Qualitative Methods for Population and Health Research

Edited by

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Institute for Population and Social Research
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Foreword

Mahidol University working along with its Institute for Population and Social Research (IPSR) is pleased to offer this textbook as a resource tool for those interested in conducting qualitative research. Since its establishment, the university has invested in research programs and community projects aimed at using innovative research approaches to improve the health and quality of life of people living in Thailand and other countries.

Under Mahidol University's philosophy on the interdisciplinary approaches and applicability of research, this textbook comprises a set of contributions from different institutes and faculties within Mahidol University, affiliated research institutes in Australia, Europe, the United Kingdom, and the United States, as well as three prominent international development agencies. By concentrating on population and health in a broad sense, the qualitative research concepts and techniques as presented in this book are readily applicable to other more specific fields and allied areas including biomedicine, anthropology, sociology, demography, epidemiology, public health, nutrition, communication, education and the environmental sciences.

Mahidol University would like to thank IPSR and its affiliated institutes and scholars within and outside of Thailand for consistently producing high quality and innovative research publications. It is hoped that this book will be valuable for and widely used by university and other researchers who are in a position to investigate the world's changing population and health pictures and their underlying behavioral determinants.

Professor Dr. Pradit Charoenthaitawee
President
Mahidol University

Preface

It is indeed a pleasure to introduce this book entitled *Qualitative Methods for Population and Health Research*. Over the past decades, the valuable role qualitative research has played in addressing many of the world's population and health problems has been well-recognized. Today more than ever, their importance is being underscored. This is because social and economic development has taken hold and AIDS and other allied population and reproductive health issues call for a fuller understanding of human behavior. The necessity for qualitative research is felt most sharply by those scholars and fieldworkers who are working in developing nations like Thailand. On virtually a daily basis, they apply their skills as they seek to improve the quality of life of the Thai people.

The many contributors to this text have placed at the forefront the practical issues which they face in doing their research work using a variety of qualitative methods. The chapters discuss the theoretical and conceptual issues of qualitative research as well as its process and methods. They present several illustrative cases where qualitative methods were used to uncover the meaning behind people's actions. To be more widely useful, especially for students and junior researchers, each author has tried to keep his/her discussion as short, simple and meaningful as possible. Their ideas and experiences can, therefore, be applied to a variety of settings and research problems.

The Institute for Population and Social Research is confident that this book will achieve its goals, and it will become a valuable text and reference for teaching and conducting qualitative research. We would like to thank all authors who put their efforts into this important book, and especially the editors whose competence and patience are the key factors of this success.

Aphichat Chamratrithirong

Aphichat Chamratrithirong, Director
Institute for Population
and Social Research

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During its long gestation, this book benefited from the contributions of many individuals. The text reflects not only the inputs of the editors and authors, but also those of other professionals who offered useful suggestions throughout the manuscript development process. In particular, Dr. Aphichat Chamratrithirong, Director of the Institute for Population and Social Research (IPSR), steadfastly encouraged completion of this book despite several obstacles along the way. In itself, this book carries on IPSR's commitment to provide current scientific knowledge and other resources to governments and communities within and outside of Thailand, while also being dedicated to promoting program innovations and practical guidance that will help to solve persistent and emerging population and health problems.

A special note of appreciation must go to the people whose names appear in each chapter's reference list, for without their knowledge and earlier contributions, this exploration into *Qualitative Methods for Population and Health Research* would not have been possible. No book on qualitative research would be complete without these 'works of many,' and we have acknowledged as many important sources as possible, not only for their own valuable contributions, but also as a reference list for readers.

Sincere gratitude also goes to Mr. Somchoke Kunsanong of the Institute of Nutrition at Mahidol University whose creative skills in designing this book's cover were invaluable, not to mention his patience in repeatedly contacting the many potential printing houses in Bangkok and assisting in this book's final publication. Ms. Aurapan Hanchangsith and her team also deserve a special note of recognition for their excellent assistance in administrating this book's publication.

Finally, any document of this magnitude owes its existence to those who gave their time, knowledge and patience in creating each of the chapters, namely, the contributors. Their unique insights, attention to detail, and fresh outlooks enhanced this work immensely by allowing the editors to focus and polish the book's goals and objectives.

Bencha Yoddumnern-Attig
George Allen Attig
Wathinee Boonchalaksi
Kerry Richter
Amara Soonthorndhada

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Chapter 1

Qualitative research: a process of discovery

Bencha Yoddumnern-Attig, George Allen Attig
Wathinee Boonchalaksi, Kerry Richter
Amara Soonthorndhada

Studying People and Problems

Qualitative data about people's thoughts, lives and relationships is like a mountaintop view; it is both panoramic and awe-inspiring, yet seductively attractive. The best qualitative information provides rich descriptions and well-founded rationale for explaining the underlying behavioral and environmental processes at work in local settings. A qualitative study allows researchers to trace historical events, their causes and consequences, and derive insightful explanations for all of these. It places persons and their families within this historical picture and shows in a realistic sense how they adapt to changing conditions both culturally (in the form of role changes, for example) and socially (such as changes in the family developmental cycle). The key to qualitative research, therefore, is discovering and understanding the context in which decisions, actions and events occur.

The current challenge facing researchers in all fields of the human sciences is how to make valid sense out of each person and social group's way of life in light of wide-ranging diversity in humankind. Not uncommonly, this challenge often encompasses a life-or-death struggle; the problems under study often, in one or several ways, affect the quality of people's lives. Family planning specialists, for example, might want to know what factors actually play a role in determining the number of children a couple desires, and those social, cultural and biological forces which hinder or impede this desire. Researchers interested in maternal and child health might concentrate on understanding food habits and nutrition throughout the life-cycle. Emphasis could center on what foods are consumed, why, when, where, and in what quantity. In addition, it dares the researcher to discover how the act of eating in an organized (but not always clear) way is 'trying to say something about something' and exactly what these "somethings" encompass and represent. Further, other urgent health problems such as AIDS or other communicable, non- communicable or vector-borne diseases, are exceedingly complex. Disease etiology rests not on only one causal factor, but a multitude of inter-twined and inter-locked ones. Likewise, their control rests on effective multi-faceted intervention programs, usually encompassing a number of specialists and disciplines.

Ways of Conducting Social Research

But just as there are innumerable social research problems, the ways to conduct social

research are just as vast. Everyone has their own style or way of doing things, but in a more traditional sense, people are studied either in terms of numbers or words. The first type is a quantitative approach to information collection and analysis. A limited number of variables are selected around which specified data categories and items are identified. These are then merged into a structured pre-coded interview questionnaire. After collecting the answers from a specific sample group, researchers then proceed to code the answers and, either manually or through the more modern use of computers, begin to correlate and cross-tabulate data. The aim is to find numerical patterns in the answers themselves. These indicate the magnitude of decisions and behaviors undertaken by the people under study. This technique is valuable in giving a scientifically valid and statistically reliable set of objective data.

The second approach is qualitative and rests on collecting subjective information, as given by either the researcher or subject. Data of this type, in the form of words rather than numbers or statistics, have always been the main staple of certain social sciences, most notably anthropology. The data sources vary immensely from interviews to diaries, letters, memoirs, literary works, historical accounts, and so on. Data are collected in a variety of ways including conversations, participant-observation with informal interviewing, in-depth interviews like life histories, and focus group discussions. Moreover, oftentimes more than one technique is used to expand the quantity and quality of information, as well as to provide a check on its reliability. Data are processed even before they are used, in the form of recordings, notes, and transcriptions.

One of the persisting questions that has plagued the social research field (and is underscored in some of the following chapters) is: "Which is better, quantitative or qualitative social research?" The answer to this question almost always depends on who is answering it. Scholars in traditionally quantitative fields such as demography will stress the benefits of quantitative research, while qualitative specialists in anthropology will present their own arguments in favor of qualitative research. The fact is that each has its own inherent strengths and weaknesses depending upon the topic under study and the research questions being asked.

Recently, Dr. Anthony Pramualratana (1993), one of the contributors to this volume, made a very relevant comment about how to answer this question. He noted that there are really three different types of social research: cross-sectional (quantitative), contextual (qualitative), and historical (temporal). Each of these can intersect one another like three intersecting circles. Moreover, in some cases, cross-sectional data can be presented in numbers or in words; the same can be said of the contextual and historical spheres. To get a complete holistic understanding, however, researchers need to target the middle, where all three intersect. As Reynolds (1976:xv) has noted:

> *If we describe what people do, without inquiring into their subjective reasons for doing it, we are talking about* ***behavior****. If we study the subjective aspects of what they do, the reasons and ideas underlying and guiding it, then we are concerned with the world of* ***meaning****. If we concern ourselves both with what people are overtly and objectively seen to do (or not to do) and their reasons for doing so (or not doing) which relate to the world of meaning and understanding, we then describe* ***action****.*

Presently, social research is on the road leading to this three-way intersection. While quantitative and qualitative data collection strategies have customarily been separate, over the past ten years more and more researchers in traditionally quantitative fields (for example, demography, epidemiology, economics, sociology, organizational studies) have become actively interested in using qualitative techniques. Likewise, qualitative disciplines such as anthropology have begun to see how they can quantify cultural information. These shifts

represent a realization that social and cultural phenomena exist in both the mind and the objective world, and there are some significant process inter-relationships to be found among them (Miles and Huberman 1984). The result today is a growing trend to wed both techniques together so as to increase both validity and an understanding of the underlying processes which affect people's decisions and actions. Although this book presents a strongly qualitative perspective, several of the applied case studies presented demonstrate how qualitative and quantitative data can be combined and analyzed to come up with valid conclusions.

Benefits and Precautions in Qualitative Research

The relevancy of qualitative techniques for quantitative research is, for the most part, straight forward. The initial collection of qualitative data can assist in formulating the specific content of questionnaires by identifying the most important key variables under which more specific data items can be explored. Further, it aids in controlling for factors (e.g., literacy, local dialect, sensitive issues) which may affect the way questions are worded, or the way in which respondents answer them. But more significantly, qualitative data enlivens and makes more concrete the statistical pictures which come out of survey information. As Miles and Huberman (1984:15) aptly state:

> *Words, especially when they are organized into incidents or stories, have a concrete, vivid, meaningful flavor that often proves far more convincing to a reader - another researcher, a policy-maker, a practitioner - than pages of numbers.*

But when coupled with the soundness of statistics, research recommendations using qualitative data can become a powerful force for change. Even if the numbers and words disagree, refinements in hypotheses, objectives and the research question itself can be a fruitful endeavor. It allows the researcher to go beyond initial preconceptions and frameworks and places him on a firm road to reality, and it can possibly lead to unintentional but exceedingly valuable findings.

To mention only the benefits of qualitative research, without looking at the other side of the coin, is misleading. Good qualitative research is not simply a matter of asking people questions and expecting them to tell you everything withou any hesitation; the demands, therefore, are not small by any means. Collecting data, especially through heavily inter-personal methods (such as in-depth and life history interviewing), is a labor-intensive process. The researcher must remember that he is probing into the lives and feelings of people he probably has not met before; some may readily assist him, while others will avoid him. Qualitative fieldwork can last for months at a time, if not years, and involve the researcher deeply in a community's way of life. Further, the researcher must realize that only a few dozen cases can be managed effectively, even in multiple-community projects, as time and resources limit the project. Hence, serious questions about sampling arise.

Over the fieldwork process, field notes, interview materials (tapes, transcriptions) and observations accumulate to vast amounts, and many workers suffer from "data overload" at the thought of analyzing them. Sometimes, certain portions of data are left un-analyzed (usually those felt to be irrelevant to the research question) and are saved for future use and reference. Data overload is compounded when research investigations involve a number of teams, each of which may be using a different type of method or approach. Data collection and analysis, therefore, must be undertaken in a systematic, formalized and comparable way in order to come up with valid meaning and information (Herriott and Firestone 1983).

More significantly is the fact that qualitative data are not easy to analyze. For quantitative data, clear-cut conventions exist as to what can be done with the data. Yet, qualitative analysts have very few guidelines to assist them. But this has not hindered the analytical process to any great extent. Through the time-intensive process of sorting data into files of ever-finer distinction, researchers can progressively determine distinct classifications, categories and over-arching general patterns. Several authors in this volume give specific recommendations as to how this can be done. But in most cases, it just takes time and patience, which grows easier to control with increased experience. Qualitative analysis is really an art form which rests not only on the subjective insights of interviewees, but also those of interviewers.

Audience and Intentions

This text is written specifically for students (undergraduate and graduate), junior researchers and others unfamiliar with qualitative research and who are working in academic, government, non-government and private organizations who must conduct qualitative research studies. These persons may come from a variety of social science or allied applied fields such as population studies, public health, epidemiology, biomedicine, nutrition, communication, environmental science, or education. Nevertheless, all need a basic understanding of the qualitative research process in order to discover new things about the social world.

It is realized that the topics that can fall under 'qualitative research' are almost as many as there are investigators. This is largely because scientists are not the only ones who do social research, be it qualitative or quantitative. In private industry, for example, people in market research, personnel management, and public relations conduct social research studies to help them better plan or deliver services. Social workers, counselors, and teachers use qualitative research to improve their educational abilities. Many journalists, lawyers, consumer groups, and professionals in the health care and criminal justice systems also conduct social research studies (Neuman 1991). What is needed to conduct acceptable qualitative research studies are three key elements: an understanding of the qualitative research process and its applications, a knowledge about different qualitative research tools and approaches, and suitable examples of successful qualitative research studies that will give the junior researcher a pattern from which to develop his/her own project. It must be stressed here that this book's main focus is on practicality and ***doing***. It is meant it to be as direct, clear and simple as possible in order for it to be used as dynamically as possible by persons who are beginning to explore the field of qualitative research and who can most use its concepts and methods to compliment their investigations.

In teaching qualitative research training programs for Thai and international students, it became apparent that the most useful texts for students are ones that are to the point. Their discussions are not circular, in that they go around and around before making (or not making) a point; nor do they bury the student in a mountain of detail. This often causes the student to believe that a method or approach is more complex that it really is. Hence, he or she quickly abandons it out of frustration, or at least does not fully appreciate it nor develop an acceptable level of competency in it. This book, therefore, does not deal with theoretically interesting, but not necessarily useful, information that may have a limited value in a fieldwork setting. Many social research books are on the market today which admirably explore in detail the finer points and procedures for doing qualitative studies. Many of these are listed in the references sections of this book's chapters. Readers are urged to consult them after they feel they have mastered the basics presented in this book.

Moreover, to be as clear as possible, this book is targeted at readers whose native

language is not English, since these are the students who can use a practical book of this kind the most. Each of the contributors to this text has kept their discussions as short and simple as possible (roughly the size of journal articles but less complex), while touching on the main points, but leaving detailed discussions for other sources. This aids in keeping each reader's attention and interest which increases their ability to retain important information.

Finally this book's organization is centered around looking at qualitative research as a *process* where each stage or method builds upon the one before it, and helps to determine the one that comes after it. As Neuman (1991) as noted for social research in general, qualitative research is a creative, conceptual process of asking the right questions, operating with partial information, following leads down blind alleys, and making difficult decisions. By not explaining qualitative research as a process, the flavor and value of qualitative studies for investigating population, health and other social problems may be lost, not to mention the richness of collected data.

Goals and Organization

Examining the world of qualitative research, though, is too wide a field to cover every aspect in one small, practical book. While this text is intended to be comprehensive, it is by no means definitive. Nevertheless, it tries to address most of the concerns readers have about designing and undertaking qualitative research studies, and it is hoped that an understanding of this book's approach will help them to address unexpected problems not discussed here.

The goal in developing this book, therefore, is multi-faceted. It is meant to serve as a text for the beginning researcher and a reference for more experienced scientists in designing effective qualitative research studies; to give students especially an understanding of the type of thinking involved in coming up with an idea for a qualitative research project, and then seeing it through the research and write-up stages; to introduce to students, and those not familiar with qualitative research, the concepts and terminology used by its specialists; to give readers a variety of suggestions for developing their own personal strategies for conducting qualitative research that can be applied in developing other studies that may combine both quantitative and qualitative methodologies; to provide them with a firm foundation for further study and work as professionals; and to prepare them to confidently conduct small-scale research projects on their own or in collaboration with other scientists.

To accomplish this multi-faceted goal, this book is organized into four major sections. Part I gives the reader a general grounding in the theoretical and practical considerations that are important for conducting qualitative studies on population and health issues. Part II then presents the qualitative research process and its basic data collection tools which have proven to be very useful in a wide range of population and health projects. Thereafter, Part III offers different methodological approaches that qualitative studies can take when using the methods mentioned in Part II. Some of the approaches such as life history taking (which is both a method and an approach) are founded upon one of the basic tools noted in Part II, in this case the in-depth interview. For others, such as the case study, several different basic tools may be used simultaneously. Also presented in Part III are some relatively new approaches including focus groups and time allocation studies; and some more recent approaches like focused ethnographic studies, rapid assessment procedures, and time and motion studies. Also discussed is how to analyze and combine qualitative and quantitative data, computerize ethnographic information, and design and write-up qualitative research reports. Part IV then presents a variety of applied case studies in population and health research. Topics range from family planning, communication and social networks, to sexual behavior and AIDS, modern and traditional health service utilization, disease etiology, nutrition, program evaluation, and

environmental problems.

Finally, it is hoped that each reader who uses this text will become more confident in his or her own ability to undertake qualitative research studies. While many other methods exist which can improve the fineness of the data collected, depending on the research study itself and its objectives, the important thing is to begin with the basics, and to possess an awareness of their benefits and precautions.

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Chapter 2

Assumptions and issues surrounding qualitative research

Chai Podhisita

Qualitative research is deeply rooted in anthropology and other social sciences that seek in-depth answers to human behavioral patterns and systems of understanding. This chapter objectively presents the roots of qualitative research, its differing terminology and separation from quantitative research, its philosophical base as well as important methodological concerns that must be kept in mind at all stages in the qualitative research process - EDS.

Introduction

Several good reasons exist why social scientists should seriously consider using qualitative research methods. First, since social science data, from which analyses are made and knowledge is subsequently derived, vary in nature, it makes sense to call upon different methods for collecting different kinds of data. Some data are easy to quantify, while others may be more appropriately collected and analyzed through quantitative techniques. Other types of data cannot be, or are not easy to, quantify. Thus, a non-quantitative or "qualitative" technique would be more appropriate. Knowledge of qualitative methodology helps in collecting and analyzing the wide variety of data that are used in social science research.

Second, conducting a particular research investigation often involves using both quantitative and qualitative research techniques. Quantitative data gives insights into the magnitude and extent of a population or health problem, while a qualitative study lends insights into the underlying processes and reasons for its existence. Consequently, the researcher can do better in explaining certain phenomenon if he/she commands good knowledge and skills of in both quantitative and qualitative research.

Finally, there are some limitations inherent in both quantitative and qualitative techniques. Each is good for studying certain kinds of problems which call for certain kinds of data, but not for others. Good command of both methodological domains is desirable for it allows the researcher to choose methods appropriate to the research problem.

This brief chapter begins with a summary description of the origin of the qualitative research methodology. It then discusses a terminological problem which sometimes is confusing for those who are new to qualitative research or are not directly involved in the field of social science research. Thereafter, issues of "quantity" and "quality" are investigated since they are often confused with approaches used by social scientists in their research. Following

this, the philosophical base of qualitative research is explored. The focus of this discussion is on the processes of discovering "social knowledge" and how such knowledge is derived. The remaining part of the chapter centers on issues relevant to research methods in general. These include the nature of data, data collection techniques, and other methodological issues in qualitative research.

Origin

Qualitative research's origin and development are associated with anthropology, a social science discipline closely related to sociology. Anthropology became a social science around the middle of the nineteenth century; but the qualitative research methodology was not known until around the turn of the century. Franz Boas (1858-1942), a pioneer American anthropologist who was fascinated by the culture of the Northwest Coast American Indian, was probably the first person to use the field technique which later developed into a special method of anthropology.

Qualitative research, especially within anthropology, became unique for its requirement of intensive fieldwork among a small population where the investigator had to live and participate with local people to get "in-depth" and "holistic" information. Following Boas, a number of his students carried on this tradition of field research in their respective studies in various parts of America and the Pacific. Among these names, Alfred Kroeber (1876-1960), Robert Lowie (1883-1957), and Margaret Mead (1901-1978) are often cited as outstanding.

In Britain the tradition of intensive anthropological field research also developed in the early decades of the twentieth century. There, the work of Bronislaw Malinowski (1884-1942) among the Trobriand Islanders and that of A.R. Radcliffe-Brown (1881-1955) among the Andaman Islanders (both published in the early 1920s) paved the way for further development of anthropological field methods.

Outside the field of anthropology, this method of doing intensive field study was also used among some social scientists especially in the later decades. At present, the method is used more widely by sociologists, economists, geographers, and public health scientists. It is used as a self-sufficient method or as a supplementary method to investigate a wide range of research topics in typical or exceptional social and cultural contexts.

Terminological Problem

Qualitative research is often referred to under different terms which sometimes confuses those who are unfamiliar with research methodology. It is, indeed, unfortunate that there is no single, widely accepted term to refer to this kind of research. Because of this, it is useful to briefly discuss some of the terms used to refer to "qualitative research".

1. *Anthropological research.* Many people refer to qualitative studies as "anthropological research" simply because the kind of approach central to it was developed within anthropology.

2. *Ethnographic research.* By way of conducting research (from data gathering to analysis and report writing), a qualitative study has as its important aim to collect ethnographic information. This is the kind of information which, as a whole, describes a culture or way of life of the population under study. It includes data

about behaviors, beliefs, knowledge, world view, attitudes and values of the population. It is important because it provides a background against which certain aspects of the people's behavior can be meaningfully explained. In taking this into account, qualitative research is sometimes referred to as ethnographic research.

3. *Field research or intensive field research.* Some sociologists use this term to mean qualitative research. The reason is, perhaps, that traditionally it has involved a relatively long period of intensive fieldwork, though the use of rapid anthropological assessment methods are now in vogue.

Quantitative vs Qualitative

The use of the terms "quantitative" and "qualitative" to distinguish two different social science research approaches is not without confusion. Most importantly, it leads to the misunderstanding that quantitative research involves the use of quantity or quantitative data whereas qualitative research limits itself to non-quantity or qualitative data only. This understanding, if ever valid, is only partially so. For although the kind of data used can tell us something about the difference between the two kinds of research, the real difference lies in the approach by which the investigator accesses, interprets and analyzes his data. Quantity and quality are two aspects of the data; they are not a determining criterion of research approaches. For this reason, a number of anthropological studies, which are believed to be essentially "qualitative", actually make use of quantitative data and hence statistical analysis. The same is also true of some quantitative studies that use qualitative data to cross-check and explain prevailing statistical patterns.

What needs to be discussed here is the kind of approach which makes qualitative research substantially different from quantitative research. Briefly speaking, this former approach (whatever it is called) is essentially "holistic". *Holism* refers to the attempt in anthropology (and some other disciplines) to incorporate various fields of knowledge into a meaningful understanding of humanity. This calls for various kinds of information to analyze and understand certain aspects of human behavior. This means that a certain level of ethnographic information is always necessary in qualitative and quantitative research. To be "holistic" has yet another aspect; it calls for collecting very in-depth data (or a *thick description* about a culture in Clifford Geertz's term) which is sometimes lacking in other kinds of research.

The holistic approach has a significant implication for fieldwork. First, if in-depth ethnographic information is essential to the analysis, it is unlikely that the investigator can utilize a large sample size in his study. The number of people required for most survey methods is often too large to be studied by using the qualitative (i.e., holistic) approach. The qualitative researcher prefers a small-scale population so that he can focus his efforts on variety and the depth of the data.

Second, focusing in-depth requires that the investigator gain enough rapport and trust from the people under study. It is only through such rapport and trust that the depth of the data can be appropriately reached. It is almost imperative that rapport and trust require not only participation of the investigator in the community (or among the people under study), but an extended period of such participation. In qualitative research, therefore, the quantitative nature of the data does not count as greatly as their holistic nature (i.e., variety and depth).

Philosophical Base

Since the goal of research is to gain knowledge, an investigator's perception of how knowledge can be uncovered is of great significance to his research approach. Here, some philosophical views may be discussed as providing bases for different approaches to research. For the purposes here, let us consider the concepts of deduction and induction which have significant implications for how knowledge can be obtained.

In logic, the concept of deduction implies the process of reasoning in which a conclusion follows necessarily from the stated premises; it is an inference by reasoning from the general to the specific. In terms of research, a deductive approach is the one in which the investigator would begin with a proposition, or some kind of theory, from which working hypotheses can be made. The hypotheses provide a basis upon which an argument is made and a conclusion is drawn. In the research process a deductive approach requires that general and broader evidence is needed to facilitate inference and reasoning. Such a deductive approach provides a philosophical basis for quantitative (survey) research.

Induction, on the other hand, is a principle of reasoning to a conclusion about all the members of a class from examination of only a few members of the class; broadly speaking, it is a reasoning from the particular to the general. In terms of research, an inductive approach implies that the investigator proceeds from a particular segment of the population, i.e., a small sample. Knowledge derived from the study of such a particular segment is assumed to apply to the whole population (general). The inductive approach provides a philosophical basis for qualitative (anthropological) research.

Data and How They Are Collected

For empirical research, data comprise an essential part, without which any conclusion is but a hollow statement. By virtue of this, it is worth the effort to consider some salient characteristics of "qualitative" data.

As mentioned above, quantity (i.e., enumerable nature) and quality (non-enumerable nature) are not differentiating characteristics between qualitative research compared to quantitative research. Broadly speaking, there is no difference in that respect. However, if there is any salient characteristic of qualitative research data, it is their holistic nature. It was stated above that holistic nature implies at least two things: (i) variety, and (ii) the depth of the information. By this very nature, qualitative data are more capable of uncovering the "meaning" and "process" of behavior, which are central to most social science studies.

Focusing on the meaning and process of human behavior often requires that the investigator be able to get to the "back of the stage" or to see beyond the actor's behavior and get to the intention behind it. And when the investigator records the meaning, he must pay attention first to the meaning as understood by the actor (emic view), and not that of his own or that which is scientifically proved (etic view). For this purpose, the investigator must avoid using any field instrument by which the emic view can be distorted. Furthermore, to be able to get to the "back of the stage" requires rapport and trust, the kind of relationship often resulting from an extended period of participation. In this way, one can see that it is the holistic nature of the data essentially needed for qualitative research that defines the nature of field work.

It was mentioned above that participation of the investigator in the community (among the people under study) as an important strategy of data collection. It should be added, here, that just as there is no single best method for data collection in quantitative research, so it is

in qualitative research. The investigator has choices of appropriate methods. However, since participation is an essential part of data collection, the investigator, himself, may be considered as a kind of tool for data collection, just as other tools that he might use. This means that, unless he maintains a proper role and is well aware of personal as well as theoretical biases that he might have, his data might be contaminated by bias and inappropriate subjectivity.

Qualitative field research involves two important roles of the investigator, the role of a participant-observer and that of a researcher. Often, these two are in conflict. The need for in-depth information requires that the investigator participate (act) as if he is a member of the community so that he gains the rapport necessary to get to the "back of the stage" and the true behavior and attitudes of the actors. Good rapport may lead to emotional involvement that is a source of bias in the data.

On the other hand, the researcher's role, in its strictest sense, requires that the investigator use every possible means to gain variety and depth of information. He is also supposed to remain free from emotional involvement of any type. This requirement is indeed difficult for the investigator who must, at one and the same time, remain a good participant-observer. So, the investigator is often torn by the desires to remain a good participant and a good researcher.

This is a serious problem faced by some qualitative field workers. To this problem, the best (theoretical) advice is for the investigator to balance his roles. Although the perfect balance is hard to practice, it should not be too difficult to decide where he should switch from one role to the other and become more of one while less of the other.

Some Methodological Issues

A discussion in anthropology for many years concerned whether anthropology is a science or an art (a similar position was also held for sociology). Certainly art is part of any endeavor; artist and scientist alike must possess dexterity and creativity. Anthropological data or data from any other field using qualitative methods must also be verifiable. They must be more than a single person's impressions. Scientists, unlike artists, must produce the same observations under similar circumstances. In the early 1920s, Malinowski addressed the issue when he cautioned the student to distinguish which results derive from observation, which derive from the person giving information, and which are the result of psychological insight.

Adequate data requirements for anthropology and other qualitative research studies include important considerations including validity and reliability, representativeness, reactivity, replicability, and, generality (Hoebel and Weaver 1979:6).

1. *Validity and Reliability.* To assure validity and reliability, the qualitative researcher verifies the statements of one informant against other sources of information and assesses the probability that the statements given are correct. This process is often referred to as 'triangulation' where the same data is sought using several different methods (such as observation, in-depth interviewing, focus groups, and/or survey data).

2. *Representativeness.* The issue here is that since qualitative research can take into account only a small sample, how can the problem of representativeness be taken care of? Usually, representativeness is obtained by interviewing a sufficient number of people to account for all social and cultural variation in a community or group. One crucial consideration, though, is the sampling procedure used in selecting the people, particularly since qualitative research is based on an inductive approach.

3. *Reactivity.* Since the qualitative field method involves an extended period of investigator participation in a community, the presence of the investigator can "interrupt" behaviors of the people under observation. If this is true, the data can be severely biased. The degree to which an investigator is disruptive will depend, to a great extent, on his/her own interpersonal skills, the rapport he/she builds with members of a community, and his/her own reactions to residing in the community. Today, qualitative researchers try to control reactivity through self-reporting procedures (diary keeping; the major points of which are noted in project reports) or by turning field workers into key informants by interviewing them upon their return to get their frank opinions of living and working in the community which may have had an effect on their data collection skills.

4. *Replicability* means that another worker using the same research techniques in similar circumstances can produce the same results. This is one difficulty in qualitative research, since the methods for data collection do not have a well-defined structure (compared to a pre-coded, standardized closed-ended survey questionnaire). The construction of interview guidelines takes care of this in part; however, the real key to the data collection process is the nature of the interviewer him/herself.

5. *Generality* refers to establishing the applicability of a generalization from a single study to other units of the larger group of which it is a part. As anthropological knowledge has grown, its practitioners have become more aware that what they once thought of as single, isolated, closed societies (or a distinctive culture trait) are in fact part of larger systems with great cultural variability. Herein lies the importance of conducting pre- and post-research literature reviews to determine if the data collected are unique, or if they are part of larger patterns and organizational processes associated with the community being studied.

Conclusion

While these methodological challenges in qualitative research are very evident - and the researcher must be aware of them and try to address them at each stage - the theoretical and methodological tools for rectifying them are at hand today. Theories exist which locate many relatively intangible, qualitative dimensions which are crucial for understanding the meaning, processes and explanations of human behavior. Moreover, statistical methods and computer technology are putting together huge numbers of factors to reconstruct the context of the situation. Together models are developed which pave the road to prediction. The scientific method involved in this process requires the researcher to synthesize ideas into concepts (and vice versa), experience into ideas, and experience into further experience (Phillips 1971). This is maximally accomplished when the researcher does not place himself at one end only of the qualitative-quantitative axis, but midway between and using the strengths of one to resolve the weaknesses of the other.

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Chapter 3

Do population studies need qualitative research?

Anthony Bennett

The field of population research encompasses several disciplines, many of which have traditionally relied on quantitative methods and analyses. In this chapter, a population scientist looks at the valuable role qualitative research has to play in uncovering the meanings behind statistical numbers - EDS.

Introduction

In the realm of formal education, there are three great disciplines: the natural sciences, the social sciences and the humanities. Population research, by focusing on the study of human societies, is necessarily a sub-field of the social sciences. This has not kept population studies, nor social science in general for that matter, from emulating the methods of the natural sciences. Traditionally, the attribute of the natural sciences that has been so desirable in the eyes of social scientists is its ability to predict future events based on the manipulation of known quantities (Bloom 1987). This is most clearly manifest in the obsessive application of the scientific method and hypothesis testing in social science which relies on statistics (i.e., mathematics) for "proof." Simply put: social science, and especially population research, wants to express itself, and justify its research findings, in terms of numbers.

Why is it then that qualitative methods are oftentimes cited as being 'nonscientific.' Schwartz and Jacobs (1979:4) have noted that, "There are many, in both qualitative and quantitative sociology, who advocate and bask in the value of science." Borman and others (1986:51) have further contended that criticisms about qualitative approaches arise from an "erroneous equation of the term 'empirical' with quantification, rather than with any real defect in the qualitative paradigm itself." While various techniques may be used by different researchers, it turns out that everyone is doing science, provided that science is defined as a specific and systematic way of discovering and understanding how social realities arise, operate, and impact on individuals and organizations of individuals (Berg 1989:9).

The problem is that, most notably in the area of population research, quantitative data are explaining less and less of the social phenomena they seek to elucidate through predictive models of data collection and analysis. In the words of Knodel and others (1987:13):

> *As the search for explanation and understanding of demographic phenomena proceeds, however, an increasing number of scholars outside the field of demography*

as well as demographers themselves are beginning to question the adequacy of an exclusively quantitative approach based on the conventional data sources and research tools of the discipline.

Kaplan (1964:206) has stated it more bluntly by saying: *if you can measure it, that ain't it.* The greatest demographic mystery of Thailand (i.e., what triggered the demand for smaller families in the Northern region in the 1950s), for instance, may never be solved because quantitative methods took precedence over qualitative methods in the early research in that region.

This inadequacy is manifest most painfully in the area of the ubiquitous "KAP" survey which implicitly assumes that human behavior or Practices, are the direct result of certain Attitudes, and that these attitudes are predicted on a specific Knowledge base. Presently, it is a common finding that changes in knowledge do not necessarily lead to changes in attitude or practice (Ajzen and Fishbein 1980). The reasons for this lie in the many enabling factors that interact to determine health and reproductive behavior (Green et al. 1980; Hubley 1986). Concisely stated, factors such as social norms, time, money and material resources, skills and appropriate services can impede the behavior intention to behavior change process. Even though a woman may have adequate knowledge and positive attitudes towards birth control, for example, any one or several of these enabling factors may effectively block her from obtaining or continuing to use a contraceptive method. Nevertheless, erroneous assumptions about KAP studies constantly lead unsuspecting researchers on a false trail in trying to understand, for example, the sexual behavior of adolescents that places them at high-risk of contracting AIDS. Research among this group in Thailand has shown that while their knowledge and attitudes about AIDS are constructive in controlling this disease, they have little impact in affecting sexual behaviors, since these are shaped more by peer group pressure and other social and individual forces.

What is it then that quantitative methods fail to provide the population researcher? It is certainly *not* quantity or quality of data. Instead, it is the *variety* and *depth* of qualitative data that distinguishes the qualitative form from other modes of investigation. In-depth interviews, focus group discussions, life histories, case study analysis and other data collection methods described in this volume are an attempt to provide a more holistic view of human behavior which is, after all, the foundation of social science and all of its sub-fields. This brief chapter provides a perspective on current applications of qualitative studies and the need for a more intensive use of these studies in the future.

Applying Qualitative Methods in Population Research

Based on research designs and objectives, there are four general groups to which all current population research can be classified.

Descriptive Studies. These studies are the most common form of population research and their primary goal is to describe a population, a group or an individual of interest.

Prospective Studies. These studies include research which attempts to measure the

effect of an intervention on a population, group or individual already defined by a descriptive study. Prospective studies begin data collection *before* the intervention has taken place and then repeat data collection over time, usually at the intervention's mid-way point and definitely after its completion.

Retrospective Studies. These studies also measure the impact of an intervention. However, generally data are collected only once, *after* the intervention has already taken place.

Demonstration (Model) Projects. These projects are not truly research but are usually funded with research monies. The goal of these studies is to apply the successful intervention tested in a prospective or retrospective study to see if the results can be replicated outside the research setting.

Although there might be some rare exceptions, qualitative *studies* fall under the category of descriptive population research. Qualitative data collection *methods*, though, can be found in all four types of population research. For example, one prospective study used focus group discussions as the intervention in an education campaign, while another study used observation checklists as the before-after data collection strategy as a hybrid quantitative and qualitative technique. Case studies are sometimes used in retrospective population research to evaluate a program's net impact on people's lives. Finally, participant-observation methods can play an important role in substantiating the findings of demonstration projects.

Qualitative studies are research endeavors that employ predominantly qualitative methods in their data gathering phase. As descriptive studies, qualitative research can play a decisive role in the planning of intervention studies of either type. But the role qualitative studies plays for other descriptive research is also profound.

Without doubt, the most common qualitative study being applied at the moment is the *focus group* research study. Unfortunately however, the focus group methodology has become so popularized that it has lost its original rigor and, thus, much of its descriptive power. Many activities that are normally considered group discussions are mistakenly classified as "focus groups" out of a fundamental misunderstanding of what a focus group really is. Nevertheless, the fact that many programs around the world employ focus groups represents the interest and confidence of program managers and donors in qualitative methods.

A less popular, though widely used, qualitative population research study is the *case study*. This type of study is combines several qualitative methods such as in-depth interview (particularly life history taking), observation and role-play. The case study has been applied in analyzing different styles of program management, especially in the context of explaining more or less successful population programs (Jain et al. 1975; Korten and Korten 1977).

Life histories have been effectively used to amplify the different consequences of fertility behavior among two women in a high fertility area of Africa (Wallace and Penn 1988). The life of each woman was traced from an early age to point out the critical influences and decisions that led each to very different destinies. A study of a Northern Thai woman's life was also used to show how the forces of culture, society and psychology (character) intertwined to affect her contraceptive use and family size decisions (Attig and Yoddumnern-Attig 1992; Yoddumnern 1985). Often it is this type of human portrayal of a man or woman's battle against the forces of society and his/her own self that lasts the longest in the mind's of readers of the life history account. Pages of statistical correlations, no matter how much more valid in describing the larger population, rarely have the same impact on understanding social phenomena as several case studies or even a single well-developed life history.

To acknowledge the importance of qualitative research, the researchers themselves apologetically assert that qualitative methods *complement* quantitative research but are no

substitute for the latter. This may be true in retrospective and prospective experimental population research, but how true is this assertion for the class of descriptive research studies? In describing a population or subgroup of interest, which would be more informative: a frequency distribution or the results of several in-depth interviews? Is it not quantitative studies which merely complement the qualitative but are no substitute for the latter in *explaining* human behavior?

Currently, an imbalance exists in the way quantitative descriptive studies take precedence over qualitative ones. This situation certainly reflects the relative lack of training in qualitative methods and the pressure in the social sciences to demonstrate competence in statistical analyses for the masters and doctoral dissertation. If these warnings are to be taken seriously, then a concerted effort to rectify this imbalance needs to be undertaken without delay.

The Role of Qualitative Studies

Clearly, the effort to pursue a more prominent role for qualitative methods in population research must begin in the academic institutions with population training programs. Once students are given a grounding in qualitative methods, then they should be encouraged to conduct their thesis projects on secondary *qualitative* data sets such as transcripts of focus group sessions, field notes from long-term intensive observation, tapes of in-depth interviews or life histories, and so forth. The graduate program would also require a demonstration of competence in fundamental quantitative skills, but one would not be pursued at the expense of the other. If the two groups of methods are truly complementary, then both course work and thesis must jointly emphasize both qualitative *and* quantitative methods.

Simultaneously, population research donors and program managers need to be indoctrinated in the role and importance of qualitative studies. Currently, many managers and donors view qualitative studies as at best an embellishment, or at worst a waste of program funds. Therefore, the immediate task is to firmly convince them that: (1) descriptive research is a prerequisite for a prospective or retrospective study, and that (2) qualitative methods are the descriptive techniques of choice in a wide range of situations. Some of the situations where a qualitative study must precede quantitative data collection, or provide crucial monitoring or post-project information, include the following.

When studying a new population for which there is very little descriptive information (e.g., adolescents, intravenous drug users, prostitutes, remote minorities or ethnic groups). The research purpose here is to uncover unique characteristics of the sub-population being studied that will require special consideration when conducting a quantitative study among them. As a case in point, the qualitative study may reveal special vocabulary as did a focus group study of Southern Thai Muslims who use a slang phrase to refer to withdrawal as a method of avoiding pregnancy (Havanonda and Pramualratana 1983). Key informant interviews are indispensable when studying a reclusive population, such as urban intravenous drug users, in order to learn about subcultural norms, values and behavior patterns. This information then serves as a basis for designing a sample survey in the community (Institute of Health Research 1976).

When trying to explain a contemporary or recent phenomenon. Often, a prospective or retrospective study will end inconclusively. Something with an intervention went right or wrong, but the quantitative data collection cannot clearly explain why. When this occurs, it

is important to return to the field and the population of interest with a qualitative study to probe unanswered questions. A remarkable study by Rogers (1977), for instance, involved a detailed social network analysis of reported sources of advice on family planning. He was able to show how the failure of a mothers' club program in a South Korean village was a result of the choice of a group leader whom none of the women in the village identified in the project's initial survey as a potential source of advice. In other cases, a KAP sample survey uncovers strange phenomena such as breast-feeding practice differentials by geographic area or contraceptive method use clustering (Kamnuansilpa and Chamratrithirong 1982; Kamnuansilpa et al. 1988). In such situations, it is very fruitful for a program to determine the causes of these phenomena using a skillfully designed qualitative study.

When sharpening the contrast between different ways of thought or behavior. It may be known that two or more population subgroups differ in some relevant respect, for instance, acceptance of vasectomy. Quantitative methods based on a statistical sample of men are unlikely to convey subtle motivational disparities between these, otherwise, homogeneous subgroups. However, at least two carefully chosen cases, one from each group, can effectively portray what the manager or motivation unit must know to fully understand resistance to and acceptance of vasectomy (Thailand Association for Voluntary Sterilization 1989).

When trying to probe a sensitive topic. When a reliable and valid response is required on a sensitive topic, then the impersonal, random sampling interview will not do. Take the case of illegal abortion. It is virtually impossible to estimate levels of criminal abortion from survey interviews with eligible women themselves or from hospital statistics because of the illegality and embarrassment which surrounds the topic. As an alternative, one skillful, qualitative researcher was able to locate the illegal abortion practitioners, gain their trust over a period of hours, and conduct an extensive interview about their clients and case loads (Narkavonnakit 1979).

Conclusion

The above list could easily be expanded, and the reader is urged to do so. However, it should be abundantly clear that population research does, of course, need qualitative studies as a means of obtaining in-depth meaningful insights about people and crucial issues, and, indeed, could not manage well without them. As Dabbs (1982:32) has shown, the notion of quality is essential to the nature of things. Contrarily, quantity is elementally an amount of something. *Quality* refers to the what, how, when, and where of a thing - its essence and feeling. *Qualitative research* thus focuses on meanings, concepts, definitions, characteristics, metaphors, symbols and descriptions of things. In contrast, *quantitative research* refers to counts and measures of things. Over the past decades, qualitative research has left its mark conceptually and theoretically on the social sciences, and population studies in particular. The lasting contributions to social understanding from qualitative research, as well as the sheer number of contributing social thinkers, are significant.

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Chapter 4

Changing qualitative approaches to reproductive health

Marjorie A. Muecke

Reproductive health is a condition in which reproduction is accomplished in a state of complete physical, mental, and social well-being, and not merely the absence of disease or disorders of the reproductive process. This chapter focuses on key considerations in qualitative research that must be kept in mind when conducting reproductive health studies - EDS.

Introduction

Despite the significant achievements of past research on population and fertility in Thailand, there is an urgent need to meet the changing demands of society for socially relevant research outcomes. The time has come to address academic research and education to what have become intractable problems of many societies, such as gender inequity, and ethnic and class discrimination in reproductive health services and policies. These phenomena affect reproductive health at least as much as the technology and clinical competencies that have been the focus to date.

What I will discuss in this chapter is only one dimension of a variety of qualitative approaches to reproductive health. I present it as a heuristic, an indicative point, and not as a standard. My own interest in reproductive health began when I was a novice nurse-anthropologist beginning what has become an 18-year longitudinal study of reproductive success among urban poor families in Chiang Mai in 1973-74. My methodology has integrated quantitative and qualitative approaches. I used quantitative measures for the biomedical aspects and statistical analyses for data that could be coded as variables. I used qualitative principles for collecting information and for interpreting the meaning and significance of what I heard in interviews, read in the media, and saw in homes, schools, and neighborhoods.

Context Makes a Difference

This initial dissertation research made clear some fundamental guidelines for qualitative research (Muecke 1976a). Most important was understanding the **context** of behavior as the ultimate determinant of meaning. Some of the pivotal behaviors related to childbearing that I observed were different from those reported for other places in Thailand,

such as home birthing with the husband's assistance, and the women, with the full assistance of their husbands and mothers, practicing "staying cool" (*yuu yen*) instead of "lying by the fire" (*yuu fai*) after delivery. These urban Northerners (*khon muang*) were different not only from the Central Thai women described by Phya Anuman Rajadhon (1954), but also from Northeastern women, and even from neighboring Shan women in Maehongson province, all of whom practiced lying by the fire, not staying cool, until delivering in hospital became the norm. The message of this finding is that the peoples, beliefs, knowledge and practices of this country are far more varied than most research on population, fertility, and health would have had us believe.

Context thus makes a crucial difference. What things mean at the local level is a function of the local context. And how local the relevant context is varies. In the case of the postpartum ritual above, local referred to Chiang Mai city. In still another case, the context was my immediate neighborhood of lower socioeconomic sector households that was bounded by three temples. In this area, women told me that they had not fed their children fish until the infants were at least a year old because, they said, Buddhism prohibited infants from eating fish. As this was an interpretation of Buddhist teaching that I had not heard previously, I inquired of each of the three local abbots, my closest key informants on Buddhism, what relationship Buddhism might have to the women's withholding of fish from the infants' diets. The first abbot headed a wealthy meditation temple; his response was that the local women were poor and ignorant, they did not understand Buddhism so used it incorrectly. The second abbot was a jolly fellow whose temple was the site of most of the neighborhood celebrations and rituals; he said that he could not explain a connection to Buddhism, or why the women believed there was one, but that was what they believed. The third abbot was a child of the neighborhood, he had grown up in one of its poor families, and his temple grounds housed a public elementary school that served the neighborhood children. He surmised that the women were using Buddhism to justify something over which they had no control, their poverty, which prevented them from buying protein-rich fish until the infants proved they would survive the risks of infancy. This case suggests that there is not one absolute truth even in a small local context, that there may be a variety of informed perspectives on the same phenomenon even within what may appear from the outside as a homogeneous grouping.

Levels of Observation and Analysis

I hasten to add here that qualitative research is about more than local variation. What is important is that both variation and similarity co-exist, although they may predominate at different levels of observation. For instance, I will return to the example of the staying cool/lying by the fire postpartum ritual discussed above. The consequence of not observing the ritual or of not observing all of it correctly was "wind illness" (*kaan pen lom*). This was described as a chronic debilitating illness that is fairly gender-specific to women, and usually associated with menopause, but if severe, affects younger women with poor quality breast milk, general weakness, dizziness, blurred vision, headaches, etc. (Muecke 1976b). This syndrome has since been reported in Cambodia, Vietnam, and Java, Indonesia, but as within Thailand, the specifics of the postpartum ritual itself vary across the region. At the higher, regional level of observation, similarity in the meaning of the ritual for chronic illness among women who have ever born children becomes paramount.

The profound meaning of wind illness as a consequence of not observing the postpartum ritual became sadly clear for me years later. In the early 1980s, a study by my student Cathy Glidden, RN, of infant feeding practices among Cambodian women who as refugees had resettled in the United States explored the women's reasons for not breastfeeding

their infants. An unexpected and unexplained response from them was that they were too weak, that their breast milk was not as good as it should be, and therefore not even as good as infant formula. We could not explain why the women felt this because they reported no current symptoms or physical distress. Years later, in 1990, when on a trip in Cambodia, I spoke with village neighbors to a woman who had given birth within the past hour and was already lying by the fire. The neighbors spontaneously mentioned how good it was that they could once again lie by the fire after delivery. They told that under the Khmer Rouge regime of 1975-79, lying by the fire had been impossible since newly delivered women had to resume work the day after delivery. Therefore, they said, almost all the women who delivered during the Khmer Rouge regime felt chronically weak and unable to produce good quality breast milk. Here in rural Cambodia was the answer to the question raised by the earlier study of Cambodian women in Seattle, Washington. What was important about the postpartum rituals to all the women, whether in Chiang Mai, Cambodia or Seattle, was restoring their bodily health to its pre-pregnancy equilibrium as quickly as possible. The best way they knew to do so was the way of their foremothers. This example indicates that in qualitative research, information is analyzed as it is collected, and the collection-analysis continues until all sources confirm its explanation.

Cultural Imperialism

Despite the importance of postpartum rituals to the women, their households, families and community, their post-delivery practices have at best been ignored, and often ridiculed, by biomedicine and related sciences. These survival strategies of former days were squelched by the belief of the educated elite in the absolute and exclusive good of biomedicine and science. Although unquestionably good intentions motivated research, training, program development and services in bringing in science-based ideas, it was of course a cultural imperialism of sorts.

This year, 1993, may redress our former short-sightedness. Government officials have recognized the survival value of protecting postpartum women and infants by requiring a 90-day birthing leave so mothers who are civil servants can nurture themselves back to health and their infants with breast milk. Now efforts are imperative to extend the right of delivery leave to the private sector as well. The experience with discovering the significance of the postpartum rituals reiterates that to find the best truth for the persons studied, we researchers need to put a higher priority upon listening to, hearing, and heeding our informants.

New Directions

Having up to here discussed qualitative research of the past, I will now switch to discuss new directions in qualitative research as they pertain to reproductive health. Medical (or health) anthropology and my understanding of it have changed over the years. Many anthropologists now take a more analytic and critical stance than the purely descriptive stance taken even ten years ago. Now context means more than acknowledging the uniqueness of a specific socio-environmental locale, it is coming to mean actively including people who are in the context in the planning and conduct of the program or research, as in participatory action research. For example, in Chiang Mai I recently spoke with the newly arrived first nurse to work with EMPOWER, a nongovernmental organization whose name stands for Education Means Protection of Women Engaged in Recreation. When I asked her about what health

program she wanted to develop for the women students, she responded, "That will depend upon what the women want. The first one wanted aerobics, so we got a cassette tape and that's where we started...." The women's interests were her primary concern, rather than imposing her knowledge and educated opinions about what they needed to know upon them.

Another major change in the use of qualitative approaches to reproductive health is recognition of the importance of directing research to ameliorate social problems, to influence policy and its implementation in order to promote changes that will enable women to lead healthier reproductive lives.

Voices of the Disadvantaged

Qualitative approaches themselves are changing. New vocabulary is emerging, such as the terms **voice** and **agency**. These are particularly useful conceptual and methodological principles when working with persons in disadvantaged sectors of society. Allowing for **voice** treats research and service programs as media through which the voices and thoughts of people who have been ignored by previous programs, science, and policy will be heard. Reproductive health studies that are grounded in qualitative social science must tap the different voices of our society. Just as physicians have long felt the pulse of each patient, researchers must identify and know the voices and opinions of people in many different circumstances.

For example, in regards to AIDS related research, some forward-looking researchers have begun to study groups that previously were believed to be at no risk, such as married women and school youth. Now we must extend our research ears even further, to teenage girls and out-of-school youth -- and even beyond them. Epidemiological research in Thailand suggests that almost all the population is at risk, not only the high-risk groups followed in the sentinel surveillance surveys. It is time to extend our ears to heed the voices of the rural and urban uneducated, of hill tribe people, and of refugees -- of the people who live on the peripheries of Thai society but who have not benefitted from Thai schooling, and who often do not speak Standard Thai. These people do not hear or understand the health education messages on television, in schools, or in clinics, and they do not receive services of an equal quality to others in Thai society. Their voices have yet to be taken into account in research, services, and policy.

Agency: Authority to Represent Oneself

The other term relevant to the promotion of reproductive health is agency. **Agency** refers to the power of the person, family, or community to be its own agent, rather than to be represented by or spoken for by another. Programs and research that provide for the agency of the people studied or served are designed to preserve the integrity of the informant as an essential and expertly informed participant. When informants participate in the definition of the problem or issue to be studied and in the methods to be used to study it, their agency is recognized: the approach is participatory research.

Qualitative approaches have long put heavy emphasis upon spending time to develop relationships, to nourish trust and credibility between researchers and the researched. Now, with new recognition of agency, qualitative approaches examine **power** differentials between the two partners as well. Critical theory as well as common sense suggests that research and training that are most likely to be sustainable share the power of definition between the researcher and the researched, and between the service provider and the patient or client. This

shift to a sharing of power also shifts responsibility to the research partner. Instead of being told how to reduce the risk of HIV, for example, the informants are assisted to find out their own solutions for reducing their risk. Informants may come up with solutions that researchers and providers had not thought of, or of ways to modify known methods to make them acceptable and therefore durable in their own community. Through sharing the power of definition each research or service partner simultaneously teaches and learns from the other. The outcome is that the project be "owned" by the researched because they are the ones who can make its findings/recommendations sustainable. Another way that agency may be enhanced is by the development of **networks** such as housewives' groups because the networks bring together people who alone may be "voiceless" but together gain social support and the power of numbers in standing up for their views.

Before concluding, I will give two examples of how qualitative research might utilize the new conceptualizations and methodologies of applied qualitative approaches in the future. Both pertain to the phenomenon of prostitution which is a primary focus of research and public policy related to AIDS prevention. Both examples address the social, cultural, and economic problems that affect reproductive health of disadvantaged women.

First, our approach to prostitution to date has been predicated upon the two hypotheses that prostitutes (and by this only female prostitutes are usually implied) comprise a high risk group for the transmission of sexually transmitted diseases (STDs) and the human immunodeficiency virus (HIV), and secondly that prostitution stems from rural poverty. Following this line of thinking, the obvious solutions to the problems of STDs/HIV and prostitution have been to control prostitutes and to reduce rural poverty. However, other approaches suggest other solutions. For example, when we consider the context of prostitution it is clear that prostitutes are only a small part of the phenomenon. Others in that context include their customers, their owners, the mamasans, the taxicab drivers that get commissions to bring them customers, police, customers' wives and other partners, etc. Also generally overlooked in research on prostitution are non-Thai prostitutes demanded by Thai customers who want to reduce their risk of getting STDs/HIV by patronizing virgins. The poverty hypothesis addresses only the supply of prostitutes: it does nothing to explain or even acknowledge the demand side of prostitution.

To contain the spread of STDs/HIV, the demand for prostitution must also be addressed. For this a more complete examination of the context of prostitution is imperative. This larger view can identify other groups and social networks in the transmission of STDs/HIV, and can elucidate larger social processes that sustain prostitution as a way of life, such as gender identities and gender relationships in society. Why is it, for example, that only certain specific persons in Thai society need to know how to wait patiently (*raw kaeng*)? Why are laymen singled out in social sanctions for immediate sexual gratification? An applied qualitative approach to reproductive health research would bring a more holistic view to the findings and recommendations for policy and services.

For a related example, if in research and health education we continue to associate commercial sex workers (CSWs) only with condoms and STDs/HIV, we will continue to ignore and thereby allow the persistence of other health risks threatening their lives. My recent visits with CSWs in brothels in Chiang Mai reveal a larger context than the prostitute-customer exchange, a context abundant in health risks in addition to those of STDs and HIV. The locking of young women in windowless rooms and providing them with cheap non-protein food place the women at high risk of malnutrition, tuberculosis, poor vision, depersonalization, abuse by drunken customers, and isolation from society. Tuberculosis is a public health problem that, given the experiences of the HIV epidemic in other countries, can be expected to become a rampant epidemic in Thailand, yet it has not yet been publicly recognized as an inevitable threat that need to be addressed.

These are but two small examples of qualitative approaches to reproductive health of many possible ones that I know will emerge from the new interest in qualitative research among scholars in Thailand and elsewhere. Whatever approaches are used, they will truly address reproductive health if they *place disadvantaged women at the center of the program or research project, hear their voices, and allow their agency in order to gain understanding of them and with them in their everyday lives and contexts.*

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Chapter 5

The use of qualitative research methods in AIDS/STD prevention

Bart Wynendaele

AIDS and sexually transmitted diseases (STDs) are rooted in human behavior while growing in magnitude and urgency. This chapter explores the role qualitative research can play in preventing these diseases. The author advances that the role of qualitative methods will depend on the way researchers deal with scarcity, their ability to learn from experience, look at behavioral issues as well as facilitate change - EDS.

Scarcity

Humankind is learning to live with the knowledge that all knowledge and know-how which has been gathered during the past 50 years will not be transmitted to the next generation. Fewer resources are available to guarantee the quality of life of more people. In the meantime, the problems attached to ever expanding and ill conceived growth are becoming larger than human, and resource expansive. Scarcity is therefore a world-wide problem, a growing one, and priorities need to be identified.

Research, and especially qualitative research, is probably in the best position to help determine priorities especially for behaviorally-based problems such as AIDS and STDs. Research however is also strongly affected by scarcity of resources. Funding, training and personnel become especially scarce in the so-called human sciences, namely, the behavioral and social sciences. Moreover, many research methods will have been developed and studies conducted just to die with their authors because society had to respond to more pressing needs such as recession, poverty, unemployment, garbage disposal, deforestation, famine and the like.

Within a world that is growing increasingly smaller, or diseases such as AIDS take hold and resources dwindle, the feeling that there is no room to be human in the full meaning of the word becomes stronger. The feeling is that there is not sufficient time to develop everyone's potential to the full extent. Moreover, a strong pressure exists to perform and to promote consumption. Consequently, care must be taken in identifying how time should be spent in order to make the best use of it.

In looking at the problems facing humankind today, however, all is not lost. Their alleviation can be achieved in three important ways: by developing skills, creating resources, and improving quality of life. What must be done is to look at human involvement with a critical eye and to formulate a program from there to solve the problems which we encounter.

Experience

In looking at AIDS/STD prevention as a case in point, it evident that in the very early stages of the epidemic the basic knowledge and skills were available to implement effective interventions. Already in 1989 it was known that successful interventions had to rely on three crucial areas: STD prevention, condom promotion and behavioral change (no. of partners). Furthermore, STD prevention was the most cost-effective approach. Lastly, peer group education was a highly effective method for behavioral change and promotion of safer sex.

At this point in time, it is also known that interventions have to be sustainable and self-supporting and that more effort should be put into monitoring and networking. Ever larger sectors of society must be targeted such as male and female youth, employed and unemployed, rural and urban, infected and uninfected. Moreover, the problem should be solved only in the next generation. Hence, educational packages are already being developed for school children.

This is where scarcity begins to play a role, and not simply in terms of resources. Because of the magnitude of the problem, development programs are in competition with each other, and certain limitations exist particularly in terms of such general factors as illiteracy, unemployment, lower status of women, etc. Strangely enough in this context AIDS prevention is still largely regarded as a medical problem. Drugs however cannot be provided and a number of instruments, usually manned by the medical profession, are not appropriate instruments in this case. The paradox which is presented here is that the mechanisms and instruments provided do not match the nature or the quality of the problem to be solved. It looks as if someone has been opening a door with the wrong key or did not know the difference between push and pull.

However going back in history when similar epidemics have struck the globe, humankind has known periods where the body and the mind were not regarded as separate instances as they are today in the medical paradigm, where rituals and magic were of common use in treating ailing patients and where conscious and unconscious, knowing feeling and acting were addressed simultaneously. Then as now, it would be difficult to comprehend how behavior is influenced and changed if only a rational explanation were relied upon as it is attempted in the medical framework. This is most crucial for the world today, as humankind is not comprised of rational beings guided by rational thought alone. Multitudes of studies show that people do not always practice what they preach, or act in a way that is appropriate or healthy. Numerous, often insurmountable factors, come upon the horizon that effectively block people's views of themselves. Hence, researchers must turn to the use of such techniques as qualitative research methods to disentangle the many, seemingly separate and unrelated forces that lead people through their apparently irrational lives.

A Behavioral or Medical Approach

To illustrate this, it is relevant to look at the different issues involved with STD and AIDS prevention apart from clinical STD management. First of all, knowledge is found *not* to be related to behavior change. Apparently informing people does not activate nor motivate them. An important issue here is the fact that people have two brains: one dealing with information and another dealing with how the world should look. These two brains do not often work well together. They are most of the time in functional disagreement. In some exceptional and highly trained people or in some rare tribal cultures the two brains are in functional agreement, but this does not hold for the vast majority of people.

The unity of the person and his or her 'two brains,' however, can be addressed on

underlying levels: hypnosis can be used, humor is effective, and subliminal messages work out. Errors, slips, exaggerations, metaphors do illustrate the mechanism. Also the use of stories, drama and music can facilitate the reception of a message by an audience. Allegory and symbolism, moreover, address both halves of the brain and activate the unconscious. The multiple senses involved in some channels, such as dance and rituals, are simultaneously addressing different components of the person thereby closing the gap between knowledge and behavior and enabling a more integrated, complete, direct and therefore more effective communication process.

The conscious learning of a person affects his behavior only when he is involved totally in the process. This involves sharing information, views, feelings and actions. But substituting one habit for another is not an easy matter. Groups, wherein the totality of the person is addressed, can also be used as a bridge between knowledge and behavior. The methodology of this approach based on group dynamics is, initially, very time-consuming and labor intensive. Nevertheless, the multiplier effect makes it easier to reach a larger audience later and requires only a limited investment in a supporting network.

Yet, suspicion also rises that dissemination of knowledge alone results in misconceptions and discriminatory attitudes. Because no guidance is provided in assessing the meaning, interpretation of a message most often creates fear and leads to discrimination. This also is related to the fact that messages do not usually provide the public with behavioral alternatives to counter the problem. In short, they often communicate what not to do, less often 'why' and even less often what alternative can feasibly be adopted within the routine daily life.

What is evident is that *the most successful programs in changing behavior were those in which the target groups themselves were actively involved from the very first start, the set-up. Group dynamics here also plays an important part, especially in terms of peer and group pressure. Interpersonal interaction and active participation are major priorities for success. Key-persons can also be useful as facilitators and peer educators.*

How does peer group education work? First, the intervention must be in line with the language, culture, beliefs, customs and resources of the target group. These can only be uncovered through the collection and analysis of in-depth qualitative formative research data. Using this information in program design and with those for whom the intervention is targeted, their sense of being forced into something evaporates and no resistance is mobilized, because the initiative originates in the target group.

Using group dynamics provides for many advantages including problem identification, problem solving, models, safe environment to experiment with new behavior and skills, social support, social control and social esteem. Moreover, belonging to a group as a part of the intervention process not only enhances self-esteem, it also provides other social benefits and awards like being able to achieve a goal which cannot be achieved alone and being sure to be appreciated.

A group focus is crucially important in AIDS/STD prevention, since at its very root the cure for AIDS is a social responsibility, based on interpersonal relationships not simply individual behavior. It involves a lot of feeling, emotional sharing, getting in touch, in short real communication for real change. This is a complicated task, since talking about AIDS is a very sensitive issue for it is closely related to sexuality and to love. At the same time, it is also related to illness and loss, thus fear is involved. Touching on sexual behavior makes it a cultural and normative topic which may also go against the grains of established social values and norms.

To be able to handle the AIDS subject thus means getting involved in a very delicate matter. To engage in an open exchange on these items is not evident for most of us. Getting to know each other is one way of making this possible. The initial expression of fear and

expectation also helps in the climate setting and will facilitate consecutive steps.

These aspects of working with groups in AIDS prevention need to be addressed in training programs for educators and community workers. Skilled facilitators are required and their effectiveness will grow if they receive the right feedback. The provision of feedback might be taken up by professionals with training in communications, monitoring, qualitative data collection, etc.

Once a group becomes conscious about the threat which AIDS represents for them, further steps can be taken towards achieving a safer sex lifestyle. Creating risk awareness leads to the identification of the problem as deserving priority attention. A group can then analyze and detail the consequences of HIV infection on social, economic, cultural and interpersonal levels. An explicit decision to take action will follow here and will stimulate the exploration of possible solutions such as regular STD checks and safer sex practices. Costs and benefits can be considered and appropriate ways to overcome possible obstacles can be explored. Skills to carry out the new behavior, such as the ability to negotiate safer sex, can be provided. Condoms can be made available. Services can be made accessible and confidentiality can be guaranteed. The social support available in peer groups will reinforce safer lifestyles. Interventions conceived in this way would offer and operate solutions matching the idiosyncrasy of the problem.

From the above it is clear that AIDS/STD prevention looks more like a topic to be handled by individuals with a background in communications, community development or behavioral change with a strong grounding in qualitative research methodology. As a result, the medical profession would need additional training to become familiar with message development, group dynamics and problem management for the creation of risk awareness and the promotion of safer sex lifestyles.

Is Research Useful

Presently, the role of qualitative research as it translates individual experience in its subjective forms is being highlighted. The world is as it is seen and the research, and researcher, should adjust to the object of the research just as the intervention should be able to adjust to the problem as it is perceived. Qualitative research can be used as a formative assessment tool for program design, impact assessment or as a monitoring instrument. Its true value, though, is empowering people with their own resources and pointing away from merely material growth. This leads to research that is user owned and thus maximally sustainable and useful.

In the beginning of the AIDS epidemic, it was felt that the use of the large-scale knowledge, attitude and practice surveys (KAP) was not going to provide a lot of useful information which could not have been gathered by participant observers. Unfortunately though, such studies were undertaken, and a lot of money was and is being wasted on the collection of data which do not contribute to improved quality of life or the development of skills and resources. For example, it is obvious that older men have sex with younger women or that world-wide about one-third of sexually active people are promiscuous. It is also widely known that most of the clients of commercial sex workers in Southern Thailand are Malaysian.

Further, to spend limited resources for research on similar issues is at least questionable when researchers have not been trained to translate results into appropriate interventions. *Researchers today for the most part are problem identifiers; they are not problem solvers.* But in order to become useful, research has to become a feedback tool and instrument used by the target actors to find out what they are doing, how they are doing it, and where to aim for. Qualitative research, by virtue of its interpersonal nature, can function in

this way as a kind of information processing tool enabling more constructive two-way communication towards change and progress. The step towards intervention would be a small one to take, but is extremely crucial.

Finally, the following topics for qualitative research application and prioritizing are of paramount importance in investigating the AIDS/STD situation and designing appropriate interventions:

Minimal requirements for an effective STD prevention program;

Health seeking behavior;

Production of IEC materials and training materials (including pretesting);

Provision of skills to negotiate safer sex (including message development);

Factors influencing consistent condom use;

Mechanisms for empowering women and children;

Factors influencing social support (attribution theory and attitudinal change);

Perceptions on AIDS/HIV/STDs as diseases;

Barriers towards use of effective methods and programs among senior officials;

Data collection on sexual networking, effective interpersonal communication processes and group dynamics;

Intervention methods (group versus individual counselling);

Effectiveness of training for behavioral change;

Development of monitoring and evaluation tools, etc.

Efforts undertaken in this areas, though, must meet certain criteria. Firstly, research should be carried out by knowledgeable people to avoid duplication of efforts and resource wastage. The necessity of a multidisciplinary approach here also becomes apparent. Further, *research should give back more to the community than it takes from it, especially in skills transfer, resource development and creation of awareness.* Research should be operational and intervention oriented, and its methods should use the language and the rituals proper to the object/target audiences.

Criteria such as these will not necessarily match quantitative procedures, though they may very well do so for qualitative procedures. The latter then, however, may be subject to criticism and regarded as not objective and unscientific. Yet, within themselves they will provide valuable and valid contributions to intervention development.

In conclusion, qualitative research methods will undeniably enhance the effectiveness of AIDS/STD prevention efforts since they can reflect and facilitate the process of change as it appears in the community.

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Chapter 6

Nutrition and qualitative research: a marriage over time

George Allen Attig
Bencha Yoddumnern-Attig

This chapter explores the field of nutrition and its development over the last three decades with an emphasis on showing how the role of qualitative research has grown in importance as nutritionists and other allied professionals seek to understand the behavioral dimensions of food habit patterns - EDS.

Introduction

Nutrition is often regarded as one of the most interdisciplinary fields covering virtually every area within the biological, life and social sciences and even the humanities. Yet surprisingly, a review of nutrition studies over the past thirty years reveals that the main approaches that nutritionists have used to study food consumption and nutrient intake are either concerned with the human body's biological needs or the economic forces regulating food obtainment and thus intake. It has only been recently that the gaps in our knowledge of the behavioral aspects of nutrition have begun to be investigated, mainly at the urging of international development agencies such as the World Health Organization, the Food and Agriculture Organization, and the United Nations University. In many instances, investigators have not been nutritionists but specialists working in other fields, most notably anthropology, education, communications and psychology. Yet, greater interdisciplinary collaboration between nutritionists and specialists in the social and behavioral sciences is very evident today since nutrition has come to be fully seen as a biosocial and biocultural field.

This brief chapter therefore seeks to answer the question "How has this change come about and where are we headed?" by traveling through time and looking at the priorities that have emerged over the last thirty years. The intent is not to present an exhaustive review of the voluminous literature on food habits and nutrition which is not feasible here. Rather, the objective is simply to highlight major trends and the growing role qualitative research is coming to play in solving nutritional problems among developing and developed nations.

To achieve this objective, the chapter is inherently divided into two major sections. The first section presents a general overview about how nutrition and food habits have been viewed theoretically and conceptually from the 1950s through the 1980s. It is meant as an introduction to the second section which, beginning in the 1980s, takes an operational look at how qualitative research has and is being used to understand the behavioral context of food

use and patterning to improve community-based nutrition programs through a research-cum-action framework.

The Formative Years

Two of the most prominent early leaders in the quest to bring nutrition's behavioral importance to light were Margaret Mead and Richard Adams. Margaret Mead's contributions to the field of anthropology are widely known within and outside of that discipline. For nutrition, she was a paramount leader in advocating a frame-of-reference perspective which called for taking an in-depth look into why people in certain cultures and societies eat what they do, how food habits are developed, and how they can be modified. Her achievements in investigating the determinants of breastfeeding and promoting its use during a time of a growing tendency towards bottle feeding are especially noteworthy.

On his part, Richard Adams was a forerunner in advocating that nutrition and anthropology should be brought closer together through the collaborative sharing of each field's unique perspectives and areas of understanding. Although his stance was advocated back in 1959, it is only now coming to fruition.

Beginning in the early 1950s and extending through Adams' time, it was inherently realized that nutrition was a biocultural phenomenon that could not be adequately investigated using only objective, laboratory- and clinical-based perspectives. This period, in particular, saw an upsurge in interest in the sociocultural and psychological factors influencing food habits that was stimulated by wartime food problems (Sanjur 1982:23). Cussler and de Give in 1952 especially noted one of the reasons why nutrition began evolving out of a purely medico-biological perspective and into a biocultural and biosocial arena. They stated that:

> *Nutritionists are constantly discovering with wonder and alarm, that man, that rational creature, often behaves unreasonably. The food analyst took a long, close look at the universal ailment and found calories, vitamins, and minerals. He said . . . "Tell me what you are and I will tell you what you should eat . . ." But it was not to be that easy. Indeed the area of food choices has seemed often an area of great unreason . . .*

As implied in this quote, during this period (and times yet to come) nutritionists were still aiming themselves towards investigating the *consequences* of food intake through basic research. That is, their primary focus was on understanding what occurred after food reached the mouth and how the body reacted to the presence or absence of certain macro- and micro-nutrients. This should not be viewed as a criticism, but a crucial starting point, since this was a period when nutrition, as a biomedical field, laid its essential biological foundations. This relatively well-defined biological basis to nutrition was needed before later nutrition specialists could consider the social and other behavioral influences on nutrition.

During the Second World War, and along a complimentary line, many non-nutrition specialists (most notably anthropologists, educators and psychologists) also began delving into the field of nutrition particularly in terms of food habits or food ways. Their main emphasis, though, was on the *determinants* of food intake: what people ate, where, when, how much. They also started looking at the 'why' especially in terms of the underlying social, economic, political, and cultural processes that encouraged people to put a certain food item into their mouths. Their focus therefore was not on the *intra-bodily* environment as was nutrition researchers at the time. Rather, they had an *extra-bodily* environmental perspective and often compared food habits cross-culturally to identify common patterns and rationale for food use

belonging to people living in different cultural, social and physical environmental settings. This was important since as Sanjur noted (1982:3),

> *What and how human populations eat depends on many factors but most importantly on* ***where people live****, because in a large portion of the developing world, food is produced in the area where it is consumed.* ***Income*** *is also a major influence on dietary patterns. But beyond these physical and economic determinants, food habits are fundamentally* ***cultural*** *habits. Food habits are culturally determined; that is, the individual's subcultural background and orientation, as well as his or her personal characteristics and perceptions, ultimately determine what his or her dietary patterns will be.*

As a result, food habits began to be seen multidimensionally as a function of four main correlates: food consumption, food preferences, food ideology, and sociocultural parameters, all of which interact to regulate food intake.

Also taking shape at this time were food habit studies and models aimed at behavior change. The pioneer in this area was Kurt Lewin who looked dynamically at why people ate what they did. This included a study of the pathways or channels by which food entered the household and ended up on a family's table. Of special importance here was understanding the food cognitions and motivations of controllers, or gatekeepers, who regulated a family's ability to acquire food. Lewin (1943) also developed a motivational model which attempted to explain food habits as satisfying social needs. In this perspective, food symbolizes human values and social relationships and thus serves several non-nutritive, economic and cultural uses. Food thus becomes not only a biocultural issue but a biosocial one as well.

Realizing that food habits were dynamic and could be modified, Lewin then advocated a process for changing people's behaviors especially through active group decision-making which proved to be more effective in leading to behavior change than if the target group were merely considered to be passive actors. This process can be summarized as a sequence of identifying a specific behavior, then 'unfreezing' the habitual behavior, 'moving' the public in the direction of a more desirable behavior, and finally, 'refreezing' them in the changed behavior (Achterberg 1993). This model was not used after World War II, but it was successful and it introduced several important principles including the need to identify a single objective, the use of peer or group pressure to stimulate 'unfreezing' and the use of active, social participation to stimulate 'moving.'

Likewise, after World War II, psychologists began working on a number of different models that described how an idea or concept (such as a food practice) diffuses through a society, but the focus tended to be on individual behavior and the decision-making process rather than on the group process (Achterberg 1993).

Merging of Perspectives

During the 1960s and early 1970s, the importance of nutrition for a population's well-being came fully into view with a series of large-scale national nutritional status surveys, most notably in the United States but also in some developing countries such as Nigeria and Thailand. These came in response to public outcry that hunger and malnutrition were not solely characteristics of developing nations; they could even be found within such an industrialized society as the United States. Combating malnutrition thus became a global concern without respect to political or economic boundaries.

Several leading international development agencies, most notably the World Health Organization (WHO), stepped to the forefront with guidelines for assessing nutritional status (1963). These guidelines covered the traditional areas of nutrition concern (dietary surveys, vital and health statistics, anthropometric studies, clinical nutritional surveys, biochemical studies, special food studies, epidemiology). But they also highlighted the need to gather interdisciplinary information that would give a more holistic picture including agricultural data via food balance sheets; socioeconomic data on marketing, distribution and storage; and food consumption patterns including cultural, anthropological data.

Nutritionists such as Jelliffe and Jelliffe (1973) were also looking more towards not only the biological factors affecting such nutritional disorders as protein energy malnutrition in childhood, but also on environmental factors that placed such children at risk. These covered not only an individual focus on the child, but also an examination of factors associated with the *mother* (e.g., illness and malnutrition, presence, age, mortality, occupation, intelligence, competence), *culture* (weaning practices and foods, child feeder, sex, traditional health and nutrition practices), *socioeconomic* factors (including not only educational and economic levels but also child abandonment, family structure, and alcoholism), *geographic-climatic* factors, and other causes including attendance at and response to health services.

Consequently, a multitude of factors arose that needed to be investigated to shed light on the sociocultural (not simply biological) factors underlying people's food consumption practices. Several schemes, such as Mead's (1964) frame-of-reference approach, were then developed for studying food habits, and these aided in systematizing investigations. For example, de Garine (1972) advocated obtaining content information on the factors underlying food habit development. He suggested at least three areas that should be studied: *food production* (storage, distribution, processing, and meal preparation), *food consumption* (including seasonal food supplies and fluctuations in income; consumption is appraised according to sex, age, and status of each family member); and *food ideology*. The latter stressed looking at implied theories underlying food-related behavior, which can be inferred from people's opinions. Other areas within food ideology include the dietetic and therapeutic uses for and concepts of food, ritual uses of food, common preferences and dislikes, and foods/diets that are accorded social value or prestige. Shortly thereafter, Berg (1973) called for a systems approach that centered on examining intrahousehold food distribution patterns in developing countries.

Sanjur (1982:50) has noted that at least four conceptual models were being used by investigators who had conducted intensive research into food habit patterning in many sociocultural contexts:

1. A *motivational framework*, or channel theory, in which food habits are viewed as satisfying social needs and in which food symbolizes human values and relationships and has non-nutritive functions (Lewin 1943).

2. A *multidisciplinary analysis* of children's food consumption behaviors and explained as a function of the school environment as well as the home and family environment, with special attention to the child's motivations and understanding (e.g., Lund and Burk 1969).

3. An *ecological viewpoint* of food consumption behavior where food habits arise out of objective (physical, environmental, technological) forces and subjective (cultural, social, psychological) ones, both coexisting in an economic environment (Wenkam 1969; later adapted and advocated by Jerome et al. 1980).

4. A *multidimensional code* to study food habits as a function of food consumption, food preferences, food ideology and sociocultural parameters (e.g., Berg 1973; Sanjur and Scoma 1971).

Also beginning in the 1970s, several other world developments enlarged the view of how nutrition could and should be practiced particularly in developing countries where nutrition programs were needed the most. In 1978 at Alma Ata, USSR, WHO initiated a fundamental change in its programming that would form the basis for virtually every nation's health system. Up to that time, WHO's main emphasis was on disease eradication which only addressed one part of health and illness behavior. With the Alma Ata Declaration, WHO began stressing prevention and the needs of the rural poor as ways to combat not only existing health problems, but many emerging ones as well. This *primary health care* (PHC) strategy provided comprehensive basic services in maternal and child health, nutrition, family planning and many other areas that have grown over the years. Hence, nutrition as a part of basic health services began shifting more firmly towards understanding people's actual behaviors as the most important health variable of concern.

In addition, many technological achievements, that could be implemented through the PHC system, were also made during this period including the development and distribution of superior weaning foods in Central America, Thailand, and other nations where the primary focus was home- and community-based nutrition improvement.

Global and Methodological Movements

The 1980s, therefore, brought the field of nutrition out of the laboratory and placed it more firmly within communities. The PHC movement stressed people's participation in health and nutrition development and the advent of such strategies as community-based growth monitoring and surveillance. To develop PHC programs that would be maximally beneficial and acceptable to villagers, nutritionists and anthropologists began to work together to develop finely-tuned qualitative approaches, such as the Rapid Assessment Procedure (RAP) (Scrimshaw and Hurtado 1987), to uncover the behavioral context of health and nutrition at household, community and health service provider levels (see Kachondham, this volume). For weaning age malnutrition, for instance, special emphasis at this time was being given to using qualitatively-based approaches to place this disorder within the matrix of social and economic factors that caused it (Mitzner et al. 1984).

Operationally, later on in the decade nutrition became a more multidisciplinary and multi-sectoral issue rather than one only concerned with public health. This came about as the concept of 'having good health' or 'Health for All' was expanded to 'having an optimal quality of life.' This included embedding nutrition more firmly in development plans and programs whose concerns were more broad, such as poverty alleviation, rather than only health or nutrition.

For example, one of Thailand's earliest and most successful nutrition model development programs was the Nong Hai Project, conducted in two villages in Pibun district, Ubol Ratchatani province, Northeast Thailand, from 1976-1980 (Valyasevi and Dhanamitta 1985). Like many developing nations today, this program came at a time when government priority was just beginning to be given to health and nutrition improvement during Thailand's Fourth National Development Plan. In this plan, health and nutrition programs were to be implemented through peripheral and village primary health care networks. Yet, an effective model for integrating nutrition considerations into the health care service infrastructure had not yet been established, largely because Thailand's formal primary health care system was still

in its infancy and had not been fully implemented on a large-scale as it is today. Moreover, many concerned health and medical specialists felt that in order to improve the nutritional status of infants and preschool children, pregnant and lactating mothers, nutrition and health components would need to be integrated into agriculture and community development. A key part of this rested on using qualitative research methods to study the felt needs and circumstances of community members as an important base for developing an integrated conceptual model to ensure adequate community income generation, food supply, food consumption, and health care.

As noted earlier, nutrition has traditionally been a 'hard science' field that has focused on the biological consequences of food intake. As a result, nutrition research has for a long time based itself firmly upon collecting quantitative data using a wide variety of techniques ranging from laboratory experiments to survey questionnaires. The intent has been to quantify the frequency or magnitude of certain food and nutrition phenomena. This quantitative orientation provided rigorous, reliable, verifiable, large aggregates of data and the statistical testing of empirical hypotheses related to people's food acquisition and consumption behaviors as well as nutritional status. *What soon became apparent, though, was that while this statistical picture provided a good description of what was going on, it did not provide adequate explanations about why such phenomena or patterns of phenomena persisted, nor the context in which people's food and nutrition behaviors were embedded.* This information is crucial, though, if community nutrition programs (including food habit modification interventions) were to change from piece-meal activities into full-fledged processes aimed at facilitating change in food/nutrition behaviors and, in turn, nutritional status.

Consequently, during the 1980s and continuing to today, there has been a considerable upsurge in interest in collecting qualitative data as part of community nutrition research and the attainment of nutrition objectives. This is especially the case for projects aiming at behavior modification. Drawing heavily upon anthropology, most notably nutritional anthropology, qualitative nutrition research aims to collect information on a smaller number of either individuals or groups to highlight the social and cultural contexts in which their food/nutrition actions thrive. In other words, it properly seeks answers to questions by examining the various social and cultural settings in which food plays a key role and the individuals who inhabit these settings. Qualitative nutrition researchers, then, are most interested in how humans arrange themselves and their settings with regards to food obtainment and preparation considerations, and how inhabitants of these settings use food as a means of making sense of their surroundings through beliefs, symbols, rituals, social structures, social roles, and so forth.

Through observational techniques, in-depth interviews, focus groups and other ethnographic research methods, community-based nutrition interventions look clearly at the traditions of their audiences and develop programs compatible with them. But instead of designing programs to affect people's beliefs and actions (usually through the simple provisioning of information), newer approaches are advocating using people's knowledge and emotional reactions to food, nutrition and allied health concerns as a starting point for education (Yoddumnern-Attig et al. 1991, 1992).

But qualitative research alone is often not enough. During this decade, nutritional anthropologists Jerome, Kandel and Pelto (1980) echoed the need to wed the qualitative nature of anthropology with the quantitative foundation of nutrition emerged. They stressed that the strengths and weaknesses of cultural anthropological research stemmed from an emphasis on qualitative, descriptive data which often ignored quantitative data-gathering. Nutritional science and nutritional epidemiology, though, erred in the opposite direction since they had been built on a firm quantitative basis. These scholars advocated that a lack of attention to descriptive, community-centered research often led to studies that failed to reveal the

underlying dynamics of the phenomena (e.g., food habits) under study. Like Adams over two decades earlier, they stressed the need to develop meaningful and accurate approaches that took into account both qualitative methods and quantitative techniques that are indispensable in developing verifiable, scientific knowledge (Sanjur 1982).

Following this call, several approaches arose for analyzing the social and cultural contexts in which food/nutrition behaviors are embedded. Two prime examples are Rapid Rural Appraisal (RRA) and, most notably, Rapid Assessment Procedures (RAP) (see Kachondham, this volume). Both, in part or in whole, called upon the combined use of specific qualitative methods such as focus groups, in-depth interviews, documentary research and structured observations. Yet while both approaches are valuable in their own right, care must be taken in deciding which one to use or whether to simply call upon anthropological methods and refine them to gather data for attaining specific program objectives. When to use a method (not simply what approach to use), for which particular research stage, and to achieve what specific objectives is crucial in holistically conducting an entire community nutrition program. Moreover, to avoid the problems noted by Jerome, Kandel and Pelto, the RAP approach especially advocated not simply the obtainment of qualitative information on nutrition and PHC, but its integration with quantitative data for action program development.

As the decade bloomed and drew to a close, many nutrition programs solidified themselves around a three-fold strategy of assessment, analysis and action where qualitative and quantitative methods were wedded to develop comprehensive, integrated food habit modification programs. A prime example of this was Thailand's own program entitled "Food Habit Modification for Improving Maternal and Child Nutrition in Rural Thailand" (Tontisirin et al. 1992). This nationwide program comprised two main phases. The first used qualitative and quantitative data collection to assess and analyze the food habits of preschool children, pregnant and lactating women. This then led to an action phase based on participatory action research with a nutrition communication component that used qualitative data to design appropriate media messages, select effective channels and develop practical interpersonal activities that successfully led to food habit changes.

Overall, this project and others pointed out that food habit modification requires an integrated concept of nutrition including biomedical and behavioral science perspectives. This should be based on an accurate, early analysis of the pragmatics of community life including considerations of socio-cultural, economic, political, psychological and physical environmental suitability, and the roles these factors play in shaping existing food practices. This gives a clearer understanding about the project's target group and the audiences that affect their food intake decisions. Lastly, to implement intervention strategies, projects must create a participatory atmosphere and a combined bottom-up/top-down team approach where local development agents and community leaders work together to design the activities that they feel will have the greatest success considering existing community conditions.

Research-cum-Action

Where are we at in the 1990s? Within Southeast Asia, most countries still encounter problems of undernutrition. Protein-energy malnutrition (PEM), vitamin A deficiency, iron deficiency, and iodine deficiency disorders are the most common, persistent problems. Infants and young children under five, pregnant and lactating women are the most vulnerable, and especially among the urban and rural poor.

Compounding these problems is that several nations are entering a societal transition according to their stages of development. This transition is reflected by various characteristics including demographic change in the population structure; epidemiological changes in disease

patterns (from infectious to chronic diet-related diseases); socio-economic change from full-subsistent to semi-subsistent, market-oriented economies; and a change from the struggle for child survival to development of full growth potential.

Southeast Asian nations cover from one end of the spectrum to the other, and some countries may show a composite picture depending on their stages of development. What this alludes to is the situation where one is dealing with different problems (such as under- and over-nutrition) in the same region and oftentimes in the same country.

Within this context and taking off from such pilot interventions as Thailand's food habit modification project, nutrition programming has come to mean more than simply collecting qualitative (and quantitative) data, using it to design interventions and then evaluating their impacts and outcomes. More importantly, it implies the determination of those engaged in it to follow through their findings to the ultimate stage of wide-spread implementation. This strategy is a new one (coming of age in 1991), and is now referred to by WHO/SEARO as nutrition research-cum-action. It involves fully merging the basic and applied food/nutritional sciences to advance fundamental knowledge while seeking practical ways to solve persistent national and community policy and program nutrition problems through research and training in appropriate research methodologies.

Special emphasis is placed on using qualitative evaluation research (at baseline, formative, process, and outcome stages) to uncover the behavioral determinants of such nutritional issues as PEM, anaemia, vitamin A deficiency, iodine deficiency disorders, breastfeeding, and nutrition surveillance and monitoring. Considerations are given to the individual and family levels, local institutions (such as schools, work sites, etc.), village or community, regional institutions, sociocultural effects, national and international conditions. This approach helps planners focus their efforts at points where interventions are more likely to have an effect. For example, if the objective is to encourage the purchase of iodized salt, but the reason that families are not buying it is due to poor distribution, then measures need to be taken at a higher level to correct the distribution mechanisms.

Nutrition research-cum-action in Southeast Asia encompasses combining qualitative and quantitative research methods for data collection and analysis concerning the magnitude and causal factors associated with specific community-based food and nutrition problems. More importantly, though, qualitative principles and methods are also used to establish working interpersonal relationships among individuals who will be involved in action research projects that are based on an understanding of local conditions and rapport building. The aim is to use the research process as a learning tool for local change agents and community members so projects have an increased chance of sustainability.

Playing into this is the nature of qualitative research itself. One principle characteristic of the qualitative process is the subject-researcher relationship. Participant-observation and in-depth interviewing involve a high degree of rapport and trust between subject(s) and the interviewer, because oftentimes many very personal thoughts and feelings are brought to the surface. Interview information, while being guided by an interview schedule, result from the free-flowing, non-directional and highly interpersonal interview context. As a result, the researcher him/herself becomes a part of the intervention development process even during the early stages of data collection, and it is his/her relationships which evolve with community members and local officials that ultimately determine whether a new program and its activities will be initially accepted.

During the project implementation process, therefore, a people-oriented qualitative perspective serves as a mechanism for creating a participatory atmosphere in planning, undertaking and evaluating community nutrition projects with local health and social development workers, community members and research personnel. This participatory atmosphere is based on a two-way concept of communication and problem-solving which is

put in operation by establishing mechanisms for working with both institutional and community groups. These groups along with project personnel can then work together as *project collaborators* who have a mutual interest in the project's success. Ownership of the project, moreover, is given to local people as early as possible. The goal is to ensure the sustainability of activities after the project has ceased as well as their post-project expansion to cover areas not under the original project (for instance, from a district-wide to a province-wide program).

Conclusion

Early attempts to understand and address community nutrition problems met with limited success. Generally, the complex interrelated factors causing nutritional disorders were not adequately appreciated and the possibility of involving community members and local development agents in identifying, analyzing and resolving their nutrition problems was largely ignored. Presently, a deeper understanding of the interrelationship between nutritional disorders and their behavioral context is now evolving, and the importance of using qualitative methods as a part of the investigation and project implementation process has come of age through the nutrition research-cum-action process. Unfortunately though, this is not an easy process because it challenges us not only to discover in-depth knowledge about local customs and beliefs, food availability and market forces, health problems and services, socioeconomic constraints, and so forth. It also asks us, as nutritionists and people, to become involved in community life as project co-participants and *learners*. Every time we step into a community we can learn a great deal using qualitative methods about ourselves, how we relate to people and our own assessment of 'what it takes' to promote individual commitment and community participation. We must constantly use our skills (both learned in the classroom and in the community) to guide, not simply inform, community members about how and why to change their behaviors, and instill in them a greater sense of nutritional self-efficacy and self-reliance. These are the vital elements in the behavior change process.

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Chapter 7

The role of qualitative studies in policy formulation and development planning

Boonlert Leoprapai

Formulating sensitive policies and accurate plans are two of the most important functions of national decision makers in any developing nation. This chapter discusses some of the key concepts that need to be understood in viewing the importance of qualitative research for policy and planning. It also uses Thailand's own successful population efforts as an example of the role qualitative studies play in policy formulation and development planning - EDS.

Definition of Terms

To gain a mutual understanding of the role of qualitative studies in policy formulation and development planning, several terms need to be defined along with their scope and processes. The most crucial of these are policy, development plan and qualitative studies.

Policy

Policy generally means an objective or set of objectives along with the measures and means to achieve them. For example, the population policy included in Thailand's 6th National Economic and Social Development Plan (NESDP, 1987-1991) contains three main objectives: to reduce the population growth rate; to develop population quality; and, to develop population distribution and human settlements in relation to the goal of quality of life improvement.

To attain the objective of population growth rate reduction, measures which were instituted included promotion of family planning, promotion of population education, and lastly, some measures which were beyond that of family planning. Guidelines for implementing specific measures also specified certain activities. For instance, activities related to family planning implementation measures were: family planning services conducted through various means to reach target groups; the training of family planning personnel to develop capabilities; dissemination of family planning information; research and evaluation; promotion of community participation; and, coordination in family planning activities (National Economic and Social Development Board 1981).

The processes leading to policy formulation are usually lengthy and complicated. For

Thailand, it can be said that the nation's changing population trends after World War II, coupled with the country's economic, social and political goals of introducing a better quality of life to its people, led to the need for a national policy for population growth reduction or one aimed at slowing the rate of population increase. This statement was supported by the existing quantities and quality of available resources as well as levels of knowledge and technology which included abilities in the administration and management of economic, social and political activity organizations. The processes which gave rise to policy formulation can also be seen from the following quotation (Leoprapai 1977).

> *Since B.E. 2487* [A.D. 1944] *Thailand (like many other developing countries) has succeeded in reducing its mortality level by using the technology of epidemic and communicable disease control together with the simple sanitary system. In early B.E. 2501* [A.D. 1958] *observations made by the World Bank Mission during a socio-economic survey and results of studies and observations made by academicians and students from various disciplines brought about the concern that the nation's increasing population growth rate would be a major obstacle in developing the population's quality of life. During that period, Thailand's natural population growth rate was ranked as one of the highest. Therefore, calls for action to reduce the population growth rate or to have the population increase at a slower rate were made. However, some academicians and technocrats thought that Thailand ought to have a larger population. After considering results from a number of research studies and opinions from various sources, eventually the government announced its population policy in March, B.E. 2513* (A.D. 1970). *It stated that the government supported voluntary family planning as an aid to the solution of various problems related to the high rate of population growth which would be a major obstacle to the country's socio-economic development efforts. After the announcement of this policy, the family planning program was established. Its target and methods of implementation were in the Third National Economic and Social Development Plan (B.E. 2515-2519)* [A.D. 1972-1976].

Since the 4th NESDP (B.E. 2520-2524 [A.D. 1977-1981]), the above policy was developed into a more comprehensive population policy covering size, quality, distribution and settlements.

Development Plan

In the briefest and most direct meaning, a development plan is a set of documents comprising both major and minor programs, including several projects. The objectives and targets of these plans and projects have to be clearly specified, especially in terms of the following questions. What development strategies will be used in order to attain the objectives and targets? What is the duration of the plan? What amount of resources are needed? What kinds of administration and management should be adopted? How will the plan(s) be controlled, directed, followed and evaluated?

A development plan might be either a comprehensive plan covering economic, social, demographic, cultural, natural resource and environment aspects; or a specific plan such as the population plan, a public health development plan or an education plan. The process of

development planning comprises the following vital steps (Bilsborrow 1976).

1. Formulating an overall strategy and preliminary specific targets.
2. Assessing the current situation in the country from existing information.
3. Projecting the future on the basis of recent past and expected future trends.
4. Determining differences between desired targets in 1 and expectations in 3.
5. Determining policy options available and choosing that set of policies which minimize 4, given the expected budget and actual resource constraints.
6. Revising targets accordingly and publishing them as goals for the entire plan period or annual goals.
7. Implementing the policies and strategies chosen.
8. At the end of the plan period (and/or at a certain period during the plan's implementation), assessing the extent to which plan targets have been fulfilled, and reasons for shortfalls.

Qualitative Study

This term means here to collect data and information to analyze and interpret social phenomena or human behavior by applying concepts, techniques and qualitative research methods. The qualitative study aims at explaining why human beings behave in a certain way and/or how the social phenomena are related to their environments.

From the above meaning, although qualitative studies differ from quantitative studies in terms of method of data collection, modes of data analysis and data interpretation, both types are complementary. The quantitative study can determine the magnitude, direction, patterns and nature of social phenomena correctly and reliably, but it cannot explain "why" such phenomena happen, under "what" socio-economic and cultural environmental conditions, and "what" relationships exist among factors. These are best obtained and understood through qualitative investigations.

The Role of Qualitative Studies

The role of qualitative studies in policy formulation and development planning can be easily seen by looking at Thailand's population growth rate reduction and the development planning which went into it to fulfill the policy objectives and targets mentioned previously.

Information from various quantitative studies indicated that during the past twenty years, the Thai population's fertility level (as measured by the total fertility rate) declined rapidly from about 6.5 during 1960-1964 to 3.5 in 1984, or a decrease of about 46 percent as shown in Table 7.1 (Leoprapai, Pokpong and Isarabhakdi 1985).

This decline in the fertility level occurred simultaneously with an increase in the contraceptive prevalence rate of currently married women of reproductive age. The contraceptive prevalence rate rose from 15 percent in 1969/1970 to around 65 percent in 1984. In addition, these women's expected number of children (i.e., number of living children plus additional children desired) gradually declined as shown in Table 7.2.

Table 7.1 Estimated total fertility rate, 1960-64 to 1984

Time Period	Total fertility per woman	Percent change from previous period
1960-64	6.48	n.a.
1965-75	6.19	- 4.5
1970-75	5.05	- 18.6
1978-79	3.77	- 25.2
1981	3.68	- 2.4
1984	3.47	- 5.7

Source: Leoprapai, Pokpong and Isarabhakdi 1985.

Table 7.2 Contraceptive prevalence rate of all methods and the expected number of children for currently married women of reproductive age, 1969-1984

Time Period	Contraceptive prevalence rate* (percent)	Expected number of children** (person)
1960/70	14.8	4.4
1972-73	26.3	3.9
1975	36.7	3.9
1978/79	48.5	3.8
1979	49.3	3.7
1980	48.1	3.7
1981	59.0	3.5
1984	64.6	3.3

Sources: *Leoprapai, Pokpong and Isarabhakdi 1985.
**Knodel et al. 1982.

Data obtained from quantitative studies indicated the direction and magnitude of the fertility level reduction among Thai women. Such a reduction is negatively related to the contraceptive prevalent rate and positively related to the expected number of children of currently married women of reproductive age.

In terms of policy formulation and development planning, it can be said that if the policy of population growth rate reduction by decreasing the fertility level is to be retained, then the contraceptive prevalence rate among Thai women must be increased. At the same time, attempts should be made to change the Thai familial value to one which stresses a smaller number of children per family. Hence, the planning to attain the policy's goal and objectives must be in the form of development strategies that lead to increases in birth control practices and to convincing people to have smaller families.

Problems or questions raised by those involved in policy formulation and development planning fall into two categories.

1. How much effect does birth control have on the fertility level; and are there any other factors influencing this level?

2. If birth control's impact on fertility level reduction is as much as expected, then under what socio-economic conditions do the people accept birth control? What cultural environment is amenable to voluntary fertility control and to limiting family size? Is there any latent demand for effective and acceptable means to control fertility or not? To what extent do various projects under the present family planning services system affect the awareness of the population-at-risk and increase their access to and acceptance of effective fertility control methods?

To answer the above brief questions is highly important for policy formulation and, especially, planning. This could be seen from the processes in development planning mentioned earlier. If these questions are not answered, then these questions, inappropriate development strategies might be used which do not lead to the attainment of policy goals and objectives. This would not only result in the wasting of resources, but it would also demoralize those who are concerned.

To answer questions in the first category, the quantitative study by Knodel and others (1982) which used Bongaarts Model of Approximate Determinants of Fertility can serve as a good example. The model used the following variables in measuring impact: proportion of married women; contraceptive practice; induced abortion; and, postpartum infecundity. The study revealed that contraceptive practice played a role in the fertility level decline. When measured in terms of total fertility rate, contraceptive practice accounted for as high as 90 percent of fertility decline during the 1968-1978 period.

Knowledge on the role of contraceptive practice in lowering the fertility level assures persons responsible for population planning that the most important and appropriate strategy or measure to help fulfill the main objective of the policy to reduce the population growth rate is the promotion of family planning. However, the above knowledge is not yet enough to assure the planners that in addition to the family planning promotion, should there be any other development measures or strategies? Moreover, under the family planning measure itself, what other supplementary measures can be applied to persuade people to accept and practice effective and efficient contraception at the desired level? To answer these questions, a qualitative focus group study was conducted by Knodel and others (1984) in five Thai villages. The discussions were held among older and younger generation village women whose fertility behaviors were different.

Data analysis from this qualitative study pointed out that Thailand's fertility reduction was the result of four major interacting components, namely, rapid economic change, a cultural environment conducive for limiting family size through one means or another, latent demand for means to control fertility, and efforts to publicize and promote family planning services. The processes of economic change made couples feel that having many children would be an economic burden as the cost of living kept (and keeps on) rising due to an increase in the demand for goods and services. The cost of raising children also continuously increased, especially in terms of education which is one means of raising their children's economic status. This was shown by the latent demand for fertility control among the older generation who attempted to control fertility using herbal medicines.

This socio-economic climate worked along with a cultural environment which did not conflict with a couple's desire to restrict their family size to meet changing socio-economic conditions. Couples could make their own decisions. Further, Thai women have quite a high degree of freedom and status, and they can decide their fertility behavior by themselves. Moreover, the Buddhist religion has not objection to birth control behaviors except in the case

of induced abortion. All of the above factors, coupled with systematic efforts to provide family planning knowledge, information, and services effectively and efficiently, contributed towards a positive public response to the family planning program (Knodel et al. 1982).

This explanation on the relationship between the fertility decline phenomenon and socio-economic and cultural changes serves as important information enabling planners to select appropriate strategies for the family planning program. They are able to clearly see how the above factors support the acceptance and initiation of birth control. They can also identify workable strategies and projects aimed at expanding and strengthening the quality of family planning and related services by various means. Also important are measures for information dissemination and increased attempts to create societal value supportive to small family size.

Conclusion

In policy formulation and development planning, therefore, research results from both quantitative and qualitative studies serve important purposes. While results from quantitative studies indicate what development strategies or activities should be used to fulfill policy objectives, results from qualitative studies explain why and under what socio-economic and cultural circumstances those phenomenon happen and what are their relationship. The most important role of qualitative studies for policy formulation and development planning is thus to enable those persons concerned to select practical policy guidelines or implementation measures from those options which are available. Consequently, both qualitative and quantitative studies should be conducted simultaneously for findings to be used efficiently and in a timely way.

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Chapter 8

The reliability and validity of qualitative research methods

Wathinee Boonchalaksi

Qualitative research often depends upon techniques which are largely unstandardized compared to quantitative methods. Consequently, a key consideration is how to make qualitative data both reliable and valid, and this often rests upon using a variety of methods to cross-check and validate findings - EDS.

Introduction

Social research is a systematic process in which a scientific method is used for data collection, categorization, classification and analysis. Social research aims to obtain key behavioral and situational answers surrounding a particular research question and/or problem. The types of answers being sought are made concrete through the research project's objectives. These may entail answers that are synchronic, in that they address the current state of specific events or processes. Alternatively, they may be diachronic where processes of change, as well as their determinants and consequences, are reflected on or projected into the future. In constructing a research project, therefore, the investigator must carefully select appropriate scientific procedures, either qualitative, quantitative or both, in order to systematically collect the data required to attain his/her objectives and insure their acceptance as scientific evidence.

Qualitative and quantitative studies are considered different forms of social research, yet the separate research processes utilized in each are initially quite similar. This includes topic/problem selection, the defining of objectives, conceptual (or theoretical) framework construction, research design, sampling, and report writing. The main differences between the two forms are in the data gathering techniques employed and, by extension, the manner in which the data are analyzed and communicated (sentences as opposed to numbers). Unlike quantitative studies which focus mainly on objective numerical data, qualitative studies emphasize detailed, descriptive, and often subjective data gathered by non-statistically based methods such as observations, researcher participation, group discussions, in-depth interviewing and case studies.

The anthropological study is perhaps the most well-known form of qualitative research in which many of these methods are combined, allowing the investigator to "get close to the people" for an extended period of time. Some studies may take a month, while others last for years, depending largely upon how familiar the investigator is with the research setting. The rationale behind this "long-term" process (as compared to relatively quick structured surveys)

is that the tools a researcher needs to really understand a community are not quantifiable. That is, they include a knowledge of the local language; an intimate understanding of the local culture, social structure and organization; and a realistic interpretation of how these inter-relate with the community's overall biophysical environment over time.

Consequently, quantitative social researchers often question whether field data gathered by qualitative methods are indeed reliable and valid. For this presentations' purposes, reliability means the constancy of the method and its measurement process when re-applied under differing but standardized conditions (i.e., Would the same results arise if the procedure was repeated under the same conditions with no real alterations in the variable being measured?). When talking about a reliable person, for example, it is meant a person who is stable in his manner; how he acts today is not much different from how he acted yesterday or how he might act tomorrow. His reliability might be determined through personal experiences in observing and interacting with him, as well as the opinions of others. Qualitative studies utilize methods which look for underlying similarities in process in people's beliefs, behaviors, actions and reactions. Their reliability stems from their ability to consistently detect these processual similarities under standard conditions and multiple levels of analysis (e.g., individual, family, community).

In any form of research, however, reliability is sometimes difficult to obtain. Repeated studies conducted on the same topic may come up with different outcomes even when the same research design and methodology are used. In these cases, time and not procedures may be the main determinant of reliability. That is, events or behaviors which occur in a prior study may never take place in exactly that same way in a later study, or they may be remembered differently by the same person at various times or even by different persons at the same time. Historical conditions and changing environmental features lead people to adapt themselves to current settings. These must be taken into consideration in order to accurately determine whether data is reliable over time and space.

The reliability of data, though, rests intensively on data validity. Validity asks whether or not the method and its measurement process are able to make precise, concrete and correct distinctions based almost solely on the variable being measured (i.e., Does the technique measure precisely and correctly what it is intended to measure?). For instance, if we are talking about family size, a survey question which asks "How many people live in this house?" is not valid. It does not identify and eliminate temporary and possibly un-related household members (e.g., visitors, boarders, domestic help) from permanent family members (cf. the chapter by Vorakitphokatorn in this book). This distinction could only be made through the construction of more detailed questions (which might not be known beforehand), through the use of observation, or by informally asking other people who regularly interact with the family.

The aim of the researcher is to make the research process internally valid, where the correctness of findings is not affected by events occurring in the study. The accuracy of the tools being used by the researcher, as well as the framework and assumptions on which the research is based, must also not overtly and adversely affect the results. If the research process is internally valid, then its external validity may also be improved. That is, the research results, once stripped of their overly unique elements, are generalizable and may be accurately applied to other populations besides the sample under study.

Reliability and Validity in Qualitative Research Methods

Qualitative studies utilize a number of methods to cross-check the reliability and validity of the descriptive, subjective data. Informal conversations, documented data,

systematic observations, and even structured interviews are cumulatively geared towards lessening the weaknesses of one method projects (e.g., surveys) in favor of complementary data collection research endeavors. Largely speaking though, and in line with this text, qualitative studies oftentimes employ a combination of major techniques in the gathering of field data such as observation, in-depth interview, life history collection (case studies), and focus group discussions. Since these methods are discussed in detail in separate chapters, this presentation is aimed at orientating the reader to the specific issues of reliability and validity associated with these techniques, as well as their relationship to such aspects as sampling and researcher-subject interactions.

Observation

One of the most natural and frequently used qualitative techniques is observation, a practice which is almost always coupled with some level of researcher participation in the community. Observation allows the researcher to study individual and group behaviors in the target sample, while at the same time capturing the identity and changeability of phenomena related to the research problem. Through the use of observations, the researcher can also check the reliability and validity of subjective or objective information through comparative analyses.

Observation can be divided into two major forms: structured observation and unstructured observation. In anthropological research, these two types are sometimes differentiated based on the degree of researcher participation; structured observations correlate with nonparticipant-observation, while unstructured observation relates to participant-observation. The former often centers on frequency counts of events pertaining to specific variables and, therefore, is closest to a purely quantitative technique. Alternatively and directly associated with anthropological research, participant-observation involves the systematic notation of events as they occur in the everyday, and seemingly random, activities of community life. An event's happening and the contextual circumstances around which it arose are of prime interest, rather than the number of times it has taken place.

In the current state of qualitative studies, the majority of researchers use both structured and unstructured observation in the collection of primary field data. Observation, in either form, contains both strengths and weaknesses. Explicitly, observation facilitates the obtainment of more in-depth contextual details than survey data. In the case of structured observations, the investigator can conduct his study independent of the people's desires to cooperate with him, at least on an initial basis, with fruitful results. The reliability and validity of the findings can be tested after a certain period of time through the inclusion of additional information gained through interviews or case studies.

But observation in this situation has a number of drawbacks. More often than not, the investigator cannot plan in advance for unexpected events, and he cannot examine more than one event at one time. Observations can only be realistically and accurately made in a small group context. Where frequencies are sought, this small group focus reduces data validity and reliability. Some personal behaviors, especially those conducted within a family household or with very close peers, may also not be readily observable. The observational data may only rest on public (and thereby socially-controlled) behavioral patterns. This data will most likely be inadequate to fully test research hypotheses (unless they concern organizational behavior at this larger level), thus hindering their provability and overall generalizability.

Relatedly, errors arising from personal bias and/or insufficient knowledge about the context in which actions take place can reduce the validity and reliability of research results.

Bias directly caused by the observer may arise if the observer differentially and incorrectly participates in on-going events, either placing himself too closely or too distantly from the people and events he is studying. For instance, the observer may under-interact with people who he does not get along well with or in events which make him uncomfortable. But nonetheless, these are crucial for understanding community activities. Alternatively, by being too close to the situation through intensive participation, the researcher may become over-confident in his understanding, leading to potentially false assumptions. He might even leave out information which he feels discredits the community or project. In some cases, researchers have become so involved in the community that they have abandoned their research project totally and have chosen to live in the research community as a permanent member.

One belief responsible for the selection of observation as a technique (and its possible misuse) is that it is a very simple method for gaining information. People constantly use observation as an integral part of their daily lives, be it to observe traffic lights or the actions of people during important meetings. Observation in qualitative research terms, though, is a different methodological issue. It is a specific technique requiring special training to insure the validity of data at every stage in the research process. The training requires providing the researcher with the correct sociological and anthropological knowledge to understand, on an initial objective basis, how the culture and society in which the community is embedded affect people's actions, values, choices and decisions. It also encompasses instilling in the researcher a sense of self- preparation both on a personal level and a professional (observer) level. He should be guided to be almost value-free, unbiased and yet cautious of becoming to underly or overly involved. He must also be taught how to accurately remember and record events in as complete a manner as possible.

Perhaps the best mechanism for testing the validity and reliability of observations is to have more than one observer in the same study. After a period of time, their fieldnotes can be compared for consistency. Yet, great care must be taken in matching the observers with each other and their study area. For example, two investigators with similar socio-economic backgrounds (e.g., urban, middle-class) may indeed interpret an economic transaction in the same way. But since this event occurred in a rural village market, their observational interpretations of what occurred and why may differ completely from those of the subjects under observation. Problems can be compounded if the investigators have differing backgrounds in terms of each other as well as the research community. The validity and reliability of the data can be heightened, in this case, by selecting and training observers whose backgrounds match each other and the community context. The usual practice today is to select individuals who have received higher education, but are natives to the area under study.

In sum, validity and reliability in observational data are categorizable into three areas. This first is apparent validity, meaning that the researcher must possess a correct understanding of the subjects he is observing. Their actions and the events in which they are found should be performed in a natural social setting, not one which is artificial (e.g., as performed for the researcher). The second area is instrumental validity which refers directly to the observer as a research instrument. The observer must recognize himself as a tool, the validity and reliability of which depends on his precision in observing and an unbiased attitude. His interpretation of data must be consistent with that of the observed, so that it is accurate, reliable and valid in quality. The final area is theoretical validity. Here, once the study is constructed, observations must show a relevant relationship (positive or negative) between variables and the research question/problem itself. If no relationship exists, observations must be re-directed to focus more on achieving the project's objectives. Data quality, and thereby the reliability and validity, in each of these areas is maximized through the addition of supplementary quantitative or qualitative information which can highlight significant aspects which might be neglected through observation alone.

In-Depth Interviewing

In-depth interviewing is one such supplementary qualitative method. Unlike structured interview questionnaires, in-depth interviewing relies on the construction of interview guidelines containing open-ended questions which correspond to specific categories and data item classifications. These are designed to direct the conversation between the researcher and subject, but not dictate (pre-structure) the subject's responses.

This technique allows the researcher to obtain deeper and more detailed information on a specific problem than do observational or quantitative studies. Since the interview context is a free-flowing discussion, the subject can talk on many potentially relevant topics which the researcher might not have considered when forming his structured questionnaire or its pre-testing. Likewise, the researcher can ask more in-depth questions (many of which might not even be included in the guidelines) as new information is given. Such new clues and additional details may add a new dimension to the problem under study. The results can also be used to confirm or disprove prior findings gained from studies using standard, heavily structured methods.

In-depth interviews are two-way conversations generally undertaken with people who are relevant, in one or many ways, to the research study and its objectives. For family planning, women of reproductive age are often selected as subjects or, as is often called, "key-informants". To help ensure that the data collected is of high validity and reliability, the interview should be arranged in an atmosphere which is appropriate to the person and the questions being asked. The answers elicited should be natural extensions of the context in which they are given. For housewives talking about family planning, this may entail discussions in the home itself. Businessmen or politicians, on the other hand, may be more comfortable in being interviewed at their offices, especially if the questioning centers on their business or political affairs.

In-depth interviews, like observations, also have their limitations. Interviewers are challenged to continually process and analyze the information being given in order to keep the discussion going and to obtain even finer details on the topic being discussed. Oftentimes subjects will bring up topics which are totally unexpected, and the interviewer must immediately assess their potential relevancy and then ask even finer impromptu questions. Usually interviewers must, at the same time, take notes in as complete a manner as possible, while not disturbing the subject in the process. This problem can be reduced through the use of a tape recorder, if it is used in an unobtrusive manner and subjects know of its presence.

Increased reliability and validity of in-depth interview data is attainable through several methods. Information can be cross-checked using documents and records; subsequent interviews can be conducted with the same person or similar persons to see if repeated accounts are consistent; or focus groups can be held to assess key attitudinal variables at individual and group levels. Since in-depth interviewing provides data in qualitative form, its reliability depends heavily on sample selection. On the one hand, selected interviewees should be persons who best represent the target population and can clearly assess the situation under study. Likewise, in comparing the interviews of different people (particularly in checking reliability), individuals must be selected who are similar in background (e.g., family members, co- workers) to maintain a level of consistency. In either of these cases, subjects may not be people with whom the researcher is most familiar. Rather, they are people who fall best within the project's predetermined sample or sample subcategories (e.g., regular, negative, marginal for dimensional sampling).

Life History Collection

The life history, a deeper and more detailed type of in-depth interview, is a case study form which views the individual as a whole and seeks to understand his development over time in light of cultural norms, his social relationships, personal character, and historical conditions. Centering on an individual's experiences over time, life histories are person-centered documents which are either written or orally presented. A person's life story is collected through a subject-interviewer relationship which is highly personal and built intensively upon trust and rapport. Of all of the interviewing techniques, life histories are most demanding in terms of time, interviewer sensitivity and awareness as well as skill. The uses of life histories in social research are many, but in summary they are used illustratively or analytically to reflect on how individuals affect and are affected by changing socio-cultural and biophysical conditions in terms of his/her decision-making processes at key stages or life events. Their retrospective information is crucial for understanding prior determinants of current behavioral and attitudinal patterns.

Life histories also use interview guidelines as a means of directing data collection. Since the interviewer and life history subject are exceedingly familiar with each other, the interview itself is usually even more free-flowing and non-directional than are in-depth interviews. Guidelines usually center on specific categories such as roles, life-cycle stages or key life events. Specific data items under each category are then formulated, classified and merged into a set of naturally flowing questions. Life history accounts, once transcribed, are then analyzed using content analysis and abstraction methods in order to identify particular thematic patterns (e.g., authority, husband-wife relations, reproductive behavior decisions).

Life histories are presented either as single or multiple cases which represent a general theme. Although the chapter on life history collection in this text discusses in detail how to control for validity and reliability, emphasis must first be placed on the data collection process itself, since controlling the interview context between subjects is exceedingly difficult and dependent on a number of variables. In any case, the researcher (and readers of life history materials) must keep in mind three key questions when examining life history information. They are: a) Under what conditions were the data collected? (i.e., the nature of the subject-interviewer relationship); b) Has the data been revised, misinterpreted or over-stressed by either the interviewer or his subject in order to present a specific point of view?; and c) Is the life history subject representative of the population in terms of his experiences?

As mentioned in the later life history chapter by Attig, though, the misrepresentation of life experiences by the subjects themselves is indeed informative, even though they reduce both validity and reliability. Since life histories are highly personal, it is important to learn how the person wants himself to be perceived as opposed to how he actually perceives himself. Furthermore, the best life histories contain not only the thoughts and feelings of the subject's themselves. They also contain those of the researcher before, during and after the interview process. This intimate knowledge of both subject and researcher allows the reader to independently assess the data quality, validity and reliability based on the subject-researcher relationship and the interview process.

Validity and reliability of life history data can be enhanced through multiple comparative analyses. Life histories depend mainly on the accuracy of an individual's memories of past experiences and conditions. In selecting life history subjects and especially those who are elderly, the researcher should collect initial background information on key events in the community from several of its members. The researcher can then question potential life history subjects about these events and determine which person or persons give the most accurate accounts. This will indicate, in part, the reliability of subject's recollections.

After the life histories are collected, the content of each can be cross-checked with

the life histories of individuals in the same family or social group. If discrepancies arise, the researcher can re-interview the subject asking similar questions at different interview periods and then re-compare the information for consistency. As noted, even if a level of inconsistency still remains, the researcher must then fine-tune his investigation to determine the actual determinants. If time is a restriction and multiple life histories cannot be collected, the content of one or a few life accounts can be compared with information gained through either in-depth or survey interviews.

Lastly, historical data found in formal documents can also be used but only on a superficial basis. This data are secondary in nature and usually focus on historical societal happenings (rather than individual life interpretations). It may thus address different times, events and environmental conditions than those under which the life history subject was or is now living. Further, the document's author may have had a totally different objective and style in reporting his information, than that of the researcher. Historical documents, in this instance, are more valuable in examining changes in the socio-cultural context over time, than in determining the reliability and validity of life history information.

Focus Group Discussion

One rather new technique for field data collection - as opposed to the individual in-depth interview - is the focus group discussion. This method was originally developed for use in marketing research to gather information on consumers' feelings, opinions and reactions. In social research, it is oftentimes employed in studies where group attitudes are of greater relevance than individual ones. One other benefit of this method is that it is time-saving and cost-effective.

Focus group sessions utilize an interview guideline similar to that for in-depth interviews, and their validity and reliability rests heavily on the skills of the interviewers. The interview context is composed of a group of individuals who are homogeneous in their relationship to the problem under investigation. For food habits, as a case in point, people who all consume the same type of food might be divided into two separate groups, a men's group and a women's group, to gain an idea of their reactions to a proposed nutrition campaign aimed at changing their consumption patterns. A moderator is used to guide the discussion, and his personality and ability to communicate accurately and effectively in the local language is one main determinant of data quality. For instance, he must have the ability to draw out the information from people who may be reluctant to talk, while controlling those who want to take over the discussion. Although focus group sessions should be held in a place which is neutral and non-disruptive, the moderator must also be able to discourage external persons from unexpectedly interfering with the discussion's progress (this might entail asking them to leave, but in a non-insulting and ego-building manner). Further, a note-taker must be adept at recording information quickly and accurately, particularly when two persons talk at once.

In addition to these points, another major concern in focus group data collection is that the data collector and the project owner (i.e., chief principal investigator) should not be the same person. The latter oftentimes gains benefits if specific data is collected which agree with his hypotheses or research objectives. In focus group discussions, the moderator (i.e., project owner) can very easily ask leading questions which will bias the way in which group members answer questions. He can also direct questions to persons he feels will give him the answer he wants to hear. Hence, the person who is assigned to evaluate and analyze the data should be someone who is neutral in terms of advantages or disadvantages. He should also be the one who has participated closely in the discussion process as either a moderator or an observer. In the analysis process, answers must be sorted and filed according to specified

classifications, using classification cards which contain key components of the discussion's narrative. If the data analyst is not constantly present in the discussion, his understanding of the discussion's content and atmosphere and thereby his classifications and conclusions will be only tenuously valid. Only through controlling all of these issues can the validity and reliability of focus group discussions be maintained.

Summary

Though many different data collection techniques can be used in qualitative studies, each technique encompasses its own special advantages and disadvantages. The same situation is also found in quantitative studies using survey research methods. Moreover, no single technique will fit perfectly into a study's research design. Sometimes researchers attempt to use as many different techniques as possible in order to collect a large amount of qualitative or quantitative information, or both. The underlying assumption is that a large number of techniques will heighten data validity and reliability. Unfortunately this is not the case, especially if techniques are used improperly (e.g., sloppily) since the researcher is trying to do too much in too little time.

All techniques basically have one or two main functions. For observations, this entails picking up non-verbal clues about people's actions which may reveal the person's actual intent, rather than that which he tries to present. In-depth interviewing is valuable for gaining detailed information about a person's decisions and choices in light of his actual actions. This information is generally not obtainable through survey interview methods alone, because the interview context is heavily structured. The focus group, while not being individually-focused, is a time- and cost-effective means to collect information on group feelings, opinions, attitudes and reactions. Life histories are most valuable for their diachronic and retrospective focus. They provide information on how external social, cultural and environmental changes affect and are affected by internal individual desires and motivations.

In total, all of these methods seek firstly to answer questions in a descriptive form by saying what is going on. Secondly, they aim to analytically inform the researcher about the relationship between variables. Whether the answers are provided using either qualitative or quantitative methods, the selection of the most important types rests heavily on the main functions of each technique, the rationale for using one type of method over another, and the reasoning for combining different methods in gaining specific types of complimentary information. Hence, the number of techniques used may not improve data validity and reliability. However, the quality of method selection (that is the optimal selection and application of maximally useful methods based on their strengths and weaknesses) may in fact enhance data validity and reliability.

Qualitative studies are considered part of both social science and humanities research, which aim to discover the determinants and consequences of human behavioral patterns at different historical time periods. The relevant variables and their inter-relationships can be found in either the objective or subjective environment surrounding the subject. Research projects which aim for a comprehensive understanding of human behavior must take into account these two "worlds" and utilize the techniques which are best suited in obtaining information stated in the project's objectives. Many research projects, therefore, use three levels of data collection, i.e., an initial level of qualitative background information collection for survey formulation, followed by a quantitative survey, and completed with another stage of qualitative information collection to check on the accuracy of the quantitative information. The techniques involved in this research process must be selected not only for the information they give outright, but for their ability to improve the validity and reliability of data given by

other methods. In this way, the research results are given a realistic, "true to life" function as they fit within an overall statistical picture.

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Chapter 9

Ethical responsibilities in qualitative research

Buppha Sirirassamee

Qualitative research is an intensely intra- and inter-personal process. Researchers must adopt and deal with, many roles and responsibilities with regards to confidentiality, subject welfare and compensation, legal and moral standards. This chapter discusses the important ethical considerations that must be met in conducting qualitative research investigations, and many of these also hold for quantitative studies as well - EDS.

Introduction

No matter whether it is a qualitative or quantitative investigation, the main source of data for all researchers is the 'subject' which may include individuals, groups, communities or other types of organizations. By providing personal information, subjects help to create mutual understanding and shared benefits for the researcher, other people within the subject's and/or researcher's society and, in certain cases, the world at large.

In obtaining information from subjects, the researcher must keep in mind several crucial considerations regarding her (or his) own ethical position and its responsibilities which form a part of the data collection and reporting process. Each subject has her own dignity and worth as a human being, and safeguarding her welfare, at least as regards her participation in the research process, is one of a researcher's paramount ethical responsibilities. Other key issues which surround a researcher's freedom of inquiry and communication center on her own roles, research competency, objectivity in reporting findings, and considerations of the best interests of colleagues and society.

This chapter discusses general ethical considerations which a researcher should remember when conducting any type of social research involving various subjects. In social research especially, ethical issues permeate every step in the research process, beginning from selecting a research topic, stating general and specific objectives, choosing the sample and methods of data collection, reporting and so on. At each stage and even in her actions, the researcher must consider morality and the proper rules (either codified or implied) which should regulate her conduct and behaviors towards the subjects involved and her reporting audience.

Researcher Roles and Responsibilities

In communicating about a research activity, each researcher must observe a set of responsibilities. The first of these arises in deciding the objectives and purposes of a research study. In general, objectives are the measurable outcomes a researcher wants to attain in conducting her project, and they are developed in such a way that they do not infringe upon the rights and privacy of the subjects to be studied. Objectives are usually guided by a purpose which is the ultimate benefit to be gained from conducting the research. More often than not, researchers equate their objectives with the purpose, particularly if the research is conducted only for the sake of increasing the knowledge of the researcher, her academic colleagues or to test a certain theory. In this case, subjects are delegated to the role of 'guinea pigs' who serve a useful purpose for the researcher, but that is about all.

On ethical terms, though, while a project's objectives may be in the interest of the research, the project's purpose should reflect the *realistic*, potential benefits to be gained by the subject(s) and/or the society in which the subject(s) live. In short, subjects become beneficiaries of the research process, not simply participants. For instance, a project aimed at studying the reasons why women discontinue using contraceptives should have as its main purpose to improve the quality and/or availability of contraceptives and, on a higher level, policies, family planning communication programs or action projects. The researcher's responsibility then is to accurately communicate her findings in such a way as to influence the decision-makers responsible for changing policies and managing programs. Sometimes this involves reporting information in the form of executive summaries which, while not following a scientific format, nonetheless are most meaningful to decision-makers who are not scientists. Her ethical responsibilities also rest on properly acknowledging data sources and collaborators.

Another of the researcher's purposes is to create and promote good understanding among people within and outside of the society in which she is working, and in which she works. This is complicated by the fact that each investigator has more than one personal and professional role and status to play, not the least of which are researcher, teacher, scientist and practitioner, to name only a few. As a teacher, the researcher tries to help people in acquiring knowledge, understanding and skills. The researcher, who often has the status of a scientist, believes that she will provide the best service to society. She will therefore conduct her study based on her own considerations about when and how to undertake certain research stages and inquiries, many of which may differ from those of her peers. She must be prepared to defend her position based on objective arguments and prior experiences (her own and others) rather than subjective feelings or suppositions. She also needs to plan the research in such a way so as to eliminate misleading findings, but yet be prepared to discuss those which may go against her own preconceived hypotheses.

The challenge each researcher faces in meeting such responsibilities is to reduce the strain or conflict she may have between two or more roles, such as that of a scientist as well as a member of society. While we all encompass a variety of roles, each of us usually identifies ourselves by one or two prominent ones. For a researcher to maximize her objectivity, one of her primary responsibilities is to decide which role set gives her the most satisfaction and rewards, yet does not infringe upon the rights and morals of others. Oftentimes this is a difficult undertaking; in anthropology, for example, innumerable cases exist where field workers become so involved in the culture they are studying that they 'go native,' that is they abandoned their researcher role in favor of a role and position in that society. Their new community role takes precedence, since it gives them a greater sense of self-worth and a new set of higher priority responsibilities. This role identification process is crucial, for it is the basis for the relationship between the researcher (as scientist or teacher or community member) and her subject. In short, it is the foundation out of which a common

understanding grows between the researcher, her 'self' and the subjects which will provide her with information in order to satisfy her role and psycho-socio-physiological needs as well as those of her subjects (see Boonmongkon, this volume, as an excellent example).

Confidentiality

No matter how one puts it, collecting research data involves an 'invasion of privacy.' A researcher must be sensitive, objective and realistic in protecting the confidentiality of her subjects. The purpose of qualitative research is to identify important behavioral patterns which will help build theories of human behavior. It is *not* to identify the subject's involved in the behaviors themselves. The researcher's foremost responsibility is thus to protect the confidentiality of her subjects, usually by restricting the number of outside persons who know about or come into contact with a subject so that personal information cannot be used against the person or group. All information that is not already generally known, or which could be damaging to the subject, therefore, should be kept strictly confidential. Information obtained from subjects should be discussed only among research team members and only for research purposes. Written and oral reports are a necessary research outcome, but they should only include a general reporting of relevant data necessary to fulfill the research objectives. If a researcher needs to use the subject's name (more common in the case of organizations and communities), official permission must be sought and granted. In any case and at the beginning of the research process, researchers are responsible for informing subjects not only about the nature of the investigation, but more importantly about the exact means by which information will be kept confidential.

The most common and practical strategy used to protect a subject's confidentiality is to code a subject numerically or alphabetically using some system which does not contain the subject's name. The only person who knows this coding system is the researcher (principal investigator), herself. But sometimes removing a subject's name is not enough. The characteristics and circumstances surrounding a person's life, for instance, can be enough to indirectly disclose the subject. This is especially the case where certain circumstances are out of the ordinary and unique to that person (or even a small set of subjects) and/or in the case of small communities where the subject can be identified through a process of elimination. In this case, certain details about the informant, which will have no effect on research findings or outcome, can be altered (such as place of residence, age, family composition, marital status, etc.).

Currently, confidentiality is becoming an increasingly important issue especially in research which may have wide societal implications. The most common example of this today is AIDS research. The problem which arises is how to strike a balance between the rights of the individual (AIDS sufferer) and the welfare of society. The ideal answer is that every effort must be made to protect the individual, but oftentimes in the last analysis the needs of society unfortunately prevail.

What is not realized, or seriously considered, is that by abiding by strict codes of confidentiality, a greater amount of data and good quality information can be obtained. People are more willing to share their ideas, attitudes, emotions and beliefs if they are absolutely certain from the outset that their anonymity will be strictly protected. When doubts about confidentiality arise, data quantity and quality decline.

Respondent Welfare

Another important ethical consideration is subject welfare which includes organizations and other resources from which data are collected. Researchers often work in different contexts ranging from communities and factories to political parties and special interest groups. In the process of collecting data, conflicts may arise between different parties (factory workers and managers, for example). Where research findings may result in undesirable consequences for the subjects, it is the researcher's responsibility to detect and remove or minimize them.

As a hypothetical case in point, suppose a researcher is conducting hearing tests among factory workers. One of the conditions set by factory management in allowing the research project was that the researcher could not identify the factory in any way, nor tell subjects directly that they have hearing problems. If this was done, then the subjects might seek compensation from the factory for hearing damage. What can be done in this case, since the researcher has ethical responsibilities towards her subjects' welfare, the factory management, and the research project itself? This is where creativity comes into play as the researcher must find ways to mediate this conflict of interest. One strategy might be to offer reciprocal services to the factory. To thank the management for its assistance, the researcher may help train factory health personnel in hearing testing and supply them with a list of workers who need monitoring. Explanations can also be made that in order for workers to remain productive, they need to be in good health, which also means regular hearing testing during non-working hours. Poor hearing can lead to accidents, which in turn can lead to long-term problems for all parties.

Legal and Moral Standards

One duty of a researcher is to familiarize herself as much as possible about the legal and moral standards of the research community in order to avoid violating important written and unwritten social rules. Moreover, the researcher also needs to keep in mind that the moral and legal standards which make up her society and culture may not be the same as those of her research community. Nonetheless, those of the research community must prevail, and it is necessary that the researcher find ways of detecting and correcting any problems in these areas. One method is to recruit field assistants from the area who will not only serve as informants. They will also act as informal teachers for the researcher in helping her to learn about and abide by important community standards.

Another important legal and moral consideration is informed consent which is exceedingly important in qualitative studies aimed at uncovering in-depth information. Obtaining subject consent is perhaps the most important researcher responsibility since it is a prerequisite for conducting, or ending, a project. Free and informed consent involves three important aspects. First, free consent includes the condition that respondents are not influenced by the actual or preconceived possibility that services they would receive in the normal course of events, or rights they have, might be withdrawn if they refuse to cooperate in a study. Second, free consent also includes the provision that subjects may stop their cooperation at any point in the research process without any actual or perceived repercussions. Lastly, informed consent includes the conditions that subjects are told the purposes and all procedures of the study in advance. Subjects must also be given enough time to reflect on the study, its objectives and activities; to ask any questions they might have; and to receive full and truthful answers before they finally agree to, or withdraw from, the project.

In some countries, assurances concerning the use of human subjects and the obtainment of free and informed consent must be officially and legally obtained before any project receives funding or commences. In other nations where such stringent regulations do not exist, researchers must take it upon themselves, and their consciences, to routinely obtain free and informed consent as a part of their own research skills and responsibilities.

Subject Compensation

Whether or not to compensate subjects for their time and cooperation in participating in a project is one area which has not been decided upon. In some localities, it is customary to give some sort of gift to respondents, while in others this is considered to be an unusual procedure. Compensation can be in the form of money, gifts in kind or services to the individual or community in which the subject resides. These are usually not of great value, since they should not be used as an undue inducement to get people to participate and give their consent to be studied. This is especially the case if the research involves a certain degree of risk on the part of the subject. To avoid this problem, researchers often wait until after the project is over before presenting any gifts of appreciation. These gifts are not only meant to compensate subjects, but also as a sincere thank you for their time and efforts which might very well have gone for more economically valuable pursuits. Compensation for research purposes, therefore, must abide by the gift giving rules of the society in which the study takes place as well as the nature of the research itself. No strict rules exist, except those which the researcher holds within herself.

Reporting and Public Statements

In presenting knowledge or research findings to the public, through either direct or indirect means, the researcher must remember that her own knowledge is also limited. She has a responsibility to report findings accurately and avoid exaggeration, sensationalism, superficiality and other forms of inaccurate reporting. Precise statements must be made concerning the research project's procedures, methods and sample, particularly if a project's findings are reported over mass media and may cause public unease.

One common ethical question that arises is 'how much of the data should be reported.' This question depends heavily upon the topic being studied and reported, but it is particularly relevant at the present time considering such complex health problems such as AIDS. Taking AIDS as an example, the determinants of this disease include sexual behaviors and preferences, and these are exceedingly sensitive and personal issues that cross-cut individual and social norms, beliefs and values.

In reporting data for these types of problems or others of a similar nature, *the researcher must remember that his/her prime responsibility is to analyze data and report on this analysis. He/she should limit the amount of reported data to only that which is directly relevant. The indiscriminant or overly extensive reporting of respondents' personal information, even when anonymity is secured, serves no purpose and is often unethical despite the intent. What must be remembered is that the borderline between illustrative description and respondent exploitation is a very thin one, and many researchers unknowingly cross it.*

The ethical and conscientious researcher generally knows what data should be reported and what should simply be a part of the analysis as necessary illustrative material. The general rule, though, should be the least explicitly said the better, and only that which is absolutely

necessary for allowing an audience to understand the researcher's interpretations.

Lastly, concerning rights to written works, publication credit is assigned to those who have contributed to the publication in proportion to their contribution. In projects conducted by several people, the major contributor or the one who takes the highest responsibility is usually the first to be listed, while the remaining contributors are listed respectively in accordance with their contributions.

Promotional and Product Activities

Researchers who are working on projects related to the development and/or promotion of any type of product (e.g., drugs, contraceptives, medical equipment) are ethically (and in many cases legally) responsible for guaranteeing that these products are safe and will function as intended during qualitative product testing and in mass distribution. They must also provide adequate information so that the products can be used appropriately, and any restrictions or limitations should be clearly indicated. Researchers involved in the field of marketing must be sensitive to conflicts of interest in promoting products, and they must also avoid comprising their responsibilities as researchers for more commercial objectives. In the case of product promotion, the researcher should present a truthful disclaimer that she will not participate in the commercial marketing or sales of any product.

Conclusion

For every type of research and every researcher, ethical considerations are crucial in planning and undertaking projects and in reporting findings. The researcher must remember that the subjects who have been providing information for the research endeavor are to be honored, respected and thanked for their contributions by all team members, not treated as isolated dehumanized objects of study. A number of important ethical considerations have been noted in this chapter, but ultimately the degree with which they are abided by depends upon the quality of the researcher herself, her conscience and her concern for the welfare of others.

Chapter 10

Fitting the pieces into the puzzle: the process of qualitative research

Thavisak Svetsreni
George Allen Attig

Qualitative research involves exploring the world to discover new information about people. It revolves around a research cycle that contains seven distinct stages. This chapter presents this cycle in detail as an introductory summary for the remaining chapters in this text's Part II. Through the use of an illustrative case study, it also gives readers a functional understanding of the process and tools of qualitative research that will help them not only to undertake their own studies, but also to analyze and evaluate the works of others - EDS.

The Nature of 'Research'

People. Their complexity and diversity is astounding, if not endless. For centuries, philosophers and scientists have been curious about the origins and nature of the human species. But what are 'people' really? In one sense, they are individual time capsules containing the written and unwritten cultural codes which guide human behavior. On another level, they are like spiders spinning webs; people create social networks and relationships that extend outward in intricate patterned structures, each of which is organized and performs a valuable function either singularly or collectively. But more importantly, they are individual actors in the drama of life. They possess their own unique developmental stages, goals and aspirations, personalities and characters, experiences, decisions, drives, emotions and egos. They are powerful beings with the ability to mold and shape their physical, biological and socio-cultural environments as easily as the latter mold and shape them.

The major means by which the nature of humankind is explored is through *research.* Research is a process by which new knowledge is produced in structured, organized and systematic ways. While 'research' is most often associated with scientists, actually many other ways exist whereby knowledge can be generated and learned. These include getting knowledge from authority figures such as teachers, through local traditions, exposure to mass media, personal experiences, and our own common sense. What differentiates research in a scientific sense with these other forms of knowledge obtainment is that it uses a scientific approach containing five essential elements associated with 'science' (Neuman 1991:6):

1. *theories about the nature of the world and knowledge;*

2. *an attitude or orientation toward knowledge;*

3. *special procedures, techniques and instruments;*

4. *an accumulation of knowledge; and,*

5. *a social institution called the scientific community whose expectations must be met in order for a work to be judged as 'scientific.'*

Research can be conducted at many levels, from the microscopic (such as in biology) to the international (as in the political and economic sciences) or even to the universal (such as astronomy). In all of these cases, research is organized around theories, and these are supported by empirical evidence, or *data*, that has been carefully gathered using specific methods and according to a set of rules or established procedures. These rules or procedures are general in that they must satisfy the larger scientific community as to their value in investigating scientific problems. Moreover, they are also specific in that each scientific field has its own characteristic data collection procedures. Some scientists collect *quantitative* data that are expressed in numbers, while others collect *qualitative* data that are expressed in words, pictures, or objects.

Qualitative Research

Qualitative research, however, is the process of producing new knowledge about the social world, that uses a scientific approach based on qualitative data collection and analysis, and involves in particular the study of people - their beliefs, behavior, interactions, institutions, and so forth. It centers around *social theory* which is a system of interconnected ideas that condense and organize knowledge about the social world (Neuman 1991).

This type of research is characteristic of anthropology, sociology and other social science disciplines. These are sometimes referred to as the 'soft' sciences, because human life is ever-changing and it is hard to observe and measure using laboratory instruments, as in the 'hard sciences.' Special techniques have thus been developed to observe and measure indirectly such intangible areas as intelligence, attitudes, opinions, feelings, emotions, power and authority. For many non-qualitative specialists, qualitative research is actually seen as 'harder' (more difficult) than the traditional sciences such as biology and chemistry, because they do not have as much control over their investigation as they do in laboratory experiments. This is because qualitative research is a two-way communication process between the researcher and his human subject(s). Laboratory research, though, is one-way and fits with the more traditional process of input (such as a scientists action's in starting an experiment), process (letting the chemical reactions take its course), and outcome (directly measuring results).

Qualitative research goes by many different names, several of which were already mentioned in the earlier chapter by Podhisita. Of these, qualitative research is most often called either *ethnography*, *ethnographic research* or *anthropological research* and it involves the detailed description and interpretation of the social life, values and thoughts of a given social group or groups.

The subject matter of any science, be it human attitudes or the origins of life, determines the methods and instruments that will be used in seeking answers to research questions. Qualitative research depends mainly on fieldwork which is a method by which a

researcher places himself into a community's, or even an individual's, life so that he can mix with and understand the people he is studying. Fieldwork aims to collect first-hand information on a qualitative basis, but it often does not totally overlook quantitative data. The ideal objective is to combine both qualitative and quantitative information in order to get a more holistic and comprehensive picture about the people and the problem under study. The rule is: the more intensive the fieldwork, the better the data quality.

Qualitative research is usually done at micro-levels by studying the population and health problems of individuals, families and communities. However, it can also be done at macro-levels such as comparing different cultures and usually on a theoretical basis and with regard to a particular issue such as a political or economic system.

Both of these areas contain three main research study subtypes. In the first case, *comprehensive* studies characterize many of anthropology's early ethnographic field studies as well as some of sociology's investigations into subcultures. The aim here is to get a detailed and oftentimes noninterpretive account of an entire community or culture including a wide range of social and cultural information. This can include kinship rules, marriage patterns, socialization patterns, gender relations, tool use, agricultural practices, and so on. A good example of a comprehensive study is one that delves into the nature and organization of important population and health subgroups such as prostitutes or intra-venous drug users in the case of AIDS research. *Topic oriented* studies, however, focus on exploring one or a limited set of behavioral phenomenon surrounding a single important issue. For instance, the topic 'family planning decision-making' could be studied by looking at how a woman's social networks affect her use or discontinuation of contraceptive methods. The third type of study is one that is focused on *hypothesis* testing. This is the most common type of research among the hard sciences, but it is comparatively not so common within the applied social sciences. The intent is to investigate the causal relationship between two or more variables, such as the degree of women's autonomy and their freedom to use contraception.

The Qualitative Research Process

No matter what type of study that is involved, a researcher must travel through a seven stage process in conducting social research (Neuman 1991), namely:

1) *problem identification*;

2) *focusing the project or area of interest within a theory or body of knowledge*;

3) *designing a study*;

4) *collecting data and recording it*;

5) *analyzing data*;

6) *interpreting findings and drawing conclusions*, and

7) *informing others in a report*.

While each of these stages will be explored in greater detail in subsequent chapters, let us bring them all together and look briefly at their content and aims.

Problem Identification The qualitative research process begins when a researcher selects a topic, and this usually involves identifying a problem. A problem is a general area of study or a particular issue (such as poverty, crime, homelessness, AIDS) where a recognized discrepancy exists (such as an inconsistency or 'knowledge gap'). Several ways are available for identifying problems (see the chapters by Sethaput and Thongthai and Attig, this volume), but usually problems are selected based on interest, urgency, usefulness, ability or uniqueness.

Focusing the problem. Such problems or topics, though, are usually too broad for conducting research. For instance, 'family planning' is a recognized social issue and problem, but it is too complex to handle in a single research project because it has so many intertwined determinants. So the researcher must narrow down or focus the topic into a specific research question or set research questions (for example, what types of social networks may influence a woman's contraceptive decision-making). To learn more about the problem and narrow it down, a researcher often reviews prior literature and/or talks to specialists looking at that problem or one similar to it (see Thongthai and Attig, this volume). He can then relate it to a body of knowledge (other related studies that have looked at the same problem but in other social or cultural contexts). He may also point out its relationship to a particular theory in terms of whether his research will help support or refute this theory. In its most basic sense, the *theory* is a system of interconnected, related ideas that attempt to explain, predict, and/or provide understanding. For basic research especially, theory is important for placing a research problem in its appropriate context. It lets the researcher see the whole picture that contains his research problem, particularly with regards to its determinants and consequences. In colloquial terms, theory lets a researcher see the forest instead of only the trees.

Designing the study. After defining and refining the research problem, the researcher needs to decide how he/she will design and carry out the specific study or research project. This involves making several crucial decisions about fieldwork operations, including sampling, the selection of specific research methods, and the construction of data collection instruments such as the interview guide. For our purposes here, the key considerations come down to 'whom to ask or observe,' 'what and how to ask and/or observe,' and mixing and matching questions and observations.

Whom to ask or observe rests on selecting the project's target group for study, and this usually arises out of the research problem itself. One mistake that researchers often make, though, is to restrict their sample to the project's target group without considering other important target 'audiences.' For example, in investigating women's decisions about using a contraceptive, one should not only focus on getting individual answers from women of reproductive age. But, it is equally important to also talk to their husbands and other important relatives, since they may also have a social impact on the woman's contraceptive decision-making.

At this stage, the researcher must also decide on his own level of participation as well as whether he will collect individual or group data, or both. On the researcher's part, he has several choices, but they almost always boil down to whether he will be a *complete observer* where he does not interact with his subjects but only observes and interprets their behaviors, or a *participant-observer*. For the latter, the researcher plays dual roles, first as an insider to contact, interact with and be accepted by the community; and also as an outsider to interpret the information from his interviews and observations. Obviously, this is the best technique, but it is also the most demanding since the researcher must be able to balance between the acts of an outsider and insider.

In deciding who to talk to, the researcher also needs to decide if his data collection will involve individuals (through in-depth interviews and/or life histories) or groups. An

individual interview is an exclusive communication between two persons only, the researcher and the respondent. This is regardless of whether that respondent is a general subject or a key-informant. The intent of individual interviews is to allow each person to say what he or she feels, believes and expects without being influenced by other persons. The researcher should expect variations in the informant's thoughts and interpretations.

On the other hand, group interviews (such as focus group discussions) provide insights into socially held beliefs and values. They are informal and open-ended where a question is introduced to a group of similar people for debate and discussion. These interviews are more difficult to control, since the communication process is multi-dimensional and involves many people, but it is a valuable method for assessing group consensus and the enforcement of social norms.

What to ask and/or observe. For interviews (group and individual), three types of questions are common in qualitative research.

1. *Descriptive questions* depict or characterize a social phenomenon. Two main questions are: What is X? Where, When does X happen?.

2. *Structural questions* look at the context in which this social phenomenon is found and its function (When, How and Why is X used?)

3. *Contrast questions* examine the social value of the phenomenon with respect to itself or other alternative social phenomena (Why is X good or bad?).

Overall, these questions are basic to the inquiry process, because they get a person to identify a social phenomenon, describe its function and relationship to other social phenomena, and interpret its worth compared to other social phenomena based on individual preferences or group norms. This is important in understanding how and why the subject feels or acts in a specific way about the issue under study.

Likewise, observational data about an individual or group can also be collected at three different levels.

1. *The descriptive level* looks at a social phenomenon's characteristics and the context in which it is embedded (What do they do? Where and When do they do it? What did they use to do? Who does it? What are the results from doing it?).

2. *The focused level* examines specifically how a social phenomenon operates and the rationale behind it (How do they do it? Why do they do it? How many different ways do they do it?).

3. *The selective/hypothesis level* looks at the exceptions and consequences associated with a social phenomenon (Who doesn't have to do it? Why don't they do it? Where and When don't they do it? What happens if they don't do it?)

Overall therefore, four key elements need to be looked at in making observation and interview questions: *actor, time, place and situation (event and process).* If the researcher focuses on one of these (such as actor), he must determine how the other three elements interact (time, place, situation) to initiate a respondent's or his group's behavior, determine its nature, and its repercussions.

Mixing and Matching Questions and Observations. Each of the different questions above (descriptive, structural, contrast) and observational levels (descriptive, focused, selective) has a specific aim. The trick in qualitative data collection is to mix different types of observations and interview questions, depending upon the type of study being undertaken. For example, a comprehensive study of intravenous drug users in a Bangkok slum would use descriptive questions and descriptive observations. The aim would be to depict and characterize the group, its drug use patterns and the social or psychological contexts in which the drugs are taken.

A topic-oriented study might use structural questions and focused observations. A study of condom use practices among female prostitutes in Northern Thailand, for instance, used structured questions to determine when, how and why prostitutes urged their clients to use condoms. It also used focused observations to see if the prostitutes and their clients knew how to correctly put on and take off a condom, and why one method was better than another.

A hypothesis oriented study, however, might use contrast questions and selective observations to see when a particular behavior is not followed, and whether this has anything to do with the behavior's quality. For instance, a study looking at contraceptive use among unmarried women might use questions that explored whether or not contraceptives were healthy for unmarried women, or whether they might lead to fewer pregnancies. This data can be compared with observations about whether or not unmarried women actually use contraceptives, and what are the repercussions if they do, or do not, use them.

Collecting data. Once these pre-fieldwork decisions are made, the researcher can collect his data among members of the target population. The major data collection and recording instruments most often used by qualitative researchers are fieldnotes/data files, photographs, maps, tape recordings, and statistical records. As fieldwork progresses, large amounts of data will accumulate, and the researcher may become burdened by their seeming unmanageability. While nothing can allay these fears, field investigators can do two related activities to help avoid 'data overload.' First, the data must be systematized on a daily basis. This includes sorting, organizing and transferring all information from field notes into data files (see Yoddumnern-Attig, this volume).

Second, one of the common errors made by beginning qualitative researchers is that they collect all of their information at once, but they do not begin to analyze it until after they have left the field. As a result, they cannot collect additional data to fill in any gaps (missing information) that may arise during the analysis process. Consequently, researchers will also need to preliminarily analyze data as it comes in, and preferably also on a daily basis. This involves clarifying wordings, noting down any inconsistencies or unforeseen issues that arise during the interview and observational period, and developing hypotheses about why certain patterns of responses are arising, and then testing these through additional interviews. The most important part of this stage, therefore, is to write down questions and points to ask for more clarification and coverage.

It is important at this stage, and in the next, that data support conclusions that are made in the field as well as back in the office. Another researcher working at the same site should produce similar findings. Miles and Huberman (1984:27) strongly recommend the following ways for checking the representativeness and reliability of data as it is collected and analyzed in the field.

1. Increase the number of cases.
2. Look purposely for contrasting cases.
3. Ensure that all cases are developed to the fullest possible detail and to relatively the same degree of detail.

4. Select a random sample within the universe, or, if that is not possible, ensure that the sample includes the appropriate variability (that is, do not talk only to the friendliest people in the community; their quieter neighbors are just as important to the research).
5. Check for researcher effects, that is, how much the researcher's presence and actions are affecting people's behaviors and responses. This can be done by asking key informants or persons external to the project community but who are familiar with what is going on (such as subdistrict officials, teachers or volunteer workers).
6. Note researcher bias. The researcher's age, sex, ethnicity, personality traits, and other characteristics will influence what the researcher is told or allowed to see and how he or she perceives events and people. This can be checked using the methods mentioned in 5 above.
7. Triangulate across data sources to check data from various perspectives. What people *say* they do can be confirmed or invalidated by *observing* the event or situation in question and also perhaps by hearing about it from a third party.
8. Weigh the evidence to determine the degree of reliability of information. There may be evidence to show that one source of information is extremely trustworthy while another is not. Also one *type* of information may be more reliable than another. In Ecuador, for example, the social desirability of having a latrine led to over-reporting. Observation in a subsample of what people really had led to the conclusion that information on latrines was unreliable (Scrimshaw and Hurtado 1987).

Analyzing data. The next challenge is to take this set of data and manipulate it until patterns can be seen. These patterns may appear in terms of common terms used by the people being studied, common beliefs or attitudes, or common themes that arise out of several conversations with different people. These patterns of data help the researcher to interpret his findings and draw conclusions about what is happening and why it is happening. Several methods exist for analyzing qualitative data (Scrimshaw and Hurtado 1987; Yoddumnern-Attig, this volume). The most common are *graphic devices* such as organizational charts, flow charts, causal networks, ethnoclassifications or taxonomies which link information and show how they are related to one another.

Descriptive analyses can involve the use of simple statistical frequencies to itemize some of the salient characteristics of households (such as low, middle or high socio-economic status) and cross-tabulate them with negative, mixed and positive attitudes towards health services, for example. Checklists can provide a listing of items, events, etc., which were obtained during the data collection. Time-ordered lists are valuable for reporting and analyzing the amount of time a person allocates to a specific activity.

Lastly, conceptually clustered variables are a descriptive analytically method that brings together information that seems to be associated. For example, in a study of why iron supplements are not used by Northeastern Thai women, it was noted that fear was associated with childbirth. The researchers compiled a set of conceptually clustered variables which included fear that the child would grow too large, fear of a difficult childbirth, fear of pain, fear that something would go wrong, and general anxiety surrounding the birth process.

There are four basic levels of analysis that each researcher must carefully select based on project objectives. These also reflect four different ways of sorting and interpreting data.

1. *Domain analysis* (Why do they demand this?)

2. *Taxonomic analysis* (Who are those that demand it? Who are those that respond to it? What are the differences between them?)

3. *Componential analysis* (In which situation will they demand and not demand this? On what occasion, and under what conditions, will those who demand become those who respond to that demand?); and,

4. *Thematic analysis* (How important and significant are the relationships between those who demand and those who respond in terms of social mobilization of the family or community in the past, present and future?).

Interpreting findings and drawing conclusions. Qualitative data are exceedingly rich in details, and most people cannot handle such a large data set. Therefore, the researcher must draw out important findings, interpret them, and draw relevant conclusions that are important to readers. In the process, one needs to look for differences and similarities relevant to the research problem, and what information is salient and what is not. The aim is to make important generalizations that answer the research question(s) and can be illustrated by case examples drawn from the data. Scrimshaw and Hurtado (1987:28) recommend the following techniques for developing generalizations.

1. Counting and time allocation (such as the number of people in a household, time spent cooking, time spent in the fields, number of community health workers).
2. Noting themes (fear of childbirth, experiences in using specific contraceptives, women as initial diagnosticians and healers).
3. Questioning plausibility (cross-check data sources to see if information is believable and credible).
4. Note relationships between variables and find intervening or confounding variables.
5. Build a logical chain of evidence where generalizations and conclusions are supported by evidence and conceptual and theoretical coherence.

Informing others in a report. Finally, the researcher writes a report that describes his study's background, how the data was collected, what important findings were discovered, and what important assumptions or recommendations can be made based on these findings. The most important issue here is the *audience* for whom the report is written. Presenting a project and its findings to university academicians, for example, is not the same as for policy-makers. Each group has their own priorities; among academicians concern is over what was found and by what methods; for policy-makers, they are more concerned with how results can be used in policy formulation and development planning.

Case Study

This entire qualitative research process, though, is a general one, but it helps in conceptualizing how research projects are conducted. At this point, moreover, let us look at one qualitative research report and find the parts of the research project process in it. In this example, the authors examined child care choices and their constraints among Thai women living in Bangkok.

Example. Drs. Kerry Richter, Chai Podhisita, Kusol Soonthorndhada and Aphichat Chamratrithirong of the Institute for Population and Social Research, Mahidol University at Salaya, published in 1992 a research report called "Child Care in Urban Thailand: Choice and Constraint in a Changing Society."

Choose a Topic. The topic they investigated was changing child care patterns of urban women from different socio-economic strata. In light of Thailand's rapid socio-economic development, the researchers wanted to know how women's child care practices have changed as they try to combine their roles as mothers and workers.

Focus the Project. A literature review by the researchers showed that in other developing countries child care is not necessarily incompatible with mother's work, since employment tends to be informal and extended family and/or inexpensive domestic labor are often available as child care alternatives. Most have concluded that the incompatibility between work and child care begins with the shift to wage labor and industrialization. This is due to a complex set of changes that occur, including the shift of women out of agriculture and other nonformal jobs into the formal sector; migration to urban areas, which lessens family ties or at least lessens the availability of family members for child care; the increased importance of education in the job market, resulting in heightened aspirations for children; and fewer female domestic laborers when better paying modern jobs are available.

Based on this information, the researchers wanted to examine women's preferences in type of care for young children with particular attention to decision-making and satisfaction with child care. They also wanted to investigate the interrelationship between child care arrangements and differences in mother's work status, occupation, and family structure. Besides investigating women who currently had children under the age of five, the study also wanted a retrospective view by talking to mothers of older children to determine how the situation has changed for Thai children over time.

Design the Study. This project consisted of two phases: a qualitative component based on in-depth interviews and focus group discussions, and a quantitative phase based on data collected through a household survey of a representative sample of Bangkok women. The researchers designed the study so that qualitative data would provide evidence on attitudes, preferences and decision-making about child care, while findings on actual type of care would be mainly taken from a systematic, more objective, analysis of child care case histories in the quantitative data. The two sets of data would thus compliment each other and present a more complete picture of the situation for Bangkok families than would either strategy used alone.

Collect the Data. Two types of qualitative data were collected among women who were either white collar workers, blue collar workers, or workers in the informal sector. In-depth interviews were conducted with ten women selected to provide a broad spectrum of characteristics according to work status, occupation, age of children and child care patterns. Four focus group sessions with participants of equal socioeconomic status were also conducted.

For both interviews the interview guidelines were similar; experiences and attitudes about child care situations of different types and opinions about quality and sources of conflict were probed in both settings. Hypothetical situations were also presented of women facing certain child care and/or economic constraints. By asking opinions on the best solution to the situation, this method deliberately removed respondents from their own experience and thus revealed a great deal about social norms and values. In in-depth interviews, respondents were also asked to relate their life history, with special reference to fertility and child care decision-making.

The quantitative part of the study consisted of a random household census of 1,515 ever-married women in the Bangkok metropolitan area. The survey collected life history information from each respondent concerning her work, husband's work, migration, marriage and fertility, and co-residence with family members and others after marriage. Detailed child care histories were obtained for the first, second and youngest child of each respondent. This included information on type of child care, selection of care, costs, and quality of care, for the entire period of time when the child was under the age of five.

Analyze the Data. The researchers analyzed the data by looking for trends in actual child care practices found within the quantitative data (analyzed using number and percentage tables), and then looking for supporting (or contradictory) patterns, attitudes and normative reasons for these practices within the qualitative interview information. Child care preferences and decision-making focused on maternal choices between child care and work, care by relatives, care by non-relatives, and formal care (nurseries, day care centers, preschools).

Interpret Findings and Draw Conclusions. The researchers discovered that there was some degree of consensus among the different groups of mothers interviewed about the ideal form of care (i.e., maternal care), particularly for the youngest child. However, many considerations dictate the actual form of care chosen. The qualitative phase of the research clearly showed that the priority for working parents is to have someone they can trust to care for their children, if not a relative then someone recommended by a relative or otherwise known to them. Determinants of the form of care chosen thus include not only family economic status, but also the availability of relatives and the informal networks of non-relatives available as babysitters. While the researchers had assumed that living apart from young children was a last resort dictated by economic necessity, they found that even some high status women chose to send their children to relatives up-country if they did not have a trusted babysitter in Bangkok. Thus the rapidity of socioeconomic change has resulted not only in new choices but in unfamiliar challenges for working parents.

For these reasons, a model of child care decision-making was developed, and it took the form of a pyramid. As women move farther away from their first choice of child care (maternal care), they are faced both with more choices and more factors to consider. Costs (which may be real costs, opportunity costs, or emotional costs) only become a factor if no relative is available to care for the child. While some of the considerations that women must make in their decision-making are based on economic status, others are based more on personal preference. And as the choice of child care moves farther away from the pyramid's apex, the clarity of the choice becomes more fuzzy and the decision-making process less defined.

This study's findings suggest that child care should be a higher priority for public policy, since it is inevitable that the proportion of children in non-familial care will increase. This is not to say that such policies should encourage any particular form of child care, such as encouraging early entrance into formal care. Rather families should be given choices whenever possible as to the form of care they prefer given their existing means and limitations. This may involve developing new employment policies that ease the burden for working women (such as lengthening maternity leaves and allowing for other forms of family leave such as 'paternity' leave where it is called for), while discouraging the 'anti-family' policies of private companies.

Inform Others in a Report. The report of this study was published by the Institute for Population and Social Research and submitted to the Rockefeller Foundation Program on Women's Status and Fertility. Several papers were also given at international seminars with a note stating the sponsorship of this agency.

Conclusion

People conduct qualitative research for many reasons, and in each case new knowledge and understanding about people is produced. Whether those involved are users of social research data, beneficiaries of programs that evolved from qualitative research projects, or simply persons who want to make more informed decisions, an understanding of the research process and how it operates is beneficial in understanding the nature and workings of humankind.

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Chapter 11

Problem identification and justification

Chanya Sethaput

The first step into the qualitative research world is to select problems that are amenable for investigation, since not all problems can be deemed 'research-worthy.' This chapter provides a general guideline for seeking out and determining problems and justifying the necessity for researching and finding solutions to them - EDS.

Introduction

The first hurdle all researchers must encounter and overcome in designing research projects is problem identification. The problem to be investigated should be accurately identified, justified based on existing information and shown to be research-worthy. What must also be demonstrated are the research methods (qualitative, quantitative) that can most effectively tackle the problem and, if different methods are used, how the data will come together to help explain why the problem exists and/or how to solve it.

Most prior texts on social research or research methodology, though, have rarely mentioned problem identification as a research stage; discussions have generally concentrated on methodological considerations, most notably sampling, data collection and analysis, etc. Consequently, research reports and, more commonly, dissertations sometimes focus on problems which are not really problems; they are simply convenient issues to study which have limited interest to scholars other than the researcher. Their main objective is to show that the researcher knows what he/she is doing with regards to conducting a research project, rather than how well he/she can fully state why a problem has been identified as significant and using what justifications. The supposition is that if a student or scholar can demonstrate research prowess, then they can be considered good researchers. The problem which arises though is that while they may be able to investigate a topic, they may not be able to identify the problems which really need investigating.

Qualitative research has been severely attacked for contributing to many weaknesses in the problem identification process, largely because the topics which were selected were seen as insignificant, not research-worthy, too specific or too limited in population coverage. One reason for this is that early qualitative investigations sometimes looked at exotic or obscure issues among little known populations which, while theoretically significant, were not problem-oriented. These were also the formative years when data collection tools and theories about human behavior were just emerging. Moreover, many of the above orientations reflect

differences in opinion regarding the value and validity of qualitative studies versus quantitative ones.

Presently, problem identification and justification are coming into their own light as researchers seek to maximize the resources needed for carrying out studies. In short, they must focus their time, energies and funds on solving urgent problems. They must also identify how their research into a particular problem will answer technical questions for basic research. Lastly, problem identification is perhaps most crucial for applied research, since the problem must not simply be justified on scientific grounds. It must also be shown that by solving the problem, better practical solutions (policies, plans, programs) and procedures will result.

What is a Problem?

A problem can be defined generally as one or more discrepancies -- such as a difficulty, obstacle, disagreement, inconsistency, dissatisfaction or other abnormal characteristics -- permeating an existing situation. A research problem, though, is a vital issue containing one or more of these characteristics, which requires the application of scientific and often technical procedures, in order to find an answer or solution, which will correct the discrepancies and alleviate the problem. Fisher et al. (1982:7) have put it more simply by contending that three conditions lead to research, namely: 1) a perceived discrepancy between what is and what should be; 2) a question about why the discrepancy exists; and 3) at least two possible and plausible answers to the question.

This concept can be shown more clearly by looking at an example of a health problem. Let us suppose that a nation's infant mortality rate among rural villages declines over a five year period. However, in one village this rate increases over the same time span. This leads to a discrepancy between existing and expected situations and the question "why is this happening" arises. Several methods can then be employed to come up with at least two possible reasons for this contradiction. They can include mothers' education, quality of health services, family economic status, an unsanitary environment, and/or poor child caregiving behaviors. This then leads to research into whether or not these, or other causes, are indeed the true problems which require solutions.

Steps Towards Qualitative Research

The phenomenological concept has held a lot of influence over most health, demographic and social research. According to this view, researchers observe differences in social phenomena as arising from societal evolution which, in turn, depends on changes in historical time and circumstances. The researcher then considers these social phenomena and raises a problem for which he/she wants to find suitable answers. In the above example, high infant mortality is a phenomenological problem that leads to a search for the causes. Overall therefore, the general steps that bring about qualitative research, in particular, are:

1. the identification of a problematic social phenomenon;
2. identification as to its research significance;
3. inadequate knowledge or other limitations, which may stem from;
4. inaccessibility to required knowledge and information;
5. the specification of a qualitative research topic;
6. the seeking for in-depth answers;

7. the acquirement of technical knowledge; and
8. proposed solutions, either in short-, medium- and/or the long-term.

Problems Suitable for Qualitative Research

Not all problems can be adequately answered through qualitative research. Some problems, such as those seeking to assess extent or magnitude among a large population, are better investigated using quantitative research and analysis methods. Nonetheless, problems with the following characteristics can be more suitably tackled by qualitative research.

Uniqueness. A problem that is unique with respect to its content, scope, population and surrounding. This is particularly the case where the population under study is contained (such as a small community or simple society) and shows differences with other communities or the larger society in which it is found.

Problems that emerge out of quantitative analyses. The latter are especially good at describing the extent, magnitude, target groups and temporal trends associated with a specific problem (like contraceptive use). However, qualitative research allows for explanations to be given into the behavioral or ecological causes supporting the problem.

Lastly, *problems requiring the development of action programs* (communication, education) need deeper and clearer insights into the target population, its needs, current circumstances and constraints. These are best gained through qualitative investigations of a problem's behavioral (social, cultural, economic, psychological) dimensions specific to certain target groups.

Sources of Research Problems

Research problems can come from various sources, the first of which is *social phenomenon observation.* The observation of one's surroundings can reveal many things that are different from what they should be. Some existing systems or procedures, moreover, may require development. Many questions spark in the observers' or researchers' mind and arouse his/her desire to search for answers or solutions. These sorts of observations, together with curiosity concerning reasons and solutions, are one of the main sources of research problems.

Routine Work. Generally, problems and obstacles are always a part of all branches of work. They may be in management or personnel areas. Some organizations establish a research and evaluation unit to assess operational performance and eliminate obstacles or unnecessary elements. For instance, health system (or office) managers may be confronted with difficulties that can only be solved through systematic and labor-intensive operations research.

Technical Paper Reading and Literature Reviews. Oftentimes, researchers read technical papers (published or unpublished) and find gaps or weak points that need investigating. Recommendations from research reports are another major source of problem identification. For instance, a study may show that Thai Buddhist women play an important role in family planning decision-making. A question then arises as to whether Thai Islamic women have the same role, or if it is different, how and why.

Problems Faced by Other People. Sometimes, research problems do not originate from a researcher's own interests or readings but indirectly from other people's problems. These can be perceived by the researcher through attending training courses, seminars, lectures and many other types of gatherings. Discussions with other people bring about questions,

puzzles and a heightened level of curiosity that can lead to research studies.

Expert or Funding Agency Recommendations. Other sources of research problems are international funding agencies that have questions of importance that they want answered. They then offer grants to researchers to investigate these problems. Sometimes, the objective is to close the gap between research studies conducted in many specific fields in order to lead to effective action programs.

Criteria for Selecting Research Problems

Generally, research problems are selected based on five criteria for study. The first is *interest.* Whose interest should be regarded as the highest in priority? The researcher's interest itself is also required for priority setting. His/her own interests and educational background, moreover, may often compete with those of his/her organization, the researcher's superiors as well as those of funding agencies. It is quite possible that all of these interests may coincide, and this is a very lucky situation indeed. However, it is not uncommon that these interests are different, and whose should take highest priority is one important decision each researcher must make. If only the researcher's interest is served, for example, what would be the extent of research result usefulness?

Urgency. While some problems may be of great interest to the researcher, answers to these problems may not be useful compared to investigating other problems. Hence, the urgency of a problem is another criteria which needs consideration. This criteria is related to the type and size of the population in which the problem is found, its scope and effects, the number of people it impacts upon, and the immediate need for solutions. For instance, AIDS formerly affected only the acknowledged high risk groups (prostitutes, homosexuals, intravenous drug users), but in Thailand today the disease is creeping into families and affecting low risk groups (housewives, youth, and infants) as well. As a result and since no cure or vaccine is available, the development of effective public education programs is an urgent problem. One final point is that not all problems require urgent research, especially if in time they can rectify themselves.

Usefulness. Research has two main areas of usefulness: expanding knowledge and information, and finding solutions to problems or obstacles. Which research problem will be selected for study will depend on these, but which takes precedence is difficult to justify. Nonetheless, research that yields solutions to immediate problems appears to be of highest priority. The hardest to attain however is research that fits both of these areas, yet applied research in many cases does just this. The criteria of usefulness should be linked with research method selection. A comparison of expected usefulness received from both qualitative and quantitative research must also be considered, and using both methods is often a must for attaining optimum utility.

Ability. Selection of a research problem is not only dependent upon interest, urgency and usefulness; it also greatly depends upon the researcher's own ability, educational and philosophical background, technical capabilities, research method knowledge, as well as his/her ability to review the literature on a problem and synthesize out the important points. For qualitative research which depends on words more than numbers and on a holistic perspective, researchers must be well trained in data collection, processing and analysis so that the information can be correctly integrated. Qualitative information is also partially shaped by the researcher's intention and intuition, and a researcher must be aware of his/her own biases and account for these in the data obtainment and interpretation process.

Uniqueness. This criteria is rather complicated, especially when a problem is a

chronic one (such as AIDS) and requires various methods to find acceptable solutions. The concept of uniqueness, therefore, refers to the extent of intended or unintended imitation or replication of studies. The main concern here is that research should be timely and unique in order to avoid answering the same question more than once and thus wasting research resources and tarnishing the researcher's reputation.

Practical Limitations. Selecting a problem, refining it into a research question and then designing a study also requires considering practical limitations. Identifying a fascinating topic is an interesting academic exercise, but if you expect to carry out a research project, practical limitations (time, costs, access to resources, approval of authorities, ethical concerns, expertise) can impact heavily on the research, and they make some problem 'unresearchable' (Neuman 1991:106).

From Problems to Research Questions

Social researchers really do not do research on problems, however. Problems are simply the general focus of the study, a starting point. To develop the research study, the researcher needs to refine and narrow down the problem into a question. A common mistake of beginning researchers is that they fail to narrow a problem sufficiently, or they try to jump from a broad problem directly into a research project without first deciding upon what research question(s) they are seeking to answer (Neuman 1991). For example, the World Health Organization's special programme of research in human reproduction has funded many studies that investigate the general problem of contraceptive use. These studies, though, narrowed this problem into specific research questions. They then sought specific answers about differing degrees of usage, effectiveness of contraceptive campaigns, as well as different methods of contraception and their acceptance or non-acceptance by certain population groups. Many studies have shown that even though contraceptive acceptance may be high, usage continuation is not always assured. Contraceptive discontinuation depends on many factors including medical recommendations, a woman's own perceived health as well as other behavioral aspects. These sorts of findings can bring about other questions such as:

> *What factors determine the successful continuation of use of specific contraceptive methods?*
>
> *What do women/couples know about the methods and choices available for regulating fertility and their proper use?*
>
> *How is contraceptive and reproductive behavior affected by gender roles, especially by type of work or economic activity?*
>
> *What are the costs and benefits of specific services for the woman, the family and the community?*
>
> *What are the perceived advantages and disadvantages of the mode of administration, and what are the social and behavioral determinants of those perceptions?*

Neuman (1991:105) has set down several valuable techniques for narrowing a topic into a research question. The first is to *examine the literature.* Published articles are excellent sources of ideas not only for research problems but also for developing research questions. These can focus on:

1. replicating a previous research project exactly to see if the same results arise, or with slight variations;
2. exploring unexpected findings discovered from previous research;
3. following suggestions a prior researcher gave for future research at the end of his/her article;
4. expanding upon an existing explanation or theory to a new topic or setting; and
5. challenging findings or attempting to refute a relationship.

Talking over ideas with others is another common method for narrowing problems into research questions. This entails asking people who are knowledgeable about the topic for questions that they think are valuable for answering. The researcher can also talk with other researchers who may hold a different opinion, and then discuss possible research questions with them.

Focusing a topic on a specific context contains three areas whereby problems can be narrowed. These areas can be either separate ways of narrowing, or they can be combined. Specifically, the topic can focus on a specific historical period or time period. Alternatively, one can narrow the topic to a specific society or geographic unit. Lastly, he/she can consider which subgroups or categories of people/social units are involved and whether there are differences among them.

Lastly, *defining the aim or desired outcome of the study* can also help to narrow it. For example, will the research question be for a descriptive, prospective, retrospective or demonstration study (see Bennett, this volume)? Will it involve applied or basic research?

Study Problem Significance

After the research problem and question are identified, at least 20 questions concerning problem justification should be answered by the research in order to confirm and support the study of that problem. These are as follows.

1. What is the specific purpose of the study?
2. Does it serve only a specific person or group?
3. Is the problem too narrow (or broad) in scope?
4. Which organization does the problem relate to?
5. Is research necessary to tackle the problem?
6. Can the research answer the ambiguous question(s)?
7. Will the research be useful in terms of topping up existing technical knowledge?
8. Will the research help facilitate the formulation of policies, plans and/or programs?
9. Who will get the benefit from the research?
10. Will the research explain or forecast social behaviors or events?
11. Is the benefit arrived from the research worthwhile?
12. Is the research problem up-to-date and contemporary?
13. Is the research problem of high priority?
14. Is there any adverse effect on any group of people?
15. What population size will the research cover?
16. Is qualitative (or quantitative) research more suitable to solve this particular problem?
17. Is this research a replication of prior investigations?
18. Can the answer to this research problem be found from other research efforts?

19. Does the researcher devise the research problem out of self-interest from various theoretical concepts?
20. Will the research help close knowledge gaps within and between fields of study?

Conclusion

Despite what has been said above, there is no strict formula for selecting and refining a research problem. Whether you are an experienced researcher or just beginning to be involved in qualitative social research, often the best guide is to select an issue that interests you. Because it is so subjective and 'researcher-specific,' usually problem identification is not given much attention. It is often thought to be a simple and logical activity that is easy to master. Yet it requires several crucial decisions that must be made. The value of any research project, and its potential to be funded, thus rests on the successful completion of four overall steps, namely, (1) developing a clear understanding of what is a problem and its suitability for qualitative research; (2) identifying where problems can be found; (3) applying acceptable criteria for selecting problems; (4) refining problems into workable research questions; and (5) justifying the problem and research question as feasible and worthy of investigation. This chapter has given the reader several ways to go about each of these stages with a better chance of success.

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Chapter 12

The literature review and documentary research

Varachai Thongthai
George Allen Attig

Reviewing accumulated knowledge about a research problem is a crucial initial step in the research process. It is not a haphazard activity, but one that requires a clear plan and idea about the topic as well as a knowledge about where to find important information. This chapter presents important considerations in conducting a literature review, and it gives the reader a grasp of the role the literature review in qualitative social research - EDS.

Purposes of a Literature Review

As a preliminary to field research, an activity in conjunction with it, or a study in itself, a sustained and high quality search for documented data - also known as a 'literature review' - is one of the most valuable tools in all of the sciences. In his day, Thomas Edison made the statement that: "When I want to discover something, I begin by reading everything that has been done in the past. . . . I see what has been accomplished at great labor and expense in the past. I gather the data of many thousands of experiments as a starting point, and then make thousands more" (Young 1966:138). Indeed, Edison's process of discovery through a literature review is as valid today (if not more so) as during his time.

On the whole, research is an individual (researcher-focused) and a collective (disciplinary) process of gaining new knowledge, finding facts, refining models, explaining events or phenomena, testing hypotheses or proving (or disproving) theory. But while individuals conduct research projects, their findings are of little to no value unless they become a part of the literature on the subject and are available for use by other researchers. Clyde Kluckhohn (1945:146), a renowned field researcher, declared that "unless a greater proportion of available source materials are collected and synthesized, field research will suffer materially, for the right questions will not be asked."

Many people think of the literature review as a single mutually exclusive activity. In actuality, though, there are two main categories of literature reviews which serve different purposes. The first literature review category, and the one most commonly known, is the *preliminary literature search* used to help design research studies. Before launching a research project, an investigator needs to collect and assess existing information from a variety of sources ranging from books, dissertations and journal articles, to government documents, policy

reports and papers given at professional meetings. In this case, the literature review's major value is to save time, money and other resources by building new studies on previously completed ones. The aim is to know as much as possible about what is known, and then to identify timely research questions for answering what is not yet known.

This type of preliminary literature review is one where the researcher uses literature to identify a problem or research question. Literature reviews, however, can also be research studies unto themselves. Starting with a research question, the researcher then conducts a literature review to seek answers to that question from the results of prior research studies. This type of literature review is known as *documentary research*. Documentary research here refers to the use of written materials as sources of information about human behavior. These may include official documents such as population censuses, hospital or clinic records; documents collected by social agencies, newspapers, etc.; personal documents such as diaries, letters, autobiographies and other memoranda; and professional documents such as journal articles by research scientists.

Documentary sources of information provide data that have been compiled from original sources, and the person responsible for analyzing the data may or may not be different from the one who actually collected the data. This type of study is useful in several ways. In the first case, documentary studies are a means of bringing together widely scattered information to construct a picture of what has been done in the past and is being done at present. They are also a way to highlight the overall results surrounding specific issues such as AIDS knowledge and awareness among high risk groups as shown across studies. They are also good at pointing out the weak points and/or strengths of existing studies as well as major points that should be tested or passed by in favor of obtaining more timely information. Documentary research is especially valuable in this sense, since it can indicate where studies are beginning to repeat themselves in looking for the same data among the same or similar populations. In short, they tell us when we have reached the 'saturation point' in the discovery process. Lastly, documentary research allows for special recommendations to be made for funding agencies and local organizations based on current or projected trends and/or obvious directions where future actions should be focused (Yoddumnern-Attig 1992).

The literature review, as preliminary or documentary research, has two major constraints, however. First, where a lot of information is available, investigators must be very selective in choosing what topics and research studies should be included. They run the double risk, therefore, of leaving out important information if the review is not thorough, or leaving in questionable studies and results if the researcher is not critical in reading and evaluating them. Further, the investigator's own academic or philosophical bias plays an important role, and he/she must be careful to balance studies in his/her own field of interest with those of others in other fields (Yoddumnern-Attig 1992).

In brief, the literature review - either one aimed at helping to design a study, or as a documentary research investigation in itself - is a fertile spring from which ideas and facts might be drawn; it is an invaluable preliminary step to direct field research. At once, the materials used in a literature review can provide a general orientation that is essential for helping a researcher to gain relevant insights and ask the right questions. It also aids in conceptual thinking and testing tentative hypotheses using certain techniques that might not have been thought of at the outset. A literature review, coupled with a researcher's thinking, thus helps to enlarge, enrich and clarify important population and health problems so that they can be investigated more thoroughly and efficiently.

Audiences and Objectives

While many reasons exist for conducting a literature review, seven main objectives are most evident. First, a literature review is a means to initially *familiarize the researcher* with the existing body of knowledge on a subject and to *identify problems* for further research (cf. Sethaput, this volume). New research problems arise as the researcher compares the results of different studies and pinpoints gaps in knowledge. In the process, the literature review also helps to *build the researcher's confidence* in undertaking the project which is crucial if he/she is to develop an effective project proposal.

After identifying a major research problem, more focused literature reviews then give the researcher an opportunity to *formulate as precisely as possible his/her main research issue or question*, substantiate its relevance and link it with prior research efforts and a developing body of knowledge. This step is important since it establishes the research project's credibility and significance.

A literature review also allows the researcher to take into consideration the methods and findings of prior studies as well as their good and bad points. The literature review thus helps the researcher to *formulate more effective research designs* by avoiding mistakes, shortages and pitfalls in earlier research attempts. Good suggestions or recommendations can also be found in past research works which may help the researcher to fine-tune his/her objectives and hypotheses, the project's sampling strategy and the selection of data collection tools, and methods of analysis.

Furthermore, a literature review also assists the researcher in *developing the study's conceptual framework*. A conceptual framework indicates the major variables and their relationships that play a role in affecting the problem under study. A clear conceptual framework allows the researcher to gather data and analyze it systematically, instead of haphazardly. It also allows readers and funding agents to see how results from various data sources will be brought together in order to give clear answers to research questions and hypotheses.

A review of previous studies serves two purposes in this regard. First, the researcher can identify what variables have been studied in the past, and whether or not they played any major role in affecting the problem under study. In addition, past reports also often contain the conceptual frameworks used for those studies, and these are often shown using figures. By examining these figures, and using knowledge gained from other documentary sources, the researcher may see areas where the frameworks should be adjusted to be more accurate. Alternatively, variables which prior investigators did not include in their frameworks may appear as points for investigation in a new project.

Literature reviews, when they are included in articles or reports, are *a means for the researcher to communicate with readers* about the topic being discussed as well as to establish the researcher's credibility. For readers who are unfamiliar with a study's subject, a review will help them to follow the researcher's thought processes, fully understand the subject being presented, and increase their confidence in the researcher's professional competence, ability and background. To fulfill these objectives, therefore, a review should be clear, simple and well-organized.

Types of Reviews

There are many types of literature reviews depending on their scope, content, depth or area of investigation. Overall though, reviews can be grouped into six major forms, and

these may be combined or employed separately as noted by Cooper (1989) and especially Neuman (1991).

The *self-study review* fulfills the first objective above. That is, it demonstrates the researcher's familiarity with a topic, increases his/her own confidence and establishes his/her credibility in the eyes of readers. A self-study review also helps a researcher to learn from others and stimulates new ideas.

In trying to link a project with prior studies or a developing body of knowledge, a researcher may conduct a *context review* to place his/her project in the 'big picture.' Oftentimes, this type of background review can be found at the beginning of an article, or in a chapter specifically entitled 'Background' which introduces a longer report. Context reviews are important because they help readers to see why a research project is significant and relevant.

Relatedly, the *historical review* traces the development of an issue over time. It is used in studies of the history of thought to show how a single past idea has split into different parts or how separate ideas have merged.

A *theoretical review* pulls together different theories and synthesizes how they address a problem. Theories that offer to explain a common phenomenon will be presented, discussed and compared in light of their assumptions, internal consistency, critical experiments, assessments and the nature of their predictions.

Methodological reviews evaluate and compare the methodological strengths and weaknesses of different research projects by describing research designs, samples, field surveys, and analytical methods. It also points out how different research methodologies produce different results.

Finally, an *integrative review* presents the current state of knowledge by summarizing past research and drawing overall conclusions from many separate studies that address related or identical hypotheses. It also reveals procedures, techniques or research designs worth reproducing.

While these different types of reviews have different functions and objectives, they are all related in that each is necessary to adequately design and propose a study. In constructing a project proposal, for example, self-study reviews give the researcher the confidence and background knowledge he/she needs to start the writing process. Context and historical reviews provide the information needed to write a project's background and justification section, fine-tune the research question, develop objectives and hypotheses.

Theoretical reviews, on the other hand, give insights into what general theory of human behavior or conceptual framework the project will take as its starting point, or springboard. Thereafter, methodological reviews shed light on what target groups should be studied, how (study design and methodology) and using what schedule (work plan).

Collectively speaking, therefore, a project's proposal is really an integrative review which brings everything together and projects it into the future, that is, into a newly proposed project.

Selecting Literature and the Review Sequence

A literature review and its carefully selected works are as important to a reader as to a researcher. To assist the reader in following the researcher's flow of thought, the logical sequencing of literature is essential and these stages generally follow the six types of reviews noted above. Moreover, a good sequence enables researchers to better understand their topic of study (Thongthai 1991). Following is one strategy for doing this, though each researcher

will need to adapt it to fit his own style. The overall process is one where the research goes from a general to specific research problem, and a general to specific review plan.

The first step in the literature review process is to clearly define a problem, theory or hypothesis that will serve as the review's guiding light. This will allow the researcher to initially select potentially relevant works as a prerequisite for finalizing his/her specific research question. Many times students by-pass this step and begin collecting a wide range of articles that they think might be useful. But unfortunately, oftentimes the student will never use more than half of these sources. Thus, this 'over-collection' represents wasted time and energy that could have gone into other, more important activities.

The important point here is to select a topic that is as focused as possible. For example, 'contraceptive use among married women' is too broad; it can refer to either studies of women who have ever used, are currently using, or who have stopped using contraceptives. More appropriate review topics would be 'contraceptive discontinuation among married women' or better yet 'the role of side effects in contraceptive discontinuation among married women.'

In certain cases however, such as context reviews, the review will be slightly broader than the specific question or hypothesis being studied. The reason for this is that a researcher often cannot finalize a specific research question until he/she is familiar with the literature (Neuman 1991:74).

The next step calls for the researcher to plan his/her literature review strategy. He/she will need to decide on the type(s) of review necessary to adequately explore the problem, how extensive the review will be, how far back in time the review should go, and the types of materials to include (such as only published documents or a combination of published and unpublished ones).

Once these are decided, decisions associated with the physical searching process need to be considered, like the number of reports to be obtained, the number of libraries or other sources to be visited, and the methods (e.g., computerized, note card system) to be used in collecting, sorting and analyzing the information. When conducting a literature review, researchers often must use multiple search strategies (such as computerized abstract searches, indexes, historical records, etc.), because each single way of conducting a search has its own strengths and weaknesses. The challenge in a literature review, therefore, is similar to that of social research in its formal sense. Namely, we must aim to strike a balance between different data obtainment methods so that information will substantiate and complement each other. The literature review is therefore an excellent initial step to see if researchers can combine and analyze different types of data, even before stepping into a research community.

Thereafter, the first step in actually conducting the formal literature review is to select only relevant research works as part of the self-study process. This will save time in reviewing as well as cut down on the researcher's workload. How to assess whether a research work is 'relevant' or 'good' is discussed in the next section. Of special importance, though, are evaluating prior assumptions; limitations or the logic behind a research problem, theory or hypothesis; and, on the basis of these, whether or not to be cautious in interpreting or adapting them to fit present circumstances.

Oftentimes a reviewer needs to investigate research works in the society in which the problem was originally studied or the one that originated the theory. This type of historical review will indicate how the problem or theory has been adapted and how well they actually did hold.

Next, a researcher should review research works in the society under study in order to place his/her project in relation to other prior studies. Where similar works have been conducted and by learning what was done, its problems and shortcomings, a researcher can effectively identify alternatives and avoid the same mistakes. This combined historical-context

review should also include all (or as many as possible) subjects or variables that are relevant for formulating and later assessing the project's conceptual framework. Since the relationship of variables should be based on theory and/or previous research works, background information should be periodically reviewed and included.

In the next step (which usually corresponds to actually writing the review), the researcher should discuss the research works as well as elaborate and express his/her own opinion about the theory and methodological assumptions of the present research with respect to those conducted previously. This review is most notably a part of original research works where the researcher's point of view must be demonstrated. This also establishes the research project's platform and direction.

Lastly, a researcher/reviewer needs to integrate the current subject and project and show its relationship to future endeavors (research, policy making and development planning, program development). This relationship substantiates not only a project's immediate relevance, but also its future importance within a broader perspective.

Reading and Assessing Documents

A literature review serves two main audiences: a *receiver* or the researcher who will conduct a project, and a *recipient* or readers/reviewers who will assess the researcher and the project based on the researcher's reports and his/her own literature reviews. As a researcher, therefore, you will both receive (or read) and send (or write) literature reviews.

To help in reading, and later writing, reviews several key considerations should be kept in mind as discussed by Katzer et al. (1982:166-169) and Neuman (1991:80). First, when you read an article, paper or chapter, do so with a clear purpose or goal in mind. Ask yourself: Are you reading for basic knowledge or to apply it to a specific question? In other words, are you reading it to obtain general knowledge, or to identify specific sets of information that will be integrated to show your project's relevance and relationship to past studies? Answers to these questions determine if you should read a set of works in detail, or simply scan them to obtain an overall picture.

Thereafter, skim the article before beginning to read it in-depth. This will give you a preliminary idea of what the writer is going to present, how he presents it (that is, what's coming next so you are not surprised) and roughly the article's major points. Oftentimes the article's structure can be seen by examining the title, abstract, summary and conclusions. The article's headings, moreover, indicate how well the presentation is organized, and if it is logical. If not, you may waste time in reordering the presentation in your own mind, and without any great benefit.

In reading other people's research works, a researcher also needs to keep in mind his/her own orientation, bias towards the topic, the method, the publication source, and so forth. These will influence his/her judgements and interpretations about what is being presented. To avoid this problem as much as possible, a researcher can consciously use his/her external knowledge as gained from other sources to assess more objectively the credibility of an article.

Most importantly, a researcher should evaluate as he/she reads an article in terms of timeliness, scientific soundness (e.g., quality and correctness of the reported research, reliability and validity of findings, accuracy of interpretations) as well as the article's relevance to the current state of knowledge (Attig and Winichagoon 1991). Key questions to ask oneself when critically reading and evaluating an article are: What errors are present? Has the writer described his/her methods as fully as possible? Do findings and interpretations follow the data? Is the article consistent with assumptions about the approach it takes? Are the findings

factually accurate? Are there any crucial questions left unanswered that could be answered based on the data presented? Are there any equally plausible explanations?

In short, therefore, a documented study needs to be critically evaluated in terms of: 1) soundness of assumptions made by the original researcher; 2) representativeness of data and their applicability to the study at hand; 3) preciseness in the research design; and 4) accuracy, clarity and specificity in presenting and interpreting results and drawing generalizable conclusions.

The overall aim of this evaluative reading process is to classify sets of literature, similar to the way data sets are organized. What one wants to come out with is a high quality set of data from which acceptable interpretations can be made. To do this, a researcher will need to decide a priority classification system, and it is usually determined by the type of review being conducted. For instance, in methodological reviews one needs to collect and classify literature based on the presentation quality (thoroughness) of their methodological sections. The same is true for theoretical reviews. No matter what type of review is involved, the basic intent is to differentiate good scientifically sound studies from adequate and poor ones. The latter should be discarded, while the others will contribute to positioning a research problem and designing the study.

Constructing Literature Reviews

A literature review reflects how well a researcher can collect, organize and interpret data. More often than not, students write literature reviews by simply listing the results of several studies. They may summarize these studies at the end, or simply leave them 'up in the air.' This type of review is meaningless to a reader, because he cannot connect the literature presented with the project to be undertaken. The review thus turns out to be simply a set of information strung together without any meaningful purpose.

Good reviews are constructed based on *chunking*, and this method is also known to be an excellent one for writing and organizing in general. In chunking, the writer organizes his findings, thoughts, or ideas into common groups. He/she then decides whether to present these 'chunks' from most important to least important, or vice versa. Whatever way is chosen, it should be the most logical one. Thereafter, the research works are discussed by simply paraphrasing their major findings, illustrating them with a few necessary quotes, and then summarizing what they mean with respect to a researcher's problem and project (Neuman 1991:81).

The aim is to make the discussion flow logically from one idea to the next. If the writer presents the literature in a haphazard way (by jumping around, for example), then the reader will easily become confused. More importantly, if the writer leaves information 'gaps' between studies by not linking them accurately, then the reader may try to 'bridge' these gaps using his/her own knowledge. He/she may then come up with a completely different conclusion than what the writer intended (Attig and Winichagoon 1991).

Collecting, Organizing and Analyzing Data

The literature review is really a data collection process containing several stages. The first stage most likely occurs when the researcher searches for a research topic during a self-study review. But as the researcher becomes more focused on his topic, he must be more systematic in collecting and analyzing literature review data.

As in qualitative research, literature review data must be collected, sorted, organized and analyzed very logically and carefully using one of the techniques mentioned in this book (see Svetsreni and Attig, and Yoddumnern-Attig in this volume). One of the best ways to do this is to organize your data collection and analysis activities around the different kinds of literature reviews mentioned earlier. These literature review types really indicate a process for collecting data, and each becomes a major ***file*** in which specific information should be sorted, organized and analyzed.

In other words, the researcher needs to collect information in the following areas, and each of these areas represents a 'file.' These files can be separate notebooks or even computer files in which the researcher places the relevant information. Alternatively, the researcher can develop his own 'filing' system; one that he feels most comfortable with. The different types of files are as follows.

Self-Study File. This file often is the first one to be developed and it tends to be more 'unorganized' than the others. The reason for this is that this file often contains apparently scattered information about an issue or general topic that the researcher must then sift through and use to define a problem (see Sethaput, this volume).

Context Review file. This file contains documented qualitative and quantitative information about how a problem or project links with prior studies or a developing body of literature. This data should help readers see *why* a project is significant. (For example, this file for an AIDS education project might include information about the disease's magnitude, extent, risk groups, etc. in Thailand or overseas.)

Historical Review file. This file contains information about past studies similar to the one a researcher is considering. It is good in showing where discrepancies exist, and how a project builds on past work. (For example, a researcher might include past AIDS education projects in other countries or in Thailand and their results.)

Theoretical Review file. If a project will address or incorporate specific theories (such as theories of behavior change for AIDS education programs), then this file contains data on these. It may also contain prior *conceptual frameworks* that have been used to study the problem, particularly if several different methods were involved.

Methodological Review file. This file contains important information on specific methods a researcher might use, especially if they are not very well known or are complex. (For instance, in an AIDS education project this file might contain data on the effectiveness of media versus interpersonal programs, message impact, scheduling and specific techniques that might be used.)

One good example of how these files and their information can be meaningfully brought together is at the very start of a project, that is, during the proposal writing stage. While a proposal can have many different parts, it usually contains seven basic ones: background, need and rationale, objectives, theoretical and conceptual frameworks, design and methodology, timetable, budget, etc. These files help develop the first five parts.

In short, the proposal's background section contains two main subsections: 1) general introductory statements about the project (which come from the self-study review file), and 2) a problem statement that explains, using documented evidence, the nature and extent of a problem that leads to the proposed project's need and rationale. The problem statement is based on information found within the context review file and possibly also the self-study review file depending upon its content.

The proposal's need and rationale section documents why a project is important, to whom, and how can it be fulfilled as well as the fundamental reasons, or rational basis, for the project. Information for this section comes initially from the context review file and any data that helps the reviewer see *why* a project is important. But it does not repeat information found already in the background section. More importantly, information in the historical

review file forms the real substance to this section because it traces the problem's history and where discrepancies exist. This then forms the rationale for the project, particularly on how this new project builds on past research studies. This discussion then leads to developing the project's objectives which state exactly what the project will accomplish in light of past studies and the project's rationale.

Thereafter, information in the theoretical review file then provides the foundation for developing the proposal's theoretical and conceptual framework section by showing how important theories or conceptual frameworks relate to the research project and its activities. Lastly, methodological review file data is incorporated into the proposal's design and methodology section. Discussion rests mainly on what methods will be used, why they are appropriate, and how they will be employed.

Conclusion

The result of a good literature review rests on quality, not quantity. Usually in preparing literature reviews for term papers, proposals and theses, students include whatever information they can get in the hopes that the reader will see each work's relevance. Usually what happens, though, is that the reader soon gives up out of frustration. A good review fulfills the 4-Cs of good writing, that is, it is clear, coherent, concise and complete. But above all, it needs to be focused. A good review communicates with the reader and is purposefully organized around a limited set of concepts or themes. The true test of a good literature review is whether it can be used as the basis for a journal publication in its own right, thus contributing not only to the researcher's project but also other present and future ones.

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Chapter 13

The main types and steps of sampling

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Sampling is a powerful technique used both within and outside of the qualitative research realm. In this chapter, the authors give the reader a conceptual understanding of sampling and how to apply it for social research studies. They discuss in particular the different sampling methods and their objectives as well as the process of sampling itself from a larger universe on down to individual sample selection - EDS.

Introduction

This chapter offers a practical, simplified, step-by-step guideline for familiarizing researchers with samples and sampling methods and providing guidance in helping them to select community and individual samples which are most appropriate to their research design and problem. Thus, the chapter itself is divided into three parts beginning with what a sample actually entails and methods of obtaining it, followed by how to select the community, and the sampling procedures involved in pinpointing exactly who should be selected for study.

What is a 'Sample'

In research terms, a sample is a group of cases determined using specific criteria to be representative of a larger population, who are chosen for observation and/or interviewing. Sampling, therefore, is like random assignment in that it is the systematic process of selecting cases to include in a research project. When we randomly assign, we sort a set of cases into two or more groups (such as "experimental" and "control") using a random process. In random sampling, we select a smaller subset of cases from the randomly assigned groups or a larger pool of cases, or *elements*. The sampling element is the unit of analysis or case representing a *population*. It can be a person, group, organization, written document, symbolic message, or even a social action such as a marriage or childbirth. The aim of sampling is for the researcher to be able to draw inferences from the sample to the population. Researchers are usually not interested in the samples alone (though qualitative researchers are interested more than their quantitative counterparts); they want to infer to the population. Thus a gap exists

between what the researcher actually has (the sample) and what is of real interest (the population) (Neuman 1991:198-199).

A researcher starts with an idea about what he (or she) considers as his population (such as all the people in a district or community) and then goes on to define it more precisely by identifying a *target population* which serves as the specific pool of cases that he wants to study. An optimal (i.e., good) sample must contain all the main characteristics of the population to be studied, or as many as are relevant to the research problem under study.

Thus the sampling process, on a simplified basis, is one of progressive selection based on pre-specified project requirements and/or information gained during a formative data collection process. In nutritional projects concerning maternal and child health, for instance, one major objective might be to determine the major food beliefs regulating the consumption patterns of pregnant women. Since many health intervention programs are aimed at rural women as the main target group, single or multiple rural communities would probably comprise the main area sample. Furthermore, as the project concerns pregnancy as the main life event and social action, the project's sample should be restricted to a target group of women who have ever been pregnant. These women may be further segregated into separate cohorts (e.g., 15-25, 26-35, 36-40, and 40+) who are of similar age and who have probably had similar experiences concerning food habits and pregnancy. These samples may be interviewed as categories in and of themselves to aid the researcher in comparing one age category/sample with another and thus understanding changes in individual and community beliefs over time. In order to get at specific group attitudes or opinions, smaller units could be selected for focus group discussions. Out of the larger rural, ever-pregnant, cohort-specific sample, one or two life histories in each category may also be taken of those women who best illustrate the overall patterns and dynamics of maternal nutrition over time.

Perhaps the most common question asked about sampling is "How large does my sample have to be?" The best answer is, "It depends." Selecting an optimal sample depends upon: (1) the kind of data analysis the researcher plans to use; (2) the sampling procedures used and how accurate they have to be for the researcher's purpose, (3) the characteristics of the population under study; (4) the necessary sample size considering the population and sampling methods, (5) the objectives of the research project and its time duration, and (6) the specific data collection methods being used.

Types of Sampling Methods

Probability Sampling

Samples are usually divided into two groups: probability and nonprobability. *Probability sampling* allows researchers (and usually those involved in quantitative research) to make definite statements about sampling and use powerful statistics to analyze and communicate findings. Several types of probability sampling exist, and these can be summarized as follows (Neuman 1991:207-216).

In *random sampling*, a researcher formulates an accurate sampling framework. He then uses a mathematically random procedure to select elements found within this framework, and thereafter identifies the exact element that has been selected for inclusion in the sample.

Systematic sampling is a form of random sampling where the researcher calculates a sampling interval (say, every three cases) which becomes his quasi-random selection method. It tells him how many elements to skip before selecting one for the sample.

For *stratified sampling*, the researcher first divides the population into strata or

subpopulations on the basis of supplementary information. He then randomly selects his sample from these strata or subpopulations.

Cluster sampling is used when a researcher does not have a good sampling framework for a dispersed population, and the cost to reach a sampled element is very high. For example, there is no single list of all contraceptive users in Thailand (or any other country for that matter). Even if it was possible to develop an accurate sampling framework, it would cost too much to reach many of the sampled users who are geographically spread out. Instead of using a single sampling framework, therefore, researchers use a sampling design involving multiple stages and clusters. A cluster would represent a unit that contains final sampling elements but is treated temporarily as a sampling element. The researcher then randomly samples clusters, then randomly samples elements from within the selected clusters. In cluster sampling, therefore, a researcher draws several samples in stages, and he must decide at the outset the number of clusters to be involved. While cluster sampling is usually less expensive than simple random sampling, the problem is that a multistage cluster sample is prone to more sampling errors than a one-stage random sample.

Nonprobability Sampling

Nonprobability sampling, more characteristic of qualitative research, is more limited and a researcher uses these techniques when he (or she) is unsure of the nature of the population, has a specific time limitation, or in special situations such as when he wants to explore a community's interconnected networks of people and/or organizations (Neuman 1991:202-206).

The most well-known nonprobability sampling procedure is *purposive sampling*. It is an acceptable kind of sampling method for special circumstances that relies upon the researcher's (or another expert's) judgement in selecting cases. Purposive sampling is usually used to select cases when the researcher has a specific purpose in mind. The problem with purposive sampling is that the researcher never knows if the cases he selects represent the population. Nonetheless, it is most useful when a researcher wants: (1) to select unique cases that are especially informative; (2) to select members of a difficult-to-reach population (such as drug addicts or prostitutes); or (3) to identify particular types of cases for in-depth investigation.

Other forms of nonprobability or quasi-nonprobability sampling are *snowball sampling* and *dimensional sampling* which will be discussed in greater detail later.

Progressively Identifying a Community Sample

Just as each person is different from all others, each community has certain characteristics which regulate the number and type of data the researcher is required to collect. The characteristics themselves fall into a number of over-arching categories, but in ecological terms a community has its own special social, cultural, biological and physical environmental components. Specific factors might include disease prevalence and incidence rates, family size, religious persuasion, economic levels and activities, ethnicity, natural resource (e.g., water) availability and the like.

Community selection is oftentimes made more challenging by the fact that qualitative research is an intra- and/or inter-community comparative process. Its aim is to determine similarities in process, such as food beliefs or eating habits, within and between communities

(or even regions), rather than mainly differences. To achieve this aim, community selection also centers on similarities. That is, if more than one community is chosen for study, they must be similar in as many characteristics as possible, especially those which may influence the variables under investigation. On an intra-community level, community groups selected for study must also be similar (e.g., along age, sex, religious, occupational, or economic lines). And lastly, where specific social groups are examined across communities, both community and group characteristics must be controlled within and between the research communities. Hence, community selection is one crucial initial research stage which must be undertaken with care, but not apprehension.

The process of selecting research communities is a progressive process of elimination, generally containing four main steps which begin at the largest theoretical sample population and ending at the actual community sample. In many country contexts, this process originates at the highest organizational level and reaches down to the village. For our purposes here, the four main organizational levels involved are the region, province, district and village. Not all research projects will encompass these levels (largely because some nations may have alternative administrative designations), but the process involved is similar and only requires slight alterations for application in other locales.

The first logical step, after developing a project, is to select the largest area for study which is congruent with the research project's problem and objectives. Let's take as a main example a project entitled "Socio-Economic Survey and Anthropological Evaluation for Integrated Coastal Zone Management Planning in Thailand's Upper South Region". The main aim of this project is to integrate the socio-economic considerations surrounding family and community life-ways into regional coastal natural resource management planning. In simple terms, the project's main objective is to determine what familial and community socio-economic pursuits (e.g., fishing, mangrove utilization, tourist trade) are affecting (either positively or negatively) coastal natural resource use patterns, and how can these activities be changed so as to preserve the existing natural resource base yet maintain (or even improve) current socio-economic levels. In this project, the area to be studied centers on Thailand's Upper South Region and is therefore restricted to the 10 provinces found within this area. Only lower organizational levels, especially communities, found within the bounds of the Upper South Region should be selected.

The second step is to select provinces within this area which possess districts and communities undertaking activities specified in the research project's objectives. For the project described above, the specific objectives include development and management of aquaculture activities (i.e., fish cultures, shrimping, off-shore fishing) and mangrove use as the two main natural coastal resource use activity categories. The researcher should now go through as many relevant reports, particularly ones from the Fishery and Forestry Departments, and single out the main provinces undertaking these activities most intensively. After this review process, only two provinces out of the total of ten might be heavily involved in both aquaculture development and mangrove utilization.

Thirdly, if possible, the researcher should select districts within these provinces which most completely align themselves with the research project's objectives and activities profile. This selection procedure would again involve close consultations with provincial officials and a thorough review of official records and documents. If possible, an initial site survey should be conducted where the researcher goes to the provinces involved and undertakes a preliminary investigation of the districts which might be chosen for study. In this way, the researcher can experience for him/herself the context in which the research project will be conducted (in terms of official and local cooperation) and thus the actual areas in which it can most feasibly be done.

The fourth selection step asks the researcher to select the actual communities

themselves. At this stage a number of smaller considerations must be taken into account. The first is, like the province and district sample, the communities must be intensively involved in the activities specified in the project's objectives. District officials are perhaps the most valuable sources of information in this area, particularly persons involved in monitoring the activities under investigation (e.g., district fishery and forestry officials).

Along with activity patterns, the researcher must also consider community size. Qualitative research studies are for the most part small-scale, micro-level investigations. They center on people's experiences, thoughts and words, instead of statistical pictures. Data is collected and analyzed using both researcher-focused (e.g., observations, participation) and subject-focused (e.g., life histories, focus groups) methods. To fully understand a community's dynamics, the community size must be small enough for these methods, amongst others, to be maximally applied. Hence, communities which have a clearly defined and numerically limited population should be selected over larger, potentially more vague, communities.

Next and as an interesting but highly relevant side-note, one common dream of many anthropologists is to work in a community that is remotely located and, thus, "untouched by the hand of modern man". But this is only a dream and generally not feasible in addressing today's research problems. On the contrary, communities which give researcher's the greatest amount of information are ones which are readily accessible. Even though the roads may be unpaved and pot-holed or the waterway routes clogged with debris, the community should have some degree of contact with the outside world throughout the year. This communication route aids the researcher in a practical sense by giving him increased access to the community itself. It also indicates the degree to which community members can obtain resources or technical assistance from outside sources and, thereby, their ability to potentially and pragmatically change certain behaviors. This step in actual community selection is to determine the level of community accessibility desired, and to choose those communities accordingly.

Relatedly, one factor which affects not only community selection but also the research design itself is language. A researcher's ability to understand the local dialect determines his/her ability to fully understand the behaviors and actions of community people as well as his capability in analyzing and interpreting the data accurately. In Thailand, this problem is compounded by the fact that each region has its own separate language variety (in some cases not mutually intelligible) and oftentimes each province and village has its own dialect (oftentimes tonal variations). The dialect, itself, is a part of the community's culture which reflects the ideas, beliefs, attitudes and behaviors of the people. Moreover, respondents sometimes are very apprehensive about trying to speak in the national language (Central Thai), if they are able to at all. If the researcher cannot understand the local dialect, a local assistant or interpreter must be employed. The local language, therefore, should be considered in the selection process as one factor which might affect data quality. Language should not, however, limit the community selection process by excluding very important communities which, by their nature, speak a dialect which is unintelligible to the researcher.

After the researcher has limited the communities to a specific sample, he/she should, as in the third stage above, conduct an initial site survey of the potential research villages. The researcher must be introduced into the communities by a well-known and respected community member or official so as to facilitate community acceptance and rapport. The researcher can then more objectively and freely examine the communities at close hand to see which best fit with the project's problem and objectives. The preliminary analysis might include a brief investigation of the village census information; an observational tour around the village itself to see how it is spatial organized as well as to assess community and family material resource bases; informal interviews with village leaders to determine the extent of the village's infrastructure and cohesiveness (to avoid community's which have serious internal conflicts); a glimpse of the occupations currently being undertaken (especially those which are seasonally

regulated); and through informal conversational techniques the willingness of the community to be involved in the research project.

In summary, the overall rationale for identifying the community sample rests on the project's problem-focus, specific objectives and the activities entailed in them. This scheme can be presented as follows, and the ways in which the steps are successfully accomplished relies on investigations of official records and documents, consultations with relevant persons/officials, and researcher-initiated preliminary site surveys. From all of this information, the researcher can then fully recognize and justify his/her community sample.

Step 1: Select the largest area for study which is congruent with the research project's problem and objectives;

Step 2: Select provinces within this area that contain districts and communities intensively undertaking activities specified in the research project's objectives;

Step 3: Select districts within these provinces that most completely align themselves with the research project's objectives and activities profile;

Step 4: Select the research communities based on: (a) degree of involvement in the activities specified in the project's objectives; (b) a clearly defined and numerically limited population; (c) level of community accessibility desired; (d) an initial site survey assessment of the potential research villages using (amongst others) document examinations, observation and informal interviewing; and taking into account local language, social organizational context, and degree of community willingness and cooperation.

Individual Sample Selection

Once the community sample is selected, the researcher must move one step closer to his population by choosing those people which will serve as his study sample. In most instances, two main sampling techniques are utilized, the first of which is *snowball sampling*. This sampling procedure is usually practiced when the researcher does not have a specific target group pre-selected for interviewing in line with a specific purpose. It is used mainly to recruit key-informants, to collect background data on the community; and/or trace the community's existing social networks. The researcher first selects a focal point in the community, usually a recognized leader such as the headman, abbot or teacher. The interview content may vary depending on the research topic itself and the purpose of the interview. Generally an interview guide is used to aid in forming questions and continuing the conversation. When the interview is completed, the researcher should ask his key-informant to recommend other village persons who can be interviewed along the same lines. In this way, snowball sampling is very similar to a referral system.

Snowball sampling therefore begins at one focal point and spreads out as time passes. The researcher will not know beforehand the exact number of individuals in the sample, which raises the question as to when the sample is adequate in size. The general rule to follow is that when the data from the samples consistently repeat themselves and reveal definite patterns of information, then the sample has become saturated and no further interviews are necessary. The data obtained from the current sample is reliable enough in explaining certain behavioral patterns of the people in the research community.

The second sampling procedure is *dimensional sampling* which requires the researcher to know the community's basic structure, especially the number of informal groups (or dimensions) existing within it and the norms which guide individual and group decisions and actions. These dimensions serve as separate sampling pools, and the final interview sample should be drawn from each of these groups. According to Arnold (1970), each group of people or community can be divided into roughly three categories, i.e., regular, marginal and negative cases. Regular cases comprise those persons who conform to the norms set forth by the majority in the community. Negative cases, though, are non-conformists who do not abide by such norms. Marginal cases do not belong to either of these groups.

Dimensional sampling's basic premise is that persons belonging to one case/category who are in the same age range, share the same experiences or background generally have the same patterns of behavior. Therefore, one person is usually adequate enough for interviewing within each dimension. However, the regular case category is often quite large and must be divided into smaller subgroups or sub-dimensions, with one sample being drawn from each. To obtain a total community picture, the researcher should select a regular case from each subgroup and one from the marginal and negative case categories. This total sample should be adequate enough to explain certain community behavioral patterns.

To illustrate, in a study on "Community-based Factors Affecting Contraceptive Discontinuation" the researcher initially divided women into two main categories: current contraceptive users and contraceptive non-users. These two groups were then subdivided into smaller dimensional groups using selected information obtained about the community structure as the frame of reference, as shown in Table 13.1.

Table 13.1 Dimensional sampling procedure

		Contraceptive Behavior (by Agricultural Occupation)			
		Current Users		Current Non-Users	
Age Group	Total	Self-Employed	Paid Workers	Self-Employed	Paid Workers
Regular Case (Thai-Lao)					
20-29	4	1	1	1	1
30-39	4	1	1	1	1
40-49	4	1	1	1	1
Total	12	3	3	3	3
Thai-Khmer Case					
20-29	1	1	0	0	0
Total	1	0	0	0	0
Thai-Chinese Case					
20-29	1	1	0	0	0
Total	1	0	0	0	0

In the research communities, no one can be classified as a marginal or negative case, since family planning is universally accepted by the people in this study. Moreover, as agriculture (i.e., farmers, paid laborers) almost totally represents the population's main occupational activity, other occupational categories are not included. The main dimension under which district subcategories are recognizable is ethnicity. The community's predominant ethnic category is Thai of Lao descent (Thai-Lao), and this category represents the "regular case". Within this case category, there are two minority groups evident in the community, i.e., Thai-Khmer and Thai-Chinese. Thus, the researcher selected one case from each of these ethnic subgroups in order to account for the marginal and negative cases. These individuals fell into the contraceptive user category (as no non-users exist for these ethnic groups), age range of 20-29 (the highest user category) and self-employed agriculturalists (the most prevalent occupational subcategory). In doing this, all sectors (ethnicity, contraceptive use, occupation) in the community were covered; the total sample size was 14 women for life history interviewing. Twelve women comprised the regular case (Thai-Lao) agricultural category, while one Thai-Khmer and one Thai-Chinese represented the remaining cases.

Within each of the sample cells in Table 13.1 (that is, "Self-employed" and "Paid Workers"), one must wonder how to select the individuals for interviewing. By this time, the researcher probably knows many potential candidates, and, if this list appears to be homogeneous, random sampling can be applied. However, the researcher should select one or two extra persons within each cell as interview alternates, in case the person who originally selected cannot or will not be interviewed.

But oftentimes truly random samples are not attainable, because qualitative research methods, and especially life histories, require a level of personal intimacy, rapport and mutual trust between interviewer and subject. This trust develops as both persons cue into each other's personality traits, past experiences, biases, interests, needs and motives. Each researcher has his own personality; he must realize that it often determines how subjects react to him. Therefore, he must be able to adapt to the reactions that his presence may instill in the subject, and vice versa. Over time, the researcher becomes sensitive to the factors which tell him that a subject is willing to give information and when she is unwilling. This increases as the topic comes more sensitive. In life histories, for example, random samples at this point become fruitless if one-half of the sample is giving poor or false information, which reduces their representativeness and reliability for testing and comparing against other data (Agar 1980a). Hence, sampling by purely statistical methods will not yield an understanding of the meaning behind people's actions.

Oftentimes, purposive (or theoretical) sampling is used as one alternative. This sampling technique, which requires and effectively utilizes the researcher's personal knowledge, entails the researcher selecting interview subjects in a self-conscious way to gather information which is maximally comparable to what has already been collected (cf. Agar 1980a, 1980b; Attig 1988). The information supplied during the interview process is compared with that gained through other qualitative and quantitative methods to determine whether the interview information is accurate or inaccurate. If the latter occurs, further interviews are conducted to determine the in-depth processes and causal factors affecting responses (for a more complete discussion see Attig, 1988, and the life history chapter in this volume).

At both micro- and macro-levels, therefore, quantitative sampling techniques can be applied to qualitative studies as well. What sampling method will be adopted, however, depends to a great extent upon the topics and methods being used. For example, if the study involves the time-allocation approach technique, the sampling procedure used rests on the study's size and scope. If it is an in-depth study, sampling and sample size will be more restricted and small according to the project's objectives. Sample size could range from 5 to 10 families, on up to every community family. In "A Time-Allocation Study on Rural

Women: The Productive and Reproductive Roles" (Soonthorndhada et al. 1987), the researcher chose in total 40 housewives who were not older than 49 years in two villages in Burirum province for in-depth interview. From these 40 cases, only 10 cases were selected for study by consecutive direct observation for a two-day period. This sample size was small, since the project's specific objective was to observe and record the variety and types of time spent by different persons.

Summary

Qualitative studies examine specific actors (either individuals or groups), events, settings and processes surrounding a research problem. In many cases, the study does not require covering and entire population of as many sub-sectors as possible, although the sample should be representative of the population under study. The long-standing belief that a researcher must reduce his population and its characteristics to a set of numbers in order to know what he is talking about, is being replaced by an emphasis on the context of interaction.

Generally speaking, the sampling procedures used in qualitative studies involve three procedural levels, i.e., theoretical, empirical and actual (cf. Johnson 1978). The first level involves the largest, major category encompassing a study and is denoted as the theoretical population. For a project which examines childrearing patterns of Thai Muslim women in Southern Thailand, the theoretical population is all Thai Muslim women in the four predominantly Muslim Southern provinces. The second level, the empirical population, is the population selected for study (e.g., Thai Muslim women living in three communities found within any one Southern province). The population sampling at this level cannot depend upon a random procedure, since as noted earlier the researcher must take numerous factors into consideration when selecting the communities themselves. The last level is the actual population, which consists of the set of individuals or groups to be actually interviewed. These are chosen either through snowball or dimensional sampling, amongst others. The emphasis at each of these levels in on depth, rather than breadth.

The criteria discussed in this chapter should serve as a frame of reference for the researcher, but they should not determine his choices outright. Unlike quantitative studies, flexibility is the number one rule. Only the researcher knows the unique characteristics of the people and communities involved which may influence sampling. He must consider these at every research stage based on his own knowledge as well as that of his subjects in order to select a representative and reliable sample.

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Chapter 14

Constructing interview guides

Amara Soonthorndhada
Pimonpan Isarabhakdi

Now that a problem has been identified, the literature reviewed, and a sample population identified, the researcher needs to decide what questions to ask and how to ask them. The basic tools used to do this in qualitative research are interview guides and this chapter provides valuable insights into their development - EDS.

Qualitative Research Interviews

When talking about tools for collecting social research data, the most common one is the survey questionnaire. This tool is used by scientists who want to determine the statistical magnitude or extent of a certain behavioral or biophysical phenomenon. Qualitative researchers, though, depend upon an interview *guide* to explore a wider range of social, cultural and psychological variables and the underlying processes which account for them on either individual or group bases.

The main difference between these two tools is structure and detail. A survey questionnaire is highly structured, containing a set of detailed questions arranged in a predetermined order, the answers to which are specifically laid out and, oftentimes, precoded. The interview guide, however, is focused on a specific topic, but it is less structured and more flexible. How it is organized depends upon the researcher's own interview style, the interview context (such as the interview location and the researcher-respondent relationship), and the degree to which the researcher wants to fully explore a topic or to concentrate on obtaining a set of specific data.

Interview guides are important parts of three types of qualitatively-based interviews. The *unstructured interview* relies entirely on the spontaneous generation of questions as they come out naturally from the free-flowing discussion between the researcher and the respondent. Specific interview questions are not written out in advance, but the researcher concentrates on guiding the discussion around a topic of interest. The most common form of unstructured interview is the conversation. In this very informal setting, people are greatly at ease, and they will generally talk more freely about a topic, the many features they believe are related to it, while also giving their own opinions about it. The purpose of this kind of unstructured interview is to gather a wide range of information which can be used to introduce the researcher to how an issue is initially and freely perceived. This information then goes into developing the content of later, more structured, interview guidelines.

Focused interviews, such as focus group sessions and key informant interviews,

require a list of in-depth questions on a restricted subject, but these questions are not always placed in a fixed order. In using this method, the researcher must prepare in advance the topics or subject areas that will cover the data needed to attain project objectives. The nature of the questions developed for the interview guide as well as their specific data items allow the interviewer to merge them and organize a discussion session about a particular subject on a limited but pre-determined basis. Where these pre-specified questions are given a fixed order, despite their being open-ended, the interview procedure is *structured or standardized*, such as for formal interviews.

Unstructured, focused and standardized interviews are usually separate stages in the *qualitative interview process*. This process begins when the researcher constructs her conceptual framework containing independent and dependent variables and their processual relationships to a particular research problem. These are determined based on literature reviews, her own experiences and thoughts as well as those of other experts. The researcher then explores these variables, and any initial hypotheses which were formulated, through informal conversations with community members. As she gains more knowledge and understanding, the researcher will then start to focus her interviews by writing out more detailed, yet exploratory, questions based on the information she has already collected and her own interpretations. Using the answers to these, she will then develop more structured hypotheses and write questions on specific aspects surrounding important variables. These written questions are then posed in exactly the same wording to a set of individual respondents. The latters' responses are recorded in detail and analyzed using appropriate methods.

Research Questions

Before constructing an interview guide, a researcher must begin by selecting a general topic for study usually based on her own interests, those of her organization or government, or a particular funding agent. She then conducts a literature review to determine the state-of-the-art knowledge on that topic. From this general literature review, the researcher then extracts out the research problem which is most often in the form of a locus of uncertainty, confusion, contradiction, controversy, or simply a gap in existing knowledge that, once filled, would shed light on ways to solve the problem.

This problem is then refined into a specific research question, or set of questions, which if answered will fulfill the research project's main objective. For example, one topic of urgency might be the high rate of malnutrition among children under five. From reviewing prior studies, the specific problem might be stated in this way, "Past research has not examined sufficiently or satisfactorily explained the differences in feeding patterns between mothers and alternative child caregivers." Specific research questions might then be: "How do mothers and alternative child caregivers differentially interact with children during feeding time, and how does their interactional differences affect a child's food intake?"

Eventually, these questions (which may also be stated as a problem, purpose or proposed solution) may be further refined into testable hypotheses or statements about the causal relationships with at least two variables.

Formulating the Interview Guide

In principle, the interview guide is an essential tool to elicit specific facts, attitudes, processes, and perspectives (beliefs, opinions) of the people under study. Skills and experience

are required when constructing questions.

At this stage, the researcher must keep in mind a few crucial considerations. First, she must define broad question areas as a point of reference for developing more detailed questions before the interview, as well as helping to guide the conversation during interviewing. These areas should initially be listed and analyzed in a progressive manner, going from the highest level down to the most specific level as possible. In this process, exact sub-categories are identified, and, then for each sub-category in turn, potential questions are written down which would obtain the information required.

For example, if the research problem is vitamin A deficiency, one broad research question might be: *What cultural factors affect food habits and the consumption of vitamin A-rich foods?* Under this question there might be two subcategories for investigation, namely, *food taboos* and *religion*. For the former, the researcher would develop questions about people's beliefs concerning the consumption of hot versus cold foods, or what foods mothers cannot eat during pregnancy. Under religion, questions might center on any religious restrictions, such as not eating a certain kind of meat or vegetable.

After question areas are identified, the next step is to formulate the specific questions themselves. In principle, questions should be worded simply, understandably, specifically and in as undemanding and unbiased a manner as possible. They should be non-technical so that they can be answered based on the knowledge possessed by the respondents. Questions also should not be objectionable, i.e., too personal, or convey negative implications. And lastly, questions should be general enough to be applicable to a wide range of respondents. Inapplicable questions are often confusing, if not irritating, to respondents and this weakens the interview process itself. One example of an inappropriate question is:

> *We know that most women abide by food taboos during pregnancy, and I think you do too - right? So what do you think about your next door neighbor and others in this village believe?*

This question has a built-in response bias that communicates the interviewer's belief that food taboos among pregnant women are universal phenomena. The question is also leading because the respondent is led into agreeing with the interviewer's point of view (the interviewer dares the respondent to say she is wrong). This question also asks for very personal information, i.e., the respondent's feelings about others, which he or she may feel is inappropriate. The respondent may therefore become uncomfortable in answering this and subsequent questions. In this situation, a truly open-ended question can be used to elicit the response. The researcher might ask:

> *What foods would you have liked to eat during your pregnancy, but could not?* (This would be followed by a "why" question.)

But most importantly, the researcher needs to ask singular questions. Each question used in open-ended interviewing should contain no more than one idea. Multiple questions cause tension and confusion in both the respondent and interviewer. The interviewer may also not be able to differentiate the focal point of the answers. Hence, increased numbers of follow-up questions would be needed to determine specific areas and answers. Concomitantly, the respondent might become uncertain as to what is actually being asked and she may have difficulty in organizing ideas. Asking a series of questions at one time can also cause the interviewer to lose control of the interview, because the respondent may lead the conversation by talking on only one or two items which they can remember. An inappropriate question of this kind is as follows.

If you wanted to feed your child with foods that are high in Vitamin A, I'd like to know how you would manage it? What sort of foods would you use? Why? What do you like? How would these improve your child's health?

To ask these questions in an easier manner, they should be separated such as:

Q1: *Do you know how Vitamin A can improve your health?*

Q2: *What foods do you think you should feed your child that are high in Vitamin A?*

Q3: *Would you and your husband eat these foods too?*

Q4: *How much of your income is spent on food?*

Types of Interview Guide Questions

Interviewing people is a mechanism whereby researchers can discover what people think and feel. The interview guide, as implied by its different forms, is one tool designed to maintain the conversation's continuity and focus. Consequently, the contents of the interview guide should at least be a check-list in the gathering of general information about people and specific information about attitudes, beliefs and behavior. To serve these purposes, qualitative interviewing involves three separate types of questions.

First, *descriptive questions* enable the researcher to sample a person's knowledge, oftentimes using the subject's own words. These questions are the easiest to ask and extremely suitable for initiating conversation and building rapport, since oftentimes they seek general information. Descriptive questions may even ask for information which, at first, might appear to be totally unrelated to the study's main or specific objectives, but which encourages the subject to talk. The information, however, might at a later time prove enlightening. The questions, themselves, can center on either personal, family or community background information such as age, educational opportunities, or types of occupations. Alternatively, they can examine an individual's factual information or perspectives on anticipated subject matters. The researcher could ask:

What do you usually have for breakfast?

What do your children like to eat for breakfast?

How many times a day does your baby eat?

Do you know of any foods that are high in Vitamin A?

In addition to descriptive questions, *structural questions* enable the interviewer to discover the manner with which people discuss and relate their knowledge, opinions, attitudes and attributes. With structural questions, four types of responses are sought, i.e., attitude responses (what people say they want), belief responses (what people think is true); behavior responses (what people do); and attitudinal responses (what people are). For instance, "How many children do you have?" is an attribute question. "When you are pregnant, what kind of food do you usually eat?" and subsequently "Why?" refer to behavior and belief responses, respectively. And finally, "Should all pregnant women abide by this food habit?" asks for an

attitudinal response.

Contrast questions, though, provide a way for the interviewer to acquire a better understanding of what the specific subject matter means. The interviewer gains benefits from these kinds of questions by discovering how people differentiate the objects and events in their own words and perspectives. Contrast questions increase the amount of information gained about opinions, values, experiences, behaviors and feelings. Also, they yield increased understanding about people's cognitive and interpretive processes. The questions typically carry an implication of the respondent's rationality and decision-making. As a case in point,

> Q1: *When you realized that you were losing weight and your appetite was low, I understand your doctor suggested that you take Vitamin A tablets regularly. Yet, your mother said that eating green and yellow vegetables regularly is just as good. Would you tell me, if you can, what is better (more convenient or effective): taking tablets or eating vegetables?*

Through this question, the researcher might discover what strategies the respondents (and their families) feel are most appropriate in terms of self-care.

Question Formats

Descriptive, structural and contrast questions can be developed in differing ways, depending upon the characteristics desired. Overall, these ways include open-ended, presupposition, role playing and probe/follow-up formats.

First, truly open-ended questions can be formulated. The purpose of using truly open-ended questions is to permit the respondents to answer the questions in their own words. The nature of these questions allows the respondents to express freely their feelings, thoughts and experiences without interviewer interference or pre-set answers. For example,

> *What do you think about the preventive care session at the health centre?*
>
> or
>
> *What do you think about feeding powdered milk to a baby?*

Alternatively, presupposition questions aim at deriving or eliciting increased meaning as the interview proceeds. These types of questions are particularly useful when structural questions are expected, because the interviewer presupposes that the respondent has something more to say. Presuppositions serve at least two functions; one is to stimulate the respondents to talk more and the other is to ease the conversation. When presupposition questions are worded, the researcher should keep in mind how the questions stimulate the respondent to assess and then answer the question directly, without making a decision about whether or not something has actually occurred.

Example Situation: Home visit of the midwife.

The mother is interviewed about the visit.

Q1: *What have you learned from the last home visit of the midwife?*
(presupposes some learning)

Q2: *What do you do for your baby now that you did not do before the last home visit?*
(presupposes change)

Role-playing questions can also be used in open-ended interviewing in order to ease difficult questions when the discussion is in progress or when respondents become tired of thinking about proper answers. The interviewer can help the respondents by providing them with cues and asking them to respond to the interview as if he or she were someone else. The questions can be worded as in this following example:

> *Suppose I was a mother of a baby who is suffering from severe malnutrition and I asked you what I should do to help my baby recover from such an illness. What would you tell me?"* (Instead of asking the question "What do you think about the causes of such illness?")

The effect of the role playing question is to improve the interview's atmosphere by giving the subject a feeling of being an expert. The respondents will not feel like they are forced to give an answer.

Similarly, the interviewer can simulate the respondents to give additional, possibly more personal information. In this situation, respondents are asked to imagine themselves in some situation about which the interviewer wants to obtain more information. The separate questions can be worded in the following way:

> *Suppose I was present with you at the health centre waiting for group preventive care sessions. What would I see happening? What would be going on? Please describe to me what one of those sessions is like.*

The purpose of the above questions is to let the respondents re-experience and describe to the interviewer the contents of the program at the health center. This will tell the interviewer more about the effectiveness of such sessions in communicating to their audience.

And lastly, the interview guide may contain probe and follow-up questions but in an appropriate and flexible way (for focused interview guide) and pre-determined for the standardized open-ended interviewing. Probes are usually used to deepen the responses given for a question. Two types of probes can be developed, namely detail-oriented probes and elaboration probes. Detail-oriented probes consist of questions which aim to fill in the blank spaces of a response. Let's take this following list of questions (that should be asked separately) as an example.

> Q. *You told me that there are quite a number of children aged under 5 in this village who are severely suffering from dryness and fissures of the lips. When did that happen? How did that happen? What kind of action programs were involved? Who was involved? How much were they involved?"*

To word detail-oriented probes, questions usually begin with the words "Why, When, What, How, Who, Where."

The other type of probe, the elaboration probe, is used when the interviewer wants to encourage the respondents to say more if the interviewer cannot understand the answers. The interviewer makes a request by using these formats.

> *That's helpful. I'd appreciate if you could give me more details?*

or

> *Let me make sure I've got down exactly what you said, and if you can think of anything more about it please tell me.*

In conclusion, probes should be used naturally and gently. The interviewer should be careful when probing because the respondents might misunderstand that their responses are not clear enough or senseless.

Interview Guide Organization: Focused and Open-ended

In general, an interview starts from simple topics to more structured questions. If group interviewing is administered, the first part of interview guide should be a statement aimed at familiarization, then questions on general knowledge can follow. Opening statements, though, serve more than one function. From the statements, the interviewer informs the respondents about the purposes of interviewing, how the respondents were recruited, who the interviewer is and the interview's confidentiality. An opening statement can be worded as follows:

> *Today we are going to be talking about a topic that I think you will find interesting and that I'm sure you all know a lot about and that's childrearing and child illnesses. I'd like to find out something about how you take care of your children. What you consider when choosing food for your children. How and when you use supplements. Now to get started, perhaps it would be best to go around the table one at a time. I'd like to know about your families. How many children do you have? How old are they? What does your husband do?*

The second part of the interview guide is focused more on the study areas. As noted earlier, there are two basic alternatives to organizing the content of questions; a focused interview guide (a set of questions or issues is prepared and probed in-depth without a fixed order) and standardized open-ended (prespecified questions are asked in a fixed order).

The focused interview guide contains questions on subject areas that lead to essential information; truly open-ended questions are usually administered but probes can be substituted intermittently in appropriate places. This procedure requires well trained and experienced interviewers. Look at the following sample of a focused interview guide.

From the list of questions, the interviewer can stimulate the respondents to elaborate more on particular answers. If the interviewer wants to obtain additional responses, he can further clarify the questions' wordings using when, why, how or could the respondent be more specific on that point.

Sample of a Focused Interview Guide

A study on factors affecting vitamin A deficiency in children aged under 5.

Q1: *What foods does your child usually consume each day? How about staples/animal protein and breast milk?, vegetables? fats?*

Q2: *When was your child weaned? (how?)*

Q3: *What is your opinion of supplementary foods? When and how are they used?*

Q4: *What did you do when your child was suffering from lip fissures? treatments? seeking remedies?/ effective?/ results?*

In the case of a standardized open-ended interview guide, the questions are predetermined and less flexible because all questions are to be asked in the same order. A list of questions can be divided into sub-topics in accordance with hypotheses. This procedure will be helpful to the interviewer in keeping the session focused.

The open-ended questions administered in qualitative interviewing yield both benefits and limitations. In general, respondents are allowed free expression in their points of view because the interview guide is a list of questions or issues that are to be explored during an interview. The respondents feel free to give a range of answers. This is due in part because open-ended questions place fewer constraints on the interaction; it is less formal and more relaxed. This is especially valuable in eliciting information among the respondents who are unfamiliar with the formal surveys and their rather rigid contexts.

Disadvantages in open-ended interviews also exist. Replicability of open-ended questions is more difficult, if unstandardized, because the content and structure of the interview is dictated more by the respondent's answers than by the interviewer's questions. Further, the results obtained by open-ended questions may not be strictly comparable. Respondents in each interview may present a wide range of topics. Respondents must also recall past experiences, reorganize them and find terms to express them, which varies by person. The interview context and thus the quality and quantity of data depends on how much control the interviewer wants and whether comparability is a high research priority. Open-ended questions are also more time-consuming than the closed-ended method and for this reason the sample size is usually smaller than can be achieved with surveys. The researcher, in addition, needs to know more about the language and culture of the subject group when developing questions.

To reduce disadvantages created in using open-ended questions, a standardization process can be used where interview questions are written out in advance exactly the way they are to be asked during the interview. The standardized open-ended procedure also elicits both strengths and weaknesses. The major weakness is that the procedure is less flexible in permitting the interviewer to pursue topics or issues that were not anticipated when the interview was prepared. However, classifications, elaborations and probe questions can be utilized in the interview at appropriate places. This is helpful and more systematic in terms of minimizing interviewer effects. Further, in the standardized procedure the interview is highly focused so that interviewee's time is used efficiently. And finally, standardized open-ended questions reduce variation among the interviewees, when a number of different interviewers are used.

Use of Pretesting

The purpose of pretesting is basically a way to reorganize ideas before the actual fieldwork starts. Pretesting allows the researcher to know and be certain enough that the questions will be administered properly and lead to anticipating response ranges. Pretesting procedures can be different depending upon the adequacy and validity required. However, in principle, pretesting should be done more than once and with a number of respondents. The respondents chosen for the "mock" interviews should be as similar as possible to the actual respondents. Pretesting can also be helpful in administering the interview in that a researcher can make use of experiences from early pretesting to arrange the actual interview sessions, i.e., when to switch from topic to topic, how to break up the interview, and when to stop. Moreover, pretesting is helpful for the purposes of making the whole interview more coherent, and at the same time the interviewers can practice their interviewing skills.

In pretesting, basic assumptions about the content of the study can be tested. Before conducting the actual field research, the investigator should at least know how effective a research tool will perform. It happens many times that assumptions put into the study are not workable. What the researcher assumed would be a critical point to be explored can be something quite common for the respondents. In this situation question pretesting would provide the researcher with a more thoughtful and preliminary exploration of correlations for question modification. Further, the number of questions can also be narrowed down and made more appropriate. To develop questions for possible inclusion in the final instruments, a larger set of questions may first be produced. Early open-ended pretesting shows which questions yield useful answers and which questions should be eliminated. It is possible to revise and elaborate on the relevant questions to obtain more meaningful replies. Reactions from the respondents will also help the researcher in noting all the difficulties or misunderstandings which might occur when questions are administered.

Conclusion

The fundamental principle of qualitative interview guide construction is to provide a medium from which respondents can express their own understandings in their own words. Good questions make the interview flow smoothly, though it still requires skill and experience. A researcher should know exactly what she wants from the respondents, and identify the purposes of questions she wants to ask.

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Chapter 15

Household census and mapping

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Pimonpan Isarabhakdi

Field researchers often conduct censuses among study populations and make maps of the field site. This helps the researcher to organize people and events in the field, while also helping others to visualize as much as possible the study area. This chapter discusses these two techniques in terms of the collection and analysis of census and mapping data - EDS.

Introduction

In conducting social research, one useful way to begin understanding the research area is to conduct a household census and mapping. Through census taking, the researcher will know more about the socio-economic, kinship, household structure and organizational context of the community. Community maps, moreover, provide information on location, boundaries, physical features, housing patterns, family clustering, and community infrastructure features such as communication and transportation networks. While these two procedures provide different information, they should be done together, since they provide complimentary information about community life.

Household Census

Usually before conducting a field survey (either quantitative or qualitative), a household census should be done. The researcher will get important information such as the community's age and sex structure, religion and race of the people, occupations, family structure and relations, landholding, basic minimum needs, and so forth that can be used in developing later data collection tools. In collecting and analyzing this data, the researcher will also become more well-acquainted with the community which is helpful for planning and controlling field operations.

The main tool for collecting household data should be a specially designed questionnaire, the content of which depends upon project objectives and researcher needs. This questionnaire should be as short as possible (ideally one page) in order for it to be less time consuming and so every household in the community can be covered. It is also more convenient for the researcher who can, just at a glance, analyze data during the household census survey.

A sample questionnaire is shown in appendix 1 for the project entitled "The Community-Based Integrated Rural Development Evaluation Project" conducted by the Institute for Population and Social Research, Mahidol University. This project aimed to collect basic information on household socio-economic status, household member characteristics and migration patterns. This questionnaire contained a lot of information so that the researcher would know the community's situation quite well before the implementation of rural development programs.

In addition to a detailed questionnaire such as in appendix 1, a questionnaire can also focus on one specific point of interest as in appendix 2. This questionnaire is a set of specific questions that helped the researcher determine basic information, family planning decisions and contraceptive use practices of the Yao people (a hilltribe in Northern Thailand). This quantitative information provided baseline data which was then followed-up with qualitative methods (in-depth interviews, focus groups) to define the actual factors and processes affecting fertility.

Usefulness of the Household Census

In conducting the household census, the researcher must go from house to house, introducing himself, interviewing specific household members, while also talking to others living in the household or any visitors that might come before, during or after the interview. This builds positive rapport between the researcher and community members which is crucial for collecting qualitative data. By walking around the community, observing and chatting with the people, the researcher begins to understand the community from his perspective. He starts to make inferences and suppositions based on unstructured observations and his own experiences. He can then check his interpretations during qualitative data collection.

A household census can provide important data such as a population profile, estimates of socio-economic status, morbidity and mortality patterns found within the community. These specific, macro-level patterns often cannot be gotten through other means, yet they are important in forming questions and interview guidelines.

Data obtained through a household census also aids in the sampling process by easily identifying target groups. For example, the information from the questionnaire in appendix 2 would indicate what women are contraceptive users and which are non-users. These would then be separate samples for in-depth or group interviewing.

Lastly, household census data can indicate the problems and needs that are felt by household members (see appendix 1, question 15). This information can then form the basis for targeting programs. Hence, household census data is an important starting point in the field research phase, and it provides much useful information for later data collection stages.

Mapping

The three most common types of maps that field researchers use are *spatial maps*, *social maps* and *temporal maps* (Neuman 1991:359). Spatial maps are the most common, and they can show the location of the community, natural resources, waterways, important places, roads, population centers, cultivated areas, waste land, etc. These maps therefore center on identifying the physical geography or terrain which sometimes may affect a community's socio-economic condition or health status.

Instead of looking at physical features, social maps identify population clusters (such

as family units within a compound, house clusters of related people or friends, certain areas associated with men or women). These are very useful for uncovering social network patterns that run through a village and influence the communication of information. Social maps can also focus on a single person or household and trace primary, secondary and tertiary relationships.

Temporal maps can either be spatial in orientation or social. Spatial-temporal maps look at such areas as the flow of goods, services and transportation over a period of time. Socio-temporal maps can show when and how often people contact each other and why.

What type of map the researcher uses will once again depend on the study involved and the researcher's needs. A study on community agricultural practices, for example, would most likely use spatial or temporal-spatial maps. A family planning communication study would use spatial maps to get an idea of a community's layout. It would also use temporal-social maps to trace information dissemination based on people's relationships to each other and their physical location from one another.

Spatial, temporal and social maps are researcher-invented maps. At least, two other kinds of maps are also useful, the first of which is *aerial photography*. This mapping system is valuable for giving contours and showing settlement patterns, especially if the research involves more than one village and these villages are not clustered but spread out over a large area. These maps also provide a wealth of information on civil boundaries, hidden transportation networks (such as heavily used pathways, unofficial roads) and natural resources that may not be easily seen on the ground. But aerial photographs collect information over a wide area, and thus details of a community may not be seen clearly. They also require special training and skills for interpretation. Lastly, aerial photography is exceedingly costly, and it only becomes cost-effective if a project covers a wide territory.

Organizational maps are ones that are constructed by relevant organizations such as provincial or district government offices. Some subdistrict and village headmen also make maps of their villages for administrative use. These maps, however, are often out-of-date or lacking in some important information. Yet, they are a good starting point from which a more recent map can be constructed. Military maps also fall within this category, but they are of limited use and often require official permission in order for them to be accessed.

The Mapping Procedure

Constructing maps is not a difficult process, but it is time-consuming. The researcher begins by making an initial field check of the community's precise location and designated boundaries. A field check is done by walking (if possible) or riding around a community to see where it is situated, for example, on the bank of a river or on a main roadway. Next, the researcher/mapper should contact the main community administrator, such as the village headman, and ask him to point out where the community's boundaries lie. This provides a check on the researcher's observations, and it is especially valuable where villages may be located so close to one another, that only a local resident would know where the boundary between village A and B actually lies.

In addition to the researcher's and local administrator's boundary identification, local government officials (subdistrict, district) should also be consulted about the village boundaries. It is not uncommon for village boundaries to be changed for government reasons (such as to facilitate the delivery of services or to preserve natural resources) without the knowledge of local administrators or their acceptance. A discrepancy may therefore exist between official and unofficially recognized boundaries that may impact on a project, especially one aimed at providing programs to village A, but not village B.

When a mapper is well-oriented to the village and he is ready to sketch the unit, it is helpful to first make a crude map indicating the relative location of public buildings and main roads. Then starting at one end of a street or lane, proceed down one side and up the other. The mapper should enter every structure and identify its main use (such as house, shop, work area, livestock holding area). This is important because the location of population centers, schools, temples, rice fields, etc. give a general orientation of the community. All households, moreover, should be numbered to facilitate sampling or the notation of important characteristics such as disease incidence. Other points such as locations where roads enter or cross an area, bridge or stream, and the distance and direction from the community to other places are also crucial and should be entered on the map. The distance between two points may be indicated in meters or paces. Where long distances are involved, the approximate time it takes to travel from one location to another and using the most common modes of transportation (walking, motorcycle, bicycle) should also be noted.

The function of mapping is not only to show a general picture of a community. But it must also be designed to fulfill the project's objectives or problems. In a study of villagers' health seeking behaviors, for example, it may be important to map not only the village being studied, but also a nearby village as well if it contains health service centers or practitioners that are commonly used by community members. For epidemiological studies, special attention must be placed on mapping the locations of houses, wells, other water sources, laundry areas, cattle pens, etc. that may give insight into the disease transmission process.

As a result, maps may have various levels, from a district map showing the community location within this large geographic area; to a subdistrict map showing even more finer details about inter-community locations, government service outlets and transportation networks; to specific intra-community maps showing the relationship of one household cluster to other clusters and community resources. What level should be concentrated on will depend on the study's objectives.

Usefulness of Mapping

In qualitative research, mapping has two specific uses: understanding the community, and analyzing data. For the former, a map will help the researcher locate the proper study area, especially if it is at a sub-community level. For instance, it may locate a specific ethnic group in the community that the study is designed to cover. Mapping also makes the research study more feasible and effective in terms of time, since the researcher can quickly orient himself and make his way around the community faster. Identifying the community housing pattern (clustered or scattered) along with a map containing household numbers is useful for sampling (simple random, quota and purposive) and thus pinpointing what households to be included. Housing patterns along with information about community member relationships (marriage, kinship) help explain communication networks and its human and nonhuman barriers. In all of these cases, knowing the problems and location of each household, in addition to community conditions, provides valuable information for researchers and program implementors in solving community problems effectively and efficiently.

Analyzing Maps

A map is a graphic representation of physical and ethnographic data. The purpose of a map is usually to discover and describe causal (deterministic) relationships between

seemingly independent physical objects, household characteristics or social relationships (in short, a study's variables). How a map's data is analyzed depends upon the type of map involved, the study's intent and the major variables that the researcher feels are important.

The first step in analyzing map data occurs when the researcher looks at his collected data and starts to make hypotheses about how certain variables (physical, social) are related to one another. He can then use his household census data, previously constructed maps, and information from other qualitative methods to construct 'master maps.' These maps contain the important data about the variables he feels are related, and then he looks at the overall pattern of the 'master map' to see if his hypothetical relationships exist or not exist.

As a means to explain, let us look at one good example. As noted earlier, spatial maps indicate what physical characteristics may be associated with a particular problem. For instance, a study of diarrheal diseases may use a master map that identifies the location, use and quality of water sources, with respect to where certain houses are located, and with respect to the incidence of household diarrhea. The research questions that this master map's data seek to answer might be: Do houses located near poor quality water sources actually use such sources for drinking water? If they do, is this reflected in a higher rate of diarrheal disease (as shown by the number of monthly cases discovered during the household census and then noted next to each house on the map)? This data may be combined with a temporal map that shows people's seasonal water use patterns (where they go to get water in the rainy season opposed to the dry season). This data is then re-correlated to account for seasonality and the incidence of household diarrhea.

On another level, a social map may indicate that one particular poor quality water source is popular among village women and they use it quite often (as shown through socio-temporal mapping). In-depth interviews may uncover that women like this water source because it is somewhat isolated, and the women feel freer to gossip and joke with each other than water sources located nearer or within the village and that may have good quality water. This ethnographic data may thus help to substantiate and explain master map interpretations and the relationship of important variables.

By looking at different maps, therefore, several determinants of diarrheal disease and their relationships become apparent, namely, location and quality of water resources, location of households, water resource use in terms of frequency and seasonality, and women's activity patterns. Maps thus give the researcher a valuable means to link the major variables contained in a study. In particular, it creates a very concrete, visible picture of how these determinants fit together to affect diarrheal disease incidence.

Conclusion

Household census and mapping are considered to be important social research techniques especially for qualitative studies. Some important factors that cannot be seen or correlated through observation and/or participation can be explained by analyzing census and mapping data. The map, in particular, gives the researcher a powerful macro-level perspective not only about a community's or household's physical layout but also about significant social and temporal relationships and processes that surround a study problem.

References

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Appendix 1. Sample Household Census Survey

COMMUNITY-BASED INTEGRATED RURAL DEVELOPMENT EVALUATION PROJECT
INSTITUTE FOR POPULATION AND SOCIAL RESEARCH

Village Identification No. _____ Household Identification No. _____

House No._____ Village No. _____ Village Name _____

Sub-district _____ District _____ Province _____

Name of respondent _____

Relationship to household head _____

Number of permanent household members (A1) Total ___ Male ___ Female ___

A1. Permanent Household Members History Table

	Name and surname	Relationship to household head	Sex	Age	Educational attainment	Occupation	Marital status
01							
02							
03							
04							
05							

A2. Temporarily Absent Household Members History Table

	Name and surname	Relationship to household head	Sex	Age	Educational attainment	Previous occupation	Current occupation
01							
02							
03							
04							
05							

A2. Temporarily Absent Household Members History Table (cont.)

	Marital status	Reasons for moving out	Current residence	Expected to return (Y/N; if Y when)	Remits money (Y/N)
01					
02					
03					
04					
05					

A3. Household Information

1. Type of living quarters

   ___ hut
   ___ single story/zinc roof
   ___ single story/thatch roof
   ___ single story/tile roof
   ___ wood house on stilts with concrete foundation
   ___ brick house
   ___ two-story wood house
   ___ others _____ (specify)

2. How long has this house been built (in years) _____

3. When was the last time this house was repaired? _____

4. Sources of water for domestic consumption

   Drinking Only
   ___ piped water
   ___ rain water
   ___ dug well
   ___ capstan hand-pump well
   ___ pond/swamp/reservoir
   ___ river/canal/weir

   Other Uses
   ___ piped water
   ___ rain water
   ___ dug well
   ___ capstan hand-pump well
   ___ pond/swamp/reservoir
   ___ river/canal/weir

5. How do you store water for domestic consumption?

   Drinking Only
   ___ cement tank
   ___ metal tank
   ___ water jar
   ___ others _____ (specify)

   Other Uses
   ___ cement tank
   ___ metal tank
   ___ water jar
   ___ others _____ (specify)

6. Type of cooking fuel

   ___ firewood/charcoal
   ___ biogas
   ___ husks
   ___ kerosene/gas
   ___ electricity

7. Do you use electricity?

___ No
___ Household use only
___ Household use and for other purposes

8. Do you or your family possess the following assets?

___ television
___ refrigerator
___ water pump
___ motorcycle
___ motor car
___ pick-up truck

9. What type of latrine do you use?

___ latrine/inside house
___ latrine/outside house
___ ground pit latrine
___ public latrine
___ others _____ (specify)

10. How much land does your household own?

___ rai

11. How much land does your household cultivate?

___ rai

12. What livestock do you own, and how is it used?

__ cattle __ sale __ labor
__ buffalo __ sale __ labor
__ pig __ sale __ labor
__ goose __ sale __ labor
__ duck __ sale __ labor
__ chicken __ sale __ labor
___ others _____(specify) __ sale __ labor

13. List of activities in which you or your family participate.

__ cloth weaving
__ sale __ labor
__ silk worm raising
__ sale __ labor
__ food preservation
__ sale __ labor
__ bamboo or wood handicraft
__ sale __ labor
__ horticulture
__ sale __ labor

__ others _____(specify)
__ sale __ labor

14. Is your household a member of any organizations?

___ agricultural group
___ cooperative store
___ cooperative rice barn building
___ buffalo bank
___ drug cooperative
___ Thai volunteer national defence
___ village scouts
___ rice bank
___ fertilizer bank
___ others _____(specify)

15. What is the urgent need for improvement in your household?

___ earn a living
___ health welfare
___ environmental sanitation
___ others _____ (specify)

Name of investigator _____

Date ___ Month _____ Year _____

Name of field supervisor _____

Date ___ Month _____ Year _____

Name of questionnaire editor _____

Date ___ Month _____ Year _____

Appendix 2: Sample of a Focused Household Census Survey

THE STUDY OF FACTORS AFFECTING FERTILITY AMONG THE YAO PEOPLE
INSTITUTE FOR POPULATION AND SOCIAL RESEARCH

Village Identification No. _____ Household Identification No. _____

House No._____ Village No. _____ Village Name _____

Sub-district _____ District _____ Province _____

1. Name of respondent _____

   age (in years) _____

2. Number of living children

   Total _____
   Male _____
   Female _____

3. Age of last child

   _____ years _____ months

4. Number of household members ____

5. What is your religion?

   ___ Buddhist

   ___ Buddhist and animist

   ___ Christian

   ___ Animist only

6. Are you pregnant now?

   ___ Yes ___ months along
   ___ No

7. Are you using any contraceptive methods?

   ___ yes ___ no

8. Does your husband use any contraceptive method?

   ___ yes ___ no

9. Where do you go for family planning service?

   ___ Health center
   ___ Center for hilltribe welfare
   ___ District hospital
   ___ Others _____(specify)

10. Where does your husband go for family planning service?

    ___ Health center
    ___ Center for hilltribe welfare
    ___ District hospital
    ___ Others _____(specify)

11. Is it convenient to travel to get family planning service?

    ___ yes ___ no

12. How far is it from your house to the family planning service outlet you use most frequently?

    ___ kilometers

13. Do you get good service?

    ___ yes ___ no

The following questions are for those who do not practice any contraceptive method.

14. Please give the reason you do not practice birth control.

    ___ want more children (any sex)
    ___ want more female children
    ___ want more male children
    ___ do not know any contraceptive method
    ___ afraid of side effects
    ___ husband does not allow the use of contraceptives
    ___ others (specify) _____

15. If you wanted to use a birth control method, what method would you use?

    ___ never thought about using any method (end of interview)
    ___ I would use _____(specify)

16. Where would you go for family planning services?

    _____
    (specify)

17. Is traveling to that place convenient?

    ___ yes ___ no

18. How far is it from your house to that place?

    ___ kilometers

19. Is the service good there?

    ___ yes ___ no

Name of investigator _____

Date ___ Month _____ Year _____

Name of field supervisor _____

Date ___ Month _____ Year _____

Name of questionnaire editor _____

Date ___ Month _____ Year _____

Chapter 16

Participant observation and in-depth interviewing

Kulwaradda Singha

In conducting qualitative research on population and health problems, basic anthropological field methods should be used. This chapter presents two of the most common ones: participant-observation and in-depth interviewing. These methods permit detailed recording of the socio-cultural context in which behaviors occur, and they provide an opportunity to better understand and interpret behaviors - EDS.

Introduction

Participation, observation and interviewing are three keys qualitative researchers use to open the door to understanding individual and community behaviors and their determinants. The first two of these techniques - participation and observation - are researcher-focused. This means that the data obtained using these methods comes from the researcher's own actions and interpretations about what is going on around him. These methods can be used alone or together in the common technique called participant-observation.

But participant-observation data alone are not reliable because they are too subjective and do not give real insights into the reasons why certain behaviors are or are not accepted by a community. Consequently, the researcher must also use in-depth interviewing (or key-informant interviewing as it is sometimes called) to check on the behavioral hypotheses he has made based during his community participation and observations, and then seek for their deeper meaning through discussions with key community members.

In-depth interviewing data, therefore, are respondent-focused. The data are obtained from community members in the form of in-depth conversations, stories or any other oral means that a respondent uses to communicate and explain herself. The focus is on examining how she answers a question (such as openly, apprehensively, or uncomfortably), what she says (the data itself) and the methods she uses to say it (for instance, a direct answer, relating a personal experience or local rumors, or through a community legend). Her answers to questions will either substantiate the researcher's assumptions, refute them, or provide deeper insights into their origins and meanings.

Many times beginning researchers believe that these three methods are simple. Its just a matter of looking around, gaining a respondent's confidence by interacting with them, and then asking them relevant questions. While this may be the overall process, the researcher must not be deceived into thinking that that's all there is to it. Each technique is very

demanding and many crucial decisions must be made in using it to collect qualitative data.

Participation

The first crucial consideration a researcher must make is how much he feels that it is necessary to participate in community activities. This will depend on three main factors: (1) a researcher's psychological readiness, (2) the nature of the research problem being studied, and (3) the reactions of the people under study.

A Researcher's Psychological Readiness

Most research methods books assume that the process of 'cultural immersion' needed for good participant-observation is the same for everyone. Its just a matter of getting used to the community, and their getting used to the researcher. But let's be honest here. Not all researchers can assimilate into a new community well, particularly one that may be very 'foreign' from what he is used to. Much depends on a researcher's own personality, confidence in himself and his ability to realize when he needs to step into and out of his participant-observer role.

Participant-observation data can become easily 'polluted' and thus less valid and reliable in two main ways. On one extreme, data quality can be negatively affected when the researcher imposes his ethnocentric views onto the community he is studying. *Ethnocentrism* is the tendency to judge other cultures by the standards of one's own culture. In the field research setting, a researcher can easily become ethnocentric when he starts to have difficulty in dealing with community life and its members. He may start to look down on the villagers as a means to cope with his uncomfortable, and probably conflicting, roles as outsider, researcher and participant.

A good field researcher knows when this role conflict starts to occur, and he will remove himself for a time from the community before things become uncontrollable and the study itself is threatened. Some experienced anthropologists recommend that the researcher stay in the village for no more than four weeks straight, return to more accustomed surroundings, and then return to the village. This 'time-out' period is also good for the research process. During this time, the researcher can reflect on himself, the data gathering process, and begin to preliminarily analyze the data and draw hypotheses for further testing. Thus it is a time for relaxation and contemplation.

At the other extreme, the researcher may feel that he is becoming too much of a participant. His judgements are becoming clouded by the fact that he is being drawn deeply into community life, either voluntarily or involuntarily, and so much so that he ceases being objective and becomes emotionally involved. Once again, a good field researcher realizes when this happens and he removes himself from the community for a period of time.

Nature of the Research Problem

The degree of participation or degree of immersion in the research setting also depends on the nature of the questions being studied. The confidentiality of the research as well as decisions about whether or not subjects should be informed about the on-going observation must be seriously considered before the study is started, since it may have a large

effect on the results. The researcher who wants to study the life of a prison inmate, for instance, might want to hide his identity, while the study of the roles of a single-mother may not need such concealment. As Patton has noted (1988:130), the ideal degree of participation must be one that:

> *(yields) the most meaningful data about the program given the characteristics of the participants, the nature of staff-participant interactions, and the sociopolitical context of the program.*

People's Reactions

There is also the question of the participant-observation method's vulnerability to distortion. When participants know they are being observed they may try to act the way they want the observer to perceive them, rather than behaving normally. Kidder (1981:109) explains that

> *the people studied by participant-observation are constrained to act as they normally would, particularly if the research continues over many weeks or months. They cannot put on an act and continue to function with their friends, families, or fellow workers. Even if a participant-observer could not recognize an act or a distortion, the actor's associates would, and the participant-observer would probably hear about it.*

Therefore, the more the researcher is immersed in the research setting over a long period of time, the less likely the research subjects are to distort the research. However, this does not imply that distortion cannot occur in this kind of study. As noted above, it is quite possible that the researcher can also be susceptible to distortion from his/her own bias.

Observation

Among the many qualitative methods used for research, the observation method provides a very strong basic framework that gives crucial credibility to the qualitative study (Patton 1988:124). Observation is defined by Bogden (1972:3) as:

> *[a] period of intense social interaction between researchers and subjects in the milieu of the latter, during which time data, in the form of field notes, are unobtrusively and systematically collected.*

Two main types of observation are most often employed in field research: *unstructured observations or simple observation*, and *structured observations or systematic observations*. The unstructured observation technique is used mainly in anthropological studies. Its flexibility helps the observer to collect and gain a large range of information which cannot be identified if the questions have been framed beforehand. Structured observation involves the selection, recording, and coding of a set of natural behaviors usually but not necessarily in their natural setting. It is different from unstructured observation since the observer must arrange and plan in advance the topic of the study (the selection is deliberate) and the study involves the separate operations of recording and encoding.

No matter which method is used, by directly observing a community's activities and way of life, the researcher is better able to understand its behavioral context. First-hand experience with a community allows an observer to be inductive in his approach. He also has the opportunity to see things that may routinely escape conscious awareness among participants and staff. Likewise, the observer can learn about aspects which community members may be unwilling to talk about in an interview, and thus he can gain information that otherwise would not become available. Observations permit the observer to move beyond the selective perceptions of others in the community and draw his own conclusions. The observer can take in information and form impressions that go beyond what can be fully recorded in even the most detailed field notes. This reflection and introspection aid in understanding and interpreting the community being observed. Thus the observation method contains the qualities central to the holistic-inductive approach which are essential to qualitative research.

Observation Techniques

Actually the term 'observation' is misleading. It implies only the use of one sense, that is, sight. But collecting observational data requires all five of a researcher's senses (sight, smell, touch, hearing, taste) and these must be focused on all objects, individuals, groups or interactions being studied and recorded. The single basic question that an observer wants to answer is: *Who is doing what to whom, when, where, how and (as much as possible) why?* Scrimshaw and Hurtado (1987) give a very good example of how this question can be answered during a household visit, for example. They suggest that a researcher who is looking at child health and health-seeking behaviors should try to make the following observations.

1. How do a respondent's answers to questions compare with her actions? Does she really do what she says she does?

2. How does the mother (or other child caregiver) prepare the child's food? Is it done hygienically? What is the concentration of water to powdered milk?

3. How does the mother (or other child caregiver) relate to the child, especially if the child is sick? What are the signs of attention, affection, rejection, etc?

4. What does the child eat? How much? Who feeds the child, how, and for how long?

5. Note exactly what the mother (or other child caregiver) does when feeding the child or giving medicine (hygiene, quantity, type of contact with the child). Does the mother encourage the child to eat or take the medicine, or does the child decide how much to eat or take?

6. What is the relationship between the mother and her relatives, such as the baby's father, her mother-in-law, etc.? Who influences or makes decisions in relation to health-seeking behavior?

7. What is the general condition of the family's life?

Scrimshaw and Hurtado also recommend that observations should be taken in terms of *use of space* (distances between people and how individuals position themselves with respect

to each other); *significance of body positions and gestures* (as they reflect moods and contradictions between what is said and the way it is said); *tone of voice* (reflecting a person's emotional state); *touch*; *eye-to-eye contact*; and *other observations* related to the problem being studied such as a child's physical and psychological condition.

Types of Participant-Observation

Generally there are many techniques used to derive participant-observation data. The selection of strategies used depends largely on the extent or degree of participation the researcher wants to undertake. In qualitative research, four types of participant-observation are mainly employed.

Complete Participant. The researcher's identity becomes intimately embedded within the community under study. He/she will try to become involved in the area he/she wants to study exclusively. By becoming as complete member of an in-group as possible, the researcher can share in hidden information guarded from outsiders.

Participant as Observer. The observer is candidly exposed. He/she will not participate in community activities in which he/she is not interested.

Observer as Participant. The observer's activities are made publicly known at the outset. However he/she must abstain from any direct interaction in the situation.

Complete Observer. The observer takes the role of an outsider (non-participant). Nevertheless, his/her roles can range from being an unnoticed observer to being a publicly known observer. There is no interrelationship between observer and participants (Gold 1958; Junker 1960).

Procedures for Participant-Observation

A participant-observation study involves several general procedures. These include the following.

Selecting a Research Site. Settings can exert great influence over people, hence, the observer must begin at actual sites and not in arranged or contrived circumstances or areas.

Gaining Access and Taking on a Role. As mentioned above, the researcher needs to select the level of visibility and involvement, whether to be totally disguised, a candidly exposed known researcher or a complete observer.

Note Taking. Participant-observation as well as in-depth interviewing combine simultaneous data collection (recording) and stages of data analysis (e.g., coding) (Lofland 1971).

Recommendations about note taking vary from researcher to researcher. Some take very detailed notes, while others make only general ones. Only through practice can a researcher determine his note taking 'style.' Nonetheless, Scrimshaw and Hurtado (1987) recommend that the researcher take *brief notes* on the observations and interviews conducted and later (the same day) expand upon them in detail. The researcher should note questions that come to mind while reviewing the notes daily, and put them in a notebook so they are handy for the next visit to a household.

Kidder (1981:281) recommends that the researcher should be trained to make mental notes of what is observed in situ, then actual written notes immediately after leaving the scene (this is in the case that the observer is not able to write full notes at the site). Moreover the decision about which data are useful should be done during the analysis rather than during the

writing of the field notes. Some details that seem irrelevant at the time can help the observer to recall other details that are clearly relevant. Notes should consist of items which are exceedingly relevant, details about the participants, the setting, the purpose for the gathering and the social behavior that occurs. Good field notes should also contain actual quotes; clear distinctions between "fact" and "impression"; incorporation of unusual or inexplicable events; explicit tendering and bracketing of feelings and hypotheses; and comments on the benefits and costs of data gathering methods.

Using a tape recorder is not generally encouraged, since it may inhibit the researcher's participation in many situations. If a tape recorder is used during the conversation, permission must be obtained from participants before the study begins.

Formulating an Analysis Plan. This is the most difficult part of the study. The researcher should generate a theory or hypothesis, or at least try to link all categories found in the data. Statistical analysis is not generally performed in a qualitative study since it makes little difference whether one interviews or observes 9 or 100 people. Nevertheless a large sample size still makes the results more reliable because it is less likely that additional observations would change the outcome (Kidder 1981:111).

Analysis of qualitative data requires a systematic, careful review of all information collected from the study. The analysis is not something to be done after all data have been collected, but rather is a part of a continual process of examining the information as it comes in, classifying it, formulating additional questions, verifying the information, and developing conclusions (Scrimshaw and Hurtado 1987:23).

Miles and Huberman (1984:25) also stress the importance of continual data analysis, and they make several recommendations to facilitate the analysis process. The recommend that if several field researchers are involved in a single study and at one or more sites, it is important that they meet regularly to discuss research topics, emerging hypotheses, alternative explanations, disagreements, subsequent data collection stages, and potential revisions to the data collection guides.

A researcher's ability to analyze data using one or more methods (see Svetsreni and Attig as well as Yoddumnern-Attig, this volume) will depend on how well he/she has organized the data into files. Yoddumnern-Attig (this volume) recommends three major files. A *fieldwork file* contains materials on the process used in conducting the research including a researcher's own subjective feelings. A *mundane or background file* is used to keep track of people, places, organizations, documents and so forth. Lastly, an *analytic file* is constructed using context and recording units based on themes relevant to the study (such as kinship, social systems and relationships; position of women in society).

Scrimshaw and Hurtado (1987:10-11) suggest at least three types of files. A *community file* is made for each community in the study, labeled with an identification number, and including all data no matter the source. A *household file* is constructed for each community household. It contains descriptive information on a household's general characteristics, any casual or important observations about the household, and data collected through other methods such as interviewing. Each household file is subdivided into themes. Finally, a *research topic file* is made for each problem under study. Usually these files correspond to the headings found in data collection guidelines or variables being investigated.

In-depth Interview

The in-depth interview is less structured than survey interview techniques. It is used for a more intensive study of perceptions, attitudes, and motivations than a standardized

interview, whether with closed or open questions. The nature of the interview can be either unstructured or partially structured.

The in-depth interview has several advantages and disadvantages. For the latter, this type of interview is inadequate as a measurement device. Its flexibility, moreover, results in a lack of comparability from one interview to another. Analysis is also more difficult and time consuming than that of standard interviewing. On the positive side, though, a respondent's answers are more spontaneous rather than forced. The interview can be highly specific and concrete rather than diffuse and general in scope. Because of its in-depth nature, the interview is self-revealing and personal rather than superficial. The focus is not on answers, but on depth of meaning.

There are three types of interviews used in qualitative studies. The ***informal conversational interview*** is typically used with the participant-observation study. According to Patton (1988:199), the informal conversational interview means that the researcher has no presuppositions about what of importance may be learned by talking to people in the community. The interviewer will get several types of answers without any direction. Flexibility is this interview's main advantage. One disadvantage is that the informal conversational interview takes quite a long time to be able to collect systematic information, and the data gathered is difficult to analyze.

The General Interview Guide Approach. This type of interview has some basic guidelines (see Soonthorndhada and Isarabhakdi, this volume). The interviewer is able to control the situation and the direction of the topic discussed to a certain extent. With a particular subject predetermined the interviewer does not spend a great amount of time in gathering all the data needed.

The informal conversational interview or the general interview guide approaches are useful for (Kidder 1981:187):

- scouting a new areas of research;
- finding out what the basic issues are;
- seeing how people conceptualize the topic;
- finding out what terminology is used by respondents; and
- investigating respondents' levels of understanding.

The Standardized Open-Ended Interview. This type of interview is used mainly when there is a large group of respondents such as during a focus group session. The questions asked need to be carefully worded and arranged in order to minimize the bias caused from variations in the questions posed to interviewees. Flexibility and spontaneity are very limited in this kind of interview.

Procedures and Techniques

Even though the in-depth interview is the least formal type of interview, some procedures are required prior to the interviewing process. The procedures involve:

1. explaining the purpose and objective of the research;
2. describing the method by which the respondent was selected;
3. identifying the sponsor or the agency conducting the research; and
4. stating the confidential nature of the interview.

Likewise, several techniques can be used to stimulate the respondent to talk more.

For example,

1. avoid the dichotomous response questions. Instead of expressing their feelings or opinions, respondents might think that interviewer wants only a "yes" or "no" response.
2. word the question at a level which is understandable to respondents.
3. use neutral questions to establish rapport with the respondents being interviewed.
4. be enthusiastic and use common sense when probing for more detailed information, especially that which is personal and private.

Scrimshaw and Hurtado (1987:11-12) also suggest that when the subject of an interview is not at home, the researcher should converse with other members of the family or neighbors. Sometimes information is obtained that might not have been gotten otherwise. Researchers must also be careful not to mislead or over-direct the interview. In particular, they should not influence or bias responses, nor influence a question by introducing the researcher's own attitudes and behaviors.

The aim of the in-depth interview is to get detailed information. Hence, interviewers need to work in as much depth as possible, and avoid moving quickly from one topic to another. This is sometimes difficult because in-depth interviews are very free flowing, but the interviewer needs to direct the conversation to get detailed responses. Some helpful phrases for doing this include "Why?" "How did you feel about that?" "What do you think" "What happened when ...?"

Another way to substantiate a respondent's answer and get more detailed information is to repeat the answer as a question. For example, let us look at this interaction where the interviewer supplies the questions (Q), and the respondent gives the answers (A).

Q: *Why don't you use an oral contraceptive?*

A: *Well, it's my neighbor. She doesn't like it.*

Q: *Oh, your neighbor doesn't like it.*

A: *Yes, you see she's my husband's aunt and she heard that it was bad.*

Q: *Oh, I see. Does she really think it's bad?*

A: *Yes, she heard from her daughter that the local health worker said it would cause infertility.*

This type of questioning also helps the interviewer to avoid injecting his/her own ideas or judgements into the conversation that may influence a respondent's answers. But the interviewer needs to be patient and let the respondent continue at her own pace so that she comes up with natural, spontaneous answers rather than ones that are convenient (easiest to give quickly without much thought).

Conclusion

Perhaps more than any other method, participant-observation is the most complex to explain and transmit to beginning qualitative researchers. The difficulty lies in the field

research process itself, which attempts to ground empirical observations in intersubjective criteria. That is, the researcher must, at one and the same time, be a part of but separate from the community, as he himself uses his own participation and observations to illuminate important factors and patterns in human behavior. Likewise, his subjects must acknowledge yet accept (and sometimes ignore) his presence in order to maintain a semblance of normal life.

But this process is a crucial one. In the most basic sense, all social science knowledge is grounded in our everyday lives (researchers as well as subjects). Moreover, all of our observations of community life and its empirical reality only become socially intelligible and meaningful through participation as a community member. Coupled with in-depth interviewing, participant-observation gives the researcher the cultural knowledge necessary for building a more theoretical understanding of human existence.

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Chapter 17

How to conduct focus group sessions

Panee Vong-ek

The focus group is a unique type of interview method that is very useful in exploratory research aiming to uncover socially held beliefs and norms. Focus groups are also a way to supplement information on community knowledge, beliefs, attitudes and perceptions about an important population or health problem. In addition, they allow the researcher to generate new ideas for hypotheses, questionnaire items, as well as to interpret results. This chapter provides a succinct account of the basics required to conduct focus group sessions, while a later chapter illustrates their benefits for cross-cultural social research studies - EDS.

Focus Groups: Their Nature and Value

In conducting research into social, population and/or health problems, anthropologists and other social science researchers have often used informal interviews with small groups of people, however these have not always been optimally systematic. In recent years, though, and through the indirect assistance of market research professionals, the focus group technique has been refined into a systematic method for obtaining information on the psychological and behavioral factors (e.g., opinions, attitudes, beliefs, norms) regulating group behavior.

A focus group session is an interview context where a small group of informants (about 7 to 10) are guided by a moderator to talk freely and spontaneously on an issue considered important to the research investigation. The session is held in an atmosphere which is considered natural (and relaxed) for the interviewees, who are chosen from a larger target group sharing similar ideas, opinions and attitudes. In some cultures such as India, Africa and Thailand, indigenously-initiated focus groups develop without prior planning, as neighbors and friends join in household and reference group interviews (Scrimshaw and Hurtado 1987). Hence, focus groups in a way are natural extensions of existing group organizational practices and patterns.

A single focus group session, however, usually cannot be readily generalized as reflecting the larger population as a whole; it can only indicate a range concerning group knowledge, attitudes and the like. Usually more than one group session is held, using different members, to assure adequate coverage.

Focus group sessions, by their very nature, are not useful in obtaining information considered private or behaviors that might be looked down upon by others. People are generally very reluctant about sharing their personal thoughts, feelings and experiences in a

group setting.

However, focus groups are valuable as a technique for checking information with a large number of people, especially if it pertains to reactions towards intended innovations (e.g., health education strategies, intervention programs). Alternatively, they can be refined by selecting out specific sub-groups within a population for comparative analysis.

Like other qualitative methods, focus groups can also be used to focus the research and formulate questions for structured interview questionnaires, as well as means to develop and/or refine research hypotheses during the research project and for future studies. In nutrition education programs, they are of particular value in developing effective vocabularies and selecting appropriate communication channels and media. Their value for social research, in general, and cross-cultural research especially is discussed in the following chapter.

Stages in Conducting Focus Group Research

Like virtually all qualitative interview methods, focus group sessions comprise a series of four main stages: session preparation, selecting and inviting participants, conducting the session, and post-session operations. Each of these is described below as simply and directly as possible. Readers who would like further information should consult the several excellent sources already available (noted at the end of this chapter) and most notably, the RAP handbook by Scrimshaw and Hurtado (1987).

Session Preparation

From a research project's topic and specific objectives, the researcher(s) should develop an interview guide containing as many pertinent variables as possible, based on a literature review or other data collection methods. This interview guide, however, should be as focused as possible and include open-ended questions centering on group perceptions (What do people do here?) rather than individual perceptions (What do you do here?). One example of a focus group discussion guide is shown in Figure 17.1.

Once the interview guide is made, it should be pretested by the moderator who will be guiding the actual focus groups. This will aid in revising or refining the questions themselves, as well as giving the moderator an early opportunity to orient himself as to the questions' contents and their presentation. Both are crucial in aiding the respondents in understanding and answering the questions.

Selecting and Inviting Focus Group Participants

For the focus group session to be maximally productive, group members should be selected based on their similarities rather than an emphasis on variety. Participants, as noted, should share the same ideas, opinions and attitudes, in addition to being the same sex; within a cohort age group which shares similar experiences; and comparable in terms of socio-economic background, ethnicity, marital status, educational level, etc.

Figure 17.1

Sample Focus Group Interview Guide for Breast-Feeding

1. What does everyone here know about breast-feeding?
2. What good things have you (collectively) heard about breast-feeding?
3. What is your opinion on that?
4. What bad things have you heard about breast-feeding?
5. What is your opinion on that?
6. Have you ever gone to the health post for ante-natal care?
7. Did the health post worker talk to you about whether you should breast-feed your child or not?
8. What do you like most about breast-feeding?
9. What do you like least about breast-feeding?
10. When do you think a mother should begin breast-feeding?
11. How long do you think children should be breast-fed?
12. Do you think breast-fed children need other foods? If so, what ones and when should be these introduced?
13. Why do you think mothers in this community don't breast-feed their babies?
14. What do you think local health workers and family members could do so that mothers would breast-feed their babies?
15. Who should give breast-feeding information so that mothers are encouraged to adopt this practice?
16. In this community, what media or channel do you think would be best to convey this information?
17. Why do you suggest this media or channel?
18. Why do you think breast-feeding campaigns are initiated?
19. How can breast-feeding help your child, yourself and your family?

One week to three days before the session, the research team should visit the community, become acquainted with its members for screening purposes, and extend invitations to participate in the session. A random sampling method is generally preferred in selecting and recruiting the participants, although other methods (e.g., dimensional sampling) can be used if the researchers are very familiar with the community structure and organization. In inviting the participants, Scrimshaw and Hurtado (1987:16) recommend the following steps.

1. Talk about something of interest to the potential participant, such as their children, the climate, or the market place.

2. In a sincere way, tell the participant about the institution sponsoring or conducting the study, the persons (moderator, note-taker, others) to be involved in the session, and the general purpose of the visit to the community.

3. Explain the nature of the session planned and invite the person to participate along with neighbors, friends and others in the community. Do not, however,

mention the specific subject of the session in advance or this may predetermine who the person may invite as well as the session's content (i.e., they may discuss the subject in advance of the session and thereby lose the latter's spontaneity and data quality). Do mention names of some of those who have volunteered to come (only when respondents know each other).

4. Confirm the date, time, and place of the session, how long it will last, and that refreshments will be served.

5. If the person does not or cannot participate, emphasize the importance of everyone's contribution. If the person still declines, sincerely express your appreciation and leave graciously.

6. If the person is interested in participating, re-confirm the day, hour, and place, and briefly state the importance of participation and punctuality so that the others are not kept waiting.

Conducting the Session

Other than the interview guide itself, the moderator is perhaps the most important data collection tool. He/she should be a person who can speak the local dialect and who can simultaneously adopt a number of roles. Although the moderator might be a professional social researcher, he (or she) does not need to be an expert on the topic being discussed. He should, though, be familiar enough with the subject to ask pertinent questions. In actuality, the moderator should not overtly convey the impression of being an expert or he may "turn off" the respondents by virtue of his domineering attitude. Instead, he should be sensitive and polite, yet enthusiastic enough to put the participants at ease; he should lead the group, but not be led by it. The moderator must be flexible in using the interview guide and able to organize his thoughts logically in order to maintain the flow of conversation. He must be careful, though, to formulate questions which are appropriate and to respond to their answers and participants' reactions in a neutral manner. He should not express an opinion (verbally or non-verbally) that could influence participants.

Moderators must also be sensitive to the atmosphere surrounding and permeating the session. He must observe the participants and recognize how much involvement each person is expressing as well as their reactions. All participants need to be encouraged to talk, not just a few who monopolize the discussion. His ability to do this effectively will be enhanced as he builds up his rapport with the participants and gains their trust and confidence. His ability to empathize with them will also give him a chance to probe for more in-depth information, the real meaning behind what is being said, and the tone with which it is being communicated. This can also be supplemented through observations of participants' non-verbal communication patterns (e.g., gestures, seating patterns). Lastly, he will need to control the time allocated to each question as well as the rhythm of the session itself.

Other than the moderator, a note-taker is also present at focus group sessions, primarily as an observer and a recorder. The information collected by the note-taker should include: 1) the session's date, starting and ending times; 2) the community's name and a brief description; 3) the meeting place and a brief description; 4) number of participants and relevant descriptive data; 5) the interview's atmosphere (interruptions, distractions, comical moments, etc.); 6) group dynamics (e.g., participation levels, interest levels, dominant or uncooperative participants); and, most importantly, 7) as close a transcription of the participants' verbatim

words as possible and in the local language. Even though a tape recorder is used, its purpose is only to amplify notes taken during the session, not replace them. In general, the note-taker should not direct the discussion and moderate the meeting unless requested by the moderator. Usually this will occur if the moderator misses important comments or the conversation requires additional input in order to maintain its flow.

A third optional person involved in managing the focus group session is the caretaker. This person's main responsibilities are to provide for the needs of the moderator, note-taker and respondents as they arise. In addition, they monitor the interview context by not allowing external persons to disrupt the session.

At the session's opening, the moderator needs to make all appropriate introductions and explain the roles of the moderator, note-taker and caretaker. He should also briefly explain the session's aims and objectives, and emphasize the importance of everyone's contributions and opinions. He must also explain that each speaker should address only the topic under discussion, and only one person should talk at a time. To make the participants feel more relaxed, warm-up questions can be used to stimulate interest and conversation so that everyone feels he can have the chance to talk. Warm-up questions thus tend to center on neutral issues.

As the session commences, specialized techniques are used to manage the focus group, as well as to determine the subjects for discussion and the exact questions to be asked (Scrimshaw and Hurtado 1987:18-19). The first technique is clarification, whereby the moderator repeats the respondent's answer in the form of a question (e.g., "Can you tell me more about that?"). Substitution is used when the moderator rephrases a question but retains its original meaning. This technique aids in cross-checking information and eliciting increased discussion. The latter can also be achieved through re-orientation. This involves using one participant's response or comment to make a new question for another participant (e.g., "Mrs. A, you said that your children eat green vegetables everyday. And you Mrs. B., how often do your children eat green vegetables?").

But in focus groups, oftentimes exceptional persons require special treatment. Dominant participants, especially, must be managed by trying to elicit more information from other participants. This involves encouraging reluctant participants to contribute more by directing attention to those persons using their names and openly asking for an opinion. At the same time, the moderator should avoid eye contact and/or change the subject to discourage dominant participants from speaking. More eye contact, though, may be needed with reluctant participants. If "experts" or "specialists" (e.g., district health officials, someone with authority) are present, they should be told before the session begins that their best contribution is to listen to the discussion and share their opinions with project personnel after the meeting. Other techniques for eliciting group participation include a list of information needed on the topic and emphasizing the group's value in providing it, pictures and other audiovisual materials, as well as periodic summaries of what has been said so far.

At the end of the focus group a small gift is usually given to compensate the participants for their time and effort. The gift should be an inexpensive but useful item. It should not however be one that highly motivates discussants to attend, or unwanted persons may attempt to join the discussion group simply to receive a gift.

Post-Session Operations

Transcriptions are made from the tapes and notes by the note-taker, using the notes as a guideline for transcribing. In listening to the tapes, hesitations, enthusiasm, silences and other psychological indicators should be noted in the transcriptions to reduce bias when the

researcher interprets the data. To make a one hundred percent, eighty percent, fifty percent or thirty percent transcription or just a summary of those matters, depends on the topics that the researchers are investigating. If it is a cultural topic, the researchers want the wording to be a quotation for a one hundred percent transcription. If eighty percent, the researcher will remove something which is not relevant to the topic. Fifty percent transcription is also focused but more selective to specific issues or relevant factors. Thirty percent transcription is sometimes a summary, especially for program evaluation.

When the researchers analyze the data, they need to read the text transcription as well as listen to the tapes. The investigators should make a card catalog (or other filing system) from the transcriptions in order to categorize the data, and also refer back to important wordings from the quotation when writing the report.

When writing the report, the researchers should try to integrate quantitative information with the focus group data to make it more valid. It is recommended that the focus group technique not be used alone, but as a complementary method. For ethical reasons, the investigators should also change the discussants' names and site of the study when they analyze the data as well as quote from the sessions.

Conclusion

Focus group sessions are exploratory discussions, the main aim of which is to determine those opinions, attitudes, knowledge held by the target group which regulate group behavior and the efficacy of potential intervention strategies and programs. Generally, they are not intended to collect specific background information which is more readily obtainable using individual interviewing methods. However, focus groups can indicate to the researcher which discussants might be valuable for in-depth or life history interviewing. The key to successful focus group discussions is, as the name implies, to be focused. The interview guide, the moderator's questioning patterns communications skills, and participant selection should be precise (focused) enough to elicit spontaneous, voluntary and in-depth information during the session. To do this, the research team must also be prepared in advance in how to manage the group discussion effectively.

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Chapter 18

The case study

Kerry Richter
Orathai Ard-am

Case study research involves in-depth examinations of a few people, organizations or groups over time. While the case study is primarily an exploratory research approach, it can be used to describe or, less often, explain. This chapter introduces the case study approach, what it is and its limitations, as well as research design and methodological considerations. The approach is brought to life through a series of case studies on child labor in Thailand's fishing industry - EDS.

Introduction

This chapter outlines the purpose, advantages and limitations of the case study approach. It is meant to serve as an introduction to this methodology; those interested in designing case study research should consult the several excellent sources already available (most notably, Yin [1989]). Thereafter, an example of case study research is presented which combines quantitative and qualitative methods. It is hoped that this section will illustrate how a carefully designed multi-level approach can overcome some of the case study's commonly cited limitations.

What is a Case Study, and When is it Appropriate?

Although the case study approach has been used in many fields to cover a wide variety of subjects, the purpose of the approach (and rationale for using it) remains the same. A case study provides a detailed, in-depth description of an individual case (whether the unit of analysis is a person, a city, an organization, or any entity). It serves as an example of the larger phenomenon under study, whether the case is typical or exceptional. A case study also provides insights that may be generalized to uncover basic truths about the subject matter under examination.

The case study approach has evolved from a wide variety of fields. One of the first examples of the case study approach is found in the writings of Freud. Descriptions of the neuroses of individual patients served as the basis of his psychoanalytic theories. In this case, it is obvious that experience with individuals must be used to understand universal truths about

how the human psyche works.

In sociology, LePlay is most often cited as the first to use the case study approach in a study of lower-class French families. Historians, especially those interested in the social history of a particular era, often use the case study approach to present an example from a particular time period (Young and Schmid 1968).

Anthropologists provide perhaps the best example of the use of the case study approach. The most commonly used anthropological method is the ethnography. This is a detailed study of a particular community, usually written after the anthropologist has lived in the community for at least a year. Economic structure, political relationships, kinship systems and cultural bases of the community are all outlined in detail using examples that the anthropologist has directly observed. But the purpose of an ethnography always goes beyond description of a particular community; findings are generalized in order to formulate theories about human culture, which may be applied to any society. Key to this process, at least in the past, was the assumption that the "simple" or "primitive" cultures usually studied by anthropologists could reveal the roots of structural relationships found in more "complex" or "modern" societies. More recently, ethnographic methods have been used to study sub-units of modern societies, such as the black family in the United States or slum culture in Bangkok (Stack 1975; Thorbek 1987).

In the past, the case study was viewed merely as one form of a life history, whether of an individual or a group of individuals. The life history takes on different characteristics based on whether the viewpoint is from psychoanalysis, social psychology, anthropology, sociology or history; but the purpose has been seen to be to show the general development of a person or group up to the present time of the study (Young and Schmid 1968; Attig, this volume). But the case study approach is not limited to the life history format, particularly when a variety of research techniques and levels of analysis are used. Most importantly, the researcher does not simply describe the phenomenon under examination, but also explains how it fits into the context to which it belongs. Case studies can include quantitative and qualitative evidence, and should not be seen as merely an exploratory or explanatory technique. If carefully done, they are very useful in giving a full picture of any research subject.

Limitations of the Case Study Approach

Many have criticized the case study approach for its tendency to be subjective. This is in part because of the underdeveloped state of the methodology used to formulate case study designs, and this criticism may be answered as new techniques are developed. In particular, attention must be made to avoid bias in the design of the questionnaires or interview questions and particularly in the write-up of the results. Objectivity in case study design can be achieved in the same way as in the other qualitative methods described in this book.

Beyond the fact that the design and analysis of case studies may be biased, many have voiced fears that erroneous conclusions may be easily drawn from case study data. This is particularly a problem in the selection of a typical or critical case, which is likely to be done early in the planning stages of the research. Yin (1989) stresses that researchers should be flexible and adjust their design or the selection of cases if the data show them to be atypical. Much of the problem may be found at the analysis stage rather than the design stage, however, as the type of generalization that the researcher makes from the data may be at fault. As outlined below, this occurs when the researcher makes statistical rather than analytic generalizations. Attention must be paid to theory building early in the research design, and generalization to theory proceeds differently from that in quantitative research.

Research Design and Methodology

In the past, the methodology for doing case studies has not been well-developed, particularly because the case study approach has been used in so many different fields. Yin (1989) is the first to codify a set of research designs for the case study. He stresses that theory building is an important part of case study design, providing the blueprint for the study. Generalization from case study to theory should be done with care, and the form of generalization to be used is analytic generalization. This means that the previously formulated theory is used as a model to compare the results of the case study. This is in contrast to statistical generalization, where each case is used as a sampling unit. Instead, each case is analogous to an experiment which is used to test a general theory.

Research designs may involve a single case or multiple cases of the same phenomenon. A single case design is appropriate when the case is a critical, extreme or unique case, and for that reason reveals a great deal about the phenomenon under study. A multiple case design gives a broader viewpoint of the subject matter by presenting several examples which may vary by different criteria such as size or complexity.

Case study research designs may also involve either a single unit of analysis (the holistic approach) or multiple units (the embedded approach). In the holistic approach, the focus is on a global viewpoint of the phenomenon under study. The embedded approach is used when there is more than one sub-unit that should be analyzed to give a full picture of the case. Embedded research designs must also analyze how the sub-units fit together into the global level, since that is the target of the study.

Yin's codification of the case study research design thus defines four types of design, drawn from a 2 X 2 matrix of single vs. multiple cases and holistic vs. embedded designs. The four types are: 1) single-case holistic designs; 2) single-case embedded designs; 3) multiple-case holistic designs; and 4) multiple-case embedded designs. Care must be taken to choose the best design for the study, both in terms of the number of cases to be examined and the units of analysis to be included. If necessary, the research design should be adjusted if it is found that the design does not suit the subject matter under investigation.

Many techniques can be used in case study research. Most typical are in-depth interviews or life histories of individuals; systematic review of relevant documents; and direct observation. These techniques are covered in the other chapters of this book. What makes a case study different from other types of qualitative research is the need to organize the data collected to provide a full documentary picture of a particular case, and for this reason, the likelihood that multiple sources of evidence and multiple techniques will be used.

An Example: Child Labor in the Fishing Industry

This example uses an embedded (multi-level) multiple-case design to study the use of child labor in the fishing industry in one community in central Thailand. The community is the municipal area of Samut Sakhon province, located at the mouth of the Gulf of Thailand. The interest in this topic could be summarized in one overall question: Why are young people (age 11-17) working in the fishing industry? Of special interest was investigating the process that results in these children's employment. This process includes economic forces at the community, national and even international level, which determine the demand for labor in the fishing industry. The supply of child labor depends on community norms and the needs of families, as well as the interests of the individual child. It was realized that this process involved several levels of analysis and many research questions, including the reasons that the

fishing enterprises employed children and the circumstances that led parents and children to decide to begin work (and in most cases, to leave school). A full picture of this process could only be obtained by collecting data from several different sources: the enterprise, the children themselves, and their parents. Our research questions and the methods used to obtain the data of interest are summarized in Figure 18.1.

Following are case studies of three enterprises in the community that employ children. They were selected by size in order to provide an example of a large-, medium- and small-scale enterprise. It should be noted that these data come from a larger study which obtained a representative sample of enterprises in the community (Richter and Ard-am 1989). In the larger study, the entire community is a case study of how child labor is used in a particular industry, because the community is a center for the fishing industry in Thailand. The larger study is thus an example of an embedded, holistic approach. These in-depth case studies of three enterprises provide detail that illustrates the issues raised in the larger study, and thus are a good example of how the case study approach can aid in understanding and theory building.

Enterprise 1: Crab Shelling

This was a very small, informal enterprise located in the houses and alleyways of the enterprise owner and her neighbors. The owner brought in crab every day that it was available and paid workers by the unit to shell it. It was then boiled, placed in plastic bags, and frozen, to be sold at markets in Samut Sakhon and Bangkok. All of the workers were women and girls, many of whom were mothers and daughters working together. Shelling was done with a small aluminum tool; a knife was used for the larger crab legs. Workers sat on the floor or ground and rested the crab on a wooden block. Although the atmosphere was informal, workers were intent on their work and did not stop to talk to us or even to eat; their meals were brought to them as they worked.

Altogether about 20 workers worked full-time at the enterprise, of which 12 were migrant workers and 8 were from the local area. The migrant workers lived nearby at a rooming house. In addition to these workers, some local children who were students worked in the evenings after school. These workers were age 11-12, but unfortunately none were working on the day visits were made to the enterprise. Workers were paid by the number of baskets of crab that they shelled: they got 5 baht per basket for the large crabs and 10 baht for the small crabs (because they are more difficult to shell). [Note: 25 baht equals approximately 1 US$.]

Although this enterprise did employ migrant women, they were all over the age of 17. Three girls from the local area fell into our age group; all were age 16 or 17. All worked full-time and had left school. One girl did not earn her own income, but worked alongside her mother; in other words, the crab shelled by both was weighed and the payment went to the mother and thus to the family. Of the other two girls, one contributed all her income to her family and the other contributed about 85%. They made from 1500-1800 baht per month (or about 60-72 US$). These girls did not work as many hours as several of the child workers that were studied (about 8-10 hours per day) and only one said that she worked on Saturday. They also had more reasonable working hours, usually not starting work until 9 a.m.

All three girls left school after Grade 6 (the compulsory level in Thailand). When asked why they left school, two said that their family needed their income, and one said that she didn't like school and saw no point in continuing. Two said that they liked their job, but one said she would rather be doing something else. The girl and her mother who were working together both said that she had no plan for the future other than to stay at the same job. One girl's mother said she would like her daughter to get a better job, and the girl said

she would like to receive training in another occupation. The third girl's mother said she would like her daughter to have her own business and to get more education, although the girl thought she would stay with the same job.

Figure 18.1 Research Design for Case Studies of Child Labor in the Fishing Industry

Level of Analysis: **Enterprise**

Research Questions	*Method*
1) To what extent does the enterprise employ young workers? Why does it employ young workers?	Structured interview with enterprise owner
2) To what extent does the enterprise employ young migrant workers? Why does it employ young migrant workers?	Informal talks with workers
3) What kind of jobs do young people do?	Observations
4) What are the working conditions for young people? (hours worked, general atmosphere and flexibility, health hazards)	Key informant interviews Observations

Level of Analysis: **Individual Worker**

Research Questions	*Method*
5) What are the characteristics of these young local workers? (age, sex, educational attainment, type of job, salary)	Short interview at enterprise with local workers
6) What are the characteristics of the young migrant workers? Why did they migrate to the area; where did they come from; and how did they get their job? What were their circumstances at home?	Short interview at enterprise with migrant workers

Figure 18.1 Research Design for Case Studies of Child Labor in the Fishing Industry (cont.)

Level of Analysis: **Household**

Research Questions	*Method*
7) What are the characteristics of the households of the young local workers (family size, household economic status, young workers' contributions to family income)	Interview with parent(s) at home (local workers only)
8) What was the decision-making process that led the young workers to begin working in the fishing industry and/or leave school? What are the parents' and children's aspirations for the future?	Interview with parent(s) and worker at home (local workers only)

When asked why she preferred to hire girls, the owner said that the work was a delicate job that was more suited to girls.

This enterprise is a good example of how small-scale entrepreneurs may profit from the fishing industry. With little investment, the owner hires workers informally and only pays them for the work they do. Wages were above average for the number of hours worked, mainly because this work requires more skill than other types of work, such as cleaning fish. Yet it is work suited to young people who, their families may feel, are too young to enter the formal labor market.

Enterprise 2: Dried White Fish

This was a medium-size enterprise that was typical in both size and activity. The product was dried white fish. Tasks included cleaning the fish, laying it out on racks to dry, carrying the racks, hauling fish, loading the truck, and making ice. It was unusual in terms of the work places that were studied because the owner was flexible about how the workers did their work; they could sit, squat or stand anywhere they liked. As in several other places studied, many families worked together. Some workers were paid by the unit, and they could make anywhere from 15 to 130 baht per day; these workers were able to make the most money. Others were daily workers who were paid 50 baht per day; they did a variety of jobs besides just cleaning fish. The owner allowed the workers to switch from being daily workers to per unit workers if they preferred.

Another unusual characteristic of this enterprise was that many of the workers commuted a long distance to work. The bus cost was 5 baht per day which was deducted from

the workers' wages; thus a daily worker who was paid 50 baht per day only got 45 baht. A visit was also made to the home of one girl whose family owned a rice farm in a nearby district. She had to commute by boat as well as by bus and had to get up at 3:30 a.m. to arrive at work by 7:30; she got off work at 4:30 and arrived home at 7:30 p.m. She made about 1600 baht per month (64 US$) and contributed 400 baht (16 US$) to the family. Her family also raised fish and shrimp and hired people to work on the farm. When asked why their daughter commuted to work instead of helping at home, they said that they felt that this job was better than farm work. They did not want their daughter to work in the sun, and they felt that she was learning a skill.

Interviews were conducted with 11 local workers who were in our age group; all girls were at least 14 years old. They nearly all worked cleaning and cutting the fish, and they worked shorter hours than the migrant workers (average 9.1 hours). In addition, most of the local workers did not work on the weekend while the migrants worked every day. Three of these girls were working alongside their mothers and did not earn an income of their own; the others made from 1600-2000 baht per month (64-80 US$). Most started work at about age 14 and all but one had completed Grade 6. About half said that they liked their job; the rest said they would rather do something else, or had no opinion. When parents and workers were asked about the future, most said they would stay at the same job or had no plan; only a couple expressed a hope for further education or training.

Besides the children who lived with their families, either within the district or outside, this enterprise employed many children who migrated from outside the area. When asked why he employed workers from outside the area, the owner said that the local workers were more selective about the work they would do, and demanded higher wages. He said that the job was suitable for girls because they are more tidy. Although he did not fix a minimum age, he felt that workers under age 15 were not responsible enough to do the job. The owner also did not place an upper age limit on his workers, but said that older people could not do the heavier work and so they quit on their own.

Eleven of the migrant workers (ten girls and one boy) fell within our age group. Only one (a 13-year-old) was less than 15 years old. All of them came from the Northeast, most from Sakhon Nakhon and Loei provinces. Most heard about the job from siblings or other relatives, and the fact that they are all from the same area underscores the importance of information networks for children obtaining jobs in the fishing industry. All were from farm families except one girl from Khon Kaen province whose father was a laborer. All said that they came for economic reasons; most said that their family was in debt. One (the boy) said that he had migrated only for the season and would return home to help with the harvest. All had migrated recently, from 1 to 4 months ago. All but one of them had finished Grade 6 before leaving school.

The migrant workers did a variety of jobs in the enterprise, but they tended to do heavier jobs than the local workers, such as carrying the racks of dried fish. All but one of them lived in a structure beside the work place which was provided for them. The other girl rented a room and earned more than the others (1200 baht a month, or 48 US$). The boy, who loaded the truck, also made 1200 baht per month, while the other girls made 600-800 per month. They worked long hours (average 12.5 hours), from as early as 3 a.m. to the early evening. When asked how they felt about their jobs, six said that they liked their work, four said they would like to look for another job and one said he would be returning home soon. When asked about their aspirations for the future, most said they had no real plan; a few said they would like to get another job or vocational training.

It should be noted that the workers at this enterprise expressed greater job satisfaction than most of the workers in our sample, and that we were generally impressed with the flexible attitude of the owner and the relaxed atmosphere. He also provided boots, aprons and gloves

for the workers. However, the situation for the migrant workers was quite poor: they lived in cramped quarters and made about half the income that the local workers did although they worked much longer hours.

Enterprise 3: Canned Fish

This was one of the largest enterprises that was studied, and the most mechanized. It was also more formal or "modern": workers had to wear uniforms (which they had to buy) and punched a time clock. It was owned by a well-connected Thai-Chinese family. The fish was cleaned at another enterprise owned by the same family and brought to the canning plant by truck. Fish were weighed and placed in cans by hand, which were then stacked on trays. Fresh tomatoes were ground into a liquid sauce which was poured into the cans by hand with a pitcher. One person ran a machine that stamped the date on the can lids, which were then put on the cans by machine. The fish were cooked in the can, and then the labels were put on by hand.

Almost all of the workers were young women and girls with a few older women. There were three middle-aged male supervisors. Workers were paid by the unit, which in this case was a tray of cans. The wage was 50 satang (0.5 baht) for a small tray of cans and 70 satang for a large tray. Those who put labels on cans earned 2 baht for 100 large cans or 3 baht for 48 big cans. If there was an accident at the plant, the owner would pay medical bills but not wages lost. The owner of this enterprise (who also owned a fish-cleaning enterprise that was studied) continually refused to talk to us, although he did agree to let us interview the workers.

There were 13 local workers in our age group working at the plant, including some only age 12 and 13. They worked long hours, most from 11 to 15 hours per day. Except for the 12-year-old who worked with her mother, these girls made their own income and it was fairly high, ranging from 1500-3000 baht per month (average 2085 or about 83 US$). Most had completed Grade 6, and nearly all said they left school because their family needed their income. About half said that they liked their job; the rest said it was boring, they would like to do something else, or had no opinion. Parent's and children's aspirations were mixed; answers were evenly split between wanting more education, wanting a better job and wanting to stay at the same job.

Six migrant workers, all girls age 14-17, worked at the enterprise. They came from several provinces in the North, Northeast and Central regions, and heard about the job from family and friends. Four of them rented a house with other workers, and two with other family members; this was not included as part of their wages. They worked from 10 to 14 hours a day and the amount they made depended upon the number of hours and the type of work that they did; those who worked with the machines made more. Monthly earnings ranged from 900-1900 baht per month (36-76 US$). One migrant mother and her two daughters who together made 80 baht working a 13-hour day. Also present were some illegal immigrants from Burma, from the Karen hill tribe, who earned no wages at all, working only for room and board.

Most migrant workers were from farm backgrounds, and two said they migrated because they had no land. Only one said their family was in debt. Four of these girls said that they didn't like their job and they would like to go home; one said that she didn't like it but would stay, and one was looking for another job in the area. When asked about their plans for the future, three said they would like to get training in another occupation, two said that they wanted to return home and one had no plan.

Jobs at the more mechanized canning and freezing plants were highly valued in the

community, as it was believed that the wages were higher and the work was less hard. Though monthly earnings were somewhat higher in the canning plant, workers had to work long hours to obtain these wages since they were paid by the unit (even though they had to punch a time clock). While the work was somewhat cleaner and less smelly than cleaning fish, the tasks were no less menial. As in the other enterprises, migrant workers earned lower wages and did more physically demanding tasks. The plant's atmosphere was considerably less congenial than in the more informally structured enterprises, as working with machinery tended to inhibit conversation and tasks were more individual than those where workers sat in groups.

Discussion

Though the three enterprises described above are quite different in size, structure and function, several similarities in the process exist that results in children's employment in the fishing industry. The common threads that run through these case studies include the following.

- Enterprise owners said that they liked to hire young workers, and in particular girls, because the work was "suited to them". Stated reasons included that the work requires nimble hands and flexibility but not much skill or education; it is also true that young girls are obedient and do not demand higher wages or better working conditions.

- Enterprise owners hired migrant workers to do the heavier work and they paid them less than local workers. One owner was particularly frank in saying that migrant workers were willing to accept lower wages and harder work than local workers. Young migrant workers were in a vulnerable position because they were alone and lacked job experience. They accepted poor working and living conditions, and worked long hours because they wanted to send money back to their families.

- Since workers were often paid by the unit, they were motivated to work long hours. For informal enterprises, this meant that they also had the flexibility to work as much or as little as they wanted. But the canning plant provided the "worst of both worlds" by having workers punch a time clock and have formal hours, while still paying them by the unit.

- In many cases young people worked alongside their parents (usually their mother) and often the money was pooled. It should be noted that in the larger study many of the husbands of women working in the fishing industry were fisherman, and sons often worked alongside their fathers when they were old enough to go on the fishing boats. Hence child labor in the fishing industry is in some ways analogous to family labor in the agricultural sector; but the more accurate analogy is to landless laborers, as these workers were not working in a family-owned enterprise.

- Most workers, both local and migrant, left school after the compulsory level (Grade 6) to begin working in the fishing industry. While many said that they had to leave school in order to help their families, about an equal number said

that they saw no point in continuing their education. When asked about aspirations for the future, both young people and their parents were about evenly divided between those who hoped they could receive some kind of vocational training for a better job and those who thought they would continue to work in the fishing industry.

While parental influence is an important factor in explaining children's participation, the larger community context should also be considered. The three case studies showed differences in the degree of skill required to work in the enterprises, but in all the workers relied on networks of friends and family members to get a job. Many workers felt that higher education was unnecessary unless they wanted to migrate out of the community. Since these families had worked in the fishing industry for generations they were accustomed to the long hours and low wages; in fact the family of the girl who commuted to work in the dry white fish enterprise considered the work to be better than farming.

Conclusion

These case studies illustrate how many levels of complexity must be considered to explain children's participation in the fishing industry. With close attention to selecting the proper research design, and by using the qualitative techniques described in this book, the case study approach is an effective method to communicate an in-depth picture of almost any topic of interest. When care is taken to obtain a broad range of evidence and present it in an interesting and engaging manner, the case study is a very effective way of providing an understanding of social reality.

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Chapter 19

Patterns from the past: a practical look at life histories

George Allen Attig

A person's writings or words describing his/her past life or experiences based on memory are called life histories. They also go by several other names including recollections and oral histories, and they can be in the form of memoirs, (auto)biographies, or interviews. In collecting life histories, a researcher conducts unstructured interviews with people about their lives or past events to uncover the social, cultural, personal and environmental forces that shaped them - EDS.

Introduction

Anthropologists have traditionally spent many months or years gathering in-depth information on local cultures at different points in time. Early on, the main intention was to produce an ethnography, or a detailed, systematic case study account of a subgroup, community or an entire culture. Traditional anthropological ethnographies covered many topics ranging from diverse environmental concerns (physical, biological, social) to specific patterns of actions (such as intra-familial food distribution) and the beliefs people held, with maybe a dash of history thrown in (Agar 1980a, 1980b).

One technique commonly used to collect ethnographic information is the life history. Though this intensive type of case study is most often used to study individuals, it has also been applied to examine larger social units (families, ethnic groups). In either case, the purpose is to determine key facets of how these 'units' develop over time in response to environmental changes and in terms of psychological/attitudinal, organizational, intellectual and behavioral adjustments. This chapter thus introduces readers to the life history method as a practical tool for qualitative data collection. Discussion topics include what is a life history, its uses and important points which should be remembered in collecting and analyzing life history data. The chapter ends with a synthesis of a life history which shows how they can be applied to understand the forces shaping an individual's decision-making processes.

What is a Life History?

Simply stated, a life history is a personalized account (a 'life story') of an individual's life experiences including the thoughts and events which permeate them. These person-

centered ethnographies emerge out of a social interaction between an individual and an ethnographer (Agar 1980a:223). Unlike other forms of key informant and in-depth interviewing, life history interviews provide a holistic, temporal picture of a person's life which is viewed as a synchronization of personal time (e.g., feelings, thoughts, opinions, aspirations, choices, decisions), family and community time (e.g., size and composition, economic pursuits, roles, statuses), environmental time (changes in physical and biological conditions) and historic time (that is, outside forces which impinge on an individual, family and community's development).

In the process of collecting a life history, a respondent will reflect on her current situation, relate it to past experiences and make an assessment of what major features shaped her life up to that point in time and, possibly, beyond. In short, in the process of telling her story, the respondent makes the first interpretation. Later, the ethnographer re-interprets and combines information, from this or other life accounts, to gain an in-depth view of a person's character and decision-making processes, and how they affect and are affected over time.

One way to look at life histories is to see each person's life as really one piece of a four-dimensional jigsaw puzzle. Each life is irregular in shape, because the patterns of life events, experiences and knowledge for each person differ along many lines. Each piece/person reveals an *individual picture* of her own personal goals and desires; her *culture* as it shapes the type and timing of her roles, statuses, beliefs, etc.; the *social context* in which her character is sanctioned and given meaning; and the external *environmental influences* which regulate community, family and individual pursuits. The lines between and connecting the pieces represent the person's social network relationships. At first, these center around family relations and extend out to the community and wider social organizational levels. When the pieces are fit together correctly, a larger picture emerges.

There are several key research questions which can help to put a life in better perspective when an ethnographer is trying to understand an important research problem. For instance, how do the community and its people view themselves both individually and collectively (e.g., in terms of health or health care now and in the past)? How and why they do they, or have they, made crucial decisions concerning a key issue (such as economics, childbearing, food selection and distribution and so forth)? How do they act (together or individually) to shape each other over historic time and within varying social groups/institutions (in short, how have they affected each other's decisions)? What are their individual interpretations of their current situation and its evolution? How have they adapted to changing social and environmental conditions?

How Can Life Histories be Used?

Life histories have played an important role in anthropological and sociological research for over half a century. As a technique for understanding social problems, though, the life history is not unique to these fields. Historians, psychologists, clinicians, political scientists, nutritionists, journalists and virtually anyone who studies man and his relationship to himself and others. Perhaps the most famous user of life histories was Freud (1909) who used life accounts as one core psycho-analytic technique in assessing a patient's psychological needs and/or deficiencies according to his/her level of development. Life histories, as used by anthropologists however, have served several purposes in their goal of gaining a more holistic picture of human culture and building theories which explain it.

One of the first uses of life histories is to *portray a culture* by looking for patterns and underlying similarities surrounding several social and cultural elements. Perhaps more

than any others, the works of Oscar Lewis (1959, 1961) stand out as ideal models of how this can be achieved. From the life histories of Mexican family members, Lewis came up with the concept of a 'Culture of Poverty' to illustrate "remarkable similarities in family structure, the nature of kinship ties, the quality of husband-wife and parent-child relations, time orientation, spending patterns, value systems, and the sense of community found in . . . Mexico City slums and (rural) villages" (1959:2). His cross-cultural comparisons, furthermore, demonstrate that many of these culture of poverty elements are also found in other country contexts. Life histories, therefore, provide rich detail in illustrating and explaining the dynamics of a culture.

Since they are diachronic by nature, life histories are valuable in showing *culture change*. Here, the ethnographer looks for different historical/temporal patterns (such as changes in fertility, family structure and organization; the effects of wars, famines and political changes) in a 'before, during, after' manner. The intent is to see when, why and how people react to changes in social, cultural and/or environmental conditions by altering such aspects as their attitudes, beliefs, interpersonal relations, decision-making processes, and actions. For example, in *Neighbors* by Lewis and others (1978), life histories were used to reflect on what the Cuban revolution meant for ordinary Cuban citizens. The authors looked particularly at how the revolution changed the occupational structure, gender and intergenerational relationships, how fast culture change occurred, and how it was that individual lives influence and are influenced by social and institutional processes (cf. Langness and Frank 1981:25-26).

Life histories are also good at *highlighting hidden cultural features* which cannot usually be elaborated on by other more synchronic methods. For example, the roles of women in society is one special case where life histories are particularly effective. In *Nisa*, Marjorie Shostack (1983) collaborates with a female member of the !Kung tribe of hunter-and-gatherers from southern Africa's Kalahari desert. Nisa's life story begins from her earliest memories and goes on to old age. In analyzing the life history, Shostack discovered that in contrast to many other societies and especially those feeling the pressures to enter the modern world, "the !Kung are something of an anomaly. . . . men and women live together in a nonexploitative manner, displaying a striking degree of equality between the sexes" (p. 237). Nisa's account gives the reader an insider's view not only of !Kung society and culture, but also what it means to be a !Kung woman and an individual.

Life histories also allow the ethnographer to *obtain comparative, retrospective and/or inter-generational information*. Yoddumnern (1985) has used life histories to highlight what subjects' lives can tell us about changing behavioral and demographic conditions in Northern Thailand. Her information provides a unique look at how different female generations view large family size, their changing roles towards various family members, and the changing functions and compositions of matrilineages. On the other side of the world, Attig (1981) collected life histories of German farming families in central Illinois (USA) to understand changing family and community values towards each other and their land. His account points out that the growing costs associated with farming reduced community cohesiveness as the younger generation moves out of the community in search of other occupations. This led to inter-generational tensions, since the elder generation, whose self-worth and identity was tied to the farm, wished to hold on to their land as long as possible. Unfortunately, their labor supply (the younger generation) desired to leave and ultimately did so.

Life histories are also valuable in *uncovering information about unusual, exceptional or deviant cases* that in themselves shed light on personal goals and reactions, cultural norms and social relations. *Between Two Cultures* by John Poggie, Jr. (1975), for example, is a sensitive life history of Roman Gonzales, a truly marginal man. Ramon is a Mexican national raised in the United States who has been forced to return and live in Mexico. Ramon, while being culturally assimilated into American culture, is not an American citizen and cannot live for the rest of his life in America. In Mexico, Ramon is labeled a *pocho*, an Americanized

Mexican. Although he tries to socially and culturally fit into Mexican life, he never really achieves this goal. Poggie sees Ramon as "characteristic of a larger class of human all over the world; people who feel that they do not belong solidly to one culture group" (p. xiii). This marginality can come from either emigration to a new cultural setting and/or where people are denied meaningful social roles in their own cultures.

Many life histories are used to analyze a person's *developmental changes* over his/her life course. In *Long Engagements*, Plath (1980) compares information from the life histories of Japanese individuals with characters found in popular Japanese novels. He does this to discover the potential pathways which are available to modern-day Japanese as they mature and become adults in Japanese culture. The novels "highlight a character's dilemma and . . . dramatize turnings in a person's awareness of self". Both life histories and novels capture the rhythms, "the pace and tenor its narrator perceives in his or her own record of experiences" (p. 16-17). While novelists emphasize events and their consequences, life history subjects place these in a more 'true to life' and meaningful perspective; thus each is given an analytical and an expressive role.

Lastly, life histories are beneficial in *soliciting background information, most notably for phenomenon about which little is known.* Before writing and finalizing other data collection tools (like survey instruments), life histories can be used to collect background information that most likely would have a bearing on the type and content of questions to be asked. Accuracy is thus increased both in terms of hypothesis formulation and fine-tuning as well as the socio-cultural fit in the family or community under study. Community nutrition researchers, for instance, have used life histories to understand food distribution among household members - who eats what, with whom, under what conditions, how much and how often (Wiseman and Aron 1970).

Life History Collection

Subject Selection

In life history-taking, the ethnographer and his subject work together as a closely-knit team. In projects using multiple data collection methods, life history interviews are usually conducted as the last fieldwork stage. By this time, the ethnographer will have already been involved in collecting supplemental data through structured and/or in-depth interviews on the community's history, present status and organization, family structure and function, as well as other relevant information on key community members. The ethnographer has met many individuals who have been eager to talk with him, with whom a close relationship has developed, and/or who have special knowledge, experiences and skills. The next question becomes who to interview.

Many researchers select their life history subjects from the people they are most familiar with and feel comfortable in interviewing. In doing so though, the question arises as to the reliability of their information. Since the subjects have probably already been involved in some aspect of the data collection process, they might provide information which they feel the researcher wants to hear, but may not be the actual case. There are several ways to deal with this problem, but only three will be discussed here.

First, the ethnographer can select individuals who are not among those with whom he is very familiar, but appear to be good life history interviewees based on the ethnographer's judgement and experiences in the community thus far as well as the judgements of other reliable informants. However, the degree to which these persons will participate in the

interview and supply good quality information will also vary by individual.

A second method is to select comparable life history subjects from both of the above samples (familiar and unfamiliar persons), and compare their life history content to see if it is consistent between groups. If so, both groups will compliment each other and increase the quality and quantity of data collected. Life history interviews, though, are often very time-consuming. If the ethnographer cannot fully interview both groups or he does not have access to other interview information (e.g., survey, in-depth), this method may not be practical. But it does have its benefits. In the words of Shostack (1983:33),

> *I interviewed seven women during the next ten months, and for the most part, the interviews were successful. What Bau and Nisa had told me, the others confirmed and expanded on. By the end I had a reasonable understanding of the subtleties of !Kung women's inner feelings, and of there attitudes toward their lives.*

In the third method, the ethnographer uses preliminary information gained through other interview methods. If the researcher has interviewed 20 women about their childbearing experiences and the flow of events leading up to and beyond childbirth, he/she can then select a life history sample which appears to be comparable with the larger original sample. Life histories can then be collected to illustrate, explain and check the accounts given by the original sample. If the original and life history samples agree, theoretical saturation is reached, and the reliability and representativeness of the life history sample is acceptable (Agar 1980b).

The Interview Context

The factor which controls data quantity and quality is basically the subject-ethnographer relationship. Life history-taking involves a high degree of rapport and trust between subject and interviewer, because oftentimes many very personal thoughts and feelings are brought to the surface. This relationship often leads the ethnographer to interview people with whom he is most comfortable, rather than those who are the best candidates. Moreover, different informants will want to participate at differing levels, and each person differs in the amount of talk he/she is willing to contribute. The ethnographer is challenged to keep the conversation going in a flexible yet directed manner. In any case, the ethnographer must realize his feelings and try as much as possible to be objective. He should keep a diary of his reactions (positive and negative) towards subjects which may affect the interview context. These should be considered when analyzing the data and, if appropriate, included in the writing-up of results so that readers fully understand the circumstances surrounding the interview process (Langness and Frank 1981; Shostack 1983).

Some ethnographers are able to collect life histories and direct interviews with ease. For most of us, though, we need a little help. Generally, the ethnographer should use an interview guide containing appropriate categories and data items (see Soonthorndhada and Isarabhakdi, this volume). This guide should be constructed and then used to subtly direct respondents toward selected topics without losing the life history's continuity or coherence. Oftentimes, the guide's content can be organized to follow the subject's life course stages in order to examine roles, behavioral factors and the environmental context as they change within and between stages. Alternatively, it can center on key life events -- such as school days, marriage, childbirth, death of a parent or spouse -- and follow a similar pattern as in the life course organizational approach.

Ethnographers who actively collect life histories are quick to note that interview information should result from a free-flowing, non-directional interview context. The reasons

for this type of interview are three-fold. First, usually the ethnographer knows what specific information he wants to collect, but not necessarily how it fits temporally or socially within the subject's life. Second, seemingly disparate and trivial life experiences which, at first hand may appear to be irrelevant, may actually make sense later on in the interview or write-up process. Last, opinions freely volunteered by the subject are more likely to be genuine than those elicited by direct questions (Oppong and Abu 1985).

One of the stumbling blocks of quantitative survey research is that interviewers do not really know if they are receiving truthful answers. Admittedly, subjective life history data frequently cannot be checked against objective observations of real behavior, especially for past experiences. However, very frequently a chief anthropological concern is the patterning of people's beliefs and conceptualizations of past events, rather than the truth or falseness of these accounts. To control for this however, other qualitative data collected using other methods can be used to cross-check life history information (also known as 'triangulation'). Further, oftentimes life histories of other family members can be compared to check for the consistency of facts. Other personal documents (e.g., letters, diaries, medical records, school records) can also be assessed. Lastly, through multiple life history sessions with the same subject, accounts can be discussed at several different times, compared for content consistency, and then revised and presented with greater accuracy and detail at a later session, usually when the ethnographer and subject feel more at ease. But even if distortions and changes are made, these are also informative because they give insights into attitudes. It is useful to know how people want others to see them, not only how they see themselves (Oppong and Abu 1985).

In summary, the life history context is really an exploratory one which challenges the ethnographer to automatically interpret, link and preliminarily analyze the information being given by the subject. The ethnographer must also call upon other skills as well, such as observation, in order to pick up non-verbal cues about the information being given. As an illustrative sidenote, one student asked a rural Northeastern Thai woman how many children she had. The woman started counting to herself on her fingers and replied "three". The student was somewhat stunned, since the woman used five fingers to count to three. Upon further questioning, though, the interviewer discovered that the woman did have three living children, but two others had died within the last ten years from infectious diseases.

Analyzing Life Histories

Methods of analyzing life histories vary depending upon the richness of the accounts. Some life histories, such as those by Oscar Lewis, can stand by themselves as illustrations of a pattern, event or theme. But most require a deeper analysis. The first logical step is to code the material in some way. This will be easier if the interview guide has been divided into general categories and, if possible, specific data items associated with the research topic and category. The ethnographer can then take this list of categories and data items and use it to sort the life history data into files (see Svetsreni and Attig as well as Yoddumnern-Attig, this volume). This entails abstracting out from the interview transcripts all statements that relate to each category. For husband-wife relations, for instance, the strategy is simply to pull out all statements that the subject makes about her husband (Agar 1980b).

Once these statements are abstracted and classified, the ethnographer should look for patterns of themes which often reveal themselves quite readily. For example, let's examine the following two sets of separate statements made by a woman in a German farming community in the United States. In the first set, she is talking about her parents and their relationship with each other and their children. In the second set, she is relating her own experiences with her husband and children (Attig 1981).

Set 1

She really controls his actions.

Gertrude always keeps quiet until after he has completely finished talking.

If I ever did anything wrong, I wasn't worried about what father would do. He'd just let it go. But mother would lecture me non-stop.

One time father wanted to raise pigs, but mother wouldn't let him. She said they smelled and weren't worth the trouble for just a little monetary return.

Set 2

John [the subject's husband] *wanted to buy a new car, but I talked him into buying a used one so we could save money.*

He wanted me to have a baby right away, but we were only just married and the crops weren't too good that year.

After I gave birth, my husband wanted me to hire a baby-sitter so I could go back to work. But I wanted to spend time with my child so I didn't.

Boys are always looking for approval from their fathers. Last week my son came home and told me he didn't want to go to college. He wanted to farm like his father. But I told him 'farming's not a secure job. People can take your land if you're not careful, but they can't take your knowledge.' I guess he's decided to go to college now.

These statements deal with the theme of authority and how it is reflected in parent-parent and parent-child relations. Collectively, they indicate that apparently the wife/mother's authority in making family economic and childbearing decisions outweighs that of the husband/father. Moreover, they also show that this pattern has maintained itself for two generations. The results obtained from this sample case can then be converted to hypotheses for further testing and/or compared with data collected using other methods. Areas for further investigation could include child socialization, past experiences related to economic ventures, and differing inter-generational attitudes towards farming and family cohesiveness.

Moreover, individual life accounts can be compared with the life histories of other subjects to see if thematic patterns are consistent or inconsistent, under what contexts (e.g., nuclear versus extended families) and conditions (e.g., economic level, educational attainment). Other themes can also be developed such as asymmetrical social relationships, social change, knowledge and awareness which could further explain the authority theme (Agar 1980b).

A Case Example

The following biographical life history was collected in a Northeastern Thai village by Bencha Yoddumnern-Attig for her anthropological study on contraceptive discontinuation.

Its focus is on understanding the forces that shape a woman's family planning decisions (Yoddumnern-Attig et al. 1992).

One Woman and Her Quest for Birth Control

Camouflaged amongst the low hills, sparse forests and parched rice fields of Surin province sits the village of Ban Phet [pseudonym]. While not distinctive in its present state, some twenty-three years ago it was the cradle into which one young woman -- Nang Gao [pseudonym] -- was born. For as long as she can remember, Nang Gao has known periods of hardship and opportunity. Shortly after her birth, her father died in an accident which shortened Nang Gao's childhood even more than is usually the case in rural Thai life. Since her mother needed to devote most of her time to the rice field and other economic pursuits, Nang Gao along with her elder sister and brother assumed the major household chores. As soon as she was capable, Nang Gao worked at any job which was available and that would increase her family's meager savings.

Nang Gao started menstruating when she was 16 years old. Shortly thereafter, her brother moved to Lopburi province as a construction worker, while her sister migrated to Bangkok in search of a better job. Periodically, they would send what little money they had saved back to Nang Gao and her mother, all the while hoping that Nang Gao could find a firm economic foothold which could ensure her a productive life and old age security for her mother. Her brother took a special interest in this quest and managed to enroll Nang Gao in a beauty school with the hope that one day she would have her own beauty parlor. At 19, Nang Gao received her certificate in hair styling and went to stay with her sister in Bangkok in order to take additional courses in hair styling and tailoring.

By the time Nang Gao began menstruating, she had indirectly heard of birth control through various friends and relatives, including her brother, sister and older community members. Whenever she needed to go to the village health center, she also listened in on family planning conversations and consultations but was afraid to ask questions for fear of being scolded. Nang Gao knew it was not proper for a young unmarried woman to know about birth control. They should not be interested in sex before marriage. It would probably lead to adulterous behavior. Over the radio however, Nang Gao heard several programs informing the public about various methods of birth control, from using intrauterine devices to contraceptive pills. Once, a neighbor's child ate all of the pills in her mother's birth control pack, and Nang Gao had to help rush the child to the health center.

When Nang Gao was 20 years old, her mother died, so Nang Gao went to live with her sister who had since returned to Ban Phet. Later on, Nang Gao met a young, handsome army recruit. Unknown to friends or family, they started having sexual relations, and Nang Gao secretly hoped that one day they would be married.

Since she did not want to get married, Nang Gao asked the community health worker to give her birth control injections, but she objected since Nang Gao had not already borne a child. According to the health worker, injections might cause Nang Gao to become infertile.

Calling upon her own informal knowledge about birth control, Nang Gao resorted to taking birth control pills from her sister's cabinet. Unfortunately however, she was not sure of the dosage and only took three pills. Moreover, they made her dizzy and nauseous, so she stopped taking them. The result? Nang Gao became pregnant.

When Nang Gao's sister found out, she was extremely angry and ordered her to get an abortion. Nang Gao objected though; she thought it was a sin. Consequently, her sister threw her out of the house. Nang Gao did not want any family problems and hoped to make amends with her sister, so she consulted health center personnel about an abortion. But at the

health center, the staff advised her against an abortion. They also felt it would be a sin to destroy life, and against the Lord Buddha's teachings.

Nang Gao next confided to her boyfriend that she was pregnant, and he was adamantly against an abortion. To avoid any problems, the young man's parents encouraged them to get married and keep the child as their own. Nang Gao agreed and, by age 22, she had both a husband and a child.

Since she and her husband did not want another child right away, they consulted the health center staff about birth control. They were advised that her husband should use condoms, but they decided in favor of an IUD instead because Nang Gao was still breast-feeding her child. "Afterwards," she thought, "I'll ask the health center staff for an injection." She did not want an injection now since she feared it would pollute her breast milk.

Presently, Nang Gao is 23 years old, the mother of one child, and the owner of a seamstress shop in Ban Phet. She is still using an IUD because it does not interfere with sexual relations or the nursing period.

Analysis

Nang Gao's life history gives us initial insight into the workings of family planning at a personal level. It shows three significant forces that play a role in an individual's decision-making processes, namely, culture, character and consociates (Plath 1980).

In an anthropological sense, *culture* can be thought of as a legacy of idioms and values which give each human life a point and a purpose. Early on, a woman is enculturated -- infused and informed about acceptable timetables for growth and the roles and duties which they prescribe. She is given an inherent cultural listing of the accumulated knowledge, experiences, beliefs, and attitudes of the group with which she is associated. High on this list is her responsibility as a procreator of new life. The timing with which this takes place is shaped, in part, by such culturally defined roles and timetables.

But each woman has her own distinctive features, her mark of identity and individuality created by both nature and nurture. This represents her *character* and through it she interprets how she will become a certain person within the general guidelines set by her culture. Her desire to accept the roles of wife and mother rests on her alone, as does her desire to avoid pregnancy through contraceptive means.

A woman, however, usually does not apply cultural codes to herself in isolation; other people must interpret them for her as well. Her character and growth as well are shaped by her family, community and larger society through a series of social relations, built up and extended over time. But more importantly, her reproductive potential becomes in part a property of others, particularly of those who are her *consociates*. Consociates are people she relates to across time and in some degree of intimacy (Plath 1980). They are friends, family, spouses, kinsmen and colleagues joined together in separate, often overlapping networks. Figuratively speaking, consociates represent a special jury which examine and confirm the course of a woman's being. More dramatically, they heavily influence her major life course decisions, such as those related to reproduction, since such decisions have an impact not only on herself but her "significant others" and social milieu. Consociates thus represent a primary social resource concerning information and validation as well as restraint in imposing limits on personal actions.

In terms of culture, community conventions dictate the timing at which unmarried women such as Nang Gao can seek and use contraceptives. In other words, the community value system restricted Nang Gao's access to birth control information before marriage. This system also carried over into Nang Gao's family. Through socialization, her sister adopted the

view that unmarried women should not use birth control or have children out of wedlock. The Buddhist religion, its canons and adherents also restricted Nang Gao's family planning options, especially in terms of abortion.

Yet Nang Gao's own character and desires worked to promote premarital sexual relations despite limited birth control knowledge and an absence of contraceptive protection. Even after she became pregnant, she still wanted to keep the child in the face of almost overwhelming familial pressure.

But playing major roles were her consociates. Although Nang Gao attempted to gain access to birth control, social and peer group beliefs dictated that such methods were only for married couples. Furthermore, differing advice from community members and health personnel, as well as a lack of active family planning education, caused Nang Gao confusion and frustration. But even in the face of such opposition, she took the initiative and tried to use contraceptive pills, even though she admittedly did not know when nor how many pills to take. Consequently, her efforts to obtain birth control ended in misinformation and, ultimately, failure. Nang Gao was fortunate, however, in that she gained support from her husband and his family. Without this, she would have been ostracized from both her family and community unless she had undergone an abortion.

Culture, character and consociates are thus the threads making up the fabric of Nang Gao's life. The process is long, and different patterns can be seen at different points in her life course. In particular, her maturation into a woman, a wife, and a mother highlight points at which each thread stands out as affecting her decisions and the overall shape of her life.

Conclusion

Like many qualitative data collection methods, the life history works, in part, to substantiate and enliven statistical information, provide illustrative examples of persistent and unique patterns, while serving as a basis for refining the investigation through more precise hypothesis formulation and testing. It allows the ethnographer to analyze several dimensions surrounding the individual, her family and community. It focuses on the subject's ability to explicitly represent her innate knowledge about broader cultural patterns, traditions, environmental circumstances, relations between social groups, and personal intentional actions. Through this life account, the ethnographer's own understanding and the subject's text mutually inform each other in an emergent dialectic manner. The major benefit of life histories, therefore, is that they intimately correlate on a detailed level the entire context of life; an achievement which is unobtainable from any other data collection method. For community health and development purposes, life history analysis goes beyond examining merely the need or mode of change required, but to an understanding of the complete context of change.

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Chapter 20

Using focus groups as a verification tool for cross-cultural research

Sairudee Vorakitphokatorn

In addition to collecting socially relevant data, focus groups are also a valuable method for planning and analyzing cross-cultural research data. Their value lies in helping to combine qualitative and quantitative data so that statistical patterns are explained more clearly and meaningfully - EDS.

Introduction

At the beginning of the twentieth century, most social science research was qualitative in nature, relying upon such aspects as observations, in-depth interviews, participation of target groups, detailed case studies and other small-scale investigations. Quantitative methods such as self-report questionnaires or survey instruments involving large groups of people, voluminous sets of data for analysis and complicated mathematical manipulation were either unheard of or were impossible to collect and process.

Early in the 1960s, the introduction of computer technology opened up the possibility of conducting large-scale data collection and processing exercises for the purpose of social research. Thus, statistical analysis and verification of hypotheses became possible. Quickly thereafter, quantitative methods overshadowed and, in effect, almost replaced the older qualitative approach. The true benefits, richness of insights and the practicality of conclusions obtained through qualitative methods were almost forgotten. Researchers tended to overly depend on quantification, calculation and manipulation of scales, indices and statistical validation. Researchers who continued to practice and rely on qualitative research methods were accused of being out-of-touch, weak or lacking in skills in social research methodology. They were called 'subjective' and their research findings were often termed 'doubtful.' Models in which complicated manipulations and statistical wizardry prevailed were steadfastly advocated by quantitative researchers. Research based on such models was viewed as the only 'scientific approach' to social science.

After several decades and erroneous modeling exercises, researchers have become unable to explain several aspects of human behavior even with the most complex of models. Thus, the qualitative approach is once again gaining ground, since the knowledge it produces cannot be gained from modeling. Nowadays, we witness a broad agreement on the complementarity of both approaches, and numerous projects have impressively integrated both approaches. It is now widely accepted that a combined quantitative and qualitative approach

is the best way to explain key facets of human behavior patterns and social interactions.

In this chapter, one technique - focus group discussions - is highlighted to show how it substantially helped to shape a research project on family relations and crowding in Bangkok low-income communities. The project is cross-cultural in nature, as an earlier investigation had already been completed in Toronto and Hong Kong by the Virginia Polytechnic and State University. This three-year study required two data collection phases. First, ten focus group discussions were held in 1987. Group members comprised male and female Bangkok residents who reside in low-income areas. Second, a quantitative survey was conducted in 1988 among 2,017 male and female household members in 150 city blocks located in 20 out of a total of 24 districts in the Bangkok Metropolitan Area. Research topics included: housing conditions, crowding, housing satisfaction, time allocation, neighborhood satisfaction, privacy, felt demands, household control, physical and psychological withdrawal, marital relations, relations with children, and mental health.

Examples taken from the actual process of designing the research project's survey questionnaire, analyzing data and drawing conclusions will illustrate our contention that a qualitative research technique, in this case focus groups, can provide a useful verification and monitoring tool in this cross-cultural research project.

The Nature of Focus Groups

Focus groups have been used for identifying the common sense perceptions of individuals and their explanations for common experiences (Calder 1977). This technique's importance has been felt in several fields such as consumer behavior in marketing research, health delivery systems, curriculum and teachers' performance evaluations, food habit research, and family planning studies, to name only a few. Modern social scientists have been systematically interpreting focus group data which has included the transcription and coding of data from focus group discussion tapes.

To conduct a focus group interview, one has to include a moderator who oversees a group of seven to nine comparable individuals. There is also a note-taker and a cassette tape recorder. A certain amount of careful planning is crucial. Research questions and their sequencing need to be drafted; participants belonging to the target population must be screened; and an optimal appointment schedule is also required. Group members should be homogeneous in personal characteristics, status and life experiences. The moderator must be spontaneous, and questions must be precisely phrased and carefully selected to elicit the maximum amount of free responses. Moderators should also subtly encourage responses from members who tend to speak less than others, while tactfully controlling those who become too talkative.

Like all research techniques, focus groups have their disadvantages and advantages. On the negative side, focus groups can easily be used to serve the purpose of justifying or even proving foregone conclusions. The technique is flexible, and can be intentionally misdirected by a skilled moderator. Focus groups, however, cannot be used to verify research hypotheses, since the technique does not provide statistical data. The groups under study are also not natural groups, since they have been pre-selected by researchers. Therefore, they may contain dominant persons and passive ones. Lastly, discussion can be highly repetitive, and many people may not like to repeat what has already been said.

Nonetheless, focus groups have their valuable points. They generate a wide range of information, insights and ideas through the extreme richness in interaction which typically emerges in a group situation. There also tends to be snowballing effects from consecutive interactions and responses by participants. Focus groups are also cost-effective in terms of

time and money. It is a highly flexible technique which can help in elucidating concepts and developing survey instruments. Focus group data provide valuable background data, especially for cross-cultural studies. The focus group method is also useful for triangulating findings obtained using other methods. Finally, varying the composition of the groups can be useful for systematic comparisons, for example between people living under different low income conditions or between women and their husbands.

Focus Groups and Planning Cross-Cultural Studies

Focus groups provide a systematic means of observing psycho-social and cultural behavior patterns as a basis for planning survey questionnaires, especially those which must be adapted to fit cross-cultural research investigations. Moreover, familiarity with the intricacies of social interactions as well as environmental stresses placed on various family members becomes a necessity for the correct interpretation of survey research results, a subject which will be dealt with in greater detail later.

At the outset, the preparations which must be made in holding a focus group (such as site selection, participant identification and screening, appointments and their confirmation) provide the investigator with numerous opportunities to familiarize him/herself with the study community. He/she will then gain greater insights into the background of participants and their limitations (like time, mobility, outstanding obligations). These interactions, that take place prior to the formal session itself, are very valuable in helping investigators to shape their understanding of concepts, the research approach, participant behavior and language. Through more frequent interaction during the preparation process, the researcher will be able to bring him/herself to a more informal level of communication which places participants and the researcher more at ease. This is one key to success in both a focus group approach and in planning and formulating meaningful questions.

To illustrate some of the above points, let us draw on a study done in Bangkok among people living in low-income communities and low-income housing projects in 1987 and 1988. Ten focus group sessions helped familiarize researchers with the participants involved, increased their understanding of how the study communities were originally established, and provided key insights into the livability of participant environments. For example, the researchers learned through focus group discussions that for everyone to be able to receive water and electricity, a set of informal arrangements and rules had to be respected by all community members. Since all water taps and electricity lines had to be shared, their equitable distribution and use by all was paramount to maintaining peace in the community. The same applied to toilets which had to be shared by several neighboring families. Simple observations or survey procedures without extensive interaction with the people (before and during the focus group sessions) would never have revealed such hidden and unique living arrangements, especially their behavioral and normative underpinnings.

The communities under study were also new clusters of families, rather than well- and long-established units. During questionnaire construction, many potentially interesting questions (such as an extensive inquiry into community history and past social and family relationships) were found to be inappropriate or redundant given existing circumstances and sociocultural conditions. Therefore, these were dropped in favor of more informative ones such as those dealing with inter-familial resource use and intra-familial relationships within their new environment.

Questions on the physical make-up, use and division of household space were also formulated based on experiences gained in preparing for the focus group sessions. Some visits and observations were made at various times of the day and evening hours. Having to prepare

for focus group discussions made it necessary to make several visits, whereas the usual research observations are limited to quick, heavily structured and furtive attempts to glimpse around the edges of the crowded community during the daytime.

The ten focus group sessions also yielded valuable information for constructing the survey questionnaire for the 2,017 sample households. As an illustration, people in the crowded households sleep in rooms other than bedrooms. Survey questions that might have made allusions to bedroom space and its use would have been inappropriate. Likewise, a family will send their older sons to sleep at their neighbor's house if they themselves have relatives staying overnight. Moreover, in homes with partitions, focus group discussions helped in formulating relevant questions on how partitions were put up and of what material. Both of these discoveries thus had implications for and influences on intra-household (but not necessarily intra-familial) privacy, a key part of the survey questionnaire.

All of these focus group findings developed the concept of familial privacy in the Thai context. That is, while the Thai people under such crowded conditions value privacy, they deal with it in a casual and relaxed manner rather than one of tenseness and personal ownership. For instance, while adults do not seem to mind the accidental exposure of marital intimacy among themselves, they are extremely careful to avoid such exposure around children and especially daughters. Households with grown daughters, in particular, tend to partition living space more extensively than those with only sons.

Questionnaire Wording

Language and Concepts

It is often heard that structured observation as part of quantitative research is sufficient and focus groups are not needed. However, in certain circumstances, focus groups are beneficial (if not indispensable) in preparing survey questionnaire wording. For example, in the cross-cultural research questionnaire dealing with the psycho-social effects of crowding, it became clear from focus group discussions that the use of certain words and concepts, the tone used in asking them, and the topics covered did not match with respondents' educational or cultural backgrounds.

For example, topics and questions on privacy and personal space are difficult to translate and adapt for use in a Thai language questionnaire. There are also cross-cultural difficulties in the concepts themselves. First, privacy and personal space are translated using the same Thai term, i.e., *suan tua*. *Kwam pen suan tua* means privacy and *thi suan tua* means private space. Such subtle nuances are not easily communicated to persons with a low level of education. Moreover, the concept of privacy itself in Thailand may be broadly defined to include nuclear family members, while in a Western context it is strictly personal. Consequently, from the original two questions in the American interview format we could only meaningfully keep one rephrased question.

Pure problems in translation are plentiful especially when a close comparison is attempted between a Western society, such as Canada, and traditional, older cultures of the Orient. The literal translation of self-respect, for instance, will have no meaning in everyday Thai life since it is not an expression that one encounters on a daily or periodic basis. For a literal Thai translation, self-respect becomes *kaow rop tua eeng* which unfortunately made no sense to focus group respondents. It was just a string of Thai words placed one after another. Western educated people familiar with the Thai language, however, may recognize the Thai version, though, and here lies the danger in incorporating this phrase into the survey

questionnaire. Alternatively, when self-respect is translated with regard to the Thai context, the word should be *sak sri* or dignity.

In the research questionnaire's English version, a question also asked whether a husband and wife feel a certain attachment to each other. Again, the word *attachment* literally means *phook phan* which is not commonly used in daily life. For less educated people, the question must state 'whether the husband and wife feel close' which is another Thai phrase, i.e., *klai chit.* Initially, both phrases were used in the question: 'do you feel attached and close to your spouse.' The idea was that if either of these words rang a bell, we would receive an answer, and since we intended not to differentiate between these two closely related feelings, this was judged convenient. In the focus group sessions however, no one ever used the phrase *phook phan,* but *klai chit* was commonly used. Some respondents related it with *sanit* which means 'very close.' Consequently, the questionnaire used the language and concepts which were more natural as indicated from focus group discussions, since these would elicit greater understanding and more spontaneous reactions.

The nature of the response, moreover, is also determined by the language used. For example, asking a Thai person if there has been any excitement lately around the house would be entirely inappropriate, because it carries a bad connotation such as car accidents, etc. However, Western respondents might comment about a particularly interesting event or television program for which the Thai translation of 'excitement' would not be suitable. Rather than excitement, the Thai use the term 'enjoyment,' or *sanuk sanaan* to inquire whether one's life has become completely without any spark of joy or laughter. Thais would not like to be seen enjoying such 'excitements' as may be understood by them from the literal translation as it is not considered good to enjoy other people's (or your own) misfortunes.

Tone and Topic

In designing the cross-cultural questionnaire and its Thai version, both positive and negative scales were needed to assess certain situations. Positive scales related to questions about children and parents, marital harmony, and so forth. Yet the problem of crowding has many negative aspects, and researchers had an unclear idea and little practical knowledge about the life experiences of persons (respondents) in such communities and the problems they face and must deal with on almost a daily basis. Therefore, many topics in the survey questionnaire, by necessity, had to center around serious problems and how respondents cope with them.

Focus group discussions provided insights into the degree to which respondents would share rather negative experiences with the interviewer. Since the sessions were social in nature, it was felt that the topics which the group would discuss openly would most likely be ones which could be asked during individual interviews and receive relatively reliable responses. Based on these observations, the tone of survey questions became an important consideration, and care was taken in wording, development and presentation, especially for such negative scales as stress, suicidal tendencies, manifest irritation, and physical and psychological withdrawal. An overly optimistic view could have been taken, and the questionnaire would certainly have looked different in tone and in the scales used for presentation. Yet likewise, the responses would have possibly been biased in terms of giving positive responses to obviously negative situations. Consequently, in developing questions, phrases which commonly arose during focus group discussions (such as 'pretend,' 'ignore,' thinking straight,' and 'nervous breakdown') were used in their natural (rather than artificial) tone.

Focus group discussions also helped tremendously in identifying felt problems and needs. Therefore, questions relating to symptoms resulting from crowded conditions were very much to the point. In the end, this led to a clearer definition of the problems and what should be done about them. Focus groups helped to direct, clarify and focus on what the problem was exactly, not in general.

For instance, to make a useful scale concerning irritating habits of a spouse, focus groups were needed to identify such habits precisely. Answers which arose included 'talking to other women (or men) too often,' 'being away from home too much,' and 'spending money,' and these were on a scale for poor marital relations. This scale asks couples' agreement on the following behavior patterns of husbands: doing household chores, how to discipline children, drinking alcohol, etc. In focus group interactions, these respondent-identified topics came up naturally and, therefore, 'problems that were not problems' among the target families were not included in the questionnaire. This led to a more precise scoring on the scale and avoided redundancy.

In general, quite a number of items and scales which were applicable in previous questionnaires conducted in the USA were not applicable in Thailand. During the ten focus group discussions, each of which lasted for two and one-half hours on the average, we could not identify these items as being either present or relevant. Consequently, we could delete them altogether and make the questionnaire much easier to administer and more accurate. All these reductions should be seen in the light of a quite lengthy questionnaire on the one hand, and the reluctance of women to be taken away from their work for a long interview time, on the other. Thus, the efficiency of interviews was improved on a rational basis and beyond the simple, often arbitrary, shortening process.

In summary, observation as a means to develop questionnaires is often lacking compared to focus groups. The latter are less easily biased since several opinions of women are discussed in a group. Furthermore, observation is more passive while focus group discussions are active and dynamic. One dissenting observation may be adopted as the 'average' behavior, but in focus groups no such misinterpretation is possible. Focus groups also more fully cover the whole spectrum of family life, including life style, daily activities inside and outside the home, common problems, marital difficulties, problems in relationships and coping mechanisms used to deal with various family problems. Many consist of acts and words, are hidden away from the outside world, and only arise in a group setting.

Data Analysis

The unique knowledge and direct experience obtained during focus group sessions can prove to be very beneficial for the data analysis process. Often we find that results from a quantitative study are ambiguous or lacking in meaning or rationale. For example, correlations do not explain causality, but with good background information some correlations can be explained in terms of human behavioral patterns. Data expressed in figures only, for example about living space and conditions, do not at all reflect the actual picture in low-income communities in Bangkok. Of course, one can keep on extending the questionnaire beyond the point where it becomes feasible to use it effectively, but even then qualitative data are superior.

Focus group data can also help to verify answers to survey questions. In the research project, survey results identified families as being predominantly extended in terms of their organization. In short, it told us how many people co-resided in a dwelling. It did not, however, give us a dynamic picture of household size fluctuation or responses to it.

Data obtained from the focus group sessions showed that many families contained two generations and five members. Many nuclear families, moreover, had a number of relatives

living with them temporarily until they could find a job and dwellings of their own. In itself, this information is interesting and meaningful in terms of crowding and coping behavior. In the focus groups, a number of women shared with the group how they attempted, by any and all means, to partition their living space. They used whatever materials they could get, cardboard, furniture if any, boxes or crates, etc. Through this strategy, crowding in visual terms was at least minimized, since partitioning reduced the number of people seen all at once.

In families of five, therefore, crowding was felt and partitioning was the coping response. On the basis of quantitative information only, however, five persons is not much, and it could be concluded that the Thai prefer living among several relatives. But when one observes housing conditions and adds this to information obtained from the focus groups, a totally different picture starts to develop as certain living arrangements are carried out to cope with the increased number of people.

Quite surprisingly, when respondents were asked in the survey whether their houses were crowded, many women replied negatively. However, in the focus groups crowding was indicated as a problem at night when all family members were at home and in the morning when toilets and bathrooms are very busy. Thus, the question in the quantitative survey was clearly inferior in explanatory power to what was revealed in the focus groups. When writing the study's analysis section, researchers had to include a discussion on time and timing as a key indicator of felt crowding.

Ambiguities can also arise between the magnitudes associated with certain survey scales (e.g., manifest irritation, a housewife's household control, psychiatric symptoms) and focus group data. The quantitative results showed a positive picture, that women were in control and had few emotional problems. In focus group sessions, though, women revealed that they had many problems in terms of types and magnitudes. This could be explained by the fact that very badly affected women would usually refuse survey interviews as they simply did not have time when the interviewer knocked on the door. In focus groups which are set in advance and at the convenience of respondents, women took their time and spoke out more freely.

Another example is information on martial relationships. When respondents were asked in the quantitative survey interview about this topic (and in so many questions), they would say that they do maintain good relationships. They also had no problems in talking with their husbands about personal matters. But in the focus groups, women said it was impossible to find any time, either day or night, to talk with their husbands since too many people were around. Once again, the issue here became one of time and its effects upon marital relations, rather than the quality of the discussions (positive or negative) themselves. Quantitative data on the frequency of discussions about divorce with friends also supported the focus group picture of marital instability, rather than the more general picture of marital bliss which arose out of other survey questions.

Conclusion

At this chapter's outset, an example was given of a cross-cultural study which compared conditions of crowding in Toronto, Hong Kong and Thailand. Such research projects are not the exception as much of the Third World is drawn into the global economy. But care must be taken in making cross-cultural comparisons, and focus groups are one mechanism for identifying problems which might have been unforeseen prior to the study.

The use of focus group discussions has been advocated to overcome the weaknesses of other social research methods. This technique is certainly not new for most social scientists who have shared the insights gained through the application of this tool. While many social

science methods have proven to apply directly or indirectly to many fields of social research, each has its own set of limitations. Each method can be applied under certain conditions only because there are limitation of time, topic, budget, research objectives, and so forth.

Focus groups, as illustrated here, have proven to be beneficial in social research by serving as a verification tool for planning and analyzing the data collected for cross-cultural research projects which are largely quantitative in nature. In the process of using this technique, a wealth of information can be uncovered which can be very significant in explaining much of the statistical data. Furthermore, while engaging in focus group discussions, researchers can learn to value the views of both sides and find a common ground for interpreting and combining results obtained through quantitative and qualitative methods.

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Chapter 21

The self-administered questionnaire

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This chapter describes the self-administered questionnaire technique and its usefulness when combined with qualitative data collection methods. It uses as a case study an investigation into a sensitive issue: sexual attitudes and practices of unmarried female adolescents (in-school and factory workers) aged 15-19 years in Bangkok - EDS.

Introduction

Currently, many sexual behavior surveys are being conducted nationwide to predict the future spread of sexually transmitted diseases and HIV infection. One of their major objectives is to determine changes in sexual lifestyles of populations at risk. However due to the sensitive nature of the subject, questions exist about the reliability of reported sexual behavior information and the interpretation and generalization of survey results. More importantly, much of the research is aiming towards making policy recommendations to respond to the AIDS epidemic. Yet the evidence is scattered and that which exists is often uncovered by social scientists who use different approaches and divergent interpretive frameworks. Thus, the need for a standard in data collection and interpretation is becoming crucial.

Attempts must also be made to address some of the key issues related to data quality, such as problems in interview techniques, inaccurate recall of past behavior or simply untruthful answers given by a small or large sample of the population being studied. There are also many problems left unsolved at present concerning the designs and interpretations of such surveys and much more research is needed on the significance of factors such as question formulation, language usage, the ordering of questionnaire content, and the sex and age of the interviewer.

This chapter provides insights into the nature of information on marital sexual attitudes and behavior of adolescents by combining the self-administered questionnaire technique with other qualitative data collection methods such as focus group sessions. Discussion will be based on research results found in a study of sexual attitudes and behavior and contraceptive use among late female adolescents (students and factory workers) in Bangkok. The study was conducted by the Institute for Population and Social Research at Mahidol University in 1992.

The Self-Administered Questionnaire Technique

While social scientists have invented various methods to collect information, two major types of research tools exist. The first is a face-to-face interaction technique that can be done on an interpersonal basis between individuals (such as scheduled interview questionnaires, in-depth interviews, informal conversations) or on a group basis like focus group sessions or group discussions. One paramount consideration with this technique is the degree to which the interview's social context and influence (researcher, group members) affect an informant's answers especially for issues that are socially or psychologically sensitive.

On the other hand, data collection can also be done in the absence of the interviewer. Procedures for this technique can include daily diaries, mailed questionnaires or other forms of self-administered record keeping. Through these methods, the informants administer the questionnaire form themselves, at their own convenience, and maintaining an optimal level of personal privacy. The principle is to reduce the affects of interpersonal interaction (subject-researcher) so that informants feel freer to express their opinions. Since privacy and anonymity are highly maintained, this technique is especially useful when confidentiality and other ethical concerns surrounding the use of human subjects are of paramount importance.

The researcher can use the self-administered questionnaire technique to study several issues such as public opinions on political issues, business management practices within companies or other organizations, or for investigations into sexual perceptions and behaviors. The procedures for applying this technique, though, require carefully planned research designs containing many of the significant points.

Questionnaire Format and Content

To develop a self-administered questionnaire for a study on adolescent sexual behavior, four key points should be considered: a) types/characteristics of questions, b) question sequencing, c) use of instructions, and d) questionnaire length.

Types/Characteristics of Questions

Due to the sensitivity of the subject, questionnaires investigating sexual attitudes and practices must pay close attention to the types/characteristics of the questions being asked. Researchers may need both background and structured questions to assess the interaction between knowledge, attitudes and behavior. Background questions may include informative questions such as knowledge of the reproductive system, contraception, and health problems related to sexual practices. Structured questions, however, may concentrate on personal perceptions about sexuality and sexual behavior.

Close-ended questions may work more efficiently when compared with open-ended questions in the sense that respondents may not want to spend too much time in completing the questionnaire. The 'yes/no' statement format as well as questions with multiple choices can be the most efficient. However, some limitations also exist. Researchers must make sure that all questions convey the intended meaning and use terms that are understandable to the respondents as well as researchers. For example, the reliability of a self-administered questionnaire into sexual behavior may be limited by respondents' understanding of the terms promiscuity, masturbation or even sex education. Promiscuity, in particular, can have different meanings for different people. Some may interpret it only as elicit sexual practices associated

with married persons, while others in the same sample population may simply equate it with frequent sexual intercourse with a number of partners without regard to marital status.

Question Sequencing

Generally, a scheduled interview questionnaire begins with easily understood informative questions to ease the respondents into the questionnaire setting. This serves also as a method for helping to structure and focus subsequent questions. This rule can be applied to all types of research studies but not always in the case of a study on sexuality where respondents have a tendency to react well to questions concerning their peers or people who they know, but they become reluctant when similar questions are introduced to them personally. For example, the following questions were used to collect information about the sexual activities of female adolescents.

1) Do you have friends who have had sexual relationships? If yes, are they your
   a) school mates/factory mates
   b) friends outside school/factory
   c) both

2) Do you have friends who are currently using a contraceptive? If yes, are they your
   a) male friends
   b) female friends
   c) both

3) Do you have friend(s) who have had an abortion?
   a) yes
   b) no

4) You probably know some friends that have boyfriends. Would you say that you have a boyfriend?
   a) yes
   b) no

5) How long have you known him?

6) How did you get to know him?

7) Is he your first boyfriend?

8) What makes you like him the most?

9) Have you and your boyfriend ever talked about sex?

10) Do you think you may have a sexual relationship with him?

11) Have you ever had a sexual relationship with him? If yes, did you use any method of birth control?

12) How frequently do you have sex with him?

These twelve questions are structured in a kind of funneling format in that they go from a broad questions about the respondent's social environment on down to her personal practices. Respondents commonly show high rates of participation for questions 1-8, but problems occur in their answering questions 9-12. Some questions are left blank and some respondents change their minds by rechecking the answers to identify themselves as having no boyfriends. Ways to control for this are discussed later in this chapter, but in short the researcher needs to check the questionnaire as soon as possible after the informant fills it out to see if it is complete. If not, they may need to administer the same questionnaire or an equivalent one in order to get a completed questionnaire.

Use of Instructions

A self-administered questionnaire should be designed to be a self-explanatory medium to help informants use it as a pathway to reflect their opinions on subjects. However, this concept does not always work very well since the quality of the respondents varies. Researchers therefore should have instructions for every sub-item on the questionnaire to help respondents follow the questionnaire correctly. Clear and simple explanations are necessary to help the respondent to fill out the questionnaire efficiently. Instructions furthermore should be used in the same fashion throughout the questionnaire and designed in accordance with the question format. For example, the researcher can choose either:

"Please circle the answer that you choose" or
"Please put an X beside your answer."

The researcher should indicate or emphasize is specific requirements are necessary. For instance,

"Please choose only one answer" or
"Please choose as many answers as you feel are correct" or
"Please answer every statement."

Apart from written instructions, the researcher may give the respondents verbal instructions if many respondents are filling out the questionnaire in the same room. This is to confirm that all respondents understand every item on the questionnaire correctly.

Questionnaire Length

There is no definite rule about how long a questionnaire should be. But the researcher should realize that respondents will become impatient with lengthy questionnaires, especially if the questions are about sexual attitudes and behavior and the respondents feel that these are personal matters. The self-administered questionnaire technique requires good concentration because respondents must read and think at the same time. A lengthy questionnaire exhausts respondents, and they may give up or state their opinions incorrectly in order to get the questionnaire over with as soon as possible. To help avoid this problem, the researcher should pretest the questionnaire to determine the optimum time for an actual interview.

Screening the Samples

Since respondents administer the questionnaire in the absence of an interviewer, or at least without the interviewer's active participation, the researcher should be aware of the quality of the respondents. Self-administered questionnaires, for example, may not be suitable for persons with a low level of education, and obviously for illiterate respondents. Level of education often has a strong effect on interpreting questions as well as an ability in writing answers to open-ended questions. If there is no other alternative, the researcher may make the questions simple and short and avoid open-ended questions.

Settings

An appropriate setting is the most important factor in maintaining informant participation and helping them to complete the questionnaire in a relaxed atmosphere. One of the most common difficulties during fieldwork, regardless of the methods used, is how to isolate respondents from their actual settings (such as during working hours at the workplace, in school or within a household sphere). The basic element in the self-administered questionnaire technique is to offer the respondents as much privacy as possible. For instance, if the questionnaire is administered at school to students, the best way to conduct a session is to have the selected students complete the questionnaire individually but in a group setting. A small group with 5-10 respondents is preferable, but it does not necessarily have to be fixed at this amount. It simply depends on whether or not a suitable place is available for administering the questionnaire. Respondents should be seated separately especially if questions deal with personal issues so respondents feel free to work on their own and in at least a minimal amount of privacy. They should not, however, be allowed to consult with each other. Big groups may cause some problems due to the content of questions, especially ones about sexual perceptions and practices. Young respondents might giggle and disturb others when specific questions on sexual attitudes are asked. The result then becomes an uncontrolled group.

The composition of group members is also important. Respondents should have similar backgrounds such as age and sex. Self-confidence and privacy will thus be maintained. Further, in most cases the researcher (or instructor) is not visible to the respondents while they are answering the questionnaire, so respondents feel freer to answer the questions. However, they may be needed if respondents have a limited capability in writing and reading, or if respondents need help to understand certain questions. This is especially the case for groups such as factory workers who have generally six years of education or less.

Precautions in Using the Self-Administered Questionnaire Technique

In using a self-administered questionnaire, several considerations that have to do with self-reporting methods must be kept in mind (see the chapter on time allocation in this book). Moreover, in exploring sexual attitudes and practices, the researcher must keep in mind six areas that represent the technique's strengths and weaknesses. Firstly, a strategy may be needed to maintain a high rate of response where sensitive topics are concerned. This may involve providing firm verbal and written assurance to respondents that all answers and questionnaires will be kept strictly confidential. This can be further substantiated by using a numerical coding system for questionnaire identification and not respondent names. This

strategy can then also be explained to the respondents in order to assure them that they will remain anonymous and their answers cannot be traced to them personally.

Second, avoidance of a face-to-face interaction and reducing interpersonal contact is necessary for answers to be as reliable and valid as possible. As noted above, this can be promoted through designing a setting (such as the seating pattern in a classroom) that fosters privacy. This also helps to maintain confidentiality and allows respondents to feel freer to share their opinions.

Open-ended questions can be used but on a limited basis. If respondents are asked to answer many such questions, they may begin to doubt whether or not they can be identified through their answers. Moreover, open-ended questions have a tendency to be interpreted in several different ways, thus they must be designed as simply and straightforwardly as possible.

Threats also exist in terms of validity through under- or over-reporting. Researchers must be careful to check questionnaires thoroughly as soon as possible after they are completed. Moreover, incomplete questionnaire rates may be due to unclear questions, a complicated questionnaire format or a general looseness with which the researcher explains the questionnaire to respondents, thus making them doubt about its seriousness.

Integrating the Self-Administered Questionnaire Technique with Qualitative Methods

Due to some of the inherent weaknesses with the self-administered questionnaire technique, the researcher should if possible integrate it with other qualitative techniques when collecting information. A researcher may begin with a survey using a self-administered questionnaire followed by one or two qualitative methods such as a focus group discussion for questions dealing with social issues, in-depth interviews to get more individually-centered data, or a narrative technique. All of these can shed light on unclear points found in the quantitative data or within the answers to open-ended questions. In the adolescent sexual behavior study, for example, when respondents were asked about perceptions on such practices as masturbation, they found it hard to imagine what this was, thus they often skipped the question or provided vague explanations.

Low rates of response can also be characteristic of open-ended questions for two possible reasons: either questions are not comprehensible or respondents found it hard to express their opinions. For instance, adolescent respondents in the study were asked about their opinions towards a man's responsibility in a premarital sexual relationship. Answers to this open-ended question were extremely limited, while during focus group sessions a wide range of feedback answers arose.

To combine a self-administered questionnaire with qualitative data collection methods some significant procedures should be undertaken.

When to Use: Before or After a Survey

A researcher can begin her study with a survey and identify from it some significant patterns that should be investigated through more in-depth qualitative methods. Other researchers, though, prefer to formulate their research views by inducing evidence from a small sample size for further elaboration. For example, data from the adolescent sexual behavior project indicated that 3% of female adolescents in Bangkok (students and factory workers aged 15-19 years) had premarital sexual relationships, while 92% of the total population disapproved

of this practice. As a result, the researcher may have some doubts about the interrelationship between attitudes and actual practices and may wish to uncover deeper explanations.

Another example in support of the use of combining these methods to explore adolescent sexual perceptions and practices is the association between the number of adolescents who have boyfriends, those who have had sexual relationships, and those who have had friends who had sexual relationships with their boyfriends. Data from the survey revealed that 40% of the respondents stated that they currently have boyfriends but were not having sexual relationships. Overall and among girls with and without boyfriends, 50% said that they knew or had friends who were sexually active. A similar issue was raised again during the focus group session. The group members, and particularly factory workers, stated that it is a common thing among them to have boyfriends. The following excerpts reflect the dynamics and rationale for behavior patterns that could not be found within the survey data.

> *We look forward to Sunday. Sunday is a very special day for us. We go out, eat, drink and keep in a group.*
>
> *We need someone to go with. If you go out alone, it is too bad.*
>
> *We go in a group, only girls, and we meet them (boys) in the shopping center, public park or discotheque. That is they way we have boyfriends.*
>
> *Young people like to make friends because we do not want to stick with someone forever.*

Whether to Use the Same Study Population

To solve this problem, the researcher may have two alternatives: use either the actual respondents selected for a survey or recruit a new sample from the same sampling frame. The latter alternative is based on an attempt to elaborate views discovered from the quantitative data and make generalizations, while the former alternative confirms information validity within a selected population under study. The choice will depend on the nature of the study and its objectives.

Ethical Considerations

A self-administered questionnaire has as its main benefit the lack of face-to-face communication which can easily take the form of confrontation in the eyes of the respondent. Where sensitive topics and questions are involved, self-administered questionnaires reduce the embarrassment that might arise in the question and answer process. Researchers may use either a complete self-administered questionnaire method or a semi-complete one depending on how the researcher wishes to maintain a level of privacy. In the semi-complete strategy, the researcher tries to reduce the number of incomplete questionnaires where respondents may skip or leave questions answered. The researcher can check through the questionnaire and request respondents to reconsider all unanswered questions. In this way, the researcher should make sure there is a consensus between the respondents and the person overseeing the questionnaire's administration. Respondents, moreover, should be allowed to refuse to participate if they wish.

In principal, the researcher must accept in whatever way the questionnaire is completed when they use the self-administered questionnaire technique. Confidentiality and freedom of expression have to be maintained, and respondents have the full right to respond to all questions in whatever manner they desire, even if this entails ultimately leaving some answers blank. As noted earlier, one way to avoid this problem is to assure respondents of their anonymity, and stressing the fact that they cannot be identified through their answers or the questionnaire itself. Respondents may also refuse to give information on their personal background (e.g., age, education, occupation, etc.) and this should be clarified for consent before administering the questionnaire.

Conclusion

In conclusion, the self-administered questionnaire method has a number of benefits and precautions, but it is very suitable for studies exploring sensitive issues such as sexual behaviors and practices. It is best used in combination with qualitative methods in order to provide deeper meaning or explanations into specific practices as well as to give a means to cross-check self-reported data against information collected by other means.

Chapter 22

The time allocation approach for qualitative research

Amara Soonthorndhada

To gather reliable and valid data on how people spend their time in the ordinary course of their lives, many social scientists are relying on the time allocation approach. Time allocation data are important for comparing patterns of human behavior across diverse settings. They are also valuable means for describing people's behavior in their full range of activities. Incorporated during the planning stages, the time allocation approach can provide a wide range of information for project development. Integrated into project implementation, it can help monitor changes as they occur (Johnson 1990).

Introduction

The time allocation technique has recently been recognized as one valuable social research method that can be used to understand the effect of time on human behavior, as well as document what behaviors transcend certain important time periods. Data from time allocation studies have been used to evaluate changes in a population's social well-being. During the early twentieth century, this technique was introduced more among sociological studies than in other disciplines. Nonetheless, scholars from such fields as economics, urban planning, and geography have used time allocation data to understand the significant relationship between time-use and time budgeting to identify and explain changes in social life and demographics. Their works emphasized the use of time within work organizations, labor demand, leisure activities, and other areas.

Theoretical Considerations

The significance of time-use as a concept can be accredited to studies by Engles beginning in 1845. In his work, Engles felt that changes in family structures, ways of life, living standards and labor force participation were all due to the power of productivity where time use and allocation played an important role.

Following this perspective, Becker (1965) postulated that the relationship between time and productivity could be measured in terms of monetary compensation. He emphasized that time as a significant indicator can determine changes in human behavior. Based on this

assumption, Becker explained that since families are the basic units of production and consumption, their members estimate their capacities in terms of these two concepts. They consider the differences between expended capital and perceived or actual benefits as paramount, and time-use and time budgeting act as determinants to direct people's ways of thinking and behaving along more economic lines.

Time-use and time budget can also explain demographic changes. Studies by Mueller (1982) have shown the relationship between time-use and decisions about fertility regulation. In her conceptual framework, Mueller demonstrated the interrelationship between education, household demographic characteristics and household economic status as they impacted on and were shaped by the time-use patterns of women and other household members. These in turn regulated the woman's fertility decision-making.

From Mueller's conceptual framework, she concluded that women with their dual roles as mothers and 'breadwinners' can manipulate their time efficiently under limited conditions. Women, though, must make crucial decisions about how to fulfill these roles. Considering her two roles, a woman's fertility decision-making can be affected, since time spent in productive activities has been shown to be associated with the economic value of children and family size in several societies. Many other studies have also used the time allocation technique to point out status, role and fertility regulating behaviors in relation to the process of household production and economic development (Acharya 1982; Becker 1965; Boulier 1976; Da Vanzo 1978; Jayme 1976; Leibowitz 1972; Mueller 1976; Tomada 1985).

In anthropology, accounts of time-use patterns were common parts of early ethnographic monographs. However, these rested largely on descriptions of what people did in a typical day or in terms of seasonal agricultural practices. Later on, other anthropologists who worked in Latin America especially began to take detailed time-use estimates of the time a household or family spent in food production and manufacture. These were used for economic analyses as well as to uncover changes in labor investment between different types of horticultural technologies (Johnson 1990).

Apart from these economic and technological applications, time allocation data have also been collected by anthropologists to look at child development and socialization. Here researchers have charted the amounts of time that caretakers of various kinds (e.g., mother, father, sibling, babysitter, etc.) spent with children, and in describing the different ways the children spent their time (Johnson 1990). One study by Whiting and Edwards (1974) showed that differences in the tasks assigned to different children affected their social behavior. For example, boys assigned greater amounts of time for child caretaking duties became less aggressive in play than other boys.

These studies, among many others, highlight the importance of time allocation. Whenever patterns of time-use are relevant - such as in estimating how hard people work (for health and nutrition studies), how activity patterns change (or do not change) following an intervention, or how time-use affects family size and fertility considerations - time allocation research should be built into a project's design.

Time Research Methodology

Three approaches can be used to collect time allocation data: self-recording, subject interviewing and direct observation.

Self-Recording

This approach requires individuals to keep track of their time (time budgets) using one of two techniques. First, *global self-reporting* is where the subject is asked only once to describe how he/she spends their time. This technique, which was common among early anthropological works, sought to describe the overall pattern of time allocation. Subjects are asked to estimate how many hours per week they devote to certain activities which are listed on a checklist. Alternatively, they may be asked what percentage of their time they spent on each activity over a week or a month.

This technique has several pitfalls, and many are common to the self-reporting method as discussed below. The most important one, though, is accuracy because it is very difficult for a subject to accurately assess his/her time use over a week. Global self-reporting becomes even more problematical as the time being investigated lengthens (from a week to a month to even an agricultural season). Variations in time use which may be affected by important personal, family or community events may also be missed.

A slight improvement over the global recall technique is the use of *informant diaries*. This technique requires individuals to keep time budgets by filling in a record-keeping diary throughout a certain period of time (24 hours, weekly, monthly, etc.). The items found within the diary correspond to the study's objectives and variables under investigation. Data reliability using informant diaries can be either high or low, but it is generally a function of how interested the subject is in the research project and in keeping the diary. Oftentimes, data reliability is higher if the diary keeping is kept to the shortest time period possible. For instance, subjects might readily (and sometimes eagerly) fill in a diary over the course of a week, but after a month they might become bored and start to stop entering information accurately.

The self-reporting approach, using either of these two techniques, can elicit collective data on the time-use patterns of household members or on an individual basis. Subjects therefore can be either the heads of households or individual family members whichever best suits a particular study.

Some researchers prefer the self-reporting approach because the informant becomes an observer of his/her own behavior. For projects aimed at behavioral change, this can have positive benefits, since the subject will more readily see and identify when he/she undertakes inappropriate behaviors. They may also more readily recognize alternative, appropriate behaviors that can be substituted for improper ones. Thus, the self-reporting approach is a good tool for raising self-awareness. Moreover, self-reporting avoids many sensitive ethical issues, because the subject decides which behaviors he/she will record and which to hide. Self-reporting is also time- and cost-effective if the number of subjects is low, since subjects themselves do the work of observation and recording, while the researcher is left with data analysis, interpretation and reporting.

The self-reporting method, though, has several limitations such as data completeness. Subjects may intentionally or unintentionally leave out important information. Data reliability rests on this, as well as on heavy on-going participation and encouragement by the researcher to maintain high response rates. Researchers also must pay close attention to the characteristics of the population under study so that activity categories are meaningful. In large-scale projects involving thousands of samples, moreover, expenses for distributing forms and other costs can be high.

For diary keeping especially, difficulties can often arise in terms of response classification. Researchers will find all kinds of unstructured verbal descriptions of activities recorded in the diaries. It then becomes a hard job to group data on the basis of keywords, since the respondents are free to fill up the diaries as they see fit. The researcher then needs

to construct his/her own qualitative data filing system in order to sort, organize and classify data under common, meaningful categories (see Yoddumnern-Attig, this volume).

The most major problem with self-reporting stems from the reliability and validity of data. In general, there is often a low correlation between what subjects record about their behaviors and what other researchers actually observe them doing. Bernard et al. (1984), for instance, discovered that in virtually all cases where self-reported and researcher-reported data were collected simultaneously, subject self-reports were weakly correlated, if at all, with direct observations by scientific researchers. This is largely because people remember their own behavior selectively and record that which they feel is appropriate or significant. Moreover, the closer in time the informant is to the actual behavior being described, the more accurate is the description (Johnson 1990).

These problems can be resolved in one of two ways, or both. First, the researcher can conduct a preliminary ethnographic study in the community. This helps the researcher to identify which subjects may be more accurate in recording their behaviors (based for example on interest in the study) as well as identifying areas in which subjects might not be adequate reporters. Second, the researcher should complement his/her time allocation data with data obtained through other qualitative or quantitative techniques. For instance, Deere and de Leal (1979) conducted a study of women's labor in the agricultural sector. When they asked women to globally report their labor activities, the women virtually ignored agricultural labor. This was surprising, since previous observations had shown that women were indeed part of the agricultural labor force. The researchers then developed a questionnaire centering on who performed what activities in each agricultural plot in the sample, which then gave good evidence of the real extent of women's agricultural labor activities.

Interviewing

A definite improvement over self-reporting is the interview approach, especially since time-use data can be collected both qualitatively and quantitatively and then combined to give a clearer picture. For instance, national labor force surveys quantify a mountain of data and categorize it in terms of the number of population subgroups in different labor sectors. This gives a good picture of the magnitude of the labor force, but not on the time-use patterns of specific subgroups, nor what other informal, but equally important, activities may also play a role in individual and family production patterns.

The interviewing method assumes that people have great difficulty in reporting their global activity patterns, but asking people what they have done during a specified period of time (especially over the last 24-hour period) gives more reliable data. People can generally remember what they have done the previous day, because they associate it with main event categories (bedtimes, mealtimes, morning work activities, afternoon work activities, etc.). For example, one of the indirect, behavioral methods community nutritionists use to estimate a person's nutritional status is through the 24-hour dietary recall method where subjects are asked to list all of the foods they had eaten over the last 24-hours and their approximate quantities (roughly estimated by spoonfuls or cupfuls).

Once again, this method has some of the same drawbacks as the self-reporting method. Subjects may distort their responses by selectively remembering certain activities, while forgetting or intentionally not reporting others. Certain activities, moreover, may be over- or under-estimated depending on their nature (if they are 'culturally' acceptable, for example) and how the respondent wants to appear to the researcher.

This approach, though, gives a much higher participation rate than the diary approach. Because it is interactive, the researcher can subtly probe, using a checklist as a guide, certain

behaviors that may be easily forgotten. Data can also be cross-checked between subjects, especially when time-use patterns are being investigated between several different members of the same family. Lastly, the researcher's own familiarity with the community also helps to indicate areas that might need investigation during interviews.

The interview method, therefore, is one of the most widely practiced time allocation techniques and produces very reliable data (Johnson 1990). It is most successful when subjects know and trust the researcher.

Direct Observation

Anthropologists in particular have found this method quite useful and workable. They often observe a few typical individuals and record the sequence and duration of their activities over a set period of time (such as 6:00 a.m. to 6:00 p.m.). They do this unobtrusively so that subjects behave as normally as possible. This is sometimes called the *following the subject* method or the *consecutive direct observation* method. Data is used to generate a description of human behavior surrounding a particular issue. This method is difficult since it is very time- and cost-intensive to follow only a few people around. It also has problems in the representativeness of data, since only a few subjects are involved. But it is an acceptable initial technique for developing hypotheses and time allocation tools (guidelines) to be used on a wider scale. Other than this method, direct observation can also be done in three other ways.

The *random spot check* method is one solution to the representativeness problem. In this method, the researcher samples behavior over time by making periodic spot checks of the behavior of many people (Erasmus 1955; Johnson 1975). The spot check technique uses a random pattern of visits or 'checks' to determine what the members of the study are doing at a given time. By randomizing the observations by person and time, a representative sample, based on hundreds or thousands of brief observations, allows a statistically accurate picture to arise about the time-use patterns in a community (Johnson 1990:146). By using this method, researchers do not have to continuously spend time observing, but their observations are made more consistently and systematically.

The main drawbacks to the random spot check method are three-fold. The randomization process in itself is very time consuming if a large number of samples is needed. Hence, the method is best used at a community level or lower. Second, the method requires unannounced visits which may not be culturally acceptable. The researcher, moreover, may unintentionally disturb the subject's behavior patterns thus distorting the data. Lastly, spot checks are usually only done during the daytime hours, and thus evening activities may be missed.

Nonetheless, systematic time allocation data obtained from randomized schedules can be a good check against a researcher's casual observations of behavior patterns and against subject's descriptions of their customary time-use (either via self-reporting or interviewing). In recent years, it has become the main technique in cross-cultural behavioral studies (Gross et al. 1979; Tripp 1982; Johnson 1990).

The *household visit observation* method to an extent combines the consecutive direct observation method and the spot check method. Here, researchers set a time for regular home visits such as every fourth night or every third week of the month for the study. Visits are made at a fixed time and throughout a set time period. Household visits are scheduled so that researchers can simultaneously move from house to house over a month or season. For example, the researcher goes to house A on Monday, house B on Tuesday, house C on

Wednesday, back to house A on Thursday, house B on Friday, etc.

While the visits are standardized in terms of timing (what time of the day the researcher arrives), they can be either standardized or randomized in terms of when the visit occurs. In other words, the researcher can agree to go to house A every Monday (a standardized method) or every fourth day (a randomized method). In this case, the randomized method is close to the spot check method, since different activities will be looked at on different days.

Similarly, the *seasonal observation* method investigates time-use pattern differentials by seasonal variations. The aim is to describe how people use their time differently depending upon the season involved (for example, the planting versus growing versus harvesting seasons). The method is structured quite similar to the household observation method, except that a series of observations are usually conducted for each of the seasons being studied. Hence, this method is used for more long-term studies.

Research Tools

Four research tools need to be developed depending on the type and purpose of each method: pre-coded questionnaire, interview guides, diaries, and special forms for direct observation. Pre-coded questionnaires contain questions on the specific activities each household member performs during a specified time (day, month, year, season). Interviewers fill in answers to the questions during actual interviews. For example,

1. Time spent in child care in last 24 hours

Mother _____ hrs.

Father _____ hrs.

etc.

This type of data collection is usually used for surveys. To compare results of one study with another, this tool requires that a code book be developed containing information on how particular behaviors were recorded, classified and coded.

If in-depth interviews are used, then qualitative interview guidelines are constructed along the same content lines as pre-coded questionnaires. Information on the exact time spent doing certain activities is obtained, but these guidelines also allow the interviewer greater freedom to probe for behaviors the subject may have been forgotten or hidden. They also allow the interviewer to explore the context around which an activity took place and note important information (see Soonthorndhada and Isarabhakdi, this volume).

For diaries, a form is designed for self-recording and also for the interviewers. It contains specified individual time periods (such as 6:00-9:00 a.m.; 9:00-11:00 a.m.) with space available for subjects to fill in what activities they did during each set time period. Instructions for filling in the forms need to be written clearly and simply, and the researcher needs to explain the form and its instruction to each subject.

Forms for direct observation follow a similar pattern as for self-recording. The first column on the recording page, for instance, contains spaces for household members names, next to it is a space for stating what activity occurred, and then a space for indicating what time period was observed.

Data Analysis Procedures

Data analysis can be done in two ways: quantitatively and qualitatively. The quantitative method is based on a statistical analysis, and the significance of correlation can be demonstrated within the conceptual framework set for the analysis. The researcher chooses either a direct or indirect relationship to identify the significance of research variables. For instance, a study investigating the direct relationship between demographic and socio-economic variables and time use may have as its independent variables: household income, children aged under 5; mother's income and age of mothers. The dependent variables would be maternal time spent on childrearing, domestic work, leisure and economic activities. A research project investigating the indirect relationship between time-use patterns and fertility, on the other hand, might control for such variables as age of mother, maternal education, children aged under 5 and household income. The dependent variable would be fertility decision-making, while the independent variables would be time spent of activities outside the home, childrearing, leisure and development activities.

Qualitative analysis involves in-depth data analysis. Data drawn from a small number of samples are digested descriptively to show the relationships between individual factors affecting time-use and time budget that lead to changes in human behavior (Soonthorndhada et al. 1987).

Conclusion

The time allocation technique as a research method is attracting the ever increasing attention of social scientists. Descriptions of time-use patterns can be useful for a wide range of studies, and they are often invaluable complements to data collected on economic behavior, household structure, fertility, socio-economic status, health care seeking, etc. Presently, there are several different approaches and techniques that can be used to collect time-use data, and each has its particular strengths and weaknesses. The most crucial considerations, however, are reliability and representativeness so that data can be adequately generalized to the population under study.

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Chapter 23

Time and motion studies

Kusol Soonthorndhada

While time allocation studies examine how people spend their time during their everyday lives, time and motion studies look at whether or not this time is being used effectively and efficiently. Time and motion data are thus important for improving individual and organizational performance such as in the provision of health and family planning services - EDS.

Introduction

Many decades ago, Frederick W. Taylor (1856-1951), a mechanical engineer and an early pioneer in time and motion studies, used this approach to reduce worker fatigue and improve their efficiency and output. A time and motion study involves identifying and measuring a worker's physical movements when performing a specified task. The results are then analyzed, and movements that slow down production are eliminated. Taylor believed that increased productivity (in terms of both time and costs) depends on finding ways to make workers more efficient and enabling them to carry out their work more quickly. Eliminating a worker's wasted physical effort and specifying an exact sequence of more efficient activities minimizes the amount of time, money and energy needed to produce a product. Taylor's principles established a scientific management scheme that provided a rational approach to examining work-related problems. Both the emphasis on job specification, as seen in modern-day assembly lines, and the time and motion study are the foundation for work efficiency improvement (Taylor 1947).

In recent years, time and motion studies have been used in anthropology, health economics and other social science areas. This technique uses *consecutive direct observation* as described in the previous chapter on time allocation approaches. The evaluator or researcher directly observes a program of operations or activities at every point in time. He/she then records the time that it takes each individual to perform each task or service being provided.

For example, to estimate the labor inputs used in providing contraceptive methods, observers would be stationed at clinics providing such services. They would then be responsible for determining the time inputs or 'clocking' for each activity, such as finding the out-patient card, conducting physical and pelvic examinations, prescribing drugs, completing forms, etc. The amount of time each of the various service providers spends on each of these activities is recorded. The patient is the unit of observation and the observer follows the patient throughout the visit, being careful not to interfere with the clinic's functions. A stop-watch is used to clock the various activities that occur in the clinic from the moment that a

potential acceptor enters the facility until she leaves. If some activities are carried out after the patient leaves, such as additional record-keeping, then these activities should also be recorded.

In a hospital setting, many health services may be integrated into the same unit; family planning may be provided together with maternal and child health for example. In some hospitals, most methods of family planning (such as the pill, injectables, IUDs and Norplant) are provided in the family planning unit while male and female sterilization are provided in the surgical section. One function of a time and motion study in this case might be to determine whether or not certain activities that appear to be compatible can actually be integrated into one or another section without losing efficiency in terms of either time, costs, workload or the quality of the services being provided.

To observe hospital service delivery procedures, special forms will be drafted in order to record all information regarding acceptor, follow-up and removal visits which list all activities seen in the units involved in contraceptive provision. To estimate the time used and the time cost for each family planning method and each service provider, direct observation records the amount of time spent by each provider for each type of service.

An example of such a study would be the estimation of time used for IUD insertion, which may be provided by many different types of personnel (such as a nurse, nurse's aid, medical technician, etc.) Information on the time used for all activities in providing the IUD insertion would be collected as described above. Information on the amount of time used for each service provider could be used to improve the efficiency of providing a service by pinpointing exactly which service provider is best to provide the service, thus freeing up the other providers to perform other services for which they are most efficient. In addition, the proportion of time used for IUD insertion per total time-used for all family planning methods may also be estimated. This proportion may be used in allocating the time used and time cost of personnel in providing IUD services in comparison with other methods (Tungjareonsatien et al. 1989). The following case example brings out these points more clearly through an actual time and motion study.

Example: Incorporating Norplant into the Existing Family Planning Services in Thailand

In 1986, the National Family Planning Program (NFPP) approved the use of the contraceptive implant Norplant in order to respond to the need for a safe and long-term reversible contraceptive for Thai women. The NFPP conducted a training program for physicians on insertion and removal techniques. During 1987 to 1990, nearly 70,000 sets of Norplant were allocated to rural outlets in the country's Northern, Northeastern and Southern regions. It was anticipated that there was a substantial well of demand for Norplant among women who were hesitant to undergo sterilization and were unsatisfied with the alternative choices at that time. In order to meet this demand the NFPP proposed a program to train hospital-based nurses to insert Norplant.

Norplant is likely to be a more costly method of contraception than other methods like sterilization or the IUD which may be considered as substitutes for it. If Norplant is to be introduced widely into the NFPP of Thailand, then it should be able to expand its choices sufficiently so that contraceptive acceptance, use of more effective methods, and continuation rates increase. At the same time, the introduction of Norplant should not substantially raise costs, particularly if its introduction does significantly increase acceptance, effectiveness and continuation. A project to estimate the comparative costs of provision of Norplant, the IUD

and injectable, including a time and motion study of service personnel, was completed in 1992 (Soonthorndhada 1992).

The time and motion component of the study attempted to identify non-allocated or wasted time of any service provision, in part so that this time could be re-allocated to the provision of Norplant services. In addition, information on the costs of service provision could be linked with output statistics such as the number of acceptors or the number of births averted. In this way the efficiency of providing Norplant could be compared with other methods such as the IUD or sterilization. In order to calculate labor costs and the cost of labor time for each specific activity carried out in providing the services, information was collected on the time used by various staff members and of the cost of their time. Thus the cost of labor time for a particular activity is equal to the cost per unit of labor time times the number of units of labor used in providing that service; the summation of these is then the total labor cost of providing that method.

The study took place in district hospitals in three regions. Teams of observers were set up in order to observe the process of providing Norplant, IUD and injectable services by trained nurses. They also trained the health personnel in the participating hospital to collect information on the cost of providing Norplant, IUD, and injectable services by nurses. Information on labor inputs was collected by consecutive direct observation. The different methods required different types of visits, since IUD and Norplant services included an insertion visit, various follow-up visits and eventually removal, while injectable services included only initial visits and follow-up visits.

For observation of service delivery at the hospitals, forms were designed to record the amount of time used by each of the various service providers for each activity; one form was designed for new acceptor visits and the other for follow-up and removal visits. These forms listed all the activities seen in the hospital which involved service provision, and included space for listing the time spent in providing each type of activity and the title of the service provider. These forms were initially designed by observing visits of new Norplant acceptors, follow-up visits and removals; they were pre-tested in selected sample hospitals and revised before being finalized for use.

As described above, a stop-watch was used to clock all activities of service delivery, both during the patient visit and afterward. In some hospitals, the observer followed the patient throughout the visit; in others the patient carried the form with her and the service delivery personnel recorded the activity times. Waiting time (the difference between the time leaving an activity section and the time entering a new section) was not taken into account.

The study also collected information on all personnel costs including salary, fringe benefits, normal working times etc. in order to calculate the total cost of time used. Costs of other inputs such as supplies and of the training program for service personnel were also included (see Soonthorndhada 1992 for details). In this way costs directly related to Norplant service delivery compared with other choices of semi-permanent contraceptive methods could be calculated. The average labor costs for one Norplant acceptor are then the average cost of time used to provide service at an initial visit, plus the average service costs of a follow-up visits multiplied by the expected number of follow-up visits over the time period during which the method is used, plus the average cost of services for a removal visit.

The study found that the average time used and the time cost for providing injectables was the smallest, followed by the IUD and finally Norplant. Comparing IUD and Norplant insertion, the average time used and the time cost of each activity in providing Norplant were almost always higher than that for IUD insertion; exceptions were health education, the Pap-smear test, the pelvic exam and writing the drug order. While time used in other activities for the IUD was less than Norplant, particularly for the insertion, this may have been due to the greater skill and experience of the personnel with IUD insertion. Similarly the average time

use and time cost of providing Norplant follow-up services were almost always the highest for every activity, particularly for preparing equipment and recording forms. Time use for initial activities of providing the injectable was quite high, but the average time cost was rather low. However, the average time used and time cost of follow-up services for each method varied depending on the activity. For removal, Norplant costs were again higher than those for the IUD. It is possible that the amount of skill for Norplant service delivery were still low at the time of the study, adding to higher costs in the short run; in the long run, as skills and experience increase labor costs would decrease.

Conclusion

Time and motion studies observe four elements: the actors, time, the process and the place. In the example described here patients were the actors, whether they came to the clinic for initial acceptance of the method, follow-up or removal; time was the time that each provider took in performing the service; the process was the activities that make up service provision; and the place was the selected district hospital. In this case the main purpose of collecting time use data was to estimate comparative costs for different contraceptive methods. Care was taken to design a full list of the activities involved in service provision so that differences in time by activity could be compared. The study concluded that Norplant service provision was the most expensive of the methods studied; but the results suggested that inexperience with the new method was the main factor increasing its cost. A follow-up study could measure whether this was indeed the main factor, meaning that costs of Norplant services decreased; or whether other aspects of service provision could be made more efficient.

Time and motion studies may be used for other purposes besides cost estimation. For example, you may be interested in how men and women perform different household tasks, comparing their efficiency and effectiveness. Agricultural economists may collect time use data when new farming techniques are introduced, and then compare how skills have improved a year later. It is crucial that data on time use is collected in sufficient detail for comparative purposes, particularly when the primary objective is to measure costs or efficiency.

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Chapter 24

Rapid assessment procedures for qualitative research

Yongyout Kachondham

This chapter presents a relatively new approach for qualitative studies: Rapid Assessment Procedures (RAP). This approach uses several different qualitative methods either singularly or in conjunction with quantitative data to gain a rapid understanding of household and community health and nutrition problems in order to design effective action programs - EDS.

Introduction

Primary health care (PHC), as promulgated in the Alma-Ata Declaration, is the most important foundation upon which virtually every Asian nation has built its health care system. PHC is defined as essential health care made accessible to individuals and families in the community by means acceptable to them, through their full participation, and at a cost that the community and country can afford." Its original core elements included education concerning prevailing health problems and the methods of identifying, preventing, and controlling them; promotion of food supply and proper nutrition, an adequate supply of safe water, and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic disease; appropriate treatment of common diseases and injuries; promotion of mental health and provision of essential drugs. Most recommendations relate to nutritional improvement and emphasize health promotion and disease prevention rather than the curative services that are the major concern of national health care delivery systems (Scrimshaw and Hurtado 1987:2). The PHC concept is also built upon understanding individual, family and community circumstances in a holistic perspective, and using these as a means to improve health and nutrition by empowering people to make wise choices and take practical actions within their capabilities.

To be successful, PHC programs require intimate, in-depth knowledge of the local context. This is complicated by the fact that health is often taken for granted and is one of people's lowest priorities compared to their economic desires. Second, because health is such a multi-faceted arena, presently no single body of knowledge nor discipline can provide the sole direction and means to explain and deal with it. No firm formulas can satisfy the ecological, cultural, economic, political and social diversities that characterize each region of a country. A growing body of health knowledge and technologies may exist, but interventions to ensure correct health practices by communities and households are far from clear and

usually confined within disciplinary boundaries.

To cope with this ever-increasing challenge, we must carefully assess and address the numerous complex linkages among the many factors affecting health and especially from a people's, rather than a health professional's, perspective. To formulate strategies and design effective interventions requires comprehensive assessment and cooperation from a variety of disciplines. However, health research efforts are often fragmented and overwhelmingly deductive, that is, based on disciplinary theories that do not necessarily address the current issues facing communities and mankind. The challenge is to create and apply methodologies and institutions that are more relevant, multi-disciplinary and holistic.

The relatively new Rapid Assessment Procedures (RAP) approach calls upon qualitative research methods to respond to this challenge. Used along with quantitative methods, it is a powerful tool for assessing, analyzing and taking action to alleviate the common PHC and nutrition problems plaguing many of the world's poor and under-served people. This chapter's purpose, therefore, is to give readers an overview this method and its applications for food and nutrition problems.

Rapid Assessment Procedures

Rapid assessment procedures (RAP) are the outcome of collaboration among many individuals, mostly anthropologists and social scientists, who envisioned that practical anthropological methods and theoretical perspectives could be applied to evaluate and improve primary health care (PHC) and nutrition programs. Led by Scrimshaw and Hurtado in early the 1980s, the procedures were revised at a workshop in Geneva in 1983 and published as a monograph in 1987 (Scrimshaw and Hurtado 1987). Unlike traditional anthropological approaches which entail long periods of fieldwork and a tremendous amount of ethnographic material, RAP is a more problem-oriented and purposive approach that can be quickly employed at low cost. The RAP methodology was developed originally for the United Nations University Research Program to improve understanding of the successes and problems related to PHC services.

RAP thus represents a set of anthropological information collection techniques that provide researchers, social scientists and health workers with guidelines for assessing local conditions and needs; the knowledge, attitudes and behaviors of the community; opportunities for intervention; and the effects of different programs (Scrimshaw and Hurtado 1984). RAP is a means for community-based assessment and analysis, and not an end in itself. The main characteristics of RAP are that it is *rapid* (two to six weeks of fieldwork, depending upon project objectives); it involves *direct contact with people*; it is *focused* on a specific health or nutrition topic or problem; it is *action-oriented*; and it is *low cost* in that it requires less material and human resources than other types of research (Hurtado 1990).

RAP methods mainly entail direct observation, informal conversations, focus group sessions, key-informant interviews and limited participant-observation and survey interviewing. *The intention is to gain information from several sources in order to triangulate findings and build a logical chain of evidence concerning the nature and causes of a particular health/nutrition problem.* Data collection focuses on indigenous beliefs and perceptions regarding patterns of disease, perceived causes, health seeking behaviors, knowledge, attitudes and practices (KAP), crucial entry points for intervention, and local responses to health and nutrition programs. Conceptual issues include the structure of incentives, the complex relationship between cognition and behavior, and how people interact with traditional and biomedical health resources. While emphasis is placed on qualitative information, the value of combining quantitative and qualitative techniques is also recognized. Data analysis employs

the use of such techniques as ethnoclassifications, conceptually clustered variables, graphic representations (flow charts, diagrams, organization charts), recurrent themes and patterns (Scrimshaw and Hurtado 1987).

Exploring the structure of incentives through RAP gives researchers clues as to why people behave the way they do, for example, whether people seek well-being (pleasure) or avoid pain. Behaviors are not always consonant with cognition. On the contrary, people often act in a manner not consistent with their knowledge and beliefs (cognitive dissonance). Symbolic interactions observed between household members, between clients and health care providers, or among providers themselves may have a greater impact on the outcome of a health problem than the efficacy of the intervention employed. Information obtained in this manner from the sociocultural context can give better indications as to why programs fail or succeed.

RAP Applications and Strengths

One of RAP's key uses is to assist in the design of surveys by taking into account important lay-defined taxonomic and linguistic aspects as well as popular concepts and definitions associated with important health and nutrition issues. RAP also provides a mechanism for helping to design a program or a specific part of a program, such as in the identification of local needs and resources. RAP information has also been used to provide insights for designing and testing community education activities and materials, as well as improve the effectiveness of programs during and after implementation (Hurtado 1990).

RAP also embraces the new paradigm that rests on a world view composed of a highly interactive and rapidly changing system, including a balance and interaction between the emic (local or indigenous perspectives) and the etic (outside or expert perspectives) from the anthropological point of view. More attention is paid to the cultural, traditional and social factors involved in the target problems as well as indigenous knowledge of the beneficiary groups. The approach, therefore, is more inductive than deductive. That is, it starts out from 'facts' and looks for generalizations on which to build theory.

RAP also represents a response to a well-recognized need for improving the cost-effectiveness, timeliness and quality of field research. Specifically, it represents mechanisms for getting around resource limitations (i.e., scarcities of skilled manpower, budgets and time) and the lack of holism and other limitations characteristic of conventional quantitative methods.

As noted earlier, RAP relies on systematic methods for obtaining new information in a relatively short time using semi-structured interviews, focus group discussions and direct observation. The interviewees are not necessarily chosen randomly, but are rather key informants within communities such as monks, the elderly and other non-formal and formal leaders. These people can supply direct information more quickly than collecting the same information from a large population using a questionnaire. Priority is given to indigenous knowledge and the opinions of local people as one core basis for identifying solutions to target problems in a way that ensures better acceptability of interventions.

RAP, therefore, uses a problem-focused approach as a tool for diagnosis, evaluation and action. It compliments both cross-sectional and longitudinal studies that may show cultural and contextual biases. It also provides a more holistic picture and background upon which to place often fragmented findings. As a result, better and more plausible explanations can be obtained, not just only statistical relationships.

RAP Purposes and Case Examples

The original RAP guidelines were tested in over sixteen countries, and there were some consistencies in the findings at the study sites. Since then, RAP has been an active or implied part of many other projects in Asia, Africa and Latin America for two main analytical purposes: 1) as a *descriptive, exploratory method* for understanding community members' perceptions of health and nutrition and how these related to health service utilization; and 2) as a *complimentary, explanatory method* to investigate why certain statistical survey findings are what they are or why they appear to be incongruent with existing conditions.

To illustrate these two RAP purposes, what follows are cases from Thailand, the Philippines, Sudan and Mongolia. The first three (iron supplementation, villagers' assessment of child growth and development, diarrheal disease) are cases where studies used RAP (or a form of it, in the case of Sudan) as a descriptive, exploratory method. In the Mongolian case on protein-energy malnutrition, RAP was used along with the 1992 Mongolian Child Nutrition Survey to help identify the behavioral or environmental factors that contribute to this and other disorders such as vitamin D deficiency and acute respiratory tract infections that should be looked into in future investigations (Kachondham and Dhanamitta 1992).

Iron Supplementation

Several recent studies in Thailand have used the RAP approach including observations, in-depth interviews and focus groups to find out why pregnant women in rural Thailand would not accept iron supplementation (cf. Choprapawon et al. 1991; Yoddumnern-Attig and Kanungsukkasem 1990). What researchers often discovered was that health personnel were mostly indifferent to or unaware of the hidden worry of pregnant women that by taking iron supplements they might have bigger babies and thus difficult deliveries. This concern is a very important one and it is also associated with certain food restrictions placed on pregnant women (Sawangdee and Isarabhakdi 1988). But in this case, and due to poor communication between health providers and clients, pregnant women believed iron tablets were mechanisms for nurturing big fetus substances or vitamins rather than something that would prevent them from anemia in pregnancy.

Villager's Assessment of Child Growth and Development

A study conducted in Northeast and Northern Thailand collected in-depth interview, household census and mapping data on villagers' explanatory models about health and nutrition (Yoddumnern-Attig et al. 1992). This centered especially on community members' ideas, notions, beliefs, values and practices associated with child growth and development. One area researchers investigated entailed how villagers, themselves, assessed the normal growth and development of children and, within this cultural construct, how food and nutrition, health and illness, caretaking, and economic considerations become intertwined.

Their results showed that rural Thai community members perceive that children should be urged to become independent and responsible contributors to the family at a very early age and be prepared to cope with the real world. An extended "childhood", in a Western sense, is discouraged. Moreover, other family members are often the main child caregivers, not the mothers alone. Nonetheless, child health development programs have been planned and implemented around a professional explanatory model based on the assumption that children

under five years require constant specialized care. Specific activities and responsibilities (e.g., growth monitoring, food supplementation) were then aimed at either the mother as the primary child caregiver or the community as the larger context in which many integrated development activities were required to be undertaken.

On a conceptual level therefore, both assumptions lead to a conflict between health/nutrition educators' and community members' explanatory models, and intervention activities become tenuous at best. The authors suggest that interventions can be placed on firmer ground if the target group for child health and nutrition education shifts from the child and mother to the entire family and, by extension, any other home-based caregivers. Communication programs using positive messages as well as interpersonal programs, furthermore, need to address people's felt needs and incorporate existing beliefs as a way of introducing new health/nutrition ideas.

A study conducted in Bauko, Mountain Province, of the Philippines also highlights differences between lay and professional explanatory models for child growth and development (Kachondham and Dhanamitta 1991). In this area, in-depth interviews with and observations of mothers revealed that they view a healthy child as one that is happy, smiling, strong, active, and not frequently sick. Only after deep and intensive probing did fat and heavy babies come up. Further questioning revealed that children between 1 and 18 months begin eating family dishes rather than specially prepared food. Since they are not old enough to compete, and sometimes must be cared for by older siblings, the chance of their getting a fair share of food is questionable. Heavy babies, therefore, may be an exception and one of the reasons why weight does not figure prominently in mothers' explanatory models.

This is extremely important to know since current growth monitoring and promotion activities are built on the professional assumption that healthy babies are ones which have a certain weight for their age. Yet, mothers do not readily perceive this concept for a healthy baby in their own frame of thought, and therefore do not see its importance. Future nutrition educators must thus try to see how people think and build programs using these frames of reference and linking weight with health.

Diarrheal Diseases

Diarrheal disease may be one associated factor of micronutrient deficiencies which suppress a person's immunological system, such as vitamin A deficiency. A cultural study of diarrheal illness in Central Thailand used the Explanatory Model Interview for Classification as a RAP method. Results showed that two-thirds of community members expected oral rehydration solutions (ORS) to reduce or stop diarrhea altogether. However, for many patients troubled by copious stools, ingesting more liquids may be counter-intuitive, seeming to add to rather than alleviate the problem. Hence, community members attributed powers to ORS that it did not have, and unrealistic expectations arose (Choprapawon et al. 1991).

Over a ten-day period in the Sudan, Aubel et al. (1991:469) studied health worker attitudes and knowledge about popular terms and concepts relating to diarrhea as a means to understand health worker-community communication as well as maternal approaches for diarrheal disease management. Their in-depth interview and observation results showed that doctors and medical assistants had a limited knowledge of popular terms and diarrhea types. Most could identify four or fewer types even though most had been working in the same zone for many years. None of the providers could clearly understand the relationship between popular terminology and the community's approach to diagnosis and treatment of each type of diarrhea.

Community health workers were more knowledgeable about the popular terms and

concepts of diarrhea than were the doctors and medical assistants. Most were aware of six or seven types of diarrhea. However, like the doctors and medical assistants, their understanding of the community's concepts of cause and treatment relative to the different types of diarrhea was very limited. This may be explained by the fact that virtually all the community health workers were men. In Sudan, men have limited involvement in child health issues.

By contrast, mothers interviewed identified 12 or 13 different types of diarrhea. The mothers explained that their diagnosis formed the basis for the treatment strategy they followed. The type of diarrhea determined whether mothers used home remedies, consulted traditional healers, and/or used the official health service. Mothers' diagnosis also determined the type of treatment used at home.

Protein Energy Malnutrition (PEM)

In Mongolia, PEM's prevalence, as measured by weight-for-age (W/A) and height-for-age (H/A), indicates that approximately 12.6% of children aged 0-48 months are below normal in terms of W/A, which is comparable to the current PEM situation in Thailand. Yet, low H/A (stunting) is markedly high at 26.3% due to vitamin D deficiency. Of those who are not vitamin D deficient, 17.8% are stunted. Results also show that children aged 13-24 months represent the most vulnerable target group (H/A = 34.2%, W/A = 16.7%). The prevalence of H/A, especially, is statistically significant (P = 0.00097). Pre-school children living in *gers* (tents) have 15.1% and 33.1% low W/A and H/A compared to those living in apartments (10.0% and 19.4% respectively) (Kachondham and Dhanamitta 1992).

The main research question for the RAP investigation, therefore, was what could be the main causes of PEM among these groups. Insights into this came on the first day of a RAP study when researchers visited a group of people living in a cluster of summer houses and tents (*gers*) containing approximately 20-30 families. The families were mostly cattle breeders and privately owned their cattle and farms. Researchers were served fermented mare's milk and top milk curd (*orum*). During in-depth interviews with 4-5 mothers of preschoolers in one tent, researchers had a chance to taste *bantam*, the traditional weaning food for Mongolian infants. The *bantam* was a rather thick gruel made from wheat flour with small pieces of lean mutton and some salt. Since the mutton in *bantam* is not ground or minced, it is highly unlikely that infants aged 6 to 12 months (the time of its introduction as a supplementary food) could eat it. They thus could not gain its total nutritional benefits. Fat is also regarded as not good for children which is why they use lean meat to prepare *bantam*. Researchers also found and confirmed in later groups that children begin eating (and competing for) family dishes as early as one year.

Another related finding concerning the timing of supplementary food feeding is that birth spacing is very short, antagonized by the unavailability of contraceptives for women and a large family size. Interview data also indicated that mothers with more children tend to introduce supplementary foods earlier than those who have only one to two children.

These findings give insights into the high prevalence of undernourished children in this country that starts from 6 months up to 1 year and continues further if there is no improvement in the family daily diet. Too young to compete with older children in the family, the low caloric density of traditional supplementary foods, and periodic food shortages (also found at another tent settlement on the same RAP day) may be some key factors causing PEM and other micronutrient deficiencies (most notably those associated with a low fat diet). These topics are prime for future research, especially in terms of family food obtainment and distribution patterns and indigenous food beliefs associated with child growth and development.

RAP Limitations

In any of the above cases, such crucial in-depth information is extremely difficult, if not impossible, to obtain by conventional research using survey questionnaires, and herein lies the major strength of the RAP approach. Nonetheless though, RAP does have its limitations, however. It is inappropriate where statistical representativeness is an important issue. Bias may arise due to three different kinds of sampling errors: 1) distortions in the situations sampled for observation, 2) the time periods during which observations take place, and 3) selectivity of the people sampled. RAP also does not have a standard methodology, and information obtained from it is at best indicative of the situation in the area and as such can be very helpful in formulating working hypotheses. If generalization is an issue, however, RAP is not an adequate substitute for careful and detailed investigations.

RAP practitioners must be prepared to conduct good quality field work and produce a report in a very short time ranging from days to weeks. If practitioners use surveys which require several months to undertake, RAP's essence and objectives are lost. Thus, the technique requires high levels of expertise and are heavily dependent on full-fledged researchers of the highest professional caliber.

RAP is extremely action oriented and can stimulate communities (or higher organizational levels) to analyze problems and to assist them in planning strategies to confront these problems. Hence, it is crucial that RAP be used in conjunction with ongoing or planned action programs, not as isolated research or academic exercises. The RAP process must be seen as a means to an end, not simply an end in itself.

The final major limitation is training. To ensure the objectivity of RAP, as well as the reliability of results gained using the technique, practitioners who are well-trained, experienced and motivated are required. Researchers must focus their appraisals on key issues and avoid allocating time to superfluous ones. This requires that practitioners develop keen analytic capabilities and good intuition to determine relevant issues and, secondly, a certain sense of discipline to limit the rapid assessment to those issues. A further requirement of RAP practitioners, especially, is the ability to communicate comfortably with a wide range of potential informants. Both analytic and communication skills must be learned through appropriate training and experience. As yet, though, few training courses in RAP have been available to health and nutrition researchers in developing countries. In the field work process especially, there is also a need for continued reinforcement and guidance of RAP activities until practitioners develop the self-confidence and experience to implement their own quality control.

Standardization

Previous applications of RAP in nutrition and primary health care research have not resulted in the emergence of a standardized method, only an approach for development research. Many reasons exist for this, not the least is the fact that different development problems must be approached differently if for no other reason than no two community contexts are exactly the same. Nonetheless, the approach has responded to the difficulty of establishing research which is relevant to field conditions. Researchers have also recognized the necessity of determining community needs and constraints before designing research and action programs.

To maintain its benefits and uniqueness, RAP should continue to withstand pressures to be standardized and remain a developmental process of information acquisition which

enables diversity to grow, thus knowledge to be discovered and refined. Concurrently, it should also avoid the pitfalls of becoming an object of unrealistic expectations and a development research panacea.

Conclusion

RAP has become a very useful tool for collecting desirable information in a relatively short time. Its advantages over conventional survey procedures include the tendency to approach the problem in an organized and holistic manner which takes into account the knowledge, perceptions and beliefs of the local population. The process also allows a great deal of flexibility to meet changing needs and conditions (either those of the researcher or community). This approach also represents a specific and important step in the development planning process, and it is a valuable component of community nutrition and health programs (Cervinskas and Young 1990). RAP's importance lies in several areas, including its ability to generate an understanding of the determinants of malnutrition and ill health, community perceptions of these problems and community participation in confronting them. RAP also facilitates interdisciplinary approaches to development problems, enlightens researchers on community issues they did not previously realize or understand, and most importantly it provides new insights for researchers who normally are accustomed to discipline-oriented work and a unilineal perspective.

Note

This is a revision of a chapter entitled 'Rapid Assessment Procedures for Understanding Community Nutrition Problems' by Yongyout Kachondham and George A. Attig which previously (1992) appeared in *Integrating Food and Nutrition into Development: Thailand's Experiences and Future Visions*, edited by Pattanee Winichagoon et al., and published by the Institute of Nutrition, Mahidol University at Salaya, and the UNICEF East Asia and Pacific Regional Office, Bangkok.

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Chapter 25

Focused ethnographic study

Suphot Dendoung
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The Focused Ethnographic Study is a type of RAP procedure that seeks to uncover the social and cultural context surrounding a health problem, such as acute respiratory infections as described in this chapter, within a short period of time. It differs to an extent from the customary RAP approach, though, in terms of the methods it applies, the specific focused data it collects and the aim of the analysis - EDS.

Focused Ethnographic Study (FES): Background and Methods

The FES for acute respiratory tract infections (ARI) developed out of a need for a better approach to rapidly assess the social and cultural context of this health problem in order to develop more effective communication and detection activities, particularly for persons without extensive health or medical backgrounds. This has become crucial since ARI is a leading cause of death among young children in developing nations. The border line between ARI and upper respiratory infections, moreover, is very thin and even doctors without sophisticated instruments have difficulty in differentiating between them. Similarly, it is very difficult for mothers or other caregivers to identify ARI disorders. As a result, sometimes it is almost too late to take an infant to see a health care provider, while at other times it is too early for such visits or for the infant to begin taking antibiotics. The issue thus becomes how to teach caregivers to identify when to take a sick infant to a health facility.

The major strategy of the World Health Organization's Acute Respiratory Infection (WHO/ARI) program therefore focuses on this issue and aims at improved ARI case detection, the timely hospitalization of ARI cases, the treatment of cases using antimicrobial therapy, and the avoidance of inappropriate antibiotic use. The emphasis is on preventing death from ARI as a result of inappropriate practices by local health workers, child caregivers or volunteer health workers. To facilitate this strategy, the WHO/ARI program has charted the signs, symptoms and appropriate actions for ARI for local health workers, and it provides home care advice for caregivers. Some ARI signs and symptoms depicted in the charts and boxes include fast breathing or breathing with difficulty, the inability to drink or eat, chest in-drawing, cough, fever and convulsions.

Most ARI studies done in the past, though, applied a symptom-based medical perspective, and their emphasis was on uncovering people's knowledge, attitudes and practices about ARI. Methodologically, they predominantly used a survey research approach and

statistical analysis. The assumption was that such signs and symptoms were universally classified based on a medical model and thus could be assessed and analyzed adequately using a quantitative approach. Like many previous investigations into disease causation, however, these studies effectively isolated ARI and pneumonia from their social and cultural context under which such health problems existed and persisted. In particular, they neglected to investigate the lay cognitive system, or system of understanding, that people use to understand, classify, construct, name, explain and treat ARI or ARI-related conditions. Without such information, though, health education efforts tended to fail because they did not achieve a common point of understanding between the professional medical model and the emic, or popular, model for ARI causation.

The differences between the medical model and the popular emic perspective has been made clear by Kleinman (1988) in terms of professional and popular sectors. From his perspective, in terms of educating people or caregivers, such as in the case of pneumonia and ARI, insights into the popular sector's explanatory construct and system of understanding are very essential because it is tied closely to the people's way of life both in terms of how the disease is detected and how it can be practically and acceptably treated. What is needed, therefore, is an approach aimed at uncovering indigenous explanatory models of disease causation, detection and treatment from a popular perspective; one that primary health care workers could use in meaningfully communicating with people about the disease. In basic terms, explanatory models are notions, ideas and beliefs people have about several areas including health and illness, the latter's causation and appropriate necessary responses (Kleinman 1988; Yoddumnern-Attig et al. 1992).

To facilitate a primary health care approach for controlling this health problem, the WHO/ARI program led by Dr. Gretel Pelto and Dr. Sandy Gove developed a rapid assessment procedure called a focused ethnographic study of acute respiratory infection to assess the explanatory model of ARI. These scholars recognized that to get the necessary data to construct an explanatory model using a conventional anthropological approach would be very time-consuming, so much so that the time lapse between starting the FES project and turning its results in actions might entail the loss of infant lives which could be avoided by more prompt action. Hence, the FES, as with other rapid assessment procedures (RAP), tries to shorten the research procedure to within six weeks or not more than two months.

Another strength of RAP and FES is that they tend to be action oriented. Usually, program managers and researchers undertake the procedure together in order to solve specific problems like ARI, AIDS, malaria, etc. The RAP and FES, moreover, are similar in terms of applying triangular methods or using multiple procedures to get valid and reliable data. But while RAP customarily depends upon such standard methods as in-depth interviews, observations and focus groups, the FES uses a wide variety of other techniques including free listing, narratives of past ARI episodes, assessment of the relationship of local terms to physical signs and symptoms using video tapes, presentation of hypothetical case scenarios, comparison of provider task, illness names, a signs and symptoms sorting task, severity rating task, inventory of home medications, interviews with practitioners, presentation of cases to pharmacists, and structured interviewing with mothers who brought their children with ARI symptoms to a practitioner (WHO/ARI 1991). Moreover, the FES focuses heavily on uncovering the explanatory model people have about ARI, while the RAP procedure may have other specific or general uses (see Kachondham, this volume) and may not focus on explanatory model construction.

Application

During the six-week period of September 9 - October 19, 1991, this chapter's authors field tested the FES procedure in one community in Lampang province, Northern Thailand. The project objectives addressed both behavioral and program development dimensions. For the former, the objective was to uncover community members' explanatory models for ARI and how they responded to it. This included identifying mothers' beliefs and perceptions, health practices, health-seeking behaviors, expectations and other cultural characteristics concerning ARI treatment. Furthermore, the field test also had the objective of facilitating further ARI global program development while at the same time assisting national ARI program managers.

One community with the highest ARI rate for young children in Lampang and which was also located in a district with the highest ARI rate was selected for study. This community contained 2,912 people living in 618 households. Economically, the community depends on wood carving and simple farming as their major sources of income. Government services to the village are adequate.

Seven key informants (six mothers, one village health volunteer) were selected to conduct most of the FES including in-depth interviews, the free listing procedure and narrative of past ARI episodes. Thereafter, twenty-five mothers with young children were randomly selected from the community hospital list of new mothers to do the same procedure which had been done with the key informants, except for the free listing. In addition, most health care providers in the community were interviewed, and during the same period interviews were held with mothers who brought their children with ARI symptoms to these health care providers.

In total, the FES had 11 separate procedures. The first procedure was *obtaining terms for ARI in young children through free listing.* Conducted among key informants, this procedure was designed to obtain the breadth and frequency of local terms for ARI-related illnesses including causes and treatments. This was necessary because these terms would become the "working vocabulary" for other procedures and a starting point for exploring their relationship. The FES manual provided information on how to analyze data from this part such as counting, sorting and ordering in order to know more about the domain of each item (WHO/ARI 1991).

The second procedure involved *eliciting a narrative of past ARI episodes.* This procedure was done almost at the same time with the free listing by going into the details of each ARI illness. Attention was placed on determining each episode's signs and symptoms, their development, causes, treatment (both from home care and outside) and also prevention. Data from key informants' experiences with ARI episodes, and especially the most recent one, aimed at obtaining an initial explanatory model. Some of the major topics of this procedure were: local terminology assigned to the illness, signs and symptoms; home care practices especially using antibiotics; characteristics of health care providers particularly for the first visit; delay and triggering factors for seeking professional health; the persons who made decisions to seek medical assistance and those who actually went; constraints on health care seeking such as money and transportation; searching for doctors; kinds of treatment received; satisfaction with care; perceived improvement; and characteristics of the food given to sick children. This procedure was done both with key informants and mother respondents. The FES manual also provided a past ARI episode recording form and tabulation forms to record and analyze data.

The next procedure consisted of *assessing the relationship of local terms to physical signs and symptoms using a video tape.* The objective was to link the local terms with bio-medical terms. For example, the project team wanted to learn what mothers referred to when

they use terms such as fast breathing by showing them many signs and symptoms about breathing and allowing them to respond to those signs and symptoms. The WHO/ARI program supplied a set of video tapes of twenty children from many nationalities and races where children of different ages exhibited different rates of breathing or difficulty in breathing. Two case versions were shown: a one and one-half minute to two-minute version and a shorter thirty-second version. Investigators would record all of the words expressed, and in the short version respondents were asked whether it showed fast breathing or not. This procedure was done with both key informants and mother respondents. Frequency or consensus from this procedure provided a set of popular and meaningful local terms for understanding the relationship between medical and lay terms which could then be used for communication and education purposes.

The fourth procedure entailed a *presentation of hypothetical cases as scenarios.* This procedure sought to remove any personal inhibitions that respondents had by taking them out of their personal situation and asking for their advice for someone else's child who was ill with ARI. The hypothetical cases varied by severity and child age in order to see how sensitive mothers were in detecting signs and symptoms. This procedure also provided data about mothers' expectations of medication and health care practitioners.

The fifth procedure comprised *paired comparison of providers' task* and the intent was to learn what practitioners were preferred depending on the different signs and symptoms of pneumonia. Different hypothetical case scenarios were also employed in this procedure. Investigators asked key informants and mother respondents to choose a practitioner from combinations of different types of practitioners and to give their reasons of choice. However, practitioner pairs were fixed and selected one at a time in order to get mothers' preferred choices rather than actual choices.

In the sixth procedure, an *illness names, signs and symptoms sorting task* was undertaken in order to validate similar, previously collected data. In this process, all local terms for illnesses, signs and symptoms were mixed together and key informants and mother respondents were asked to sort the signs and symptoms of each illness term. The results of this procedure are ideally supposed to be the same as the initial explanatory model if there is cultural homogeneity.

The *severity rating task* then obtained data concerning severity of illness, terms, signs and symptoms that key informants and mother respondents perceived. It also aimed at developing progressive patterns of illness severity, especially for ones that would point to pneumonia.

An *inventory of medications in the home* procedure examined availability of medications, health seeking behaviors, and compliance by asking key informants and mother respondents to show what kinds of medicine they had in the house.

Interviews with practitioners aimed at obtaining information about what practitioners thought about ARI and especially about the congruence between mothers' and practitioners' perceptions of ARI. Also it was designed to gain information on delay in care-seeking, what terminology they use to communicate with mothers, what are the triggering signs and symptoms, etc.

The tenth procedure entailed *presentation of 'cases' to a pharmacist* in order to uncover information on how pharmacists prescribe drugs, and especially antibiotics, give referrals and advice to caregivers. Pharmacists were presented with hypothetical cases as in the procedure 4 by investigators or local mothers who were part of the research team but not known to the pharmacists.

The final procedure involved *structured interviews with mothers who brought children with ARI symptoms to a practitioner.* The intent was to determine actual behavior patterns and if they were in agreement with the initial explanatory model. It also provided information on

triggering symptoms for seeking care, validation on what mothers meant by reported signs and symptoms, and on health-seeking behavior especially in terms of delay in seeking care.

Results

ARI Illnesses, Signs and Symptoms

From the free listing method with key informants, a list of thirty-three local terms for illnesses and one hundred signs and symptoms were obtained. Seven illnesses were determined to be either ARI illnesses or a central sign or symptom. These seven illnesses were selected for further study. During data collection, key informants and mother respondents were asked to match signs and symptoms to ARI illness. Using this matching process, five distinct ARI illnesses and one ARI sign were discovered. These along with their explanatory models are described below beginning with the ARI sign and then the ARI illnesses (Upayokin et al. 1993).

Khaj sym (drowsy fever) is not an ARI illness, but it is almost always a core sign and symptom of ARI. *Khaj sym* can include other signs such as vomiting and drowsiness, but the focal point for detection and health-seeking is the fever level. Community members' explanatory model points to the causes of this disorder as physical stresses such as exposure to sunlight, cold water and seasonal changes. Spiritual or supernatural causes are not associated with this sign. Initially, caregivers treat a child with *khaj sym* at home by monitoring the child body's temperature and sponging body with a wet cloth. The child is wrapped in a blanket to keep the body warm. If caregivers perceive that the fever becomes moderate or severe, they will only wait about a half of a day before seeking medical care.

Khaj wad (common cold) is associated with high body temperature, runny nose, coughing, and difficulty in breathing. The first two signs are the focal points for detection. However, *khaj wad* does not necessarily involve drowsiness as in *khaj sym*. The causes of *khaj wad* are related to long periods of exposure to heat (sun) and cold (water), breathing polluted air and seasonal changes. Home care practices and health care seeking for *khaj wad* are the same as *khaj sym* including taking commercial drugs. Most mothers classify *khaj wad*'s severity as mild, though they will only wait about .48 days before seeking professional help.

Lood lom agseeb (sore throat) is closely associated with *khaj wad* but its core symptoms include a sore throat, wet cough and difficulty in swallowing due to throat pain. A runny nose or difficulty in breathing are not necessary symptoms. Many respondents did not mention this illness, but among those who did they classified it as being moderate in severity. Most respondents argued that *lood lom agseeb* is a part of the common cold process. Home treatment methods could not be determined because there were no current cases involving a sore throat.

Aj hyyd aj hoob (asthma-like illness). While the former conditions are acute, *aj hyyd aj hoob* is chronic. It is characterized by difficulty in breathing or shallow breathing, tired breathing, a sticky cough, and wheezing. Respondents felt that the cause of this disorder is changing weather conditions, and becoming wet or cold. Some believe it is related to heredity or lung problems. Since many people suffer from this illness, and the breathing difficulty is also similar to pneumonia or *pood chyyn* and *pood buam* (discussed below), it is easy for

caregivers to interpret the signs of pneumonia as a sign of *aj hyyd aj hoob* among children who are suffering from this disorder. Many home remedies are resorted to including drinking warm, boiled water; avoiding showers; and avoiding contact with people with colds. A few respondents reported trying home-made remedies or herbal medicine made by the traditional healer. Respondents classified this disease as moderate to severe.

Pood chyyn and *pood buam* (pneumonia-like illness) are two distinct local terms which refer to infected lung and lung disease, respectively. However, in-depth interviews with respondents revealed that these two terms actually represent the same pneumonia-like illness, and that medical doctors gave these terms to the local people. The core symptoms of the illness include: coughing, a heavy and sticky cough, difficult breathing, gasping, high temperature, wheezing, and fatigue. Respondents attribute the illness to becoming overly hot or cold, having a cold for a long period of time, and changing seasons. Home treatment is very limited since many respondents seek professional help immediately. For the early stages of pneumonia, home treatment involves: avoiding baths, wearing extra clothing, and eating boiled rice. The respondents classify this illness as severe which explains why they waste no time in seeking medical care.

The above explanatory models show that the local classification of ARI is quite complex. Some illnesses such as *khaj* or *khaj sym* become signs and symptoms of other ARI illnesses. The signs and symptoms of ARI are thus grouped into many clusters. Each cluster has its own name and explanation.

All of these ARI illnesses, signs and symptoms are related to pneumonia especially *pood chyyn* and *pood buam*. However, these terms are ambiguous as well as *lood lom agseeb* because they stem from a medical construct. The respondents initially had no illness name for pneumonia, but when their children became sick with pneumonia, they learned to recognize it, its signs and symptoms from health care providers. Hence, they adopted the terms *pood chyyn* and *pood buam*. Literally, *pood* means lung, *chyyn* means moisture, and *buam* means swollen. However, *chyyn* and *buam* are related to *naam tuam pood* or flooding in the lung or a lung that fills with water. This local term indicates that pneumonia is related to too much water or moisture in the lung, and it is another way the people communicate with medical doctors about pneumonia which they perceive as very severe sickness that requires emergency medical help to avoid death.

Detection

In general, most mothers can recognize the signs and symptoms of ARI illness, especially in terms of *pood chyyn* and *pood buam*. In viewing the ARI video tape, a majority (52%) of mothers and key informants could identify fast breathing in the case of very fast breathing. For marginal breathing, however, only 20% of the mothers could recognize and label this as fast breathing.

Mothers and key informants could also recognize signs of difficult breathing. When 20 cases were presented to mothers, each of them mentioned 2 to 15 words related to difficult breathing. Nearly all mothers consider fast or difficult breathing as a serious sign requiring medical attention. The delay time prior to seeking medical assistance is thus short when dealing with an evident ARI illness. If home treatments are ineffective after two days, 80% of mother respondents said that they had taken their children to a doctor. However, not all caregivers can recognize ARI signs and symptoms which in turn leads to treatment delay.

Secondary caregivers (grandmothers, nursery staff), in particular, delay the most in seeking health care for children largely because they lack the knowledge to recognize some of the ARI signs and symptoms.

Extenuating Circumstances

The FES uncovered several surprising trends concerning ARI patterns and treatment, two of which will be discussed here. First, it is commonly assumed that ARI, particularly in rural areas, is a 'disease of poverty' and rural poor children are the usual victims. In this study, however, those people who had children suffering from pneumonia fell largely within the middle and upper socio-economic classes, *not* the lower class. This is apparently because such parents left their children with other caregivers, such as grandparents, while they temporarily migrated away as traders. As noted above, these secondary caregivers were not adept at recognizing ARI signs and symptoms or in seeking prompt care, thus aggravating the situation.

The second surprising finding concerns treatment. It is often assumed that rural people under-utilize health care services which in turn can increase the drastic consequences of such health problems as ARI. This study, though, showed that community members (from lower to upper classes) would readily seek health care from professionals, not from traditional healers, after only a very brief period of home care and taking of over-the-counter drugs. The problem which exists therefore is related not to the under-utilization of service, but their over-utilization. Many different health services are readily available within or within a short distance from the research community. These include community hospitals, medical clinics in the community or in the nearby town, clinics run by non-physicians, drug stores, community drug cooperatives, and village health volunteers. As a case in point, the excessive over-use of antibiotics is related to the many drug stores and health care providers in the area. Antibiotics are available in many forms and trade names at these outlets. Also clinics run by persons who are not doctors readily prescribe antibiotics to treat ARI or ARI-like illnesses and as a preventive measure for pneumonia. They compete with each other and with clinics run by trained physicians in terms of who is going to treat patients better.

This problem is also antagonized by a mother's expectations and evaluations of health provider efficacy and her health-seeking behaviors. Many mothers feel that an ARI illness can be easily cured when treatment is sought promptly. Consequently, if a child's illness is not resolved after consultation with a medical practitioner, the mother will doubt the practitioner's diagnosis and will most likely switch practitioners. Switching may lead to problems since many mothers are likely to continue medication prescribed by the previous practitioner as well as start new medication from the new practitioner. In addition, some mothers are likely to increase the prescribed dosage because they feel that a higher dose will result in a faster recovery. They will also discontinue medication when there are initial signs of recovery, because they believe the medication is very strong and effective.

Discussion and Conclusion

The above field test case indicates that the focused ethnographic study provides very specific and detailed procedures for those who have no formal training, since it gives them an adequate orientation to be able to do most of the job. Validity and reliability are very high because all of the procedures are cross-checked in a triangular fashion from various dimensions

such as from key informants, mother respondents, providers, pharmacists, and caregivers of sick children; from general ideas of key informants to past episodes, to hypothetical cases, to real cases in clinics; from local terms to concrete signs and symptoms such as in video presentations; from informal interviews to formal structured interviews and to observation and counts. Nonetheless, even though the FES is well-designed, investigators must be cautious on a number of points in collecting and analyzing data.

First, one of the problems that arose out of this study was that the culture and language of the community was exceedingly rich with different terms that have very similar meanings. For example, although over half of the mother respondents could distinguish fast breathing from normal breathing, in this culture with its rich language, the problem arose that there were too many words or terms to indicate different levels of breathing. The problem is complicated even more when there is no strong consensus or pattern for such middle-of-the road conditions as 'marginal fast breathing' as noted above. As a result, researchers must spend extra time determining and refining terms in order to avoid later problems during data analysis.

Second, the focused ethnographic study of ARI must tread a very fine line between being underly and overly focused. Confusion in linguistic terms as noted above can complicate an underly focused FES, especially when the language has an extensive classification system. On the opposite end of the spectrum, researchers must be careful not to over-use the FES and become too focused on determining the explanatory model and merging it with a professional model. This is a great temptation for researchers (and especially for students and junior researchers) who may have a tendency to look for something that may not be not there. The basic assumption is that a divergence exists between community members who have their own terms and explanations for illnesses like ARI as opposed to local health providers who have their own professional model with its terms and explanations. While other studies have documented this difference for such health problems as diarrhea and malnutrition (cf. Aubel et al. 1991; Kachondham, this volume; Yoddumnern-Attig et al. 1992), this study showed that community members and health care workers actually share the same ARI concepts, *pood chyyn* and *pood buam*, and both consider immediate treatment as crucial. Hence, in looking for differences between the popular model and the medical model, a researcher may become so overly involved in pinpointing, describing and analyzing the models that the time saved in using the approach is lost. This may lead to delays in implementing action programs and treatments to needy children. The time could better be spent on pursuing such recommendations as educating mothers in correct home treatments; clear and concise labeling of medications with warnings about exceeding the recommended dosage; and programs to speed up the response time of secondary caregivers.

One final comment stems from the rather surprising findings discussed above concerning treatment and health service over-utilization. In the case described above, treatment delay was not an issue. Most mothers took their sick children to practitioners too early even to the extent of trying to prevent ARI by the early, preventive use of antibiotics. The real problem was thus over-utilization of health services, some of which were of dubious quality. Moreover, the ARI problem rested not with the poor sector of the community but with the middle and upper classes. Under these circumstances, the FES technique when used alone cannot provide adequate answers for understanding the underlying processes responsible for these occurrences. Moreover, and as its name implies, the FES is heavily focused and based on the assumption of a shared culture and homogeneous community which may or may not be the case. Therefore, what researchers must do is to avoid running the risk of excluding the social and economic context that also leads to ARI problems.

Herein lies the real value, not drawback, of the FES. This technique, because of its rapidity and ability to give reliable and valid data through triangulation, is somewhat similar

to a quantitative survey. The FES, which gives qualitative data, and a survey based on statistical data are both concerned with the *process of revealing*. Both aim at revealing the patterns (in terms of numbers or terminological concepts and models) which characterize human behavior. But while this is a good starting point, it is not always enough. A subsequent period of more formal qualitative research (either in terms of a RAP investigation or another more standard anthropological inquiry) is needed and which focuses on the *process of explaining* such as why ARI is more common among wealthy families or why mothers and other caregivers decide to over-use medications or other health services. In short, an FES is an excellent starting point for developing short-term action programs while also showing areas that might require further, more in-depth research in order to formulate more medium- and long-term interventions.

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Chapter 26

Analyzing and combining qualitative and quantitative data

Bencha Yoddumnern-Attig

One of the most common questions asked by students and advanced researchers alike is "How do you analyze qualitative data." This question is a valid one, since it is much more challenging to disentangle patterns of beliefs from a series of in-depth interviews than it is to manipulate numbers through accepted statistical procedures. This chapter provides a simplified introduction to how to go about analyzing qualitative data and combining it with quantitative information - EDS.

Introduction

One of the cornerstones of qualitative research is "be prepared as much and as early as possible." In collecting, analyzing and reporting research data/information, there are two main ways most researchers tend to use. The first way occurs when a researcher begins to make some kind of sense out of fieldnotes, documents and other data sources *after* the data collection process (fieldwork) is completed. This format is very problematical, since in many instances field insights are lacking or forgotten, and the opportunity to clarify social and cultural patterns with supplementary data has long since passed.

This chapter, though, advocates a second way which stresses that the researcher must know, *before fieldwork even commences*, exactly how to work the data into an organized and understandable unit, which can then be easily written-up in a logical form. In this strategy, data collection and analysis should occur simultaneously during the time spent in the field. This allows the researcher to continually formulate, test, and/or modify concepts and assumptions concerning the research problem under study using newly obtained field data and the insights of his informants. This approach to analysis is called *successive approximation*, and it lets the researcher cycle back and forth between thinking about existing data and generating new strategies for collecting ever finer data (Neuman 1991). It focuses more fully on analytic exploration and development of data which are substantiated through on-going systematic observations and interviews.

This chapter's major objectives, therefore, are to initially familiarize readers with qualitative analysis by guiding them in mapping out a plan for effectively sorting, categorizing and classifying raw data into units of analysis as well as changing information from a narrative form into a concrete filing system. These are the major keys whereby qualitative data is

analyzed. Thereafter, specific helpful tools for analysis are described. And lastly, a way to combine qualitative and quantitative data is presented, since many studies are now use both techniques.

Data Analysis

As noted, a qualitative analysis is best done as data is collected through efficient sorting, coding (or indexing) and filing. This will help the researcher in organizing his data, turning the data into concepts, and then concepts into relationships. That is, in analyzing qualitative materials, the researcher is trying to find underlying patterns that join together and make sense out of observations and interview cases (Arnold 1982; Patton 1980).

Herein lies one of the major differences between collecting and analyzing qualitative data as opposed to quantitative data. In quantitative research, questionnaires can often be pre-coded pretty precisely around a specific set of variables, questions and potentially expected answers. The latter (data) can then be manipulated and analyzed using various statistical packages. Qualitative data, though, usually cannot be precisely pre-coded in this manner. Even though a set of topics or variables can be identified as well as a set of questions (such as on an interview guideline), the researcher really does not know what possible responses, or even response categories, might fall under each variable. As a result, a qualitative researcher needs to develop his 'coding' system as he conducts the research, not before and not after. The aim is to sort and organize information *as it comes in* into logical, discrete and comparable units (such as themes) which can aid the researcher in repeatedly collecting and analyzing data in a continuous, progressive manner during fieldwork as well as afterwards.

Sorting Data

The first step in analyzing qualitative data is sorting. The sorting process usually begins as soon as field data are obtained. Every evening (and lasting sometimes into the night), a researcher must write-up his fieldnotes in a systematic form. Each completed write-up should be comprised of at least the following aspects:

a) people met as well as events or situations experienced that day and the exact context in which they occurred (even the smallest, seemingly insignificant encounter should be noted in detail since, at a later time, it may become exceedingly relevant);

b) the main themes or issues discussed in each interview, described in as complete a manner as possible;

c) the issues on which the researcher should concentrate during the next interview; and,

d) the specific types of data sought about these issues (Miles and Huberman 1984).

The researcher may then do one of two things with his fieldnotes, depending on his specific style and his stage of data collection. In looking over his notes, he might see prominent themes (such as recurring beliefs or practices), logical connections, clarifications or

relevant comments that match with or help explain similar statements made by other informants. They might also substantiate or refute any hypotheses the researcher has formed. He then needs to note specific relationships (actual or hypothetical) between important variables and linking these with previously collected information.

For other researchers, after the fieldnotes are written up, he might let them "sit" for an hour or two, and then come back and review them using the same process as in the first case. This latter technique is especially good when the fieldnotes are lengthy, since it gives the researcher a chance to relax after the arduous task of compilation and then clears his mind for a more objective analysis.

Both methods are acceptable in that each aims to give the researcher clear insight into what data he has actually collected, its connection with previous information, and what data still needs to be obtained. In this way, the researcher will gain a more comprehensive understanding of the core variables and key phases in a process, as well as major research issues which may not have been anticipated (Burgess 1982; Lofland and Lofland 1984).

Data Coding

While the researcher is sorting the data, he must simultaneously do the coding or indexing-category. These are ways of organizing and classifying data so that it can be readily compared between cases (e.g., persons), and patterns can be readily identified. These codes are inductively developed and point to the general domains evident in the fieldnote content.

Bogdan and Biklen (1982) suggest that the major scheme for coding should include the following elements:

a) setting/content, e.g., general information on surroundings;

b) definition of the situation -- how people define the setting surrounding specific topics;

c) perspectives -- ways of thinking, orientation;

d) activities -- regularly occurring behaviors and their patterning;

e) events or specific happenings; and

f) strategies -- ways of achieving specific ends.

To illustrate, Example 1 is a set of completed fieldnotes along with their associated indexing-categories.

Coding or the assigning of indexing-categories can be done by designing the required units of analysis such as the major relevant headings which arise during data collection such as those in Example 1. These units then become the standard and are used in analyzing and classifying information from all other interviews.

To make it simple, these units can be divided into roughly three types: enumeration unit, recording unit and context unit (Cartright 1966). The *enumeration unit* refers to an exact number, time or age, physical length or temporal duration. In Example 1, indexing-categories numbers 2, 4, 5, 6, 13, and 17 express enumeration units.

Example 1.

Fieldnote: *Mrs. A migrated to this village from Ban Fa, a nearby community. She has six siblings: two elder and three younger, four are female and one male, giving a family size of six.*

Indexing-Categories:

1. Prior residence
2. Siblings/Family size

Fieldnote: *Mrs. A is the third eldest child, and she has worked in her family's rice fields since she was 14 years old. Before that time, she did household chores.*

Indexing-categories:

3. Occupational duties before marriage;
4. Age at farm labor initiation

Fieldnote: *Mrs. A is now 20 years old, and she has been married for one year. Mrs. A and her husband knew each other for about five months before they were married.*

Indexing-Categories:

5. Current age
6. Age at marriage

Fieldnote: *The wedding ceremony was a traditional one. In the beginning, the groom's parents asked for the hand of the bride from her parents. When this proposal was accepted, both the groom and bride paid respect to each other's lineage spirit. This is call the rite of cross-lineage propitiation.*

Indexing-Categories:

7. Marriage process
8. Sacred/religious rites associated with descent

Fieldnote: *Usually, men then move into their wife's parent's house. For Mrs. A, though, this was not the case. Since her husband was an only child, no one would be left to care for his parents. Thus Mrs. A began her married life in her husband's natal household.*

Indexing-Categories:

9. Post-marital residence
10. Old age security

Fieldnote: *Thereafter, Mrs. A worked with her parents-in-law in their rice field. Whenever possible, though, after they were finished the married couple also went and helped Mrs. A's family. If they could not go, they hired someone to help Mrs. A's parents.*

Indexing-Categories:

11. Post-marital occupation
12. Labor obtainment strategies

Fieldnote: *After marriage, Mrs. A used contraceptive pills for about one year. Her husband's mother and sister advised her to do this, since her husband's temporary job did not provide a steady income. After nine months of marriage, however, her husband's job became permanent. They both then wanted to have a child, so Mrs. A stopped using pills two months ago.*

Indexing-Categories:

13. Duration of contraceptive use
14. Family planning information sources
15. Usage determinants
16. Contraceptive discontinuation determinants
17. Timing of contraceptive discontinuation

The *recording unit* is the answer to a single question, and is often referred to as an indicator. For example, when there is a question about patterns of post-nuptial residence in a community, the answer might be neolocality. Neolocality is then perceived as the recording unit (subsequent examples to follow).

The *content unit* provides the basis for perceiving the recording unit. For example, in the study of "Population Growth, Society and Culture", Sipes (1980: 34-36) hypothetically anticipates several factors that correlate with population growth such as kinship, social system and relationships; the position of women in society; marriage and divorce; etc. Each of these factors is considered as one context unit. Under each unit, several recording units can be noted as in Example 2 such as Kin, Social System and Relationships is the context unit, whereas classes 1.1 - 1.16 are the recording units (Sipes 1980:34-35).

Example 2.

Context Unit 1. Kin, Social Systems and Relationships

Recording Units

1.1 Neolocality
1.2 Polygyny
1.3 Inheritance rules
1.4 Sociopolitical usefulness of children
1.5 Results of illegitimacy
1.6 Child labor laws or customs

1.7 Attitudes of children toward parents
1.8 Attitudes of young toward old
1.9 Sociality of care for the aged
1.10 Amount of care given the aged
1.11 Individual achieved versus ascribed status
1.12 Sex-based differences in roles and behavior
1.13 Freeness of conversation between the sexes
1.14 Extent of corporate kin group activity
1.15 Economic contribution by children to the household
1.16 General importance of family to the society

Context Unit 2. Position of Women in Society

Recording Units
2.1 Preference for a particular sex of child
2.2 Equality of women with men
2.3 Desire to restrict women to the home

Context Unit 3. Marriage and Divorce

Recording Units
3.1 Social drawbacks of the unmarried state
3.2 Parental arrangement of marriages
3.3 Difficulty in acquiring a marriage partner
3.4 Age at first marriage
3.5 Difference in ages of marriage partners
3.6 Percent of people never married
3.7 Frequency of divorce
3.8 Ease of divorce

Context Unit 4. Pregnancy and Parenthood

Recording Units
4.1 Desire to limit the number of children
4.2 Pregnancy viewed as onerous
4.3 Influence of parenthood on sex identity
4.4 Attitude toward abortion and infanticide

Like the sorting procedure, the aim of these units of analysis -- be they enumeration, content or recording units -- is to organize and classify the data. From this procedure, a multitude of different data types and their content (which oftentimes are intricately inter-twined) can be logically separated out. They can then be objectively compared and similar patterns can be identified which link variables on an intra- and inter-case basis (e.g., determinants of post-marital residence patterns, post-partum food habits/taboos).

A very good example of this data sorting and coding procedure can be found in the chapters by Richter as well as Pramualratana et al. in this volume. For this latter chapter, the

investigators used the ETHNOGRAPH computer program to sort voluminous amounts of in-depth interview and focus group data about condom use in brothels into three main context units: (1) commercial sex worker (CSW) persuasive strategies, (2) condom lubrication, and (3) persistent misconceptions. Under the CSW persuasive strategy context unit, for instance, they could then identify two separate recording units: (a) frequency of condom use as perceived by CSWs, and (b) persuasive strategies CSWs use to get clients to use condoms. These recording units gave them reference points which could help them to classify their data (i.e., CSW statements during individual interviews and focus groups), group them according to similarity, and then guide their analysis and interpretations.

Establishing Files

In addition to sorting, coding and devising the units of analysis, an efficient and effective filing system is crucial in the analytical process. Qualitative data, as mentioned in several chapters, is usually based on words, not numbers. Hence, respondent statements are often difficult to keep organized so that they can be readily accessed and reviewed. The researcher's challenge, therefore, is to change the data out of its narrative form -- as found in the researcher's fieldnotes, recordings or write-ups -- and into a storage system where he can easily order and retrieve it for later use (especially in writing the report).

To do this, three major files are needed, namely, fieldwork, mundane or background, and analytic (Lofland and Lofland 1984). A fieldwork file contains materials on the process used in conducting the research. It should include the step-by-step procedures used in collecting information, personal experiences, feelings and observations of the researcher himself as these may or may not affect data collection, any logistical problems encountered, and the like.

By having a file on this topic already built up, the researcher will find it much easier to write-up the final report's section on research methodology or research strategies. He will also be able to look back on how his personal actions and reactions might have affected, or were affected by, the community itself. For instance, he can assess if his experiences as a participant were actual, normal reflections of natural community and individual behavioral patterns, or whether certain community members changed their behavior because of his presence. (In some cases, researchers keep a personal diary of their intimate thoughts and feelings toward the community and research project as a way of assessing objectivity at a later time.)

A mundane or background file is used to keep track of people, places, organizations, documents and so forth. Mundane files should be organized in such a way that information is grouped under obvious categories so as to facilitate its later retrieval. For instance, when an in-depth interview is conducted, the researcher will almost certainly want to have a folder on this person, in addition to subsequent persons (Lofland and Lofland 1984). Data related to the community under study -- such as its history and development, material resources, family organization, and so forth -- should also be filed under specific thematic categories.

And lastly, the analytic file, as its name implies, is the heart of the analysis. When the researcher reviews his notes, he must analyze and interpret the data by discerning patterns of behavior (often through the use of content and recording units) and finding the underlying meanings that were evident in the interviews or observations. This preliminary analysis should be written-up in a brief (or as extended as possible) fashion, to be put along with a copy of the relevant data into labelled file folders, and entered into the analytic file under specific behavioral, cultural or social categories (Lofland and Lofland 1984).

From personal experience, trained research assistants almost inevitably have problems

in deciding what to write in an analytic file. Their main concern is whether there will be any repetition between the fieldnotes and the analytic file. The answer is usually "No." Fieldnotes record a picture of the social setting and conversation involved in each interview, event or experience as shown in Example 1 earlier. They serve as a kind of computer to memorize, sort, code, record and organize data into a written form. A good example is the ETHNOGRAPH computer program that can record and print out a file containing all statements made by CSWS about how they persuade clients to wear condoms.

Analytic sheets (which comprise the file), on the other hand, is what you do with that printout. The sheet should contain the main themes, impressions and summary statements about what actually occurred in the interview and how the data on the printout relates to these. It also includes explanations, speculations, and hypotheses about the community at large as they bear upon the research problem.

When to write-up this analytic sheet is rather flexible. Ideally, it should be done every night after taking two or three interviews, since it aids in updating the researcher's understanding of what is going on. It also assists in revising and updating the coding scheme. I personally use this preliminary analysis in forming a plan for the next interview.

Preliminary analyses, therefore, should be put in one analytic file. If the researcher begins the preliminary analysis at the start of the fieldwork, he will be better able to identify a central thesis or set of fundamental assumptions concerning the research project and its results (Arnold 1982; Burgess 1982; Lofland and Lofland 1984). He can then elaborate on and expand crucial features into an effective outline (or it can be called a 'Table of Contents') and reorganize his analytic file according to the outline's order. As his analysis builds upon itself, the mundane and analytic files are likely to merge.

Tools for Data Analysis

Analyzing qualitative data thus entails reviewing, indexing, reorganizing, classifying, filing and refining data in order to turn it into comparable items, concepts and then relationships for further investigation. In conducting comparative qualitative analysis, several tools exist which can facilitate this process (these are discussed in detail and at great length by Miles and Huberman 1984, and Scrimshaw and Hurtado 1987). They include graphic devices, organizational charts, causal networks, taxonomies or ethnoclassifications, conceptually clustered variables, and mapping.

Graphic devices are useful in reflecting trends and aiding in understanding. For example, organizational charts show the relationships between structural or hierarchical levels. Flow charts describe and contrast events. Growth charts show increases in significant variables over time (Miles and Huberman 1984).

Causal networks can be used to describe deterministic relationships between independent variables (Miles and Huberman 1984). Let us take as an illustration a study of factors influencing the acceptance of immunizations. The causal network would begin at a common point such as pregnancy. It would then trace out the immunization 'path' from pregnancy through delivery for two different contexts: health services delivery and those attended by traditional midwives. The causal networks, once drawn, would then be placed in the analytic file.

Taxonomies or ethnoclassifications constitute an extremely useful strategy for organizing qualitative information and interpreting research findings (Spradley 1979, 1980). In Northeastern Thailand, as a case in point, there are several local terminologies for infant diarrheal disease, which are different from those assigned for adults. These are developed according to folk knowledge or experiences about symptoms, degree of severity as well as

etiological beliefs. For instance, certain episodes of diarrhea are associated with normal child development, they are common to everyone, and thus require no special treatment. In other instances, diarrheal episodes which do not correlate to a life-cycle stage are given a different name (taxonomic or enthnoclassification) and readily treated (Premsriratana 1985: 121-124).

Conceptually clustered variables bring together data which are relatable (Scrimshaw and Hurtado 1987). In a study concerning the duration of breast-feeding among Northeastern Thai women, seven main variables form a cluster which influences incidences of child/infant malnutrition. These variables are: 1) climate, 2) economic opportunities, 3) female (i.e., mother) migration patterns, 4) child care-taking responsibilities; 5) weaning and food supplements: 6) the cognitive classification of breast milk; and 7) the color, taste and texture of sweetened condensed milk. These variables are related based on the following overall scheme.

In Northeast Thailand, economic opportunities are more restricted than elsewhere in Thailand. The main occupation is wet-rice cultivation. But due to the twin conditions of drought versus flood (oftentimes in the same growing season), fairly good crops can only be expected once every three years or so. Hence, both men and women often migrate either daily or seasonally in search of work and supplemental income. In their absence, grandmothers become the major child care-takers so as to facilitate parental migration, and thus early weaning often occurs. In their attempt to find a suitable weaning food, powdered milk formulas are not used since they are expensive and not readily available. Alternatively, they try to find the closest cognitive match between breast milk (the indigenously recognized ideal food for infants) and a suitable replacement which is inexpensive and accessible. Breast milk which is thick, sweet, and cloudy white is believed to be of the highest quality. Thin, yellow and tasteless breast milk is believed to be rotten. In assessing the available foods in their area, many grandmothers and some mothers select sweetened condensed milk as a breast milk substitute, because it has the same sensory characteristics of breast milk, is inexpensive, and readily available (Vong-ek 1987).

Hence many variables cluster themselves in such a way as to determine the selection and use of certain foods in weaning and their consequences for child nutritional status. Information of this type should be included in the analytic file.

In addition to conceptually clustered variables and the other tools, mapping is also a useful aid to understanding the relationship between the physical environment and human behavior. A map of the community's settlement pattern can be prepared by the researcher to show the locations of households relative to such resources as agricultural land, water sources (e.g., wells, rivers), roads, and markets. If the settlement is influenced by seasonal migrations, this should also be noted (Johnson 1978).

Maps which identify not only the location of houses but also their occupants are also exceedingly valuable. Once the researcher has become familiar with community members and their social relations, maps can be used to trace social networks and how the community's spatial arrangement reflects these as well as the selection of house sites. Maps can be placed either in mundane/background files (as in their relation emphasis on the physical environment and settlement patterns) or in analytic files where they demonstrate or illustrate social relationships and inter-personal communication.

All of the above mentioned are tools to help the researcher sort and organize data. The researcher, however, must keep in mind that these tools are based on the idea of searching for patterns in events, behaviors or other significant phenomena. This is what Patton (1980) calls *pattern-matching*. When the patterns have been established, the researcher at this point is similar to an artist in the sense that he/she has to describe the phenomena (drawing a picture) so that the audience can see what is out there. In addition, the researcher must be able to explain the motive (underlying reason) behind the phenomena as well. Patton (1980) calls

this process *building-explanation*. The explanation can be drawn and built from several sources. First, the inevitable source is from the project's own empirical evidence. A second source can come from the records or reports of others in that particular area or adjacent areas. The third source can come from theory and/or specific conceptual frameworks that help to link data into an integrated, holistic picture (Neuman 1991).

Combining Qualitative and Quantitative Methods and Data

It goes without saying that both qualitative and quantitative methods have various advantages and disadvantages. Alone, each gives a partial picture. By combining them, though, the researcher can eliminate many of the weak points characteristic of either method, while at the same time gaining greater insights into the phenomenon being studied through *data complementary*, or the matching and integrating of complementary qualitative and quantitative data sets.

A complete research project contains at least three separate stages. The first stage is really the *stage of familiarization* where qualitative methods are used to gain necessary background information that will be valuable for developing later research stages and tools. In this stage, qualitative methods help the researcher to familiarize him/herself with the community as well as the actual and most recent problems found within that community and related to the project's objectives. He/she can then see how these link with a community's total way of life, its history, environment, etc. Through the familiarization process, the researcher can then identify appropriate approaches, target groups, questions, their wording and content that may not have been realized during the project's pre-fieldwork planning phase.

The results of the first stage can then be used to develop the research project's second stage, that is, the *stage of investigation*. Insights gained through participating and observing the community and in talking to community members can be used to construct a formal survey questionnaire or even subsequent qualitative interview guidelines that focus more specifically on an issue in light of its community context. These will also be more sensitive by taking into consideration such important factors as literacy, lay or popular terms, sensitive issues and the like that may affect respondents' abilities to answer questions or even to give their consent to participating in the interview process. For example, in the last chapter Dendoung and others uncovered several popular terms for ARI illnesses. In gaining more in-depth data about why mothers take their children to a health care provider too early in the disease process or why secondary caregivers delay treatment, researchers may need to use these terms in developing their questionnaires or guidelines so that respondents know exactly what illness or illness stage is being investigated, not simply ARI in general terms. This then makes the instrument more sensitive at being able to gather reliable and valid data.

This brings the project to its third stage or the *stage of revealing*. At this stage, qualitative methods can be used after a formal statistical survey or rapid assessment procedure and for four main purposes. In most instances, this may also involve combining the quantitative data with qualitative data. First, in analyzing statistical survey data, a researcher may see inconsistencies between different respondents who may be asked to answer the same or similar question. For example, brothel owners and commercial sex workers may report different rates of condom usage, possibly even within the same brothel over the same period of time. Qualitative data would then be needed *to clarify* why this difference is occurring. Brothel owners, for instance, may give a 100% condom use rate to satisfy local authorities. Commercial sex workers, though, may report only a 50% usage rate because only half of their clients bring condoms with them, and the CSWs are not given any at the brothel. Second,

qualitative data can be used *to explain* patterns in survey results such as in the previous example. Third, sometimes survey data, once analyzed, give unexpected results. Qualitative data can then be used *to verify* these results usually by explaining the conditions that led to them. Lastly, since qualitative data is often descriptive, a researcher can use specific accounts, such as life histories or transcripts from focus group sessions, *to illustrate* important points or patterns (see Attig, this volume; Pramualratana et al., this volume). As noted in this book's introduction, these qualitative illustrations often have a greater impact on policy-makers and others who are not well versed in statistics, than only giving several pages of statistical calculations and tables.

Quantification of Cultural Data

Much interest has arisen in the last few years about quantifying cultural data. Three of the major reasons for quantification are to increase the reliability of cultural data, increase data comparability especially when a project uses both qualitative and quantitative methods and seeks to combine them, and increase the power of statistical tests. Likewise, there are three ways of dealing with the quantification of cultural data. First, the research can simply add a survey stage to the research design and methodology. In doing this, the survey will be used as another data collection tool. Second, the research may quantify case studies. If the researcher happens to have 100 or 200 case cases in his/her hand, the best and easiest way to analyze the data is to quantify them using an appropriate computer package. Lastly, researchers can quantify ethnographic materials in a similar computerized fashion for cross-cultural comparison.

The first stage in quantifying cultural data is to code them using the following main steps (Johnson 1978).

Clarify what it is that is desired from the materials. The answer to this usually lies in a project's main research question(s). For example, if the researcher is interested in women's roles and statuses, he/she will search for information that will give clues to the position of women in society, such as information on female literacy and educational attainment, female inheritance, parental attitudes towards daughters, post-marital residence patterns, etc.

Work out the classes and class indicators. After closely studying the data, the researcher will probably get a rough idea of the classes that need to be developed. For instance, information on the position of women in society might be divided into several classes such as parental preferences with regards to child gender, equality of men and women, occupational roles, etc. In the class concerning child gender, the indicators may include the directness of inheritance (e.g., name, membership, formal title, social status, and property) (see Sipes 1980 for more details).

Fit the classes to the data. After working out a preliminary set of indicators, the gradual process of fitting classes to the data begins. At this stage, it is particularly important to pay attention to deviant cases. These cases should be studied in detail, for they may require a new set of indicators or a new set of classes.

Code all the answers. In order to process and analyze data, all of the answers must be coded. There are three possible ways to code qualitative materials: dichotomies, serials, and variables. The dichotomies system calls for a judgement to be made about the presence or absence of an attribute as in the following example.

Statement #1: Preference for sons over daughters.

Code:	Presence	Score 2
	Absence	Score 1

Statement #2: Favorable attitude toward mother.

Code:	Presence	Score 2
	Absence	Score 1

Statement #3: Presence of extended kin groups.

Code:	Yes	Score 2
	No	Score 1

The serial system is required when a statement, value or attitude has a certain degree of intensity. Thus, instead of categorizing the statement as merely present, one might wish to indicate that it reflects high, medium or low intensity of feeling. For instance, a researcher may go through the recording units to see whether he/she can find the variables that indicate women's status in society as in the following

Statement #1: The chance of a woman being elected as village headman or a member of the village council is:

a.	Greater than a man	Score 3
b.	The same as a man	Score 2
c.	Less or not at all	Score 1

Statement #2: Boy or girl child receives care:

a.	The difference in care is very great	Score 3
b.	One more than the other	Score 2
c.	Equally	Score 1

Finally, a limit or internal system of classification is used where a statement designates equal intervals and an absolute zero. The most common ones are timing variables (such as age of respondent, age at first marriage), monetary variables (like income, service fees), units of physical length (such as distance from a health service center), quantity variables (amount of land owned, average crop yield, number of livestock owned, number of drinking water sources), and other hypothetical factors that may be relevant to the study, amenable to coding and analysis. Examples for these are as follows (Sipes 1980).

Example 1: Timing variable

Statement: Abstinence is required after the birth of a child and the average period is:

Code:	a.	More than one year	Score 5
	b.	One month to one year	Score 4
	c.	Over one week but less than one month	Score 3
	d.	One week or less, or undeterminable but there is a period of abstinence	Score 2
	e.	No abstinence period	Score 1

Example 2: Duration and distance variables

Statement: For at least half of the villagers, the family planning service center is within a walk of:

Code:	a.	Less than one hour	Score 3
	b.	Less than one day	Score 2
	c.	One day or more	Score 1

Example 3: Monetary variables

Statement: Approximate family income per month.

Code:	1,000 - 1,499	Score 1
	1,500 - 1,999	Score 2
	2,000 - 2,499	Score 3
	2,500 - 2,999	Score 4
	3,000 - 3,499	Score 5
	3,500 - 3,999	Score 6
	4,000 - 4,499	Score 7
	4,500 - 4,999	Score 8
	5,000+	Score 9

Coding should be done on a coding sheet. After the coding process is completed, the researcher can then proceed to analyze the data using appropriate procedures and write the report.

Conclusion

The main function of qualitative research, and thus the responsibility of each investigator, is to reveal underlying patterns in human behavior by identifying and showing relevant relationships (both direct and indirect) between significant variables, be they in the

physical, biological, sociocultural or psychological dimensions. This can only be accomplished by analyzing and interpreting data obtained through observations, formal and informal interviews, as well as other tools, either qualitative or quantitative. An effective analysis rests firmly on the researcher's ability to efficiently sort, organize, classify and file data in a systematic and logical manner. The researcher should have command over the data, not vice versa. He/she can then put together the pieces of the puzzle, which means transforming data and experience into concepts, and these into patterns of relationships and new ideas.

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Chapter 27

Computerizing ethnographic data

Kerry Richter

In the past, qualitative researchers depended largely upon the paper and pencil, or an occasional typewriter, for recording and preliminarily analyzing field data. Today, though, the notebook computer and ethnographic software packages have made this process more efficient and less tedious, but no less demanding - EDS.

Introduction

As outlined in the previous chapters, a qualitative study requires great care in the research design process: choosing the appropriate methods, preparing the interview guidelines, and selecting a representative group of cases for the problem of interest. Often most of the research effort goes into the research design and fieldwork stage. But as outlined in the previous chapter, it is crucial for the analysis process to begin even before the fieldwork commences, as the researcher sets up an analytic strategy to sort and collate qualitative data. When the research project consists of focus groups or other rapid assessment techniques, organization becomes even more critical.

Once the focus groups and/or interviews have been done, the investigator is faced with hundreds or even thousands of pages of transcripts. If the research has been carefully done, these contain the answers to the research questions that were asked. And if analysis categories have been developed throughout the fieldwork period, analysis becomes mainly a matter of searching and sorting these categories. In the past, qualitative researchers would sort data by copying quotes onto index cards and filing them by topic, or photocopying transcripts so that they could be cut and pasted. Fortunately this organization process has been aided by the development of computer software that performs the "cut and paste" functions that formerly had to be done by hand. Computerization greatly cuts down the time required for this task, especially now that transcripts are usually typed into a word processor.

It should be stressed that the actual analysis of qualitative data cannot be done by computer. This point may be somewhat confusing to those who have done quantitative research, where data is collected, coded and entered into the computer for processing. Because survey data often contains a large number of cases and many variables of interest, compiling the data into frequency tables and cross-tabulations would be nearly impossible without a computer. This process is analogous to sorting. In both qualitative and quantitative analysis, the sorting procedure often brings to light issues that had not been anticipated. But the next stage in quantitative analysis, where bivariate or multi-variate relationships are tested for significance, is also performed by statistical software. While the selection of the appropriate

method is crucial to quantitative research, by the time the analysis is done the researcher may be only asking whether a particular relationship is significant or not. In qualitative research, while key concepts should be developed ahead of time and the first stage of analysis mainly involves sorting according to these concepts, the interpretation of the material is an on-going process. Thus organization and analysis should be interactive, as the data is refined into meaningful conceptual categories and relationships; and this process may only be performed by the investigator.

This chapter gives an overview of the steps in using the most commonly known software package for the analysis of qualitative data, **The Ethnograph**. It is no substitute for the excellent manual which comes with the software (Seidel et al. 1988). Readers who are interested in using this package will find ordering information at the end of the chapter. An example of how **The Ethnograph** was used to analyze data on child care in Bangkok is given for illustrative purposes.

Preparing Transcripts for Computer Analysis

Almost any word processing package may be used to prepare the transcripts, as long as the package is capable of creating an ASCII file that can be read by **The Ethnograph**. There are also specifications for setting up the transcripts as follows:

- The total width of the text is set at only 40 characters; generally this means that margins are set at left 1, right 40.
- Speaker identifiers, such as **Q:** and **A:** for in-depth interviews or the name of the speaker for focus groups, start in the first column. You may use up to 10 characters and there must be a colon (:) after the identifier.
- The text or transcript of what was said is indented at least one column.
- Other comments or information, such as identifying information about the respondent or descriptive information on circumstances should begin in column 1 and have a + sign in the first column.

Contextual comments are an important part of the transcript. Besides identifying the respondent or focus group, they provide circumstantial information about the situation that may affect the outcome of the interview. These may include persons present at the interview or focus group (e.g. the point at which the husband enters or leaves the room); disruptions (e.g. a loud truck going by, the school next door letting out); or simple description not given by the text (e.g. laughter, a shift to talking about another topic which is not clear from the text alone). As will be seen later, contextual comments will appear in the sorted output for any segments of text where they apply.

A sample of a transcript prepared for **The Ethnograph** for a project on child care is given in Figure 27.1. Because the transcripts use only the left half of the page, there is plenty of room for coding or other written comments. Transcript files should be saved in ASCII and have the extension .ETH. Further information about using various word processing programs to create files for **The Ethnograph** is given in the manual.

Figure 27.1: Transcript prepared for analysis using The Ethnograph

+Interview in van

Q: After finishing Paw 7 why didn't you continue?

A: I had many younger brothers and sisters, and had a lot of responsibility. My father and mother were the only two people working, and there were many younger brothers and sisters - seven of them. Everyone was going to school, so I had to quit first because I am the eldest.

+Move interview to street

Q: In the beginning when you had the first child, you were working selling things; how did it change your work status - did you keep selling or stop for awhile?

A: For the first child it wasn't too bad because my mother did not work, she stayed at home; she helped me take care of my child. I took care of her myself for more than three months, then came out to help my husband sell things. But I came out a little bit late. My mother took care of her until she went to pre-primary school (anubaan) when she was more than two years old. Since my mother got a job we have to hire someone to take care (of the second child).

Creating Numbered Files for Coding

The first task in the analysis using **The Ethnograph** is to create a file where the text lines are numbered, so that they may identified for coding. Simply select **<N>** in the opening menu, **<E>** to enter the names of the files, and **The Ethnograph** will create a numbered version with the extension name .NUM. Normally you would want to print this file at the same time, since you will need the printed output to code the transcript.

The Coding Process

"Coding", as it is referred to in **The Ethnograph**, is the process of indexing the numbered transcripts according to the codewords that you have developed. These may be topics and sub-topics from the interview guidelines; key concepts that are more general to the project; and many other types of categories. Usually there are several "rounds" of coding; in the first step the major keywords or categories are identified, and in the second and subsequent rounds new codewords will be developed as additional issues arise. Coding becomes more detailed with finer and finer categories as it progresses. As described below, re-coding may be done even after searching and sorting helps to identify new findings (Knodel 1993).

The coding process involves identifying the line numbers of the segments in the transcript associated with particular codewords. Because the numbered transcript only takes up the left side of the page, there is plenty of room for assigning codewords. The segments may overlap, as one topic shifts into another, or be nested, as a subtopic arises within the discussion of a major topic. There are limitations within **The Ethnograph** program regarding the length of a segment (from 1-9999 lines), the number of codewords that can be assigned to a segment (twelve), and the number of levels of nests and overlaps allowable (no line of text may belong to more than seven segments).

It may be best to illustrate the coding process with an example. In the childcare study, I was interested in indexing discussion about the different types of childcare; these were identified with the following codewords:

Type of Child Care

MOTHER	(self-explanatory)
FATHER	(self-explanatory)
EXT	any other relative
SITOUT	non-relative such as neighbor, caring for child outside the child's home
SITIN	non-relative caring for the child in the child's home, but not live-in
SERVANT	live-in babysitter or nanny
CENTER	day care center / nursery
SCHL	pre-school
APART	child living apart from the mother
TAKEWORK	mother taking the child to work

These were the major types of child care that had already been identified through pre-testing. The first step in the coding process was to index the segments in the transcripts where the various types of childcare were discussed. At the same time, I coded other issues of interest as follows:

Other Topics

EXPENSE	childcare expenses
WORK	mother's work outside the home
CONFLICT	any discussion of conflict or disagreement
QUALITY	any discussion of childcare quality
SHIFT	change in childcare
BANGKOK	aspects of life in Bangkok
FERTILITY	any discussion of pregnancy, contraception, spacing etc.
PAST	any discussion about past lifestyles, childcare in the past etc.

An illustration of how these codewords were assigned in the first round of coding is shown in Figure 27.2. The entire segment shown (lines 509-552) concerns pre-school care, so this is coded as SCHL. All other segments are "nested" within this. Lines 509-527 discuss school expenses. Line 529 begins the discussion on school quality, but in 533-545 the expense issue arises again; this segment is nested both within the QUALITY and the SCHL segment.

In the second round of coding, I became interested in the decision points where parents shift their child into another form of child care. In this round, I would code lines 533-545 as SHIFT. It is interesting that both expenses and quality were being discussed at this point; the mother talks about her reasons for shifting the child to her current school (due to expenses) when the interviewer asks about the school's quality. These overlaps become clear when the search procedure in **The Ethnograph** is used, as outlined below.

Another example, this time from a focus group discussion, is shown in Figure 27.3. Here speakers are identified with names (pseudonyms), but you may also simply use **P.1**, **P.2** etc. In the focus group discussion, topics tend to shift more quickly, and coding is more complex. In this example there are many nested segments; lines 18-20 are coded with SITOUT as a childcare type; QUALITY because the speaker (Noi) is referring to the quality of care; and EXT because the segment takes place within a discussion about care by the grandmother. Note that in this segment Noi is comparing a non-relative's care to care by the grandmother; this would not be clear by looking at the small segment alone, but by using the nested structure the context will not be lost.

You may also want to create non-substantive codes, to flag certain segments of the transcript that contain quotes you may want to use in the write-up for example (Knodel 1993). Transcripts may be re-coded later for analysis on a different topic; besides being flexible, **The Ethnograph** has the advantage of storing the transcripts in a way that makes it easy to use them at any point during the research process.

Entering Coded Segments into The Ethnograph

After the analytical process of coding, which may take several rounds of going through the transcripts and creating more and more detailed codewords, the mechanical task of designating the line numbers of the segments assigned to the different codewords must be performed. Each segment is entered separately; in the example in Figure 27.2 above the following segments would need to be entered:

SCHL	509-557
EXPENSE	509-527; 533-545
QUALITY	529-557
SHIFT	533-545

Figure 27.2 Coding the numbered transcript: in-depth interview

Q:	And the fee, how much is it?	509	
A:	The fee is 700 baht each term; food is 100 baht a month; and the vehicle is 150 baht a month.	511 512 513	
Q:	Did you have to pay *paejia*?	515	
A:	No, it's a temple school.	517	*Expense*
Q:	How many months in a term?	519	
A:	6 months.	521	
Q:	So each term you pay 700 baht but monthly 250 baht. Do you have any insurance fee?	523 524 525	
A:	No.	527	
Q:	Do you think the pre-school (anubaan) is good; how has it been so far?	529 530	*School*
A:	It's a temple school, not a private school. At the beginning I took her to Tanamboot, for about one term; then I took her out because I could not afford it. One term costs 3000 baht. So she moved out to the temple school.	532 533 534 535 536 537 538	*Expense*
Q:	Was it a pre-primary (anubaan) school at Tanamboot?	540 541	*Quality*
A:	Yes. At that time business was bad and we could not afford it. So she moved out to the temple school.	543 544 545	
Q:	And how do they take care of the child?	547 548	
A:	Fine, they take good care of the child. But they don't teach language (English), only the alphabet.	550 551 552	

Figure 27.3: Coding the numbered transcript: focus group

+Informal sector group discussion		1			
Q:	Who do you think is the most	3			*Mother*
	suitable person to raise a baby aged	4			
	from birth to 6 months old?	5			
Tao/Noi/Gop:	The mother.	6			
Q:	Why?	7			
Tao:	She is the closest.	8			
Q:	How about the rest of you?	9			
Noi:	Yes, I think the mother.	10			
Gop:	The mother.	11			
Joy:	The mother is the most important	12			
	person.	13			
Q:	If the mother is not free?	14			*Ext*
Noi:	If she is not free, she can ask	15			
	her own mother.	16			
Lek:	Yes, the grandmother.	17			
Noi:	If you hire someone to take care	18	*Sitout*	*Quality*	
	of the baby, it's not safe because	19			
	the baby is still very small.	20			
Q:	Why do you think the grandmother is	21			
	the best?	22			
Ott:	Because we can trust them.	23			
Noi:	My husband's mother is up-country.	24			
Ott:	Yes, our mothers are far from us.	25			
Q:	How about a baby older than 6	26			*Sitout*
	months- who do you think should take	27			
	care of them?	28			
Noi:	You can hire a babysitter or you	29	*Expense*		
	can leave your baby with someone	30			
	and pay around 20-30 baht.	31			
Joy:	I think most of us do that, pay	32			
	someone to take care of them	33			
	during the day.	34			
Lek:	The mothers who don't work usually	35			*Mother Work*
	raise their children themselves.	36			
Joy:	Well if I had nothing to do I	37			
	would take care of him myself.	38			
Q:	Do you think that mothers who are	39			
	not doing anything should take care	40			
	of the baby themselves?	41			
Noi:	I think so. But I sell things, how	42			
	could I take care of my child.	43			
Lek:	The people who pay someone to do	44	*Expense*		
	it usually have to work outside of	45			
	their home.	46			
Noi:	Yes, we pay about 20-30 baht.	47			
Lek:	But if the mother works at home	48			
	she should take care of the baby	49			
	herself while working.	50			

Select "Code a file" from the opening menu and enter the start and stop line numbers and codeword for each segment. You may add additional segments or revise your coding scheme as your analysis proceeds. **The Ethnograph** creates a coded file with the extension .COD. Entering coded segments is a procedure that can easily be performed by a research assistant, which is particularly helpful if you have many pages of transcripts.

Sorting Qualitative Data

The Ethnograph's main function is to sort qualitative material according to the key concepts that you specify. The sorting process itself is very simple. Use the Search procedure in **The Ethnograph** to search for codewords from one or more transcripts; you can either obtain a printed copy of all material pertaining to that codeword or just view it on the screen.

Searches may be performed at several levels of analysis. At the outset, you would probably want to sort all material according to the major topics of the study. For example, for the child care study the first step was to obtain a sorted transcript of all text pertaining to the different types of child care. It is extremely useful to have all material from a major topic in one printed transcript for referral. Reading through this sorted material may give the reader additional insights. For example, if respondents for the in-depth interviews were selected on the basis of their socioeconomic status, the similarities or differences they have in experiences with a particular type of child care may not become clear until all segments on that type of care are compiled. Some researchers may code and sort transcripts according to major topics before proceeding to the second round of coding.

A particularly useful feature of **The Ethnograph** is its ability to search for segments when two or more codewords overlap. While many conceptual issues emerge from reading through the transcripts several times for coding purposes, a systematic search across several interviews or focus groups provides greater documentation of the findings, and may identify issues that had not been previously perceived. For example, when I searched for the codewords EXT and CONFLICT together I found that nearly all reports of conflict were with the respondent's mother-in-law (the paternal grandmother); subsequently when I searched for EXT and QUALITY together I found that most reports of high quality child care were referring to the respondent's mother (the maternal grandmother). Without a systematic search of all interview transcripts, this finding may not have emerged as clearly.

Figure 27.4 shows the result of a search for the codeword PAST from the in-depth interview in Figure 27.2 above. The name of the file and any contextual comments are given at the top. **The Ethnograph** uses symbols such as #, $, and % to mark the coded segments; in this example PAST is designated with the # and MOTHER with the $. The symbols are shown on the right-hand side and codeword nesting can be clearly seen. Search results can be printed or saved in a file; or you may want to simply re-search for them with **The Ethnograph**, since the combinations and permutations for searching are unlimited.

Further Uses of The Ethnograph: Catalogs, Templates and Face Sheets

If you have a number of files pertaining to the same research topic, it is often easier to create a "catalog" of files with a descriptive name. You can then search all the files in the catalog at once. For example, you could save focus group sessions in one catalog and in-depth interviews in another; or have catalogs for each major sampling criterion or respondent type (e.g., younger and older age groups). After you create a catalog, you may refer to the name

Figure 27.4: Example of a search for the codeword PAST

INFYNG02 +MOVE BACK TO VAN

SC: PAST

```
#-PAST
  : A:  Like in the past, everything is fine,          983 #
  :     and simple. Now it's very                      984 #
  :     complicated.                                   985 #
  :                                                      #
  : Q:  How did they take care of children in          987 #
  :     the old days that's easy and simple?           988 #
  :                          #
$-MOTHER      %-EXPENSE     %-WORK      *-FERTILITY
  : A:  In the old days the mother can                 990 # - $ - % - *
  :     breastfeed the child, and another              991 #   |   |   |
  :     thing, things were cheap, not                  992 #   |   |   |
  :     expensive like nowadays. The father            993 #   |   |   |
  :     could just work alone and the mother           994 #   |   |   |
  :     could stay home and take care of the           995 #   |   |   |
  :     child. So in the old days they had a           996 #   |   |   |
  :     lot of children.                               997 #   |   |   - *
  :                                                      #   |   |
  : Q:  The mother didn't have to go work but          999 #   |   |
  :     nowadays...                                   1000 #   |   |
  :                                                      #   |   |
  : A:  Nowadays the mother and father have           1002 #   |   |
  :     to work together and help each other           1003 #   |   |
  :     or it doesn't work. The expenses are           1004 #   |   |
  :     high.                                          1005 #   |   - %
  :                                                      #   |
  : Q:  And besides the economy being                  1007 #   |
  :     different, is there anything else              1008 #   |
  :     different about child care comparing            1009 #   |
  :     the old days and nowadays?                     1010 #   |
  :                                                      #   |
  : A:  Yes. In the old days the mother could          1012 #   |
  :     breastfeed the child. Nowadays they             1013 #   |
  :     use canned milk because she has to              1014 #   |
  :     work. And in the old days the mother            1015 #   |
  :     was close to the child, but nowadays            1016 #   |
  :     she cannot be close; she has to hire            1017 #   |
  :     somebody else to take care of the               1018 #   |
  :     child.                                          1019 #   |
  :                                                      #   |
  : Q:  She has to take her child somewhere            1021 #   |
  :     else but in the old days she took               1022 #   |
  :     care of them herself completely.                1023 #   |
  :                                                      #   |
  : A:  Yes, by herself.                              1025-# - $
```

of the catalog rather than the name of individual files when doing a search procedure.

Face sheets are a way to store detailed information about respondents, such as their age, sex, work status or other characteristics, that may be attached to the transcripts. These characteristics may also be used in the search procedure, so that you may search for all segments concerning childcare by a servant for working mothers for example. To enter this information about respondents, you must first create a template that defines the particular variables you will use. Then face sheets about each respondent are created by entering the data for each variable. Variables defined on a template may be used in searches along with the substantive codewords already entered. Face sheets add an additional dimension to qualitative data analysis by allowing you to explicitly examine the relationship between conceptual issues of interest and the variation by different sub-groups (Seidel et al. 1988).

Conclusion

This chapter has given an overview of how computer software may be an aid in the analysis of qualitative data. Primarily, software such as **The Ethnograph** performs an organizational and sorting function. When a large amount of data is collected by a qualitative research project, this capability is invaluable for systematic analysis. And while interpretation remains the job of the investigator, computer sorting may reveal patterns and relationships that are difficult to see simply by reading through transcripts or performing "cut and paste" operations. Most importantly, sorting and searching should become an interactive process where more and more detailed relationships may be conceptualized.

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Information on Ordering the Ethnograph

This chapter refers to use of Version 3.0 of **The Ethnograph**. Version 4.0 is scheduled to be available sometime in 1993. For information write to:

Qualis Research Associates
P.O. Box 2070
Amherst MA 01004 U.S.A.

Chapter 28

Designing and writing qualitative research reports

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A report, article or monograph based on qualitative research is not, or should not be, an individual's cut-off view of a situation. Rather it should be a descriptive and analytical presentation of data that have been laboriously and systematically collected and interpreted (Bogdan and Taylor 1975).

Introduction

Why write reports? There are almost as many answers to this question as there are ways of doing research. Nonetheless, the most basic reason is that research projects of any type, no matter how successful they have been, are not finished until their results are reported. The philosophy of science is based on the fundamental premise that original research *must* be reported. Only through the reporting process can new facts and new research questions come to light and new findings be related to the research activities of other professionals. By communicating your project findings, you also communicate the importance of your project and its research design which can become the basis for developing new projects and training others to conduct similar research studies in other locations.

Scientists and researchers are thus faced with a two-fold challenge. They must not only *do* research; they must also *write about* research. But while scientists are trained to conduct research using well-established principles and methods, their training almost always neglects the communication arts. In essence, many good scientists cannot write, while others fear it needlessly. In the words of Charles Darwin, "a naturalist's life would be a happy one if he had only to observe and never to write" (Day 1979; Trelease 1958).

This chapter's purpose is to introduce students and junior researchers to the report writing process with special emphasis on constructing qualitative research reports. Of course, one brief chapter cannot tell the whole story, and readers are encouraged to consult the many excellent, full-length texts on writing research reports, proposals and articles which are currently available (cf. Attig and Winichagoon 1991; Day 1979; Lefferts 1978, 1990; Wilkinson 1991). Many of these, though, focus mainly on quantitative research studies, and their parts and construction differ from those of qualitative research reports. Nonetheless, the principles of good writing noted in these texts apply to all.

Report Characteristics

A research report is a written document that communicates the methods and findings of a research project to others. It is not simply a brief summary of a project's findings. Rather, a good report (be it qualitative or quantitative) documents the entire research process, starting with how the research problem or question was identified and then going on to relevant past research related to the problem (the literature review), the project's specific objectives and hypotheses, its research design and methodology, study areas and population characteristics, theoretical and conceptual framework, results, discussion and recommendations. Report writing therefore *should not be a last minute activity*; a researcher cannot wait until the research project is completed before starting the report. The best reports are those which are constructed as the project commences and where the report writer keeps systematic notes about each research stage while conducting the project itself. In this way, important points are not forgotten from the time the project was originally conceived to when the report needs to be formally written.

In writing a research report, the writer has three main communication tasks. The first rests on identifying the audience who will be reading the report, since reports can be written differently depending on the primary audience and their reasons for reading the report. For instance, a funding agency commonly wants to see results and if the project attained its objectives. Professional social scientists look especially at the research process, its scientific soundness and interpretations; while policy makers, who generally ignore scientific details, want to see how the project's findings and recommendations can be applied. In each case, though, readers want to see a well-organized report that shows clear and systematic thinking.

Second, report writers must ***transform*** *their abstract and multifaceted thoughts into concrete, logical writing*. This is a familiar task for many researchers, since they are constantly putting new ideas and new information into words. Third and not so commonly, a writer must *make his/her writing* ***convey*** *their abstract and multifaceted thoughts to the reader*. Oftentimes, report writers feel that by achieving the first objective they will automatically lead to achieving the second. Yet different readers will interpret the same material in different ways, unless the writer makes an effort to transform his or her thoughts into words that allows various readers to understand exactly what he/she intends. Further, the writer must make it *easy* for the reader to do this by making the report as *readable* as possible.

Readability means writing which is straightforward and understandable. Technical terms are kept to a minimum (especially for reports written for non-specialists) and, if they must be used, are explained as clearly and simply as possible. In a highly readable report, readers do not have to mentally bridge gaps or make assumptions, reread passages to decode information and technical terms, or even stop reading momentarily to interpret what the writer has written. In composing good reports, the writer needs to make the reader immediately understand what is being said, so that he or she does not have to study the report in excessive detail. If readers must do so, they very quickly put it aside and question not only the study's, but also the writer's, credibility.

What must be remembered is that in talking to someone about a project, the listener can ask questions when the discussion becomes confusing. The communication process is two-way and interpersonal. When a reader reads a report, communication is one-way, from the paper to the reader. Hence, writers must *anticipate* how readers will read what they have written, anticipate their questions, and avoid as much as possible any confusing areas.

In most cases, both the writer and report reader already possess a conglomeration of concepts, data and thoughts in their minds, though these may differ in their configuration. Both also share the same scientific language. Usually, readers may also have much more

information and ideas than are needed to understand a report. What they lack, though, is the particular conceptual framework that the writer has in mind. That is, the reader needs to understand exactly how the writer is putting together his thoughts, ideas and data.

To do this effectively, a report writer must guide readers *step-by-step* through complicated parts of the report (such as data analysis and interpretations). Alternatively, they may indicate up-front specific points or issues for discussion (such as a significant finding), and then go on to discuss it in detail. This approach gives readers an overall expectation of what is to come as well as a reference point for a possibly complicated process of explanation.

In either case, readers expect writers to provide directions about where to go (following one idea to the next) and where to turn (changing ideas). Thus, writers must not mislead readers, raise false expectations, or confuse them by omitting cues (directions) or supplying implicit or wrong ones. Writers must not surprise readers by leaving gaps in the discussion (such as unanswered questions or incomplete ideas or interpretations) or changing direction totally without warning. If a writer leaves a gap, report readers will bridge this gap using their own ideas, information and interpretations. This may lead them in a totally different direction, and they may easily arrive at a different destination than the writer intended. At the worst, readers may become so confused that they have to go back to find their direction. Thus, leaving a report's readers undirected or misled creates confusion and miscommunication (Wilkinson 1991).

Unlike popular works, research reports are written using a very limited number of styles and have a distinct tone. *Style* is often used to refer to a person's form of writing, that is, how he/she chooses words and the length and form of sentences or paragraphs. Scientific writing is often criticized for being lacking in style. In research, however, style is a consequence, not a goal, of scientific writing. It is a result of matching a report's form to its content, objectives of the writer, and requirements of the readers. Many critics of scientific writing expect the style of reports to meet criteria for a quasi-literary style. They fail to realize, though, that scientific writing is not a form of literary writing. Its main intent is to inform, not entertain. In actuality, a report which is stylistically excellent may cause a reader to be uncomfortable, since he or she may feel that the writer is "hiding" something by trying to "write around" it. In writing reports, style is important only with respect to how well it facilitates or impedes communicating a project's process, its findings and conclusions. The style often used in writing reports (qualitative and quantitative) is formal and succinct; the writer says a lot using a few words.

Going along with this formal, succinct style is the *tone* or attitude the writer takes in relation to the subject matter. In research reports, the tone expresses distance from the subject matter; it is professional and serious (Neuman 1991). Avoid rhetoric and inflammatory or flowery language. The purpose is to inform, not to advocate a position. Radical statements or opinions will often turn readers away from the report. If readers detect bias, carelessness or omissions in writing, moreover, they may question the research itself and the researcher's capabilities.

Many projects are complex and this can breed confusion, not only on the part of writers in communicating their projects, but also for readers who must interpret them. Clear writing is the way to avoid the danger of confusion, and it can be attained by planning the report ahead of time, thinking and rethinking the research problem and design, explicitly defining terms and labeling tables and figures, writing with short declarative sentences, and limiting conclusions to what is supported by the evidence (Neuman 1991).

The Writing Process

Writing is a process; it is more than simply recording details about the research project in addition to one's thoughts and interpretations about its results. Rather, writing is the process of formulating and clarifying these. The best way to learn to write clearly is through writing. There is no single correct way to write, though some methods do characterize good writing. No one method of writing fits everyone, and only through practice can a writer determine which is best for him/her. In preparing to write, the writer should create an atmosphere which is congenial to writing; one that is free of distractions, stress, interruptions and any other factors that may disturb the writer's concentration (Barzun and Graff 1977:324-328). Neuman (1991:485-486) has noted that the writing process has three steps - prewriting, drafting and revising - and these entail several different methods of writing.

Prewriting

The first step is *prewriting*, and it entails getting prepared to write by arranging notes on the literature, making lists of ideas, completing bibliographic citations, and organizing comments on data analysis. The objective is to begin organizing a piece of writing before starting the actual writing process. For some writers, this stage may include using structured methods of organization, like those discussed below, to set out as close as possible what the report will look like in terms of its organization and, to a smaller extent, its content. Other writers feel more comfortable in not structuring the document beforehand. They will thus skip this part of prewriting and go on to the drafting stage by either writing rapidly and spontaneously, or by expanding on a smaller piece of writing like a report summary or a project proposal. While the latter are not substitutes for a report's sections, they can serve as initial rough drafts.

For writers who prefer a structured writing method, the most time-honored way to do this is to prepare an outline. An outline ensures a report's unity and completeness because it serves as a record of the report's content (e.g., main sections, data, graphics) and order. Preparing it helps writers to gather their material, organize their thoughts and thinking process, and determine the relationship between specific report sections. Some writers use an outline as a final structure and they follow it closely, while others see it as a flexible guideline or working outline. During writing, the writer may elaborate more on specific points, add new ones, delete inappropriate parts or reorganize certain sections. This is a common method when writing long reports which contain a lot of material and details, and especially in writing reports concurrently with research.

Another method of organizing a complex report (or paper) is to make a question tree. At the top of the tree is the major research question (Q_1), or one which the writer feels is the most important that the report should address. Under this major question are sub-questions ($Q_{1.1}$, $Q_{1.2}$, $Q_{1.3}$ . . .). The writer then collects the information he/she needs to answer these sub-questions and develops the report.

Wilkinson (1991:92) also recommends developing a path diagram, which is particularly useful for a piece of writing (report, paper or sections of a manuscript) which has complex interrelationships. First, the document's elements are clustered into separate units, such as hypotheses, methods, collection, conceptual framework, results, discussion, etc. The clusters are organized so that arrows can be drawn to show relationships within and between clusters. In the writing process, these arrows may need to be restructured several times before the relationships displayed match one's conceptual structure of the document. Separate path

diagrams may be developed for each document section. If the path diagram is well-structured, it can be more effective than an outline as a basis for writing. If it is possible to lay out the path diagram as a tree diagram (similar to the question tree diagram above), the translation to the writing will be even easier.

Drafting and Revising

Drafting, or composing, is the process of getting ideas on paper as a first draft by freewriting, that is, sitting down and writing everything you can as quickly as it enters your mind, without stopping to reread what you have written, and without worrying about grammar, spelling, or punctuation. The writer may use any one of the structured methods noted above to guide the writing process, or they may begin without a definite plan. The aim is to put ideas down on paper as quickly as possible to get and keep the creative juices flowing. This kind of unstructured writing is most useful when one gains insights into a process or concept or when the materials begins to come together and take shape. Some writers do away with the paper and freewrite by dictating or using a word processor. In either case, the writer can help to maintain a consistent tone and point of view by focusing in the back of his/her mind on an invisible listener (Wilkinson 1991). Drafting also entails drawing up the bibliography and footnotes, preparing data for presentation, and forming an introduction and conclusion.

Revising involves evaluating and polishing the report by improving coherence, proof-reading for mechanical and grammatical errors, checking citations, and reviewing voice and usage. The best process of revising is when the writer leaves the manuscript alone for awhile. Then he/she goes back to it, re-reads and corrects any errors that arise. He/she then gives the report to a colleague to review and make comments, and then revises it again based on these.

The Nature of Qualitative Reports

Quantitatively-based scientific reports are tightly structured and focus on presenting hypotheses and evidence in a sound, logically tight and condensed style. Sufficient information is presented so that potential users of the data can (i) assess observations, (ii) repeat experiments, and (iii) evaluate the researcher's intellectual prowess (Day 1979). The report (or article) is organized around five main sections: a brief *Abstract* or *Executive Summary* (What was the topic, the research problem, the basic findings, and any unusual research design or data collection features?); the *Introduction* (Why did you do the work; what was the problem, research question or hypothesis; and what were the objectives?); *Materials and Methods* (What did you use and how did you use it/them? What did you do [the study design] and how did you do it?); *Results* (What did you find out?); and *Discussion* (What does it all mean, and what are the implications?). Also included in the report are a table of contents, acknowledgements (if any) and references.

In contrast, qualitative reports have fewer rules and are less rigidly structured and organized. The final sections may be similar to those of quantitative reports, as noted above, but this is not usually the case. More often, qualitative reports tend to be more diversified since they are generally not concerned with repeating 'experiments' and focus more on the suitability of the data collection process and, more importantly, the formation of interpretations.

According to Neuman (1991:491), they also tend to be longer for five main reasons. First, qualitative data are more difficult to condense. Rather than numbers, data comprise words, pictures or sentences, and they often include many quotes and extended case examples.

Qualitative reports also contain detailed descriptions of project sites and important characteristics of the population under study. This helps readers to better understand or get a feel for settings as the writer attempts to transport the reader into the subjective world view and meaning system of the society or culture being reported on.

Qualitative researchers use less standardized data collection methods, ways of creating analytic categories, and modes of organizing evidence. What methods are used usually depend upon researcher preference and the conditions of the research site itself. Thus, researchers explain what they did and why in greater length than that used to describe laboratory or similar scientific experiments.

As noted in earlier chapters, the goals of qualitative research are to explore new settings and construct new theories. This often engenders developing new concepts and examining detailed relationships which adds to a report's length. Further, theory derives out of evidence, and detailed descriptions demonstrate how the researcher created the interpretations from evidence.

Finally, qualitative researchers use other styles besides a formal one, largely because the nature of ethnographic data (in the form of life histories, case studies, folklore, tales, and so forth) gives the writer greater freedom to use literary devices to keep the reader's interest and accurately translate a meaning system for the reader.

In addition to these five attributes, qualitative reports also make use of graphic representations like figures, pictures and illustrations. Many times they may include tables to help describe more compactly the major background characteristics of a population, such as those associated with demographic, economic, nutritional situations. If the report contains tables or figures, they are meant to supplement, not replace, the qualitative data.

Another characteristic of qualitative reports is that they tend to include discussion throughout, as opposed to a specific "Discussion" section for quantitative reports. This makes the report's organizational structure even more critical for clarity. Writing a qualitative report thus requires very close attention to structure and meaning, and writers have to make a special effort to achieve coherence and conciseness. Since descriptions of participants, sites and theoretical models are largely verbal, moreover, the standardization of terminology and nomenclature, which is extremely important for quantitative studies, becomes crucially important for qualitative research, where it is most difficult to achieve (Wilkinson 1991).

The tone of qualitative reports is also different from their quantitative counterparts. It is not as objective or formal, and writers may use the first person (i.e., using the pronoun *I*) because the field researcher was directly involved in the setting, interacted with the people studied, and was the measurement "instrument." This personal involvement sometimes leads researchers to include a short autobiography of themselves in a report's appendix, especially if their backgrounds or previous experiences may have played a role in what problem was studied, how and what interpretations emerged (Neuman 1991; Wilkinson 1991).

Planning and Organizing Qualitative Research Reports

While qualitative reports rarely follow a fixed format with standard sections, this does not mean they are structureless. It only means that their structure emerges from an interaction between the topic being studied and the researcher's own style and system of logic, rather than one which is imposed upon him/her by disciplinary rigor. The basic idea is that report writing, like research, should be done systematically, building it up step by step into a framework or master plan that can then gradually build itself into a complete report.

There are many acceptable organizational forms. Some qualitative researchers try to mimic the format used for quantitative reports, as noted above. Some reports are organized

in terms of a *natural history*, an unfolding of events as the researcher discovered them, or as a *chronology*, following the developmental cycle or career of an aspect of the setting or people involved (Neuman 1991). Some scholars such as Plath (1980) organize their presentations around themes which depict important categories of the people being studied. Others researchers (cf. Yoddumnern-Attig et al. 1992) assign separate sections or chapters entitled: *Introduction* (containing background information, problem identification and a literature review); *Research Design and Methodology*, *Study Areas and Population Characteristics*, *Theoretical and Conceptual Frameworks*, *Results* (which may contain many subheadings), *Discussion* and *Recommendations*. Scrimshaw and Hurtado (1987) suggest the following.

Executive Summary of Conclusions and Recommendations

I. Introduction and Statement of Purpose
   - A. General discussion of research purpose(s)
   - B. Importance or relevance of the research

II. National and Regional Background Information
   - A. Summary of available data on the topic
   - B. Reference to relevant studies

III. Description of Study Communities
   - A. Reasons for selection
   - B. General community data
   - C. Health resources data summary

IV. Methodology
   - A. Sample selection
   - B. Research timetable
   - C. Characteristics of researchers
   - D. Standardization of research techniques
   - E. Techniques and instruments used
   - F. Obstacles, problems, constraints

V. Results
   [with special reference to making comparisons between communities if relevant; present factual data and illustrate with ample case studies]

VI. Detailed Discussion of Conclusions and Recommendations for Programs and for Future Research

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Oftentimes, researchers plan how their reports are going to be organized *after* they have begun a project and its data collection stages. This is unfortunate because by planning ahead, a report's organization can actually serve as a guide for helping the researcher to plan exactly what data need to be collected and how they will be analyzed and come together. For instance, a rapid assessment procedure (RAP) project at the Institute of Nutrition at Mahidol University examined mothers' models of child growth, weaning and weaning food selection

in an urban Bangkok slum. Using Scrimshaw and Hurtado's framework above, researchers developed the project's organization even before they had selected the study site. Under each main chapter were a list of needed data which had to be collected in order for the project to attain its objectives and the final report to be written. This organizational plan roughly corresponds to the project report's final table of contents, and it served as a guide for collecting background information, developing the project's in-depth interview and focus group discussion guidelines as well as the data analysis plan.

Major Report Components

While qualitative reports will vary in terms of their organization, they all have in common a set of key component parts. Several of these components are also relevant in reporting quantitative studies. In qualitative reports, though, these components may be arranged differently such as placing the literature review in the introduction or keeping it as a separate section in itself. No matter what strategy is used, each component should contain information as follows. The contents of many of these report sections, moreover, are also the same as those which are found in project proposals and admirably described by Lefferts (1978, 1990).

Title

Titles should be as short as possible, descriptive and accurate. They should communicate the topic, its key features and the type of research; for example:

Community-based Factors Affecting Contraceptive Discontinuation: An Anthropological Study.

To make sure the title agrees with what the report is discussing, the report writer can wait until a draft of the report is finished, or rewrite a previously designated title.

Table of Contents

A report's "Table of Contents" serves three purposes. When the reader first sees a report, it gives him/her an overview of its content. The table of contents also tells the reader how well the writer has organized the report. It can make a major contribution to conveying a report's sense of coherence, unity and clarity. Lastly, it gives the reader a quick way of finding certain sections. If the report's subject is well-known, a reader may skip the background section and go straight to the project's results.

The table of contents contains the title of each major report section and subsection along with the page number where the section begins. It uses an outline format in presenting the report, and this format can vary; the general rule is, though, ***keep it simple***. Some table of contents give each major section a Roman numeral (I, II, III, etc.), each subsection a capital letter, each heading under a subsection an Arabic numeral (1, 2, 3, etc.), and each heading under this a lower-case letter. This format type is better for detailed reports where the number of levels is over three.

The most common, and simple, format for research reports is the Arabic numbering system. This system, however, is only good for reports which have only three major levels.

If more levels are involved, the numbering becomes confusing. In other instances, writers may use a combined Roman and Arabic system. No matter what method the writer uses, however, each heading should accurately describe the material to follow it. Further, it must also represent the central concept or theme of that particular section. The table of contents, moreover, contains ***exactly the same headings*** used in the report's body. No additional words or punctuation should appear in either the text or table of contents headings. After completing the report, the writer adds the page numbers.

Abstract or Executive Summary

When reports exceed twenty pages, a writer should include a summary of not more than two typed, double-spaced page. The summary should briefly cover the major points of each report section. For a research report, the summary will consist of: 1) the problem statement with brief background, 2) overall objective(s), 3) study population and data collection methods, 4) basic findings, and 5) main implications. A good summary is one that captures the report's main thrust, impresses the reader, and makes him/her want to read the entire report. Even though the summary, like the title, comes early in the report, experienced writers usually prepare the summary after they have written the report. If a writer prepares the summary first, he/she may inadvertently leave out details that may arise from the writing process.

Introduction

The report's introduction includes descriptive and substantive material. In the former case, introductory statements indicate the project's title and a short explanation of the project. Substantive material should clearly, yet briefly introduce: 1) the project concept; 2) nature and scope of the problem; 3) location where the project took place; 4) the research population investigated or served; and 5) importance or significance of the problem. The latter can include a concrete summary of the "needs" the project met. This helps to guard against readers getting "turned off" by what they may consider vague ideas.

As Lefferts (1978) points out for proposals, introductory statements should increase a reader's curiosity, interest, anticipation and desire to read on. Thus, the introduction must be written interestingly and to the point. It is extremely important to be clear about all aspects of the project. After the report is completed, the writer may need to revise the introduction to clarify any points that are not clear. Alternatively, some writers leave the introduction (and/or the summary section) until last, and write it when they have a clear idea of the entire report.

The introduction also introduces the report's style which can be either personalized and informal (using the first-person style) or institutionalized and formal (using the third-person style) (Lefferts 1978). Once again, qualitative reports can comprise either style depending upon the topic and the writer's skills. In either case, the presentation style should be well-organized and professional, but not overly formal and thus uninteresting. The introduction should also set the report's flow with each report section and its logical ideas leading into the next section.

Literature Review

The literature review concentrates on framing the project's problem by providing documented evidence, scientific data and facts relevant to the research question or problem under study. It communicates the writer's view of the problem and the factors that determine, contribute to, or have a causal relationship with the problem. In framing the problem, the report writer must determine how far -- both chronologically and conceptually -- this section must go to provide readers with an adequate background for the project. Although in the report writer's thinking the problem may have arisen out of the broad literature, for the reader the problem must arise directly from immediately pertinent, and scientifically sound, literature. Not all concepts, findings, and literature that have presented themselves to the writer are directly pertinent to the problem (cf. Thongthai in this volume; Wilkinson 1991). Writers must therefore screen the potential literature in terms of timeliness, scientific soundness (e.g., quality and correctness of the reported research, reliability and validity of findings, accuracy of interpretations), as well as relevance to the project.

In organizing the literature, the report's overall problem context should address two main responsive issues. First, it should show the project's social responsiveness through its relevance to national development priorities as well as those of the project's funding agent. Second, this section should also show the project's relationship to existing scientific knowledge on the subject, or its scientific responsiveness. In documenting these, the writer should be careful not to "oversell" the problem, so that it seems almost insurmountable. Rather, ***he/she needs to limit the discussion to those project aspects that the present report will address.*** To do this, it is best to state the problem in a general way and then go on to discuss each specific aspect of the problem which is relevant to the project and its report.

The literature review uses documented quantitative and/or qualitative evidence or limitations of prior studies to explain the exact nature and extent of the problem that led to the project's initiation (Lefferts 1978).

Quantitative Documentation. For the literature review, quantitative documentation entails using statistical or other numerical information. The writer can present this material in absolute terms (such as "there are 250 malnourished children in the district") or relative terms (one child out of three is malnourished). Usually, both absolute and relative data are presented, but the writer must be careful in presenting only that amount of information which is relevant to the report. Too little information will cause the report to be weak and reduce its credibility. Too much statistical information will "overload" and confuse the reader, making him/her feel that the writer is not sure of what information is important.

Qualitative Documentation. Qualitative documentation uses evidence from such fields as anthropology and sociology. It relies on logical connections that can be made between different factors or ideas as derived through non-statistical methods. The intent is not to show "what is happening" in a numerical sense, but "why" it is happening. The aim is to determine underlying similarities in process which help explain people's behaviors. Relationships between factors can be expanded and references may be cited from literature, research, or empirical evidence to further support ideas. The best strategy is to combine qualitative and quantitative data into a convincing argument. The material presented earlier in the problem statement also contributes to the qualitative documentation of the need.

Limitations of Prior or Existing Programs. Very often, projects have already been undertaken which address a report's particular topic. The writer should recognize those which are most relevant in the report. He/she should critically (and professionally) review them to highlight their limitations as well as their strong points. Thereafter, the writer should demonstrate how the project avoided such limitations while building upon successful factors.

This will help to establish the new project's relevance and increase its credibility. For research reports especially, it is always necessary to reference previous research in the same or allied fields; to show how the research is related to prior work by overcoming earlier limitations of that work; by extending prior research; or by validating or testing the results of other research.

Research Questions and Objectives

A *research question* is the immediate objective that the research addressed; its answer will help fulfill the project's purpose. The research question(s) can be presented in the latter part of the report's introductory section or at the beginning of the research design and methodology section. The development of the research question can be seen as a successive focusing from the general literature, to the general problem that forms the background of the research, to the particular research question (Wilkinson 1991:101).

Objectives, on the other hand, are specific statements of what *exactly* the project aimed to accomplish. Their main function is to answer the research question(s). Objectives differ depending on the nature of studies and the goals to be attained. Some research studies aim to gather descriptive data, explanatory data, data from which theoretical constructs could be deduced, or data which promotes administrative changes or comparisons. In any case, these objectives must be measurable through appropriate evaluation techniques. They must also relate to existing scientific knowledge about the subject being investigated. Objectives thus stand halfway between the general statement of purpose and the detailed explanation of project activities to be presented later in the report.

Hypotheses and Propositions

Hypotheses are suppositions upon which the project is grounded. In scientific investigations, hypotheses are usually assertions about the relationship between two or more variables, which can be expressed as a prediction or expected future outcome, and can be shown to be true or false through testing against empirical evidence.

Wilkinson (1991:124) has made a valuable distinction between hypotheses and propositions in the natural and social sciences. In the social sciences, hypotheses are explicitly stated and usually labeled; in the natural sciences, they are not. An example of this is: "*Hypothesis 1* -- The adoption of new food consumption behaviors will prompt a decline in vitamin A deficiency among children aged 5 to 60 months, pregnant and lactating women."

Further, in the social sciences, hypotheses are not always stated in a predictive form as they are in the natural sciences. Writers may not distinguish rigorously between the predictive character of hypotheses and the declarative form of *propositions*. For instance, Hypothesis 1 above is an example of an explanatory and predictive hypothesis. The future tense ("will") gives the statement a predictive character. It can also be stated conditionally in terms of an "If this, then this will happen" style. A statement or proposition, though, would be: "New food consumption behaviors lead to declines in vitamin A deficiency among children aged 5 to 60 months, pregnant and lactating women." The issue is that a hypothesis cannot logically be stated as a general declarative statement (a proposition) when it is predicting what the research will demonstrate.

In short, the natural sciences rely on predictive or conditional hypotheses. If a hypothesis is expressed as a proposition, it should be in the conditional or future tense. Social scientists, however, utilize either predictive hypotheses or, more commonly, propositions which

function implicitly as hypotheses but lack the rigor which is obtained by being stated in explicitly predictive terms. These propositions are taken to be true or to be proved true. The "proof" need only be rational or admissible, and some may come from empirical scientific studies.

This is an important point, because an emerging issue today is whether or not qualitative research, or projects which combine both qualitative and quantitative methods, require hypotheses. The answer is, "It depends upon the nature of the project and its objectives." If a project aims at *testing* a causal relationship, for example determining the effectiveness of a new communication strategy in reducing vitamin A deficiency, then predictive hypotheses are needed. On the other hand, if a project is descriptive or aims at *assessing* an existing situation and especially when specific variables and their influence are not clear (for example, "There is a positive association between improved dietary intake and adequate vitamin A status"), then propositions are adequate means to *explore* this issue, but not test any specific causal relationship.

Theoretical and Conceptual Frameworks

In the natural sciences, the theoretical framework for studying a phenomenon is so well established and so much a part of the structure of the discipline that it does not have to be presented explicitly. A clinical nutritionist might look at lactation within a neurological, biochemical, behavioral or ecological framework without developing it explicitly. Social scientists, and especially those who use qualitative research strategies, must make their theoretical frameworks explicit. They may choose to study adolescent sexuality in a theoretical framework derived from developmental, small group, or social alienation theory. But they must set the problem explicitly within the framework they choose (Wilkinson 1991:124). If the development of the theoretical framework is simple and brief, it may be included in the report's introduction. If it requires a lot of development and discussion it may comprise a separate section with its own heading.

In projects where the theoretical framework is well known and accepted, researchers may use a conceptual framework as a method of highlighting key concepts. Concepts are the building blocks of theory, and a conceptual framework is one way a qualitative researcher organizes and makes sense of data. Sometimes, this involves identifying variables and their relationships, either potential (before data collection) or actual (after data analysis). More often qualitative researchers use general ideas, themes or concepts as analytic tools for making generalizations prior to and after the research process. When a researcher constructs a conceptual framework (which is usually in the form of a graphic representation), he/she is showing the relationships between variables based on the project's theoretical framework. The project's theoretical framework is then used to tell whether or not concepts are related, and if they are, what is their relationship.

In many cases, providing a conceptual framework in the report will help readers to see what major variables were considered, their relationship to one another, and how information about them comes together to answer to report's research question. A conceptual framework is especially important for studies which use a variety of different quantitative and qualitative methods.

Research Design

A research design is the logical and systematic planning and directing of a piece of research. The design results from translating a general scientific or project model into varied research procedures. Research and project designs are dictated by many practical considerations. They must be geared towards available time, energy, facilities, equipment, and money; to the availability of data; and the extent to which it is desirable or possible to impose upon persons and/or social organizations which might supply the data.

A research design, however, is not always a highly specific plan to be followed without deviations, but rather it is a series of guidelines to keep one headed in the right direction. In the natural sciences, research reports present designs which must be followed exactly in order for experiments to be conducted correctly, the results to be valid and reliable, and the experiments to be replicated by other researchers. For qualitative research studies, though, the design needs to be flexible in order to allow for unforeseen problems which might arise during the research process and that are not due to a researcher's poor performance. As the study progresses, new aspects, new conditions, and new connecting links in the data come to light, and it might become necessary to change the plan as circumstances demand. The most meaningful and revealing studies, in this instance, are those that are conceived from a definite point of view. Over time though, the views are modified as necessary during the research process.

In essence, a study design is either flexible or inflexible depending upon the discipline involved, the nature of the project and its problem. Designs must also take into consideration the above practical considerations, while not seeming to be too unrealistic. The bottom line, though, is that in qualitative research studies, or ones which combine qualitative and quantitative methods, we can be creative about the study design if we can skillfully combine various designs to optimize our ability to investigate a research problem or question. Many times however, researchers make the mistake of following a specific study design (qualitative or quantitative) as if it can only be used singularly, rather than in combination.

Methodology

One of the most important parts of the research design is the methodology. Reports must describe precisely the methods to be employed to achieve specific objectives. In the case of lengthy or complex methods, writers should describe them in an appendix and/or refer to existing literature that describes them. The methodology should also state if the project is being carried out with reference to a particular theory, conceptual framework, or model.

In summary, the report's methodology section should contain information on ten basic areas:

- What the study is specifically about, its type (e.g., case study, life history, time allocation, rapid assessment), the types of variables investigated and their conceptual relationship;
- What data were needed and collected;
- Where the needed data was obtained;
- Where, or in what areas, was the study be carried out;
- When, or what periods of time, the study included;
- How much and what type of materials were used;
- How many cases were studied;

- What were the sampling procedures;
- What were the data gathering methodologies and tools employed, and how have they helped to achieve the project's objectives;
- How were the data analyzed, interpreted and -- if several different methods were used (qualitative and quantitative) -- how were data sets merged;
- What limitations (if any) affected data collection or analysis.

Population and Study Site

The primary "material" in qualitative research is human beings. Reports must therefore contain a section describing the "subjects" or "sample." The selection criteria and characteristics of the subjects must be carefully chosen and documented, since their attributes are important in determining the reliability of the research (Wilkinson 1991). Specific criteria can include such attributes as age, sex, occupation, education, language, ethnicity, and so on. Also important is the use of human subjects and maintaining subject anonymity in the report.

Qualitative reports also must often describe the research "site," or area in which the subjects live. Where the attributes of the site are an important part of the research, the desired characteristics and selection process should be described. Also valuable is including maps of the research site at various levels, such as locating the study area on a national and provincial map, as well as providing a map of the village(s) studied which shows the housing and settlement pattern.

Results and Discussion

This section's structure depends upon the nature of the project's results and the researcher's preference. There are several ways to write the results section, three of which have been described by Stapleton (1987). One is to present the project's results without commenting on them. Interpretations can be given later in the discussion section. Alternatively, the results can be interpreted up to a point, to make some connections between different statements or lines of evidence, but more detail is given in a separate discussion section. A third way is to combine the results and discussion of each point. If results are brief, decisive, easily presented, or need an in-depth discussion to give them meaning, then it may be desirable to combine the "results" and "discussion" into a single section. The writer must be very cautious in this case, since he/she (and the reader) can become very confused. The writer needs to take extra care in writing clearly, simply and logically so that the reader can follow from one result and its discussion to the next without losing his/her train of thought. Also helpful is making use of relevant literature to strengthen the discussion of results.

The 'discussion' section has three main parts: the facts found through the research, the investigator's commentary on them, and the theoretical or practical implications of the facts. As noted earlier, the discussion part of qualitative reports has a more substantive function than in papers based on quantitative research. Hence, discussion is not confined mainly to the discussion section. In trying to make the discussion coherent, Wilkinson has noted four major hurdles which the writer must overcome: (1) determining the central line of the development of the argument (or discussion of the research results); (2) determining the evidence to be used and its logical relation to the argument; (3) introducing different pieces of evidence at appropriate points in the argument; and (4) developing each discussion so that it is focused and tight but provides all of the required information. This section requires very

careful thought. Using his/her original argument and calling upon the results, the researcher can make the entire meaning of the research findings clear.

Conclusions and Recommendations

This section should tie together the project's main points into a consolidated whole, especially when the results and discussion sections have been especially complicated. When relevant, it should also contain suggestions for future research questions which can help confirm or strengthen the project's results. A set of recommendations for policy or program improvement also need to be included. These recommendations should be *realistic, practical and readily implementable* so that they are maximally useful. Idealistic recommendations (such as to radically change a health care system) are oftentimes useless since the actions needed to bring them about cannot be feasibly undertaken in either the short-, medium- or long-term.

Conclusion

This chapter has looked at the qualities of a good report, the writing process, differences between quantitative and qualitative reports, and the content of each major qualitative report section. Most people find that writing a research report is difficult. But experienced report writers have learned one important secret: the more reports you write, the easier they are to write. After having written two or three reports, a model pattern appears which writers use to help guide them in composing later reports. Report writing is therefore a learned skill that develops with practice. If you practice writing and learn from your writing, it will improve and become easier over time. As your worries about writing lessen, moreover, your creative energies can spill over into improving other areas, such as the interpretation of data in addition to its effective communication.

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Community participation in family planning programs: Thailand's experiences

Amara Soonthorndhada

Community participation is the key to the success of virtually every community-based development project. But as this study shows, it does not always mean the same thing to everyone, which in turn affects the outcomes of development initiatives - EDS.

Introduction

Over the past fifteen years, community participation has figured prominently in the policy statements of virtually all governments and aid agencies concerned with development, and the health and population sectors are no exception. Community participation, moreover, is the cornerstone of Primary Health Care (PHC) as defined in the Declaration of Alma Ata and a key element of many nations' population programs according to the 1984 World Population Conference in Mexico.

Despite its importance for health and family planning programs, community participation is still an elusive concept with no clear definition. On the one hand, it can be defined generally as the involvement of a significant number of persons in situations or actions which enhance their well-being, e.g., income, security or self-esteem (Uphoff et al. 1979). More specifically, it can mean an educational and empowering process in which people, in partnership with those able to assist them, identify problems and needs and increasingly assume responsibility themselves to plan, manage, control and assess collective actions that are proved necessary (Askew 1984).

What has come to be realized over the years is that community participation's core element - 'people's participation in development' - as shown in these two definitions is common to virtually all programs that mobilize people to take constructive health or population actions to improve their current situations. However, what 'people' are involved, what form their participation takes, how it is developed, and the actual degree of control and responsibility beneficiaries have in a program depend heavily upon situational conditions found from the national level on down to the community. In some cases, it takes the form of direct participation that is characteristic of a 'top-down' development process where people are directed to become involved. In others, it evolves into social participation, or a bottom-up approach where the people are the main (if not sole) actors in the development program.

Because community participation has different meanings and assumes different strategies in different contexts, its application for national family planning programs has been limited when compared with the expectations of policy statements. Overall though, it has entailed two main types of participatory mechanisms (Askew 1982), and these parallel the direct and social participatory processes mentioned above. *The first is the household level inundation approach where each household in an entire community is reached through direct door-to-door canvassing for potential family planning acceptors. The actors in this approach are usually local government officials. The second approach is known as the community level village depot approach and it uses local villagers and/or village organizations as central service distributors.*

In Thailand, the government decided in 1980 that community health and family planning improvements could best be done through a decentralized PHC system based on the village depot approach. In addition to supplying health and family planning services through government outlets (e.g., general hospitals, medical centers, health stations, midwifery centers), a program was then introduced for training selected community members as village health volunteers (VHVs), village health communicators (VHCs) as well as traditional birth attendants (TBAs). As a result, Thailand administratively decentralized the national family planning program down to provincial, district and community levels where family planning activities are provided by both government health care personnel and local non-government community-based distributors (CBDs).

The CBDs work particularly in maternal and child health (MCH) including family planning. They also work as motivators for MCH services such as visiting homes to provide ante- and post-natal care, providing child care guidance, serving as the lowest level of the referral service hierarchy, and distributing oral contraceptives and condoms. VHVs and especially VHCs are responsible for providing knowledge on MCH, motivating parents to have their children immunized on a required schedule, and providing community members with family planning information. TBAs assist with the health needs of pregnant women and mothers while some also distribute oral contraceptives. Thailand's family planning program policy and PHC system for providing such contraceptives through health stations, midwifery centers and local sources such as CBDs has meant that at least one effective modern contraceptive is reasonable available.

While CBDs exist in virtually all Thai villages, questions have arisen over the past five years about their effectiveness, especially as community participation motivators and the actual and preferred roles they play in health and family planning services. Once again, in most cases this has depended on the interpretation all involved give to the concept of community participation and then how it is applied at the local level.

The Study

To investigate this issue more deeply, the Institute for Population and Social Research at Mahidol University carried out a community participation in family planning study from 1989-1990. One of its main objectives was to determine the community participation perspectives of five main target groups: community members, local leaders, policy-makers, clinic and family planning program staff, and CBDs. Through these perspectives it would become evident whether existing policies, programs and responsibilities were meeting these target groups' expectations as well as national and community conditions. This in turn would lend clearer insights into how future programs would need to be improved in order to fit more closely with expectations about community participation on the one hand, and its application for family planning programs on the other.

To achieve this objective, the study used a multi-disciplinary approach for data collection. This included a quantitative survey of 400 married women of reproductive age and 100 of their spouses. These persons represented the community member sample. The survey's aim was to determine the benefits and disadvantages of community participation in family planning, whether it was adequate or should be strengthened, and any differences between current and preferred program responsibilities. It also assessed norms, values, beliefs and experiences with community participation programs.

A focused interview questionnaire was also developed and administered to 16 CBDs individually. This survey used closed-ended questions to uncover information on community participation along similar lines to that of the survey above. In particular though, it also assessed what activities community members were more likely to participate in, be it family planning or other community development activities.

Apart from these surveys, twelve focus group discussions were organized with local leaders to assess their own perceptions of community participation. Topics discussed included the types of collective behavior characteristic of village life, how often collective activities are undertaken and by whom, their effectiveness and relevance to modern world. This information would help to determine how well community participation for family planning programs matched the naturally occurring collective behaviors and decision making processes found within rural Thai communities.

Finally, in-depth interviews were also held with 3 policy-makers and 17 clinic staff and family planning program managers. The objective was to get their interpretations of Thailand's population policy with reference to community participation. To obtain this data, four main questions were asked: the interrelationship between program implementation and the concept of community participation, awareness of government statements or intentions, desires for policy changes, and lastly their approval of existing policies.

Views on Community Participation

Clinic Staff and Program Managers

Family planning clinic staff and program managers agreed that the family planning program encouraged community participation and that the government supports and promotes community involvement by mobilizing local people to take part in program implementation. For example, the introduction of community-based distribution and the allocation of budgets to train community volunteers for village implementation proved that the government made efforts to encourage villagers to be more self-reliant.

Staff and managers also held the view that program organization had made use of community leaders to motivate community members to be aware of the program's aims and this has made programs more acceptable to the people. Some of the clinic staff and managers also believed that the family planning program allowed family members to make their own choices in program management by having a local community member take part in service provisioning and management so that more alternatives for providing services were available to villagers.

Furthermore, clinic staff noted that the policy of recruiting community members to participate in other development programs also strengthened their confidence in participating in the family planning program. Some of these other programs included group membership in village development revolving funds such as the drug fund, the mother's club for nutrition promotion and MCH/family planning activities, and training local members to work as TBAs,

VHVs and VHCs for health and environmental improvement in addition to family planning.

When asked for their approval or disapproval of the decentralized family planning policy which stressed community participation, almost all managers and clinic staff agreed with the policy in principle. However, they felt that it may create confusion and conflict among community members and also may lead to some problems in management and follow-up. They foresaw that more involvement of community members might lead to less consensus among the members. For example, to recruit people for training in specific health activities from the many people who desire to take part in it might create selection problems and could cause conflict between those who were chosen and those who were not.

Two out of seventeen clinic staff disliked the policy of participation. They argued that participation was problematic to management in the sense that too many people involved in the program overloaded clinic staff with work in managing and supervising. For instance, in the community-based distribution program, clinic staff had to give advice about record keeping, checking supplies and dealing with problems of regularity and efficiency of service provisioning by CBDs. Rather, the clinic staff preferred to provide services at health stations so that they could check and update the records easily, and if any problems of side-effects occurred, they could manage them directly.

Nonetheless, the majority of clinic staff and program managers felt that the policy was good because it created a feeling of cooperation among community members and this would make the family planning program more successful. The components of the policy may also stimulate community members to exchange ideas about what they would like to do. At the same time, community involvement helps the government to save funds in health service implementation and reduces the workload of the health personnel. It also made family planning more accessible and acceptable to the people thus encouraging participation in the program. They observed that the policy would also help to encourage community members to understand the principles of the program and thus make it more acceptable.

Managers, though, pointed out that any policy which aims at creating a feeling of cooperation among community members must consider their real needs in the sense that all targets and plans for promoting the policy should be within the capacity of community members. Also close cooperation between government and NGOs should be considered so that the overlapping of programs, and potential competition between them, could be avoided.

Views of CBDs and Community Members

CBDs gave two main reasons for approving the policy. First, the government wants people to have a better quality of life by having fewer children, since a large population restricts the land available for cultivation. This is also in line with community members' desires to conserve resources and improve their lives and livelihoods. Second, participation helps the government and community to know each other and work together better. For example, in the family planning program, more participation means better accessibility to services.

CBDs, clinic staff and program managers also valued the policy of participation as an important strategy for implementing the family planning program. They agreed that promoting community involvement would lead to more cooperation in the community and would thus enable the government program to reach its goals more efficiently.

Community members also valued the policy because it made services more accessible not only for method accessibility but also having someone locally giving them advice on health problems. Apart from family planning services provided by CBDs, community members also mentioned that one additional benefit of having a community-based distribution program was

that other services also became more available such as referral and basic health care services. They also noted that strong community participation increases people's appreciation and acceptance of family planning.

In summary, therefore, agreement generally existed among all respondents that the community participation policy, as currently implemented, was valuable and should be continued. Most of the benefits cited centered on the value of community participation for increasing family planning and other services at the community level and for community members.

Benefits and Disadvantages in Increasing Participation

Respondents were then asked to assess the benefits of increasing participation in the family planning program. Community members identified two main benefits: increased knowledge about the family planning program and greater accessibility to services. If there is more participation, community members felt that people would better appreciate and accept family planning since it would help remove any persistent objections to the program's aims. Members would also have greater understanding and therefore would better participate in all activities concerning the program itself.

Clinic staff and program managers valued greater participation by community members as an important strategy for helping to manage and implement services, and they felt it is the most crucial action for making a program a success. Managers also stated that increasing participation would be a way of saving time and money, thus helping to reduce management costs further.

A question on disadvantages of more participation in the program was then asked in order to evaluate both the concept of participation and the actual benefit offered by the participation strategy. Among community members, their responses reflected the extent of confidence they would have if more members participated in the program. The majority felt that confusion might be the main disadvantage if more people became involved, because too many people would be giving advice. This might also lead to conflicts within the community where opposing opinions were evident. In this situation, community members strongly preferred to be advised by health personnel.

Among CBDs, only two out of sixteen mentioned disadvantages of greater participation. They noted that recruiting more people to work for the program could lead to greater interpersonal competition and tension. At the same time, if greater efforts were put into persuading members to participate in the program, this might also cause conflicts within the family. For example, if a husband or wife wanted to participate more but his/her spouse did not, then there would be no consensus and this would make participation less effective.

For clinic staff and program managers, two continued to feel that more participation would create greater confusion in management and follow-up. Another big concern was that the quality of participants might vary, which would be a disadvantage for some communities.

Consequently, while respondents saw a benefit to increasing participation in terms of greater program participation and service accessibility, the main disadvantages were fears that the program would cause increased competition between villagers for CBD positions, greater tensions at family and community levels, and possible management difficulties could cause the program to backfire when community members began turning solely to health personnel in order to avoid intra-community and family conflicts.

Differences Between Current and Preferred Program Responsibilities

To better understand the dynamics of family planning program implementation, respondents were also asked who should be responsible for carrying out specific program activities. To do this, two sets of interviews were conducted with each sample. In the first set, respondents were asked who they believed was currently responsible for providing certain family planning service components. This represented their actual perceptions of the situation. In the second set, they were asked who they would prefer to provide such service components. Answers to this question would indicate the correlation between what respondents believe is happening (results from the first interview) and what they would prefer to be happening (results from the second interview). While the answers to these questions, as noted below, appear at first to be wide ranging and complex, a surprising trend can also been seen which needed a more in-depth, qualitative analysis.

Education, Promotion and Target Setting

Overall, respondents preferred clinic staff and CBDs to be responsible for family planning promotion. Among community members, 20% felt that clinic staff are performing this function, but 40% preferred for clinic staff to more actively take on this role. Among community leaders, only 10% believed that CBDs were performing this function, but 52% wanted CBDs to work more for family planning promotion in the communities.

In both cases, therefore, a lower percentage of respondents perceived that CBDs and clinic staff were performing this duty compared to those who would prefer it. This indicates room for improvement in CBD and clinic staff promotion of family planning at the community level.

However, an important difference exists between what community members in general prefer and what is felt to be appropriate by community leaders. In short, while community members feel that family planning promotion should be in the hands of health personnel, community leaders would prefer it to be more of a community activity via CBDs. Further research into which strategy is more effective needs to be undertaken.

In terms of educating potential users, program staff and managers preferred different groups of people to be involved in this activity even though it is now a current role of only clinic staff and CBDs. They said that community members and leaders should become more involved in the program as motivators which, to an extent, is in agreement with community leaders' views noted above.

Managers also felt that the government and clinic staff should be involved in target setting, which corresponds to their perceptions of who is currently setting the targets. However, program managers felt that clinic staff should be integrated more into the target setting group than what is currently being done.

CBD-Related Issues

The consensus among all respondents was that clinic staff are the actual and preferred group to continue monitoring, supervising and training CBDs. Moreover, they also agreed that clinic staff should be responsible for selecting CBDs.

Concerning CBD remuneration, currently CBDs are not compensated for their work either in terms of family planning program duties or other community-based development

activities. They do, though, receive some benefits including free medical care for their families and recognition from the community. However, community members and CBDs strongly agreed that the government should remunerate CBDs for their work, while other respondents also saw the benefits of this practice.

Differences existed, however, concerning who should be responsible for pursuing this issue. Seventy-five percent of the CBDs wanted the government to pay more attention to this, while community members felt that either clinic staff or the government should be responsible for it. Program staff and managers thought this should be the responsibility of managers. Since the concurrence at the community level is for government officials to undertake this responsibility, and program managers are for the most part government officials, serious consideration should be given to allocating this responsibility to them.

Identification of Potential Acceptors

Half of the community member respondents believed that the clinic staff should identify potential acceptors, while 74% of CBDs considered themselves suitable for this activity. Staff and managers also agreed with the CBDs, but managers would prefer that community leaders anc members become more involved. This reflects previous findings where managers realized the potential significance of broader participation within the community. Community leaders, however, had a different opinion in that they felt both clinic staff and managers should share their responsibility equally in identifying potential acceptors.

New Program and Referral Activities

There was a similarity within and among the groups in preferring clinic staff to suggest new program activities, except for CBDs who thought that they should take on this role rather than clinic staff. Community members also thought that clinic staff should help provide referral services for community members, while CBDs, staff and managers gave high preference to CBDs.

Administrative and Logistical Responsibilities

Clinic staff and CBDs were the main groups that respondents wanted to manage contraceptive resupplying and provisioning to new acceptors. Senior managers, in particular, preferred this practice, however community leaders strongly wanted only clinic staff to resupply methods.

The CBDs and community leaders jointly thought that record keeping activities should be the responsibility of CBDs, though program staff and managers would like community leaders to be more involved in this process. This again reflects their desire for broader community participation.

In terms of storing commodities (e.g., supplies) and administering them, community members once again voiced the opinion that clinic staff are the preferred and actual persons responsible for this, and program managers concurred. However, over 80% of CBDs would prefer this job, although only 38% perceive themselves as currently doing it. Community leaders, though, felt that both clinic staff and CBDs should administer the supply of commodities equally.

Community members had only a vague idea about who should be responsible for financial accounting. As a result, they did not refer to any specific group. However, 36% mentioned clinic staff and 17% preferred the government. The managers preferred that they had control over financial matters.

Community members perceived that they themselves and clinic staff should manage transportation to clinics, while CBDs suggested that they should be involved in this kind of assistance. The managers strongly preferred clinic staff to assist community members with transport.

All respondents agreed that clinic staff and CBDs should play a role in pursuing follow-up visits. Interestingly, two of the clinic staff and one manager would like community members to help each other with this activity.

Trends

Results from the above survey and in-depth interviews uncovered several very interesting trends with regard to perceptions about community participation for family planning. The most important though is the perceived focal point for family planning program responsibility and the different perspectives (personal, programmatic, conceptual) that each party uses to determine their choice.

At the first level, community members see clinic staff as the most important responsible parties when issues concerning family planning promotion; education; CBD selection, monitoring, training and supervision; referral services; new programs; and administrative/logistical considerations such as transportation are considered. This reflects their *personal perspective* that family planning is an individually-focused health issue and they are more comfortable when they receive attention and services from highly trained health personnel who are accessible to them. They also pointed out some prominent disadvantages in having CBDs in their communities. In particular, community members felt that CBDs had insufficient knowledge so they might give incorrect advice. They also feared that CBDs would give expired or fake contraceptive pills. As a result, while they view community participation as valuable (as noted in the previous section) it equates more with ways of increasing community awareness and gaining access to services, rather than interpersonal action-oriented activities that they would prefer to be in the hands of professional health personnel. In the words of local leaders,

> *Family planning is a matter of the husbands and their wives. We do not think we can persuade them to practice family planning.*

> *Nowadays, there are many methods of birth control. People have more choices. They can get service easily from the health stations and they can have advice from health personnel directly.*

This community member view is in contrast to those held by the other respondents. The reason for this is that community members center their view on the act of family planning itself with special attention to service obtainment and other personal considerations. The other respondents, however, are concerned with implementation as prescribed by the government policy. Hence, they look at community participation for family planning from a *program perspective* and as a *social issue* not simply a personal one. They therefore seek to place it firmly within a community context.

For example, while community leaders felt that family planning was a personal decision, they also believed that CBDs were the most appropriate persons for family planning promotion and education even more so than clinic staff. CBDs themselves overwhelmingly felt that they should be responsible for identifying potential acceptors and new program activities as well as referral services, while community members once again placed these responsibilities in the hands of clinic staff. CBDs also noted that even though community members highly accepted the CBDs' roles and were friendly towards them, they had difficulties in dealing with community members because the latter did not take CBD advice seriously and they thought that CBDs were not knowledgeable enough. Therefore, while community leaders and CBDs hold a personal perspective with regards to family planning and similar to community members, by virtue of their social positions they emphasize a *programmatic perspective* more strongly.

At the next higher level, although government officials also see the family planning program from a programmatic perspective, they also hold a more *conceptual perspective* in terms of how they interpret community participation. On their part, they preferred that different groups of people, not solely CBDs or clinic staff, be involved in family planning education and referral services, record keeping, and, to an extent, follow-up services. Their emphasis was on encouraging 'community participation' in the broad sense of the term. As a result, their responses showed insufficient recognition or consideration of the different subgroups (leaders, CBDs, villagers) within the community and their perceptions and desires. Their macro-level perspective thus looked at the community as a unit instead of discrete subunits.

Overall therefore, results indicated that while clinic staff and managers have a broad concept of community participation and want to expand certain areas to encompass the community as a whole and its several community groups, two obstacles could work to block this effort: 1) community members' strong preference for clinic staff based on personal considerations; and 2) the preference of community leaders and CBDs to centralize certain program activities in their hands rather than involve the community in general. This is a significant point, since it is often assumed that the actual point of conflict exists between government health service providers on the one hand and community people on the other. These results, however, imply that the real point of contention lies deeper and is centered more at the community level in terms of the different desires and perspectives of different community groups. Consequently, the next question becomes, "What are some of the reasons underlying this point of contention within communities?". This called for a more in-depth look at community collective behavior, decision-making and participation, and their changes over time as obtained through the study's focus group sessions.

In the Face of Change

In rural Thai communities, traditional collective behavior has take on a variety of forms depending upon the occasion. Types of collective activities are demonstrated particularly during religious functions where community members believe that contributing labor or money for religious purposes is a natural part of life and a way to improve one's future lives. Collective religious activities are conducted throughout the year. Some are performed to pay respect to ancestors, parents and the elderly, while others are practiced for psychological support such as when food is offered to spirits or deities to help assure a good harvest. When religious or other collective ceremonies take place, everyone participates and assumes his/her responsibilities. Young people and men are willing to handle the hard work, while women prepare food and the elderly oversee all activities to ensure that everything is

being done properly and in line with tradition.

Other than during religious rites, traditional collective behavior can be seen in the form of labor exchange for agricultural assistance, house building and for secular ceremonies such as during the New Year celebration, marriages and funerals. Labor exchange for agricultural purposes occurs when community members take turns moving from one family's field to the next family's, planting, reaping or threshing in the rice field. An agreement is made between them that the host family offers food to those who work voluntarily. The rationale for this was that farmers could help each other and thus save money and time.

Unfortunately however, this traditional collective behavior has gradually become unpopular due to many reasons. From the focus group discussion,

> *Nowadays, farmers do not help each other without paying wages. Labor exchange is no longer effective. We have to work hard and fast, otherwise we cannot produce enough. Machines are also important, and we need to employ labor so that we can assure a good harvest. We calculate that we pay the same or less if we employ labor compared to labor exchange. At the present time, it is quite difficult to ask for help because everyone is busy and it might be too late to harvest our own produce if we have to wait for help.*

To some extent, local leaders felt that they wanted to preserve this traditional collective behavior, since it was useful to community members and maintained strong community ties and relationships. Without this help, leaders feared that a gap would develop between community members. Nonetheless, they also noted,

> *We cannot stop the stream of change. The younger generation, they are different from us, the older generation. They want to work outside the field and off the farm, and thus we lack labor even to share among ourselves.*

Community leaders believed that the only way to bridge this growing gap between senior members and the younger generation is to socialize the latter to follow the traditional way of life. Yet they were also resigned to the fact that many traditional collective activities, and especially those related to economic activities, are being reduced in significance. *The effects of modernization result in changed attitudes, beliefs and values of community members. The power of the modern economy is stronger than tradition, and materialism is superseding traditional relationships between community members.*

How is this affecting participatory decision-making and behavior? Basically, it means that community members and their families are looking at two sources to provide for their means: communities and the society or government. This is most clearly seen in traditional decision-making and participation which have come to take on this dual perspective.

Traditional communal decision-making and participation are still found in rural Thai communities, but they are strongest when the activity is seen to benefit the entire community. In this instance, local leaders usually take on the role of mobilizing collective action for a specific need, and traditional communal decision-making plays an important part. This means that community leaders will organize and supervise members to participate in collective activities that have been mutually decided upon. These can include contributions of labor and money for constructing irrigation canals, repairing roads, building or repairing schools or temples, or other community development activities.

> *We [local leaders] request them to spare their time and resources to repair roads or to deepen irrigation canals. They come and help each other. They know that if they*

do it, all the community will gain benefits. It is quite easy to have them in groups, and they work hard if they realize that everyone gains benefits. The heads of households, they are strong and suitable for hard work. The housewives and young people take part in food preparation and light work. We no long have to bother with food. They bring it with them and share among themselves.

Problems arise, however, when development activities are not viewed as benefiting the entire community or when benefits are not evenly distributed. This operates to divide the community, and community members then begin judging whether an activity is beneficial to them or their families. If not, their participation level dramatically declines, since they do not see how their time or labor investment helps them.

Local leaders, for example, decide on what development activities should be pursued and they are responsible for prioritizing them. They also decide on how costs and benefits will be divided among community members. This means that communal decision-making does not necessarily mean equal benefits within the community. Communal decision-making in some situations benefits only the people in specific groups and indirectly to the community as a whole. For example, leaders noted that:

We cannot allocate resources to everyone in the village. We receive very limited resources from the government. This year, we are provided materials to repair roads and we have to repair only the section that will be useful to the majority of people.

We try our best and we feel so upset when we fail to get our needs. Villagers do not understand the process. For them, gaining means they have great and efficient leaders. In contrast, if we cannot make it successfully, they will compare us with their neighboring village headmen.

As a result, intra-community competition for resources and interpersonal tensions can easily grow and fragment a village. Concern about this was reflected in the responses to increasing community participation and recruiting more community members for the family planning program as discussed earlier.

Participation is high, however, for development activities that have both community and individual/family benefits. Prime examples of this are the community savings and credit groups, but these are not without their own interpersonal difficulties.

Villagers appreciate very much the credit group. They need money to invest in their land and they prefer to pay low interest.

The only problem they are dealing with is that not everybody can be a member. They have to form a group with 5 to 6 people to request a loan and they have to take responsibility among the members for the loan.

During focus group sessions, most leaders agreed that villagers are highly participatory in development activities and particularly in those that fully and immediately render benefits to the community. With their limited resources, however, participation is crucial.

We try to encourage community members to participate for the sake of everybody in our village. We are poor and it is important that everyone should help each other.

We do not have enough money or resources to handle all development activities. Our needs for survival must be fulfilled immediately. We cannot wait all the time for help from the government. There are a lot of villages that need help. We must help ourselves first if we are to survive.

Discussion

The question that was raised earlier was what are some of the reasons underlying the different ways community participation is being perceived at the community level. The first and most important one came from community leaders during the focus group session. They noted that community life has changed a lot compared to earlier days. Materialism and even the world economy influences greatly people's thinking, their values and norms. The leaders felt that the erosion of traditional behavior patterns, including community participation, is visible and increasing. People become more monetary minded and this results in declining participation especially for activities like family planning that have no overt and immediate economic benefits.

Villagers are therefore no longer highly dependent on each other for assistance compared to the past except in the case of religious ceremonies. For economic and health concerns especially, this trend carries over as community members are turning more towards government services which, in most cases, they see as superior to what can be obtained within their communities. Health and family planning services are prime examples of this since they are viewed as more 'modern' and effective than traditional methods as well as being equally accessible due to the nation's extensive PHC system. Community participation for community members still means sharing ideas, but when the time comes, they will reach 'outside' for help with personal or family matters, rather than reaching into the community as was done in the past.

This is perhaps the most crucial turning point. Community life, the lives of each villager and his/her world view were traditionally deeply intertwined and revolved around the community culture and social relationships linking villagers within the community. Modern Thai society, however, has evolved rapidly. The traditional community inward focus has been replaced by a wider world view, one in which each villager places him/herself, their families and their expectations within more of a national or societally collective framework and often supported by economic rationale. Village girls, for example, are no longer live, work and raise families in or near their natal community throughout their lives. Today, they migrate in great numbers to Bangkok to become factory workers or to advance their education and take on professional careers.

Each person's concept of self thus depends not only on one's community culture, but also on one's personal desires and expectations within the larger society. Family planning is a particularly relevant issue here for community members, since it reflects one's personal decisions and relies heavily on external provisioning. The benefits of family planning, moreover, are perceived by community members to be largely individual- and family-based. They therefore tend to prefer services that reach from the outside, modern world and its health services directly to them. But this is not to say that they do not see a community value to participating in family planning programs. Instead, they see them as a valuable means of obtaining other services for themselves and their communities.

The real actors in the family planning program, as viewed by community members, are therefore the health care providers (clinic staff) and themselves as receivers. But where does this place community leaders and CBDs? The family planning program is a national development program activity, and community leaders and CBDs are the traditional and official

persons responsible for this activity and who liaison with community members. Even within the PHC system, CBDs are the first level of the referral hierarchy.

Based on their responses in the focus group sessions, community leaders want to maintain community control over the program and remain an active part of it for two main reasons. First, they see this program like other development activities in that it is a way for them to maintain traditional collective behavior and decision-making patterns within the communities. One of their strongest worries is that community interrelationships and participation are breaking down. Since family planning usually concerns the younger generation, while the program itself is run by older community members such as the village leaders and CBDs, then the program could be a mechanism for slowing the growing gap between generations or at least a way of initially socializing them and retaining some degree of community cohesion.

Second and relatedly, community leaders also stated that community participation is declining as community members begin placing greater stress on family economic survival at the expense of community involvement. Increasing community members' participation in the program could very well lead to its downfall, either through increased competition or apathy when they turn to other economic activities and ignore responsibilities to the family planning program. Since community leaders feel they are able to motivate community members (based on their experiences with past community development activities), they would prefer to maintain control of the program and community members' participation at the village level and under their supervision.

On the part of CBDs, they see themselves as directly responsible for the health concerns of villagers. This is what they were selected and trained for by clinic staff, and it is the function through which they receive community recognition and status. To expand their roles more into such important areas as identifying acceptors and new program activities could substantiate and heighten their importance within the community. On the other hand, to adopt a community participation framework as proposed by clinic staff and program managers (where duties are shared by community members in general) would reduce CBD importance. Moreover, it might even encourage community members to bypass CBDs and seek assistance outside the community by working directly with program managers or clinic staff.

Conclusion

To improve future programs will entail striking a balance between the interests of all parties involved in community participation for family planning. For community members, it should be recognized that they consider participatory involvement more attractive and effective if it shows specific development benefits. Just participating in a family planning program is too abstract since results are not immediately recognizable and family planning itself is a personal matter. Individuals only seek assistance when they feel that they are in need of services. Participation therefore can only play an important role if basic and easy tasks are involved such as motivating friends or relatives to practice family planning and sharing information. Community participation here focuses more on community awareness.

For community leaders and other village subgroups, program planning and implementation must also consider their needs, not simply those of family planning users. In most programs, needs assessments are restricted to target groups such as contraceptive users, while disregarding the needs of those who must implement the programs. Study results here showed several areas where they have fears and concerns about community participation and its dynamics. Further research into these needs to be made.

Data also indicate that CBDs want more responsibility for family planning programs.

This also should not be ignored but looked into at greater depth. Does this problem stem from a lack of confidence, needs for increased training or supervision? Since it is clear that community members prefer clinic staff to provide services, studies also need to look into what roles community members think CBDs should fulfill, and then try to match these more closely with CBDs' recognized needs.

Finally, program managers and clinic staff noted that the community participation policy could be a way of cutting program management costs. This should be viewed with caution, however, since it seems there will be more motivation to participate if the benefits are direct and tangible to all concerned, especially community members. To be more cost-effective, it might be worthwhile to see how such programs can be integrated more thoroughly with other development activities, particularly ones that already engender a high degree of community participation.

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Chapter 30

Social networks and contraceptive use patterns over the female life course

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This chapter presents an anthropological study which used qualitative and quantitative methods to uncover community-based factors affecting contraceptive discontinuation in Northeast and Southern Thailand in order to improve family planning communication programs. It focuses on how a woman's interpersonal networks change and differentially influence her contraceptive use decisions as she passes through three reproductive life span stages: pre-childbearing, childbearing and childrearing, and family size achievement - EDS.

Introduction

This chapter identifies changes in social network influence over a woman's reproductive life course as it impacts upon contraceptive use and discontinuation. Its rationale rests on Thailand's current effort to develop more finely-tuned family planning communication strategies to help lower population growth in the nation's Northeastern and Southern regions from 2.46 and 3.06, respectively (Chayovan et al. 1988) to a level more comparable with that of the country at 1.5. The chapter begins with a brief look at three communication network frameworks which help to understand how network structures and their functioning operate to influence contraceptive use behavior. This is followed by a short discussion on how a diachronic life course perspective can highlight the changing social network context in which family planning actions take place. This is further illustrated through findings of a World Health Organization-sponsored project entitled "Community-based Factors Affecting Contraceptive Discontinuation: An Anthropological Study" conducted among women of reproductive age in Northeast and Southern Thailand.

Communication and the Life Course

Communication specialists and anthropologists alike have known since Durkheim's

work at the turn of the century that few individuals can lead healthy and contented lives without the support of close personal ties (Brownell and Shumaker 1984). Social support is a process inextricably woven into communication behavior and the ways it affects physical and psychological health, especially during stressful life events, are well documented (Albrecht and Adelman 1987; Hamburg and Killilea 1979; Hammer 1983).

Family planning communication efforts have followed a two-way highway in trying to persuade women and couple's to initiate or continue to use contraceptives. The first views reproductive behavior as an individual decision-making process which can be influenced by promotional efforts aimed at the individual. This linear mechanistic model divides interpersonal communication into a series of acts like source-message-channel-receiver. This model identifies the different stages that a communication (such as contraceptive pill promotional message) can go through from being heard or seen by the receiver; holding his or her attention; being perceived or understood; being accepted and promoting a change; resulting in a change in a behavior; and finally leading to a change in health or family size. Communication failure, however, can occur at each stage for a variety of reasons (Hubley 1986).

An alternative to this individual orientation are two frameworks stressing the role social networks play in communicating ideas, values and norms and their functions of reducing uncertainty, enhancing personal control in one's life experience and maintaining social order (Albrecht and Adelman 1987:19). Emerging out of Rogers and Kincaid's (1981) work, the "convergence model of communication" is based largely on systems analysis and focuses attention on interrelationships between individuals, subsystems (e.g., families, cliques), and systems (e.g., communities). Information here represents an outcome of action. In family planning, for instance, a woman's actions -- like the selection or discontinuation of a particular birth control method -- often lead her to share her experience with other family or community members. This information sharing may lead to further actions including the first time selection of a birth control method by non-users up to that point, or the re-selection of birth control methods by other users. This sets up an iterative information exchange cycle (ESCAP 1987).

Rogers and Kincaid (1981) termed the communication occurring within such network relationships as one of the creation and sharing of meaning between participants. Drawing from such theorists as Bateson (1972) and Wittgenstein (1958), their model has been used to describe how relational clustering occurs in network structures. The exchange of symbols to which people attach meaning will bring them to points of convergence or divergence in their perceptions of reality and thus reduces the uncertainty surrounding certain individual decisions and actions.

Hammer's (1981a,b) social feedback perspective adds to this by illustrating specific ways an individual is inextricably tied to his or her social field. The model's prediction is that the function of network support is to maintain norms that preserve the community. Individual behavior is regulated though he or she may not necessarily benefit from this pattern. Adequate feedback reinforces a pattern of behavior and performance (such as large or small family size) while inadequate networks provide either a lack of reinforcement or information distortion. A primary way this occurs is that individuals in a network may feel pressured to behave as other network members. Depending upon the behavior, "groups or networks have the potential to be either health-promoting or not, and this may influence the health status [or health practices] of individuals" (Berkman 1984:429). In traditional Northern Thai society, for example, women's reproductive behaviors were regulated by family and community norms which stemmed from the need for a large family to provide family labor and perpetuate a woman's lineage (Yoddumnern 1985).

Based on the above models, certain basic assumptions have arisen concerning the

structure of family planning communication and most have centered around network properties (ESCAP 1987:5). Specifically, in determining family planning communication structure, individual interrelationships are measured on two dimensions: frequency of contacts and extent of closeness. To identify network member characteristics, information is often collected on various aspects, such as socio-economic characteristics, demographic profile, inter-spouse communication, role of mass media, formal leaders and the role of service providers. The intent is to determine the interrelatedness of these various factors and their influence on communication structure on the one hand, and continuous or discontinuous use of family planning methods on the other.

The above models are valuable in explaining the impacts of communication networks on individual behavior. The heart of the communication is a shared code of meaning which affects cognition, emotion and behavior. Yet curiously neglected within family planning communication studies is a temporal dimension which takes into consideration changes in social network influence at key life course stages. It has long been known that an individual's life course undergoes several transitions owing to the continuous acquisition and discarding of culturally-defined and socially-sanctioned roles and relationships (Elder 1975, 1978; Plath 1980). At each transition, an individual re-structures her/his social relationships and behavioral patterns in a unique way to fit with her/his new status (Goode 1960). An individual's choices at particular points in her or his life course, moreover, reflect not only personal preferences but also actions which are conditioned by the structural relationships the individual has with family members, consociates and his/her larger community and society (Hareven 1980; Plath 1980; Yoddumnern 1985).

A life course perspective thus raises an important question in studying family planning communication and in implementing intervention programs. Namely, what social networks influence a woman's contraceptive use practices as she passes through successive stages in her reproductive life span? This is a crucial question since communication programs no longer target only primary audience members (women, couple's) but also influential secondary audiences (networks) (Rasmuson et al. 1988). In short, it takes family planning communication out of an individual mechanistic domain and seeks to identify what social domains are most influential at different reproductive life span stages. Exactly which secondary audience category (social network) is playing an important influential role and within what domain can help program planners to target their communication efforts more efficiently and resource-effectively.

Methodology

To explore this issue, an anthropological study was conducted in Northeast and Southern Thailand. The project's objectives were to examine the roles of different interpersonal networks in determining women's and couples' use of contraceptives; assess the role of identified community leaders in family planning decision-making; and, identify what domains are most important for family planning education. Two villages in Trang province, Southern Thailand, and two villages in Surin province, Northeast Thailand, served as the research sites. Together, the two Northeastern villages contained 156 households and 721 people. In the South, villages comprised 222 households with 986 people. Despite this marked size difference, the communities had about the same number of married women of reproductive age (15-49), i.e., 145 in Surin and 155 in Trang. The two areas are also similar regarding the number of married women of reproductive age (MWRA) using modern contraceptives (105 in the Northeast, 106 in the South).

The research encompassed four main data collection phases, beginning with a

household census and community mapping. These provided standard demographic data on age, sex, household composition, occupations, each community member's place of residence, and the like. Further, it allowed the researchers to become acquainted with community members and daily life.

Thereafter and in each village, researchers conducted key informant interviews with 20 women of reproductive age (15-49 years) and ten community leaders (total of 120 interviews) including local health workers, community leaders, midwives, and elderly persons. Interviewers utilized a pre-tested, standardized open-ended interview guide containing five topic areas, namely: 1) community level attitudes and values concerning birth control, 2) community organization, 3) the roles of men and women, 4) family structure and function, as well as 5) the availability, acceptance and use of various contraceptive methods (both traditional and modern).

For each village, project personnel also collected the life histories of ten to fifteen MWRA (in total 50 interviews). Emphasis was placed on determining individually perceived changes in village and family organization; changes in contraceptive use within village families; alterations in affiliations with community members as per closeness and contact over time; roles of community leaders in family planning decision-making; and women's personal family planning decisions.

Finally, project personnel conducted a household fertility survey of all MWRA in each community (n = 300). It comprised a pre-tested, single structured interview schedule covering the topic areas noted for the key informant interviews.

Network Indicators

Many factors can determine social network formation and composition in a given community. Four of greatest descriptive use in this project were *ascriptive indicators* (e.g., kin group, caste, age), *achievement indicators* (educational level, occupation, income categories), *proximity indicators* (physical and social distance), and *functional indicators* (e.g., health service provisioning, family or community leadership, interpersonal assistance).

To determine social network characteristics, interviewers collected data on those features associated with each of the above four indicators. It also necessitated information about roles of formal and nonformal leaders as well as health service providers in contraceptive use decision-making. To identify the community communication structure for contraceptive use also requires considerations of frequency of contact and extent of psychological closeness. Considerations were also needed in terms of openness, that is, the degree to which networks allow new members to enter; degree of network overlapping; and the potential number of different network types which a woman allows to influence her family planning decisions and actions.

The interrelationship of these various factors was investigated to determine the influence of the four indicators on the community communication structure, the creation and characteristics of specific networks, the affect of community-based factors as well as contraceptive information flow on a women's use of family planning.

Community and Family Profiles

People living in the Southern research villages are, for the most part, Buddhist of Thai nationality who speak Southern Thai on a daily basis. If they are conversing with persons

from other regions, they speak Central Thai (the national language). The Islamic religion and Chinese culture have influenced this region and the communities themselves due to historic events (e.g., migration, historical trade routes). Occupationally, most community members work as hired laborers, often in local rubber plantations. Many also cultivate rice, but mainly for home consumption. Among the Northeastern communities, villagers are mainly of Thai Buddhist of Lao descent who speak a Northeastern Thai-Lao dialect as well as Central Thai. Other minority ethic groups include Thai-Khmer and Thai-Chinese. The major occupations are rice farming (for sale and home use) and hired labor when harvests are poor.

Perhaps the most common feature of both provinces is family structure. In general, families in each province are of the stem- or nuclear-type. This depends, though, upon a household's particular stage in the family developmental cycle. Matrilocal residence is the norm in both provinces, although patrilocal residence is found more frequently in the South than the Northeast.

Respondents

The household fertility survey covered all MWRA in each community (n = 300). Results from both regions show similar patterns. First, these women are distributed fairly evenly across age groups, except those in the youngest and oldest categories. About half of the sample women are 31 years of age or younger. This suggests that almost 50% of the sample is in the prime age of reproduction. Nearly all the women are literate, although only about 60% can read and write well. Slightly more than one-fifth of the sample have received a higher education than the four-year primary level. Nearly two-thirds of the women (60.4%) are from households which earn less than 20,000 baht per year (800 US$ annually). These households, therefore, have a low economic status. Regarding marriage, 47% of the women married at or before age 19 years. The mean age at marriage is 20 years. On the average, they have about three living children, although a large proportion (27%) have more than this number.

Results

In sorting and categorizing data, three distinct stages emerged in a woman's reproductive life course: Stage 1 -- Pre-Childbearing; Stage 2 -- Childbearing and Childrearing; and Stage 3 -- Family Size Achievement. Four key characteristics separated these stages, namely, (1) contraceptive use (or non-use), (2) type of birth control method, (3) family size, and (4) the differential influence of certain social networks.

Community Social Networks

Three types of social networks are most common in the Northeastern and Southern research communities, and they represent the communication structure which transmits community beliefs and information about reproduction, contraceptive use and discontinuation. The first group corresponds to Boissevain's (1974) ***intimate network***. This network consists of a woman's primary links as derived mainly from ascriptive, proximity and functional indicators. It also involves a high degree of daily contact and emotional closeness. Network members largely include persons in a woman's family or kin group (e.g., mother, sisters, close

female cousins), her husband and his family, if the latter is living nearby.

The second network is an ***effective network*** in Boissevain's scheme. It also comprises primary linkages, but ties are less ascriptive in nature (except for age). Rather, they consist of more achievement, proximate and functional features. Likewise, the degree of closeness equals or exceeds that of the intimate network (as per certain issues such as contraceptive initiation) but usually with a lesser degree of daily contact. This social network is broader, comprising close friends, peer group members and neighbors.

Finally, an ***extended network*** exists among village women. This network contains the lowest degrees of closeness and contact. In composition, this network mainly consists of local health personnel and formal or non-formal community leaders. Network membership originates from functional characteristics (interpersonal assistance) and ascriptive indicators in the sense of their being community members. Inequality in achievement (knowledge, education, experience) accounts for greater social distance amongst members.

These networks, though, are not mutually exclusive. For one young woman in Northeast Thailand, her husband was a health post worker, so technically he is a member of both her intimate and extended networks. Moreover, a sister may be either an intimate or effective network member depending upon the degree of closeness and proximity. Networks can also cross-cut or intersect. This occurs where one woman is the intersecting node between two separate networks belonging to two other women. To keep this discussion as simple as possible, though, this chapter discusses the three networks separately, except where their intersection is significant.

Stage 1: Pre-Childbearing

Reproductive Education

In both research provinces, young girls begin menstruating at the age of 14 to 15 years which marks their entrance into womanhood and is a sign of marriageability. Community members, though, consider this to be too young an age for marriage. At this same time, members of a girl's social networks (intimate, effective and extended) encourage her to begin acting like a woman and not a child. She may no longer associate with male friends within her effective network. They also inform her about reproduction and associated behaviors, but only when the need arises. The first form of reproductive education is "menstruation education" which only occurs when a girl starts menstruating and not before. Intimate network members (mothers, grandmothers, elder sisters) are primarily responsible for educating the girl about bodily care and food restrictions associated with menstruation. Effective network members do not play a major role in communicating menstruation information, unless they have already passed this stage. Members of her extended network (health workers) will be consulted only if the girl's menstruation appears abnormal.

Lack of Family Planning Awareness

Community values and norms state that unmarried Stage 1 women should not have premarital sexual relationships, nor should they even know about sex. Such knowledge, it is believed, might cause adulterous and immoral relationships. Consequently, none of a woman's social networks provide her with formal sex education before marriage.

But this does not mean that unmarried Stage 1 women do not know about birth

control and family planning. Rather, they are the *passive recipients* of information originally channeled to other persons within her social networks. Effective networks (especially friends) play a more prominent role in communicating and obtaining birth control information than either intimate or extended networks. Such shared information can entail types of contraceptive methods, procedures, their relative effectiveness and side effects. As her curiosity grows, the young woman becomes an ***active seeker*** of family planning information. Usually, her sources of information are media-based (e.g., books, pamphlets) or through confidential discussions with effective network members.

Community and family members do not view family planning as a preventive measure for unmarried Stage 1 women. Instead, contraceptive use is strictly a marital activity through which couples can organize their families. The problem is that many women know about family planning before marriage, but their information is oftentimes incorrect or incomplete (e.g., lack of knowledge about pill dosages). Premarital sexual relations and inadequate premarital family planning education can have dire consequences, the most dramatic being unwanted pregnancies which lead to abortions. Alternatively, the young woman's family (or that of the man's) may force her into marriage before she is psychologically ready to be a wife and mother. In the process, members of her intimate and effective social networks may alienate her. She thus loses their support when she needs it most.

Stage 2: Childbearing and Childrearing

Roles of Community Leaders

Community leaders' views can greatly affect normative and/or actual family planning considerations (ESCAP 1987; Lee 1971). Over half of the women in both regions cited village headmen, members of the village council, their assistants and school headmasters as community leaders. This was followed by friends, respected community members and relatives. In either province, community leaders were predominantly men aged over 40 years, though more female leaders exist in Surin. Surprisingly, only 4% of Northeastern respondents stated that local health and medical personnel were community leaders. No Trang women cited these persons.

Respondents in both regions feel that family planning is the domain of women and not community leaders nor men in general. Community leaders also echoed this sentiment. In the Southern communities, 73% had no opinions about family planning; over 50% of their Northeastern counterparts felt the same. Among those with opinions, they only mentioned vasectomies and no methods associated with women. Community leaders in each region, therefore, have little influence on the family planning behavior of community members.

Information Seeking Behavior

After the first child's birth, women will seek information about appropriate, socially acceptable birth control methods. Their family planning information seeking is a conformed type. That is, a woman will go to the local health facility with a member or members of her intimate or effective networks. These individuals usually use the same type of contraceptive or have had similar usage experiences. This type of companionship serves as a source of moral and social support.

However, Southern and Northeastern women do not use the same channels of

communication and social networks for contraceptive decision-making. In the South, information seeking behavior rests predominantly on members of the woman's intimate network. These include her kin group members who are older and have experience in using contraceptive methods. If intimate network members are not available, or if the woman wants reconfirmation about her method choice, she will inquire among close members of her effective networks. Neighbors are the first choice since they are usually the woman's relatives.

Among Northeastern women, effective and extended (i.e., health worker) networks are the most influential information sources. Women reported being too shy and feeling ashamed to talk about sexual behavior and family planning with parents (especially mothers) or sisters. They felt more comfortable talking to close friends or health personnel. When Northeastern women do consult intimate network members, their descending order of priority is sisters, mothers and other relatives.

In the Northeast or South therefore, extended network members (i.e., health personnel) act as family planning *distributors*. Among Northeastern women only though, they also serve as primary *influencers* in contraceptive decision-making. Regarding a husband's role in family planning decisions, Southern women confided in their husbands more often than their Northeastern counterparts. Their inquiries, however, rested mainly on how many children the family should have; women retained independent control over her contraceptive selection and use.

Preferred Birth Control Methods

For Southern women who are not breast-feeding, the contraceptive pill is the most prevalent method used and recommended by a woman's social networks. They cite it as most convenient, and they have a greater ability to control its use. Women do not favor injections and see them as too painful. Injections also stop menstruation which leads women to believe that it is unnatural. Further, Southern muslim men do not like their wives to expose themselves to health workers. Hence, IUDs are not common among the women in this study. Tubal ligations are also unpopular and discouraged by a woman's parents-in-law. The latter fear that such a procedure will lead to adulterous behavior.

After childbirth and until an infant is fully weaned, a woman's contraceptive use patterns change. In particular, mothers breast-feed their children for one month (on the average), and during this time they do not utilize pills for fear that the breast milk will dry-up or become contaminated. This belief stems from the folk concept of the relationship between *blood* and *milk*. Women believe that anything they consume will mix with their blood and turn into milk (Vong-ek 1991). As an alternative, a couple will use either natural family planning or condoms.

Unlike their Southern counterparts, Northeastern Thai women commonly use IUDs after their first child is born for the sake of convenience. Furthermore, health personnel can easily remove the IUD when a woman wants another child. Newly married women who do not have children, though, use the contraceptive pill. Two main factors determine this selection. First, local health personnel (as extended network members) do not like to use IUDs on a woman who has not had a child. In addition, women and health workers are aware that, even with an IUD, the mother may become pregnant.

After childbirth, Northeastern Thai women commence breast-feeding shortly after delivery. Breast-feeding mothers generally do not resume using any form of contraception until after six months. They fear that such methods will dry-up or pollute the mother's breast milk. After six months, a women will have an IUD inserted.

Side Effects

Contraceptive method change or discontinuation occurs among women in both regions who have used one method for an extended period, or who have experienced (or have heard about) method failure and its consequences. In addition, the desire to have a child is also one logical reason. But more significantly, the main over-arching reason for contraceptive discontinuation as reported in both regions is side effects. Women who have experienced significant adverse reactions to one method (e.g., contraceptive pills) often discontinue contraception all together to preserve their health. Among Southern women who experience side effects, however, those who receive intimate network support to continue family planning are less likely to discontinue contraception. In the Northeast, women receiving support from their effective and extended networks exhibit a lower rate of discontinuation (Boonplang 1990).

Rumors of side effects are also common and play a role in affecting contraceptive discontinuation. However, if a woman cannot trace a rumor back to the person who experienced the side effect, the rumor will have no effect on her contraceptive practices. Thus, unconfirmed rumors ("hearsay") are not grounds for discontinuation. If a rumor is confirmed through a woman's social networks, it does to a very great extent lead to contraceptive discontinuation. The actual event is a confirmation for the decision to stop (or not start) using that particular method.

Sources of side effect information and their influence on the discontinuation decision, though, differ between the Northeast and the South. In the Northeast, confirmed rumors can pass through any social network channel in reaching the woman. Moreover, the side effect need not occur among a woman's intimate, effective or extended networks only, although the information about its occurrence often reaches the women through these networks (especially the effective network). As long as it is experienced by some community member, the woman considers it confirmed.

In Southern communities, however, a rumor is confirmed only when side effects happen to someone belonging to the woman's kinship circle. This situation may cross-cut intimate and effective networks, particularly when kin group members also belong to the latter network. Their rationale is that if a side effect is experienced by a member of her kin group, a woman has a good chance of experiencing it as well. Among non-kin, the likelihood of its occurrence is small, to non-existent. This belief stems from the folk notion about *right* and *wrong* substances in food and medicine. If a contraceptive method is *wrong* for one kin group member, it is felt that it is wrong for others. The possibility of experiencing side effects thus becomes greater. If it is experienced by non-kin group members, this possibility is over-shadowed by the belief that the method may still be *right* for the individual.

Stage 3: Family Size Achievement

This stage covers couples who have attained their desired family size as well as those who, by choice or due to physiological problems, do not have children. This stage, therefore, contains two community-perceived sub-stages, namely, family size over-achievement and under-achievement.

Family Size Over-Achievement. Villagers in the two research areas share the same attitudes toward family size. That is, two children constitute the family size norm. Women who continue to have children past this size (especially more than three children) will be subject to community ridicule. Criticisms will center on the couple being too traditional and conventional. They will also remind the couple about the misfortunes a large family can incur.

Members of a woman's social networks will then put pressure on her to continue temporary birth control or adopt a permanent method.

One exception to this family size norm exists, however. A couple's final family size will depend upon its composition. An earlier ESCAP (1987) study noted that in the Republic of Korea and India, preference for sons determined family size. In the former case, couple's who already have two sons adopted family planning. In both Trang and Surin, the ideal family contains one son and one daughter. If a married couple has two boys, they will try to have another child in the hopes that it will be a girl. The same action will occur if the couple has two girls. Consequently, family size often exceeds the norm, and without penalty.

Family Size Under-Achievement. Community members, and especially members of a woman's social networks, invoke arguments when a couple wishes to have fewer than two children. In essence, a one child family is a risky situation. If the child dies or deserts his/her parents, the latter will have no one to replace the child. They will thus lose one potential form of old age security. An only child will also have no siblings to depend upon and seek support from in times of need or emergency. Community members totally disapprove of childless families. Without a child, a family is not complete; only a child can make it legitimate. For women in particular, giving birth to a child changes her status to that of a mature women. Most significantly, childless couples will have fewer alternatives for old age security. This is a significant point since Thailand does not have a social security system. Consequently, social network members (especially intimate and effective) will urge a woman to discontinue using any form of contraception if they see no logical reason for her not to have a child.

Discussion

While Northeastern and Southern Thai women view family planning as a woman's prerogative, several findings shed light on the actual domains of family planning decision-making. Moreover, these are different for the communities in each region. *In Southern Thailand family planning is a family-centered affair.* Women seek contraceptive information from family and kin group members. Contraceptive use and discontinuation, moreover, depend heavily upon the experiences and support of family and kin group members, especially in the case for rumored and actual side effects. Effective and extended networks have little, to no, influence on contraceptive selection, use and discontinuation. Even in Stage 3, intimate networks take precedence.

As a result, the family planning communication structure among Southern women is narrower. A woman's influential consociates rest largely (if not solely) within her kin group. This can restrict the impact of family planning information each woman receives, since there are fewer influential channels. For side effect rumors, for example, while more Southern women know about them than in the Northeast, their impact is less. To promote family planning among Southern women, therefore, will require that programs be family- or home-based rather than broad spectrum or linear, individually-focused ones. Opportunities should exist for familial dialogue and discussion to allow learner participation and feedback in understanding birth control, its methods, and their respective implementation requirements.

Among Northeastern women, this picture is entirely different in that *family planning is a personal, non-familial affair.* In the first case, Northeastern Thai families are oriented around females, with mothers being the "symbol" or center of the family unit. However, when Northeastern women do ask intimate network members about family planning, sisters are more important than mothers. The latter are only more important than "other relatives." A woman's information seeking, therefore, is already starting to distance itself from the family center. Likewise, a husband is not a source of information or influence.

Of greater significance, Northeastern women consult effective and extended networks more often than their own family members. Even when a family member is a neighbor, a woman will consult her *before* any co-residing family members. Moreover, survey results show that Northeastern women are more likely to discontinue contraception if they are not supported by effective and/or extended networks (Boonplang 1990). Contraceptive selection and discontinuation, in addition, rest on a woman's experiences or those of her effective or extended networks; not simply her intimate network.

Consequently, a Northeastern woman's communication structure is broader, containing several important relationships and numerous channels. As a result, much information can potentially reach the woman. Yet she decides for herself which types of information are most applicable to her, and in line with the community's culture and her social networks. Her contraceptive use and discontinuation decisions arise out of personal experiences and non-familial factors as grounded in actual circumstances. Unlike the South, Northeastern community-based family planning programs should target specific cohorts of women, those the same age, who have had similar experiences and who are in the same reproductive life span stage. Discussions also need to be held in a non-family environment by informed health personnel.

Conclusion

Anthropological principles and techniques can provide valuable information for designing family planning communication programs, especially in their ability to explain the social and cultural context in which people's actions thrive. For Thailand at least, this entails taking a closer look at three main dimensions: 1) the differential acceptance of certain contraceptive methods over a woman's reproductive life span; 2) the roles of different social networks in regulating contraceptive method selection, change and discontinuation; and 3) the mechanisms by which rumors are spread and confirmed. Without these considerations, family planning providers may encourage the use of socially inappropriate methods for women, which can lead to increased contraceptive discontinuation. Moreover, if the method causes overt side effects, this occurrence may not only cause the individual to cease using contraceptives, but also persons within her social network. The fear of side effects may also perpetuate through inter-personal social network information. Furthermore, by being cognizant of these three factors, family planning providers can more readily identify contraceptive use problems. They can then locate the core persons in the community to which to direct a more effective education program.

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Chapter 31

Social networks and contraceptive choice in Thailand: lessons learned from a focus group study in Nang Rong district

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While the last chapter looked at social networks and contraceptive use and discontinuation at the regional level, this chapter examines contraceptive choice from district and community levels - EDS.

Introduction

Beginning with the efforts of the World Fertility Survey, there has been considerable work on the effect of community factors on contraceptive use. While progress has been made, studies to date have been hampered by a limited range of community variables, their focus on easily measured aspects of communities such as service delivery, and the availability of individual and household data for only a small sample of each community. In the study of Nang Rong district in the Northeast of Thailand, we use a broad range of community variables to study the contraceptive choices made by all couples "at risk" residing in 51 rural villages in Nang Rong. As for the qualitative analysis, we may find powerful and intuitively appealing effects for some of the measured community variables. In addition, we may find evidence for the importance of the social community, bound together by social interaction, discussion, gossip, and perhaps even ridicule, taunts and gibes. This is aimed for with the focus group study on the social network and contraceptive choice in Nang Rong.

Nang Rong district is located in the Northeast region of Thailand, a largely rural area characterized by low annual rainfall, relatively infertile soil, insufficient irrigation, poverty, high rates of population growth, and high rates of out-migration. Near the Cambodian border Nang Rong straddles the main road connecting Bangkok and Korat (a regional city) with Buriram (the provincial capital) and the border with Laos. Built initially for military reasons during the late 1960s, the road integrated Nang Rong into the national economy and stimulated further development in the area. Change was rapid during the 1980s. Consider progress in the availability of electricity. In 1984, a third of the 51 villages had electricity; by 1988, about two-thirds did; during a field trip to the district in January 1991, only one village could be located that did not have electricity -- and poles were resting beside the road ready for installation. Other changes over this period include improvements in agricultural productivity

related to the use of new seeds, fertilizers, and pesticides as well as more widespread use of tractors (mostly "walking tractors") for land preparation; an increase in the number of mechanized rice mills, which efficiently remove the hulls from harvested rice; an increase in the number of televisions, even in villages without electricity (where they run off batteries, charged and recharged at the gasoline powered rice mill); and improvements in sanitation and water storage.

While Nang Rong occupies a relatively small geographic area, contraceptive choice varies widely from village to village. In the mid 1980s, residents could choose among three temporary methods -- the pill, IUD, and injection -- as well as vasectomy and female sterilization. While condoms were widely available in Nang Rong, fewer than 1% of Nang Rong residents used them or any other coital method. Figure 31.1 indicates which of the temporary methods is most popular in each of 51 villages in the district. As shown, the pill is the model temporary method choice in 38 villages, the IUD in nine villages, and injection in four. Among all users of temporary methods in a particular village, as many as 65 percent might use the pill, 53 percent the IUD, and 38 percent injection. What factors account for such striking variation in method preference within a confined geographic area? How can we explain such marked preferences within villages? This chapter explores the origin and maintenance of these patterns, particularly drawing on qualitative data.

A Focus Group Study to Clarify a Quantitative Analysis

The quantitative data on Nang Rong consist mainly of a census of 51 villages and a village survey, both conducted in 1984. The household census recorded the contraceptive method used by each married woman of childbearing age as well as characteristics of each household member and household asset information. The village survey interviewed as a group the headman and others knowledgeable about the village. With these data, multilevel models were estimated that relate the characteristics of the agricultural economy in each village, remoteness, and the local presence of family planning outlets to choice of a temporary contraceptive method. In addition, because the census was repeated in 1988 for households containing a reproductive-age woman in 1984, the effects of village variables on the decision to become sterilized in the interim were estimated. In both analyses, the statistical methods took into account unobserved as well as observed community effects within the context of multinomial logit estimation.

As a complement to these quantitative analyses, five focus group interviews were carried out in early 1991. We selected four study villages based on prior knowledge of the contraceptive methods popular in each (pill, IUD, injection, and vasectomy) and interviewed women or men aged 35 to 44 about factors affecting the choice of one method versus another. A focus group interview was also conducted with headmen from eight villages to determine their awareness of contraceptive use patterns in their own and neighboring villages, and to inquire about possible reasons for such patterns. The transcripts are particularly valuable as a source of information about social networks in the Nang Rong villages, and the importance of village boundaries for the discussion of contraception. In villages where the pill, IUD, or injection was popular, the focus group consisted of women aged 35 to 44; where vasectomy was popular, we interviewed men in this same age group. The interviews asked about a range of topics related to contraceptive choice, including the size and composition of conversational networks in which contraception is discussed; the opinions and methods chosen by women who might be considered "important" (e.g., the headman's wife); the history of contraceptive use in the village; and experience with serious side effects and method failures. A focus group

Figure 31.1 The temporary contraceptive methods most often chosen by couples living in 51 Nang Rong villages

interview was also conducted with headmen from eight villages to determine their awareness of patterns in their own and neighboring villages and to inquire about possible reasons for the similarities and differences. Taken together, the focus group interviews provide the basis for hypotheses about social networks and contraceptive choice.

Social Networks

In Nang Rong, farming families live in dwelling units that are very close to each other. Physically, the dwelling units are open and many daily activities, such as cooking, occur outside and are easily observed by others. In a relatively short walk, one can visit or see all the dwelling units in a village. The land that is farmed surrounds the village, and farmers walk (or ride a truck or tractor) to their plots. The plots a family farms are unlikely to be contiguous but rather are relatively small and intermixed with the plots of other families. During an average day, villagers have numerous opportunities to talk with one another.

Because of this pattern of community life, decisions about contraception are seen as individual choices but are not private choices. Within boundaries to be described more fully below, the choices made by individuals are widely known. Family planning is an everyday topic of conversation, especially among women, and individuals are not embarrassed to discuss the choices they have made. In the words of the headmen:

> *They are not shy because they think that this is a normal thing of everyday life. Everybody does it now. It has become a normal thing.*

But knowledge of individual choices and conversation about family planning is bounded by social networks. This is true within villages, and between them.

First, and importantly, women are more likely than men to discuss family planning, and there is very little discussion between men and women (other than husbands and wives). Women and men agree that although men may talk among themselves about birth control, they do not devote much time to this topic. One indicator of this is that the time required to conduct the focus group interview, and the pages of transcript generated, were considerably less for the focus group interview of men than for any of the focus group interviews of women. The attention men do give to family planning appears to coincide with any action that they themselves might have to take. For example, they may discuss the topic a great deal when considering the pros and cons of a vasectomy. After a decision has been made, interest wanes considerably. In addition, the transcripts suggest that men may have been more involved in discussions of family planning when methods were first introduced in their village. The headmen also seemed uninterested in the topic of family planning, perking up considerably when asked questions about roads and electricity, including the role they played in bringing these amenities to their village.

In contrast, family planning appears to be of intense interest to women, and all three focus groups agreed that women discuss the topic more now than before (despite their advancing age and the fact that all have been using contraception for some time). It is a topic that comes up naturally in a variety of settings. According to the description of one headman:

> *At the rice mill, [women] meet each other and ask, 'how many children do you have now?' 'I have two children'... 'And you haven't gotten sterilized yet?' 'No, I haven't. I'm on the pill.' They will talk like this. They will ask about children. It will go on like this.*

Women discuss children, family size, and contraceptive methods in the course of their everyday activities -- when they go to fetch water, work in the fields, look after cattle or water buffaloes, have their children weighed by the visiting health worker, or travel to Nang Rong town.

Family planning is not a topic that women readily discuss with men, however, other than their husbands. When asked whether she felt embarrassment talking about family planning, one woman replied,

> *No, not shy. But when I talk to men, I am shy.*

And when asked whether men share information with women about their vasectomy, one man stated,

> *If she is brave enough to ask, we will be brave enough to tell.*

Interestingly, women were quite willing to talk about these topics with our moderator, who was male. We attribute this to the fact that he was not part of their social network, and also to his skill at conducting focus group interviews. It also may be that, as one headman claimed, women are becoming increasingly bold in their willingness to discuss family planning in front of men. Further, as one village man stated,

> *If someone asks, they will tell. Usually when people sit and talk they will tell each other.*

Women say they discuss family planning most with their neighbors and friends, especially those of similar age and life stage. Many of these discussions occur outside the context of the family. Indeed, focus group participants rarely consult their own mothers on matters of birth control and contraceptive choice. This appears to be a reflection of their mother's age and lack of experience with contraception. As one focus group participant explained,

> *My mother does not know about it [family planning]. When I talk with her, I have to talk about other subjects.*

Nevertheless, focus group participants regularly give advice to daughters, nieces, and other younger female relatives. This advice is likely to be given when there is a specific need, either at marriage or immediately after the birth of the first child.

Age and generation represent relatively permeable boundaries to discussion about family planning and contraceptive methods. Boundaries of class and status appear less easily breached. In advance of the focus group interviews, we tried to identify types of women whose opinions might be influential in the village: the headman's wife, the head of the housewives' group, teachers and their wives, and women from relatively well-off households. By virtue of their background and current status, these women have more ready access to new ideas and knowledge about birth control. We also thought that they would be in an excellent position to share this information with other villagers, and asked about this explicitly. We could not have been more mistaken.

Take, for example, the headman's wife. She clearly is not part of the social circle of the focus group participants, and rarely discusses birth control with them. When the moderator asked whether the headman's wife had ever suggested a birth control method to members of one focus group, four participants answered "no" in quick succession. Participants in another

group mentioned that they had discussed family planning with the headman's wife. She recommended injection -- they chose the pill! The rich are not part of the social network of focus group participants either, nor do they use similar contraceptive methods. For example, in a village where most women used the pill, well-off women opted initially for the IUD and more recently for injection.

The situation with respect to teachers and teachers' wives is more complicated. In some villages, the gulf separating them from focus group participants is as wide as any just described. In other villages, participants do mention instances in which teachers' wives have discussed birth control with them. There is little similarity in the contraceptive choices made by these two groups of women, however. For example, where IUDs were popular, teachers' wives were using the pill.

To a large extent, village boundaries overlap the boundaries of social networks. Villagers have many opportunities to meet women from other villages -- at the market, at religious festivals, on public transportation. But villagers do not always strike up conversations with people they do not know, and when they do, they keep to safe topics such as working in the field or garden, crops, or rice yields:

Moderator:	*What happens when you ride on a bus and you talk with the woman who sits by you and you make friends with her?*
Woman #1:	*I have never dared to ask the other villagers.*
Woman #2:	*I do not dare to talk to her and she does not ask me, because we are strangers.*
Woman #1:	*They do not dare to ask. If one wants to talk, they talk about the other subjects.*
Moderator:	*What do they talk about?*
Woman #1:	*They talk about their work.*
Moderator:	*Can they talk about the matters we are discussing now?*
Woman #1:	*They do not talk about this.*
Woman #3:	*They do not dare to talk.*
Moderator:	*If they are people in the same village, do they talk about these matters?*
Woman #1:	*If we are in the same village, the secret will be opened.*

Exceptions do arise, of course. It is difficult to know for sure from five focus group interviews, but it seems that conversations about birth control among new acquaintances are more likely to happen when women hail from nearby villages. Many ties of kinship and friendship link villages that are close. Residents of nearby villages also engage in a variety of common activities, in part because they may share a school or a temple.

An exception is the readiness of new acquaintances to discuss family planning during visits to the hospital:

If stay in the hospital, we will talk and discuss with each other. 'Why do you have only a few children? What did you do?' Tell each other things.

In this example, the new acquaintances may come from neighboring villages, but not necessarily. Hospitals draw their patients from a wide catchment area. Rather, it may be the setting itself that is conducive to confidences about health and related matters. Since visits to the hospital are a rare event, they probably do not represent a major source of information and ideas.

The picture that emerges from the focus group interviews is one of social networks made up of women of similar background and life stage, largely although not totally confined to the village. Within these networks, contraception is a normal topic of conversation and discussion of this topic occurs frequently. Indeed, when asked, focus group participants without hesitation could correctly identify the most popular method in the village. To put this into perspective, how many Britishers or Americans could correctly identify the most popular method in their neighborhood or among their friends or co-workers? Focus group participants could also name the first users of contraception in their village and could even come within a few years of dating the first acceptance. For instance, in one village a focus group containing men began talking about when vasectomies became common,

Man #1: *The first people in this village were those people. They did it before my group.*

Man #2: *The elder group did it first, the uncles.*

Man #1: *Three or four people did it first.*

Man #2: *The elders did it first, and so they advised the younger group that it is like this and like that. 'Go ahead and do it,' and so we decided to go. And then when we are there, we say to ourselves, 'Hey, should I do it or not, oh well!! Let's just go ahead and do it.*

In a focus group containing village headmen, the exchange went like this.

Moderator: *Which method do villagers most commonly use? Can you think of one?*

Man #1: *For me, it is vasectomy. . . . I have compared this and found that it is done a lot. Compared to the pill in other places.*

Moderator: *And in your village . . .*

Man #2: *In my village usually they use the IUD and the pill, but only one person is vasectomized.*

Moderator: *What about your village?*

Man #3: *The temporary method . . . the pill.*

In a women's focus group, the participants were just as revealing.

Moderator:	*Of the nine people who are sitting here, can you tell me which birth control method is the most popular in your villages.*
Woman #1:	*The IUD.*
Women #2:	*Many wear the IUD.*
Woman #3:	*The IUD, many.*
Moderator:	*How do you know the IUD is used the most?*
Woman #4:	*Oh! Because we know from all our friends.*
Woman #5:	*Know from our friends.*
Woman #6:	*If a person gets it put in, then they come and tell us about it.*

The boundaries of social networks help us to understand how it is that villages can vary so much one from the other in terms of their method choice. But how did such variation emerge in the first place? We suspect that the choices made by initial users, and their experiences, played a crucial role. Once a method is introduced into a village, experience with it accrues. As focus group participants explained, the information spreads by word of mouth. Compared with other methods available at the time, more is known about the first method. Choosing it may seem like less of a risk, and others may be more likely to opt for it as well. This is a dynamic that would explain the tendency to choose the most popular method in the village, and the tendency for village difference to be preserved over time.

In some instances, the most popular method in the village now is the same as the one chosen by the first user. The particular one chosen depends on when in historical time the choice was made. The earlier the choice, the fewer the options. The earlier the choice, the greater the likelihood of opting for the IUD rather than the pill and the greater the likelihood of opting for either rather than injection. Such aspects of village context as family planning availability, access to new ideas, and costs and benefits of children may have affected the timing of first use. This is one way to link conversational networks to theorizing about the nature of contextual effects.

Of course, the most popular method in the village now need not be the same as the one chosen by the first user. Initially, it may be hypothesized that highly publicized negative experiences with particular methods would explain these shifts. Interestingly, the focus group interviews provide no examples of a village avoiding a particular method because of the side effects experienced by an early user. However, the focus group material made it clear that if someone within a village experienced a side effect such information would quickly be shared among women in the village.

It appears that health professionals can play an important role in shifts of method preference. When a shift in method preference occurred, it appears related to the intervention of health professionals. For example, in one village the doctor who initially advised villagers to take the pill, the first method used there, subsequently made injection available to them. Injection is now the most popular method in this village. This example provides a good illustration of how health workers may exert an influence, within a network of information

flow. Other potential conduits of new information are underutilized. We have already commented on the surprising lack of influence of headmen's wives, teachers and teachers' wives, and women from well-off households. Focus group participants also denied that returning migrants represented a source of new information about contraceptive methods.

Conclusion

The social networks in which individuals are embedded are the key to understanding how such characteristics as family planning accessibility, the organization of economic activity, and village remoteness affect the choices made by individuals and couples. Focus group interviews conducted in January 1991 make it very clear that contraceptive choice is a matter of frequent and easy discussion among Nang Rong villagers. This is particularly the case for women. Further, the boundaries for conversation on this topic appear to be largely coterminous with the physical boundaries of the village. It is thus not surprising that villages vary so much in terms of their method choice, even adjacent villages. But how did such variation emerge in the first place? We have no firm answer to this question but suspect that the choices made by initial users played a critical role. If the earliest contraceptive use took place before the initiation of the government program in 1970, the IUD was the likely choice. If the earliest use took place in the early 1970s, either the pill or the IUD might have been chosen. Once a method is introduced into a village, experience with it accrues and increasing numbers of couples may choose it. This hypothesized dynamic would explain the tendency for couples to choose the most popular method in the village and the tendency for village differences to persist over time.

Note

This chapter is excerpted from a paper on 'Community and Contraceptive Choice in Rural Thailand: A Case Study of Nang Rong District' by the same authors and presented at the Population Association of America's (PAA's) meeting in Denver, Colorado, USA in April 1992.

Chapter 32

Contextual forces influencing Northern Thai women and the AIDS crisis

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This case study shows how qualitative and quantitative data collected from different, yet related studies and using several different methods can be combined and analyzed to understand the family, community and societal context within which Northern Thai women make occupational choices that place them at risk of HIV infection - EDS.

Introduction

Thailand's AIDS crisis is a well-publicized phenomenon and the nation's highest priority public health problem. Statistically speaking, by the end of 1992 there were 1,251 full-blown AIDS cases and 1,588 AIDS related cases (ARC). In 1990 there were at least 200,000 HIV positives, a rate that rose to close to 500,000 in 1992. If current trends continue, 2-4 million Thais will be infected by the year 2,000, over 50% of whom will be women. Meanwhile, sexually transmitted diseases (STDs), which are highly prevalent and for the most part undiagnosed, can increase the risk of HIV infection by at least ten-fold (UNICEF 1993; Vittachi 1993).

In almost 80% of reported AIDS/ARC cases the disease was transmitted through sexual networking, usually from female commercial sex workers (CSWs) to their clients and then to the latter's wives or girlfriends (Havanon et al. 1992; UNICEF 1993; Yoddumnern-Attig 1992). Female CSWs therefore represent one of the major high risk groups for the disease, and the vast majority of CSWs come from Northern Thailand (Yoddumnern-Attig 1992).

Yet AIDS is no longer restricted to this category, and the epidemic's most tragic consequences will fall on women in general and their families, since AIDS is rapidly spreading from high risk to low risk groups (such as housewives, children and youth). This is significant since Ministry of Public Health data for 1991 alone shows that STD prevalence among Thai youth aged 15-19 years was 23%, and this percentage increased to 36% in the 20-24 year age group. Most females afflicted with AIDS/ARC are between the ages of 20 and 24 years, while their male counterparts are 25-29 years. Both of these age groups represent a large proportion of Thailand's work force (Yoddumnern-Attig 1992).

Without a cure or vaccine, AIDS can only be controlled and prevented through health education aimed at modifying risk behaviors among high and low risk groups. AIDS education

programs in Thailand and elsewhere, though, consist mainly of providing information under the assumption that an increase in knowledge of healthy behavior will lead to the practice of healthy behavior (Quirk and Wapner 1991; Yoddumnern-Attig 1992). Yet several studies in Thailand and elsewhere have shown that information, although necessary, is not always sufficient for action to take place (McKuisick and Cotes 1989; Quirck and Wapner 1991; Soonthorndhada 1992a; Woller 1989). For such information driven programs, the unit of analysis and action is often the individual and little attention is paid to environmental forces that exist at family, community and societal levels that mold and shape a person's decisions and actions.

What is currently needed the most in Thailand's AIDS education campaigns is a clearer understanding of the contextual factors at individual, family, community and societal levels that place Northern Thai women (CSWs and non-CSWs) at greater risk of exposure to AIDS. To gain this understanding, we need to focus on the person-in-environment as the unit of analysis, rather than solely the individual. As Quirk and Wapner (1991:204) note, in this perspective behavior and environment are a unity, each component mutually defines the other, and that one without the other literally would not exist. This is crucial in AIDS education because one cannot delineate and attribute causality solely to the person or to the environment when we know that both are critical factors. Clearly, the person and the environment are parts of an entity linked by transactions, i.e., the person-in-environment system, which serves as the unit to be analyzed.

For AIDS in Northern Thailand, for instance, these transactions run broadly between individual factors that *predispose* Northern Thai women to undertake key life course decisions and actions (such as becoming a factory worker or a CSW) and which in turn *predispose* them to risk of HIV infection, Further, factors belonging to her family and community help mold or *reinforce* women's decisions and actions (such as when families consider prostitution as an acceptable occupation for young women and a means of gaining old age security). And finally, many societal factors *enable* these decisions and actions to grow and blossom (such as the nation's economic, educational and occupational climates along with a permissive state structure and role). This chapter's objective, therefore, is to uncover such important factors which affect Northern Thai women and their potential exposure to AIDS.

Methodology

The data presented here come from three sets of quantitative and qualitative studies. In the first case, quantitative data on AIDS derive from Ministry of Public Health statistics, other government documents and/or as reported in other scholarly sources including journal articles and conference papers.

Second, qualitative information concerning Thailand's AIDS situation comes from a situation analysis that this chapter's lead author undertook as part of a short-term consultancy to the UNICEF Thailand Area Program in Bangkok (Yoddumnern-Attig 1992). Data were collected from January - July 1992 from Thailand's four main regions with Bangkok serving as the focal point for the Central area. Chiangmai, Khon Kaen and Songkla provinces were the research sites for the Northern, Northeastern and Southern regions, respectively. The study used a documentary research approach entailing four main methods. Initially, available statistical data were collected from several sources including universities, research institutes, various national, provincial and district level government offices, and in several cases, from health service centers such as hospitals and AIDS clinics. The objective was to determine the disease's patterns in terms of magnitude and distribution since it was first identified as well as its projected levels into the future.

Thereafter, a literature survey identified current trends in AIDS and STDs research with an emphasis on epidemiological studies. This helped to determine the disease's geographic extent and main target groups; the type and effectiveness of existing behavioral and educational control and prevention programs; and people's (i.e., youth, CSW and the public's) responses to AIDS and particularly changes in their knowledge, attitudes and practices, and the coping mechanisms of those at high risk or already infected.

Data on these areas were then cross-checked and supplemented through in-depth interviews with AIDS researchers and health personnel working at provincial, district and community levels as well as observations of on-going AIDS control and prevention programs. The data sets were then analyzed, compared and synthesized to highlight existing patterns and processes found within Thailand's AIDS situation on national and regional levels.

Finally, data on Northern Thai family and community structure were initially acquired from the lead author's Ph.D. dissertation entitled *Continuity and Change in a Northern Thai Village: Determinants and Consequences of Fertility Decline on Northern Thai Family Structure* (Yoddumnern 1985). This dissertation combined statistical and qualitative data from many studies of Northern Thai family and community life over historical time, and then viewed it within the context of one village to highlight those changing family and community factors that regulate women's fertility (including sexual) behaviors. Fieldwork consisted of gathering qualitative data using participant-observation, in-depth interviews and life history taking. Cross-sectional, quantitative data collection also included a village population census, a household fertility survey, and collection of various secondary data at district, sub-district and community levels. Results of this study were then compared, up-dated and integrated with a more recent study on women's changing roles and statuses in Thai society supported by the International Labour Office (Yoddumnern-Attig et al. 1992).

Northern Thai Life: An Overview

Northern Thailand is a mountainous region with narrow river valleys formed by the tributaries of the Chao Phraya river. Rice, forestry and horticulture (fruit and especially orchid growing) are major industries. The valleys are inhabited by the Thai people, but the mountains contain ethnically distinct tribal peoples.

Since the beginning of recorded history, Northern Thailand has supported itself on rice cultivation, and the society has revolved around farming families, often considered the 'backbone' of the country. Despite the availability of modern farming technologies, rural life is still typically that of small-scale farming families, with farming being done with traditional techniques. Work is usually done by hand or with a water buffalo, under the hot sun, and shared by the entire family, who consume the products from their own fields, while selling any surplus at local markets. For those who can afford it, televisions, radios and motorcycles are common possessions. Life is centered in the rice fields and around the community Buddhist temple. More often than not, neighbors are also extended family members or other relatives. This is the life pattern of the majority of the rural poor, who often have only a primary education (Komin 1993).

Individual Forces

For the purposes here, two sets of individually-centered factors are important for understanding the relationship between Northern Thai women and the AIDS crisis, namely,

occupational/career choice and perceived risk of exposure to AIDS. These two categories are to an extent interrelated but on a different basis depending upon the risk group being investigated.

Occupational/Career Choice

In Northern Thailand, a woman's occupational/career decisions, which affect potential exposure to AIDS/HIV, rest firstly with her own assessment of her current personal situation in light of family resources. Studies indicate that approximately 50% of Northern CSWs come from farming families, 16% are formerly laborers and factory workers, and the remaining 34% are housekeepers, students or others. Yet very little, research on the perceived situation, hopes and expectations of these women prior to their becoming CSWs has been done, though its importance is great. For example, one study investigated the attitudes of 5th and 6th grade students in two Northern provinces about prostitution. Alarmingly, two percent of the girls wanted to become prostitutes. Their reasons, furthermore, reflect not only their own desires, but those of many other Northern Thai women who become CSWs or enter low-paying non-agricultural jobs in urban centers. These include poverty, a desire to earn a lot of money, helping their parents, providing better care and educational opportunities for younger siblings, and some wanted extra money to continue their own schooling (Yoddumnern-Attig 1992).

Clearly, one major underlying cause affecting women's predisposition to AIDS, and a major force for their entering prostitution or other low paying jobs which place them at greater risk of HIV infection, are employment and income needs associated with inadequate family resource availability. Once again, this is directly related to Thailand's rapid economic progress (which is acknowledged to place it as a Newly Industrialized Country within the next five to ten years), a rise in a materialistic society, and most of all for Northern Thailand increased landlessness and the growing economic gap between the rich and poor (Komin 1993; Yoddumnern 1985).

Landlessness and its economic and occupational consequences especially are having a great impact on changing the Northern Thai family structure and organization in terms of residence patterns, descent, roles and functions, and family size. Lately, decreased land and even water availability for agricultural purposes has been aggravated by many interrelated factors. In Northern Thailand, for instance, the number of landless people grew immensely from 1970 to 1987. Figures for 1987 revealed that over 609,000 Northern Thai families were landless, the highest rate for all of Thailand. The main reasons for this are: 1) extension and promotion of tourism; 2) use of irrigation for non-agricultural purposes (such as golf courses, unplanned resorts and other land development schemes); 3) loss of land due to public projects such as roads and dam construction; and 4) an increase in landed businesses, including the transfer of land from small farmers to large industrial or housing projects. As a result, currently many Northern Thai families have become landless, and they are being forced into the industrialized labor market in order to put food on their tables (Yoddumnern-Attig and Attig, forthcoming).

Hence, while women were traditionally attached to the land in occupational terms, more and more they are being detached from it as their land is removed from agricultural production. Consequently, they are also adopting a more active role as family 'breadwinners' than in the past which has led to occupational role diversification. Where in traditional times girls went to school and then returned to the family farm, they are now by-passing the farm in favor of becoming factory or construction workers or CSWs. Of these employment options, prostitution is seen as the most high paying and entailing relatively little work. Monthly incomes can range anywhere from as low as US$ 250 to as high as US$ 2,000, well above the

average *annual* per capita earnings of the rural Thai. Prostitution also does not require education (other than the primary level) or skills development training, both of which cost money and reduce family resource availability at least in the short-term. After only a few years in the profession, they can return to their families and purchase land or build houses, an option that was not open to them previously either as farmers or factory/construction laborers. Hence, prostitution is a *resource recovery strategy* since it is one way for them to more efficiently regain any family resources (such as land) that had been lost thus far and/or secure their future more firmly by purchasing additional family resources, most notably houses and land.

AIDS Exposure

Another individually-centered factor that plays an important part in a woman's AIDS prevention behaviors is perceived risk. Among high risk groups, CSWs are knowledgeable about AIDS through information campaigns, but they generally feel that AIDS is not their biggest health problem, and they do not give much thought to it. They realize that their occupation is filled with all types of social and health consequences and AIDS is just one of many. They also believe that the ones who need to reduce their risk behaviors should be male clients. Even among CSWs who perceive themselves at high risk, they are often powerless since they do not have any bargaining power when it comes to convincing a client to use a condom. At best, they will lose a client and the income, at worst they may be abused and forced to have unprotected sex. This situation greatly hinders their use of condoms to protect themselves against AIDS/STDs.

Even among low risk groups such as adolescents and housewives, AIDS protection is also a low priority, since AIDS is usually perceived as a disease of prostitution, and thus they do not perceive themselves at risk. Furthermore, condoms have a negative connotation. They are associated with CSWs, and to use them implies that adolescent females are 'bad' or 'unclean girls' or wives do not trust their husbands. Hence, although many women have said they do consider talking about AIDS and condoms with their boyfriends, 67% said they would have sex with a man even if he refused to wear a condom.

Playing an important role here is the underlying cause of inadequate access to accurate AIDS information or inadequacies in terms of its targeting and impact. This problem is so great that many such women are not aware that they are at-risk. Even if they are aware of the HIV/AIDS situation through information campaigns, they do not perceive themselves as being at-risk of contracting the disease, and many are apathetic about protecting themselves. Antagonizing this situation is that while men may use a condom with CSWs, they will not do so with non-CSWs including wives and especially girlfriends or casual sex partners who might be HIV positive. In Northern Thailand, for example, male clients and especially construction workers do not use condoms. Among users, they will often cut off the tip because they believe that the rubber sheath will protect against disease transmission (AIDS or STDs). They also feel that a condom with an intact tip should only be used for preventing pregnancy. For men who do not use condoms with girlfriends, casual sex partners and/or CSWs, they are thus serving as a bridge for spreading the disease among other low risk groups.

In summary, at this individual level a Northern Thai woman's occupation/career choices center firmly around poverty-reduction, income-generation, and in some cases educational attainment. She expands and diversifies her occupational role to other non-agricultural areas in order to secure personal and family welfare and achieve personal goals within existing household resource limitations. The basic, structural determinants influencing this process are physical characteristics (i.e., landlessness, inadequate water resources,

environmental degradation) and the social structure (e.g., income disparity, a decline in the feasibility of agriculture for employment). The occupation/career she chooses, moreover, may increase her direct or indirect risk of HIV exposure.

Familial Forces

Many family and community factors influence Northern Thai women's occupational/career choices and their direct or indirect exposure to AIDS. Perhaps the most important is that women are not only becoming detached from the land due to resource unavailability, but also because of concomitant changes in Northern Thai family structure brought on by Thailand's changing population and economic climates. For the purposes here, three specific areas will be addressed: changing residence patterns, familial roles, and education. Changes in these areas, moreover, correspond roughly to three time periods: traditional (pre-1913), transitional (1913-1945) and contemporary (1945 to the present). These are divisible based on changing fertility, mortality, health and economic conditions (Yoddumnern 1985).

Changing Residence Patterns

Empirical evidence from many studies indicate that a norm of uxorilocal and matrilocal residence characterizes Northern Thai society, but this norm has changed over time in response to a changing economic climate (Yoddumnern 1985). Briefly, in traditional times married daughters and their husbands lived with the wife's parents until the married couple's own children were old enough to help with housework and farming activities. The married couple was then free to establish their own household on the family compound. Under these circumstances and if the parents had several daughters, several married couples would co-reside in the original house at the same time. Thus, the extended family was the basic subsistence unit and support network. Its members were thus highly *inter-dependent* rather than independent.

During transitional times, uxorilocal residence was still adhered to, but responsibility for caring for the wife's elderly parents fell on the youngest daughter and her husband. This altered residence pattern came about from the introduction of a cash-based economy (rather than traditional subsistence or barter systems). In short, a couple would remain in the original house only until their first child was 6 or 7 years old. At this time, the couple moved out of the original house, was given rights to a portion of parental land, and established their own *independent* household. The couple worked on their own land and ate rice from their own granary rather than sharing rice with the wife's family. This strategy reduced the original house's resource burden to provide for many successive families. It also meant a couple's freedom from providing active labor and financial support to the original house, though some resource transfer (money, food, materials) persisted for parental old age security.

In the contemporary period, matrilocal and uxorilocal residence still predominate. Also during this period, the stem family household appears. Fundamental to this system is that one and only one married child in each generation resides in the parental household; co-residence of married children does not exist. The basic structural units of the contemporary Northern Thai family thus pass through three stages in the developmental cycle: 1) when a young couple marries, they initially live with the wife's parents; 2) when one of the wife's younger sisters marries, the elder married sister and her family leave the original house and

establish an independent household; and 3) this pattern continues until the youngest sister marries.

Four major forces are responsible for motivating these residence pattern changes from transitional to contemporary times: increased landlessness as noted earlier; the desire for advanced education; the increased need for labor in the industrial, construction and services sectors to fuel Thailand's development; and the need *to maintain parental old age security at least on economic terms.* All of these are now working to push children, and especially women, away from their natal villages.

In actuality however, this family-based 'out-migration' of children is not a new phenomenon. From traditional to contemporary times, the family economic survival strategy has focused on pushing children out of extended families and into nuclear ones to preserve family resources and, if possible, maximize them through increased land obtainment. The only difference now is that this child out-migration strategy characteristic of Northern Thai families is changing from intra-village or inter-community streams to an *extra-community* or societal stream (via rural-to-urban migration) and centering on unmarried as well as married children. Family ties and functions are thus declining as a function of distance, *however* familial (child) obligations and responsibilities remain strong in terms of providing for parental old age security.

Consequently, *these changes have allowed Northern Thai women to become more mobile, geographically and occupationally.* Those who have completed the compulsory primary level education are now migrating to urban centers at an ever-increasing rate in search of higher education or more commonly low-paying jobs in construction, manufacturing and service sectors as well as the sexual service industry. The ramifications of this increased mobility on women's sexual behaviors and risk of HIV infection are significant and will be discussed in the following subsection on community and societal norms. But the fact remains that among highly mobile Northern Thai women who migrate for low-paying jobs, and even for those who remain on the farm, the threat of contracting AIDS is extremely evident. According to Ministry of Public Health data (as of October 1992), laborers (female and male) represent the largest group to have contracted AIDS (at 40%), while the second largest category is rural agriculturalists at 17%.

Familial Roles and Education

Familial forces in terms of parental expectations and the value of children play a key role in affecting the educational and occupational decisions of rural Northern Thai women and thus their potential exposure to AIDS. According to the traditional Thai point of view, the mother was likened to the entrance or gate leading to the house compound. The father was usually the household authority figure and responsible for the welfare of family members. All decisions regarding activities associated with extra-household matters were subject to his decisions and authority. The mother, however, was responsible for the house and compound. This area represented the domestic domain and her authority, roles and duties centered on this realm. By virtue of matrilineal/matrifocal norms, moreover, she was also considered the 'pillar' of the family, and descent was reckoned through her. Though descent in Northern Thailand is now reckoned bilaterally, the woman's importance to and responsibilities for the family and its perpetuation remain strong.

Parentally, a married couple's major responsibilities are three-fold. They are to provide for and raise their children to adulthood, accumulate property/wealth for child inheritance, and encourage daughters to marry in order to insure parental old age security,

since one of the main, persistent duties of a daughter is to care for her parents for as long as they live.

Cumulatively speaking, therefore, parental roles and responsibilities are closely tied to the value of children in Thai society, and much of the literature on the value of children focuses on economic benefits and costs. Thai parents see their offspring as the basis for a dependency reversal later in life. In short, through their children parents will have someone to care for them in their old age and to make merit for them when they die. During old age, these parents spend increasing amounts of time merit making and observing religious precepts to better enhance their rebirth prospects. The children, on the other hand, assume more of a responsibility for the family economy. The Value of Children study in Thailand indicated that the expectations for economic assistance from children were highest among rural people, a reliance on these children for old age security. Over 80% of urban, lower class and rural respondents expected to rely on their children when they became old.

Presently, parental roles and duties as well as the value of children have altered in part due to the increased importance of education. Under rapid socio-economic change, parents anticipate more of an immediate problem in raising and educating their children. As one Northern Thai woman noted:

> *In the past, the parents' prime responsibility and concern was to feed their children. Today, the parent's prime responsibility and concern is to educate their children.*

Under these circumstances, children are now seen as consumers of parental time and energy rather than valuable contributors to the household as in the past. This in turn promotes child migration by loosening the traditionally tight parent-child bond so evident during Thailand's traditional and transitional periods. Parents, though, still value children in the long-run and view education as one main long-term investment that helps to assure that a child can obtain stable employment for the benefit of their children and parents.

Rural children who have the chance to go on for secondary and higher levels of education so that they can better avoid high-risk AIDS occupations, however, are in the minority. For a child from a poor household in particular, the chance of climbing the educational ladder is dismally low. For a farmer's daughter of secondary school age (about 12-17), only 14% are at school. Once they are at the age for higher education, less than 2% are studying. For children of middle or upper income classes, however, 96% of secondary school age children are at school, and 58% attend higher education (Yoddumnern-Attig and Attig, forthcoming). Because of high educational costs, poor rural parents have no option but to seek short-term economic gains through their children's labor, instead of looking towards long-term growth and security through education. When asked if their lives are better nowadays than in the past, villagers often respond (Rabibhadana and Pattrachokchoui 1991):

> *In a way, it is more convenient nowadays. We can go places easily. We can enjoy lots of new things. But life is hard. We have to rush around and work all the time to get money. And money is so important for our lives.*

For young Northern Thai women family ties remain strong, with or without an education. Daughters in particular have been so well socialized that they must fulfill their parents' demand for cash even if the family farm is no longer productive enough to retain its family members. In Thailand today, therefore, one finds a paradox - that a woman's independent economic status, whether obtained through higher education or early entrance into the labor market (including prostitution), does not entail independent social life. Migrant daughters continue to feel very obligated to contribute parental monetary support even at the

expense of having to enter the low-paying labor market or the sexual service industry which places them at high risk of contracting AIDS (Komin 1993; Vichit-Vadakan 1993).

In summary, the Northern Thai family as a source of strength or an anchor for one's psychological and emotional stability, therefore, is changing rapidly due to pressures on family members, and especially young women, who must work hard, and in the process they either deprive themselves to maintain their families, or neglect other family members in favor of an independent life (Komin 1993; Vichit-Vadakan 1993).

Community and Societal Forces

Thailand's modernization has also brought with it a changing socio-cultural system, most notably with regards to community and societal characteristics that impact upon all age strata and reinforce the propensity for HIV infection. For example, socio-cultural forces play a large role in determining adolescent (aged 15-24) sexual behavior and thus place young people, both in-school and labor force members, at risk of contracting STDs and AIDS. A steady increase in premarital sexuality after the age of sixteen is pronounced as a new social phenomenon which indicates the development of early sexual maturity. Several studies have shown that changes in norms about adolescent sexuality may be due to a number of inter-related factors including a general loosening of family control over young people's behavior, increased inter-sex interaction of young people in school and work places, and increased access to sexually stimulating materials (Soonthorndhada 1992a; Yoddumnern-Attig 1992).

Coupled with these socio-cultural forces are personal characteristics of adolescents which promote unsafe sexual practices and place them at greater risk of contracting STDs and AIDS infections. For example, young female adolescents prefer to engage in sexual relationships with partners of a higher socio-economic class, and especially with persons with whom they are not familiar (i.e., 'strangers'). This stems from another underlying cause, namely, *the perceived inadequacy of personal and/or household resources* where developing sexual relationships with upper class men provides girls with additional material and economic supports. In addition, they did not want their peers to know of their sexual activities which may have led to their ostracism or being labeled as 'flirtatious' or 'loose.' They felt that this could be achieved by having sexual relationships with persons outside their friendship and family circles (Soonthorndhada 1992a).

Adolescents also have a perceived propensity to casual unplanned sex, which heightens due to peer pressure, contextual circumstances (e.g., use of alcohol during group interactions), and a behavioral sequence that makes it hard to plan for safe sex. Moreover, only 53% of male in-school adolescents and 24% of their out-of-school counterparts have an accurate knowledge of STDs and AIDS, while 63% of in-school and 45% of out-of-school female adolescents show a similar pattern respectively (Pitaktepsombati et al. 1989).

In Thailand, furthermore, differential sex norms persist between men and women. In societal terms, proper males are expected to be sexually virile, while proper females should be docile and repressed in their sexuality. This leads to the right of males to sexual servicing outside of the household, promiscuity and permissive premarital sex which are prevalent in Thai society. Women's roles, moreover, dictate that male contraceptive methods are within the male domain, and thus women should not be involved in such contraceptive decision-making. This also obstructs their knowledge, attitudes and practices regarding AIDS/HIV prevention as well as limiting their attention to and acceptance of AIDS information. Lack of awareness, personal preference and low perceived risk of infection on the part of men and their sexual partners thus promotes HIV infection from high to low risk groups (Havanon et al. 1992; Yoddumnern-Attig 1992).

For young women, the 'push' away from the family and into low-paying jobs or prostitution also stems not only from a need to supplement familial incomes. It is also facilitated by the changing nature of family and community support networks and their underlying values. In short, during traditional times these networks served as a safety net and a source of labor for agriculture. Nowadays, they are pushing girls into other occupations, and research has shown that most CSWs were encouraged to enter their occupation by friends or relatives who were former CSWs. Moreover, it is not uncommon that Northern Thai parents encourage their daughters to become prostitutes. Moreover, all evidence points to the fact that most CSWs send money back home. This is highly praised, valued and encouraged by family members, relatives and friends (Yoddumnern-Attig 1992; Yoddumnern-Attig and Attig, forthcoming). Familial and community economic values are thus taking precedence over a woman's health and quality of life.

There is widespread concern, therefore, that Northern Thai women (and Thai women in general) are becoming the next victims of the AIDS epidemic in Thailand due to their sexual vulnerability as well as personal, familial and community attitudes towards sexual behavior and condom use. Also supporting this is the cultural belief (held particularly among the rural population) that single women are (ideally) not supposed to know about sex or to learn about and use any type of birth control. Family planning information is largely restricted to married women only. As a result, while some women may have heard about family planning and specific birth control methods before marriage, only a few actually know how to use them. For condoms especially, some women have never even seen them before, let alone know how to use them properly (Yoddumnern-Attig 1992).

Discussion

Many factors have been presented thus far, but taken individually, they mean very little and most are already known. Stepping back and looking at them cumulatively, though, four key concepts arise from the patterns of environmental factors which influence and are influenced by Northern Thai women and the AIDS crisis. These key concepts are self-autonomy, mobilization, social support and social immunity, and a clearer understanding of them can give rise to recommendations for AIDS intervention programs.

Self-Autonomy

Many changes in Northern Thai family structure have occurred especially in terms of altered residence patterns, familial roles and education. Some, such as declining matrilocal residence norms which allow daughters to out-migrate from the family and community, are prompted by economic needs and occupational and educational diversification. They are justified on the basis of the need to maintain a woman's importance in providing for parental old age security and thus family stability. What this has led to is greater *self-autonomy* among Northern Thai women.

Dyson and Moore (1983) characterize societies with a high degree of female autonomy as possessing freedom of movement and association for adolescent and adult females; post-marital residence patterns that permit continued social contact between the bride and her natal kin; the ability of females to inherit and dispose of property; and some independent control in choice of marriage partners. Data presented here and elsewhere clearly show that Northern Thailand passes this test, and Northern Thai women act more

independently in many spheres than women in most other Third World societies (Knodel et al. 1987) or even in Southern Thailand. In the latter, Southern Thai Muslim women are under stricter kinship and religious norms which heavily influence their family planning decisions and migratory patterns. Post-marital residence also varies depending on familial resources, and male decision-making even within the household is strong (Knodel et al. 1987). It is hypothesized that this may be one reason why AIDS prevalence is lower among this group than among Northern Thai women who, by virtue of greater self-autonomy, can become a part of occupations and situations more conducive to HIV infection.

Mobilization

This self-autonomy, however, requires greater mobilization - either geographically into low paying jobs or prostitution, and/or educationally in order to successfully climb the career ladder. One of the main forces supporting this is the parental old age security norm where daughters (and also sons, but to a much lesser extent) must continue to care for their parents until the latters' deaths. While daughters have the autonomy to increasingly migrate to other areas, they must still send remittances home to parents and any other residing siblings. Even though many more options are available now than in the past to provide for parental care, this norm still remains very strong for young women. Among CSWs and workers in low-paying jobs, it is exceedingly strong, and one of greater burden since their incomes and alternative occupational choices are limited.

Social Support

This old age security norm is based on the concept of *social support* which in itself is changing. In traditional times, parental social support was provided by daughters (and indeed the entire extended family), and it was based on combined economic security (material support), personal caregiving (active support) and emotional closeness (affective support). In transitional times when couples and their households became more independent of the parents' original house, the social support pattern of out-migrating children still stressed material support and to a lesser, but roughly equivalent, extent active and affective supports if the couple lived nearby (which was usually the case). Presently though with greater self-autonomy and mobilization, daughters can only continue to provide strong economic security, moderate to low affective support (if they can communicate regularly with their parents), and low (if any) active, immediate support (due to increased geographic and possibly social distance). What has happened over time, therefore, is that parental social support is becoming more economically motivated, and it is moving away from being family-based to individually-based.

Social Immunity

Finally, due to greater self-autonomy, mobilization and changes in the nature of social support, daughters have lost their *social immunity* to many 'social ills.' In the past a woman's family and community controlled many of their key life course decisions, including occupational choices and especially premarital sexual behaviors, through family- and community-sanctioned kinship norms and beliefs. This degree of control is still somewhat high among Southern Thai women due to kinship and religious restrictions, but has lessened to a

great extent among Northern Thai women. On the one hand, this has increased their freedom of movement and behavior, but it has also left them open to exposure to social problems such as AIDS in their quest to improve their quality of life.

Conclusion

These four key concepts give insights into developing more in-depth AIDS prevention and control programs. Factors associated with self-autonomy and mobilization, for instance, will require more intensive individual *and* cohort- or peer-based education programs. It will require raising Northern Thai women's awareness of their risk, empowering them to be more active in male contraceptive decision-making, and increasing their access to AIDS prevention strategies such as education, counseling and STD treatment. The latter need to be supplied not only at government outlets but also at schools and private work places (such as factories and construction sites) along with an explanation to managers that AIDS affects the productivity of their companies through the health of its workers. This targets the felt needs of managers and thus makes such interventions more appealing to these gatekeepers. Manpower to cover these broader, private sectors can come from women's groups, non-government organizations and the private sector working in partnership with government organizations.

Interventions aimed at family and community levels need to address the concepts of social support and immunity. AIDS education programs should focus now more strongly on three important *target audiences* that have a definite effect on risk group behaviors and HIV infection. In this perspective, the *primary audience* consists not only of high risk groups but also low risk women and youth and especially Thai men whose promiscuity perpetuates the AIDS crisis. In most (if not all) studies of AIDS/HIV awareness and practices among the general Thai public, and low risk groups particularly, attitudes and desirable practices were always contradictory to levels of knowledge. Playing a large role in this is whether or not a person sees him/herself as a high risk individual in contracting and transmitting the disease. Education campaigns thus need to focus more intensively on closing this self-perception/attitudinal gap if AIDS/HIV infection is to be controlled and prevented among this audience.

The *secondary audience* comprises important family, community and extra-community members who could teach, support and/or reinforce proper sexual practices and beliefs of the primary audience. This set contains such people as parents, teachers, volunteer health workers, subdistrict and community extension workers, community leaders and even brothel owners. Among the latter group in particular, when they were asked to cooperate in one project and were given an AIDS orientation session, the rate of condom use in their brothels increased. Resident *mamasans* or managers, furthermore, can serve as brothel-based AIDS education promoters. In studies where researchers have gained the consent of brothel owners, peer group counselling and group meetings have been effective mechanisms for promoting condom use (Yoddumnern-Attig 1992). For parents especially, special emphasis needs to be made on changing parental values about prostitution as an occupation and source of income, and re-instilling the value of daughters as sources of affective and active support, not simply material support.

The *tertiary audience* entails persons who may be largely external to AIDS intervention areas. Nonetheless, AIDS intervention programs would need such individuals by virtue of their expertise or official positions. On their part, they would serve as valuable sources of information for intervention development along with local community groups. Such persons include provincial and district health, education, agriculture and rural development

personnel, local mass media representatives, communication and marketing specialists, and university researchers.

Moreover, what has not been done thus far, but is of major importance, is that AIDS intervention programs should become even more integral parts of other health and social development programs under these tertiary audience members. AIDS education projects, either singularly or integrated into other programs, moreover must also be based solidly on a people participation model and using a participatory action approach that has proven to be very effective in behavior change programs. Thus far, most AIDS education campaigns have been largely media-based, but studies in many areas have shown that such programs are not effective in changing people's behaviors. Rather, media programs should support community interpersonal action programs which have been shown to be the most effective forums for educating people and changing their behaviors.

In conclusion, without a vaccine or cure, the extent to which it is possible to control AIDS among Northern Thai women is admittedly limited. Presently, the disease can only be prevented and controlled only through a well-coordinated large-scale program of public education which will require the expertise of persons from many quarters, from government and non-government agencies to university researchers and, especially, media development and marketing agencies. Such a program, though, must rest on a qualitative understanding of the factors mediating between a Northern Thai woman and her social and physical environment. Under this approach, STD and HIV education and services to rural and urban young people and lower socio-economic groups in Northern Thailand and elsewhere can be improved, made more relevant and accessible.

Note

This chapter is a revised version of a paper entitled "Northern Thai Women and the AIDS Crisis: Family, Community and Societal Determinants" given at the 5th International Conference on Thai Studies, School for Oriental and African Studies, London, 6-9 July 1993.

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Chapter 33

Situation, opportunities and problems encountered by young girls in Thai society

Kritaya Archavanitkul
Napaporn Havanon

This chapter compiles relevant data and information about the situation, opportunities and problems facing girls under 15 years old in Thai society using the documentary research methodology. The study separates the profile of girls from a general profile of children in order to identify priority areas and sensitive issues that must be addressed more intensively through active policy-making, law enforcement and intervention development if the quality of life of young Thai women is to be improved - EDS.

Introduction

Studies on children in Thailand do not generally differentiate between girls and boys, although in reality, the situation, opportunities and problems facing girls and boys are very different. Thus, to understand these differences in depth, a study of girls must be separated from boys, or a comparative study between the profile of girls and that of boys should be made as presented in this chapter. The study presented here deals with two important issues: first, the extent to which social norms and values affect socialization, parents' expectations, and opportunities for girls in the family, and second, the observed situation and problems girls face in Thai society. Although these two issues are interrelated, limited data does not allow for a more detailed analysis of the problems. However, the compilation of all available data and information helps to highlight the links between the socio-economic structure and social norms on the one hand, and the situation, opportunities and problems girls face on the other. It is hoped that the results of this study will encourage more comprehensive investigations in this area thus pointing the way to formulate policies which solve the specific problems girls face.

This chapter is divided into six main sections. Following the introduction, the second section describes sources of data. The third section then presents overall figures and ratios of girls in urban and rural areas, and of the distribution of girls in school and in the workforce. The fourth section elaborates on the status and roles of girls in Thai society, and covers aspects of the rights of girls, such as choice of marital partner and inheritance rights. Information about the life opportunities of girls is examined including educational attainment, employment and

social opportunities. The fifth section deals with problems girls face in various areas, namely in the labor force, prostitution and sexual violence. The last section includes a conclusion and recommendations for further study.

Sources of Data

Data from three national surveys provide a broad profile of the situation of children, including the place of residence, participation in the labor force and educational attainment. Thailand has systematically collected data on children and youth since 1974 when the National Statistical Office (NSO) set up 'The Children and Youth Survey Project'. This national survey covers demographic data of children and youth, education and jobs; the time usage of children who were either attending school or had left school; and the sports/recreational activities of children and youth. Eight of these surveys on children and youth have been conducted; the most recently published survey was carried out in 1987.

Another national-level survey in which data on children is included is 'The Population and Housing Census', conducted by the NSO every ten years. This census compiles data on people of all ages, including children. The Labor Force Survey is another national survey, conducted every three times a year, which, although it does not aim to cover children, provides data on children aged 11-14 in the labor force. The target population of this survey is that section of the population aged 11 to 65 which are economically active as defined by NSO.

These three national surveys, however, cannot provide data about problems faced by certain groups of children, such as child laborers in factories, violence against children or child prostitutes. Information about children under these circumstances is obtainable from governmental and non-governmental organizations whose area of responsibility concerns children. These organizations have collected data or information about children suffering unjust treatment and violence.

Statistics, however, on the numbers of children who are ill-treated cannot be collected directly, because these cases are generally concealed by the offenders for fear of legal and moral penalties. Most information on children encountering these sorts of problems are case studies which provide details about the problems, for example, their magnitude, causes, and processes by which children are led or forced into these circumstances. But data about figures and distribution of children facing such problems are often only estimates which may be far from the reality.

More historical information about the situation of children is limited to data collected by social scientists working in various disciplines. These research studies allow an investigation into the situation of girls in the past and how Thai culture has determined the status and role of girls in Thai society.

It should be mentioned that there is a large amount of data on children which is not sex-segregated, such as data on children's income in the national Children and Youth Survey, and case studies of child laborers. This limits this study into the situation and problems facing girls. Some issues, therefore, can only be described in general terms for all children, without distinction between boys and girls.

Numbers and Distribution of Girls

Thailand is one of the countries in which children under 15 years old account for a high proportion of the population, although the fertility rate started to decline since 1960,

resulting in a gradual decrease in the proportion of children in the Thai population. The proportion of children of the total population during the past 20 to 30 years (1960-1970) was as high as 43% to 45% but this declined to 38% by 1980 and to 33% by 1990. It is estimated that the proportion of the population under 15 years of age will be reduced to 28% by the year 2000. But the number of children in 1990, 18 million, is still very high, considering that this section of the population usually go to school and are considered dependent on their parents and society. The sex ratio between boys and girls among the population under 15 years old is about 97-98 boys to 100 girls which is considered a stable and usual ratio in most societies.

Most girls and boys reside in non-municipal areas or what is generally considered as rural areas or villages. According to the Children and Youth Survey in 1987, 18.8 million people, or 35% of the total population, were children, and about 83% lived in villages. A higher proportion of children in urban areas attended school compared to rural areas. When the proportion of school children by place of residence is considered, there was no difference between the proportion of boys and girls in school among the age groups 3-5 and 6-11 years. But for the age group 12-14 years, only 85% of girls in urban areas attended school compared to 92% for boys. In the rural area, there was little difference between the proportion of girls (67%) and that of boys (69%) in school.

It is worth noting that a large number of children aged 12-14 not attending school is more likely to be associated with this age group's participation in the labor force. This is clearly seen in the 1987 Labor Force Survey, conducted in the same year as the Children and Youth Survey (1987). It may be argued that the two surveys cannot be directly compared as different age groups were reported. The age group of 11-14 years is reported in the Labor Force Survey while that of the Children and Youth Survey is of 12-14 year olds. However, both data sets give similar profiles of children of this age, whether they were participating in the labor force or not.

In general, both sets of data indicate that children in urban areas had a greater opportunity to be in school than those in rural areas where a higher proportion were in the labor force. Table 33.1 shows that among children aged 11-14 who lived in urban areas, the proportion of girls attending school was clearly lower than that of boys: 83% of girls compared to 90% of boys. But in rural areas, the proportion of girls and boys who were attending school was nearly equal: that is, 60% girls and 62% boys.

It is apparent that most of the children who had left school were participating in the labor force. During the week of the survey, most of those in the labor force were working; only 1-2% were unemployed and were looking for jobs. In urban areas, the proportion of children participating in the labor force (less than 10%) was much lower than that in the rural areas (approximately 25%). It is noticeable that in urban areas, the proportion of girls participating in the labor force was double that of boys, 9% for girls compared to 4% for boys.

Overall, the distribution of children in school and in the labor force reflects that girls were disadvantaged compared to boys as far as opportunities for education are concerned. There is also a tendency for girls to assist with the household economy more than boys. Are the status and roles of girls and boys determined differently by Thai culture? The next section describes society's expectation of the roles for girls and for boys, rights and opportunities of girls and boys as members of the family and society. In the latter part, the opportunities girls have for education and work is discussed in detail.

Table 33.1 Percentage distribution of population aged 11-14, by labor force Status, by place of residence and sex, 1987

Labor Force Status	Municipal Areas		Non-Municipal Areas	
	Girls	Boys	Girls	Boys
In Labor Force				
- Employed	8.6	4.4	23.4	24.4
- Unemployed	0.6	0.3	2.2	1.6
Not in Labor Force				
- Studies	83.2	90.1	59.6	62.1
- Household work	2.5	0.5	4.3	1.2
- Too Young, or incapable of work	3.4	3.4	8.7	8.7
- Others	1.7	1.3	1.8	2.0
Total: Percent	100.0	100.0	100.0	100.0
Number ('000)	(371.6)	(379.7)	(2047.0)	(2127.0)

Source: Report on Labor Force Survey Round 2, 1987 (Table 1).

Status and Role of Girls in Thai Society

In every society, the roles and duties of men and women are prescribed by their social status, such as that of son or daughter, of husband or wife. The social norms which shape roles according to sex not only have a significant impact on the socialization of girls and boys in the family and in society, but also on their rights and opportunities, such as opportunities for education and training, rights to inherit, and to pleasure. Comparing status, which reflects rights and opportunities, and roles, which reflect duties, of girls and boys in the family is a way to identify the difference in situation and opportunities of girls and boys in society as a whole. In the following discussion, the status and role of girls in Thai society will be presented in two parts: the role of girls as expected by their family, and the rights and opportunities girls receive from their family.

Family Expectations of the Role of Girls

Family expectation of the role of girls has changed along with changes in Thai society. An important cause of the change in roles of both girls and boys was the introduction of compulsory education throughout the country in 1921. After the Compulsory Education Bill was passed, every child had to spend at least 4 years in school, a length of time that is now extended to 6 years. Children's going to school from the age of 7 until 10 or 12 years old affected both family and children.

Before education was extended to the majority of people in the country, the family in Thai rural society was not only the centre of production and consumption of food and other basic necessities for members of the family, but also a social unit, responsible for transferring knowledge, life and work skills to younger members. Families were responsible for teaching

children what they should and should not do and how to behave when grown-up.

Data about the role of girls in the family in the past is rather limited. According to historical evidence, since the Sukhothai period (12th century A.D.) boys and girls received equal care and love from their parents, but they were given different work to do and underwent different socialization patterns. Boys were trained to work in the fields and prepared to be the main family breadwinners. Girls were trained to work in the fields as well, but were also trained in household chores, including taking care of younger siblings (Pairoh 1976).

The expectation of parents to receive economic assistance from daughters and sons clearly changed after compulsory education was introduced. One study showed that parents in rural areas thought that their children, both girls and boys, help parents with their chores, both in the household and on the farm, far less than in earlier times. They compared the situation to that of their own childhood when they had to help their parents planting and harvesting rice, raising buffalo, carrying water, finding food and cooking and with other economic production activities for the household. Children today spend more time in school; they study more and play more; they have less opportunities to help their parents (Knodel, Havanon, Pramualratana 1983).

The overall current expectation of parents for economic assistance from their children aged between 7-12 years is limited, because the children spend most of their time in school and the need for labor is not as demanding as before. Farm plots have become smaller and machines have increasingly been brought in to assist farmers. The growing opportunities for employment within and outside of agriculture are mostly for workers over 12 years old.

Although parents' expectations of economic assistance from their children during their school years has reduced drastically, expectation for economic support from adult children, especially those who are single, still exists. This support from unmarried children can be in the form of labor on the farm or earnings and is the same for both daughters and sons. Before marriage, they should try to help support their parents as much as possible. After marriage, the expectation is limited to only urgent needs, for example, in sickness or bankruptcy (Knodel, Chamratrithirong, Debavalya 1987). Children's support given to their parents is considered *tob tan bunkhun*, (repayment of a debt of gratitude), an obligatory return for the care and protection the parents gave when raising their children. The care and support of parents is seen by some people as gaining merit, according to Buddhist principles (Podhisita 1985). Parents expect their adult children to look after them in their old age, when they can no longer work.

According to Thai culture, especially in the Northern and Northeastern regions of the country, a newly-married couple will stay with the woman's parents for a period of time (usually 1-2 years), before they separate to settle down by themselves. But the youngest daughter is expected not to leave her parents, but to take care of them in their old age (Foster 1965; Keyes 1989). In this respect, daughters are the ones parents expect to depend on when they are old, while sons are expected to leave after marriage. Thus sons' support will only be in the form of visits or occasionally sending money to parents especially at certain significant times of the year such as the Thai New Year. The fact that the son-in-law moves into the family for a short period of time after marriage makes parents realize that a daughter brings in more labor once she is married. This is contrary to the situation in Chinese, Korean or Indian societies. Moreover, because the youngest daughter is expected to take care of her parents in old age, most Thai parents would like to have at least one daughter.

In Thai society, parents not only expect to gain economic and welfare support from their children, but also to gain merit when a son ordains as a Buddhist monk for a period of time (usually for three months). The ordination ceremony of a son before his marriage is regarded as a very important action of merit-making for parents which only sons can fulfil. It is also considered as *tob tan bunkhun* to their parents. This is why Thai parents want to have at least one son.

In conclusion, although parents expect different roles and duties from their daughters and sons, they value girls as much as boys. Studies on parents' satisfaction of the sex of their children showed an equally positive attitude towards having either a son or a daughter. Most parents say that, if they have two children, they want to have one boy and one girl (Knodel et al. 1982; Riley 1972).

Rights of Girls Within the Family

In almost every society, there is a general principle about allocating rights and duties for boys and girls as members of society. Such a principle, either enshrined in cultural values or in law, has an important impact on the opportunities for self-development which girls and boys can receive from their family and society. It includes opportunities for education, career training, to choose one's own marriage partner, to choose the place of residence, to make friends with people of the same sex or of the opposite sex, and to relax and have pleasure.

When slavery was legal, during the Ayutthaya period to early Rattanakosin period (13th-19th century A.D.), parents had high legal rights over their children. It was legal for them to sell their children to other people, if the family was poor and had urgent need of money. Daughters could be sold as slaves (bonded labor) as a guarantee against a loan and to pay interest on the loan (from the girls' labor when in slavery) if the parents so wanted. For daughters, this was a way of *tob tan bunkhun* or showing gratitude to their parents (Pairoh 1976). Today, although such laws were repealed a long time ago, similar practices still exist. Some parents sell their daughters to brothels, and daughters feel that they are fulfilling their obligations or *tob tan bunkhun* as understood in Thai society (Naowarat 1987; Narumon 1988).

Concerning the choice of marital partner, it has long been the practice in Thailand to allow daughters to choose their own spouses. Even during the Ayutthaya period (13th-17th century A.D.) when it was legal for parents to sell their daughters as slaves, section 130 of the marital law allowed daughters the choice of their marital partners. If parents agreed to give their daughter's hand in marriage to someone without consulting her first, she had the right to refuse the marriage (Pairoh 1976). Nowadays, daughters can still choose their marital partner without being forced by their parents (Chamratrithirong 1984). There is a Thai proverb 'Building a house the style the inhabitants want' which means one should have the choice of marital partner.

Another important right is the right to inherit. In an agricultural society such as in rural Thailand, land is a very important asset as it is the crucial means of production. According to Thai tradition, parents give an equal amount of land to all their children. They divide the land into plots of the same size and give one to all the children, reserving a small plot to sustain themselves in their old age. This piece of land and the house will be inherited by the child who takes care of them until their death (usually a daughter). In this regard, daughters and sons have the same inheritance rights (Keyes 1989; Knodel, Havanon, Pramualratana 1983; Podhisita 1985).

Life Opportunities for Girls

The life opportunities for girls in Thai society to be discussed below center on those to study, to work, to socialize and relax. These opportunities have significant impacts on developing girls' potential in working and living.

Education. Compulsory education through formal schooling has not been set up for

very long in Thailand. The national bill on compulsory education was issued in 1921. Before education took the form of schools, parents sent their children to take lessons from Buddhist monks in temples. As there are strict rules prohibiting Buddhist monks from talking to or mixing with women and girls, opportunities to study in the temples were mainly for boys. Girls rarely had a chance to receive this kind of education. In some cases, rich parents who were determined to give their daughters an education, would try to arrange teachers to give lessons at home. According to the 1980 Census, among the population over 55 years old, 69% of men were literate compared to only 36% of women. This difference shows that among young people 40-50 years ago, women had much less educational opportunities than men.

When the Thai government started its policy on compulsory education in 1921, it was for four years of primary education. In 1963, this was extended to seven years. In 1978, primary schools providing the 7 years of compulsory education were available in 57% of tambons (sub-districts) throughout the country. Compulsory primary education was altered in 1978 to six years; this new system is now used nationwide.

The compulsory educational policy and efforts to achieve nationwide coverage resulted in an increase in literacy among the population. In 1980, among the population aged 15-29, the rate of literacy was as high as 96-97%. In the older age group, the rate of literacy among men was much higher than women. The difference in rates of literacy between women and men was less among younger groups. For example, in the group of 15-24 years, there was hardly any difference between women and men in the literacy rates. The data implies that when compulsory education was not available throughout the country, boys had more educational opportunities than girls. After compulsory education was widely available, the difference in the rates of literacy between women and men diminished.

Regarding the percentage of people who had at least four years schooling, in general, the proportion of those who had completed at least four years education showed a similar trend to that of those who were literate. Among the older age group (over 55 years), 28% had spent four years in school with a clear indication that the proportion of women with four years schooling (16%) was much lower than that of men (42%). The difference between the opportunities of women and men to get an education was reduced in the younger age groups. Among the group aged under 30, the proportion of those who had had at least four years schooling increased to over 90%. Moreover, it is estimated that the proportion of the population with six years schooling is as high as 90% (Wongsith and Knodel 1989).

As primary education is now compulsory and available nationwide, a comparison between the educational opportunities for girls to further their education at lower and upper secondary levels with those of boys will be more enlightening on differences. Data from the 1980 census indicated a very low percentage of the population with lower secondary education (usually from 12-15 years), particularly among those aged over 40 of whom less than 10% had lower secondary education. This proportion increased gradually among the younger age groups of the population: 24% in the age group 20-24 years, and 27% in the age group 15-19 years. Among these two age groups, the proportion of women with lower secondary education was lower than that of men: 20% of women compared with 27% of men in the age group 20-24 years, and 25% of women and 29% of men in the age group 15-19 years.

In general, the proportion of people with at least lower secondary school education in Thailand is rather low. This is due partly to the lack of lower secondary schools and to the fact that they are not available throughout the country. In contrast, the government has successfully expanded primary schools throughout the nation, down to the village level. According to a village survey of the Third Contraception Survey Project in 1984, 70% of all villages had a primary school (Kamnuansilpa and Chamratrithirong 1985). In the villages where there were no schools, schools in the next village could be reached easily (Knodel, Chamratrithirong, Debavalya 1987). But there were much fewer secondary schools than

primary ones; in 1986, there were 34,068 primary schools throughout the country while there were only 2,362 lower secondary and 1,488 high schools (National Education Board 1988).

School distance from children's homes and the fee for attending secondary school (there is no fee for governmental primary schools) means a much higher cost for secondary education than for primary. These factors have limited the opportunities for parents to send their children to secondary schools. Findings from a research study on the opportunities of secondary education for children in villages in the Central and Northern areas confirm that one of the main reasons for children leaving school after primary education was their parents' lack of money (Knodel, Havanon, Sittitrai 1989).

Given that children's education involves distributing limited family resources for the development of family members, what considerations do Thai parents give to providing resources to their sons and daughters? Evidence at the macro-level indicates that women have fewer opportunities than men to continue their study after completion of compulsory primary education. Is this disadvantage against women to pursue their education the result of their parents' opinions on the future economic role of their children? In a related research study, wives and husbands were questioned on their opinions on a sufficient level of education for girls and boys to earn a reasonable living nowadays. Both wives and husbands from small families (1-2 children) and large families (more than 4 children) were inclined to suggest that boys should have a higher education than girls. For example, 25% of fathers with 1-2 children thought that lower secondary education is crucial for boys, but only 18% thought so for girls. Fathers with more children had a similar opinion (Knodel, Havanon and Sittitrai 1989).

Moreover, in parents' opinions, the average level of sufficient education for boys is higher than for girls. The results from this study show that Thai rural parents thought that, in order to become economically self-reliant in the future, boys need a higher education than girls. This may mean that parents thought that men rather than women had to support the family. Under this assumption, parents who have limited resources would send their sons to secondary school rather than their daughters. Data about educational opportunities for girls and boys, as given above, show the same indications.

Labor force. The number of child laborers or workers, either in the home or in the labor force, is connected to their educational opportunities. Since more girls than boys do not continue their education to a higher level, they are more likely to enter the labor market before boys of the same age. This expectation is supported by data on children in the labor force. In 1983, among children aged 12-14 in municipal areas, the percentage of girls in the labor force was double that of boys (10% compared to 5%), while in non-municipal areas the percentage of girls in the labor force was somewhat higher than that of boys (31% compared to 27%). But among children aged 6-11, the proportion of girls and boys participating in the workforce was very low for both sexes, less than 1% for both in urban and rural areas. This is mainly because children in this age group must attend primary school.

The work status of child laborers also greatly differed between municipal and non-municipal areas. In particular, among child workers aged 12-14, a higher proportion of private employees were living in municipal areas than in rural places. This is due mainly to the fact that almost all factories are in urban areas. By contrast, almost all child laborers (more than 90%) in rural areas were family workers, working without payment; they were most likely to be helping their parents in farmwork. It is common for girls and boys to work on family farms in Thai rural society. But considering that girls had to work in the house as well as on the farms, girls are likely to undertake more work and family responsibility than boys.

Comparing the work status of girls and boys, the proportion of girl employees was higher than that of boys in all age groups. This difference was most evident among child laborers aged 12-14. As can be seen from figures of child workers in the urban areas, 59%

of girl workers were private employees, 39% were family workers, 2% were self-employed whereas the figures for boys were 38%, 8% and 54% respectively. If the occupation of child workers in urban places recorded on the 1983 Children and Youth Survey is considered, more than half (66% of girls and 90% of boys) of those in the 6-11 age group worked in small-scale selling or merchandising, such as selling newspaper; flowers and small goods. Nineteen percent were unskilled employees, and 10% were employed in the service sector (as domestic workers or restaurant workers). It is usual that a higher proportion of girls work in the services sector while a greater proportion of boys are employed in small-scale trading or merchandising.

According to a Declaration of the Ministry of Interior in 1972 on the protection of child laborers, the government prohibits and punishes the employment of children under 12 years old. It allows for the employment of children between 12-15 years but under strict rules and/or with a special license given by the Labor Department. Unfortunately however, child labor is one of the most prominent children's problems in Thailand. United Nations' statistics show that Thailand is one of the countries where there is a very high proportion of child labor in the economic system. The percentage of child workers in the labor force in Thailand is the highest in Asia and the third highest in the world after Mozambique and Tanzania (Newsletter of the Coordinating Committee for Primary Health Care NGOs 1989:6). In 1978, the Anti-Slavery Society for the Protection of Human Rights considered that the exploitation of child labor in Thailand was so serious that it presented a report on it to the United Nations. The report of the National Youth Bureau, presented to the Thai government in 1989, mentioned that a large number of child laborers worked in places and under conditions not suitable for their age and their development (National Youth Bureau 1989:108-109). These children are often physically and mentally tortured, and exploited by their employers in terms of their payment, their living conditions and welfare.

Opportunities to socialize, use free time and make friends. Participating in any activity outside the home is considered an opportunity to participate in a society wider than the family. Societies set norms on how children should behave in society. Such norms affect girls and boys and their opportunities to socialize, use free time and make friends. These norms for girls are strongly connected to the social values of 'being good wives' and 'being good mothers' in the future.

Since the Sukhothai period (during 12th century A.D.), Thai girls have not had the same social opportunities as boys, because of the Thai norms concerning the quality of women who will make good wives and mothers. Girls are trained to *rak nuan snguan tua*, that is they are not allowed to have a close friendship with a man. There is a strong expectation that Thai women should be virgins before marriage. Being friendly, touching, or having a special relationship with any man before marriage will be a cause for gossip, being looked down upon or even condemnation by neighbors and relatives. Therefore, women are often socialized to stay at home, to do household chores, and to participate in society much less than boys. While in general women are not prohibited from working outside the home, or participating in social events, they are trained to be timid and self-conscious in society. Girls have less freedom to express themselves than boys.

The qualification or evidence of social values concerning women in Thai society can be found in much classical literature, such as Supasit Kamglon and Gritsana Son Nong (poetry which teaches girls and women how to behave at various events and stages in their lives). It emphasizes that women should be humble, well-mannered, and serve their husbands and parents. Even a seminar on the desired qualities of women, organized by the National Council of Social Welfare of Thailand in 1980, concluded that women's qualities should include being humble and knowing the social strata, being reserved and keeping women's pride, taking good care of the household and children, and making the family happy (The Commission on

Promotion of the Qualification of Thai women and the Commission of Women's Welfare Promotion 1980).

A point worth noting here is that girls are strictly trained on their behavior in society, while boys have a lot more freedom. Boys' behavior and manners are not as strictly controlled as girls. When it comes to contact with the opposite sex, men have a great deal of freedom. They are allowed to have intimate relationships with women, to have pre-marital sex, and to have extra-marital sex (e.g., to go to a prostitute, to have a minor wife or mistress) without society condemning them. This is not the case for women, if they do the same things. There is certainly a double standard in Thai society in judging the sexual behavior of women and men (see also Saiprasert and Ford, this volume).

Many studies have found that men and women have different attitudes towards sex and sexual behavior. The result of a study of 361 teenagers between 15-24 years old in villages and provincial centres shows that most teenage men did not think it was wrong to have pre-marital sex. The percentage of teenage men who did not think pre-marital sex was wrong was higher in the provincial urban areas than in the villages - 30% compared to 18%. By contrast, most teenage women (72% in urban areas and 80% in rural areas) thought that pre-marital sex was wrong. Concerning their own sexual practices, many teenaged men had already had sex - 70% in urban areas, 68% in rural areas, but very few teenaged women had a sexual experience - 13% in urban areas and 5% in rural areas (Prasartkul et al. 1987: Tables 5 and 6).

The enforcement of the double standard results in different socialization for girls than for boys. But no study has been done pointing out the results of this difference, for example, if it marks a different effect on self-development, social ability and stresses in one's life. Nevertheless, the stricter norms on girls prevent women from going outside of the home, from finding new experiences and pleasures. Girls are trained to stay at home, help their mothers work around the house, cook, raise younger siblings, and take care of the elderly. Boys are often allowed to go outside, to have fun, to make friends, and to spend a lot of time in out-of-the-house activities.

Exploitation of Girls in Thailand

The exploitation of girls does not arise as a result of their behavior, but happens when they are ill-treated and harmed, physically and mentally. The prominent problems faced by girls in Thailand are discussed in this section. They are divided into three areas: work, prostitution and sexual abuse, especially rape.

Girl Workers

A large number of Thai children work on their families' farms or in homes, factories, shops and as domestic workers. Working within their own family has a different effect on a child's working condition than being in outside employment. Children working within the family are usually given harmless work which, most of the time, they are taught and trained how to do. Working in outside employment, however, children often have to work full-time with responsibilities and tasks which are too much for their young age. Such work gives children a lot of physical as well as mental stress and disturbs their normal development. This is all against the law, proving that child labor receives the least protection from law enforcement (Kumprapan 1988:272). Even the Women and Child Labor Division of the Labor

Department, Ministry of Interior, whose mandate is to protect child workers, has said that 'children face these problems all by themselves. This proves the failure of measures to protect child laborers' (Thanapiboon 1987:15).

Girls and boys who enter the labor market too young are usually taken advantage of by their employers (National Youth Bureau 1986; Tinakorn 1981). Both girls and boys receive less than the minimum wage. They have to do heavy work in an unhealthy environment for more than eight hours a day, with very little rest and few days off. All these conditions are harmful to the physical and mental health of the children. But there are differences in the problems girl laborers face compared to boys.

Wages. One of the main problems for women in the labor force in general is that they are paid less than men for the same type of work. Girls' wages follow a similar pattern; girl employees receive a lower wage than boys. According to data from the Children and Youth Survey 1987, among children and youth aged 13-24, girls' monthly income was lower than boys'. Children and youth laborers in urban areas had a higher income than their peers in rural areas. Girl workers in rural areas received the lowest income of all; almost one third of this group earned only 500 baht or less per month. Although some micro-studies which researched child labor (research on child labor in factories [Tinakorn 1981] and in the fishing industry [Richter and Ard-am 1989]) did not give the figures of wages of girls and boys, their findings confirmed that boys were earning more than girls employed in a similar kind of work for a similar length of time each day.

Preference for girl laborers. Labor statistics for 1983 show that there were more girls than boys especially among children age 12-14 participating in the labor force, with the average age of girls being less than that of boys. This pattern in a national survey is consistent with findings from a survey of 479 manufacturers in the Bangkok Metropolitan Area between 1981-1983, conducted by the Women and Child Labor Division of the Labor Department, Ministry of Interior. This survey found that 70% of the 2,166 child employees, aged between 11-14, in these business premises were girls, and only 30% boys. It is worth noting that most child laborers in Bangkok come from the Northeast of Thailand, the poorest region of the country.

In cases of illegal child labor, girl laborers are much more common. This is evident from the figures of illegally employed child laborers who were rescued by officers from the Public Welfare Department, Ministry of Interior. Of the 640 children the team rescued during 1978-1982, 585 were girls and 55 were boys, or 91% girls and 9% boys (Thanapiboon 1987:30).

There is a high demand for child labor because children are cheaper and more obedient than adults. The demand employers place at employment agencies is higher for girls than for boys, thereby raising the agency's commission for replacing girls to a higher level than that for boys. The high commission fee the employers have to pay the employment agency for replacing girls may be one of the reasons they pay girls less. For example, if an employment agency guarantees that a girl worker will stay in the employment for a minimum of two months, the commission fee would be 400-800 baht, while 100 baht would be the comparable charge for boys. (Children's Rights Protection Centre 1984:26). Chutikul and her team (1987:17) gave the following explanations for this:

1) Girls are more obedient;
2) Girls will not easily leave their homes unless the family knows the middleman, therefore the middleman is paid more, thus increasing overall costs;
3) Girls do not escape easily and, therefore, will stay to work longer.

Girl laborers are often hired in the service sector, such as working in restaurants as

waitresses or giving sexual services. In factory work, girls are often hired in certain industries, e.g., textile industry, candy factories, food processing industry, and other small family-business type workshops with only a few employees. These workshops are often managed under family authority in which employees are not allow to give their own opinions (Petprasert 2529:13). These type of premises prefer women and girl laborers because they are more obedient.

Exploitation by employers. According to the national labor law, child laborers are protected only if they work in the manufacturing industry. The law is the same as for adults. Children in these factories have no right to complain or file a lawsuit to bring a case to the labor court against their employers, because they are under age and thus not covered by this law. The relationship between employers and child employees is unequal and allows the employers to exploit child laborers as much as they want (Kumprapan 1988: 273-274).

There is a negative effect on the physical and mental well-being of children in exploitative situations such as these. Incidents of children who are badly affected by these situations are occasionally reported in the newspapers or in case studies. During 1978-1983, 26 incidences were reported in the newspapers of illegally employed child laborers who had been maltreated. They involved 430 children, 11 of whom were permanently handicapped, and 3 of whom died (Children's Rights Protection Centre 1984:7). In a study of nine cases conducted by the National Youth Bureau in seven different kinds of production factories (1986:267-287), only one girl and one boy were found to be physically, mentally and emotionally healthy. Four children - one boy and three girls - had mental problems. One girl had one arm missing as a result of a work accident. One girl was in bad health and malnourished. Another girl had been beaten, raped and became pregnant. It is apparent that the working conditions are more likely to have negative impact on girls' mental and emotional well-being than boys'.

Child laborers who are not protected under the labor law include domestic workers, certain kinds of agricultural workers and street vendors. It should be stressed that it is girls who are mostly employed in these unprotected conditions, such as being domestic workers whose working conditions and welfare depend solely on the employers. Legal help cannot reach these children. The Children's Rights Protection Centre reported (1984:12-13) that girls working as house maids usually have worse working and living conditions than child workers in factories. They live closely with employers. Every member of the family is considered an employer whom they must serve. Working hours are not limited.

Girl Prostitution

In Thailand, child prostitution involves both boys and girls, but it affects a much greater number of girls. Many girls from poor families in rural areas are deceived, bought or procured into prostitution and suffer various forms of torture. At present, the precise number of children in prostitution is not known. From a survey of 300 prostitutes, 5% were under 15 years old (Muangman and Panta 1982). Of 13,486 prostitutes who were rehabilitated by the Public Welfare Department during 1974-1983, 5.1% were under 15 years of age (Panbunkerd 1984). Both these sources did not identify the age of the girls when they first went into prostitution. If 5% is used as an indicator to calculate the number of child prostitutes out of the total of prostitutes in Thailand estimated by the Police Department to exceed 500,000 (Chutikul, 1987:23), there are approximately 25,000 prostitutes under 15 years old in Thailand.

At present, increased violence in child prostitution in Thailand has exacerbated the problem. An assessment of the Foundation for Women's campaign against child prostitution, using a specially designed children's book called 'Kamla' in the Northern region in 1988 and one called 'Kamkaew' in the Northeast in 1989, revealed that the impoverishment of rural

families, the change in villagers' attitudes towards prostitution, and the new consumer culture have all intensified the magnitude of child prostitution. The problem is widespread in the North of Thailand, especially in the provinces of Payao, Chiangrai and Chiangmai. But there are indications that more girls from the Northeast will be procured into prostitution in future. The Children's Rights Protection Centre found one case of a child of 11 years old in prostitution. Procuring has spread to children of ethnic minority groups in Thailand such as hilltribe groups in the North, refugee children from refugee camps in Thailand and other foreign children whose families live near the Thai border (Burmese, Laotian, Taiyai). These children were brought to work in prostitution in Thailand and neighboring countries (Children's Rights Protection Centre, n.d.; ThaiRath 1988).

In areas where many girls enter prostitution, most of the girls have completed the compulsory six years of primary education. Some were reserved for recruitment into prostitution while still in school and before they had completed the sixth grade; their parents had already been given money for them. Teachers who are trying to solve the problem in their areas said that it is intensified by families' poverty, the urge to follow other people's wealth, and the change of villagers' attitudes towards becoming a prostitute, considering it a way to earn quick and easy money. In some villages, parents celebrate when a baby girl is born as she is a hope for improving her family's economic status in the future (Foundation for Women 1988, 1989).

Analyzing the factors which bring girls into prostitution, only 10% of girls wanted to enter prostitution, while 90% entered because of the poverty of their family, the desire to repay the debt of gratitude to their parents or because they had been deceived (National Youth Bureau 1988:304). There are children who realize that their parents are selling them into prostitution which they themselves do not want, but, believing in repayment of their debt to their parents, they give in to the economic pressure of the family (Naowarat 1988). The story of one girl, 'Noi,' illustrates the life story of many rural girls. Noi was sold to brothels twice by her father for 7,000 baht each time. The Children's Rights Protection Centre rescued her from the second brothel. Noi was worried that her father might get into trouble, because she had not worked long enough to pay back all the 7,000 baht debt. According to histories of girls rescued by the Children's Rights Protection Centre, this kind of pressure is the main reason why girls stay in prostitution.

One case study on child prostitution revealed that 13 of 19 girls had been deceived and forced into prostitution. The procurers were often acquaintances of the children. The tactics used to procure children are becoming more and more sophisticated. In Chiangrai, some procurers opened a dress-making school to cover up their real business. After a month of lessons, the procurer brought 50-60 girl students of the school to Bangkok with the excuse of finding them jobs. Fortunately, the police rescued the girls before they were sent to brothels. (Foundation for Women 1989:8). The police squad team responsible for the suppression of forced prostitution estimated that there are about 5,000 such criminal cases annually (Soathipan 1984).

The torture and exploitation of girls in the sexual service sector is similar to that of child laborers, but with a higher degree of violence. The report on a national seminar on the prevention and protection of working and abandoned children in December 1987 (National Youth Bureau 1988: 304-305) revealed that child prostitutes worked hard and long hours with little sleep and for very low pay. They received only 40% of what they actually made, much lower than other child workers, because a large proportion of their earnings were taken away by the brothel owners and others. The brothel owners use violence to control the children strictly. They beat them up when they refuse to work, sometimes so hard that some children have become permanently handicapped or have been killed. To keep the children working, brothel owners often drug them with either stimulant or addictive drugs. They sometimes lock

the children up to prevent them from escaping. Five girls died when a fire broke out in a brothel in Phuket province in the South on January 30, 1984, because they were chained and locked up in the brothel and could not escape. An observational visit by Muecke (this volume) has also noted the currently poor conditions under which girls are subjected in brothels which critically affects their physical and psychological development and places them at greater risk of contracting diseases (malnutrition, tuberculosis) that are not necessarily associated with prostitution.

Sexual Abuse of Girls

Sexual assault and rape often have the worst effect on girls in every society, because it leaves a mark of violence and violation on them for the rest of their lives. For example, one rape survivor wrote in a letter: ... *it happened over fifty years ago, but I never got over it, and it has made my life hell. I have always felt unclean and abused...* (Grunseit 1987:16). There has been no study in Thailand on survivors of sexual abuse to illustrate the effects of sexual abuse on children. But it can be especially painful for girls in society such as in Thailand where virginity is valued very highly.

Statistics collected by the Children's Rights Protection Centre from newspapers show that at least one or two girls under 16 years are raped, or raped and murdered, or raped and beaten, or assaulted every week. The youngest girl assaulted was one year old, while the oldest case was 74 years old. In 1987, cases of 15 children raped and killed and 65 children raped by people close to them were reported (ThaiRath 1988). It is difficult to find out and estimate the number of cases of sexually-abused girls not only because the crime is often committed by people close to the children, such as their father, brother, grandfather, uncle, teacher, and male neighbor, but also because the sexual abuse of girls is usually committed in secret when the sexual offenders were alone with the children. It is difficult, therefore, to find witnesses.

The data from a home for rape survivors run by the Friends of Women Group indicate that 80% of the women who contacted the group for support had been attacked by people close to them. Fifteen percent of the rape survivors became pregnant from the incident, 10% contracted venereal disease from the rapists, and half of them were badly bruised (Friends of Women Group 1990). Many children who have been sexually abused keep quiet about it, because they fear nobody will believe them, or that they will be blamed, and they feel ashamed of the incident. Some children are forced and threatened to keep quiet by the offenders who may be someone in the family or from the school who wants to protect their reputation.

It is a common belief that people who sexually abuse others are people with personality problems or that they are all poor people and strangers. But an exhibition against rape, produced by Friends of Women Group, Children's Rights Protection Centre, Hotline Centre and Rape Crisis Centre, stated that sexual offenders are 'normal' people with social status who are often close to the assaulted (Friends of Women 1988: 62-63). This statement agrees with the opinion of professional people, such as doctors, nurses, social workers, teachers, police and lawyers, whose work brings them into contact with rapists. They believe that sexual offenders are normal physically and mentally, and they can take care of their sexual drive perfectly well without raping anyone (Kongcharoen 1987). This means that rape is actually violence against women.

The law on sexual assault sets a very heavy punishment for the assaulter, but there is a loophole in the law which gives the opportunity for involved parties to seek agreement among themselves on the matter. Many cases, often encouraged by the police, are resolved in this way, especially when the offenders have some social status (Friends of Women 1986).

In cases where the assaulter is a father, a child cannot take legal action against a parent; they depend on the 'legal inspector' or attorney to take action for them. On many occasions, these agents, upholding traditional values concerning parents and children, do not want to start a court case of children against their fathers (Kumprapan 1988:266). Kumprapan also mentioned 70-80 court cases where teachers were found guilty of committing a crime against their young students but the Ministry of Education did not punish them on the grounds of contradicting the moral principles they should hold towards their subordinates (SiamRath 1987).

Some people believe that part of the cause of sexual assault is because the assaulters are stimulated by pornography, which is readily available in Thailand. The authors believe, however, that the phenomenon is due to the fact that social values, law and society accept male authority over women. There is a definite double standard concerning sexual practice. Men can freely buy sexual services without any qualm or legal punishment. It is not illegal for a husband to rape a wife. If a husband commits adultery, a wife cannot use it as grounds for divorce although a husband can use a wife's adultery as grounds. It is generally accepted for men to have more than one wife at the same time and even to boast about it.

In short, the exploitation of girls in Thai society does not occur in a vacuum. It is interrelated with the social structure, values and norms in Thai society. Principle institutions such as the family, school, mass media, religion, peer groups and governmental departments, including the government itself, have a direct influence on promoting or curbing the exploitation of girls. For example, the policy to promote tourism influences authorities' attitudes on being flexible or ignoring the sexual service business which has mushroomed in the last decade along with tourism. The increase in the sex business in Thailand naturally affects the increase in the number of prostitutes, both children and adult.

Concluding Remarks

It is often remarked that the status of Thai women is relatively high compared to that of women in other societies. At the aggregate level, existing data reveals no significant difference in rates of literacy, participation in the labor force and even migration between Thai men and women. Moreover, various aspects of Thai culture demonstrate a high degree of autonomy for women. Thai women have the right to choose their own spouse, to maintain relationships with their own relatives after marriage, and to choose their place of marital residence. In addition, Thai wives generally control the family budget and make important decisions in the family.

But this general picture of the relatively high status of Thai women has made various aspects of sex discrimination and exploitation negligible issues in Thai society. Despite this, problems of the exploitation of women workers, girl prostitutes, and abuse of girls, occurring as part of the process of Thailand's socio-economic change, have become serious issues in Thai society today. For example, it is estimated that about 30,000 million baht, or US $ 1,200 million, is made each year in the sex business in Thailand (Chiengkoon 1989).

Data on life opportunities of girls in Thai society show that girls have fewer opportunities than boys to attain education beyond compulsory schooling. This particular disadvantage may arise partly from the attitude of parents concerning the role of their children when grown-up; men are expected to be the main breadwinners for the family while women are expected to take a secondary role in income earning with household chores as their first priority. But in fact, women work side by side with men. With this value orientation, when parents cannot send all the children to school, they often decide to send their sons to further study.

Available data about girls' education cannot give details about the opportunity of girls

from different social and economic classes in pursuing their education after compulsory level. An interesting question is 'Is there a difference between the opportunity of girls from disadvantaged and poor families and of the girls from more advantaged families? If there is, how and why?'

The opportunity for girls to pursue their education is a key factor related to other problems they may face. After they leave school, they are likely to enter the labor force. If they leave school early, they enter the labor market at an early age. When the work they are doing is not on the family's farm or in the family's business, they are likely to be engaged in unskilled jobs which may lead to exploitation of their wages or to being over-burdened with work. This chapter presents data showing that there are more girls than boys of the same age participating in economic work which demonstrates that girls are more inclined to enter the labor force earlier than boys.

The question posed is whether leaving school early pushes girls to start working early or whether the desire to put girls to work takes them out of school? If the former is true, the government's efforts to increase the secondary schools and to reduce the cost of attending school should help increase the capacity of the parents to send more children to school, thus increasing the opportunity for girls to receive higher education. But if the latter is true, government effort will mean very little for the educational opportunity of girls. If the labor market prefers girl workers and the parents want income from their daughters, girls will continue to leave school to work for their family.

The problems girls are facing are more condensed among girls from the disadvantaged socio-economic group; such as girls from poor families in both rural and urban areas. The main problems encountered by girls are sexual exploitation, such as child prostitution, and rape. The exploitation of wages and the ill-treatment of employees and other labor related problems are common to both girls and boys. But on top of the general labor exploitation, girls face sexual exploitation from their employers as well.

The sexual exploitation of girls is a complex problem. Poverty is one of the main causes which pushes girls into the sex business. However, poverty alone cannot be used to explain this circumstance. Cultural factors, namely social values and norms, that determine roles for girls as daughters and members of society, are important factors as well which seem to be related to the increasing magnitude exploitation of girls in Thai society. Many studies have shown that *kaumkatanyoo,* the intention to pay a debt of gratitude to parents, together with parents' expectations for girls to assist with the household economy, have pushed many girls into sex-related businesses, such as by being masseuses and prostitutes. But there has not yet been a study which attempts to link social values and social norms which cause girls to be sexually exploited. For example, women's status related to sexual relationships, the dignity or reputation of women related to sexual behavior, and the double standards of sexual behavior between women and men.

A study which will help to explain the situation of girls more clearly can be divided into two levels. First is a macro approach that employs secondary data from national surveys carried out by government organizations, such as Children and Youth Survey, Labor Force Survey, Population and Housing Census, and other national surveys. The national surveys generally contain rich data and information. They can be used to elaborate a profile of the situation and opportunities of the young sectors of the population. The main disadvantage of this published data is that it is often not presented by gender division. This leads to a serious limitation in investigating a profile of girls. To eliminate this limitation, government organizations which are responsible for conducting national surveys should use sex-aggregated presentations as much as possible in their publications.

Another approach that should be given much consideration is a micro level study. This approach should investigate the opportunities and problems facing girls in communities,

small villages, slum areas, and communities of mobile construction laborers. The study should aim to give a rounded and in-depth picture of the status and roles of girls in the family, for example, expectations of the family and society upon girls which in turn affect the girls' life opportunities and problems encountered. Data collection for this kind of study should use both qualitative and quantitative methodologies. Quantitative data, particularly obtained from a research survey, is for a broad analysis on population structure and socio-economic structure, whereas qualitative data provides an in-depth picture of the studied issue. Both sorts of data will give not only a more precise picture of girls, but also a clearer linkage between cultural factors, socio-economic structures and the problems encountered by them.

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Chapter 34

Gender construction and changing nature of the sexual lifestyle of Thai youth

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This paper discusses qualitative findings derived from a study of the sexual awareness and lifestyles of young, single female factory workers in Thailand. Although the principal concern of the study is with young women, the study has also collected data from young men in order to identify the gender structuring of sexuality - EDS.

Introduction

It is axiomatic that in order to develop HIV prevention strategies which may be able to foster 'safer' patterns of sexual behavior, it is necessary to understand the nature of, and trends taking place within, specific sexual cultures (Ford and Koetsawang 1991a). Sexual lifestyles, particularly of young people, are dynamic, developing in relation to a wide range of social, personal, cultural and health-related factors.

The significance of the sexual lifestyles and health of factory-employed young women has to be considered in terms of the scale of migration in Thailand's growing industrialization and urbanization, the deepening intensity of the threats to sexual health (especially regarding the transmission of HIV) and the especial vulnerability of this migrant group who come from socially-sheltered rural environments to the Bangkok Metropolitan Region (BMR) and its environs (Sussangkarn et al. 1988). Much of the inter-regional migration in Thailand is concentrated among young adults, and for instance, over 60% of the 1980-85 migration stream were women (National Statistical Office 1985; United Nations 1987). Labor force surveys also indicate the increasing level of women's employment in the industrial sector, with the majority of these women being under 30 years of age (Podhisita et al. 1988).

The process of urbanization is accompanied by sweeping social changes, some of which are having an impact upon sexual lifestyles. There have been indications of increasing levels of pre-marital, unwanted pregnancies, abortions and associated maternal morbidity and transmission of sexually transmitted diseases and HIV. The Thai government estimates that there are currently between 200,000 and 400,000 cases of HIV infection nationally (Komin 1989; Havanon et al 1992, 1993; Koetsawang 1980; Poschyachinda 1990; Ministry of Public Health 1992). Further, the Thai Ministry of Public Health has reported that up to December

1992, factory and construction workers included the highest number of AIDS/ARC cases of any occupational group (Epidemiology Division, Ministry of Public Health 1992).

Although these reported cases of workers with AIDS were primarily males who were probably primarily infected, and in turn transmitted HIV, via low income brothels, the increasing levels of non-commercial intercourse highlight the vulnerability of female workers. The vulnerability of young single female migrants is highlighted further given that they are four times as likely to engage in sexual intercourse than young single women who live with their families (Prasartkul et al. 1989) and although some sex education is provided in high schools in Thailand, most female factory workers leave school before the age of thirteen and thus are unlikely to receive such instruction (Soonthorndhada 1989).

The principal focus of this paper is upon the gender dimension of the sexuality of young single factory workers. Young factory workers are possibly more representative of the broad cross-section of Thai youth than the minority who completed high school or go on to higher education. As such, although these findings are derived from a specific occupational group they may well have more general relevance, although of course no claim is made for statistical representativeness.

Methodology and Initial Findings

These findings are derived from a series of 18 focus group discussions conducted among male and female factory workers between September 1992 and the end of January 1993. Participants were recruited from a range of light industrial (garment and textile, electrical and consumption products) factories which are large scale employers of women. To ensure the strict confidentiality of the discussions the participating factories cannot be named, suffice it to note that six were located in Bangkok and the remainder in surrounding urban centres including Nakorn Pathom, Samutprakarn, Cha Cheung Soa, Pathumthani and Nonthaburi.

Discussions were held among eleven groups of young women and seven groups of young men. The number of participants in each group generally ranged from six to eight, although there were two groups of nine (perhaps too many) and one of only four (too low). In order to establish a broad homogeneity within the groups, they were broadly structured by age (mid-teens, late-teens, early twenties) and residence (in factory dormitory or outside in private room/flat). The group discussions were transcribed completely in Thai, fully translated into English and entered into computer files to facilitate further analysis, generating a very substantial qualitative data set.

The discussion guideline was based upon a series of themes, commencing with the more 'neutral' subjects of reasons behind the migration, perceived differences between life in the rural and urban areas and broad patterns of leisure lifestyles and living arrangements, partly in order to develop a rapport between moderator and participants, but also to provide a context for the subsequent more specific discussion. This was followed by a general discussion of courtship, socio-sexual expectations for young men and women and their view of the overall sexual behaviors of young people in Thailand. From there the discussion shifted towards a more personal focus upon participants feelings about sexuality and their relationships with members of the opposite sex, and attitudes to specific sexual activities in interaction. Finally the discussion explored the participants awareness about sexual health-related issues (including, contraception, pregnancy, abortion, sexually transmitted diseases and HIV/AIDS), their feelings about the consequences of sexual behavior and the demand and suggested formats for, pertinent sexual health-related services.

The main objective of this paper's discussion of the focus group findings is to

elaborate upon the nature of the gender construction of sexuality of the young factory workers. This is introduced by reference to their perceived differences between the home, rural and factory, urban social environments with particular reference to their leisure activities and other aspects of their developing lifestyles. This is followed by discussions of the findings pertaining to; attitudes towards sexual relationships, courting and marriage, and sexual feelings and arousal; their views of the involvement in sexual activities of young Thai's in general and the socio-sexual expectations for young men and young women; the respondents' own attitudes and expectations towards sexual interaction with particular reference to pre-marital sexual intercourse as articulated in the group discussions; the young men and women's description of their sexual experience and the dilemmas they face in specific socio-sexual situations; and finally their awareness and knowledge concerning contraception, HIV/AIDS and sexually transmitted diseases (STDs) and attitudes to the adverse consequences of sexual activity. The pattern of gender variations pertaining to sexuality are summarized in Figure 34.1.

Perceived Differences Between Home, Rural, Factory, and Urban Social Environments

Crucial factors patterning sexual lifestyles are the range of constraints (sanctions, taboos, protection) and opportunities (contacts, exposures, freedoms) which revolve around sexual norms in any given social situation (Abramson 1983). The vast majority of the young factory workers came originally from rural areas, primarily the Northeast region, where they had been living with their parents and families. It is also important to note that this migration from home, rural to factory, urban, environment had taken place during the maturationally critical period of the mid-(and in some cases, late) teens. The focus group discussions commenced with questions concerning how they felt the move had influenced their lifestyles with especial reference to courtship and sexuality. The young women had a much stronger sense than the young men, that the move away from their families had had a great impact upon their life. This probably relates to the Thai family socialization of young women to be socially sheltered, and dutiful and obedient to their parents, in contrast to the much greater latitude of autonomy and willfulness accorded to their male siblings (Archavanitkul and Havanon, this volume; Muecke 1992).

The double standard of course means that there are two forms of sexual interaction available for young males (commercial and within courtship) but only one form (courtship) for young females (excluding sex workers). The young men felt that there was little difference between opportunities for commercial sex between the rural and urban areas; (of course all nicknames are fictitious for ethical reasons).

> Ood: *I don't think it is very different. Nowadays, there are also brothels in the countryside.* (male aged 23 years)

However, both the young men and women agreed that courtship development was different in their home, rural and factory, urban social environments. In reply to the moderator's question, "Can you then compare how young men and women get together in the rural areas and in Bangkok?" The young men replied:

> Ting: *Its different in Bangkok. It is easier to make contact in Bangkok, in the rural areas they don't trust you so easily.* (male aged 17 years)

Figure 34.1 Summary notes on sexuality by gender expression

Dimension	Young Men	Young Women
Social acceptability of pre-marital intercourse	Commonly first sexual experience was masturbation. Pre-marital intercourse accepted and expected for young men. No word in Thai language for a male virgin. Such young men are ridiculed by peers.	Masturbation uncommon, considered negatively. Pre-marital intercourse strictly unacceptable for 'respectable' women; considered to be highly damaging to the reputation of the young woman and her family.
Attitudes to sexual feelings	Positive, open. Strong psychological sense of sexual drive which demands 'release' and justifies coercion occasionally. Sex is for enjoyment. A subject discussed with humor and much slang.	Generally negative attitude to sexual feelings. Great reluctance to admit having such feelings. In the rare event (admission) of sex taking place, justified in terms of pleasing partner and sustaining relationship.
Actual sexual experience	Practically universal. Generally first (and most of subsequent) intercourse taking place with prostitutes. Belief that the level of non-commercial sex is increasing.	Very difficult to identify because of extreme reticence on the part of young women to admit sexual experience. Articulate definite stages and limits in sexual interaction - holding hands, hugging, kissing.
Attitudes to condom use and contraception	Condoms used in varying degrees of consistency with prostitutes but not with (non-commercial) girlfriends. Contraception viewed as the woman's responsibility.	Would like to know more about contraception. Generally could not consider seeking or requesting contraception because they would fear being stigmatized as sexually active.

Attitudes to negative consequences of sexual activity	The core of men's sexual freedom is that such activity has no impact upon their reputation. Mixed attitudes to the risk of HIV from prostitutes. Pregnancy is the women's problem.	The greatest perceived harm revolves around the women's reputations. Pregnancy feared because it shows evidence of 'sinful' behavior. HIV/STDs not perceived as salient issues.

Boy: *I think its easier to ("jeeb") court in Bangkok. In the provinces you can't hide - they are with their parents.* (male aged 20 years)

The young women tended to articulate the urban/rural difference in courtship opportunities in terms of both familiarity with potential partners in the rural areas and freedom from parental control in the urban areas. The women felt that in the rural areas they would be thoroughly familiar with their courting partner's background and family and a gradual process of steady courtship was likely to develop.

The migration from the rural to urban area seemed to have a much greater impact on the lifestyles of the young women than men. For the youngest age groups of women coming from socially sheltered, home situations the urban environment was initially imbued with a sense of risk and even danger, including fears of simply becoming lost or being cheated and misled by people they may meet.

Mai: *The people in my rural area are good, they are familiar to me. But here most people deceive, nobody is sincere.* (female aged 15 years)

However, many of the young women had felt that they were very much restricted by their parents and whilst missing them, welcomed the new freedoms of living away from home. The early period in the factory was described as being one of adaption to new friends and their ways.

Given that Thai daughters (more than sons) feel a strong sense of material obligation to their parents and siblings, many remitted money from their wages back to their families. The financial independence arising from their factory employment was felt to be a highly appealing feature of their migration. Initially the wages seemed relatively high to the young workers. However, the young women in particular generally articulated a process in which living in the urban area led to changes in their consumer needs and aspirations. This process is also related to that of maturation into mid- and late-teens, but was primarily described in terms of developing new tastes in clothes, entertainment and even food (away from rice towards desserts). Whilst in the rural areas they nearly always dressed simply; in the urban environment they became attracted to the 'modern' fashions, which some obtained through higher purchase catalogues. Thus they found that whilst they earned much more in the urban than rural areas, the cost of living was correspondingly much higher. One of the effects of these new consumer tastes was that they had less and less money available to remit back to their families.

Pervading much of the group discussion about the contrast between the rural and urban area, the main changes in lifestyles and perception of the behaviors of young Thais in

general was a very strong sense of the shift from traditional to modern. There was repeated reference made to things being "different today". These young people were acutely aware that they were living in a period of great social change. Both the young men and women felt that there was much that was good in the rural areas, but very limited scope for income. There was also a pervading sense that they associated themselves with the 'modern' expressions which they observed in the urban setting. The young men and women were acutely conscious of new 'modern' (foreign) patterns of sexual interaction taking place, even if the young women were reluctant to admit that they themselves actually engaged in such practices. This dynamic of a shift from clearly understood traditional sexual norms towards ill-defined 'modern' behaviors of unknown destination, underlies much of the findings elaborated in the following sections.

Courtship

An important theme in the group discussions was the ways in which young men and women made contact with each other, the development of relationships from friend and *fan* towards marriage, and what the young men and women were seeking in these contacts.

There were strong differences in the ways young men and women articulated the place of courtship in their lives. For the young women courtship and finding 'your husband' was possibly the most important subject in their lives, whilst the young men tended to talk more about their attraction to women in general and often in terms of their desire to sample and enjoy a number of women.

When asked by the moderator if in their gossip (with friends at the factory) they ever talked about men, some of the young women's replies included:

Ooy: *Crushed to powder.* (meaning, yes, very much) (female aged 20 years)

Peun: *Like sodden rice.* (meaning, yes, too much) (female aged 17 years)

In general the women explained that they mainly discussed young men they had seen in terms of the things they liked about their appearance, and the impressions of their personalities and characters.

In reply to the moderator's question about the reason for having a steady girlfriend, young men replied:

Dang: *Only to make love.* (used the word 'fun', literally meaning 'to cut with a sword') (male aged 18 years)

Tum: *Yes, that's the main target.* (male aged 22 years)

Both the young men and women feel that it is fairly easy in the urban areas to make social contact with members of the opposite sex. It is acceptable to have a number of 'friends' of the opposite sex with whom there is no sexual or any strong emotional link, but rather persons whom one can talk, joke, confide, maybe flirt and generally have fun. Initially members of the opposite sex are likely to go out together among a group of friends, later they will go out as a couple. From some of the comments it seems that the young men often view such friendships as providing a springboard to sexual opportunity or to expand their range of contacts. The young women see these contacts both as a source of fun and a means of getting

to know the men. In the event of an emotional relationship being formed a friend becomes a *fan*, which translates to the word English 'lover' in the sense of 'being in love', but certainly not someone with whom you necessarily 'make love'.

The easy going and egalitarian relation with a friend is substituted by the greater seriousness of a *fan* relationship, the women 'watches herself' attempting to behave in an appropriate way - almost as if the young people are starting to practice the traditional gender scripting of husband and wife, with the latter in a more submissive role and looking respectfully to the man as 'her leader'. The following comments by the women illustrate some of these feelings;

Ooy: *He* (a husband) *takes my power.* (female aged 20 years)

Peun: *He* (a husband) *takes your authority . . . I imagine that I have absolutely no freedom to court any other man.*

Nok: *I think that if you have a husband you should praise him. You should not banter with him* (female aged 20 years)

Kung: *A husband is an owner and a leader.*

Lek: *He will be older than me and more mature .... I should respect him.* (female aged 19 years)

Cherry: *If you should choose a bad husband, you make a mistake forever.* (female aged 19 years)

Traditionally the act of pre-marital sexual intercourse signalled a violation of the young woman which had to be redressed by the young man formally apologizing to the woman's parents followed by the *seay phee* ceremony following which the couple were considered by the families and community to be husband and wife.

Indeed, one young man felt that a major advantage of sex before marriage leading to *seay phee* was that it made marriage cheaper:

Ood: ('Seay phee' is good) *because it is cheaper than a formal wedding. No bride price, just a ceremony to give an apology.* (male aged 23 years)

As one young woman explained,

Pui: *These days marriage means you have to hold a big feast, that costs a lot of money. After the wedding you will be in debt and you won't have any money to start your new life.* (female aged 19 years)

Furthermore, cohabitation was believed to be an increasingly common practice for young people within the anonymity of the city. One young woman explained that cohabitation was useful in allowing the couple to save up enough money to marry.

Sexual Orientation and Arousal

In the discussion of sexual feelings and arousal there was an extreme gender difference, with the young men openly describing their feelings (chiefly in terms of a drive psychology) and the young women only with great reluctance admitting that they have any such feelings at all. The young women's reticence reflects the traditional norm that they should be *huang-neau-huang-tua*, an idiom literally meaning to prevent themselves from touching a males' body to keep their virginity, and with the broader connotation of being 'sexually reserved'. The idiom *ploy-neau-ploy-tua* refers to the sense of being 'sexually permissive'. For instance one young woman mentioned:

> Mam: *If I and my boyfriend are alone together in a room there may be a high chance we could have sex, and if we cannot hold back our sexual desires it might mean 'seay-neau-seay-tua' (the loss of virginity).* (female aged 20 years)

The men argued that a strong sexual desire was a natural part of being male and a teenager - a drive, at times hard to bear. Their earliest sexual arousal was fairly openly discussed in terms of wet dreams and masturbation. Discussions of sexual feelings were focussed and developed in both the male and female groups, around the subjects of the readily available pornographic cartoons, magazines and videos. Most of the males and females had seen such materials being passed around by friends. For instance, when the moderator produced some pornographic cartoons in a discussion, even some of the young women commented disparagingly that they found them rather tame in comparison to others they had seen, and emphasizing that such books were widely available.

The existence of sexual feelings and arousal in young men and women is not the issue here, but rather the ways in which they articulate and acknowledge such feelings. The women clearly perceived lust as being a male attribute and expressed awareness of male masturbation (*chak-wow* 'pulling the kite'). This gender difference in the social acceptability of expressing sexual arousal possibly reflects on the underlying cultural construction of sexual pleasure as a male preserve. While the young men, openly and humorously, described their sexual feelings as a drive or force demanding release - a topic of good humored banter, the young women felt that to admit having such feelings would be shameful. Many of the young men by contrast expressed the idea that young women most definitely did have strong sexual feelings.

> Ood: *They are full of energy.* (male aged 23 years)

> Pog: *I was courting one and I went away for less than two months - she got pregnant.* (male aged 24 years)

The younger age groups in particular discussed their initial motivation for sexual experience in terms of adolescent curiosity. The young men discussed this sexual curiosity in positive terms, stressing the peer influences which, for instance, led to their first contact with a prostitute. The young women, however, alluded to sexual curiosity in a negative way, emphasizing that they considered such thoughts to be inappropriate for women who should wait to find out about sexuality until they are older and married.

With developing rapport towards the end of the group discussions the young women became open enough to admit that women did have sexual feelings, but that they did not show or express them. Unlike men, they felt women should repress such feelings.

Bo: *Usually women don't show off* (express sexual feelings) *they have such feelings but don't express them.* (female aged 24 years)

This outline of some of the ways the young men and women described their sexual feelings provides some context for the following discussion of sexual activities.

Attitudes Towards Pre-Marital Sexual Activities

This section is structured in terms of the comments firstly relating to males' contact with prostitutes, and secondly to the currently perceived patterns of young peoples' non-commercial sexual interaction.

Given the traditional double standard pertaining to the acceptability of pre-marital sex for men and women, the recourse taken by males to prostitutes is obviously a major component of the sexual culture. The young men variously articulated their interaction with prostitutes in terms of peer-related leisure behaviors, sexual drive release and seduction and the suggestion made by several that (largely in response to the AIDS threat) they frequent prostitutes less frequently than formerly.

In general, visiting prostitutes was mentioned in the group discussions within the context of leisure behaviors. Rather than being a specific, discrete socio-leisure activity, *pai-tiew* - 'to go out for enjoyment', *koen-hong* - 'to go into the bedroom', both terms used in the groups visiting prostitutes/brothels, were described as part of a night out with friends which was generally preceded by a meal, maybe a game of snooker or some similar past-time, and drinking, and often followed by further drinking and socializing with friends after visiting the brothel or 'cafe'. Virtually all of the young men reported that their first intercourse was with a prostitute, often being taken to the brothel to *koen-kru* - 'to pay their respects to the teacher' (the prostitute as sexual teacher) by older friends and relatives. For the young, visiting prostitutes was seen as an important source of experience where the man could learn about sex. In the discussions the young men often recalled vividly this first experience of sex, the shock, excitement and disorientation and their discussion of it immediately after the event with their friends. They also mentioned that they did not mind discussing this with their female friends.

The peer context of young men's frequenting of brothels was further evidenced by some of the humor and teasing in the discussions. It was socially acceptable to the groups if someone claimed to no longer frequent prostitutes because he engaged in regular sex with his steady girlfriend. However, in the very few cases where (generally younger) members of the group claimed never to have visited a prostitute or engaged in sexual intercourse, such individuals were (almost mercilessly) teased by others in the group discussion. For instance:

Tig: *Ooh, doesn't go to 'cafes'.* (male aged 22 years old) (Ooh is one of the male participants in the group, aged 15 years.)

Ood: *He only sucks ice-cream.*

Pog: *Little Ooh' is still a teenager . . . Ooh, only watches men.* (male aged 23 years)

Sert: *Tell us about your first time.* (male aged 22 years) (no answer)

Ood: *He is a prude.*

The young men described their leisure time activities in terms of enjoying music, snooker, prostitutes and cafes.

Pog: *Going to cafes means going to prostitutes.* (male aged 24 years)

In the discussions the young women also expressed the view that they accepted that the young men went to prostitutes for sexual release.

However, although visiting prostitutes is almost an accepted part of the young men's sex lives, several expressed the views that either they only frequented prostitutes in the past, but did not any more, or visited them much less frequently than they did formerly. The motivation for this change in behavior was awareness of the increasing prevalence of AIDS and especially its identification with prostitutes. It is possible that fear of AIDS and the partial shift away from contact with prostitutes is relating to and interacting with the increased pursuit of non-commercial sexual contact, which is perceived as a safer channel for sexual release. For instance one young man said:

Chet: *Having sexual intercourse with the female in the factory is safer than going outside* (to a brothel), *because there is no risk of infections.* (male aged 24 years)

It is to the pattern of activities within non-commercial sexual interaction that the next section turns.

Non-Commercial Sexual Interaction

These findings are outlined in terms of the ways the young men and women described the sexual 'double standard', their own feelings about the level of sexual intimacy/contact admissible within relationships, and their general perception of trends in (non-commercial) sexual interaction among young people.

Both the groups of young men and women were very clear about the nature of the double standard. One young man did express the view that a traditional Buddhist view of sexuality would advocate fidelity on the part of the man as well as the woman, but generally the double standard was accepted as the social norm. For instance, discussing pre-marital sex a young man described:

Pog: *It is good this way. If women do it, they'll be damned but it is normal for men to do it. Men can have some fun. Most men like it. We don't want to marry the ones we don't really like.* (male aged 24 years)

Moderator: *Now my question is what if women do the same things?*

Ood: *That's possible. But I think it is not good if a woman is going to get married to one man and goes and has sex with another man.* (male aged 23 years)

Tig: *No, its not proper.* (male aged 22 years)

Pog: *Because this is Thai society. Women are the ones who will be damaged. Also, Thai people like to gossip. If the man talks to other people then*

everybody knows about her and then she is considered spoiled. Women are not like men.

Similarly, several of the young women commented on how vital it was to protect a woman's pre-marital virginity:

Noy: *If you do wrong* (that is engage in pre-marital intercourse) *once, you lose everything* (female aged 17 years)

Ning: (referring to the social impact of intercourse) *the man doesn't become a wreck. It's natural.* (female aged 24 years)

Nang: *If a woman wants to try intercourse just once she becomes a wreck. If she later turns to another man, that man will consider her flawed.* (female aged 24 years)

Nevertheless, although the sexual 'double standard' was so strongly articulated by the young men and women in the discussion groups, repeated reference was also made to the belief that pre-marital (non-commercial) intercourse was increasingly common these days. Reflecting the impact of the double standard the young women were at great pains to stress that although they personally did not engage in such activities, they know friends and colleagues who did. The women also expressed the view that they felt that students were more promiscuous than factory workers. It is pertinent to note that the males' and females' perceptions of a young woman's social worth of value was in inverse proportion to her sexual availability, thus the lowest status women were prostitutes, followed by 'bad girls' (those who engaged in occasional, casual, but not commercial, sex), non-virgin-steady girlfriends, with finally virgin girlfriends being the most valued. Many of the young men said that they would not marry a woman who was a non-virgin.

Attitudes and Feelings Towards Specific Sexual Activities

The young women in particular discussed their attitudes towards a whole range of specific sexual activities, including holding hands, kissing and hugging, as well as the reasons for, and ways in which a relationship may lead to pre-marital intercourse.

Several commented that the public expression of affection between young men and women was particularly striking in Bangkok, in contrast to the rural areas. Dating (going out together) in the day and holding hands were described as very common. The young men only alluded to such contact insofar as it may imply an opportunity for intercourse.

There was considerable discussion in both the male and female groups concerning the kinds of circumstances under which pre-marital, non-commercial intercourse may take place. These circumstances can be divided into two broad types, within casual encounters and within steady relationships. Firstly, both groups of men and women referred to a very small minority of young women who engaged in casual sex with multiple partners. Such women, described as *hoew*, used by young people (a word with connotations such as 'wild', 'extreme', 'modern', and 'fashionable'), were believed to be very unusual in their disregard for the social conventions, following a nightlife-oriented leisure lifestyle and being looked down upon by both the young men and women. Reference was also made to the use of violence to force the woman to acquiesce to intercourse. This was not considered likely within steady, courting

relationships, but rather in casual encounters in which the man feeling he had been encouraged and thenceforth (given the rationale of the sexual drive psychology) claiming to be unable to stop the process. In several of the groups the young women discussed this in terms of how far they could physically fight to resist such coercion. In one group when a young man actually described having used violence to force a young woman to have intercourse with him, the striking feature was the levity of both the way in which the event was described by the speaker, and received by other members of the group. It is also important to note that in other groups unprompted, younger men emphasized that they would never use coercion. For instance:

> Ood: *If I have a chance* (of intercourse) *I'll do it right away. If no chance, I won't do it. I don't rape. I only do it when its consensual. I don't force.* (male aged 23 years)
>
> Tig: *I'm the same.* (male aged 22 years) (Nobody in the group differed.)

Given that it was felt that very few Thai women were available for non-commercial, casual sex, intercourse was felt most likely to occur within steady relationships. Although the men valued a woman's virginity (as noted above), they had no hesitation in emphasizing that they would take the opportunity to engage in intercourse if their girlfriend was willing. Indeed, they expressed the view that if a man turned down such an invitation he would be made to feel ashamed.

In general however both sexes were strongly aware that the gender scripting was such that the man made the sexual advances and the woman was expected to resist. The process was seen to be one of a series of steps and limits in which the young men applied various forms of social pressure upon their female partners to agree to intercourse. The women for example described engaging in intercourse in terms such as 'submission' and 'surrender'. The most common means of exerting pressure seemed to be one of emotional attrition, with the young women attempting to take into consideration the perceived love and commitment, their wish to sustain the relationship and concern to protect their reputation. Another young women who admitted she engaged in sexual relations described the steps leading up to it as a progressive 'softening of her heart', or weakening resolve, as her feelings towards her boyfriend developed. Within their steady relationships some young women stated that not being *tai dan* (sexually insensitive) they often did feel aroused by their partner (who through likely contact with prostitutes was fairly sexually experienced) but struggled to suppress their feelings to prevent things being taken too far.

The process of discussion and attrition towards intercourse within pre-marital relationships was described by young men and women as being shaped by *jai-khang*' ('connoting/soft-hearted/giving way/flexible/kind/manipulable'). For instance:

> Pim: *He did everything until I became 'jai-oon', sometimes he used to cut his arm with a knife to show his feelings, and he kept trying to persuade me for a long time.* (female aged 19 years)

The young women try to dissuade their boyfriends from seeking intercourse with them by encouraging *jai-oon* on the part of the males, for instance:

> Mam: *I have faced this situation* (of being pressured to have intercourse), *but nothing happened because we controlled our sexual desires. At the time we were alone together in a room, he hugged me and kissed me and then asked*

> *me to have sex with him. I rejected this and he said 'Don't be cruel', but I tried to stop him through persuasion. I said 'If I become pregnant what should I say to my parents'. Also I cried until he became 'jai-oon' and let me go.* (female aged 20 years)

There was a definite expression in the women's groups that the socio-sexual behaviors of young people were changing to become more open. Within groups young women expressed different attitudes to the possibility of engaging in pre-marital sex. For instance, in the following exchange:

Pear: *I think I will have no pre-marital coitus before my marriage.* (female aged 17 years)

Toy: (Interrupts/teasing) *a good person by the national standard*; and later

Toy: *Nothing is certain Pear, you may suddenly meet your 'boyfriend' and this way things* (intercourse) *may suddenly occur. Isn't it possible Pear?* (female aged 18 years)

Pear: *Yes, but I always keep in mind that if something starts I will try to think of the face of my parents.*

Toy: *Wow, a grateful child, good daughter!*

The essential nature of the pattern of young Thai women's attitudes to pre-marital sexual intercourse is shaped by the tension between traditional pre-marital chastity and more 'modern' romantic attitudes which acknowledge the possibility of intercourse within a committed relationship. In several of the group discussions the young women described the main reasons for engaging in pre-marital intercourse in terms such as being in love and feeling very emotionally close to the man.

Jum: *In the heat of the moment, because of love, I may give in to please him . . . sometimes you trust them too much and you don't trust your own feelings* (female aged 19 years)

Expectations for, and perception of the nature and future of the sexual relationship were also of paramount significance. Both young men and young women expressed the view that if the couple were engaged/fully committed to be married, then intercourse could be admissible. Indeed, both women and men suggested instances where women engaged in sex in order to become pregnant to 'entrap the man'. This also relates to the traditional *seay phee* ceremony whereby following pre-marital intercourse the young man goes to apologize to the woman's parents and the couple *pook khomai khomeu* ties special white threads around their wrists in an affirmation of what may be described as a common law marriage. Following the *seay phee* ceremony the affront to the woman's family is considered redressed and the couple are considered man and wife by the community. The *seay phee* was thus viewed as a pragmatic option to protect the parents' reputation. Although the young people viewed themselves as developing an 'urban lifestyle' they were still conscious of their great respect for their parents. Given the emotional pressure on the women within the relationship to acquiesce to intercourse, it was also sometimes viewed as a means of keeping their boyfriend. However, the continuing tension between traditional and modern attitudes was evidenced in

that young women also felt that agreeing to intercourse would have the opposite effect, for instance:

Ooy: *If he gets me then he will not need me anymore* (female aged 20 years)

As noted above young women who are known to engage in casual sex are strongly stigmatized. Furthermore, it was acknowledged that a man would think less of his girlfriend if she did not seem sufficiently reserved (in term of gender roles) regarding sexuality.

Actual Sexual Experience

Focus group discussions are not an appropriate mode of collecting data on areas of respondents' behaviors which are socially sanctioned (such as young Thai women's sexual activity). Thus whilst most of the young men openly discussed their sexual experience, throughout the whole range of eleven woman's focus groups, only one woman admitted having engaged in intercourse. Indeed, another member of that group commented that she thought the woman "was mad", the inference being not for engaging in the behavior but in admitting it. Several of the young women were prepared to admit that engaging in pre-marital sex was a possibility for them; many described, often in some detail, the circumstances in which friends had engaged in pre-marital intercourse, and there was often teasing intimations made within the discussions that certain members of the groups were sexually active but did not admit it. For instance, the young women used euphemisms such as *kin-kluay* (to have eaten banana), *sai-krock* (chinese sausage), 'bought ice-cream in the mid-day' to imply certain individuals in the group had engaged in intercourse.

The young men also held that a significant proportion of their single, female colleagues were sexually active (but rarely with any man from the same factory). One of the young men said privately to the moderator after the group discussion that he knew that one of his friends in the group had sexual relations with a girlfriend in the factory, however, he would never mention it in a group discussion as it would embarrass his friend and, if word got out, damage the reputation of the woman.

It is impossible to infer from focus group findings the actual prevalence of specific behaviors within a population. However, it is possible to attempt to outline tentative typologies of the range of sexual lifestyles of young Thai men and women, which can then be further explored using other research methodologies.

The sexual lifestyles of young Thai men can be structured in terms of the following interacting dimensions; current sexual relationship status, frequency of sexual contact within commercial (with prostitutes), non-commercial, but casual, and steady relationship, settings, and sexual orientation (hetero, homo, or bi-sexual). The interactions of these three dimensions can give rise to a complex range of sexual lifestyle types, some of which are noted on Figure 34.2.

The tentative typology is constructed from two continuums pertaining to levels of commercial (with prostitutes) and non-commercial sexual interaction. Level of sexual interaction would have to be further developed in terms of both numbers of partners and frequency of coitus. Both continuums could be considered in terms of hetero, and homo-sexual partners. Havanon et al. (1993) have identified empirically a range of basic patterns of sexual networks. Some examples include: 1) high levels of interaction with prostitutes and non-commercial partner(s); 2) high level of sexual interaction with non-commercial partners(s) and occasional sexual contact with prostitutes; and 3) occasional sexual interaction with prostitutes but never with non-commercial partners. The epidemiological implications of such

Figure 34.2 Tentative typology of young, single Thai males' sexual lifestyles

Figure 34.3 Tentative typology of young, single (non-prostitute) Thai females' sexual lifestyles

patterns obviously depend upon the consistency of condom use with different types of partners as is discussed below.

The sexual lifestyles of young Thai women can similarly be structured in terms of the same interacting dimensions as for young men, with the qualification that the commercial dimension refers to engaging in prostitution rather than (as with the males) engaging in sex with prostitutes. There was no reference made in any of the (male or female) group discussions to any female factory workers engaging in prostitution. Given the cultural vilification of prostitutes, such omission from group discussions may be expected. However, if any female factory workers are actually involved in any prostitution it seems plausible that it is very rare. Similarly it would seem that engaging in casual sex is also a very rare phenomenon for the female factory workers. The crucial factor differentiating the young women's sexual lifestyles concerns their behaviors within steady relationships. It is possible to hypothesize a typology which ranges from those who engage in intercourse with their steady partner regularly, occasionally or never. As with 'Western' research into young women's sexual lifestyles (D'Augelli and D'Augelli 1979; Ford 1987) the typology can be further refined by reference to the nature of the (perceived) commitment of the relationship. This could imply that young women who 'permit' intercourse may be differentiated as to whether this is for instance, within relationships with or without a clear and definite commitment to marriage. The importance of attempting to develop and elaborate typologies of young peoples' sexual lifestyles is that they may help to clarify the risks to sexual health that they face. A tentative continuum of young womens' sexual lifestyle types is provided in Figure 34.3.

The continuum presents three basic (non-commercial) sexual lifestyle types for young single women. Given that there are very strong social sanctions against young women's pre-marital sexual experience, it would appear likely that a large majority would be 'Traditional-Restrictive', but with a substantial minority following a 'Modern-Romantic' sexual lifestyle. Those young women pursuing a 'Casual-Recreational' (non-commercial) sexual lifestyle would be expected to be an extremely small proportion.

Discussion of Consequences of Sexual Activity

A major concluding theme of the focus group discussions was the awareness of, and attitudes towards the consequences of (pre-marital) sexual activity. There were a number of differences between the ways in which the men's and women's groups related to, and discussed, these issues. Firstly, the young men's discussions tended to be fairly brief, with easily reached straight-forward conclusions, whilst the young women approached the issues in a more exploratory way, reflecting upon the complex dilemmas and elaborating upon them. Secondly, the young man tended primarily to discuss sexually transmitted disease (STD) infection (including HIV) whilst the women primarily discussed pregnancy, but also alluded to a wide range of other issues including 'baby dumping', infanticide, abortion, violence and coercion. Thirdly, reflecting the sexual 'double standard' whilst the men tended to discuss the inconvenience of infections, for the women the consequences were viewed in terms of their impact upon their own reputations, those of their families and their emotions in relationships. For instance, pre-marital pregnancy was feared, primarily because it was evidence of 'sinful behavior'. Many of the women had known friends or siblings who had gone through the trauma of pre-marital pregnancy. With respect to dealing with an unwanted pregnancy themselves most expressed the hope that their partner would care for, and marry, them, enabling them to keep the child, whilst others had no hesitation in insisting that they would seek an abortion, largely because they did not feel ready, emotionally or financially, to take the responsibility of having a child. It is interesting to note that in the event of pre-marital

pregnancy, the blame was apportioned by both the young men and women, on the woman for 'allowing' intercourse to take place, thus becoming a 'bad girl'.

For some years there have been considerable efforts made by both government and non-government organizations to inform the Thai population about family planning and contraception (Knodel et al. 1987). More recently these efforts have been intensified in response to the rapidly accelerating HIV/AIDS epidemic (Ministry of Public Health 1992). The discussions revealed widely varying levels of knowledge and awareness of sexual health and contraceptive issues on the part of the young men and women. Whilst a minority were well informed, many were confused about particular issues and some had very little idea at all about the ways in which they could protect their own sexual and reproductive health.

Probably the two most disturbing issues to emerge from the discussions concerned the inconsistency of males' condom use with prostitutes, and the inability of most of the women to even contemplate, let alone access or actually use, contraception. The young men expressed a whole variety of responses to perceived HIV/AIDS among prostitutes ranging through denial that there really was a high prevalence of HIV, refusal to use condoms, occasional use of condoms if there was felt to be a risk, and no longer visiting prostitutes. Some described how when at the brothels they tended to forget about the risks and fail to use condoms and then the next day start to fear the consequences, waiting to see if there was any sign of infection when they relieved themselves. Even those who were prepared to use condoms with prostitutes were not prepared to do so with a regular girlfriend. They argued that the issue with (non-commercial) girlfriends was simply whether or not to have intercourse; such women never raised the question of condom use with them.

There appears to be a whole range of obstacles preventing contraceptive use within relationships. The men expressed the views that using a condom with their girlfriend would imply that they did not trust her, or:

> Ped: *... most women know all about birth control. I think that women are careful if they have sex.* (male aged 24 years)

The women found it difficult to acknowledge that they could be sexually active. Furthermore, they argued that sex could only take place within a loving, committed relationship and thus pregnancy should lead to marriage. Within such a relationship the man, as their future husband, was expected to take the lead in saying whether, and if so, what form of contraception, should be used. The women felt that it would be extremely difficult to actively seek contraception as it would amount to an admission that they were sexually active. They stressed that any counselling or family planning service in the factory would have to be highly confidential.

Epidemiologically it is important to note that the low income sex establishments which are frequented by young men, contain some of the highest levels of HIV infection in Thailand (Ford and Koetsawang 1992). There are also increasing numbers of women who have followed strictly monogamous sexual lifestyles, testing HIV positive (often in ante-natal screening) having been infected by their partners (Epidemiology Division 1992).

In general the women's discussion groups made very little reference to the possibility of HIV infection. Basically it appears that firstly, they feel that their own sexual lifestyles are not high risk, and secondly, it is likely that they do not like to imagine that their boyfriends are potentially infected. When confronted directly with this dilemma, several suggested that the couple should have HIV tests before marriage. Another response was that "to be in love is to be prepared to die for one another" (female aged 17 years).

The sexual 'double standard' has of course fostered acceptance of men's multiple partners as something natural. Looking ahead to their future marital situations, the young

women expressed their attitudes to their husband's (likely) 'infidelity'.

Noy: *He can go wherever but do not bring her* (female aged 17 years)

Ning: *I don't mind if he goes somewhere* (i.e., for sex with another woman). *I won't say anything.* (female aged 24 years old). (The rest of the group interrupts her with a 'burst' from a popular song, "if you know you'll be cool".)

Ning: *If he has other women I won't blame him, but I don't want the others to be near me.*

These expressions link with the women's feelings about the roles of husband and wife as referred to in the foregoing section on courtship. In the light of the pace and expansion of the HIV/AIDS epidemic in Thailand it is worrying that these young women do not appear to recognize that their future husbands' infidelity could put them at risk of HIV infection. These findings reinforce the crucial importance of effectively implementing Thailand's policy of "100% condom use in the sex industry". In touching upon these issues there is a risk of straying from the main focus of this article which is the gender construction of the nature of youth sexuality in Thailand. Suffice it to note that other research projects are addressing the means of implementing the 100% policy (e.g., Koetsawang and Ford, forthcoming 1993).

Conclusion

The aim of this paper has been to explore the sexual culture of Thai youth from qualitative focus group discussions conducted with young, single factory workers. Such data cannot reveal the prevalence and levels of sexual behaviors, but it is useful in yielding insights into the feelings, expectations, meanings and expressions of sexuality. Two major themes ran through the discussions of courtship, sexual feelings, attitudes to pre-marital sexual activities, sexual experience and the consequences of such activity; firstly there is an all-pervasive gender construction of sexuality, and secondly, the dramatic process of social change in Thailand is having an impact in modifying 'traditional' sexual norms and expectations.

In terms of access to education and involvement in economic activities Thai women generally occupy a much more advantageous position than women in many other parts of South and South East Asia (Sethaput and Yoddumnern-Attig 1992). However, this relatively high economic status contrasts with the powerful 'double standard' pertaining to sexuality. The maxim that "to do as one pleases is to be genuinely Thai" (Podhisita 1985) seems a little stretched if applied to the social expression of Thai women's sexuality. Indeed, the social and cultural socialization process is different for male and female Thai adolescents. Young males are often given few responsibilities and allowed considerable freedom, for instance to try alcohol, tobacco and become sexually experienced. By contrast a young female is given stricter training on how to behave, more responsibilities towards the family and household and much less social freedom (Archavanitkul and Havanon, this volume).

It would be premature in the implementation of this research program to attempt to derive specific policy implications; the main aim at this point concerns understanding of the sexual culture. However, some of the processes identified in the findings do seem to have some broad implications for programs concerned with the sexual health of youth. In the past three decades Thailand has experienced a much vaunted 'reproductive revolution' (Knodel et

al. 1987) with a dramatic shift from high to low fertility rates. This revolution has been primarily ascribed to an innovative and well organized family planning program, incorporating a strong emphasis upon communication, as well as to certain underlying facilitating characteristics of the socio-cultural context (Knodel et al. 1987). Nevertheless, it is not certain that this reproductive revolution has been particularly successful in addressing the issues of youth sexuality and reproductive health. This is not to deny the significant advance made in the provision of family life and sexual education in schools (Ismartono 1989), and some innovative services which make family planning counselling available to young people in Thailand (Koetsawang 1987). Rather it is emphasized that firstly, such education functions within a socio-cultural context which affects the ways in which it translates into practices, and secondly service initiatives for young people are generally small scale and inaccessible to the mass of the youth population (Ford et al. 1992). The need for the protection of young people's sexual health is, of course, powerfully reinforced by the accelerating pace of HIV transmission in Thailand (Ministry of Public Health 1992). The key parameters of the epidemic pertaining to young people are the young men's frequenting of prostitutes, and the parallel likely increasing levels of non-commercial sex, and the levels of condom use in both types of such interactions. The findings suggested varying levels of condom use with prostitutes and very little use of condoms within non-commercial sexual relationships. Furthermore, the kind of low income brothels which are frequented by young men contain some of the highest levels of HIV prevalence in Thailand.

There appeared to be a general belief or awareness on the part of the young people that there are increasing levels of pre-marital activity within courting relationships. Such developments which were felt to be taking place particularly within the urban areas were associated in the minds of young people with modern social trends. The overall sexual culture of youth in Thailand may be viewed as a complex interplay of traditional sanctions and modern expectations, which are each structured in terms of the gender construction of the 'double standard'. Thus there was a strong tension in the discussions with the young women between their expressions of their own behavior and the ways they felt other young people were behaving. As in the 'West' in earlier decades the core of changes in sexual culture is likely to principally relate to the social expectations and standards concerning young women's behavior. There appeared to be a strong sense that (at least) some of the young Thai women were open to 'romantic' sexual relationships which permitted pre-marital intercourse, provided it was taking place within a loving and committed relationship. However, the socialization of young Thai women with respect to sexuality makes it difficult for them to acknowledge their own sexual feelings, let alone to be able to insist on 'safer sex' in the event of intercourse taking place within a relationship. In a sense there are conflicting social pressures operating upon young women's sexuality; (external) traditional cultural norms strictly forbid any expression of sexuality, yet (internal) dynamics of courting relationships involve pressure from the partner to acquiesce to pre-marital intercourse.

Other research (Fisher et al. 1983:207) has confirmed that "an individuals' emotional response to sexuality, will generalize and, in part, determine whether the person approaches or avoids contraception." Many of the young Thai women found it very difficult to acknowledge that they had sexual feelings. Also the use of effective contraception often involves a communication and negotiation process; the culturally articulated expectation that the Thai woman should be sexually 'innocent' and reserved militates against her ability to express the need for taking precautions during sex. One of the complex fears in the young woman's mind is that by openly expressing the need to take precautions (e.g., condom use) she conveys an image of being sexually knowing, possibly experienced, and sexually and contraceptively active rather than passive, in interaction with her male partner. The young Thai males, who do tend to be sexually experienced and have few inhibitions concerning

sexual expression, vary widely in their perspectives on contraceptive use along a continuum from those who fully appreciate the need for safer sex to those who prefer to ignore it. Further understanding of these issues is crucial for the development of strategies which may be able to foster consistent 'safer sex' behaviors, which is a survival imperative for the current and following cohorts of young people in Thailand.

The young themselves view the more 'open' trends in sexual interaction to be similar to foreign or 'Western' behaviors and associated with modern developments. However, as with other areas of social behavior Thai culture is likely to adapt and develop these trends in its own form. Again it is important to stress that to be effective HIV risk-reduction/harm-minimization strategies have to interact with the continuing process of the cultural construction of sexuality. More quantitative modes of data collection are required in order to further identify the prevalence and pattern of the sexual lifestyles of Thai youth. The very reticence of young Thai women to acknowledge their sexuality is one obstacle to obtaining reliable and accurate data upon sexual behavior. It is likely that there are an increasing proliferation in the patterns of young Thai's sexual lifestyles, with variations being shaped by individual values, attitudes, propensities, social and peer context and life experiences and circumstances. Although some directions of changes have been noted in this paper, their future destinations remain unknown.

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Chapter 35

The social context of condom use in low-priced brothels in Thailand: a qualitative analysis

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While condoms are effective in preventing sexually transmitted diseases, their actual use by high risk groups rests on many underlying behavioral factors associated with perceived risk, frequency of sexual intercourse, and characteristics of the condom itself. To gain a meaningful understanding of relevant behavioral factors and their causes, and to recommend potentially effective intervention measures, requires in-depth qualitative analysis as in this case study - EDS.

Introduction

Sexual behavior and practices are rooted in cultural values and imbued by society upon its members at a very early age. Such existing values can be seen as learnt by male and female adolescents and carried on and adopted by succeeding adolescent cohorts. The shaping of sexual values and practices thus must be seen as an historical process, possibly subject to change but most likely only very slowly.

If for example sexual gratification is felt individually and socially to be inhibited with the use of condoms, how likely is it that patrons of commercial sex establishments will change their behavior and readily use condoms? Commercial sex workers (CSWs) may also, for instance, wish to sexually gratify clients whom they see as potentially high paying regular customers. How likely is it for them to use condoms with clients who feel they are not sexually gratifying?

Consequently, the condom must be understood not as a cure-all but only as a tool to assist in the prevention of sexually transmitted diseases (STDs) and HIV. Understanding the social context of condom use in commercial sex establishments such as brothels is thus necessary if this tool is to be used effectively.

Commercial sex establishments in Thailand are run by an extensive and complicated network of agents at all geographical levels. Each of these levels is interdependent and supportive of one another, looking after the common interest. Recruitment of CSWs is almost universally before the age of 18 and sometimes as young as 11 years old. Working hours are

long and the number of clients is very high, as many as 40 clients in a single 24-hour period. Indebtedness is also common among CSWs and desired by the establishment in order to keep the girls working.

With the awareness of the AIDS epidemic, the condom is seen as 'the new player on the block.' Under this context, CSWs have been educated to learn strategies to get unwilling clients to use condoms. This is because previously condom use in commercial sex encounters before the awareness of the AIDS epidemic was very low because of certain cultural values associated with sexual gratification.

Condom use during sexual intercourse can significantly control the spread of STDs and HIV infection among sex partners (Havanon et al. 1992). Though this protection is not considered to be 100%, it does have a multiplier effect on slowing HIV because of a synergistic relationship between STDs and HIV transmission (Havanon et al. 1992:20). According to this report, condom use is highest among men who had their last commercial sex encounter at a straight brothel (82%) partly because such encounters are probably considered as most risky by both partners. Their awareness has been heightened, moreover, by continuous public campaigns to educate the population about the dangers of HIV infection as a result of multiple sexual encounters. Preliminary results of a behavioral study for AIDS prevention among long distance truck drivers conducted by the Institute for Population and Social Research at Mahidol University shows over 84% condom use in low priced brothels (Podhisita et al. 1993). The Ministry of Public Health (MOPH) has declared that in order to control the spread of STDs among the male population and CSWs, it is necessary to provide education and promote the 100% condom use program in commercial sex establishments in all provinces, beginning from January 1992 onwards (MOPH 1993).

Many studies, including the ones mentioned above, have documented the increase in condom use in commercial sex establishments as well as casual sex encounters. The reported increase in condom use is welcomed, but many questions exist about whether or not the 100% condom use policy can be attained. Since sexual behavior and gratification are the most sensitive and personal areas of human behavior, quantitative research using a straight question and answer strategy may not give reliable or valid data. The tendency to hide one's personal behaviors and provide only answers that are 'socially appropriate' is very great. Hence, the data become distorted. If the currently proposed 100% condom use policy in brothels is to be effective, an in-depth understanding of the context of condom use within brothels becomes of paramount importance. The object of this chapter is to contribute to this understanding.

The Behavioral Research for AIDS Prevention Study (BRAIDS)

The BRAIDS study is being implemented by the Columbia University Center for Population and Family Health (CPFH) and the Institute for Population and Social Research (IPSR) at Mahidol University. The objectives of this on-going study are: 1) to collect information on the social context of sexual behavior and high risk practices for selected study populations; 2) using study results, to design and test a limited number of prevention interventions in low income commercial sex establishments and slum communities; and 3) to develop recommendations for large-scale preventive programs directed at the core study populations. Four major target groups were selected for study: CSWs in low-priced brothels; long distance truck drivers; adolescent and adult males in low income areas. An additional group of adolescent females in low income areas is presently being studied.

Behavioral Study Methodologies

The project uses three main research methods. First, a survey interview is conducted with each of the target groups using a standard core questionnaire. Second, in-depth and focus group discussions are held to acquire contextual information regarding sexual behavior practices and the nature of commercial sex within brothels. Lastly, a network analysis is also planned to assess the potential for HIV transmission within and beyond the study populations.

This chapter deals specifically with preliminary results gained from the focus group and in-depth discussions conducted with CSWs in Bangkok and two provinces in the Central and Northeastern regions. The major topics of discussion in both focus groups and in-depth discussions included knowledge on STDs and AIDS, the context of condom use in the work place, entry into commercial sex, problems in maintaining health, movements between brothels and context of working within a brothel. At the time of writing, 21 in-depth discussions and nine focus groups sessions had been conducted. On average, a focus group discussion lasts between two to three hours. Complete transcripts for a two and one-half hour focus group amounts to approximately 70 single-spaced pages. An in-depth discussion lasts on the average one and one-half to two hours. A complete transcript for an in-depth discussion is about 35 single-spaced pages. Thus, in quantitative terms, there are approximately 1,400 pages of written transcripts from this particular data set. Coding and analysis of each particular transcript was assisted by using the ETHNOGRAPH program (Seidel et al. 1988; Richter, this volume).

This particular chapter will focus only on the context of condom use in low priced brothels. The first section presents various strategies CSWs use in persuading clients to use condoms. Findings suggest that although many clients are willing to use condoms without aggressive persuasion, there are still a number of clients which CSWs must persuade nonetheless. For these clients, CSWs have to develop their own persuasive strategies in order to get clients to use condoms. Such clients can be broken down into three major categories: those who use condoms after successful persuasion by CSWs; those who inherently refuse to use condoms under any circumstances (referred to as hard-core non-users); and those who because of alcoholic consumption are extremely difficult to persuade, if at all.

The chapter's second section discusses condom lubrication as a strong disadvantage when CSWs must serve many consecutive clients. This is usually the case, and brothel managers also place pressure on CSWs to serve as many clients as possible. This situation becomes extreme during the new year and other public holidays when numbers of clients increase dramatically. The main problem is that the continued use of the one-type one-lubrication condom distributed by public health personnel results in friction and vaginal sores. This becomes extremely painful, and some CSWs consider removing the condom during sex.

This chapter's final section discusses prevailing misconceptions by CSWs about when to use or not use condoms. During in-depth and focus group discussions, it was generally agreed upon that condoms should be used with all clients. However, upon continued discussion, it became more evident that the meaning of 'use with all clients' was not interpreted the same by CSWs and researchers. The customary CSW interpretation is 'use with all clients who are considered higher risk types.' Falling outside of this category are clients who the CSW feels look 'handsome,' dress well, who are 'regulars' or potential 'regulars' or who can be 'trusted not to pass on an infection.' For these low risk types, they may not use a condom during sex. This chapter ends with recommendations for interventions to improve condom use in commercial sex establishments.

CSW Persuasive Strategies

During discussions on condom use, CSWs stated quite clearly that their clients were well aware of the risk of contracting STDs and HIV if they were to have sex without using a condom. CSWs noted that most clients are willing to use condoms with little or no persuasion. This is consistent with other research studies where awareness of STDs and HIV infection appears to be high among most clients thus leading them to use condoms while visiting CSWs. Hence, it is quite easy for CSWs to suggest the use of condoms as noted in the following focus group exchange and in-depth interview quote. [Note: In this passage and subsequent ones, P = Participant and M = Moderator for focus group discussion data. In-depth interview data are denoted by either 'Respondent' or Q (questioner) and R (respondent).]

P1: *I try and speak with them nicely. Clients nowadays understand easily. I tell them, "If no condom, I'm sorry then no sex." Everyday now it is so easy for clients to understand, not like before. Now, I use condoms every day.*

P2: (laughing) *Everyday now clients understand.*

P2: *When we run out, the clients bring their own. I tell them, "Honey, if you don't wear a condom, I won't do it with you." And then they ask if I have any and I tell them it will cost 10 baht and so they buy it from me.*

P1: *Everyday now you know, if a client does not wear a condom I open the door very wide. If a client does not want to wear it, they can get their money back and I open the door very wide and say, "You can leave now if you don't wear a condom."*

Respondent: *Mostly clients will wear a condom. If we talk and tell them in a nice way, they will agree to wear a condom. A lot of clients wear condoms; a lot of them.*

The above exchange shows that condom use in brothels is widespread and its importance is understood by both CSWs and most clients. However, there are instances where more direct persuasion is needed on the part of CSWs in order to convince clients to use condoms. Under these conditions, CSWs must develop their own personal persuasive strategies. The success of these strategies depends upon the individual experiences of each CSW and how they deal with them. Some lesser experienced CSWs may learn from the more experienced. In general, education programs by the MOPH and non-government organizations (NGOs) have given CSWs suggestions on how to persuade clients to use condoms. During focus group and in-depth discussions, the first strategy taken can be described as soft persuasion. In this strategy, the CSW informs the client in a pleasant manner that he should use a condom. Soft persuasion is usually accompanied by providing some technical information as to the possible spread of disease if a condom is not used.

M: *If a client does not want to wear a condom, is there a way to convince them?*

P1: *If we speak to them nicely they will wear it. If we speak sweetly like the doctor told us. The doctor advised us to tell them that, "I have not been to the doctor for many weeks now, so what are we going to do. If something happens, oh, you won't come and see me again." So I speak like this. I trick all my clients*

like this.

M: *What about you do you have a method of speaking?*

P2: *I say, "Honey, please wear a condom; your mind will be at ease when you have fun. When you go home, you won't have to worry that you got a disease from this or that person."*

M: *How do you explain it to your clients?*

P1: *I explain to him like if he was a CSW right, and I am a client right? And would he be afraid. He replied yes and then he agreed; he then used a condom. I speak to clients in a nice way and they agree to use a condom. This particular client was also a little bit drunk.*

Respondent: *We had a video-tape which the doctor gave us. The tape was about AIDS. I would play this tape to any client who refused to wear a condom. Like any client who didn't want to wear a condom, even a regular client. I would turn the tape on and then after watching the tape his thing [penis] would not get hard!*

Respondent: *I tell my clients to wear a condom. I even lie to them that I have AIDS, but some are not even afraid then.*

The above strategies are varied, ranging from direct requests to video-tape displays, convincing arguments as well as lies. Yet, they all represent the various ways CSWs attempt to persuade clients to use condoms. It seems evident from this information that a large majority of brothel clients are using condoms. However, CSWs do remark that there exists certain hard-core clients who refuse to use condoms. These clients are more likely to be long-term patrons of brothels before the AIDS epidemic and who have never considered using a condom.

P1: *Some clients do put it [condom] on, but later they pull it off.*

P2: *Some try to fool us by pulling it off during sex.*

P3: *Some are really smart; they poke a hole at the condom's tip.*

P4: *It breaks!*

P1: *Sometimes, when we are doing it and I am off my guard, they pull it off. If I know in time, I would take it [penis] out.*

P5: *Some clients speak harshly. They say that, "If I have to wear a condom, I would prefer to go home and masturbate."*

P6: *[If asked to wear a condom] they will walk away and curse, "Fuck you; you think I have AIDS. Why should you be afraid of me and force me to wear a condom. I might as well go home and masturbate than come here." They say this while walking away.* (laughs)

P5: (laughs)

P2: *Some will say that it is more exciting to expose it [penis] on the side of the road and have the cars whiz by.*

Everyone laughs.

P6: *It is because they don't feel anything if they wear a condom.*

P2: *A lot of them are really sickening.*

P7: *Some say to me that they aren't afraid at all when they go to brothels. I really don't know what to answer them in reply.*

P4: *[They say] they are not afraid of AIDS, but they are really afraid of not having any sex. . . .These people when I put it on for them, they pull it off. I really try and persuade them to wear it.*

P6: *I fool them. I say, "Today when I urinated, I felt a little bit abnormal."*

One word to describe such clients who refuse to use condoms, as used in the exchange above, is 'sickening.' A major reason why such clients may not want to wear condoms is because it reduces the sexual sensation. The issue of loss of sensation is one that has been debated somewhat in the technical literature. However, the issue does not rest only on physical sensation but also on sexual sensation. In this sense, sexual sensation includes the physical and mental constructs together which cannot be separated. The issue of loss or no loss of 'sensation' must be decided in the field, so to speak, and social reality from the CSWs' perspectives indicate that condom use decreases a client's sexual sensation.

P1: *Some clients, I tell them to put it on. "Honey, will you put it on?" They say, "Oh, why should I, if I put it on I will not be in the mood; it will not be exciting, not overwhelming."*

P2: *Some clients when they don't wear a condom it takes only a short time [to reach climax]. Then when they return the next time and wear a condom, oh, it takes a really long time.*

Condom Lubrication

The condom was produced originally as a contraceptive device and possibly secondly as a protection against STDs. As such, the condom's construction may be considered inappropriate for use in low income brothels. The MOPH distributed condom was originally lubricated with an oil based lubricant. More recently though, water based lubricants have been introduced. Condoms are produced in batches with each condom in a batch being given the same amount of lubricant. Yet, two consecutive batches of condoms may actually have different amounts of lubricant, one more or one less, for example.

In focus group and in-depth discussion sessions when the topic of condom use problems was addressed, spontaneous discussion arose concerning the type of lubrication used on a condom. Some CSWs mentioned that there was not enough lubrication which causes

friction and painful sores within the vagina during repeated sexual encounters. The reduced sensual pleasure, as a result of wearing a condom, also contributed to longer periods of sex.

P1: *It [condom] is good and safe from many diseases. What is not good about it is that when I have sex with a client, friction occurs and it becomes painful and stings.*

P2: *There is friction and that's when it [sex] takes a long time.*

P3: *Friction causes the pain; it will also cause an open wound.*

P1: *There may be a wound and it may swell.*

M: *Do you mean you have an open wound?*

P1: *Oh, of course.*

M: *And then that's why your client spends a long time with you?*

P4: *He does it long, longer than not wearing a condom.*

P5: *Yes, and also whoever [client] is drunk when they do it [sex] it will also . . .*

P1: *also be bad; that is they take a longer time. What is it they call it, a . . . lubricant; there is none of it left. Then it rubs back and forth and becomes very painful.*

M: *And then what about your natural lubrication.*

P6: *Yet, it is all gone too.*

M: *And then it is painful.*

P1: *It causes friction and then the pain. But it [condom] has a lot of good points; it protects [the user] from many things.*

Q: *Has a condom ever broken while you were using it with a client?*

R: *Yes, but I put on another one. I pulled it off and put on another one.*

Q: *Immediately?*

R: *He [the client] said not to worry about it, to forget it. I said to put on another one, put on a new one. He said he wouldn't put on another one, to forget about it. But I insisted that I have another one and that he should wear it, and so he agreed.*

Q: *I have heard other young girls tell me that it takes a long time if you use a condom?*

R: *It does take a long time.*

Q: *Does your vagina hurt when it takes a long time?*

R: *No matter how long it takes, I would have to bear it. Some clients refuse to take it [condom] off. They are also afraid.*

Q: *Have you ever had to take the condom off because having sex was so painful?*

R: *There were some instances . . . but not very often. But most of the time the clients refuse; they are also afraid and I tell them that it is okay [to continue having sex with a condom on].*

Q: *And so you have to continue suffering the pain?*

R: *These clients come to have fun. I have to submit to it.*

The increased friction and pain as a result of high frequency sexual intercourse is not unknown by public health personnel. Consequently, the amount of condom lubricant added during production has been increased to account for this problem. However, too much lubrication may also be problematic (discussed below) since it leads to difficulties in maintaining cleanliness when douching after sex or resulting in increased friction thus causing open sores.

Some discussion on condom use also centered on allergic reactions to the condom lubricant. Though it is not clear whether the stated allergies are the result of the lubricant or the frequency of sexual intercourse, thereby causing friction and sores, it does have important implications for further technical improvements on condoms in terms of lubricant types, amounts as well as appropriate washing liquids. Sexual frequency in low-priced brothels is very high and distribution of condoms to all establishments may not be enough. Developments in condom lubrication and washing liquids must take the social context of commercial sex into consideration.

M: *Do you think that there are any problems encountered in using condoms?*

P1: *Allergies.*

P2: *Some people are allergic to it. Women get sores and itchiness.*

M: *So some are allergic to it.*

P2: *There is some lubricant on it which some people are allergic to.*

P3: *Some get sores and extreme itchiness.*

M: *So there are sores in the vagina?*

P3: *There is a rash because it is not clean?*

M: *What is not clean?*

P2: *When we finish having sex and take it [penis] out and wash our vagina, it is not clean because there is still some lubricant left.*

P3: *We have to use more soap.*

Implications from these discussions on condom lubrication indicate that there may not be a single type of lubricated condom that will be appropriate for all women working in low-priced brothels. More likely, CSWs should be able to experiment and choose condoms with different amounts of lubricant. Public health authorities should possibly consider producing and distributing different types of lubricated condoms on a 'cafeteria' type basis as well as informing and educating CSWs on the availability of such condoms. This would be much more effective than the present distribution of the one-type lubricated condom. CSWs could then pick and choose the most appropriate ones for their personal needs, thus contributing to reduced pain and friction and a reduction in risk behaviors associated with premature condom removal during sex. From a cost-benefit point of view, distribution of different lubricated condoms free of charge may not seem feasible. However, CSWs are well aware of the need to use condoms and a nominal charge for the availability of different amounts of lubricant tailored to individual needs would be much more effective in increasing condom use.

Persistent Misconceptions

Focus group and in-depth discussion data show that CSWs clearly understood that they had to use condoms in order to prevent contracting STDs and HIV. From this understanding, they have developed various strategies to persuade clients to use condoms.

However, among some CSWs a significant level of misunderstanding persists as to when to use a condom. In particular, they feel that the condom may not need to be used with all clients, only with ones that they perceive as high risk. For example, CSWs often develop personal relationships with regular clients, and they may not use a condom when having sex. Other than this psychological assessment, CSWs use other sensory methods to assess clients and their own perceived risk of infection. A client who looks 'clean' and dresses well, and who may be a potential regular client, may also not be asked to wear a condom. Some CSWs mentioned that the look in the client's eyes, the cool temperature of his skin, or even the color of his penis are indicators that a client is 'clean.'

P1: *If he is a regular client, a client that we are sure that he does not have fun elsewhere. That we know he only comes to us for fun, then we don't have to use a condom.*

M: *From what you [P1] said, if it is a regular client you would not have to use a condom?*

P1: *Because to use it with every client it is . . . not possible to use a condom with every client.*

M: *In your mind it is not possible?*

P1: *Because for regular clients sometimes it is not necessary to use it; something like that.*

M: *That you said is not possible, your mind or your body.*

P1: *I don't really know. It is because of many reasons, sometimes many reasons. [To P3], wouldn't you agree with me?*

P5: *That is, some clients who come look really disgusting . . . but you know, some clients look really nice [implying that the nice clients may not need to use a condom].*

P1: *Looks attractive.*

P3: *The girl [CSW] would take a client if she herself is not attractive. She would take him [without using a condom],; it is like that.*

M: *For an attractive worker like you participant 4, you would ask every client to wear one?*

P4: *Mostly it is how handsome the person is.*

M: *But really I would like to know whether it is like what participant one says, a regular client need not wear a condom?*

P5: *Some regulars are also afraid of us you know. So they would have to wear it.*

P1: *Some wear it. Some trust us and don't wear it.*

M: *Everyone has a regular client?*

P5: *Every one of us has a regular client.*

P6: *We would have to wear it. If it is a casual client, we would have to use it.*

M: *Is it regular to use condoms?*

P6: *It is regular.*

M: *Aren't we afraid of what we don't know?*

P1: *Its okay if they don't wear it. . . . we have to be sure.*

M: *In what way sure?*

P3: *We [client and CSW] have to trust each other.*

Q: *And what about the two clients last night that you told me didn't use a condom?*

R: *They said they did not want to use it; that it was not like the real thing; they said it like that.*

Q: *Open up your mind and tell me. If a client does not want to wear a condom, would you accept him?*

R: *Well, yes.*

Q: *You would accept him.*

R: *But I won't take many clients like this, especially if they are not clean.*

Q: *If they refuse to wear a condom, you would allow it?*

R: *Sometimes I will allow it. Sometimes not. If I have no alternative, no money to buy food, I would accept it.*

Negotiations over condom use begin to slacken as a result of social interaction, such as the development of personal relationships between CSWs and certain clients. Such social interaction creates a feeling of trust among both parties. Though debate existed in the above excerpts concerning the necessity to use condoms, it is clear that trust, physical appearance and a client's apparent sexual innocence contributed to the non-use of condoms. The above excerpts also imply that trust comes relatively easily after a short period of interaction, at least for some CSWs. Why trust should occur so easily and in such a short time and contribute to non-use is still unclear. The extremely young ages of CSWs that are continually recruited combined with their low level of education (primary or below) could be a contributing factor. Nevertheless, these findings can contribute directly to the improvement of educational programs for CSWs in low-priced brothels.

Immediate Interventions

From the BRAIDS research, it seems quite clear that considering the extremely young ages of CSWs, a significant portion of them are well informed about the need to use condoms during sex. Strategies taken by CSWs confirm this conclusion. This knowledge stems most likely from widespread educational programs of government and non-government organizations through the mass media and within the brothels themselves. However, since the recruitment age is extremely young and continual, educational programs must provide on-going information to these new 'recruits' on an indefinite basis. Intervention programs need to target three main categories: CSWs, male clients and brothel managers. The following are suggested interventions.

'Experienced' CSWs should be involved in developing a comprehensive client persuasion strategy. Such a program, though already introduced by many organizations, should have more direct input from CSWs. Identification and selection of former or present CSWs to act as paid consultants to the program should seriously be considered. Such CSWs should also be involved as paid trainers when implementing the program either in commercial sex establishments or elsewhere. Further, many CSWs are recruited at the inception of puberty which gives them a distorted picture of sex, sexual relations and social interactions with men. A sex education course designed and implemented by experienced CSWs would assist in the social and mental development of young CSWs.

A mass media campaign needs to be developed stating that drinking and going to brothels should not be done together. For clients, messages could target the idea that drinking dulls the senses and reduces sexual sensation. In brothels, targeted information should focus

on the concept that such 'disgusting' clients are possibly the highest risk group for contracting HIV and may pass it on to workers in the commercial sex establishment. This would instill the idea that entertaining such clients would give the establishment a 'bad name.'

Perceived condom quality is a big issue not only among CSWs but also the general public. Better technologies to standardize condom quality should be introduced immediately and publicized widely and responsibly to reduce rumors about poor condom quality.

The availability of condoms with different amounts of lubricant should most seriously be considered. CSWs would then be able to choose those which fit their needs the closest. This would not only reduce the physical problems many CSWs experience, but it may also strengthen their commitment and action in persuading clients to use condoms.

Regarding the lack of sensation when using condoms, poster presentations in brothels should seriously consider such messages as *Wear a condom; a little bit less pleasure, but a lot of satisfaction.*

Development of more contextually appropriate information, education and communication programs are needed for brothels and the general public and targeted at persistent misconceptions. Stress here would be on such areas as: 1) every man who goes to a brothel is a potentially high risk case possibly carrying STDs and HIV; 2) STDs and AIDS can be contracted from regular, shy, handsome and 'clean' clients; and 3) the look in a client's eye, the warmth of his skin or the color of his penis are not correct indicators of whether he is an AIDs carrier.

Lastly, for effective educational programs to be implemented, serious consideration must be given to the registration of brothels and brothel owners, ***not*** CSWs. Registration of brothels and other potential STD/AIDS transmitting establishments should not aim at punishment or social condemnation. Rather it would allow for the much more effective administration of education programs, health check-ups and condom distribution.

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Chapter 36

Determinants of health service utilization in rural Thailand

Uraiwan Kanungsukkasem

In developing and developed nations alike, the reasons why people use certain health services over others and for different types of illnesses generally depend on the type of illness, its severity and stage in the disease process. This chapter uses quantitative and qualitative data to investigate the reasons for health service utilization among people in Thailand's north-central province of Nakornsawan - EDS.

Introduction

As a result of recent National Health Development Plans and their program objectives, health care facilities and services have been set up in almost all rural districts and subdistricts throughout the country. Despite successes in developing the health infrastructure, the incidence of preventable diseases is still much higher than that of the chronic degenerative diseases. Non-infectious diseases are increasingly important and infectious diseases are still significant as well as unsolved causes of death and other major health problems (National Economic and Social Development Board 1987; Prasartkul et al. 1988).

One major reason for this persisting, adverse situation may be due to the under-utilization, non-utilization, and/or non-acceptance of public curative services (e.g., drug funds, health centers, district hospitals), even where modern medical practices/treatments are recognized as superior to traditional forms. The Ministry of Public Health (1987:13) stated that there was an influx of patients from rural areas seeking services from large urban hospitals without any screening or referral systems. Among patients visiting hospitals, approximately 65 percent have simple ailments and injuries which do not need sophisticated treatment. This results in local health facilities being under-utilized or by-passed by rural people, while most district, provincial and Bangkok hospitals are overcrowded with patients from rural areas.

Motivated by these existing problems, this present study proposes that health professionals need to understand health service utilization in greater detail and from a consumer-oriented rather than solely a professional perspective. Shortell (1984), for instance, suggests that it is important to understand the factors associated with the use of health services, especially those that can be manipulated to improve the provision of care.

Figure 36.1 Framework for the study of health service utilization

Conceptual Framework and Research Design

This study is designed to systematically analyze determinants of health service utilization among the rural Thai population. The study framework (Figure 36.1) takes into account selected policy variables, community resources, and socio-economic, demographic and cultural characteristics of the consumers.

This study used a combination of quantitative and qualitative approaches on the assumption that a quantitative field survey design alone can neither provide sufficient insights into the reasons behind the study behaviors nor provide the researcher with sufficient data to permit insights into the total life situations in which respondents are thinking and behaving. Therefore qualitative approaches, i.e., direct observation, participant-observation and in-depth interviews, were used as additional methods to strengthen the validity of the cross-sectional field survey and village-level group interviews employed as quantitative approaches. They were also employed to provide descriptions and a well-founded rationale for explaining the study behaviors. This additional information was secured from the responses of the informants and not the subjective opinions of the researcher, and was used to enhance and explain the study's statistical findings.

The field survey and the group interviews were carried out at the same time. Participant observation and the in-depth interviews were carried out after the field survey in order to utilize the quantitative data for planning the qualitative research.

Study Population and Sampling

This study was conducted in Nakornsawan province in north-central Thailand. The field survey and the group interviews were carried out in 1987. A multi-stage sampling technique was employed, with a total of 620 sample households in 25 villages located in 4 districts. The population for the field survey consisted of 620 women (wives of household heads) who were interviewed regarding household characteristics, their own beliefs, and their attitudes toward and relationship with government health personnel at each level. The study population also included household members with events of illness that occurred one month or over one month prior to the survey and whose illness still remained as of the date of the interview. Each household member, with at least one illness episode, was interviewed about his or her individual characteristics, illness events, and health care utilization patterns for each event. However, if the ill-persons were young children, old persons, or were not available at the time of interviews, the information was obtained from the female respondents instead. Altogether, there were 1,803 events with which to analyze determinants of curative health care utilization.

The population for the village profile study were village key informants. A group of 6-8 key informants from each sample village were interviewed together to provide adequate and accurate information about their own village.

Moreover, during 1988 the qualitative approaches of participant-observation and in-depth interviewing were also employed in 4 sample villages to provide descriptions and well-founded rationale for explaining the behaviors under study.

In order to gain a more in-depth understanding of rural people's health care seeking behaviors, it was also necessary to study health care providers. Government and private health personnel, including some popular non-institutional practitioners from the villages, were observed and interviewed in-depth. The main purpose of the direct observation was to observe work performance, curative health care provision, the whole process of treatment provision,

and the relationship with patients of personnel from the government health center, district hospital, private clinic and private hospital, as well as the village popular non-institutional practitioners.

The in-depth interviews covered the health center personnel, the directors of district and provincial hospitals, the heads of provincial and district health offices, doctors from the private clinic and hospital and paramedical personnel, including the non-institutional practitioners. The purpose of the in-depth interviews was to specify and clarify the duties, responsibilities, problems and obstacles, available curative services provided, job satisfaction, and (in the case of government health providers) referral system and support received and given. In addition, patients using the health services studied were also interviewed about their illness episodes, the providers' diagnoses and explanations, the consumer and provider relationship, as well as the consumer satisfaction.

Major Findings

This chapter's next section will examine the reasons for the differential use of health providers in order to explain and predict the health utilization behavior of rural ill people. Health service utilization is, however, not a single behavior but represents a chain of behavioral events. When people feel ill, they must decide whether they should seek any health service or not, and if they do, where should they go. If the first treatment is unsuccessful, they must again decide whether or not they should seek any subsequent sources of treatment, and if they choose to do so, where to go.

Three models will thus be used in this analysis. The first model is presented in order to identify the determinants of the first source of treatment for each illness episode, regardless of the number of treatments sought. The second model explained why some ill-persons sought a second source of treatment and some did not. If they used a second source of treatment, a third model attempted to identify which factors determined their second source of treatment. Since there were few cases of people who sought third, fourth, and subsequent sources of treatment, the analyses therefore does not cover those cases. The models presented were derived from multivariate analysis of the quantitative data, in the form of a logistic regression model (see Kanungsukkasem 1991). The specific results of the multivariate model are not presented here, but are simply reported; they are then explained and enhanced using findings from the qualitative data.

Determinants of First Choice of Health Care Utilization

Of the five choices for first source of treatment available, buying medicine/self-treatment and going to a private clinic or hospital were found to be most likely to be selected. The other three sources, namely health centers, public hospitals and non-institutional practitioners, ranked much lower. The significant determinants of the first source of treatment found by the multivariate analysis included age, sex, usual health status, the nature of the illness (acute/chronic), the degree of severity, whether the ill-person held a membership in the health card fund and/ or village drug fund, the main occupation of the household head, the respondent's belief in spirits and in fate, the regular source of health services, and an index of community wealth.

Several individual characteristics of the patient significantly determined the first source of treatment. Women were found to be much more likely to go directly to private clinics or

hospitals when they feel ill, while men tended to treat themselves first. This may be due to several reasons. Women usually report more symptoms than men because as primary care givers in the families, they are sensitized to health problems. They may thus be more likely than men to seek help when symptoms occur. Because not all women work outside the home, they may also have more time and greater flexibility in scheduling and suffer less cost associated with medical use than do men, who frequently lose time from work if they seek medical attention.

Another reason men may try to ignore their health problems may be due to their masculine image, which suggests that they should tolerate minor discomforts. These facts are reflected in their differential choice of first source of treatment. Men are more likely to treat themselves first by buying medicine. However, they also go to the government hospitals more than women. It is possible that some men do not even bother to buy medicine until their symptoms are too serious to self-treat. They then perceive a need for more effective treatments, for which they choose government hospitals. Women, who are more aware of their health discomforts, are more likely to seek effective sources right away. The proportion of women choosing private clinics or hospitals, as well as health centers and non-institutional practitioners, is therefore higher (although the last two are not much different).

The age of the ill-person was found to be positively related with selecting self-treatment, government hospitals, or non-institutional healers as their first source of treatment. However, that association was weakest for the latter two sources of care. Being younger in turn increased the probability of going to private clinics or to hospitals and health centers. This is probably because parents usually take better care of their children than of themselves. They therefore do not want to risk just buying their children medicine, but would rather take them for professional help, such as nearby health centers or the more convenient and better service private clinics or hospitals. Adults sometimes think that their symptoms are not significant and that buying medicine in order to treat themselves first is good enough. If more effective care is needed, government hospitals or non-institutional healers, which are less expensive than the private clinics or hospitals, are often selected as their first source.

The results of the quantitative analysis showed that when people who rate their usual health status as good or moderate become ill, they are more likely to believe that their illness is minor. Therefore, trying to treat themselves first by buying medicine should be sufficient. Those who rate their usual health status as not good will be more concerned about illness symptoms as they occur. They hence seek more professional help from government hospitals or non-institutional practitioners, such as the injection doctors in their own or nearby villages.

Those who had a chronic disease were found to be much more likely to immediately seek help from the government hospitals, private clinics or private hospitals and non-institutional practitioners. In contrast, those with acute diseases were much more likely to choose self-treatment through buying medicine first. This may result from the differential nature of each condition. Acute conditions have sudden onset, sharp rise, and short courses. They are often serious, urgent, and demanding for attention. Buying medicine from nearby drugstores or general stores may be an attempt to immediately respond to the acute condition.

People with chronic conditions, on the contrary, may not recognize their conditions as illness in the beginning, or may regard them as very mild, and thus delay seeking treatment until they become more serious. They then need to seek a more effective first source of health services from non-institutional practitioners, private clinics or hospitals, or government hospitals, including government specialized clinics for some specific episodes of illness.

Degree of severity is another factor that determines the choice of first treatment. The more severe the symptoms, the higher the probability that ill-persons will seek their first treatment from non-institutional healers such as the popular injection doctors, as well as the convenient and effective (in their opinion) private clinics or hospitals. If their illness is not

quite severe, however, they are more likely to buy medicine to self-treat themselves first since it is the most convenient and inexpensive treatment.

The regular source of health care also has a strong impact on the choice of the first source of health care. People whose regular source of care is either self-treatment, non-institutional practitioners, health centers or government hospitals will be more likely to go to those places as their first source of care whenever they require health services.

Ill-persons from farm households, as measured by whether the household head's occupation was in agriculture, were found to have higher probabilities of selecting care from self-treatment, health centers, or non-institutional healers than those whose household heads were not in agriculture. One possible reason may be due to the nature of their occupations. Usually, if the household heads are farmers, almost all others in the household are considered farmers. Their work makes them bend in the fields almost all day long. As a result, their bodies often ache badly. They, therefore, need some fast pain relief medicine which they can obtain from drugstores, health centers, or the non-institutional practitioners, such as injection doctors, tambon (subdistrict) doctors, or any "quack" doctors.

Another reason may be an economic one. Thai farmers are usually very poor. In spite of their hard work, their income is very small compared to people with other occupations. They only receive cash when they sell their crops a few times a year, or only once a year if they are rice farmers; or they may not even receive any income at all in a bad year. Since the cash left after paying for debts is oftentimes minimal, they often do not have enough money to live on until the next selling season. Hence, they must spend their money very carefully. Consequently, they cannot afford to go to private clinics or hospitals unless some emergency arises.

Households whose heads did not work in agriculture, in contrast, were substantially more likely to seek private clinics or hospitals as the first source of treatment. This is probably because of their relatively better financial status which allows them to seek more expensive care from private clinics or hospitals. Even laborers sometimes earn more money than farmers, and they are often paid on a daily basis.

One obstacle for non-farmers in using health center services may be due to the latter's office hours. Some health centers do not have any personnel living at or near the center. If that is the case, patients have to see them only during their office hours, which are usually also their working hours. Therefore, in order not to be absent from work and losing pay as well, they would rather pay more at the private clinics or hospitals which offer them faster service and more flexible hours to visit.

Ill-persons from households where the women respondents strongly believed in spirits were much more likely to use self-treatment or go to the non-institutional practitioners, which included traditional doctors, spirit doctors and quack doctors. Others were noticeably more likely to go directly to more modern health care providers such as government hospitals or private clinics/hospitals when they are ill.

Possible Explanations for First Choice of Health Care

The explanation for the different first choice of treatment selected may be as follows. Since the women interviewed for the household survey are usually the care takers of sick family members, their beliefs about the causes of illnesses can influence treatment choices. If they believe that the illnesses are caused by supernatural powers, such as ghosts or spirits, care from traditional or spirit doctors becomes more relevant than that from other providers. People who believe in spirits may also believe that there are some illnesses that can be cured by traditional medicine, such as 'the extraneous winds' or 'poisonous winds' that enter into the

body and cause illnesses. Consequently, they will buy some traditional medicine to cure those illnesses by themselves or go to the traditional healers for treatment.

Fatalistic beliefs of household heads' wives also have an impact selecting the first source of treatment. Such beliefs increase the likelihood of buying medicine for self-treatment, going to health centers, or seeking non-institutional practitioners. People who have fatalistic beliefs believe that what happens to their lives is preassigned by fate; they are thus beyond human control. Illness, for example, is something that people cannot avoid, no matter how well they take care of themselves. With these beliefs in mind, they try to cope with their illness episodes as best as they can depending on the conditions. If it is a minor illness, they buy medicine to treat themselves. If it is not, they seek more efficient but inexpensive treatment from health centers or non-institutional practitioners. They would rather not expend more effort by going to the more distant government hospitals or spend more money by going to the private clinics or hospitals, because if the illness is to be cured, it will be cured anyway. So why travel farther or spend more money?

Membership in the village drug fund was not found to be positively related with buying medicine as the first source of treatment, as was expected. The answers from our in-depth interviews may resolve this unexpected result. Respondents stated that being members of a village drug fund does not prevent household members from buying medicine elsewhere. Normally, there is only one drug fund for each village, which is usually situated at the village health volunteer's or one of the village health communicator's houses. It is not necessarily located at the central spot of the village or at a convenient location where most villagers can travel to easily. Every village also has several general stores which sell groceries and some non-prescription drugs, such as 'pain-killers', 'fever reducers,' antacid medicine, cold tablets, etc. Most people prefer to buy medicine from those general stores nearby their homes instead of going to the more distant village drug fund in order to get the same kind of medicine.

Another reason may be because they often think that the medicine at the village drug fund is not as 'strong' as the medicine they buy from a private drugstore elsewhere. By 'strong', they mean powerful medicine which can cure or relieve their symptoms fast and is an appropriate treatment for medical problems of all degrees of seriousness, not only minor ones. At drugstores, people can freely buy any 'strong' drugs they want without a doctor's prescription. Respondents also complained that the village drug fund often does not have a variety of medicine and as a result, does not have the kind of medicine that they want. In addition some village drug fund salespersons, unlike the commercial drugstores, do not have adequate knowledge and cannot provide adequate advice to customers. In turn, members of the village drug fund are more likely to go to private clinics/hospitals. This may imply that they are, however, more health conscious and may be of a higher economic level than others. They hence can afford the more expensive private clinics or hospitals as their first source when they are ill.

Membership in the health card fund was also not found to increase the likelihood of selecting health centers as a first source of treatment. Persons who are covered by health cards buy medicine or go to non-institutional healers as their first source of treatment more than those who are not. The reason for this may arise from the extensive regulations involved in using health cards. Namely, there is a limitation on the number of illness episodes for which the health card can be used. The MCH (mother and child health) cardholders can use their cards only for free MCH services. Personal medical care cardholders can have free medical services for up to four episodes. The family medical care card can be used for up to four specified family members and is free for up to six illness episodes. All types of health cards are valid for only one year and can be renewed year to year. The cardholders are obligated to follow the referral system, which is hierarchical from the village facilities, i.e., from the village drug fund and/ or health center, upward. Priority services at health centers, district and

provincial hospitals are provided with minimal waiting time through a 'green channel' for those patients holding the authorized referral slips.

With this information in mind, cardholders may want to save the cards for more serious illnesses that may occur. If more non-serious illness episodes arise first, the real benefit of the card in terms of monetary savings is lost. Consequently, people are more likely to begin with buying medicine or seeking help from the non-institutional practitioners, if they consider that it is not worthwhile to use the cards for minor illnesses.

Another reason may arise from the fact that having health cards may not benefit everyone in the household. A personal health card is valid only for the specific person who purchases the card. A family health card is valid only for four specified persons. Thus, other family members who do not have their names listed on the card are not able to utilize it, even if the specified persons have not used all of the six free medical services allowed. Hence it is not necessary for them to follow the referral system. They, thus, are free to seek help from any sources they consider suitable for their illness and their situation.

The only characteristic of the community that was found to have a statistically significant association with first source of treatment is the community wealth index. This was created from the number and price of modern commodities in the community, including televisions and the vehicles that enable people to access the outside world easier or increase productivity (such as motorcycles, pick-up trucks and tillers). Therefore, besides measuring the community wealth, this index partly indicates how accessible the communities are to the health services available to them and how much health information the people receive as well.

In essence, the "wealthier" the community (measured by this index), the more likely individuals are to utilize health centers or government hospitals as their first source of treatment, and the less likely they are to buy medicine or go to the non-institutional healers. This index, however, does not seem to increase the likelihood of going to private clinics or hospitals. This is quite interesting, since it may indicate that if people are given more health information, they may be well aware of the available public health services provided for them as well as the appropriate steps for seeking health care.

Consequently, if the conditions are too severe to visit the health center, and if travelling outside the community to public hospitals or specialized clinics is as convenient as travelling to private clinics or hospitals since there are many private vehicles available in the community, it is very reasonable to try public hospitals first instead of going to the more expensive private health services.

This index may also indicate that it is probably not true that people do not want to use government health services. Health centers and district hospitals are sometimes not in the location where people can travel to easily. For example, no buses pass by, or it requires several transfers before they can reach their destination. This problem often occurs because the government health facilities are placed on donated or government land which sometimes is not in a central location.

The situation is different for the private clinics or hospitals. Since they function to a degree as businesses, they are often located in areas which are convenient and accessible. People often stated that it was much more convenient to travel to the private clinics or hospitals. In addition, the latter have more flexible office hours and offer better services.

Another inconvenience patients did not like about government hospitals was that some district hospitals did not provide food for in-patients. If they were far from the market place, it was extremely inconvenient for patients and their relatives.

In sum, if the government health services are made more accessible, this may very well lead to an increase in the amount of health center and district hospital consumers, especially from people who are now seeking their first help from drugstores or non-institutional practitioners.

Determinants of Seeking a Second Treatment Source

Certain persons seek only one source of care and cease looking for subsequent ones, while others look for additional sources. The study also examined the determinants of seeking a second source of treatment after the first one. With regard to age, it was found that the younger the ill-persons are, the more likely they will not seek further treatment after the initial one. Being older, however, increases the likelihood of seeking a second treatment source. One explanation for this is that people of different ages have different patterns of morbidity. Some child illness episodes may be serious in the first instance, but the child usually recovers quickly if proper care is given. Their better physical conditions may also help them to recover quickly. The fact that they receive better treatment in the first place from more effective health services than most adults do may be another reason why they do not need a second source.

An individual's usual health status also determines whether or not they seek a second source of treatment. Ill-persons who consider their usual health status as not good are more likely to seek a second source of treatment, while those who consider their usual health status as good or moderate are more likely to end their treatment after the first one. It is probable that patients whose usual health status is better can recover from their sickness faster or at least feel better sooner, given the same treatment. They thus do not need subsequent treatments, at least for the moment.

The nature of the illness is a very important determinant of whether a second source of treatment is sought, in that chronic episodes drastically increase the likelihood of seeking a second source. Since chronic diseases are long-term illnesses, they cannot be cured from just one treatment as can some acute episodes. The latter, however, cannot always be cured after one treatment either; this is why some ill-persons with acute episodes (although not many) seek a second treatment when they are not yet cured or do not yet feel better after the first treatment. In addition to the nature of the illness, the degree of severity also determines whether ill-persons would seek a second source of treatment or not. The more severe the episode, the more likely they are to seek a second source.

The fact that the first source of treatment is self-treatment may indicate that the illness was just minor, assuming that the ill-persons have a rational diagnosis of their episodes. The likelihood of seeking a second source for those who buy medicine as their first treatment is, therefore, lower than that for those who seek other sources in the first place.

Determinants of the Second Treatment Source

Once ill-persons decide to seek a second source of treatment, they have to make a decision about what their second choice should be. The third model examines which factors determine their second choice of treatment. At this time, self-treatment and non-institutional treatment are combined as one category due to the small number of cases of ill-persons who sought a second source of treatment.

Generally, private clinics or hospitals are most likely to be selected as an ill-persons' second choice of treatment. Government hospitals rank as second, with self-treatment and non-institutional practitioners ranking third. Health centers were the least likely second source of treatment.

Older ill-persons are more likely to select self-treatment, non-institutional practitioners, or government hospital services as the second source of treatment than their younger counterparts. It was seen that older people were more likely to utilize self-treatment or go to government hospitals for their first treatment. For people who seek less effective sources the

first time and do not feel better afterwards, it is reasonable that they would try to seek more effective methods (as perceived by them) as their second source, for which they may choose government hospitals or non-institutional healers. Some older people who go to government hospitals and find that their illness is not cured after the first treatment may find that it is not practical for them to travel to hospitals all the time. They may try to buy the same kind of medicine which they received from the hospital at a drugstore, or they may go to injection doctors in order to try some new treatment. They may, as well, buy traditional medicine or seek help from traditional doctors, since modern treatment did not cure their sickness. It is also probable that some older people think that their illness is not a serious matter. As a result, they buy medicine in order to treat themselves twice.

The younger the ill-persons, the more likely they are to seek a second treatment from private clinics, hospitals or health centers. One possible reason for this occurrence may be due to parents' concern about their children. If the latter are not cured after the first treatment, parents would rather take their children to the private clinics or hospitals which they believe offer effective treatment and give better and faster service, regardless of the higher cost. Some younger persons, whose sickness is not very serious and whose parents cannot afford to go to the private clinics or hospitals, may consider health centers adequate for their second source of treatment. They may thus seek them as a second source instead of buying medicine or seeking help from non-institutional practitioners.

Ill-persons who consider their usual health status as not good are more concerned about their illness. If they are not cured after the first treatment, they are more likely to seek their second treatment from the more efficient government hospitals. Higher level government hospitals, such as the provincial hospitals or the government hospitals in Bangkok Metropolis, have more doctors including specialists, and therefore are more well-equipped in terms of manpower and other resources to offer treatment for more complicated illnesses. It is therefore very rational that ill-persons with poor usual health status would select these health/medical care services as their second source.

Those who consider their usual health status as good or moderate, however, are more likely to seek other less effective and less expensive treatments by buying medicine or going to non-institutional practitioners or health centers. Nonetheless, they are also more likely to select private clinics or hospitals as their second source because of the convenience they provide. Private clinics or hospitals in rural areas may be less efficient than the government hospitals, since they include clinics run by the lower medical personnel (which are very common in the rural areas) as well as medical doctors' clinics. The private hospitals in rural areas are also small hospitals with fewer doctors, compared to government district hospitals.

People who try self-treatment or go to non-institutional healers first are more likely to go to health centers or private clinics or hospitals for their second source of treatment, while others who do not are much more likely to seek their second treatment from government hospitals. This may imply that rural people whose first treatment is not successful subsequently go to more effective sources, according to their judgement of the symptoms and their financial status.

Respondent's beliefs in spirits increases the likelihood of buying medicine or going to non-institutional practitioners as the second source of treatment. Some people believe that some illness episodes which cannot be cured after the first modern treatment may be caused by bad spirits. Consequently, they seek help from spirit doctors. In the reverse, they may seek their first help from spirit doctors and have the treatment fail. They may then try health centers, which are nearby and also inexpensive, for the second treatment. It is also probable that some people wait until after several unsuccessful modern treatments before they turn to the spirit doctors with a new hope. Therefore, they still seek modern treatment from a second source, such as health centers or injection doctors.

Fatalistic beliefs also influence the choice of the second source of treatment. They increase the likelihood of buying medicine for self-treatment, going to non-institutional practitioners, or government hospitals for the second treatment. The source selected depends upon the conditions of the patient. For example, if the illness still exists but the conditions are not severe, they may try non-institutional healers or even self-treatment. If the patient's condition is severe, they then seek help from the higher level public health services, i.e., government hospitals. Since they believe that illness is caused by fate, and whether it is going to be cured or not also depends on fate, therefore it is unnecessary to select the more expensive private clinics or hospitals as the second source of treatment.

The number of bus trips from the village to other communities, districts or provinces can indicate the accessibility to health services. The greater the number of buses traveling to and from the village, the easier people can reach the health services. Consequently, the likelihood of going to health centers, government hospitals, and private clinics or hospitals is increased. If there are only a few or no buses traveling to and from the village, the community is less accessible to health services. Consequently, the likelihood that the villagers will treat themselves or go to the non-institutional practitioners is thus higher than for villages that are more accessible to institutional health services.

Community wealth is another community characteristic that affects the choice of the second source of treatment. The impact of this index to the second choice of treatment is almost the same as it is to the first choice. The "wealthier" the community, the less likely villagers are to try self-treatment or non-institutional practitioners and the more likely they are to go to health centers for their second treatment. Some differences exist, however. Community wealth does not increase the likelihood of selecting public hospitals or specialized clinics as the second source of treatment, as it does with the first source selection. Rather, it increases the probability of visiting the private clinics or hospitals. This is understandable. If ill-persons have already tried public health services and their illness is not yet cured, they may turn to the private health services for the second treatment. Being members of the wealthy community, the higher medical fees and the necessity to travel outside the village should not be the major problems preventing them from visiting private clinics or hospitals.

Policy Implications

In order to be more fully utilized, village drug funds should have an adequate supply of essential drugs at all times. Their salespersons should be trained with enough knowledge about the properties and the proper usage of the drugs they sell as well as the dangers of the "strong" drugs so as to advise their customers. Besides this, appropriate location selection for new village drug funds and increases in additional branches for the existing drug funds in large villages should also be considered by the policy makers and planners.

Health card regulations should be adjusted to be more flexible and more attractive to most people. For example, the rule could be changed to make them more attractive and more practical by covering all specified family members. In addition, minor episodes that required only minimal care from health centers should be weighted differently from the severe or chronic episodes that need more complicated or longer-term treatment from the higher level health services.

Some improvements should be made to increase the popularity of health centers. These findings suggest that each health center should have at least two or three personnel and there should always be at least one staff on duty during the office hours. The current training curriculum of health center personnel should be reviewed and adjusted to be consistent with the nature of health and the needs of the people. They should also be convinced to study the

spectrum of diseases of their specific communities before starting their work in those communities. Continuing education programs should be provided to increase their efficiency and effectiveness.

Some interesting and useful health education programs could be offered while patients are waiting for services at the public hospitals in order to educate them and to make their waiting time more worthwhile. Continuous training programs to establish better relationships with patients should be set up. Health personnel's quality of service, manners, attitudes towards the patients, as well as their efficiency and effectiveness should be improved. A more flexible referral system should be formulated. People should be allowed to seek services from the nearest health facility and still be eligible to receive the authorized referral slips when necessary, even if the patient is not within the facility's responsibility. Backward or downward referrals should also be encouraged. Higher level health facilities should always refer minor cases or chronic cases back to the lower level facilities, such as district hospitals or health centers, with some supervision and guidance.

In order to increase the choice of health service alternatives for rural people, expansion and improvement of public transport and the rural road system should be encouraged and supported.

The government should recognize the importance of private health services. Some definite policies regarding private sector health services, focusing on quality control, licensing for private health services, and the support system should be formulated. Some collaboration and cooperation between government and private sectors should occur in several areas. Careful consideration should be made to include private sector health services within the referral system, which may be more beneficial to the patients.

Since patterns of utilization vary according to socio-demographic and cultural characteristics, policy-makers should be aware of this fact and should have different health policies and programs for different population segments.

Summary

This chapter focused upon explaining and predicting health service utilization behaviors through logit regression analysis as well as through qualitative data analysis. Questions like why people seek different health services, why some seek only one when the others seek several, and what factors determine their first and subsequent sources (if any) were discussed.

It is quite convincing that the rural people's decision-making about choice of health care appear to be made on a rational basis. They normally start from the simple treatments first, and if these are unsuccessful, the individuals move onwards to more complicated and extensive treatments provided by higher levels of health services.

There are several factors influencing these decisions at several levels. Certain individual, household, and community characteristics of the ill-persons can statistically determine which health services patients seek each time. Whether the subsequent sources will be further sought are, however, largely influenced by all need factors of the individuals. Nonetheless, government policies on village drug funds and health card funds, although being potentially significant factors, do not impact on the health care selection in the expected manner.

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Chapter 37

Khi Thut - 'the disease of social loathing': an anthropology of leprosy in rural Northeastern Thailand

Pimpawan Boonmongkon

Disease has been a part of life since the origins of humankind. Many diseases such as leprosy have become important parts of social beliefs, values and norms in communities where they have co-existed with humankind for an extended period of time. This chapter describes how the qualitative anthropological research process was used to uncover the social stigma surrounding leprosy in order to develop more sensitive prevention and rehabilitative programs - EDS.

Prologue

Jam lives in a small village in northeast Thailand. She is a 57 year old landless woman afflicted with leprosy. She has no fingers and only two toes, and has several open sores on her hands and legs. She has no eye brows, and her nose cartilage is collapsed. The muscles under her eyes are distorted and she is blind. Other villagers avoid talking to or meeting her and do not want her to come to their houses. Very few ever come to her house. They do not eat or drink with her, and do not sit where Jam has sat. They are disgusted by Jam's appearance and are afraid that they will contract leprosy by eating or drinking with her, or by sitting where she sat. Villagers do not buy the chickens Jam has raised because they believe these chickens ate Jam's excreta, which they believe contains leprosy germs.

On her part, Jam is happy to stay in her village rather than move to the leprosy colony, as health workers have often urged her to do. While she feels socially ostracized, she believes many villagers are not disgusted by her because they talk with her and allow her into their homes. They also give her financial assistance as well as food.

Introduction

Leprosy is imbued with a rich and complex mythology which results in negative social responses. However, I argue against the notion that a strong aversion to leprosy is universal. Leprosy is not stigmatized in every society and there are no universally held conceptions of

the disease. As Jam's case demonstrates, ostracism and the fear of leprosy may exist in a community without overt hostility.

This research is aimed at understanding the stigma of leprosy as a social and cultural phenomenon. The main purpose of this study is to investigate how the stigma of leprosy is constructed and maintained and its effects on patients and their families. The research also seeks to demonstrate how the use of anthropology can help to improve the planning of leprosy control programs. The knowledge gained from this study will hopefully provide information needed to develop effective strategies for destigmatization, and a community-based rehabilitation program. A study of the stigma of leprosy will also lead to a better understanding of rural Thai society and culture.

Leprosy continues to be a serious public health problem in developing countries. The population at risk of contracting the disease is very large, and more than one-third of all leprosy patients face the threat of permanent and progressive physical and social disability (WHO 1989). Only a few of these countries have developed satisfactory health education and rehabilitation programs designed to combat the stigma of leprosy and to rehabilitate these patients. In spite of the scientific information and successful treatment available today for leprosy, fear and prejudice associated with it remain strong in many countries. In most societies, leprosy is still viewed as a debilitating, incurable and socially ostracized disease. For this reason, we need continuing intra-cultural and cross-cultural studies concerning the stigma of leprosy.

Scholars point out that in Thailand, the stigma associated with leprosy varies from person to person (Leerapun et. al. 1989; Ramasoota n.d.). The country also has faced many changes in terms of social and economic transformation, and in advancement in medical technology. This is particularly the case in the implementation of multidrug therapy regimens, the so-called "rapid and effective treatment" for leprosy patients. In this regard, Thailand is a very useful setting for conducting a study on the dynamics of the stigma of leprosy, as it is undergoing rapid transformation.

Community Setting

Located in Northeast Thailand, the village of Noan Pa lies on a semi-arid plateau of Nakorn Ratchasima Province. The province is 250 kilometers from Bangkok. The village itself lies about 100 kilometers northeast of Nakorn Ratchasima city, and 16 kilometers from Pu Kum town. (To protect the confidentiality of informants, the names of villages, districts and individuals are pseudonyms.) The village of Noan Pa is under the jurisdiction of Pu Kum district. The village was chosen as the study site because of its location in a district with one of the highest prevalence rates of leprosy in Thailand (1.1 per 1,000 in 1987 for Pun Kum district and 0.5 per 1,000 in 1988 for Nakorn Ratchasima). The size of the Noan Pa village is rather small compared to other Thai villages. There are 75 households with approximately 400 inhabitants. The village was established 120 years ago by four families who came from another village, Sam Mung, one and a half kilometers west of Noan Pa. During the year of the study, eleven persons were diagnosed as having leprosy and registered as patients.

Data Collection

This is a multidisciplinary study which uses ethnography, oral history, life-history, in-depth interview, folklore, and reviews of Buddhist doctrine, health worker training manuals,

and government plans for the leprosy control program. The diverse data were not collected in isolation, because information collected using one method informs data collection using another.

Ethnography. This ethnographic study was carried out over a nine-month period (from March 15 to December 15, 1991) while the author was residing in the village of Noan Pa. During the study, I conducted participant-observation, informal interviewing and in-depth interviewing with a number of informants, and a census of every neighborhood household. Survey questionnaires were administered to every non-patient's household.

Oral and Life Histories. Fifteen oral history interviews were conducted with 5 elderly Noan Pa residents. Interviews were tape recorded and the tapes were transcribed. In addition, life-history interviews were completed with 15 patients and former patients and their families in Noan Pa village and three other villages in the vicinity. I conducted life-history interviews in order to record lifelong social experiences in relation to leprosy for each patient and his or her family. Five to twelve interviews were conducted with each case and most were tape-recorded except when the subjects found the recording intrusive.

In-depth Interviews. In-depth interviews with 45 patients and their families from 13 villages in Pu Kum district were performed. The interviews attempted to elicit information about beliefs in disease etiology and health-seeking behavior for leprosy, and the social, medical and emotional ramifications of the disease that existed among patients. Four village headmen and 4 village health volunteers from the other 13 villages in Pu Kum district were also interviewed to gain information on community attitudes towards leprosy patients, beliefs about disease causation, and health practices regarding leprosy.

Folklore and Document Reviews. This component focused on how folklore and documents (Buddhist doctrine, training manuals and leprosy control plans) referred to leprosy, and whether they contributed to producing and/or perpetuating the stigma of leprosy.

Participant-Observation. While living in the village for nine months, prominent among my methods of data collection was participant-observation. The majority of my time was devoted to observing, and the bulk of my field notes derived from my experience participating in the everyday social lives of nine leprosy patients, ex-patients and their families, as well as people who interacted with them such as villagers, health workers, and strangers from outside the community. To the extent possible, I participated actively in the lives of the persons with leprosy and their families in order to understand what it means both to them and to the people around them to have leprosy. My participant-observation focused on the daily interaction between the patients and non-patients, their likes and dislikes, fears and ostracism as well as the patients' adaptation to their stigmatized chronic illness. I helped them plough their fields and catch fish in the pond and participated during the patients' social interactions with other villagers. I also accompanied patients to the district hospital, health center, and leprosy colony, as well as to Bangkok. I went with them to many places such as gambling events, cockfights, grocery shops. On one occasion, I found a cane for a blind patient and helped teach her to walk with it.

Because I was with the patients, I was able to talk with them when they suffered because of community ostracism. Through participant-observation of everyday life and social interactions between patients and community members, I observed first-hand the experiences of stigmatized people. While participating in one village ritual ceremony, a leprosy patient with body deformities who was walking past a group of drinkers was teased by a man, "Don't let him drink with us; he will spread his disease." When I accompanied another patient who had developed body disfigurement on his hands and feet to the health center, I saw two children mocking that patient: "Look, look, the mad man is coming."

Measuring the Extent and Forms of Leprosy Stigma. During the second month in the village, my research assistant and I conducted a survey of every household, using

structured interviews covering demographic data, family and kinship patterns, economic status, health beliefs and practices, and questions about the intensity and forms of the stigma surrounding leprosy which exist in Noan Pa village. I had to discard my questions on the stigma of leprosy prepared from the literature because most of them were not relevant to the villagers' situation.

First, my research assistant and I had a few general and open-ended questions about what villagers think about living in the same village with persons with leprosy and interacting with them on a regular basis. Villagers usually presented rich information on the fear, revulsion, and ostracism of patients in everyday social interactions. I also heard several villagers use the term "the disease of social loathing" [*Rok Sungkhom Rungkhiat*] when they talked about leprosy. The term was introduced to the community by the health workers. Several villagers talked about their revulsion towards rice processed by the patient Jai because he used his clawed hands to touch the rice while it was at his rice mill. Several villagers showed similar revulsion about sharing a meal and drinking glass with a patient with visible deformities because they feared it might lead to their contracting the disease. Villagers also mentioned that they never bought or ate chickens from leprosy patients' households because those chickens ate the patient's excreta, which had leprosy germs.

After I saw the existing patterns of stigmatization of leprosy patients by villagers, I redesigned my questions. The questions used to elicit the intensity of stigma of leprosy were based on two levels: the villager's views towards the leprosy patients, focusing on (1) fear of disease contagion, revulsion, and ostracism, and (2) the behavioral manifestations based on the everyday social interactions between patients and communities: ostracism, segregation, and seclusion. These measurements comprised emic views because the questions being asked were drawn from the villagers' daily social interaction (see appendix).

Entry into the Community

Overcoming Fear. In studying the social aspects of leprosy, fear of the disease may make a researcher reluctant to conduct research on this topic. My interest in studying leprosy dates from 1986 when I was asked by an anthropologist colleague to help him conduct research on the social aspects of leprosy patients who resided in a leprosy colony. In the field, I was met by a large number of leprosy patients, many of whom had severe deformities. I was not afraid. I interviewed one *lepromatous* patient who was in a highly contagious state because he had never taken any medicine, but I never felt concern about contracting leprosy from him. In 1989, I was an interviewer in another project conducting research on *Health-seeking Behavior of Leprosy Patients in Northern Thailand.*

From these experiences, I was struck by the fact that although the stigma of leprosy exists, there is a lack of knowledge about what it is like to be a leprosy patient or how the patient adjusts his or her life to live with social ostracism in the society. Hence, I began to plan my research in the area of leprosy. After taking a leprology course, I realized that my extreme academic interest in the social aspects of leprosy and my thorough understanding of leprology made me overcome any fear of leprosy. The lack of fear of leprosy is an important quality for a person who attempts to study leprosy patients, as documented by Wiboonsawut (1988) and Pituckwong et al. (1989), Thai scholars who studied the social aspects of leprosy in Thailand.

The Researcher as Stigmatizer and Intruder. Confidentiality is always an issue in anthropological research but it is especially sensitive in the study of a stigmatized condition such as leprosy. A person with leprosy does not want to be identified as a patient. A patient's

acceptance of close interaction with a researcher who identifies herself as a person interested in the well-being of the leprosy patients sounds humanitarian. However, leprosy patients most often do not want to identify or call attention to themselves as such because of the stigma attached to the disease. To inform the community about my objective of studying the stigma of leprosy reinforces the notion of leprosy patients as a socially marginal group. A third problem is that identifying myself as studying the stigma of leprosy and conducting participant-observation during social interactions among leprosy patients and non-patients disturbs the natural setting of social intercourse. The non-patients would be cautious about discussing or showing ostracism towards the patients because of their awareness of being observed. In order to protect patients' confidentiality and prevent contaminating the natural social setting, I identified my objectives more broadly. I told villagers that my research objective was to learn about villagers' culture and overall problems in everyday life, especially health issues.

Neutrality, Detachment and Objectivity. Another moral and ethical dilemma I faced was to what extent does a researcher remain neutral, detached, and objective in the face of confronting community needs and expectations. During the first period of my study, I struggled to be neutral but a conflict arose for me. The mobile leprosy clinic was scheduled to be in the village on a certain day but the sub-district health worker did not come into the village to tell the patients and ex-patients to be at home at the time the mobile team came. I had information about this schedule, but I pondered whether to tell everyone that the mobile leprosy team would come and that they should wait for them, or not tell anyone and see who visited the leprosy workers. Further, I also asked myself whether, during interviews, if I should work to convince patients who never took any leprosy drugs or took them irregularly to re-evaluate their condition and to consider how important it is to take the leprosy drugs consistently.

In the end, I found out that it was impossible to be neutral and therefore spent time convincing patients to take the leprosy drugs regularly. Detached neutrality leads to overlooking community needs and problems and that neutrality seemed exploitative to me. Villagers, especially the leprosy patients in the Noan Pa village and the other villages where I interviewed patients, have been exploited too much already because of their poverty. So my research was not neutral, but it was objective, in the sense that it explained what it is like to be a person with leprosy in rural Thai society. During my nine-month stay, I chose to do things I thought would not be harmful to the community and to help patients with their problems. I followed the notion of compassion in Buddhism, "always do good" and help others who need help.

A Balanced Reciprocal Relationship. This relationship was important in developing trust and rapport with my informants. Mayer (1975:28) notes that field work requires a "balanced reciprocity relationship and information." Villagers became more acquainted with me and trusted me more as they learned more about me. As time went on, I gained more in-depth information from the informants as a result of their trust.

In a study of middle-class Americans, Ablon (1977) states that the "diminution of cultural barriers leads to increased personal visibility of the anthropologist and demands for intimate information." Since I am Thai and was studying in Thailand, I had little hesitation in sharing personal information. Villagers were always curious about an urban researcher who lived in their community. I had to share personal details such as my family and economic background, my marital status, and place of residence. These details were often shared in public places, for example, during the temple ritual and before the interviews started. I felt comfortable answering most questions because I shared many of the same values as the villagers. I felt that many times my social interaction with villagers was based on the exchange of personalized information.

There was always a part of the day when I sat with the villagers chatting and listening

to gossip and sharing my own thoughts with them. Sharing information also included sharing similar concerns. A 61 year old female leprosy patient, who denied having leprosy when interviewed initially, admitted to me and my research assistant in the third interview that she actually had leprosy. She also expressed fear and anxiety about her worsening symptoms and the fact that she had stopped using the medicines for many months. The truth was disclosed immediately after my research assistant expressed concern that the white patches and itching on her legs might be signs of leprosy. She recognized these signs because she had been with many leprosy patients during her last research project. I was surprised by the patient's quick reaction to my research assistant's remark, especially when I had earlier tried very hard with many questions to elicit from her that she had leprosy.

I also felt obligated to contribute some concrete benefit to the community. In order to create "a structure of reciprocity relationship" (Lipson and Meleis 1989:110) with the community, I donated money from my research budget to the temple, the village, and the local school. I was active in contributing advice and assistance in community works such as village meetings, youth group activities, temple activities, and school programs. For example, I offered to give lectures on the topic "health education" at the school. I gave the youth group some advice and helped run the youth fair.

Villagers, especially the poor and poor patients, requested several favors from me. For example, I accompanied five landless famiiies to the land department and helped them process documents establishing their legal ownership of their residential and gardening lands. I also donated food and bus fare to poor peasants and leprosy patients and photographed them free of charge.

In Thai society, the symbol of trust and respect is the giving of a gift. Sharing a meal together is another cultural code that shows a deeper level of relationship. I visited several families bringing gifts such as fruits and desserts I bought from the town market and shared meals with them. I felt so uncomfortable at the beginning of the project that I initially refused to eat with villagers because of my fear of the unhygienic condition of the food and eating utensils. My research assistant, however, had no fear of eating with villagers and most of the time she ate lunch with several families and rarely came home to eat with me. Sharing meals with villagers is one social factor that allowed her to establish rapport with the community more quickly than I did.

Interviewing Style. I used several interviewing styles to elicit different types of information from different social categories of informants. My interview techniques included formal interviews, informal interviews, and chatting or eliciting gossip. Formal interviews with note taking or tape recording elicited more systematic and direct answers to questions which were not too personal. Formal interviews also worked in the situation where I was viewed by the informant as the representative of authority. I was able to obtain the information because of the asymmetrical power relationship between me and my informants.

During my in-depth interviews with the patients in eleven villages, for instance, I approached informants for formal interviews and carried their patient records with me. Many leprosy patients would deny that they had leprosy because they did not want to publicize their disease for fear of ostracism. If the informant whom I asked for an interview denied that he or she had leprosy, I would not be able to continue my interview. However, with their medical records at hand, it was difficult for patients to decline to be interviewed on the grounds that they did not have leprosy.

For anthropological discourse, I propose the notion of "chatting" as a research tool to gain in-depth information from the community since formal interviews, many times, often did not elicit the information I needed. Several times, I discarded the formal interview and chatted with the informant individually or was part of a chatting group. Chatting in rural Thai society is the informal discussion that usually takes place in the villagers' houses, along the village

road, in the small huts, in the rice field, etc. The discussion covers villagers' economic, social, and religious lives, such as, "How much rice will Dang produce this year?" or "Boon's daughter, who works in a textile mill in Bangkok, is visiting home," and so on. Chatting includes joking and teasing among persons as well as gossip about the villagers' private lives, such as "Kao, a widow, is five months pregnant and no one admits to being the child's father." Chatting was an invaluable method for me because it gave me access to rich data and private information. In chatting, the issues discussed were depersonalized and a person could mitigate his anxiety about being responsible for the ideas that came out during the chat. From these chats, I learned the significance of the fear and revulsion of leprosy, the anxiety of contracting leprosy, the use of metaphor in everyday social discourse, etc.

Due to the longitudinal nature of the life history method, this type of interview did not work with some older, illiterate, poor peasants who were not accustomed to such discourse. Through the life history method, the researcher plays an active role by encouraging informants to portray their own autobiographies and comment on events as they came to light (Whittemore et al. 1989:7). Some informants did not remember well about events in their earlier lives. Most of the time, it was very difficult for me to elicit the emotional experiences and adaptive strategies adopted as responses to particular life circumstances that had happened in the past. Some informants had very short answers to my questions, only "yes" or "no" or "I don't know" or "I do not have anything to say to you." Some answered with very neutral tones, such as "Yes, I felt very sorry when my fingers and toes started falling off." Such answers made it difficult for me to analyze the answers in order to understand emic views and get the insider's perspective of patients' life experiences.

In some situations, the formal life history interview was replaced by an informal interview or chat which made some informants feel more comfortable about expressing their feelings and emotion. Life history interviews must be performed several times, together with home visits and participant-observation at home and in everyday life activities with their families to increase understanding about the context of the informants' life. I probed the same questions more than once with the informant and/or cross-checked with his or her spouse, other family members, as well as close neighbors. Family members and neighbors also provided additional information, which gave a complete life history of the person with leprosy. For example, every leprosy patient hid the fact that other relatives had leprosy and I always had to obtain this information from patients' neighbors.

The Use of Self as a Tool. Lipson (1991) reminds us about the influence of the use of self in ethnographic research. She pointed out that data elicited through the ethnographic method are influenced by the informants' evaluation of the researcher. The informant judges the researcher according to his or her personality, cultural background, age, gender, social status and professional background. I was conscious that villagers evaluated me from many aspects, such as being a married woman, a representative of authority which arose from my affiliation with health officials from the Ministry of Public Health, a professional teacher from the university, an insider (as a resident of Noan Pa village) and an outsider (an urbanized-middle class student).

During field work, I utilized these different types of perceived "selves." For example, claiming to be an outsider who wanted to learn about community culture, I asked many questions and expected villagers to answer every single one. Most villagers enjoyed telling me their own stories, for they wanted to "educate" me about their culture. Taking the role of an outsider, I assumed my informants would not ignore some bit of information because they assumed I already knew it.

Ablon (1977) recognized the influence of value and personality in anthropological research. The informants' perceptions of me as well as my personality and cultural background shaped the direction of my data. My own interest in the poor population and their emotional

response to landlords, whom I evaluated as economically exploiting the poor (e.g., charging too much interest on loans), influenced me to spend more time collecting data from poor informants than the landlords. I also felt uncomfortable talking with or visiting the landlords' families.

I had more difficulty approaching and eliciting data from married middle-aged men than from any other group in the study. Although I was accepted as part of a discussion group such as a drinking group, data gained from this population is not as detailed. Men were not as forthcoming with information during the interviews. Some married male informants kept their distance from me during the interviews because of the gender difference and my inability to establish rapport among them. I had good relationships with unmarried young men and women, married middle-age females, and the elderly (both male and female), and as a result data from these groups are richer.

Although Thai women enjoy a certain degree of autonomy and independence, a female anthropologist is more closely scrutinized than a male. My research with men aroused remarks and negative responses from some sectors of the community. Criticism surfaced when I spent time and had close contact with some middle-age married men who had the reputation for seducing women. For example, I was criticized by the woman who owned the house where I lived. I was told to stop travelling with the village headman on his motorcycle because his wife was furious about me spending time with her husband and suspected we might flirt with each other. I was warned by my landlord again that I should stay away from Loa, another middle-age man who had a reputation for seducing women. I felt demoralized. But later I understood that my gender was more important to the villagers than my professional role.

In summary, using the "self" as a tool for collecting data led me to balance my gender, cultural, and professional roles with community expectations. I also had to be aware of any effects from using "self" as a tool of data collection on the direction of the data obtained. I recorded methodological memos and analyzed them day by day and used them as methodological tools for identifying issues for more investigation and revised my methods of data collection. As a result, I devoted considerable time to collecting information from rich peasants in the later period of my study because I realized that I had not obtained enough data from them. Once I was close to the rich informants, I felt comfortable talking with them and could maintain an emotional balance during social contacts. I became more careful about social contacts with some male informants to preserve my reputation.

Research Findings

An anthropological discourse on the stigma of leprosy needs to explore stigma as a social phenomena embedded in the cultural, social structural, economic, political and historical context of Thai society. This study shows that villagers had developed folk classifications of leprosy, namely, non-stigmatizing leprosy called *rok ruen* which is characterized by white patches, and stigmatized leprosy called *khi thut* which is characterized by visible physical disfigurement and ulceration. The ideology of the stigma of leprosy is strongly felt and expressed verbally in the villages studied, but it is not manifested in actual social life. Self-stigmatization existed among the patients with visible disfigurement; they withdrew from most social activities permanently.

An illness may symbolize social beliefs, values, and norms. *Khi thut* has certain characteristics that lend it to figurative thinking about signs and symptoms, etiology, and the social features of those who have the disease. It is the beliefs about these characteristics of the illness which underlie the stigma associated with leprosy. Villagers viewed leprosy as a disease characterized by mysterious and aesthetically unpleasant conditions of disfigurement (e.g.,

bodily fluid secretions, skin color abnormalities), accompanied by a bad odor. The stigma of leprosy is created because villagers view a patient's body as representative of the "social body" of the unclean poor.

The stigma of leprosy continues to exist and is reproduced through several channels: 1) through the socialization process arising from families, school, and health education materials, 2) through the daily use of language in terms of non-neutral discourse on leprosy, 3) through metaphorical speaking which conveys the secondary meaning of leprosy as unclean, contagious, loathsome, and debilitating, and, 4) through the behavior of some health workers, who discriminated against deformed patients.

Significant factors mitigate the stigmatization of leprosy among village community members: 1) the Buddhist ideology of compassion and mercy (*mettasongsarn*) for those who are unfortunate, 2) the Thai notion of social etiquette in interpersonal relations based on politeness and affability (*kreng chai*), 3) the behavior of leprosy health workers as destigmatizers, in their emphasizing that leprosy is only a "mildly contagious disease," and integrating leprosy control work into the general health care system.

From this study, it is clear that there is a certain amount of variability in the stigmatization process involving leprosy patients. The stigma of leprosy varies from person to person and from time to time. Several significant factors that influence the dynamics of stigma formation regarding leprosy are found. First, social relations among the stigmatized and stigmatizers are embedded in the existing social structure. For example, neighborhood ties and the sense of companionship and acquaintanceship among villagers and patients with *khi thut* lessen aversion and fear of the patients. Second, economic class proves to be important in that the rich ostracize leprosy patients more than the poor, and the wealthy patient is ostracized from society less than the poor patient. Third, gender is an issue as women appear to shun patients more than men. Finally, following the historical context of the state's leprosy control program, in the period following the introduction of Western conceptions of leprosy, patients with bodily disfigurement and ulcerations became increasingly stigmatized.

A diagnosis of leprosy brings severe psychological suffering as well as a sense of shame. Patients fear being socially ostracized, or debilitated, and that they may spread the disease to family members. Ex-patients, especially those with bodily disfigurements, have to live with the fear of being ostracized and diseased all their lives. Persons with leprosy develop three major strategies to cope with stigma as they present themselves in everyday interaction: information management and concealment, destigmatization, and confronting stigma.

Leprosy patients suffer from chronic deteriorating body conditions. As a result, their illness strongly affects the social and economic dimensions of their lives. Those with *khi thut* restrict their physical mobility within the village, no longer working outside the village or in their rice fields. They face increased poverty.

The presence of leprosy, even in its most severe form of disfigurement, rarely affects existing family relationships. Family ties among husbands and wives and parents and children, are usually strong, which result in family members overcoming their revulsion and embracing the patient. However, the disease elicits severe psychological suffering in family members.

Health Education: Destigmatization

Educational messages in Thailand concerning leprosy (and possibly as well in other parts of the world), should be designed to eliminate the fear of disease contagion and revulsion. In addition, these messages ought to promote modification of culturally stereotyped beliefs that still exist. Certain aspects of existing popular beliefs concerning disease etiology might be utilized to design health education messages.

Leprosy health workers, and those involved with health education programs for combating stigma of leprosy need to be aware of the significant impact that social and cultural constructions have on producing the stigma surrounding leprosy. Health professionals should be made aware of how stigma is produced, and how it is directly related to their activities. Health practitioners at every level should be well educated about leprology and especially the transmission of the disease. As I experienced from the study, there is an inverse correlation between knowledge about leprosy and fear of leprosy.

The words "leprosy as the disease of social ostracism" should certainly be eliminated from health educational materials and no longer mentioned by health educators. Similarly, photographs of severe open ulcers in health education messages elicit aversion to leprosy patients in the community and should be discarded.

Educational materials for lessening the stigma of leprosy need to be designed within the framework of culturally diverse regions. In educational materials for the Northeastern Thai population, the folk concept of *mae* (small animal-like organisms) can be used as a substitute word for the bacterium *M. leprae,* which causes the transmission of leprosy according to the biomedical model. It can be emphasized that the *mae* of *khi thut* are not highly contagious, and are transmitted only via the single route of nasal droplets. It can be stressed that *mae* are not transferable through physical contact, sharing food, etc.

Villagers already understand the concept of "immunity." In order to destigmatize the fear of disease contagion, the concept of the existing immunity of the adult population should be emphasized. Villagers should be informed that only a leprosy patient who never takes any medication and is at one particular stage of the illness can spread the disease. Because the community has strong faith in Western leprosy drugs, it should be emphasized that the chances *mae* (the leprosy germ) will be transmitted from one person to another is reduced if that person has taken the drug regularly for a prescribed period of time.

The cultural stereotype of leprosy as an incurable and debilitating disease can be modified more rapidly if the leprosy control program succeeds in preventing deformity in the patient and ex-patient. Even now, there is evidence of a trend in the reduction of stigma associated with leprosy. This study reveals that young people had fewer negative attitudes and shunned the person with leprosy less than older people. This appears to be because they had personally seen fewer cases of patients with deformities. The fear and the stigma associated with leprosy persists because the community still sees patients with deformities.

Communities should be informed about the stages and types of leprosy. Cultural stereotypes of leprosy or *khi thut* as a disease characterized only by body disfigurement and ulcers must be changed. The community should be educated as to the early signs of leprosy (such as white patches, joint pain, and the loss of sensation), and not told such signs represent another type of skin disease.

Laws and norms in formal and nonformal codes (e.g., marriage law, government hiring applications), which marginalize and ostracize leprosy patients and ex-patients and regard leprosy as a "severely communicable disease," must be changed.

The findings disclose that patients suffered horribly from worrying about leprosy following the diagnosis. Educational materials have to incorporate messages that help the patient cope with the psychological and social effects of the disease at the time of diagnosis. There is also a need for health workers who diagnose and give treatment to convince patients to overcome their feelings of shame and fear.

Secrecy and denial as coping mechanisms of patients should be considered. When providing services in the community, the leprosy worker has to be sensitive to the stigmatizing process that may affect the patient. For example, it may be preferable not to visit the household contact cases at the school, nor to announce the names of leprosy patients for case holding in the village. There should be consideration of the rights to privacy, and the rights

of patients to withhold their names from the public. This is a basic right to which any patient with any stigmatizing diseases (such as AIDS) is entitled.

Educational materials for destigmatization should utilize Buddhist notions of compassion and merciful acts. It should be emphasized that a good Buddhist must not ostracize persons with a disease like leprosy (or AIDS) since they have suffered enough without the added strained of ostracism.

Self-Help Therapeutic and Rehabilitation Programs

Due to advances in medical technology, particularly the development of an effective chemotherapeutic program, the drug known as MDT has earned its status as the currently most effective means for controlling leprosy in Third World countries such as Thailand. The rapid decrease in the prevalence rate of leprosy in Thailand raises the real possibility that leprosy-free zones can be established in many areas of the country. However, the need remains to help ex-patients successfully reintegrate into their communities.

The Thai government's leprosy control program has not been successful in preventing or rehabilitating disabilities in patients who have otherwise been successfully treated. Such an accomplishment would surely improve the quality of their lives. In this study, the incidence of those who developed disabilities remained high. Although there are currently efforts by leprosy workers to offer health education for self-care practices in deformity prevention, in reality these efforts seldom affect patient practices. Disability prevention and rehabilitation thus needs to be given high priority in leprosy control in Thailand.

First, community-based self-care programs and procedures should be sufficiently flexible to be incorporated into the everyday life of patients. Community-based rehabilitation programs should be focused at the individual and family level rather than at the community level. The programs should focus on educating patients and family members to be relatively independent in caring for leprosy-related problems. Mobilizing community participation from volunteers or village leaders is often not helpful since volunteers, village leaders (except for some local healers) and other community members still view leprosy as a loathsome disease.

The study revealed that many local healers were not repulsed by patients' ulcers and body deformities. One local healer had treated a *khi thut* patient for her *ENL* (Erythema Nodosum Leprosum) reaction by using herbs. Local healers who do not shun the leprosy patient should therefore be mobilized to advise patients and families on deformity preventive strategies.

Patient education should emphasize measures to prevent bodily injuries. Patients with anesthetic hands and feet must learn to adapt their every day routines in order to prevent further disability. For example, they must realize that even the smallest ulceration can be potentially serious. The patient, with the assistance of the health worker, must identify those routine daily tasks that may cause injury, and take preventive measures. The prevention of ulcers and disabilities however requires a high level of motivation. One must maintain such continuous preventive behaviors as hand exercises to prevent contracture in paralysed fingers, soaking the feet in warm water, and massaging the hands and feet with skin lotion or oil. The process requires close and regular supervision, and follow-up from the health worker. As a result, health workers should make regular home visits to the patient's family (at least two times a month). This can be arranged in conjunction with the community work of the health worker from the health center.

An efficient referral system for patients who require more extensive treatment such as eye or hand surgery must be developed to prevent potentially more serious deformities. The availability of logistical support should be improved in order to facilitate prevention or

rehabilitation of disabilities: shoes for the patient who has footdrop, sunglasses and antibiotic medicine for ulcers or eye infections, olive oil for skin cracks, and so on.

This research also focused on the social structure associated with those who have leprosy. Northeast Thailand, which is considered to be the poorest part of the country and the area to which the government has allocated the fewest resources for development, has the highest prevalence rate of leprosy in the country. Like other infectious diseases, leprosy primarily affects the poor and its widespread occurrence in this region reflects the collective problems of Thai society: low income, malnutrition, and poor living conditions. Uneven resource allocation exacerbates the occurrence of many infectious diseases, including leprosy.

The successful prevention of leprosy, and rehabilitation of ex-patients who have been treated, requires confronting the societal and political problems of the country: the lack of mainstream participation of poor people in the country's development, economic deprivation, exclusion from the political and educational process, lack of land and good employment opportunities. Preventive and rehabilitation programs will not prove successful unless the government and health planners realize that unfavorable socio-political factors undermine program effort. It is clear that poverty and economic deprivation are important problems for those who have leprosy and who have developed deformities.

Efforts to teach preventive behaviors in order to curb the development of deformities will not be successful if patients must struggle for daily survival in conditions of economic deprivation and hunger. Poverty also exacerbates the problem of stigmatization for those afflicted with leprosy, and prevents them from fully reintegrating into the community. They are thus twice marginalized and excluded from society by their socioeconomic status as well as by their disease.

The folk concept of leprosy as the "unclean" disease, which partly creates the revulsion and leads to stigma, is based upon the social features of patients who are very poor. Government policy for any leprosy control program must acknowledge that leprosy is a foremost social, economic and psychological problem rather than merely a medical problem.

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Appendix

Interview and Observation Guideline

1) Background Information of the Community

   a) History of the Community
      Life and the establishment of the village

   b) Geographical Characteristics of the Village
      1. Location: distance from town, health services, another villagers
      2. City of Nakorn Ratchasima: History, ethnicity, connection with Bangkok, economy, contact with outside world, population characteristics
      3. District characteristic: Ecological setting, population characteristic, contact with outside world
      4. Ecological setting of the village
      5. Climate
      6. Geographical characteristic of the village and housing, pattern of residence
      7. Land and land use, water resource
      8. Communication and transportation

   c) Demographic Data
      1. Population distribution
      2. Education, migration, ethnic identity

d) Social Structure

1. The village community: sense of community
2. Relationship with outside world
3. Administrative divisions and factions
4. Social Stratification: Importance and distribution of land ownership and wealth
5. Power and political structure
6. Junior-senior relationship
7. Entourage
8. Kinship, kinship obligation and pattern of residence, role of kinship in relation to leprosy patient
9. Type of family structure, decision-maker in the family
10. Marriage and divorce
11. Woman's role and status within the family and public domain

e) Villagers' Belief System and World View

1. What is your ultimate goal of life?
2. What is a perfect life in the contemporary Thai's belief system?
3. Do you believe in *Karma*? What is the meaning of *karma*?
4. Do you think that all people are equal as human beings? Why are some people rich, poor, healthy, afflicted and disabled?

f) Health Care System

1. Disease etiology and type of treatment on: tuberculosis, AIDS, cold, simple skin diseases, leprosy, diarrheal diseases, dengue
2. Sources of treatment: herbalist, injectionist and other local healers, government health services
3. Local health problems
4. Water supply and sanitation
5. Nutritional status, meal/diet in everyday life
6. Family planning and maternal and child health

g) Economic Structure

1. Type of occupation
2. Economic level
3. Income and land distribution
4. Market place
5. Cash and subsistence economy/products
6. Everyday economic life

2) Life History Guidelines (For both patient/ex-patient)

a) Patient's Personal Data

1. Name, address, age, sex, religious belief, marital status, social status or involvement in social groups and social activities
2. Numbers of children and household members, social support system
3. Number of years of residence in the community; type of residence, place of birth, life-history since you were born: place of birth, what was your education?, life after education, how you met your spouse?, How your marriage was arranged? How much was your bride price? Where do you settle down after you got married? Migration story after the marriage, family planning method.
4. Do you own land? How do you own your land? How much land do you have? How much rice did you grow last year? Was it enough for selling? After

cultivation, what do you do? How much does your family earn from wage labor? Do your children send you any money? How much and how often? Any other sources of income? How much debt do you have now? For the person without land, ask about sources of income, type of occupation and the debt he/she has. Observation on the housing structure, utilities he/she has in the house.

5. Did you and your family members have any sickness recently? Do you have any personal health problem? What about the local health problems? What are the important health problems of the village?

b) Medical Information and Health-Seeking Behavior

1. Type of leprosy, degree of deformity
2. First symptom appeared, how long ago? Have any symptoms appeared on skin, nerve system and other part of the body? Type of treatment received and history of drug compliance
3. Problem of complication: side effect, relapse and reaction, intensity of physical symptoms.
4. Number of leprosy patients in household/kindred
5. Observation: Explain the deformity, ulcers, patches or redness on the skin and other symptoms: dryness, sweatiness, numbness, scars, etc.
6. When did you first recognized the symptom? What was the first symptom? What did you perceive as the first symptom? Whom did you talk to? What did you do? Why did you choose that treatment? Did it work after the first treatment? If you did nothing, why? How long did you do nothing? What did you do after the first failure? What was your second source of treatment? Why did you choose this treatment? Did it work? (Ask the same types of question if there is third, or forth sources of treatment)
7. What kinds of drug did you take? How often did you take these drugs? Did you take drug every day? Have you ever forgotten to take the drug? How often did you forget to take the drug? What did you do after you forget?
8. After you first took the leprosy drug, did you develop any abnormal symptom or sign? If, yes, what were they? Have you felt okay since you have been in the drug regimen? If, not, what did you feel? If you developed some reaction or side effects, did you still continue taking the drugs?
9. Did you have any member of your family or siblings that had the illness similar to you? If yes, how many? Who are they? What are their treatments from the beginning to the last treatment? Why they chose those treatment?

c) Belief and Knowledge about Leprosy and Treatment (For villagers and patient/ex-patient)

1. What do villagers usually believe about the causes of leprosy? What are your personal beliefs about the causes of your disease (leprosy)? Is leprosy contagious? How?
2. Can you avoid getting sick with leprosy? If yes, how?
3. Who can get leprosy? Can some people get leprosy more easily than others? Who are the most susceptible to leprosy?
4. Is leprosy a hereditary disease? If yes, why do some children get leprosy while others do not?
5. How many types of leprosy are there? What are they?
6. Is leprosy a severe disease? Why? Comparing AIDS and leprosy, which is more severe? Why?
7. Can a leprosy patient avoid getting deformity? How?
8. What are the symptoms at the onset of leprosy?
9. Is leprosy curable? What is the effective treatment available now?
10. Do you know about MDT for treating leprosy? What is it?
11. Where can one get treatment for leprosy? How long does the treatment take?

d) Popular View on MDT (For villager and patient/ex-patient)

1. When MDT was introduced into the community, what did people know about MDT?
2. (For ex-patients only) When did the doctor tell you that you were "cured" and stop giving you the drugs? How did you feel? Do you believe that you are "cured"? Do you still want to take any drug? Why?

e) Psychological Transformation, Adjustment, and Adaptation of Patients/Ex-patients

1. Who have you told that you have leprosy? How did you feel when you were told that you had leprosy? Please describe your feeling about yourself since you have leprosy? How has the feeling changed over time?
2. Did you first believe that your symptom was leprosy? Why?
3. What did you do after knowing that you had leprosy? Do you conceal your symptoms or not? How? (i.e., wearing long sleeve shirt all the time, never taking off your shirt in public?)
4. What do you think is the most worrisome aspect of leprosy for you?
5. Do you think your disease has affected your life? In what way?
6. Have you ever thought of escaping from your village or committing suicide?
7. What were the reactions from your family, relatives and neighbors after your disease became obvious? How have your relationships with these people changed after you had leprosy?
8. What about yourself? How have you tried to **adjust** yourself in relation to your family, relatives and neighbors? (Dimensions: having meal, sleeping, drinking, going to the temple, joining social activities, social feasts)
9. Do you think you are a burden for your family?

3. Guidelines for Patients' Family: Family Adaptation

1. Numbers of years living with the patient in this house?
2. How did you know that she/he was sick with leprosy?
3. How did you feel when you knew that she/he was sick with leprosy? Reactions of parents and other family members.
4. What kind of advice and support did you give to the patient concerning her/his sickness?
5. On-going family interaction and family's problems (observation by researcher).
6. Have you separated household utensils, food, drink, bedroom?
7. When the patient's symptom became severe, how did she/he react (i.e., depressed, self-isolated)?
8. Have you heard from the patient that she/he think about moving away from the village or killing her/himself?
9. Do you think that the patient's sickness has interrupted family relations?
10. Do you think the patient is a burden to the family or causes some trouble to other family's members? If yes, how?
11. Does the patient's sickness affect the other family members' relationship with community members and other relatives? If yes, how?
12. How do you manipulate the situation to make yourself accepted in the community?
13. Compare the relationships of the patient's family with the community before and after the diagnosis.

4. Guidelines for Community Survey: Level of Stigmatization

1. Someone mentioned that leprosy is *rok sungkhom rungkhiat* ("the disease of the social loathing"). Do you agree with this statement? If yes, please explain. Comparing AIDS and leprosy, which disease is more disgusting?
2. Do you ever visit these patients or do they visit you? Why? and Why not?

3. Will you have a meal with the patient? Why or why not?
4. Will you drink water from the patient's house? Why?
5. Will you take a bath from the same pond the patient uses? Why?
6. Will you sit where the patient sits? Why?
7. What would you do if the leprosy patient is thirsty and asks you for a glass of water? If you give him your glass, what will you do with that glass later?
8. If you must give a leprosy patient some money, what will you do?
9. If the patient or his/her family members cook some food or dessert, will you eat that food or dessert?
10. Will you eat chicken from the patient's house?
11. If you must go to Jai's ricemill to have him mill your grain and Jai used his clawed hands to touch your rice during the milling process, will you eat the rice and how will you cook it?
12. Will you let your children marry a leprosy patient?
13. How will you feel if you or your family members are sick with leprosy?
14. What kind of policy do you think the government should have for the leprosy patients in your village? Should the government provide a restricted area for patients to live?

5. Guidelines for Health Personnel

a) Health Personnel as a Destigmatizer or Stigmatizer

1. Observation on the patient-health personnel interaction during the health service process in terms of discrimination against patients and communication problems
2. Knowledge about leprosy in terms of the route of transmission, types of drug treatment, signs and symptoms of leprosy

b) Self-reliance for Disability Prevention

1. Does the health service system function efficiently to monitor and support the patients' practice of self-care for deformity prevention, detection of relapse and reaction as well as hospitalization, detection of relapse and reaction?
2. Can the district hospital function efficiently for providing technical support in teaching patients' self-care? Why? or Why not?
3. Do the health workers give health education about the disease and self-care for disability prevention? If yes, how often and what is the message?
4. What do the leprosy health workers tell patients and their families after the diagnosis?
5. Do the health workers pay attention to counselling for patients' problem in terms of the psychological and social problems that arise from the stigma attached to the disease? If yes, what do they do?
6. Expertise in diagnosing the early stage of leprosy.

Chapter 38

Socio-cultural determinants of filariasis prevention in Southern Thailand

Orathai Rauyajin
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Filariasis, also known as elephantitis, is similar to leprosy in three ways. First, it is an affliction characterized by a body's disfigurement. Moreover, depending upon the disease stage a person is in, he/she may or may not be stigmatized. Lastly, community members recognize different stages of the disease and use different lay terms to identify each. Since filariasis is a vector-borne disease, the authors advocate an ecological understanding of the disease, including an in-depth investigation into its etiology, behavioral causes and perceived risk - EDS.

Introduction

Lymphatic filariasis has long been endemic in 15 out of Thailand's 73 provinces. *Wuchereria bancrofti* and *Brugia malayai* mosquitos which transmit the disease are highly prevalent in the country's western and southern regions, respectively, where they breed in open swamps and swampy forests. Up to the present time, the Thai government has not conducted a national epidemiological survey; thus, morbidity rates are under-reported for endemic and non-endemic areas alike. Nonetheless, the Filariasis Control Division (FCD) of Thailand's Ministry of Public Health has reported the prevalence of *B. malayai* and *W. bancrofti* infection in endemic areas as 991 and 785 per 100,000 population, respectively (Sujarit 1988). *B. malayai*'s microfilarial rate was highest in Nakorn Sri Thammarat province at 1,555/100,000 population.

The consequences of filariasis infection are numerous. Many afflicted cases exhibit physical and mental disabilities, an impaired productive ability, and an extremely low quality of life. These originate not only from the disease process itself but also from the social stigma attached to the afflicted person.

To control filariasis requires both biomedical and behavioral perspectives. Thus far, the FCD has relied on case findings via mass blood surveys and chemotherapy as the major clinical control measures. Thailand's national Filariasis Control Program, furthermore, has

cited several behavioral problems characteristic of filariasis control, namely, migration, unsuitable personal protective practices and inappropriate self-treatment behaviors. These originate largely from inadequate health education programs and a lack of public awareness. Realizing this, Thai filariasis experts are proposing to strengthen health education interventions, which for the most part have relied on minor preventive and control measures (Sujarit 1988).

To formulate effective filariasis prevention and control guidelines and design appropriate intervention activities requires accurate behavioral information. This includes considerations of the socio-economic, cultural and psychological factors affecting disease transmission and control. Unfortunately, though, only one knowledge, attitude and practices (KAP) study exists concerning filariasis's behavioral dimensions, and it was undertaken in Thailand's western province of Kanchanaburi. The study revealed that 43% of the people did not know the causes of filariasis. Further, mistaken beliefs about its causes and transmission were common and led to inappropriate preventive behaviors. About 67% of the people, for example, did not do anything to protect themselves against mosquito bites (Rauyajin and Kamthornwachara 1991).

Filariasis's behavioral determinants and consequences, though, have never been investigated in Nakorn Sri Thammarat province, Southern Thailand, despite its being the highest endemic area of Malayan filariasis. This study, therefore, had as its main objectives to identify and explain the socio-economic, cultural and psychological factors underlying filariasis transmission and control within this province. Its specific objectives were to determine people's traditional knowledge and cultural beliefs about filariasis's etiology, transmission and symptoms; to assess people's perceived susceptibility to filariasis and its perceived severity, including local attitudes towards the disease; to investigate the social stigma attached to filariasis infected persons and the roles of social networks and social supports in disease prevention and control; and lastly, to determine the behavioral risk factors and existing preventive and illness behaviors associated with filariasis.

Study Site

To achieve these objectives, a three-month intensive anthropological study was made in a Buddhist village in the municipal (*muang*) district of Nakorn Sri Thammarat which is noted for having the highest filariasis morbidity rate. The study community was established about 100 years ago and is approximately 19 kilometers away from the urban municipal center of the province. It contains 1,233 people and 252 households with an average family size of five. More than half of the population (51%) are of working age and almost 40% are younger than 15 years of age. The remaining persons are 65 years and over. Most villagers (about 70%) have a primary level education and they pursue rice farming as their major occupation. During the off-season, young community members temporarily migrate to large urban centers such as Bangkok to work in factories.

The village and surrounding area contain residential dwellings, orchards, low waterlogged areas, drainage canals and sago forests. It is situated on a low-lying plains area to one side of a very large swampy forest and an open swamp. The latter is locally known as a *plu* meaning a huge natural water source. Living along the edge of the *plu*, which is an important breeding place for mosquitos, are several varieties of trees, land and aquatic animals. This area is a significant source of many natural resources important to the villagers' lives and livelihoods. In particular, the local people cultivate rice on the fertile land surrounding the *plu*. Fishing is also a major subsistence and marketing activity. Trees provide the raw materials for building houses, while the aquatic weed *kla* (akin to the American arrow-root) is used for making mats and other household products.

A monsoon climate produces a two-season cycle: a hot and dry season which alternates with a rainy one. While the former usually inhibits mosquito reproduction, the annual rainy period, which lasts 8 or 9 months, creates the swamps that facilitate mosquito breeding. In addition, the breeze which blows from the *plu* often carries with it infected mosquitos which easily reach the village.

Village houses are scattered along both sides of the community's main road, not far from the *plu*. Half of the houses are one-story thatched (walls, roofs) cottages; one-quarter are one-story wooden houses; while the remaining houses are two-storied and made of wood and cemented bricks. Most houses have two to six windows, none of which contain mosquito screening. During the day, these windows are always closed when no one is home, which is the majority of the time since both men and women work in the fields during the day. Consequently, little sunlight enters, making the houses a good place for mosquitos to rest on the shaded walls.

Other than filariasis, the most common village health problems are respiratory and viral infections and gastric disorders (peptic ulcers). Local health resources that are readily available within the village include local healers, a health center staffed by two health workers (one auxiliary midwife and one auxiliary sanitarian), along with village shops that sell common drugs. A general mobile clinic and a filariasis mobile clinic provide health services on an infrequent basis.

Methodology

This study used several qualitative and quantitative data collection methods, since no single method could answer all of the research questions and objectives being investigated. Moreover, data could more easily be triangulated and cross-checked concerning the specific socio-cultural and behavioral factors surrounding filariasis transmission and prevention.

First, an entomological observation study was conducted in collaboration with entomologists from the regional Filariasis Control Program. This study looked at the local mansonia mosquito's biting and resting habits to determine their effect on villager exposure, risk behaviors and preventive practices.

A household survey was also carried out to identify filariasis cases in the village, collect baseline population information, and data on the village's geographic and environmental conditions. Simultaneously, project personnel mapped the community noting all households and other important community locations to become familiar with the community, its layout, and to see the geographic distribution of households with filariasis cases.

Group interviews were held with community leaders using a standard open-ended interview guide to obtain general information about the villagers, community and way of life. Two focus group sessions (8 to 10 persons per session) were held to collect information on villagers' cultural beliefs, perceptions and opinions about filariasis transmission and prevention. Participants to the first session comprised community leaders, while the second session included a cross-section of knowledgeable community members. A focus group guideline was carefully designed, and discussions were held by a trained moderator. Tape recording and note taking facilitated data recording.

In-depth interviews with selected key informants from two separate groups were also conducted. The first group included knowledgeable elderly community members, local health personnel, health volunteers, filariasis control personnel, local healers, shop keepers, and relatives of filariasis cases. Information obtained from this group comprised the community's history; each person's perceptions, beliefs, and attitudes towards filariasis; and social stigmatization of elephantitis persons. The second group included persons afflicted with

filariasis (known hereafter as 'cases') and non-afflicted persons (non-cases). Thirty-five persons out of 75 cases were selected using a multi-dimensional sampling procedure. For non-case selection, the pair matching procedure was used to select the same number of persons with similar characteristics as the clinical cases.

Lastly, three experienced researchers conducted participant-observation investigations during the three-month study. This included participating in village life while observing villagers' risk behaviors, preventive practices, filariasis case illness behaviors, reactions to afflicted persons, as well as any other behaviors that might be related to disease transmission.

Local Etiology, Knowledge and Beliefs about Filariasis

Study results revealed that community members are well-aware of filariasis, and they believe it has been endemic since the village's establishment over a century ago. Most villagers, moreover, know a person who has enlarged legs, and the local name for this is *teen-to*. Although during their recent surveillance activities local filariasis personnel introduced the term 'elephantitis' into the village, community members are still not familiar with this 'foreign' term. Further, while filariasis is endemic and despite control program efforts, most villagers are still unsure of its etiology, symptoms, mode of transmission, and how to prevent it. Nonetheless, although they are unsure, most villagers could correctly identify filariasis symptoms and prognosis, largely because they have direct experience with the disease. Furthermore, other community members have had indirect experiences in that they have learned about filariasis through discussions with infected persons or from helping afflicted family members, friends, relatives and/or neighbors.

How villagers conceptualize filariasis transmission is interrelated with the concept of the disease's causation. Community members' beliefs, moreover, encompass both traditional and biomedical theories. In general, younger villagers hold more modern, scientific views, while older community members adhere to traditional beliefs. Following is a brief, more in-depth look at these beliefs and their bases.

Heredity. Community members believe that filariasis is a genetically transmitted disease. This belief stems from their own empirical observations of village families in that they have seen that most children of afflicted parents also develop the disease. Even when non-afflicted children have parents with filariasis, key informants explained that such children have most likely acquired a level of immunity from their parents which helps them to fight off the filariasis 'germs.'

Bodily conditions. Another important belief is that filariasis is caused by poor blood and air circulation in the body. This belief also comes from villagers' observations, since persons with elephantitis have enlarged limbs, usually legs. It is felt that this bloated appearance arises from inadequate blood or air circulation, where these collect in the afflicted limb. This condition is locally known as *klonlomtid* and it leads to swollen limbs and, at a more advanced stage, elephantitis or *teen-to*.

In the early stages of filariasis, lymph nodes in the inguinal (of or near the groin), axillary (armpit) and epitrochlear (upper ankle) regions become inflamed. Villagers believe that this is a symptom of filariasis and it is caused by no blood vessels across the arches of the feet. It will also lead to elephantitis.

Excessive physical labor. Villagers think that elephantitis can also be caused by long experience in carrying heavy loads. They also stated that long walks or prolonged standing could also bring about this condition and could cause pain in the thigh and knee areas.

Drinking or bathing in the *plu*. Community members have long believed that *plu*

water is not pure, and anyone who drinks it or baths in it runs the risk of contracting elephantitis.

Myths and supernatural forces. Supporting the above belief is a community myth which says that a very large tree is under the swamp forest's waterbed. Whoever drinks water that has flowed through that tree could develop elephantitis later on in their lives. Moreover, a large number of villagers hold a strong belief that it may be a person's 'fate' that determines whether or not he/she contracts elephantitis. Offended deities or malicious ghosts may also bring on the pains associated with the disease.

Personal contact. Most villagers believe that elephantitis can be transmitted from one person to another. This is thought to usually occur when a non-afflicted person massages an infected person especially if the latter has a fever or is in pain. Once again, this belief derives from community members' empirical observations. Over the past several years, many children who have helped massage an elephantitis person using their hands or feet developed a fever (which is one indigenously-recognized symptom of early filariasis). Consequently, villagers believe that the disease could be prevented by washing hands and feet immediately after massaging the afflicted person's body. Some also believe that elephantitis could be transmitted by skin contact, particularly touching the lymph node or the secretion exuding from an infected wound.

Some adults, though, believe that elephantitis cannot be transmitted from one person to another. They explained that according to their observations, several people who live with infected persons, and who share meals and personal and household items with them, have never developed the condition.

Community conditions. Lastly, the community's way of life has changed over the recent past, and villagers feel that its 'modernization' is another cause of filariasis. For example, electricity was made available in the community the year before, and villagers think that it has attracted an increased number of mosquitos compared to when the community had no electricity.

Animals in the community are another concern. Almost all villagers feel that cats could be one of filariasis's intermediate hosts. Actually, in April 1989, the local filariasis control center tested 60 village cats for the disease. Six of the cats, or 10%, contained *B. malayi* micro-filaria in their blood. When the infected cats' owners were notified, none of them believed their cats had filariasis. Moreover, five children from six households with filariasis reservoir cats occasionally develop inflammations of the lymph nodes.

Perceived Susceptibility and Severity of Filariasis

In-depth interviews with both elephantitis cases and non-cases indicate a range of perceptions concerning susceptibility and severity, and these are linked directly to the disease's indigenously believed etiology. For instance, most respondents associate their susceptibility with their family's disease history. Persons who have ancestors afflicted with the disease feel they are (or were) more prone to acquire the condition themselves. Others explain susceptibility in terms of physical conditions such as poor blood and air circulation.

Some respondents note that children who have the same blood type as their afflicted parents are highly susceptible to filariasis. A large proportion of the villagers also believe that elephantitis has an equal chance of arising without regard to sex or age. The former village headman, however, also said that children nowadays are not likely to contract filariasis. As part of their education, children are taught to do regular exercises which brings about good blood and air circulation.

Concerning severity, most community members feel that filariasis is not a severe

illness, since it does not cause death. However, they recognize that it would deteriorate a person's productivity and quality of life if severe symptoms occur frequently.

Risk Behaviors

For this study, any behavior that coincides with the mansonia's biting time is considered a risk behavior. Results from the study's entomological investigation indicated that the mansonia's peak biting times are during the evening (6:00 - 8:00 p.m.) and nighttime (11:00 p.m. - 1:00 a.m.) hours, though the mosquitos may bite anytime from 6:00 p.m. to 6:00 a.m. Moreover, the entomological study also assessed the mosquito infective rate which was found to be almost 67%.

According to participant-observation and in-depth interview data, the most common filariasis risk behaviors which coincide with these times include the following.

Rice farming is the village's major occupation with activities being conducted for about 6 months out of every year. In general, a community member's rice field is located close to their house and in close proximity to the *plu*. During the harvesting season (February to April), men work for long periods in the fields, oftentimes from 7:00 a.m. to 8:00 p.m. Since this time span overlaps with the mansonia's peak biting time, their chances of being bitten are relatively high.

Fishing is a common practice in the village since the *plu* contains an abundance of aquatic life, and fish represent a dietary staple in addition to rice. Persons who catch fish for home consumption usually do so during the daytime. They thus run only a slight risk of exposure provided they are not in a shady area containing the mansonia mosquito. Villagers who earn part or a majority of their income by selling fish, however, usually go fishing during the nighttime. They often live in huts located along the swampy forest or *plu* for a period of time ranging from a few weeks to four months. Fishing begins at around 4:00 p.m. and lasts until the early morning. Results from in-depth interviews indicate that filariasis cases are more common among these nighttime fishermen, than among persons who fish during the daytime for home consumption. The peak exposure time for fishermen is between 6:00 - 7:00 p.m. when they must stand still to bait the fishhooks. Although they wear long pants and long-sleeved shirts to prevent mosquito bites, they admit that this is not effective. They are still bitten on other exposed body areas such as the hands, neck, face and scalp.

Sewing nipa leaf thatching. From April to July, sewing nipa leaf thatching and making bamboo brooms are popular household activities of adult female villagers. To obtain the materials, the women must go into the swamp forest and cut nipa leaves. They then sew them into strips while sitting in a shady area of the forest where mosquitos are resting.

Guarding livestock and crops at night. Elderly villagers commented that, over time, the village has experienced several robberies. When the latter become more frequent, male villagers sleep outside at night without mosquito netting in order to guard their livestock and crops.

Recreation. From early evening until dark, most village children watch television programs in their own homes or those of neighbors. Often, they fall asleep in front of the television and thus are not protected with mosquito nets. In addition, children enjoy playing and fishing in the swamp forest. While they usually go there during the daytime, the children are exposed to the mansonia mosquito when they play or rest in shady areas. From in-depth interviews with two groups of children (asymptomatic cases and non-cases), results revealed that non-infected children usually did not play in the *plu* whereas this was a more common activity of the infected group. Hence, children's play habits comprise another important filariasis risk behavior.

Among teenage males, they often stroll around the village or congregate in groups in the evening. Further, they often sleep overnight at a friend or relative's house without using a mosquito net. They also watch outdoor movies and go fishing in the *plu* at night. For adult males who have finished their daily activities, they usually spend their leisure evening time sitting together chatting, drinking and/or playing cards without wearing a shirt.

Mosquito Bite Preventive Behaviors

Community members use several methods to prevent themselves from being bitten by mosquitos. They include swatting a mosquito that lands on the body, swinging a cloth to drive mosquitos away, fumigating the area (usually under the house) with smoke made from firewood or coconut husks, lighting mosquito coils, applying mosquito repellant or insecticide spraying (not well-known methods since the sprays and repellents are not available at local shops), wearing suitable clothing, and sleeping under mosquito nets. Villagers perform these preventive behaviors as both deliberate and non-deliberate filariasis control measures.

The most common prevention method is the mosquito net, and household survey results showed that every home had at least one mosquito net. Almost all villagers (93%) said that they regularly sleep under them. Some also use it in combination with another preventive method such as mosquito coils, smoking, fumigation, repellents or insecticide spraying. However, more in-depth probing revealed that during the summer months, the nets block cool breezes and disrupt sleep, so they are not used regularly. They are used regularly, though, in the winter time, since they stop cold drafts and improve sleep.

Development Stages, Symptoms and Treatment

When preventive measures have failed and a person is bitten by an infected mosquito, villagers can identify three separate filariasis development stages based on the disease's symptoms. These progressive stages are locally known as *fok-dun*, *marl*, and *teen-to*.

Fok-Dun

Fok-dun is associated with the inguinal lymph nodes, and some experienced villagers note that it is the first initial sign of on-coming elephantitis. The symptoms are felt to be common occurrences for children, and they might either disappear or develop into elephantitis when the child becomes an adult. Study results noted that the youngest community child who had *fok-dun* was 6 years old. Seventy-eight percent of children under 19 years exhibited *fok-dun* symptoms at some time in their lives.

When a person is in the *fok-dun* substage, treatment centers on relieving fever and inflammations in the inguinal lymph nodes. A person's help-seeking behavior, though, will differ depending on symptom severity. For mild *fok-dun* symptoms, the afflicted usually do not seek help. Rather, they remain bed-ridden until the symptoms subside. If the symptoms are severe however, the person will use one of several different folk healing methods combined with the use of modern drugs.

The first treatment involves covering the inflamed lymph nodes with ashes combined with water and made into a clay. The village elderly, who usually administer this treatment, believe that it will help reduce lymph node swelling and reduce the patient's 'hot pain.' While

this healing method has not been proven to scientifically effective (though its has in villagers' experiences), it is not harmful, relatively cost-free, and apparently improves the patient's ability to psychologically and morally handle the pain.

The second treatment entails using magical rituals. In this process, a magic formula is blown from the mouth onto the inflamed lymph nodes to make them disappear. As an alternative, some villagers use coconut husk fibers to bind the toe to the opposite side of the inflamed lymph nodes to eliminate them. Both healing practices reflect prevailing beliefs in the supernatural. Self-treatment through the use of drugs purchased at villages shops is also a common practice. Most of these drugs are for the relief of pain and fever such as aspirin, *vicool-dek* (a children's pain reliever in tablet form), local antibiotic drugs (such as *ya-ha-san*, *ya-hok-liam*), or herbs made into teas.

If *fok-dun* symptoms become severe, villagers will seek help from local government personnel at the village health center. Typically, such personnel prescribe tablets for fever and pain relief for new patients who are then referred to the Regional Filariasis Control Center for an accurate diagnosis. For confirmed cases, the Center will direct local health center personnel to prescribe Diethylcarbazine (DEC; discussed below) without a second referral. Most villagers who are currently taking DEC are primary school children and adults with infected lymph nodes who were diagnosed by the Center several years ago. After diagnosis, Center personnel asked school teachers and local health center workers to distribute DEC to infected school children and other villagers in their respective communities.

Marl

Marl, the second acute stage of filariasis, can be divided into three separate substages based on community members' perceptions: pre-*marl*, *marl*, and post-*marl*.

Pre-*marl*. After a person experiences *fok-dun* for some time, his/her condition progresses into pre-*marl* which has such symptoms as body aches, alternating periods of warmth and chills, pains in the thigh to below the knees, and excessive thirst. This stage typically lasts two to three hours per attack. During this time, patients will rest at home waiting to see if the symptoms will stop by themselves. They will also drink a lot of water to relieve thirst and a family member will massage them to relax the body. Most of the afflicted hold the traditional belief that *marl* is caused by supernatural forces such as evil spirits which have entered the body. These spirits will leave when a friend or relative in a nearby house begins to experience pre-*marl* symptoms.

***Marl*.** After a few days, the full-blown *marl* substage begins and completes the actual stage of lymphatic filariasis. This stage typically lasts several days or up to a few weeks. *Marl* symptoms include chills, recurrent attacks of fever associated with inflammation of the lymph nodes and vessels, fatigue, unconsciousness, and swelling and inflammation of the limbs. Hence, a person with *marl* often cannot work and requires bed-rest. Some people have a high fever with chills, febrile delirium, and exhibit aggressive behaviors. After each episode, their legs become red and swollen. Symptom episodes last from a few hours to one day. Thereafter, the body temperature decreases to normal. At this stage, the infected person must be cared for by family members. The entire substage lasts from several days to a few weeks, after which symptom severity diminishes and the person enters the post-*marl* period.

Treatments for this stage include covering the person with thick blankets to help ward off chills and drinking hot water to keep the body warm. Later as the body temperature rises, many take both traditional and modern medicines to reduce body heat. They believe that modern medicine lowers the body temperature (the symptom) while the 'cold' traditional

medicine reduces the heat inside the body (the 'cause'). These actions reflect traditional beliefs that illnesses arise from an imbalance of 'hot' and 'cold' elements in the body.

Ya-ha-san, a type of antibiotic (sulphadimidine), is popular among those who have *marl* symptoms. They believe the tablet helps reduce the severity of high fevers while also relieving pain. Children or other family members will purchase the drug for the afflicted. Important sources of information about this drug and its treatment for *marl* fever are village shopkeepers and former users who, after taking the drug, felt better.

Unfortunately, a person with severe *marl* symptoms will not seek care from either the local health center or the provincial hospital. The important reason is that they believe no Western medicine can cure *marl* symptoms. Therefore, they practice self-care through the help of family members.

Post-*Marl*. During the post-*marl* stage, an infected person is conscious, but fatigued. He/she will be thirsty, however they will also experience a loss of appetite, nausea and vomiting. Some people's limbs will again swell and become inflamed, and their skin will also start to peel. Any scars will also swell. These symptoms last for 3 to 10 days.

During this period, patients rehabilitate themselves by drinking coconut milk, eating sour fruits, and consuming as much food as possible to make them strong enough to work as usual. For those suffering from soft tissue swelling and transudation (oozing/exuding of fluids), they will pulverize a *ya-ha-san* tablet and put the powder on the wound to dry it.

Teen-To

Finally, *teen-to*, or elephantitis, is the chronic swelling of the leg(s) below the knee. A person who has had *teen-to* for a year will also show a thickening of the skin in the leg area and feet along with soft tissue swelling and transudation. Villagers state that only persons with at least one of these symptoms can be considered as being infected with filariasis.

Patients who have *teen-to* either treat themselves or seek care from provincial hospital personnel at symptom onset. They believe, though, that prolonged swelling of the limbs cannot be cured. Three popular folk treatments also exist in the village, and these have been passed on from one generation to the next. First, herbal medicines made from tree barks are applied to the swelling limbs. Villagers believe that this treatment will promote tissue shrinkage and reduce soft tissue swelling and transudation, thus returning the leg to normal size.

Second, the afflicted may bury their swollen legs in a pit and fill it with dirt. The aim is to break the wound through compression so the inflamed lymph nodes can transude, or ooze out. In this way, patients think the legs will become smaller.

Lastly, afflicted persons will scrub the arches of their feet with red ants. The purpose is to make the wound infected with the toxic substances produced by the ants. The patient will then scratch the itching wound causing the lymph node to transude. Once again, the intent is to reduce the size of the enlarged legs.

Filariasis Prevention and Treatment Beliefs

Beliefs in filariasis prevention fall into two categories which correlate to indigenous perceptions of disease causation. For villagers who believe that the disease is caused by *external* bodily actions or agents (such as drinking *plu* water, skin contact, mosquito bites, excessive labor), they also feel that the disease is preventable, largely by avoiding these causes.

However, most villagers feel that it is difficult to prevent filariasis brought on by hard physical labor, since most villagers are farmers who must work hard in the rice fields.

Villagers who believe in the *internal* bodily causes of filariasis (for example, heredity, poor blood and air circulation in the body) feel that the disease is not preventable. Some villagers do note that regular exercise can help maintain blood and air circulation within the body and thus prevent filariasis from this cause, but not others.

Regarding treatment, most villagers thought that a person who has had elephantitis for years could not be treated using any medication. However, persons who have *fok-dun* and *marl* could be treated using traditional healing practices and modern medicine. However, while symptoms associated with these substages could be treated, the disease itself could not be cured permanently and thus it would recur at any time.

Lastly, all villagers interviewed feel that surgery could not cure elephantitis, and this medical procedure would, in fact, make the condition worse. Their position stems from experience in that they have seen unsuccessful surgical operations (conducted in a Bangkok hospital) conducted on fellow villagers with elephantitis.

Attitudes Towards Filariasis

Villagers are not apathetic towards filariasis, and most feel that it is a horrible disease because it causes a person's legs and feet to swell to abnormal proportions. The afflicted also must suffer psychologically from the social stigma attached to them as well as the physical discomfort associated with chills and fever. Although the disease cannot cause death, villagers do not want to become infected. However, most villagers feel that the disease would gradually decrease by itself, since they have observed that the number of filariasis patients today is less than it was in the past. Most of the afflicted are also elderly, and when this cohort dies off, community members think the disease will completely disappear. In addition, the availability of modern, scientific drugs could help eradicate the disease.

Among villagers who have just entered the *marl* stage, what they fear the most is that every time the symptoms return, their legs and feet will become even larger. Alternatively, those who already have enlarged legs and feet do not fear repeated cases of *marl*. From their experiences, they realize that even though the symptoms occur frequently, the associated pain will decrease naturally without any treatment. For their enlarged legs, they have accepted this condition because they see it as incurable.

Social Stigmatization

Persons afflicted with filariasis will be stigmatized to varying degrees depending upon the disease stage he/she is in. Persons in the early stages of *fok-dun* are not stigmatized, because villagers perceive *fok-dun* as a common minor illness which lasts only a few days.

For persons who are in the *marl* stage, their families take care of them if the symptoms are minor. However, they do not want other people in the village to know about their afflicted family members. In general, minor *marl* symptoms do not openly or adversely affect normal daily activities. Among those who have full-blown (fulminating) *marl* symptoms that may last for several days or up to 6 weeks, their ability to work is greatly reduced. Villagers also refuse to marry persons with fulminating symptoms because they cannot adequately work and take care of a family.

The *teen-to*, or elephantitis, person carries with him/her a greater social stigma than

those with *marl* symptoms largely due to their more visible condition. In general, a *teen-to* person will be disliked and avoided by fellow villagers. The latter try not to sit next to a *teen-to* person because they do not want contact with the smelly fluids on the person's body. Some villagers said that, "If I had to have *teen-to*, I would rather die," or "I wouldn't marry a *teen-to* person even if he was a millionaire." Families of *teen-to* victims perpetuate this stigma. While allowing the afflicted to live in the same house and share its facilities, they refuse to eat with the person when he/she is experiencing acute symptoms such as lymph node inflammations which produce a smelly serosanguinous fluid.

A *teen-to* person often feels ashamed of him/herself, especially those who are single. They attempt to hide themselves by staying home and do not disclose to other family members about their swelling legs. When they must go out, they wear long pants or sarongs to cover their enlarged legs. When they go with neighbors, they walk and sit separately from the others because they do not want their companions to be offended and dislike them. When sitting, they try to hide the enlarged leg by putting the normal leg over it, which only partially hides the deformity. One of the *teen-to* said that, "Whenever I have to go out, I wish I could take off my enlarged leg and leave it at home."

For women with *teen-to*, they are extremely shy and often refuse to leave the house. One male *teen-to* said, "A man with an enlarged leg could ask a normal girl to marry him, but no man will marry or even ask a female with an enlarged leg."

Elderly *teen-to* are not stigmatized as much as their younger counterparts. They are familiar with the symptoms and they know that their neighbors recognize them as *teen-to*. Therefore, they have no need to hide themselves at home. However, they still do not want to expose their enlarged legs to strangers. When visiting other villages, they wear ankle-length pants or sarongs to hide their legs.

In sum, the degree of social stigma associated with filariasis varies from minimal to maximal depending upon the disease stage and its associated symptoms. As the disease progresses to advanced stages, it also depends upon the afflicted person's characteristics such as gender, age, and familiarity with the community.

Diethylcarbazine (DEC)

Since 1988, the Regional Filariasis Control Center began providing chronic lymphadenitis (*marl*) and elephantitis (*teen-to*) patients with DEC. They also educate these people about DEC's effectiveness in reducing fever and, if taken continuously for two years, its ability to reduce the size of enlarged legs (as earlier observed by Center personnel). Hence, some patients obtain DEC free of charge either from the local health center or directly from the Center. Despite this ready availability of DEC, a large number of elephantitis patients do not seek care or accept DEC from either of the above sources. Their reasons are five-fold.

First, since the Center has a limited supply of DEC, it has asked the local health center to distribute DEC only to the patients who were diagnosed by the Center personnel as elephantitis cases. These persons are listed on a roster of filariasis patients eligible for a DEC prescription. Afflicted persons, who are not listed on the roster, are afraid to even ask for DEC at the local health center. They also feel the role of health center workers is that of merely DEC distributors. Therefore, they cannot make proper diagnoses or DEC prescription decisions.

Second, patients with minor symptoms, which do not interfere with daily activities, use self-treatment methods to relieve pain rather than obtaining DEC. Further, some patients do not believe that DEC is effective for persons who have had enlarged legs for many years.

They also prefer to treat themselves using *ya-ha-san*.

Fourth, certain afflicted persons do not take DEC because they are afraid of side effects. These patients consist of those who have taken DEC and developed a fever that lasted 4 to 5 days. Rumors about DEC's side effects are also common, and these discourage initial use. In general, all such persons fear that side effects (especially fever) will reduce their ability to work. Lastly, there are still some villagers who have not received any information about DEC through either the health center or Regional Filariasis Control Center personnel.

Even among DEC acceptors, not all comply with the drug's recommended regimen and they often cease treatment altogether. Their main reasons for stopping treatment are: (1) boredom over having to take the drug for a long time; (2) growing fears about DEC side effects such as high fever, nausea, dizziness, vomiting, etc.; and (3) the long distance they must travel from home to the health center to obtain DEC. The latter is particularly difficult for elderly elephantitis patients.

Choice of Medical Treatment

As discussed earlier, patients use several treatment methods including varied self-treatment techniques, local healers, and modern health personnel. The reasons behind a patient's choice of treatment are as follows.

Symptom Definition and Severity

When a villager thinks that something is wrong with his/her body, he/she takes note of the symptoms and associates them with either *fok-dun*, *marl* or *teen-to*. The stage that correlates with the symptoms determines the different types of treatment and sources of care they will call upon.

Simultaneously, they also assess symptom severity. Not surprisingly, if the symptom is not severe, the person usually will not seek care. They will wait to see if it becomes worse or disappears. Alternatively, some persons might resort to self-treatment or folk remedies. However, if they perceive the symptom as being severe (especially if it adversely affects daily activities), they will seek medical care at the local health center or provincial hospital.

But the most important point here is that *villagers who are asymptomatic, but who have been diagnosed by Center personnel as having micro-filaria in their blood, are not perceived by villagers, or patients, as having filariasis. Hence, asymptomatic villagers often do not comply with the DEC regimen because they do not perceive themselves as being afflicted.*

Healing and Efficacy

Most patients select a treatment that they have used themselves effectively or one that has proven successful for another community member. Such treatments can include folk healing and/or modern medical care.

Relatedly, a patient's belief in a treatment's efficacy plays a major role in his decision-making processes. For example, patients who have taken *ya-ha-san* with positive results have increased faith in the drug's efficacy. Consequently, they continue to use the drug whenever a *marl* symptom reoccurs. Contrarily, if patients do not believe a certain treatment method is effective (such as surgery for enlarged legs), they will reject it.

Accessibility to Care

Filariasis is endemic in remote rural areas where health facilities are somewhat scarce. As a result, patients seek treatment from sources that are most accessible. These include local healers and village stores that sell drugs. Although DEC is readily available and free of charge, its sources (local health centers, Regional Filariasis Control Center) are comparatively inaccessible in terms of distance, time and transportation costs.

Lay Referral System

Choosing a treatment source is frequently *not* an individual decision-making activity. Other family members and persons belonging to the patient's wider social networks also have input into the decision-making process. For example, the wife of a filariasis case was frightened by her husband's *marl* fever. Without knowing that her husband had filariasis, she thought the fever was caused by an evil spirit. To go near him would put her in danger. So to avoid this, she asked her husband's mother to visit, but when the latter arrived she realized her son had filariasis. She then advised her son's wife about how to take care of him and where to go for medical care. Other family members, friends and neighbors also provided support by taking the man for folk healing treatments, purchasing drugs from village stores, and providing information on methods of healing that they believed to be effective.

Intervention Strategies

Findings from this study suggest several practical contributions for filariasis prevention and control programs. Regarding filariasis beliefs, modern day health education measures no longer center on identifying harmful beliefs, and then recommending (often in an abstract way) that these be changed. Experiences in trying to change many health problems have shown that trying to convince people that their beliefs are wrong is an extremely difficult, if not useless, process. Rather, emphasis must rest on determining what positive beliefs exist and using these as a means to change people's behaviors (Smitasiri et al. 1993; Yoddumnern-Attig et al. 1992).

For example, villager's lay etiology about filariasis's causes is complex, and many causes are recognized. Most of these, such as heredity, supernatural forces, and beliefs in poor air and blood circulation, would be difficult if not impossible to change. These beliefs have been passed down from one generation to another and are supported by elderly community members who have a powerful say in treatment selection especially at the disease's early stages. One belief, though, is directly related to filariasis contraction, that is the *plu*. Villagers believe that filariasis can be contracted by bathing or drinking *plu* water, and thus villagers indirectly realize that the *plu* is a source of contagion. Health education programs need to concentrate on this relationship between the *plu*, mosquitos which breed in its 'impure' water, and filariasis.

This is significant because approximately two-thirds of mothers realize that mosquitos transmit disease and that simple preventive measures, such mosquito nets, can prevent other mosquito-borne diseases such as dengue hemorrhagic fever and malaria. A small, but very evident, proportion also realize that it will prevent filariasis. Hence, most mothers use mosquito nets particularly during the winter months. Health education programs thus need to build on these maternal realizations and make logical connections between (1) filariasis as another mosquito-borne disease, and coincidentally (2) the need to use mosquito nets or other

effective preventive measures throughout the year. They also need to be shown how children's play activities may predispose them to mosquito bites and thus potential filariasis infection.

Furthermore, villagers recognize that filariasis has several different stages depending upon the symptoms a person has. Because the early stages of filariasis (*fok-dun*) has symptoms very similar to other childhood or common diseases, lay-defined filariasis is only truly recognized when a person reaches *marl* or *teen-to* stages.

Health education is therefore useless if it only tries to teach people the true symptoms of filariasis infection at a *fok-dun* stage. People will only become confused between it and other diseases, and they will continue to try self-care practices that have limited effectiveness. In villages where filariasis is endemic, therefore, health education needs to become more broader in scope. It should not focus only on diseases like filariasis, but it should center on symptoms. In short, health personnel need to tell people that any family members who have any symptoms associated with *fok-dun* should come for an examination at the local health center. In some cases, these symptoms may be related to other illnesses, but in others it may be directly related to filariasis. The aim here is to get people to come for an examination in order to detect filariasis cases as early as possible.

Communication between local health workers, Center personnel and villagers is the most important factor that influences villagers' health-seeking behaviors and treatment compliance. Moreover, all must come to a common point of understanding before effective communication can take place. More importantly, this common point of understanding is necessary for a common trust and rapport to be developed between all parties which is crucial for treatment and control programs.

For filariasis, local health personnel and Center staff must recognize and adopt lay filariasis concepts such as *fok-dun*, *marl*, and *teen-to* in talking with villagers about their conditions, rather than introducing 'foreign' terms such as elephantitis that have no meaning to community members or the afflicted. Once a mutual understanding has been reached, patient compliance and community participation with control programs can more easily follow.

Moreover, communication concerning potentially harmful home remedies and traditional treatments for filariasis (such as burying the leg in an earthen pit or applying crushed red ants) can be facilitated, and villagers may take the advise of health personnel more seriously.

But health personnel must be careful not to overstep their bounds especially with regard to villagers' risk behaviors. Villagers must have access to the *plu* for economic and food obtainment reasons. It is therefore not realistic for health personnel to tell villagers to avoid it. Due to the *plu*'s size, moreover, villagers cannot modify it along an ecologically sound basis to reduce mosquito breeding or prevalence. The only feasible avenue of prevention, therefore, is for health education efforts to focus on reducing or eliminating as much as possible villagers' exposure to mosquito bites, rather than on the *plu* itself. Many effective personal protective measures exist and should be more systematically and visibly promoted.

Moreover and especially in highly endemic villages, provincial health authorities should provide the resources to equip all houses with mosquito screening for windows as well as screen doors. Villagers already see the advantage of netting for protecting against mosquitos, and thus screening is not too large a step for them to take or accept.

At present, DEC is available at the local health center under a cooperative agreement between the Chief of the local Filariasis Control Center and the local health worker. This agreement, however, may end at any time if one of these parties becomes dissatisfied. To prevent this problem, a permanent referral system should be officially established and aimed at enhancing patient accessibility. Through training, local health personnel should be given a working knowledge on filariasis prevention and control, including symptom diagnosis and

DEC treatment.

Regarding compliance behavior, results reveal that many patients do not comply with the recommended DEC regimen. One of the important reasons for non-compliance is side effects. This issue needs further investigation to see if the side effects are actually real, or simply if rumors of side effects play a role in stopping treatment. Further, if the side effects are real, selective treatment with low-dose DEC and a longer course regimen might be one corrective strategy that would reduce side effects for eligible patients. Another alternative is providing the standard DEC dose regimen together with antihistamines and analgesics to treat symptomatic DEC side effects. The community should also be treated honestly and given increased information about side effects as part of early treatment. They would thus not be surprised and would know what might happen and how long associated side effects should last. They would then know what to expect and can more easily handle it.

Many school children have enlarged lymph nodes, and their mothers realize this condition is most likely an early filariasis symptom. However, these children have never been diagnosed due to limitations with the vertical filariasis control program such as the lengthy referral system, distance, transportation costs, etc. To interrupt the disease transmission process, these children must be accurately diagnosed via a blood test for microfilaria. To make the service more accessible to the community, local health personnel should be trained in simple diagnostic procedures and equipped with simple materials (microscope, slides, etc.). They also require training in DEC drug treatment. Another alternative is to organize *regular* mobile filariasis clinics to periodically screen community members. This should include an on-the-spot blood examination, appropriate drug treatment, as well as health education for filariasis prevention by protecting themselves from mosquito bites.

A risk group approach should be mobilized for effective health education programs. Occupational groups at highest risk of exposure to mosquito bites are fishermen, female producers of nipa thatch and bamboo brooms, and others who must go into the *plu* area regularly. Moreover, children whose playing and recreational habits promote their exposure to mosquito bites also present another risk group, but they are also an important filariasis communicator.

Many prior health education programs have shown that school children are the most effective health communicators because they are neutral persons (unlike health workers) who family members listen to (cf. Smitasiri et al. 1993). School-based education programs using children as school-to-home communicators need to be developed, pretested and implemented to raise community members' awareness about filariasis and its causes, prevention and treatment. Programs must be based on community action activities (such as a village house screening campaign) and supported by appropriate media activities to promote the prevention of filariasis. This comprehensive approach should focus on intersectoral cooperation among all health and social development agents *along with community leaders*. The Regional Filariasis Control Center can serve as the program's coordinator, and they should call upon specialists who are experienced in implementing such programs. Emphasis should be on developing a participatory community-based filariasis prevention and control program using a combined top-down/bottom-up approach. The former can provide coordination and technical support services, while the latter can center on program planning, implementation and evaluation.

The intent here is to raise people's awareness, involvement and participation. For too long filariasis has been recognized by health workers and community members alike, but this level of awareness has led to limited involvement, and usually only in terms of curative care. The referral system, moreover, only focuses on people who already have the disease (mainly those who are in *marl* or *teen-to* stages). Most commonly the afflicted are in the advanced stages of the disease, because early diagnosis rests on community members' understanding of

disease etiology, rather than on an effective, coordinated health communication and referral approach.

Therefore, emphasis now needs to be placed *not* on curative measures that are only effective in the short-term. Rather, attention and action must focus on using our in-depth understanding of filariasis's indigenous, behavioral underpinnings to develop effective prevention programs that are maximally participatory.

Notes

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Chapter 39

Traditional bone setting and its healers: thoughts, belief system and practice

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This chapter presents a unique look at a traditional healing practice that exists in many parts of Thailand. Thus far though, it has received comparatively little attention from either the medical profession or social science researchers compared to some of the more popular healing practices. According to the authors, traditional bone setting persists as a result of complimentarity between the thought and belief systems of both healers and patients - EDS.

Introduction

Through an extensive primary health care system that reaches virtually every rural village to the technologically modern hospitals of Bangkok and other regional centers, the Royal Thai Government has successfully increased accessibility to health care for the Thai people. But although such an achievement is readily acknowledged, many people continue to seek health care from traditional healers. Studies show, moreover, that traditional healing still has a place in Thai society and some techniques can effectively help patients especially for minor illnesses and injuries. The contention now is that if traditional healing is encouraged, it can provide the Thai people with greater accessibility to health care (Ruey-ajin and Kaewthap 1980). Furthermore, by understanding traditional healing practices in greater depth, it may be possible to integrate more 'modern' beliefs and methods into the traditional healing system such as the thorough cleaning of implements used in the healing process. Likewise, the positive psychological benefits of traditional healing on patients may also speed their recovery when modern medical techniques are used as well.

Traditional bone setting is one good example which shows the popularity of traditional healing in Thai society. As its name implies, the practitioner's objective is to repair a broken appendage (such as an arm, leg, finger) using methods based on traditional and/or modern practices. The crowd of people waiting to be cured by this healing practice can be found in every part of Thailand, from cities with modern health facilities to remote rural areas which rely heavily on health stations and paramedical personnel. Different methods of healing in this case reflect supernatural beliefs in almost every step of the healing procedure and in certain cases the complimentary use of modern medical procedures. Faith of the people in the healers and in the healing process can also be readily observed when visiting traditional bone setting

practitioners.

A number of researchers from Thailand and abroad, and anthropologists in particular, have studied the causes which support the existence of traditional healing, and many have investigated the relationship between the patients' socio-economic backgrounds and the use of traditional healing practices. One common assumption is that traditional healing is characteristic of people who are in the lower classes, since these people do not have enough money to afford modern medical care. Other research studies, though, have shown that this assumption is not always the case, since traditional healers in Thailand have clients from the upper to the lower classes. The emotional benefits in terms of a closer practitioner-patient relationship, psychological confidence in traditional healing's efficacy, world view and Buddhist religion are all cited as reasons why patients from every economic strata continue to seek out traditional healers (cf. Chen 1987; Hatiratana 1987; Keyes 1977; Leslie 1979).

Medical anthropologists believe that human behaviors, including health and health-seeking behaviors, are influenced by human thoughts, attitudes and beliefs, and vice versa. In looking at traditional healing using the above perspectives, researchers have often focused on patients' thoughts, beliefs and circumstances on the one hand and those of traditional healers on the other. It is the authors' contention, however, that for traditional bone setting at least, its persistence rests on a complementarity between these two actors and their thought and belief systems. In essence, both mutually support each other, and thus the persistence of traditional healing.

Objectives and Conceptual Framework

To test this proposition, the authors conducted a study on the thought and belief systems of traditional bone setters and patients which was supported by the World Health Organization through its Health Behavior Research Network in Thailand. The study had two main objectives: 1) to identify the relationship between thoughts and beliefs held by traditional bone setters and their clients with special reference to the healing process; and 2) to identify how traditional bone setting has adapted in terms of integrating modern medical practices into the healing procedure.

The study was guided by a conceptual framework (Figure 39.1) containing three main domains: patient, traditional healer and modern medical practitioners. Since this study addressed only the first two domains, the third was bracketed and considered only in terms of recognizing that it is also a health care-seeking choice. In this framework, the patient and traditional healer domains are intertwined by virtue of the relationship between the health care-seeking and healing processes. The former represents the patient domain while the latter is associated with the traditional healer domain. Briefly speaking and beginning in the patient domain, a patient's decision to choose traditional healing over modern medicine would rest on his/her own attitudes and beliefs in these two different, though potentially complementary, healing systems, especially in terms of perceived practitioner efficacy, as well as his/her own personal assessment of the causes and severity of their health problem. Based on their decision-making, they will select either medical practitioners, traditional healers, or sometimes both. If they choose either of the latter two options, they then enter the traditional healer domain.

Related with this is the nature of the traditional healing domain itself. While there are many points of divergence between this domain and its modern counterpart, this study focused on the processes of learning since these oftentimes heavily (if not solely) influence traditional healing and modern medical thought and belief systems. On the one hand, while modern physicians gain their medical knowledge through formal learning, traditional healers

Figure 39.1 Conceptual framework relating patient and practitioner selection domains

improve their prospects and continue to appeal to patients as a health care alternative because they (if they want) can draw on two different systems of learning: experiences in traditional practices as well as the methods and concepts learned in various ways from modern medical practices and/or practitioners. Traditional healers may then draw upon and integrate these into a single thought and belief system which serves as the core of their healing practice, and an attractive package for patients. This, in turn, gives them an avenue into the patient domain. Several good examples of these types of 'combined' traditional healers exist, including traditional birth attendants (TBAs), herbalists, injection doctors and traditional bone setters. In the first examples, TBAs and herbalists, while they are regulated to some extent, the Thai government encourages their participation in the health care service network even to the extent of giving training programs for TBAs and recommending the use of some traditional herbal preparations to help alleviate illness symptoms such as traditional preparations to relieve headaches.

Design and Methodology

Site Selection and Sampling

The study was conducted in three provinces in Central Thailand, the names of which will remain anonymous in order to secure the anonymity of the traditional healers and patients who were studied. The Central region was selected since on the average each subdistrict in this region has two traditional healers. Furthermore, there was no dialect barrier between the researchers and the healers and patients, since the researchers were from Central Thailand.

Within these provinces, nine locations which provided traditional healing services were visited, and three were chosen for study. They were selected because each was an area where traditional bone setting procedures integrated both traditional and modern techniques. The healers, themselves, had more than 10 years experience and were still actively providing services. And lastly, the traditional healing centers could provide beds for the patients to stay.

At the traditional healing centers, two population groups were studied. The first group contained 3 traditional bone setting healers: 2 monks and 1 lay healer (one in each province). In addition, a total of 15 patients who had stayed at the centers for healing for at least two weeks were interviewed.

Data Collection

Since this study focused on elucidating healers' and patients' thought and belief systems, a qualitative approach was adopted involving three data collection methods. First, in-depth interview guidelines were constructed covering relevant information on thought and belief systems as well as procedures used in the healing process. Besides this formal interview, sometimes informal chatting also brought about in-depth information (see Boonmongkon, this volume, for a discussion on 'chatting'). Both healers and patients seemed to be more relaxed during these informal conversations, because chatting without any obvious guideline or note-taking made respondents more open and familiar in talking with the researchers. This kind of discussion also targeted the spouses, relatives and friends of patients, so a wider amount of data could be obtained. Further background information about the patients, for example, could be gotten during the chatting sessions. For instance, one strong element in both informal and formal discussions was the strong faith the patients and their

relatives had in the traditional healers.

The third technique involved observation aimed at gaining additional data on the behaviors of target group members. Most of the questions used in the informal conversational settings, moreover, derived from observations. Both techniques, therefore, could be used to cross-check each other. For example, the researchers were surprised to find in front of one healing center that there was a large pile of plaster splints. They could not understand why they were there, so they asked the healer what the splints were for. He replied that they indirectly showed the people that he was a popular healer, because so many people had come to him. The splints also increased their faith in him as a healer for reasons to be discussed later.

The researchers recorded all information obtained from interviews and observations. During the interview sessions, short notes were taken, and these were elaborated on with details after the researchers returned to their research base. When respondents gave their permission, a tape recorder was also used to record interview data. However, it was not possible to tape record the lay healer since he refused to give his consent. The reason for this was that he had not been given permission to treat patients by local authorities. The researchers planned to solve this problem by taking as many notes as possible, but sometimes the lay healer asked to see the fieldnotes which contained all the information including the researchers' own opinions and comments about his healing. Needless to say, this alternative approach did not work either, so the researchers relied heavily upon their memories and only wrote up the notes after they had returned to the research base.

Besides note-taking and tape recording, photographs of healing procedures were also taken, but only with the permission of respondents. These photographs helped to remind researchers about the details of certain procedures as well as giving them a second chance to see the procedure and determine if they had missed anything that should be looked into further.

Data collection took approximately two months to complete. Two visits were made to each traditional healing center, and the researchers spent at least one week in gathering information at each center. One fieldwork day typically lasted about 10 hours. Sometimes, the researchers spent the night at the centers in order to observe healing ceremonies that only took place at night.

The amount of information obtained for each day depended on the number of patients who visited each healer. While the healers did not have much time to talk if there were many patients waiting to be cured, the researchers spent their time conducting observations (such as of specific healing procedures and symptom identification methods) and in interviewing patients. Any part of the curing process that researchers did not understand, they would ask the healer when he had free time. The researchers' intent was to disturb the normal routine of the healing centers as little as possible, so they could collect more accurate information about what really went on.

Gaining Rapport

The first step that needed to be taken once the project started was to gain the permission of the healers to be studied. Since the two healing centers run by monks were approved and visited by many government health personnel, these monks readily gave their consent. They freely gave the researchers as much information as they thought useful to the project. On the contrary, the lay healer was difficult to approach, and he was very apprehensive during the researchers' first visit. In particular, he was hesitant to answer questions about his healing procedures especially if they used modern medical techniques. After the second and third visits, however, the lay healer changed and became more relaxed,

because he came to understand more clearly what the project entailed, what the researchers were looking for, and that the researchers did not threaten either him or his practice by reporting him to the local authorities. As time progressed, he began to more freely give information, even that which was not requested by the researchers.

In gathering data from patients, the researchers faced the same problem as with the lay healer. During the first few days, the patients did not trust the researchers and were reluctant to respond to questions. In order to solve this problem, the researchers began talking with them about neutral issues that were of mutual interest to the patients and researchers such as the patients' homes, children, families, and community way of life in general. This steadily increased the rapport between the researchers and patients, and then the researchers began asking patients more in-depth questions about causes of their pain, their decisions to be cured by traditional bone setting, views on traditional versus modern health services, etc. As noted earlier, discussions were more free flowing and spontaneous when the researchers took as few notes as possible during the interview sessions.

Study Findings

Medical anthropological studies pay particular attention to the social context that influences an individual's thoughts and beliefs. The premise is that on the one hand, health behaviors, illness and health care-seeking cannot truly be separated from what the patients, their families, neighbors and communities believe. Furthermore, the determinants of these beliefs can be found within a community's cultural tradition which underlies the explanatory models people have about health and illness, their causes and proper treatments. These, in turn, affect decisions on the choice of healing place and practitioner (cf. Dendoung et al., this volume; Kleinman 1988).

The following findings follow this line of thought as they elucidate the relationship between healers' learning and curing experiences and their practices as well as the factors affecting patients' health care-seeking behaviors. The first section gives a brief profile and conclusions of the three healers in terms of their learning background, a sample of their healing procedures, use of ritual, and the integration of modern and traditional medical practices. Thereafter, patients' views on several areas are presented including the factors determining their decision to choose traditional healing, faith in the healers, environmental familiarity, and pessimism with modern medical practices.

The Healers

Healer A

Healer A is a monk who learned his profession from his father who was also a traditional healer. He cooperates with local health authorities by contacting health personnel and referring severely injured patients to health centers or hospitals. He also attends meetings that are held so that traditional healers and modern health practitioners can get together and become acquainted with one another. It is at these occasions that he learns about modern medical practices for bone setting.

When a patient with a broken foot comes for treatment, healer A sets the broken area using massage over a two to three day period before putting on a bamboo splint that is about 1 centimeter wide. Before putting on the splint, healer A puts holy (blessed) oil on the foot,

and this oil is made from various herbs and unguents. During each of these activities (massage, oil preparation, splint application), healer A conducts a ritual employing hand gestures and words. In particular, the ritual pays respect to the one who passed on knowledge to him every year and invites every patient's family and friends who are there to join in the ritual.

Besides this traditional ritual, healer A also uses modern medical techniques. For example, he uses X-ray film to help him in analyzing the symptoms. If he feels that he cannot help the patient, he will then refer the patient to health personnel for modern medicines and other cures.

Healer B

This healer is also a monk, and he learned to be a traditional bone setter from his father as well as another monk. Both of the latter were also traditional healers. Healer B has been heavily influenced by modern medical practices. Both of his mentors worked with modern medical personnel, and healer B's son and daughter are also modern health personnel. Healer B also actively seeks modern medical knowledge by reading magazines and consulting local health personnel.

Healer B sets broken bones by pulling on the appendage and resetting it into a normal position. As with healer A, healer B then applies holy oil and a bamboo splint which he then covers with cotton and a bandage. Healer B also uses rituals like healer A. Every evening, healer B conducts a ritual to drive away unlucky spirits and help to join the bone. He also uses a ritual in preparing the oil, in paying respect to those who gave their knowledge to him, and in encouraging a patient's family and friends to participate in the healing process. In addition, healer B blows holy water on the patient and gives his/her holy blessings.

Unlike healer A, healer B refuses to use X-ray film, though he does use a stethoscope and some other modern medical materials. He also gives injections and conducts other modern medical practices he has learned. When necessary, he conducts minor surgical operations including wound suturing.

Healer C

This man is the lay healer discussed above. He learned how to be a traditional bone setter from a traditional healer who used to cure him. Like healer A, healer C contacts modern medical personnel and refers patients to hospitals when necessary. He also attends meetings held for traditional healers and modern health personnel.

Healer C uses the same bone setting procedures as the previous two healers. The only rituals he uses, though, are while preparing the oil and in paying respect to those who have given him healing knowledge.

Like healer A, healer C uses X-ray film in his diagnosis. One of his assistants is capable of giving injections and suturing wounds.

Trends

The brief profiles presented above suggest three important conclusions. First, all three healers can be classified as healers who learned their profession through experience and the influence of other traditional healers. Their skill has been improved through observation and

practice as well as the continued seeking of new knowledge, especially from modern health personnel. However, none of the healers could assign any special theory associated with their healing. They felt that it was simply an innate part of them that had been cultivated over the years.

Second, although all of the healers live in separate provinces (which are some distance apart), they still used similar curing techniques. They understood that the bamboo splint prevented the bone from moving, and it was necessary to reposition the bone to as normal a position as possible before applying the splint. When asked why they used wood or bamboo splints, they explained that it helped the wound to recover more quickly, because these substances were porous and air could pass through more easily. In addition, they all used holy oil and rituals in their healing procedures, even though the details of how these were practiced were not the same. The oil and rituals can be explained in terms of their psychosocial function in curing in that they increased patients' confidence, trust and faith in the healers.

Lastly, all three healers have integrated modern medical techniques into their curing regimen. All of them also had regular contact with modern health personnel which helped them to learn new techniques, incorporate them into their thought and belief systems and then use them in their practice. Nonetheless, not all of the healers used or integrated modern techniques to the same extent. Observation and interview data agreed in that the lay healer used modern methods to a much greater extent than the monk healers who relied more heavily on ritual. This activity is associated more closely with monks, and thus has taken a more prominent role in their healing practices.

The Patients

Fifteen patients in the three traditional healing centers were interviewed, and the data show that most decided on their own to be cured by traditional healers. Only two teen-aged patients admitted that it was their parents' decisions to bring them for traditional treatment. This does not mean, however, that social influences do not play a role in affecting a patient's treatment choice. Results of interviews revealed that a patient's personal experiences with traditional healing and such indirect factors as recommendations of others, rumors, and personal observations of friends and family who were treated by traditional bone setting, also play a role in affecting health care decision-making. Patients revealed that before they came to see a healer, they already had a faith in him based on these personal and social forces. During their treatment, moreover, the curing procedures and skills of the healers, the rituals, and discussions with other patients increased their faith. This faith, furthermore, can be an important psychological factor in making the patients recover faster (Hatiratana 1987), thus strengthening the patient's faith even further in the traditional healer. One of the patients even called the lay healer *Mau Thevada*, or 'angel doctor.'

Nonetheless, several patients confided that they would prefer staying in a hospital where they would be more comfortable. However, they said that traditional bone setting could also cure them, and most felt that using both traditional and modern techniques was the best curative approach. They were particularly impressed with healers A-C because they used splints, holy oil, ritual and other traditional practices along with modern medical procedures, even X-rays. The combined use of both techniques by traditional healers, therefore, increased patients' confidence and faith in the traditional healing process.

The healing environment also played an important role in the healing process. The healers were well-known to patients since they lived in the same area. Most patients were treated out-of-doors, not in private enclosed rooms. They felt more relaxed, since during the curing process their relatives and friends could stay close to them and actively participate in

the healing rituals. Sometimes, relatives or friends assisted the healers by holding the patient still when the bone was being reset. This type of atmosphere relaxes the patient more, because the healing context is an open, family-centered affair, rather than a private, hidden activity done with the assistance of possible strangers.

Finally, most patients held bad impressions of modern medical practices. Two examples best point this out. First, the majority of patients did not like to be treated by modern medical personnel, because the latter invariably used a plaster cast rather than a wooden or bamboo splint as used by traditional healers. They said the plaster would make the wound more painful because it could not allow air passage. This is probably a rational objection, since anyone who has had a cast on can tell you of the itchiness and pain caused by a tight fitting plaster cast. This is one of the reasons why one of the healers had a pile of plaster casts outside his healing center. It showed not only that he had had many patients, but that also he was concerned for their comfort.

Interpersonal dealings with modern medical personnel also affect their reputation among the people. One of the most prominent examples cited during the project was of a woman who went to see a local doctor because her hand was injured. The doctor wanted to cut the woman's hand, but she became so frightened that she ran away from the hospital and sought help from the traditional lay healer who succeeded in curing her hand without having to cut it. Needless to say, this event which was well-publicized in the area increased people's faith in the healer.

Conclusion

The qualitative research study presented here shows that an investigation of the traditional healing process requires an in-depth look into the thought and belief systems both of traditional healers and patients. The results indicate that these systems have merged in that both healers and patients recognize the benefits of modern medical practices, particularly in terms of symptom diagnosis and the use of such procedures as suturing and injections. As a result, the traditional healers have integrated them into their personal *process of healing* which includes physical diagnosis and treatment.

But healing to patients and healers goes beyond this simple process of healing; it transcends into the *meaning of healing*. This meaning lies in the deep-seated psychological faith, trust and confidence traditional healers must instill in patients in order for the process of healing to fully take place. This is not a new point, since the value of traditional healers in providing psychological security to patients is well-recognized. What is interesting, though, is that unlike modern physicians who oftentimes are strict adherents to their own scientific practices, traditional healers are more flexible in accepting the value of modern practices for their patients. The next question becomes 'why.' Two plausible answers exist. The first and simplest answer is that traditional healers realize that modern techniques, like X-rays, can actually help them to diagnose and cure. Affiliating with modern practitioners and using their methods also improves the traditional healer's perceived efficacy, because he can send problematic patients to local medical personnel, thus excusing him from any further responsibility. Traditional healers thus accept modern methods from a "healer's point of view" and for a healer's benefit.

Traditional healers, though, have customarily been concerned most with the patient's state of mind, his/her psychological readiness to be cured. The healer already has the ability to insure a patient's confidence and trust by using such familiar sacred methods as rituals which are tied to the Buddhist religion and the patient's deep-seated faith. But why stop there? By adopting modern medical procedures along with traditional ones, the healer can provide a

second level of patient psychological security. In short, when a patient comes to a traditional healer, the latter probably already knows that the patient would prefer to go to a hospital. This information was readily obtainable from patients during interviews, and it can generally be assumed that most healers are aware of modern medicine's general acceptance by patients. What the traditional healer does is soothe the patient's fears further by using not only traditional methods but also modern ones. The healer thus gives the patient a 'double-dose' of psychological security in his healing practice by using traditionally held local beliefs (such as religion) along with more modern beliefs in the power of modern medicine. As a result, the thoughts and belief systems of both traditional healer and patient merge as they both focus on the *meaning of healing* which is using a holistic approach (traditional healing with modern medicine) to health care.

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Chapter 40

Socio-cultural factors affecting breastfeeding duration in Thailand

Panee Vong-ek

Breastfeeding is a beneficial practice that not only improves the health and nutritional status of infants, but promotes closer mother-child bonding and its psychological benefits. But while this practice is often thought to be heavily influenced by a mother's wishes, in fact many cultural and social factors come into play that may interfere with its initiation and duration - EDS.

Introduction

Promotion of breastfeeding is an important development policy in many countries since it affects child nutritional status, survival and development. The initiation and duration of breastfeeding are influenced by a host of factors, not the least of which is the social and cultural environment surrounding the woman and her family.

While many previous studies in Thailand have investigated breastfeeding patterns and other infant feeding practices, relatively little has been mentioned about the socio-cultural factors affecting breastfeeding duration. This is important since although it is commonly believed that breastfeeding is almost universal among rural Thai mothers, malnutrition's prevalence among rural infants is still high. In rural Northeast Thailand, for example, the prevalence of combined first, second and third degree malnutrition is 30%. For Central Thailand, it is lower at 11%. For Northeast Thailand especially, this rate is well exceeds the national average of 17% (Tontisirin 1992).

The determinants of malnutrition are numerous and include other areas besides breastfeeding such as supplementary food practices. Also like breastfeeding it is heavily affected by socio-cultural conditions. For a more complete picture of the forces shaping breastfeeding duration, which also may play a role in malnutrition's persistence among rural infants, this study focused on uncovering maternal beliefs affecting breastfeeding duration in Central and Northeast Thailand. Using these beliefs as a starting point, nutrition communication messages and diet-based action programs can then be built and adapted to accommodate and exploit existing beliefs (Yoddumnern-Attig et al. 1992).

Materials and Methods

The research was conducted in eight villages, four each in Sakon Nakhon province, Northeast Thailand, and Ayudhaya province, Central Thailand. For each village, the research investigation adopted a qualitative data collection approach that correlated with three main methodological phases, namely, participant-observation with informal interviews, in-depth interviews, and focus group discussions. All interviews employed an interview guide that took into account such aspects as breastfeeding beliefs and patterns, infant feeding practices, traditional food beliefs, and maternal perceptions of child health and illness. In total, eighty married women of reproductive age (15-49 years) who were breastfeeding or had ever breast fed were interviewed in-depth. Eight focus group discussions were conducted with fifty-six women, with each session comprising seven women.

The project was supervised by an experienced principal investigator. For data collection, four research team members were recruited, each of whom possessed a Bachelor's degree in one of the social sciences and was able to speak the local dialect. Prior to the actual fieldwork, one week of intensive training was held so that everyone involved knew exactly what were the study's objectives. In the training period, a brief field study was undertaken to familiarize research personnel with the study's methodology and data collection instruments. After this stage, a few days were set aside for discussing problems and improving the study's instruments. During fieldwork, the research personnel were divided into two teams by region. Both teams were closely supervised by the principal investigator on weekly to monthly bases.

Socio-Cultural Context

The four research villages in Sakon Nakhon province, Northeast Thailand, contained a predominantly Theravada Buddhist population. The majority of the people were farmers who cultivated glutinous and non-glutinous rice for home consumption rather than for sale at local markets. Most household income derived from agricultural wage labor and/or the cultivation of small vegetable farms. One research village contained a health station, while people living in the other three villages sought health services from nearby villages. While most women had health personnel assisted deliveries, a minority delivered at home using traditional birth attendants. Whenever delivery complications were foreseen, women would go to a health station.

In Ayudhaya province, Central Thailand, the people are also mainly Theravada Buddhist. Most people were farmers who cultivated non-glutinous rice and supplemented their diet by fishing. Since these communities were located relatively near to Bangkok, many community members worked in factories after the harvest season. Such workers commuted daily (via rail transportation) or rented houses near the factory sites. During planting and harvesting seasons, they returned to the communities. Extended families were common in both research provinces where grandparents assumed the role of child caregivers while the children's parents worked either in the field or factories. Health stations were located in the Ayudhaya research villages, and villagers would seek assistance when they had an accident or minor illness. In addition, the government health referral system required them to go to the local health station before going on to the community hospital. Since these communities were relatively near the nation's capital, though, most people sought better services and treatments from Bangkok hospitals. For child delivery, almost all women gave birth in large modern hospitals in Bangkok.

Results

Breastfeeding is widely practiced among women in Northeast and Central Thailand. For both rural and urban areas, the proportion initiating breastfeeding has increased as indicated by declines in the proportion who never breast fed their children (Knodel et al. 1990). The percentage of urban mothers not breastfeeding at all is 9% and for rural mothers 2%. The average median duration of breastfeeding in rural areas is 18 months, with the longest being noted for the Northeast (18.7 months), compared to 4-6 months among urban mothers. In Bangkok, average breastfeeding duration was 4.5 months compared to about 13 months in other Central region provinces. Further analysis by residence and educational attainment shows that regardless of residency, breastfeeding duration was longer among women with less education. It has not been reported, though, if the differentials were related to the nature of mothers' employment (Winichagoon et al. 1992).

In rural Northeast and Central Thailand, the socio-cultural forces affecting breastfeeding duration, as uncovered in the present study, fall into five categories: perceptions of child growth and development; supplementary food use; attitudes toward advertised, commercially prepared milk substitutes; maternal food habits; and the psychological impact of mother and child bonding.

Child Growth and Development

The influence of mothers' beliefs on breastfeeding practices and duration is particularly evident in terms of child growth and development. According to mothers, a baby under one year of age is supposed to be poor to many illnesses and still require breast milk. A cultural distinction also exists between the nature of breast milk coming from the right or left breast and its relationship to child nutrition and growth. In short, the right breast represents rice (Thailand's main staple), while the left breast represents water. Mothers clearly explained that either regular non-glutinous rice or glutinous rice are Thailand's super-cultural foods and thus a baby should be alternately fed with both breasts, that is with rice and water. As a Central region mother noted,

> *My mother taught me to breastfeed with both breasts in order to represent rice and water. Whenever an adult eats rice, they always have water. Children also require the same thing.*

The belief's impact on breastfeeding duration relates directly to perceived milk production. It has been reported that maternal milk production in rural Northeastern villages, for example, is much less than that of healthy mothers reported in Western countries. The average milk produced during the first six months after birth was 585 ml. and declined to 521 ml. by 12-18 months (range of 400-600 ml/day). For mothers in the West, this amount is 850-1000 ml/day (Winichagoon et al. 1992).

A common complaint of rural (and urban) mothers is a lack of breast milk which causes them to feel that the child is not receiving enough nourishment, either physiologically in terms of milk production or culturally in terms of the rice/water, right breast/left breast distinction. If a mother thinks that her right breast is not producing enough milk (or 'rice' in a cultural sense), she will feel that the child may not grow or develop to his/her fullest potential. As a result, she may stop breastfeeding and/or start supplementation early using milk substitutes of various qualities or wean the child onto solid or semi-solid food.

Supplementary Food Use

In rural Thailand, most mothers practice supplementation quite early beginning anywhere from two to three days after birth. Infants are given either chewed rice or a mashed rice and banana mixture. The underlying belief in introducing supplementary foods at a very early age is to satisfy the baby's hunger since breast milk is digested quickly. Respondents in both regions felt that breast milk alone was not enough for the baby. It only temporarily fills the baby's stomach compared to other, more solid foods. The best way to avoid hunger, according to their beliefs, was to feed the baby rice in addition to breast milk. Mothers also felt that it is a means to introduce infants to familiar foods. As two mothers stated:

> *I gradually fed my baby with roasted chewed glutinous rice to fill him up when he was a few days old.* (Northeast mother)

> *Sometimes, I gave my baby mashed banana or mashed rice while breastfeeding because I thought he might get hungry if I gave him breast milk alone.* (Central mother).

In Northeastern Thailand, an infant is given supplementary food when the mother is abiding by post-partum food restrictions (*yu kam*). Mothers will give boiled water or a small amount of chewed glutinous rice to the baby for the first few days before the breast milk begins to flow. When the latter occurs, the colostrum may be squeezed out according to the mother's beliefs about its quality or benefit to the baby. Thereafter, a mother will breastfeed together with giving roasted chewed glutinous rice and water for a few months. The amount of food is gradually increased as the baby grows older.

Some Northeast mothers also mentioned that one reason for giving glutinous rice at a very early age is because they believed that the baby's bowels become empty as the meconium is removed. For example,

> *After delivery, I gave my baby water. After a few nights had passed, I gave him a little bit of roasted and chewed glutinous rice. They said that giving glutinous rice to a baby will help to remove the meconium and it is easy to wash up the baby's sheet.*

> *After the first few days, the breast milk came in. I squeezed it out because the breast milk is a clear yellowish milk that is not sweet. When it is cloudy and white, I began breastfeeding my baby.*

Types of supplementary foods differ by region. While the above foods are characteristic of Northeast Thailand (especially glutinous rice), mothers in Central Thailand will give warm water or honey to the baby until her breast milk begins to flow. Two main reasons were cited for giving honey to the baby. Firstly, the honey has the ability to expel the meconium. Secondly, if the baby is given honey, when she/he is older they will speak politely. After the first few days have passed, the baby will be fed soft-cooked rice mashed with banana together with breast milk.

> *I gave my baby both honey and water. When my breast milk came, I breast fed my baby.*

> *I gave my baby honey for the first few days, because it can be a laxative and also make a baby have a sweet sound.*

Advertised, Commercially-Prepared Milk Substitutes

In general, commercially-prepared and advertised formulas are not readily available in remote communities, although they are available in provincial and district centers. Community profile data showed that village stores sell powdered milk, sweetened condensed milk and/or U.H.T. (ultra high temperature pasteurized) milk, all of which are inappropriate for infant feeding. However, mothers who have trouble with their nipples, or feel that they do not have enough milk, view these types of milk as suitable breast milk substitutes.

Especially among elderly child caregivers, sweetened condensed milk is very popular for cultural, personal and economic reasons. In essence, they perceive sweetened condensed milk as being cognitively closer to breast milk than other milk substitutes, because it is thick, sweet and milky white. It also satisfies the child's hunger for a longer period of time, thus allowing the caregiver to complete other household tasks. Finally, it is less expensive than formula and does not require preparation other than pouring it into a bottle (Yoddumnern-Attig et al. 1992).

Mothers in both regions perceived bottle feeding as expensive and a luxurious practice which can easily cause diarrhea. They also felt milk substitutes should not be given to the baby if a mother is able to breastfeed. Moreover, bottle fed babies are thought to be more stubborn than breast-fed babies. To illustrate,

> *I did not bottle feed my baby because I have heard it can cause diarrhea.* (Northeast mother)

> *My friend fed her baby with sweetened condensed milk. Her baby gets diarrhea, and she has to take the baby to see the doctor.* (Central mother)

As shown by these quotes, moreover, community communication networks also have a great deal of influence on breastfeeding versus bottle feeding. Mothers always referred to their friend's children when giving reasons for selecting or using milk substitutes. They also made references to socio-economic status and modernization when rationalizing the use of commercially-prepared formulas instead of breastfeeding.

Maternal Food Habits

Pre-natal Period

Successful breastfeeding requires some preparation during pregnancy, though rural mothers in this study did not readily recognize this need nor hold any beliefs or practices aimed at stimulating milk flow. Increased food intake during pregnancy was a natural phenomenon, rather than the intention of mothers. Nonetheless, mothers did not over eat and avoided certain foods (such as fish, pork, eggs, fats, oils, coconut milk) for fear of delivering a large fetus, or causing complications during parturition. Green vegetables and yellow fruits were believed to cause indigestion and diarrhea. A woman's food practices during the pre-natal period (as well as post-partum and during lactation), furthermore, are heavily influenced by the beliefs of friends, neighbors and especially elderly relatives. Frequently, the latter had a powerful say over the pregnant women's food habits, particularly for women experiencing their first birth.

Post-partum period

For the post-partum period, food restrictions are related to cultural beliefs about the hot or cold qualities of foods (i.e., hot and cold food dichotomies). For women in both regions, preparation for breastfeeding begins right after delivery. During this period, post-partum women observe a complex set of customary practices governing both the food they eat and the activities they engage in. This set of customary practices is called *yu kam* (in the Northeastern region) or *yu fai* (in the Central region) which means 'to be in a state of restriction'. During the post-partum period, which lasts from 3- 15 days, a woman observes food regulations as well as restricting herself to 'lying beside a fire'. The belief is that the heat from a brazier aids the new mother in regaining her strength, physical equilibrium and in producing good quality breast milk. During this time, women will eat foods believed to be 'hot' (in temperature or cultural quality) such as hot vegetable soup, and avoid 'cold' foods such as cucumber and watermelon.

As for food regulations, post-partum women are not allowed to drink unboiled ('cold') water. Either regular boiled water or boiled water with an herb in it is encouraged for drinking and for bathing as well, since 'hot' water is believed to stimulate milk flow. A post-partum woman's diet is also considerably restricted. In the Northeast region, it is merely comprised of salt, roasted glutinous rice, chicken and pork. In the Central region, it contains regular rice, salted fish, coconut milk and a soup made from pear-shaped banana flower (*kaeng liang huapli*).

Post-partum food restrictions aim at promoting maternal health. The idea is that if a woman is healthy and not susceptible to disease, she will most likely produce high quality milk. The origin of these practices appears to relate to folk beliefs about blood and milk. Women in both regions believe that the constituents of milk are derived from blood flowing through mammary glands. They also know that a proper diet is essential in blood production and quality. Through socialization, they have learned what they can and cannot eat in order to produce and maintain good quality milk. According to these women, the foods they eat can make the blood starchy and cause clotting of the milk ducts. They believed that breast massage, every now and then, would help in breaking down the clots and release the secretion of milk. Almost all women interviewed reported that they practiced both food observations and breast massage.

Lactation

Overall, food restrictions are clearly associated with a desire to ensure a steady flow of milk of the right concentration. Foods permitted during the post-partum period are characteristically white in color, a symbol of good quality or the correct milk concentration.

Mothers in both regions agreed that all foods taken by mothers become breast milk and pass through to the child. Mothers should, therefore, avoid taking 'forbidden' foods which can poison the breast milk and cause poor child health (e.g., fever, diarrhea). However, some foods which are forbidden in one region are readily consumed elsewhere depending upon their availability and/or local and regional food habit patterns. Types of foods which are restricted, as observed by mothers, can be divided into two groups. First, pickled foods (such as bamboo vegetables, and some fruits) are predominant 'taboo foods' among mothers in both regions. When these foods are consumed, they were believed to cause rotten breast milk. If a baby is breast fed with this kind of milk, he/she will become sick.

I do not eat pickled bamboo shoots while I am still lactating because I have heard from my parents that it is a forbidden food for breastfeeding women; it can give the baby a stomach ache or cause fever. (Central mother)

I ate bamboo shoots while I was breastfeeding and my baby got a diarrhea. I dare not eat it again. (Northeast mother).

Further, in both regions some fresh fruits are restricted during lactation since they are believed to adversely affect the breast milk and cause stomach aches in the child. Such sour tasting fruits include orange mango, tamarind, pineapple and guava. The others are sweet tasting fruits like water melon, jackfruit and banana.

Regarding types of food, fish are eaten by breastfeeding woman in the Central region, with none of the women mentioning that it was a taboo food. In contrast, breastfeeding woman in the Northeast do not eat certain types of fish (e.g., catfish, carp, snakehead, scaleless fish). In addition, white buffalo, duck and birds are also forbidden for lactating women because they may cause headaches or weakness.

Fresh vegetables are not strict taboo foods for breastfeeding woman in the Central region. Respondents only mentioned cucumber as a cold food which may lead to a reduction in the amount of milk produced. Since breastfeeding women can consume a variety of vegetables during lactation, these can become important components of nutrition education programs. In the Northeast region however, taboo vegetables include string bean, acacia, margosa, mushrooms, bitter melon and cauliflower. These vegetables are also believed to cause maternal illness such as vaginal irritation, vaginal bleeding, headaches, and fever.

I ate all kinds of vegetables that my mother cooked for me while I am breastfeeding, because my parents want to make my baby familiar with those vegetable later. (Central mother)

I do not eat acacia while I am lactating because I have heard that it may cause fever. I also have heard my neighbor died because of eating acacia after delivery. (Northeast mother)

As shown in these cases, some women did report an illness experience related eating specific foods. However, others heard rumors from their neighbors which altered their food habits during lactation. This was especially the case among Northeast mothers. Beliefs about maternal sickness, reduced milk production, and other afflictions thus underlie many food taboos and influence breastfeeding duration. In addition, as mothers prolong breastfeeding, they must also prolong maternal dietary restrictions.

Mother and Child Bonding

It is believed that breastfeeding is the first way to tell the truth to a baby and keep a promise. At the breast, a child commences to learn how to relate to another person as a warm, loving, caring human being. Breast fed babies receive intimate physical skin-to-skin contact, close holding, and eye-to-eye contact.

Women in both regions believed that breast milk comes from mother's blood, and it strongly influences the mother-child bond. It is felt that this affection started ever since the fetus was fertilized in the womb. Respondents believed that the clotted blood in a mother's uterus develops into a fetus, thus making it a part of the mother. Moreover, after delivery, an

infant consumes breast milk which is believed to come from the mother's blood and extracted by the milk gland. Mothers also said that a woman should be condemned if she unreasonably refused breastfeeding. To feed a child with formula at an early age is seen to be modernized and costly. More importantly, it is also believed to reduce mother and child bonding.

Mothers, therefore, are encouraged to prolong breastfeeding partly in order to strengthen the mother and child bond. Even if a woman feels that their milk is low in quality, or even if they have insufficient milk, she may still continue breastfeeding to increase the affection between mother to a child. In this case, supplementary foods will be employed to fulfill the child's hunger and other perceived nutritional needs.

Discussion

Over the last decade, Thailand has dramatically reduced the prevalence of protein-energy malnutrition among preschool children from 51% in 1982 to 17% in 1991 (Tontisirin 1992). Yet regional disparities exist pointing to a need for more refined infant feeding programs. During Thailand's Fifth National Economic and Social Development Plan (1982-1986), Thailand's Ministry of Public Health in collaboration with other agencies conducted a nationwide breastfeeding campaign during March for five consecutive years. Officials, though, recognized that the public campaign only increased awareness, but was not effective in increasing breastfeeding practices (Winichagoon et al. 1992). With the support of UNICEF and WHO, Thailand has changed its strategy and is now one of 12 countries launching the 'Baby Friendly Hospital Initiative.' While this is a strong hospital-based breastfeeding promotion program, it is mainly targeting women living in large provincial and district centers (Winichagoon et al. 1992).

Breastfeeding programs in rural areas continue to be tacked onto other community-based child growth and development activities such as the national growth monitoring and promotion program. This is partly because even though breastfeeding promotion has been recognized as an important nutrition activity (and included in Thailand's national Food and Nutrition Plans), breastfeeding is not viewed as high a priority issue as compared to other nutritional concerns. Moreover, because breastfeeding is almost universal in rural areas, it is seen as more cost-effective to add it to already existing programs. Nonetheless, even as a 'tacked on' program, rural breastfeeding campaigns need more systematic nutrition communication strategies to address improper supplementary feeding practices while promoting and maintaining breastfeeding to stem the tides of bottle feeding and early supplementary feeding among rural mothers.

To design effective programs, it must be remembered that breastfeeding and its duration can be conceptualized in three distinct ways. For nutritionists, *a clinical perspective* emphasizes breastfeeding's physiological value for children, their growth and optimal development. Among policy makers and planners, breastfeeding is *a social indicator* where its prevalence may reflect developmental changes within a society. Results from this study and others (Yoddumnern-Attig et al. 1992), though, show that breastfeeding, at least as it is interpreted on a community basis, is *a cultural construct* made up of the collective knowledge and experiences not only of mothers, themselves, but also of those held by significant others. New experiences are reinterpreted by individuals from the basis of their own cultural knowledge, which in turn can be based on more than one model. It may be based on assumed past behavior on the one hand; or on women's perceptions of the modern way to care for an infant, on the other. In looking at breastfeeding as a cultural construct, emphasis is on understanding community members' and mothers' beliefs, actions and recognized needs associated with child nutrition as well as perceptions about child growth and development,

illness and health. Health and nutrition education, therefore, must adopt a *target audience*, rather than simply a target group, perspective in order to cover not only childbearing women, but other important audiences as well, and especially older female relatives. It must also take into account age and status differences in developing and implementing effective communication strategies.

Moreover, by identifying collectively held beliefs, nutritionists, public health workers, and communication specialists can then build upon them in designing nutrition messages and programs that fit within the existing social and cultural context. The intent in this respect is *not* to conflict with existing food, nutrition and child development beliefs, but to uncover and exploit ones that can be used constructively.

Results from this study show several areas where this can feasibly be done. For example, customarily many breastfeeding and maternal nutrition promotion programs focus on changing mothers' food practices by trying to get them to eat foods that are culturally forbidden. Oftentimes such programs meet with limited success, if for no other reason that they have a great potential to cause conflicts between health providers and community members as well as intra-familial conflicts between mothers who may want to adopt a new food practice and influential, yet conservative elderly family members. Programs could have greater success, though, by promoting diversified dietary changes focusing on foods that are *not* forbidden but equally nutritious, and encouraging women and other food preparers to experiment with new recipes to vary the diet. Efforts could center, for instance, around the many vegetables that are not forbidden during lactation, and particularly those that mothers believe will promote milk production during the post-partum period. The focus here, therefore, is on formulating diet-based change strategies rather than simply on food belief and food-based behavior change programs. Study results, though, also show that such programs will need to be regionally-specific rather than comprehensive nationwide programs, since supplementary food use and the food beliefs and diets of women living in Northeast and Central Thailand differ.

Also important is a program's orientation. In breastfeeding and malnutrition programs, nutrition educators usually adopt either negative themes or positive ones. While the former often gives quicker responses, more rational positive themes are most effective for long-term goals (Yoddumnern-Attig et al. 1992). However, nutrition educators can do well by using a two-stage strategy that combines both perspectives (Fine 1990; Smitasiri et al. 1992). On the negative side, mothers in both regions already see bottle feeding as an expensive, modern luxury that can easily cause child diarrhea. Negative messages about the early introduction of bottle feeding could be designed an implemented. In conjunction, this can be done effectively when the program is participatory and exploits the positive culturally-based mother-child bonding concept also held by mothers and centering around a positive message such as *A Mother Loves Her Child.* This message has already proven effective for a vitamin A deficiency control program in Northeast Thailand that also incorporated an improved supplementary feeding component (Smitasiri et al. 1992, 1993).

In summary, by focusing on the positive culturally accepted attributes of breastfeeding and constructive beliefs, using a non-conflict participatory approach, and targeting programs not only at caregivers but also those who influence their decisions, the opportunity to improve each child's quality of life improves immensely. In the process, the nutrition communicator and other public health personnel are given a more realistic view of community needs and preferences as well as a level of analysis, planning, implementation and control that can lead to the more effective and efficient use of program resources.

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Chapter 41

Assessing nutrition communication through effective practice reviews

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The Effective Practice Review is an evaluation technique combining both qualitative and quantitative methods. This chapter discusses how it can be applied to identify why nutrition communication campaigns and programs succeed, how to improve mature ones, and what successful processes and practices program planners can adopt to improve other programs - EDS.

Introduction

To combat micronutrient deficiencies like iron, iodine and vitamin A deficiency, dietary diversification programs have been conducted in many countries to change people's eating habits through nutrition communication. Generally, this involves introducing the improved production and consumption of nutrient-rich foods at affordable prices.

To assess these programs, several methods can be used. The most customary are comparative target group analyses over time, such as assessing media exposure, production capacities of home gardens, changes in knowledge, attitudes, practices (KAP) and nutritional status. Results are usually communicated through quantitative measures that place an emphasis on correlations, levels of significance and other statistically determined relationships. Such evaluations try to show that a program fulfilled its objectives in order to satisfy a particular funding agency as well as to determine if a program should be continued, transferred to other areas, or implemented as a national program.

While such methods and their aims are valid, they are not always timely in pinpointing exactly why a program succeeded. An answer to this question, though, is crucial for determining how an on-going program may need modification, how to improve a mature one, and what successful practices and approaches program planners can adopt to improve other programs. Even for programs that apparently do not succeed, as judged by traditional evaluation methods, knowing what factors and practices actually worked in changing some people's behaviors and under what conditions can give program planners insights into potential ways of modifying and thereby improving future interventions. This is especially important where resources are limited and must be used wisely to avoid wastage (Mangano 1991).

This paper begins with a discussion of effective practice reviews (EPRs) as one timely

way to help program planners and managers discover which program practices and processes work better than others and thus improve the likelihood of program success and sustainability. It then goes on to describe how the EPR process was applied for evaluating the "Social Marketing of Vitamin A-Rich Foods" conducted in Northeast Thailand. The intent here is not to dwell on specific project details which can be found elsewhere (Smitasiri et al. 1992, 1993). Instead, the objectives are to show how the EPR process works as well as how it can highlight points of success which may help in initiating similar nutrition communication projects, or even communication programs in other health or population arenas that might apply a similar intervention process.

Effective Practice Reviews

EPRs have been used by analysts within the Office of Evaluation and Inspections, a component of the U.S. Department of Health and Human Services, to look for good program practices which can serve as examples for others, including successful methods, techniques and strategies for providing services more efficiently and effectively (Mangano 1991). Although EPRs can help improve health and nutrition program implementation and management in a cost-effective manner, their potential for use for nutrition communication in developing countries such as Thailand has not been fully documented.

In the EPR process, evaluators do not focus heavily on program deficiencies. Rather, an EPR as either a monitoring or final evaluation tool allows evaluators to assess a program's progress and merits, and then tell a program planner or manager what works and what does not in a timely way. Evaluators then offer reasonable choices to program managers and contribute highly to present or future program improvement.

Furthermore, instead of focusing only on program outcomes, EPRs assess a program dynamically by examining the entire project's process, its range of activities, and the main participants involved. Most importantly, they explore what aspects have helped programs to handle problems quicker, mobilize resources faster and produce better results.

EPR Process

In conducting EPRs where programs have involved many communities, evaluators can do one of two things. They can either select sites which appear to perform better than others in other areas *or*, if a program is generally successful as indicated by statistical assessments, sites can be chosen randomly. EPR evaluators then use several different assessment tools entailing both qualitative and quantitative methods. The most common include literature reviews, statistical data analysis, expert views and on-site reviews. While evaluators can identify positive program aspects through any one of these methods, they ideally seek confirmation by all. Though such techniques do not establish effectiveness in the same manner as more rigorous and time-intensive methods, they do allow for triangulation of information which can help program planners and managers to say, "Perhaps we should concentrate more on this activity, or consider an alternative approach" (Mangano 1991).

For EPRs, literature reviews entail studies of how prior similar programs have been conducted, whether or not they succeeded, and why. Further, it involves reviewing preliminary data concerning the practices which require changing as part of the program, their facilitating factors and any obstacles which might cause the non-adoption of practices. Part of the literature review process may also involve examining the program's available statistical data.

These can indicate whether outcomes tended to improve over time as the practice was implemented (for example, whether people increased their consumption of vitamin A-rich foods). Literature reviews thus suggest ways of analyzing programs, describing successful ones, and serving as sources of useful comparative data.

In examining the program itself, EPRs rest most firmly on the use of qualitative evaluation methods to collect expert views through in-depth interviewing as well as on-site visit data obtained through interviewing, observations or both. One common complaint made about using such techniques, however, is the time needed to collect in-depth verbal data and then analyze it. Fortunately though, rapid assessment procedures (RAP) and guidelines have been developed and tested cross-culturally (see Kachondham, this volume). Once adapted to focus on assessing positive program features, these can be implemented in a relatively short-time, ranging from as little as a few days to several months.

The main purpose of such rapid assessment guidelines is to help evaluators learn for themselves about the project's strong points and to confirm this with what the people associated with the program recognize as the most positive aspects. The views of program experts and participants (such as community leaders and district government service providers) are perhaps the most crucial, since they largely determine whether or not a program's activities will be sustained after program completion.

However, such knowledgeable people can possess strong biases, so evaluators must be careful to validate their views in other ways. Evaluators, hesitant to rely too heavily on what others say, conduct their own observations of program sites whenever possible. They collect additional qualitative information, observe the program in action, and obtain local information on program performance. This also allows them to gain a personal appreciation for program dynamics and how the program operates in different settings (homes, communities, schools).

To see how EPRs can be applied, let us turn to the case study of the social marketing of vitamin A-rich foods project in Northeast Thailand which applied an EPR framework within its overall project evaluation.

Project Overview

The Social Marketing of Vitamin A-Rich Foods (SM/VAF) project was a three-year (October 1988-September 1991) field trial for district and community control of vitamin A deficiency in Kanthararom district, Srisaket province in Northeast Thailand (Smitasiri et al. 1992, 1993). The project research area involved 134 villages and approximately 122,000 people. The comparable district of Trakarn Phutpol, Ubol Ratchatani province, served as the control area.

The SM/VAF project objectives were two-fold, first, through nutrition education using social marketing techniques, to improve knowledge, attitudes and practices regarding dietary intake of vitamin A rich foods; actual dietary intake of vitamin A; and vitamin A status, scientifically measured, in pregnant and lactating women and children aged 5-60 months; and secondly to develop a model for improving vitamin A status through nutrition education.

The project adopted the social marketing concept as its foundation. This entailed the design and implementation of programs aimed at influencing the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution and market research (Kotler and Roberto 1989). The SM/VAF project applied the social marketing concept to create communication intervention strategies which would satisfy community needs as well as enhance its ability to effect population-wide changes.

The project had three main overlapping phases. First, it created a 'nutrition

information society' within the communities to give people a firm knowledge base within which to place their current behaviors and the proposed new ones. In total, this phase employed eight main media channels: radio, posters, pamphlets, newsletters, community public address systems, outdoors (billboards), direct mail, and manuals/albums.

The project's second phase used mass media to promote selected food items, and particularly the ivy gourd plant (*Coccinia indica*), as images of vitamin A-rich foods through three main messages. The first message was simply "Let's Eat Ivy Gourd." It aimed at raising community members' awareness about the ivy gourd and, then, getting them 'excited' about the vegetable as a food source. The second message was "Let's Grow Ivy Gourd" which encouraged community members to grow ivy gourd and recognize the benefits of their actions. Once the ivy gourd became popular and readily available in the homes, the project's third message was "Healthy and Strong with the Ivy Gourd." The behavioral objectives were: community members know the benefit of consuming more ivy gourd and cooking with oil, they realize how their ordinary dishes and recipes can be diversified by using the ivy gourd and oil, and they make the latter two a part of their routine daily diet.

The third project phase recognized that health/nutrition-oriented social marketing programs, however, are generally not effective if they rely solely on mass media. Consequently, the SM/VAF project's media activities were accompanied by concrete community action programs which the people themselves saw as meaningful and in which they could participate. These programs were developed and launched by local officials and community leaders; project personnel only provided guidance and organizational assistance. The programs included home gardening, school lunch program improvement activities (fish and poultry raising, vegetable gardening), school competitions (ivy gourd propagation, short story writing), drama, community visits by local celebrities, maternal and child health and nutrition counseling sessions for mothers, and health care/nutrition training sessions for traditional birth attendants and Buddhist monks.

All of these phases were aimed not only at the project's target group, but also three important target audiences who could influence the health and nutrition practices of target group members. These audiences were: 1) a primary audience of child caretakers who were responsible for food production, processing and/or consumption patterns (i.e., immediate household members, especially the elderly); 2) a secondary audience comprising persons who could be motivated to teach, support, and reinforce the practices and beliefs of the primary audience (such as teachers, health workers, subdistrict extension agents); and 3) a tertiary audience of persons external to the project area (like provincial and district officials, health and medical personnel, local mass media representative, and university researchers). These persons also served as valuable sources of information for project development, especially in terms of technical assistance for home gardening activities (Smitasiri et al. 1992, 1993).

The SM/VAF tailored interpersonal and media programs to target these audiences as a means to help change target group members' behaviors. For example, Buddhist monks in their sermons for the elderly incorporated health and nutrition information, and school teachers were given training in gardening, food preparation, and nutrition. They were then encouraged to use their knowledge in improving their classroom and school curricula.

To assess the SM/VAF project, three different evaluation teams from Mahidol University were subcontracted. A team from the Faculty of Social Sciences and Humanities was responsible for the project's KAP evaluation. The Institute of Nutrition's Division of Community Nutrition assessed changes in vitamin A intakes and status among the target groups. Finally, an EPR using anthropological concepts and methods was undertaken by a medical anthropologist and her team from the Institute for Population and Social Research.

EPR Objectives

The EPR was undertaken over a three-week period during May of 1991. While other evaluations looked at behavioral and nutritional status changes in the project's target group, this study had a wider focus. It explored the opinions and attitudes of government officials, community leaders and villagers who participated in the SM/VAF project. Its main objective was to determine positive practices and processes which determined project outcomes. Its specific objectives were to investigate whether the SM/VAF project was successful and why, to assess the project's impact on involved government officials and community members, to assess the project's potential sustainability, and to elucidate government officials' opinions about the continuity of project activities.

Literature Reviews and Statistical Analysis

Successful Social Campaigns

Several scholars have investigated what constitutes successful social campaigns such as those promoting new health and nutrition practices. One of the earliest was conducted by Cartwright (1949) who pointed out that social campaigns must first *create a cognitive structure* for individuals, whereby promotional messages are perceived and integrated into a person's (or community's) system of understanding. Changes in cognitive structures, moreover, cannot be assured simply by bombarding people with media messages. The messages must be tailored to fit an individual's or community's existing environmental situation and be in agreement with prevailing cultural beliefs. Cartwright goes on to also say that *individuals must be motivated* by either changing their perceived needs, which is very difficult to do with a campaign, or by showing them how the advocated practices will meet existing needs. Lastly, campaigns need to *create a particular behavioral structure* which gives people (villagers, local officials) the opportunity to enact desired behaviors at a particular time and place. Programs, facilities, messages and materials must be identified and readily available.

More recently, Kotler and Roberto (1989) have specified a core set of five elements necessary for a social change campaign. First, campaigns must have a *cause*, that is, a social objective that change agents believe will provide a desirable answer to a social problem or felt need. The second requirement entails *change agent(s)*, that is, an individual, organization, or alliance that will work to bring about the desired change. Third, *target adopters* are those individuals, groups or entire populations who are the focus of appeals for change. *Channels* represent the communication and distribution pathways through which influence and response are exchanged and transmitted back and forth between change agents and target adopters. Lastly, the *change strategy* represents the direction and program adopted by the change agent(s) to effect the change in target adopters' attitudes and behavior.

These works, amongst others, show how social campaigns must meet certain conditions as they impinge upon individuals, groups and change agents. How well the SM/VAF project succeeded would depend upon whether these conditions were met and how.

Behavioral, Dietary and Nutritional Status Results

In addition to the literature review, the team examined all project documents and evaluation reports to get an initial picture of the project and its overt outcomes. Overall,

nutritional status and behavioral evaluation results showed that the behavioral and vitamin A status objectives were achieved. There was a significant improvement in knowledge ($t = -4.73$; $P<0.005$), attitude ($t = -5.95$; $P<0.005$) and practice ($t = -2.45$; $P<0.05$) scores for the intervention area compared to the control area.

Moreover, before the intervention no statistical difference existed between the intervention and control areas in terms of energy, animal protein, fat and vitamin A intakes of target group members. After the intervention, however, vitamin A and fat intakes among target group members in the intervention area increased significantly ($p=0.04$ and 0.002, respectively). This also held for increased liver and egg consumption ($p=0.0001$ to 0.02 among target groups). Fat and vitamin A intake among pregnant women in the intervention area also showed statistically significant increases (from 201 ± 425 RE in 1989 to 428 ± 391 RE in 1991) and also among lactating mothers (269 ± 355 RE in 1989 and 476 ± 618 RE in 1991). No increases were evident for the control district (Smitasiri et al. 1993).

Regarding an inability to see in dim light (one indicator of vitamin A deficiency), subjective dark adaptation testing among lactating mothers, pregnant women and preschool children noted a decline to zero percent in both areas. For school children in the intervention area, however, the percent of night blindness cases dropped from 4.8 to 1.4% ($p=0.04$). In the control area, though, this percentage increased from 0 to 3.4% ($p=0.01$).

EPR evaluators thus concluded that the SM/VAF project, to an extent, achieved its mission. The remaining question was why. They then turned to developing the fieldwork portion of their evaluation, that is, the collection of expert views and on-site visit data.

Expert Views and On-Site Visit Methodology

The project team obtained first-hand EPR data through in-depth interviews, observations and conversations using a rapid assessment open-ended interview guide. The topics for discussion covered three main areas: the project's value; the extent to which the project has helped the community; and interest in continuing activities on a post-project basis.

Interviews were conducted at provincial, district, subdistrict and community levels with government personnel and village members who were aware of or active in the SM/VAF project. For the government, interviewees were officials affiliated with the Ministries of Public Health, Agriculture, Education and Interior. At the community level, key informants comprised mothers, the elderly, monks, village headmen, teachers, school students and health post volunteers.

Since the SM/VAF project relied heavily on home gardening activities, the research communities were selected on the basis of soil (fertile, infertile) and water (available, limited) conditions. Kanthararom district was first divided into two major areas, upper and lower, using the Moon River as the dividing line. Six lower and six upper subdistricts were then chosen, also according to water and soil conditions. In total, 24 villages in 12 subdistricts were selected for study. These villages and subdistricts covered areas where the soil is fertile and water is plentiful as well as areas where both conditions are problematic.

Summary of Qualitative EPR Results

Results were initially presented based on information and opinions of different organizational level members. Evaluators realized, however, that differences would exist between these levels, since what a high level official believes is happening may not always be

in agreement with what is actually occurring (or believed) at the community level. Care was thus taken in cross-checking data and identifying patterns of agreement between levels and their respondents.

Provincial Officials

Provincial level government officials reported that the SM/VAF project was successful to an extent. They associated the project's main "Mother Loves Her Child" message with the ivy gourd and vitamin A-rich foods. They also stated that community members learned a great deal about the sources of vitamin A and the ivy gourd as well as the consequences of vitamin A deficiency. They also disclosed that villagers were consuming vitamin A-rich foods (especially the ivy gourd) more now than before the project began. However, they were uncertain as to whether or not community members had changed their food preparation habits. They believed that the same low-fat cooking methods (broiling, boiling) would be used now as in the past, because they felt that rural people were conservative in nature.

District and Subdistrict Officials

At district and subdistrict levels, however, local officials were very positive about the project's outcome. They expressed the view that certain community members (especially mothers and grandmothers) do know about sources of vitamin A and the consequences of this micronutrient's deficiency. Others have merely learned that the ivy gourd has a high nutritional value and it can improve children's health, especially their eyes. In other words, while these people had not memorized the "foreign" word or concept of vitamin A, they do know that eating ivy gourd can promote health and help, in part, to prevent disease.

Most importantly, these local officials learned and witnessed that community members have changed the way in which they prepare the ivy gourd. Contrary to provincial officers views, villagers were cooking the ivy gourd with lard, vegetable oil or coconut milk which enhanced vitamin A absorption by the body. They also realized this practice will help them to get the maximum vitamin A value.

Project Impacts on Government Officials

EPR results thus showed a number of positive aspects with regard to government officials. First, government officials reported that they, themselves, have received "fringe benefits" from the project. One of the most important is a closing of the "gap" between the officials and villagers. Before the project was implemented, government workers often had difficulty communicating with villagers and encouraging their participation in any development activities. The SM/VAF project's participatory approach, however, gave both parties a chance to move towards each other and begin closing this gap.

In addition, government officials are guided by the national "Quality of Life" policy. However, this policy is vague, since it only states that officials should work to improve people's lives and livelihoods. In short, it tells them what to do, but not necessarily how or why to do it. Several officials noted that they were struggling to find a strategy which could serve as an organizing focus or theme, and which would give them direction. The SM/VAF project gave them this concrete strategy and showed them *how* to link their own existing

efforts, such as nutrition education, with maternal and child health as well as agricultural development (home gardening) activities. It also showed them how to work together with people from other development sectors.

In particular, local government officials have learned the project's model, strategy and principles. They stated that at every opportunity, they would continue this same type of model and extend it to other health and social development projects. The project has also motivated them to keep up with new knowledge as well as encouraging them to try more innovative and integrated activities. For instance, a provincial health officer is interested in adapting the social marketing model to combat iodine deficiency through an iodized salt promotion. A district health officer who will soon be transferred to another area has committed himself to promoting the ivy gourd in his new location. Subdistrict health workers not involved in the project are also actively approaching their counterparts in the research area, asking them for printed materials and information about how to start similar projects. A major community day-care center not involved in the project is also constructing its own ivy gourd garden.

Government officials also served as role models for the community. They, themselves, have learned about vitamin A, its various sources, and the consequences of vitamin A deficiency. They regularly prepare ivy gourd dishes for their children and themselves, and many have started home gardens containing the ivy gourd. Others have started to grow the ivy gourd for sale. Consequently, these government officials were active change agents as well as informal nutrition educators for the community. They worked to spread the project's message and the knowledge about vitamin A and vitamin A-rich foods to the communities, their neighbors, friends and families.

Community Impacts

The overall picture regarding knowledge and behavioral changes at the community level was similar to that presented by district and subdistrict officials. Villagers realized that readily available and inexpensive green leafy plants, like the ivy gourd, are of high nutritional value. The fact that university scholars from Bangkok helped them to recognize this and promote the ivy gourd also gave them a higher sense of prestige. In short, project personnel along with local officials and community leaders served as leaders for the villagers, giving the latter a greater sense of pride in their way of life and their environment.

To support the above information, expert views and on-site observations noted the following, and these helped to confirm statistical data. First, while home gardens were rare prior to project implementation, over 50% of families in the research communities now grow the ivy gourd in their yard, compared to 38% in the control area which either grow or, more frequently, collect the ivy gourd ($p<0.01$). Reasons for intervention area families could not grow it centered on either a lack of space for cultivation, or the plants have died and have not yet been replanted. Nonetheless, they obtain the ivy gourd from their neighbors or at the local market. The ivy gourd has become a staple food for the people due to its convenience, availability and high nutritious value. Prior to the project, it was not assigned any social or nutritional value and not considered a staple. Community members have also learned about other sources of vitamin A-rich foods. Even in cases where certain persons do not know the foreign word "vitamin A," they do know that the ivy gourd improves child health, especially with respect to their eyes. Consequently, villagers consume the ivy gourd more often now than before project implementation (Smitasiri et al. 1993).

Lastly, mothers and grandmothers have adapted their cooking methods to include more fats and oils in order to maximize vitamin A absorption. For example, five times as many respondents in the experimental area cook with oil compared to control area respondents.

Moreover, over 30% of experimental area respondents, who had not regularly cooked with oil prior to the project, have adopted the new methods of cooking after the intervention. Only 6% did so in the control area.

Overall therefore, community members now readily produce and consume the ivy gourd, realize its nutritious value, and prepare it appropriately in order to promote child health. They also realize that many locally available products are of great nutritious value. The ivy gourd, itself, is now a staple for virtually every family. Local health workers, district hospital personnel and mothers have also noticed a reduction in the number of child illnesses since the project's commencement. [The actual rate of reduction has been documented, but not reported, by the district hospital]. While they do feel the project has played an important role in promoting vitamin A-rich foods, its greatest value has been in organizing existing maternal and child health strategies under the "Mother Loves Her Child" umbrella.

Of special importance is the role home gardens are playing in family life. Several community members have stated that ivy gourd gardening gives everyone in the family a chance to work more closely together, much more than field cultivation. Each family member, from the oldest to the youngest, is assigned a task and, through their cooperative efforts, family relationships are strengthened. In particular, the elderly view themselves as even more important actors in family health and welfare, as opposed to solely "recipients" of familial benefits.

Target Audience Impacts

The above picture varied slightly for different target audiences, most notably the elderly, pregnant and lactating mothers, mothers with pre-school children, and school children. Though they were not within the SM/VAF project's target group, the elderly were influential primary audience members. Through them, traditional food beliefs are perpetuated and in several cases enforced especially regarding food restrictions during pregnancy and lactation.

After the project's intervention, the elderly had not changed their own food preparation and consumption patterns. They themselves preferred not to eat leafy green vegetables such as the ivy gourd usually because they found it difficult to chew. However, when they cook for their grandchildren, they have adopted the project's new food preparation methods. For example, they use oil, green vegetables and eggs in preparing omelettes. Some thought that this type of food was good for a child's health. Others believed it was an easier, faster and more convenient way to prepare an omelette, which children would eat for breakfast or take to school for lunch.

Secondly, among pregnant and lactating women, traditional food restrictions (especially among the former group) persist largely due to the influence of elderly family members. Young pregnant women and new mothers often feel insecure, and the closest and most trustworthy persons for them are their own mothers or close relatives. But while such traditional food beliefs continue, they are declining in significance. This was substantiated through in-depth interviews as well as a literature review of prior food habit studies in Northeast Thailand (Sawangdee and Isarabhakdi 1988).

The SM/VAF project, however, had a great impact on lactating women. Prior to the intervention, most lactating women refused to eat the ivy gourd due to traditional food restrictions. Since the project's commencement, district hospital personnel have observed an important change. After giving birth and while staying at the hospital, these women accepted and consumed ivy gourd dishes more than ever before. Upon returning home however, they again conformed to traditional food regulations as encouraged by the elderly. Postpartum food restrictions, though, only last for a few days to one month at the most. After that time, the

women are free to return to a normal diet, though one which contains fewer spicy or sour dishes than the usual adult diet.

Thirdly, mothers of preschool children also changed their food preparation habits. Prior to project implementation, the ivy gourd was not a regular ingredient in many dishes. After implementation, whenever mothers prepare suitable dishes which contain oil, they also add the ivy gourd. They have learned about and are conscious of the ivy gourd's nutritional benefits, and they are now adapting recipes to include it. They are also experimenting with other vitamin A-rich foods (such as pumpkin and morning glory) by either adding them to traditional dishes or developing new recipes.

Finally, school children comprised the SM/VAF project's most successful group. They have learned and retained information about vitamin A, sources of vitamin A, and the consequences of vitamin A deficiency. Moreover, they readily consumed ivy gourd dishes that are prepared by their mothers and grandmothers. According to the EPR, one of the project's main strong points was that it used this target group as the project's taking off point. Through its ivy gourd propagation competitions at schools, the project increased students' interests and made them active "agents of change" rather than solely "recipients" of new food practices.

Sustainability

A very good outlook exists for project activity sustainability. Regarding ivy gourd home gardening, the plants are plentiful year around and, since they are wild, are hardy enough to last through adverse environmental conditions. Even when they do die out, people are obtaining young plants from neighbors or by collecting them from areas surrounding the community. Community members also now realize that raising vegetables in their yard is more convenient than obtaining them from the forest or market. Even after project incentives and motivating messages have ceased, villagers who grow the ivy gourd for sale or home use continue to do so.

Concerning food consumption patterns, the project's new food preparation and consumption practices will most probably be sustained. The major indication is that villagers have internalized many of the project's nutrition and health concepts, particularly that the ivy gourd can improve child health. Even where knowledge has declined, the new practices are still continuing.

Government officials themselves made several points about the SM/VAF project which could further promote its sustainability. They also hold for other similar projects.

First, SM/VAF project activities (especially action programs) could be easily incorporated within the work scheme of local development sector personnel from several Ministries, largely because they were in agreement with existing central level plans and policies. For example, the local Office of Non-Formal Education, Ministry of Education, is now training villagers to produce and market ivy gourd noodles as part of their regular official activities and supported by their government budgets.

Government officials also recommended that the project should also be ended slowly, rather than abruptly, so that officials and community members have adequate time to fully assume continuing activities. This is especially the case for activities which require governmental budget support. An important part of any program is making known to the people about each government office's specialty. When villagers have problems, they will then know where to go.

Further, one invaluable aspect was the initiative by government officials to encourage people to grow the ivy gourd for sale as well as home consumption. This added an additional economic incentive on top of the already successful health benefits.

Training should be given for local government development workers so that they can periodically go to the villages and guide people in ivy gourd production and consumption (or other nutrition-related health activities).

Finally, as was done for Kanthararom villagers, community members from other areas should be persuaded to visit and learn from these villagers with successful nutrition and/or home gardening programs. This also helps the host communities to maintain their sense of pride and achievement as well as their self-interest for sustaining key activities.

EPR Points of Success

In addition to the above, EPR data highlighted several factors which made this project successful, and which should be taken into serious attention in designing future communication programs. These fall into the areas of communication, collaboration and an integrated concentration (Smitasiri et al. 1993).

Communication

A close fit exists between how people behave, what they expect, and the environment in which they live. The day-to-day situation of rural poor people is very complex, and they are often faced with unpredictable changes in their physical, economic and social environments. They must often adapt themselves to unexpected (and often stressful) changes, and, in the process, they usually must take a great deal of risks (Jonsson 1991).

Nutrition communicators are thus challenged to make the increased production and consumption of micronutrient-rich foods a part of community survival and coping strategies. One way of doing this is to *focus on what the community is already doing and in line with existing beliefs and needs* (Yoddumnern-Attig et al. 1992). Nutrition communication projects therefore need a clear "people's orientation," because success rests upon *people changing themselves. They are the key actors in the change process.*

Collaboration

Likewise, one of the most common findings of researchers who evaluate community action programs is that *those which are most successful are ones which are planned, implemented, managed and monitored by the people themselves.*

Nevertheless, *what community members can do by themselves does have limits.* Those who think all can be left to the community will be disappointed. A community needs not only involvement, leadership and motivation, but also political and financial support, plus technical guidance.

To be successful, nutrition communication programs like the SM/VAF need to build positive partnerships between community members, local development agents from several sectors, and, ourselves, as change agents. The program's main change agents must therefore have an ability to *interact* and *work flexibly* with others as partners in the behavior change process.

They also need a thorough understanding of the target population in order to develop sensitive programs. This often requires them to *listen* to the people, for they are the experts about what is feasible in their given situations.

Overall, nutrition communication programs need to attain five main objectives to help assure program success. These are to:

1) decentralize project decision-making for planning, managing, implementing and monitoring activities;

2) promote a two-way communication process;

3) create positive relationships between project collaborators based on a common understanding and complimentary roles and responsibilities;

4) build a functioning team based on mutual awareness of each other's needs and resources; and

5) transfer project ownership to the people as early as possible.

Integrated Concentration

The SM/VAF project indicates that nutrition communication programs need a three-fold concentration.

First, micronutrient concerns should be integrated into a participatory communication program, developed by the people themselves. This helps to ensure their relevance to community life and thus their impact.

Further, project objectives should become integral parts of how people see that they can fulfill their felt needs.

Finally, project activities must be integrated into larger institutional (government, non-government) and community development processes. While a nutrition communication project may focus on a nutrition problems, solutions must also take into consideration other areas of social development including education, agriculture and rural development.

By having a broader perspective, a nutrition communication program can increase its acceptability to local people and development agents; its appropriateness within local conditions; its institutionalization within the existing service system; and, ultimately, its sustainability. In this way, nutrition communication's goal of facilitating changes in nutrition practices and nutritional status can become a reality.

Conclusion

The SM/VAF project is just one of many which show that dietary diversification programs can successfully improve community food and nutrition situations. Care must be taken, though, in identifying exactly what aspects led to project achievements. Nutritional assessment methods thus far center largely on clinical, biochemical, anthropometric, dietary and KAP methods at community and individual levels. Most notably for vitamin A, no gold standard evaluation method exists. Present methods, moreover, reveal separate measures and no definite mechanism exists for combining them. Some programs which have sufficient resources perform several different evaluation techniques. Most programs, though, have too few resources for anything but the most basic evaluation of either nutritional status or dietary behavioral change. In any case, the most critical measures are not simply those related to a

program's nutritional status impact on target groups. More importantly, it also rests on what factors have helped to promote positive food practice changes. For this latter evaluation, EPRs using a variety of quantitative and rapid qualitative assessment techniques are a sound investment, particularly for any program which aims for national scale implementation.

For the SM/VAF project itself, it demonstrates that successful nutrition communication programs require an integrated concept of nutrition, including both biomedical and behavioral science perspectives.

Above all, programs must create an interactive atmosphere. Project activities and responsibilities should be shared by communities, local development organizers and project personnel, all of whom act as ***project collaborators*** in a combined "top-down/bottom-up" approach. This emphasis on change agents and the deliberate use of intersectoral collaboration is one of the unique qualities of the SM/VAF project. Also crucial is combining nutritional messages with concrete actions, and an emphasis on careful, effective management.

Finally, the project itself must have a certain style which includes developing a variety of activities which meet the practicalities of village life. This is important because ultimately the community members are the one's who make the real difference. They are the ones who must change themselves.

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Chapter 42

Community views on urban environmental problems

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Environmental problems are now at the forefront as important determinants of people's quality of life and any nation's attempts to formulate sustainable socio-economic policies and programs. As discussed in prior chapters on health problems, environmental concerns are deeply rooted in human behavioral patterns, not only in terms of how such behaviors shape the environment, but also how humans react to what they have created. This chapter uses focus groups to explore this issue among people living in Bangkok - EDS.

Introduction

This study has been inspired by the ongoing debate among Thai scholars, politicians, administrators and the public as to whether the path of modernization followed by Thailand historically and currently is appropriate to ensure the health and well-being of Thai people and of the natural environment upon which they depend. The course of this debate has suffered from a lack of adequate data. The debate has parallels worldwide, as people in developed and developing countries alike are questioning the wisdom of forms of development which are unsustainable ecologically and which have potentially negative effects on human health and well-being.

Urbanization, including the uncontrolled growth of Bangkok, is an important aspect and consequence of this path of modernization. The city has been developed as the sole center for government and national administration, economic activities, industrialization, telecommunications, social services and public welfare. Most manufacturing is clustered in and around the city (Krongkaew and Tongudai 1984). London (1980) argues that the growing primacy of Bangkok is integral to the exploitation and neglect of the rural hinterland. This uneven development between Bangkok and rural areas has been fostered by minority elite groups through the deep rooted patronage system.

Bangkok dominates Thailand's urban hierarchy. It is estimated that in 2001 Bangkok will have about 8 million people. This overcrowded city suffers severely from many environmental and social problems - traffic congestion, air pollution, noise, inadequate water supply, water pollution, flooding, a poor garbage disposal system, slums, rapidly rising cost of living, and a growing gap between rich and poor. The city has grown far beyond its

optimum size and its population is also responsible for wasteful energy consumption. The city's site on a flood plain, and the lack of an effective urban planning system, exacerbate the problems and make solutions difficult.

A number of studies have analyzed aspects of Bangkok's urbanization (see for example London 1980; Wongtrangan 1982; Korff 1983; Krongkaew and Tongudai 1984; National Economic and Social Development Board (NESDB) 1986; Thadaniti 1987; Komin 1989). However, there is still a lack of substantive information on resource usage and the environmental quality of the city. The impacts of the growing city and of environmental problems on its inhabitants, and how people adapt or adjust to the changing environment, have not been studied.

People's adaptations to existing conditions (and anticipations of them worsening) have the cumulative effect of transforming the city in unintended ways, creating new problems and undermining the government's solutions. For example, middle class people move to the green belt to escape air pollution, adding to traffic flows, and displacing farmers and poorer people as land is taken up for housing estates. The burdens of displacement and worsening conditions fall very inequitably on poorer people. It is therefore crucial to understand people's perceptions and the rationale for their behavior. People also adapt in ways which impact on their own well-being. They may internalize stresses, or adopt behavioral strategies such as spending long hours away from home to avoid peak traffic.

This chapter is based on a dynamic view of the city as a people-environment system centering specifically on community views of urban problems. Its data derives from a detailed study of selected communities around Bangkok that are currently affected by various aspects of urbanization. Focus group interview were used to collect community members' perceptions of environmental conditions in Bangkok and their own communities, and their accounts of how environmental and social conditions affected their daily lives.

Procedure

In this study, the principal investigator was the moderator of each discussion. He selected the communities with the assistance of district officers of the Bangkok Metropolitan Authority, particularly those involved with community development activities. Twelve communities were considered, and seven eventually chosen (one as a substitute for an inner city community in which it had not been possible to raise focus groups representing both age groups under study).

Once community leaders had agreed to participate in the study, he familiarized himself with each community by observation and a conventional group interview involving longstanding residents active in community affairs. These interviews gave historical and other background on each community. Without this background, the views expressed in the later focus groups could not have been understood.

Participants in the focus group discussions were required to have lived in the community for ten or more years, to ensure their familiarity with and sense of belonging to the community concerned. Ten years was considered to be an appropriate span to represent changes resulting from urbanization, and to be within the comfortable memory of the participants. Two groups were held in each community, representing the generations of 'younger' and 'older' adults, aged 25-40 years and over 55 years respectively. There was one exception, where two similar communities had to be used to achieve one focus group for each age bracket. These ages were applied flexibly where potential participants were scarce in these age ranges; and where older adults were concerned, general health and the ability to participate effectively in the discussion were also taken into account. A large gap between the age ranges

was allowed, to ensure a clear generational difference between the groups. Altogether 103 people, 52 men and 51 women, participated. The groups were mixed, as the topics of discussion were not so sensitive as to require gender separation (in family planning studies, single-sex groups are usual).

The group meetings were held in a range of popular and reasonably neutral community settings, including schools, temple grounds and private houses. Each discussion was limited to two hours, and participants were rewarded with refreshments and a token gift. Interruptions were not entirely preventable in the two open-air temple settings used, but the flow and quality of discussion recovered quickly in each instance.

After the interviews, the tape recordings were transcribed. The researcher then coded the data according to the issues discussed, and used content analysis to explore the details and linkages described.

Locations and the Communities

The study concentrated on three districts of Bangkok - inner city, slum area, and old subdivision - from the inner, middle and outer zones of Bangkok respectively. The slum area and old subdivision are adjacent, on the rapidly expanding western side of the city where a new bridge across the Chao Phraya and new major roads have opened these areas for residential use at the expense of agricultural lands.

Bangkok city includes a wide range of different living environments. The communities selected for the preliminary study represent the most typical of these 'habitats', from slums to high-income housing, and from densely populated inner areas to agricultural and klong (canal) communities experiencing the pressures of urban expansion for the first time. Communities, as habitats, were chosen in preference to the more conventional socioeconomic methods of sampling, as lifestyle and living environment are interlinked. People of one class or income bracket, on the other hand, may live in very different habitats: the poorest in slums or agricultural communities, and the well-off in traditional sois (lanes) or modern, westernized housing estates. Communities on the urban fringe, such as the market gardeners and orchard growers in the old subdivision district, provide a particularly interesting case of land use conflict and other impacts of the urbanization process.

Six communities were selected initially, with two focus group sessions, for younger and older age groups, planned for each community. A seventh was added to provide an older group which had not been possible in the inner city community.

Community Views on Urban Problems

The focus group sessions proved to be an excellent way of taking an integrative view of the city - from the point of view of the inhabitants. Ordinary people make links between environmental, human and societal influences on their habitats and behavior in a way which experts seldom can, because their own daily experience provides the points of integration. For example, Bangkok people are highly conscious of ways in which government and city management decisions and activity (societal decisions) affect the roads and transport systems available (biophysical features arising from societal decisions). These in turn affect their commuting behavior (behavior patterns) and stresses on themselves and their families (human part of the framework). An expert study, by contrast, would concentrate either on measuring traffic flows, or health, or even analyzing government planning and decision-making, but

would be most unlikely to explore the other sections of this causal chain.

The people agree with the literature and official studies as to which urban environmental problems are important, but analyze their causes and effects in a fresh, integrative and personalized way. They also add new issues for discussion, as they consider their economic and social circumstances to be inseparable from the environmental problems. Their analysis of the city is presented first in terms of the well-known environmental problems, then in terms of the socioeconomic conditions and changing life conditions in their neighborhoods. The following summary uses many direct quotes, translated from Thai. In these, the abbreviation 'P' refers to a participant in a focus group, so that 'P1' is the first speaker in a section of discussion quoted, and 'P2' the second speaker.

Environmental Concerns

This section focuses on three main concerns: urban transportation, which links traffic, air pollution and noise; water pollution; and urban land use.

Transportation

Options for changing the city's transportation systems are extremely limited, on environmental and economic grounds. Underground transport, an effective form of rapid mass transit in societies which can afford it, could never be possible because of the floodplain. The ecological and cultural opportunity of water transport has been allowed to lapse owing to westernization of the transport system. Road surfaces form a small proportion of the city's area, in comparison with other cities. Land uses, and hence the places between which everyone has to travel, suffer from a severe lack of coordinated planning, which in turn results from the nature of Thailand's political and administrative systems.

Perceptions of the problem

Traffic congestion was the first response of almost all the focus groups when asked what they considered were Bangkok's environmental problems. The people recognized that the number of cars on the road is greater than the capacity of the road surfaces to carry them. People pointed out the close connection between traffic congestion and the levels of air pollution and noise. Those in a slum community described the effects graphically:

P1: *Even the trees are dead.*

P2: *Even trees cannot bear it. I doubt the idea of growing trees to minimize air pollution is effective. The trees now standing there are dying.*

P3: *A lot of poisonous gas:* (Slum: Younger adults).

The high pitched noise of motorcycles is the worst of the noise effects. Motorcycles fill an important niche in the transport system because of their ability to enter narrow sois (lanes) and weave around heavy traffic. They are cheaper than a car to purchase, and cheap to hire. Despite being illegal and dangerous (although the allocation of routes is regulated by the police), hiring is a popular informal-sector economic activity.

P1: *Wherever motorcycles go, they bring noise with them.*

P2: *It affects psychological health.*

P1: *It deafens people.*

P3: *It troubles me nearly every night (at work). I really want to curse them.*

P1: *Yes, you have to turn up the TV volume if motorcycles pass your house.* (Inner city: Younger adults).

Impacts

The impacts of the traffic, air pollution and noise are unevenly distributed between locations and income groups. The different groups have different opportunities to adapt to the problem, and thus suffer different impacts from the traffic.

The overwhelming impact of the transportation system is on people's time. Car and bus commuters alike make astonishing arrangements to cope, at great expense to their well-being. Even if they have a short distance to travel, they may leave home as early as 5 a.m. to ensure faster and more reliable travel time or to secure a car parking place. In order to travel early, a few start work up to three hours before their official starting time, and also remain longer at the end of the working day.

Traffic congestion, and the air pollution it causes, are seen as having impacts on both physical and mental health. On the physical side, the people mentioned that they get headaches, eye irritation, infected lungs and heart, and feel weak. People have little time at home to rest, spend with their families and friends, or carry out their household responsibilities. Meals and preparations for the day are rushed, or carried out on the way to work; Bangkok people have reported feeding their children breakfast and supervising homework in cars. Some working couples have their main weekday chance to talk together on the long car journeys.

Whether people travel at the normal times, or outside peak hours to reduce the time they spend on the roads, the time involved in commuting has severe impacts on their families and personal relationships. Family life is changing as a result of so little time at home, and community life is changing also as people have less time to spend in their neighborhoods.

The work begins at 8:30 a.m., but I leave home as early as 5 a.m. We start to journey back around 6:30-7:00 p.m. and arrive home around 9 p.m. (Inner city: Younger adults and Older adults)

P1: *Everything is done in cars. If we could move beds into cars, we might do that!*

P2: *I have my children do their homework at the university [the work place] or have them tutored there. We have to have everything done out of the house. Then, when we reach home, we just take a bath and go to bed.* (Inner city: Younger adults).

People from the old subdivision and slum communities said they were worried about the limited time given to their children, who they hardly saw because they had to leave home very early in the morning and come back very late at night. They mentioned that in some cases 'the children do not recognize their father's face' (Slum: Older adults). The people were concerned that the limited time available for family members influenced children's behavior

and the way they grew up: 'Because we cannot give enough time to kids, that is why they are changed' (Old subdivision: Younger adults). A slum resident mentioned that since the financial situation was bad, parents could not control their children; they went out to work every day and did not know what their children did at home.

In addition, parents usually could not prepare suitable food in the morning because they had to hurry to work. The participants considered that they were unable to bring up their families in the way they would prefer. For instance, the children in this generation cannot cook rice by themselves because they use electric rice cookers. People have to choose the easiest ways of doing things, so cannot pass on their experience and skills even to their immediate family members.

As well as the economic inefficiencies of lost working hours, delayed meetings and tired employees, there is a serious financial impact on middle-income households, which strive to own cars to save their time and reduce travel stress. Despite their expense, cars are no longer perceived as a luxury. People from the middle income communities (Inner city and old housing subdivision) argued that a car had become a necessity for commuting in the city. They are struggling to buy and run cars so as to avoid the slow and crowded public buses and the severe air pollution. In addition, the growth of the city adds to the demand for car ownership, as those who move to the fringe areas have no other means of transport. Because of the lack of effective control over land use, urban expansion is taking place without sufficient planning, thus aggravating the inadequacies of the public transport network, and causing further traffic congestion in all city areas.

The higher income inner city and old housing subdivision communities are equipped to reduce the effects of traffic, air pollution and noise. They have air-conditioned cars to protect them while they are travelling, and air conditioning at home. This adds to national energy consumption. Meanwhile, those who travel by motorcycles or public buses breathe polluted air constantly and are also exposed to it for longer periods. The highest health risk and discomfort is experienced by the members of the low income groups who depend on these modes of transport.

Adaptation

The study investigated ways in which people adjust to the time demands and stresses of commuting. Those who travelled by private car said that they had to accept the situation because they could not change the causes. This is a cognitive adaptation - they choose to alter their mental state. People did everything possible to relax or release their frustrations while they were in the traffic. For instance, they read magazines, listened to the radio or a cassette, or meditated (Inner city: Younger adults; Old housing subdivision: Younger adults and Older adults).

People with cars ensure that they suffer the impacts as little as possible. However, by buying a car then cocooning themselves in air conditioned comfort, they use adjustment processes which collectively add to the traffic-related environmental problems as well as energy use, and have negative impacts on other commuters.

The other common behavioral adaptation is to avoid travel altogether. If they have an option, many would prefer not to go outside at all: 'now, I do not want to go anywhere because I feel fed up with the traffic' (Slum: younger adults).

Water pollution

The floodplain biophysical setting of Bangkok, transformed by societal changes from a water-oriented culture to a modernizing and westernizing built environment, is also the foundation for a severe water pollution problem.

Perceptions of the problem

Discussion of the issue of water pollution covered the pollution of the Chao Phraya River and of canals. Participants in the focus group interviews were fully aware of the seriousness of the pollution in the Chao Phraya river, having observed floating rubbish and weeds, changes in the color of the water, and a decline in aquatic life. In agreement with empirical research, they recognized three main sources of pollution of the river: industries, households and restaurants. There was some divergence of opinion as to who should be blamed: riverside residents, migrants, or everyone.

The situation in the canals is less well-publicized but equally critical. Canal water pollution has become an acute health problem for the vast majority of residents on the fringe areas of Bangkok. The majority of these are poor, and their livelihood is still closely associated with the water.

Many agreed that one of the major problems is the lack of a proper sewerage system. The partial system available merely discharges household effluent into the canals, which flow into the river. The majority of houses, which are not connected to any system, also discharge wastes directly into the river or canals. Many communities also lack access to the garbage collection network, so that solid rubbish is also thrown in.

Many factors were seen as contributing to the pollution. The population of each urban community is growing, and crowding affects the water: 'It is because of the growing community, things have completely changed' (Canal: Older adults). In the past, when each community was small, there was no pollution problem as fresh water from other places replenished the canal. Now that there are more people, communities are less able to control the throwing of rubbish into canals.

Pollution from factories among the communities is recognized as another major cause of the canal pollution. Together with household rubbish, factories are seen to contribute to the reduction of depth in the canals, reducing water flow (Slum: Younger adults).

Participants believed that chemicals are discharged into the water, and that these have not been studied adequately (Slum: Older adults). They were conscious of health risks caused by chemicals to which they are exposed through the use of contaminated water.

Impacts

The pollution of canal water has had significant impacts on the people's physical health, behavior patterns and cost of living. Since the water has become polluted, they are prevented from using it for drinking and washing, but the poorest people still do so when there is no rain water. Those who use the water for cooking rice mentioned that it deteriorates rapidly; 'just in the afternoon, the rice is off' (Agricultural-based: Older adults).

The people who live in the agriculture-based community said that they have stomach upsets and diarrhoea after drinking the water or eating rice. They suspected that these symptoms were related to the contaminated water that they used. Moreover, everyone in this community had experienced water-related problems such as itchiness and swollen skin.

'Almost everyone in the community gets it because we have to use the canal water for bathing' (Agriculture-based: Younger adults).

The lack of running water in the poorer communities makes their life much more difficult. People from the slum community explained that they usually washed their clothes in the canal first and then again with clean water. Since the water is so polluted, they have to buy extra water for this purpose (Slum: Older adults).

Urban land use

The processes of economic growth and urban centralization continually intensify the use of the land in the inner city area. Meanwhile, rising prices and increasing air pollution drive people to greener and cheaper areas towards the city's fringes, where modern new housing estates are built to entice the middle class.

The increasing demand for residential areas puts great pressure on land throughout the city and the neighboring provinces. Housing developments and golf course projects are the leading agents in bringing about change in land use on the fringes. Due to the lack of effective land use controls, these new projects have burgeoned at the expense of agricultural and economically marginal areas of the city. Land speculation leads these processes. The communities in the outer zone are being engulfed by urban expansion.

Meanwhile, the communities of the middle zone in particular suffer new population and resource pressures as lower income inner city residents are forced outwards by eviction and rising prices.

Loss of agricultural areas

Farmers explained that several factors contribute to their decisions to sell their land, including the failure of agricultural production resulting from the adverse environment (water and air pollution, breakdown of natural pest control) and unprofitable markets. The increasing land prices, due partly to land speculation, are extremely tempting. People from the agriculture-based community said that they had sold many of their orchards and paddy fields, so there is almost no land left now: 'The ones who have got land will sell to the people who develop it as housing projects' (Agricultural-based: Older adults).

When they sell the land, they are able to clear their debts and have money to spend on whatever they want. These people usually retain a small piece of land for their own houses but no longer continue farming for a living. There is no concern for those who are able to manage their money and survive by taking up some other employment, but there are many cases in which people cannot manage: 'People here do not have much land left and spent all the money they got from selling the land' (Agricultural-based: Older adults).

These problems of water drainage from the housing development projects have already been experienced in the two slum communities (Slum: Older adults). Also, members of the old housing subdivision community mentioned that the new housing development projects never have proper drainage pipes (Old housing subdivision: Older adults). Another environmental effect observed by those in the old subdivision, is that the reduction in trees and increase in built-up areas affects the heat levels, so that there are no longer cool periods in the early morning and late evenings. As a result, people need air conditioning or fans.

Apart from the specific environmental problems, many people mourned the loss of the natural or agricultural environment. Several from the old subdivision community said that they originally moved to the area because of its good environment: 'I liked it here when I first

moved in because there were a lot of trees and it was very shady' (Old subdivision: Younger adults and Older adults). Others said they moved in because land prices were not very high, and they did not think about the environment at first. However, after staying there for a while, they 'began to like the environment because of the birds and trees' (Old subdivision: Younger adults).

There is little communication between the residents of the new housing developments and the older residential communities. High fences are usually put up surrounding the new estates. The two groups have different lifestyles, and come from completely different socioeconomic backgrounds. There is thus little hope of integration between the two types of habitat, at least in the short term.

The process of urban encroachment on agricultural land has serious impacts upon those who live on rented land. These people expressed their strong concerns about the threat of eviction, either for housing estates or the infrastructure and public utilities which follow (Canal: Younger adults). Some accepted that this is the way of development: 'that is fine as long as they do not come onto our land' (Agricultural-based: Younger adults).

Others were really afraid that they, as poor people, would be displaced (Canal, agricultural-based and slum communities): 'If the land owner sells the land and evicts us, we will be in big trouble as we do not know where to go' (Agricultural- based: Older adults)

Some people, mainly those who still had some land which they expected to sell for a favorable price, perceived the increase in new housing development projects within the agricultural areas positively, as a catalyst for development and 'progress' (Canal: Older adults). For example, they would bring electricity and new roads to their community area. They would be able to use cars, and have easy access to public buses.

Slum relocation

The large number of slum and squatter settlements in and around the city are equally at risk of eviction. The continuing process of urban expansion has a substantial impact upon these people, who are inevitably forced to move further out, or to crowd existing settlements. In the outer areas, their land, like the agricultural land, is sought after for new housing developments or golf courses. In the inner and middle zones, the rate of new building means that their sites are cleared for new developments. Slum dwellers seldom own their land. Many of them own their own houses on rented land, and stand to lose these with any change in land use.

The reluctant merging of lower income populations through this process causes environmental and social pressures in the receiving communities. For example, the long-term residents of the agriculture-based and slum communities are conscious of crowding. In the past there were few people, and the communities were relatively isolated along their canals. Over about the last five to ten years, many more people have moved in. The new have either built their own houses or rented a room in the community.

The lower income communities did, however, welcome the improvements to local infrastructure which had been made in their areas. They considered the improvements to roads, walkways, electricity, and running water a sign of progress and development.

Economic Conditions

The participating communities described their economic conditions as being inseparable from environmental conditions in influencing their lives and health conditions.

Because of wide income disparities, the majority of the city's population still remains at a low standard of living despite the strength of the economy. The low-income habitats generally have lower environmental quality, and low-income commuters depend on the slowest and most polluted forms of transport. Economic stresses are often inseparable from environmental ones where work and commuting behavior patterns are concerned, and while the lowest income people suffer worst, middle income people are not exempted.

Sharp increases in the cost of living have hit people at all levels. Participants in all the focus group discussions complained about economic hardship: the situation is worse because of the high cost of living. Although the country's economic status is improving, not everyone shares the benefits.

Members of the inner city community confirmed that the income distribution is very poor (Inner city: Younger adults) and people do not earn enough to live on (Inner city: Older adults). Many participants in the agriculture-based and slum communities reported economic hardship.

> *It's difficult. Goods are expensive. We want to be economical or spend less but we cannot because we have to buy things. Our salary is small. We run out of it very quickly. It's a little easier for those with bigger salaries but some people have to be responsible for three or four other people.* (Agriculture-based: Younger adults).

Impacts and Adaptation

The economic conditions have direct effects on people's health, in worry about paying bills or finding employment, working inordinate hours at second jobs to try to make ends meet, and inability to meet their basic subsistence needs. They interact with environmental conditions, in that those with the fewest means generally suffer the worst living environments. Their housing is of low quality, many lack land tenure, and their locations are generally unfavorable in terms of pollution. They travel by public transport or motorcycle, and thus are exposed to the worst of air pollution, for far longer periods than those who travel by car. They depend more directly on aspects of the environment such as canal water, and they lack the means to escape the unfavorable environment by such measures as air conditioning and noise-proofing their houses, or escaping to the country on weekends.

Members of the slum communities described how inadequate income makes life more difficult: 'You are under pressure if you cannot find enough money' (Slum: Older adults). They have to accept low wages because of the high competition for jobs, otherwise they will be unable to feed their families. They pointed out that finding a job is much more difficult for the person who has no skills and less education: 'Nowadays jobs that used to be for people with an educational background of level 4-6 are for level 10. Jobs are also rare' (Slum: Younger adults).

Although the members of all communities face health problems owing to the stresses of environmental and economic conditions, an important difference between the economic groups is their respective abilities to use leisure to escape or relieve their stresses. Members of the well-off inner city community mentioned that they felt so bored and stressed with their hurried daily routines, that they took every opportunity to get out of the city. It is common for this group of people to take weekends or holidays away from the city. They said that people nowadays want only peace of mind as they never feel at rest while living in the city.

Those who live in the slum and canal communities are constrained by economic conditions. They have little time to rest and cannot afford to have holidays. The only pause is while having meals, yet not having enough to eat in itself creates stress. Even when they

manage some physical rest, they cannot stop thinking about how to make a living: 'For the ones like me who do not have enough for survival have to keep worrying until they get a headache' (Agriculture-based: Older adults).

Since people have to struggle for their economic survival, work and the work-place come to dominate everyday life. Because people have to spend most of their time at their work-places, they inevitably have less time at home and with their families.

The focus group interviews raised the role of television in coping with urban stresses, and also in contributing to the quality or deterioration of interaction within the family or household. There are different patterns from community to community, related to economic status. The households which can only afford one television set (such as those who live in the canal and slum communities, where almost every household has one) believed that television has an important role in bringing family members together. Watching television is the only time that family members are together, because television is the only cheap entertainment available. In the agriculture-based community, where there are few televisions, community relationships are enhanced because people tend to gather wherever they have access to one: 'Just one television but all share it with each other. All are in front of the screen' (Agriculture-based: Younger adults). However, higher income people from the inner city and old subdivision communities considered that television separates family members, because each family member tends to have their own television set in their bedroom.

Neighborhood and Social Contact

Land use and population changes, economic and social conditions combine to affect the social qualities of urban neighborhoods. Members of all communities talked of a decline in social contact and neighborhood interaction. One cause is the population changes in established communities, resulting from land use pressures and individual economic hardship. Many people are moving out, while there are also a number of people moving in. People tend not to know each other very well. Those who have lived in the inner city for a long time mentioned that a lot of people have moved in to live in the area. Unlike in the past, they cannot recognize everybody in the community: 'Now, sometimes I am taken as a stranger here while I should be the one to take them as a stranger' (Inner city: Younger adults).

The combined effect of everyone's busy lifestyle, as their time disappears on commuting and earning a difficult living, means that people do not have time to get to know their neighbors: 'we hardly see one another because we have to do our own business, we have to earn our living' (Old subdivision: Older adults).

Since people have to spend most of their waking time on the road and at their offices, they tend to spend much of their time with workmates. This affects activity patterns after hours as well. People tend to eat out or have holidays with office friends rather than with neighbors.

The pattern applies to those who live in canal and slum communities, which traditionally have strong social interaction, as well as to the middle-income inner city communities. People mentioned that in the past, everybody knew everyone on the same street as they met at some central place in the community such as a coffee shop. Now the society is rather limited and nobody knows each other because of the way of living (Canal: Older adults). Many also perceived that economic hardship made people less sociable, particularly among neighbors. In addition they believed that television played an important role in separating them. When there were only a few television sets in a community people would get together to watch programs of common interest. Nowadays, they spend their time watching television in their own homes.

The lack of community interaction makes it difficult for existing community members to integrate newcomers. The existing community members and the newcomers, who are usually migrants from upcountry, may associate with each other when they become more familiar. However, the relationship between the existing community residents and the neighboring people in the new housing development projects is problematic. Because of their different socioeconomic status and ways of living, they do not interact with each other at all.

Conclusions

The focus group discussions name most of the same problems and issues as those raised in studies of specific environmental or economic issues, yet give a very different perspective. The people's perceptions and explanations show links between administration, environment, behavior and personal experience that would not be obvious from statistics or other methods of study. Although the results from just a few groups cannot be assumed to be representative of all of the urban population, they describe vividly how they relate to the complex city system and its problems. Their view is integrative, because their daily and long-term experience with the various aspects of the city system enables them to see linkages.

As well as covering familiar ground in a fresh way, the groups raise issues which have not emerged from the statistical, administrative and academic literature, and had not been anticipated by the researchers. Among these are the importance of economic status, against the backdrop of the country's economic conditions, and the way that economic and environmental aspects combine to affect people's habitats, lifestyles, and hence stresses, means of adaptation, and health.

The study has found that the main problems are well-known in a technical sense, but their impacts on, and importance to, the ordinary citizens are far from known. Nor is much known about people's behavior patterns, yet the ways in which they change their behavior in order to adapt to changing environmental conditions have a profound collective effect. The demand for cars, or to live in less polluted green spaces, generate future traffic problems and transformations of land use.

Another contribution of this method is the recognition of income and power differentials in people's experience, and indeed in the classification, of the environmental problems of the city. The environmental problems which are thought to be so well known turn out to be principally those of the inner city, and those which most affect elite groups in the society. Far less is known, or cared, about the effects on the outer areas of the city or the experiences of lower income groups, with the exception of slums, which have the backing of non-government organizations and community development programs.

Until recently, solutions have also been biased towards the needs of elite groups. For a long time, traffic problems were tackled from the point of view of private car travellers, and vast sums were spent on flyovers across the worst intersections and a few overhead expressways. Less costly but less spectacular options, such as improving traffic flow by better traffic management, can be observed to have played an important part since 1988 when planning for this study commenced. The public bus system, still the only feasible alternative for mass transport (which will be expensive to improve), has continued to be neglected although people's avoidance of buses ultimately contributes to the scale of the traffic.

While lower-income people, in this study those who live in canal, agriculture-based and slum communities, take a more parochial view of local and personal problems, they provide perspectives which might not otherwise reach public attention. Bangkok is a human ecosystem. Neglect of any of its elements will tend to perpetuate the existing pattern, whereby attempts to solve one environmental problem often just cause different ones.

Adaptation is an important ecological concept, which our results have shown to affect the continuing transformation of the city. It is only by learning about ordinary people's motivations and behavior patterns that one can appreciate the changes which result, or are likely to result in future. It is vital to understand the informal processes of transformation of the city, because coordinated planning is virtually impossible in Bangkok. Politicians have short-term horizons (and terms of office) so cannot impose unpopular decisions, and the distribution of responsibilities amongst strongly separatist government departments, arising from the imposition of a pseudo-western form on still-traditional hierarchies and systems of patronage, defies coordination. The city is therefore extended and reconstructed by a series of ad hoc decisions, as industries choose their locations and use financial or political leverage to bypass impediments to their plans, the growing middle-class creates a demand for housing estates and hence the sale of agricultural and slum land, anyone can build or block off a minor road or klong, and the dispossessed rebuild where they can. Thus the unplanned and unguided results of ordinary people's actions, as well as those of powerful groups, are important shapers of urbanization.

It remains to be seen whether public participation and public cooperation, now considered integral to urban planning and environmental management in the west, are viable for Thailand's culture. Factors such as societal hierarchies, patronage, and Buddhist-influenced relaxed acceptance, would appear to make public participation in the solution of urban problems unlikely. However, there are examples to suggest that local initiative can thrive alone or in partnership with government organizations. Slum redevelopment programs, initially supported by non-government aid organizations then by enlightened programs of the National Housing Authority, and the unsung efforts of low-income communities to improve their own infrastructure through working bees, give models for community participation in urban reform.

Economic conditions determine the capacity of people to solve the problems as well as to adapt or adjust to the changing environment. People who have better economic conditions can adapt themselves to the changing social and environmental conditions reasonably well, compared to those who are economically disadvantaged. The poor seem to have the least ability to adapt since they are exposed to numerous constraints. Security of land-tenure, as a basic living condition, is one of the worst restrictions limiting their capacity to survive in the fast growing and dynamic urban system. Meanwhile, although people who have better economic conditions might be able to adapt well in the present environmental conditions, they may also create a further impact on the whole system by, for example, consuming more energy and producing more waste. People's economic and living conditions must therefore be taken into account in the process of solving any environmental problem.

The present combination of economic conditions and the city's environmental problems is likely to have a great impact on social cohesion, family interaction, and individual members of the society. The change in behavior patterns necessitated by social and economic conditions (such as disparity between incomes and cost of living) and the deteriorating environment lead to a loosening of social organization and family relations. At the individual level, both the physical and mental health of the population seems to be at risk. Although the degree of the impact varies from person to person, people's health and well-being are as important as other problems.

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