CONTRACEPTIVE PRACTICE OF THAI WOMEN 1987

RESULTS OF THE STUDY ON DETERMINANTS AND CONSEQUENCES OF CONTRACEPTIVE USE PATTERNS IN THAILAND

Institute for Population and Social Research
Mahidol University

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Boonlert Leoprapai

Varachai Thongthai

Institute for Population and Social Research
Mahidol University at Salaya
25/25 Phutthamonthon 4 Road, Salaya, Nakhonpathom 73170 , Thailand
Telex: UNIMAHI TH; CABLE: POPCENTER SALAYA; FAX; 66-2-4419333

IPSR Publication No. 138

1989 ISBN 974-586-718-7

The project 80649 "Determinants and Consequences of Contraceptive Use Patterns in Thailand" is supported by the grant from the Special Programme of Research, Development and Research Training in Human Reproduction, World Health Organization.

FOREWORD

Findings of the study have been released in the form of an advanced report, papers presented at several national seminars and conferences since the second quarter of 1988. It is indeed a matter of great encouragement to us that these have been well received by those concerned. The study's findings and data have been extensively utilized, especially by the National Family Planning Programme, for different purposes.

This report, the first in a series of reports and articles to be generated by the study, deals in more details on different aspects of contraceptive practise of Thai women currently married in reproductive age. What is the extent to which these women know about the contraceptive methods? How well do they know? What are the patterns of contraceptive practise? What are the levels and trends of contraceptive use, and patterns of contraceptive method mix prevailing at the country, the region and in urban and rural areas? What socio-demographic and behavioural characteristics of women are determinants of contraceptive use? What are the physical and psychological and behavioural effects of nonpermanent methods of contraception?

It has been our sincere hope that findings and data contained in the report will be useful not only to the family planning/population policy makers and programme administrators but also to students in family planning and population who may wish to use the data for further study and analysis.

Boonlert Leoprapai
Varachai Thongthai

ACKNOWLEDGEMENT

We would like to take this opportunity to acknowledge our sincere appreciation to the concerned institutions and persons without whose help, direct or indirect, this study would not have been possible.

We are grateful to the Special Programme of Research, Development and Research Training in Human Reproduction of the World Health Organization for supporting this study and to the Family Health Division, Department of Health, Ministry of Public Health for extending cooperation during the field survey.

Indeed, we are indebted to those who assisted us towards completion of this paper. Our word of thanks is due to Ms. Mali Leunanonchai and Ms. Sureeporn Punpuing for their computer assistance and to the secretarial staff, Ms. Somying Suvannawat, Ms. Viyada Akaratananat, Ms. Patama Iamvijcharin, Mr. Narongsak Paew-on and Mr. Somboon Supakut, whose unfailing cooperation contributed much to the final shape of this study.

Finally, we express our deepest thanks to all the members of survey staff, the interviewers and the respondents.

ABSTRACT

The survey of Determinants and Consequences of Contraceptive Use Patterns in Thailand was conducted between April to August of 1987 by the Institute for Population and Social Research, Mahidol University. The sample size was 6,835 cases of ever married women aged 15-49 years old. The survey was designed to represent country, regional and urban-rural areas.

Findings reveal that knowledge of contraceptive methods was universal especially on the five methods promoted by the National Family Planning Programme namely, female sterilisation, male sterilisation, pills, IUD and injectables. Quite a high proportion of women had a correct knowledge on how to use each of the widely known method. Women's perceptions on the effectiveness of each method were, on the whole, fairly good.

Level of contraceptive use has been increasing. Although the differences in the contraceptive prevalence rates between urban and rural areas disappeared, but the regional differentials still existed.

Female sterilisation was the most widely used contraceptive method, followed by pills and injectables. Natural and traditional methods were used by only a few. The majority of contraception being used was female methods.

Factors which still have some influence on contraceptive use were women's age, education and work status, number of living children, number of additional children wanted, intention to space, religion, and number of contraceptive methods which a women knew.

A fairly to a very high proportion of current and ever users on nonpermanent contraceptive methods perceived or reported no change in their physical, psychological and behavioural conditions after using any one of nonpermanent methods of contraception. The change, if there was any, tended to be on the positive rather than negative aspects.

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CHAPTER 1

INTRODUCTION

Thailand, with an estimated mid-year population of 53.2 million in 1987, is ranked as the 18th largest country in the world (United Nations, 1986). Had it not been due to the attainment of one of her major demographic goals, i.e. the reduction of population growth rate by means of reducing birth rate, adopted since 1972, the country would have now been ranked as the 12th largest country (Leoprapai, 1985).

After the first official national population policy statement, issued in March 1970, "supporting voluntary family planning in order to resolve various problems concerned with the very high rate of population growth, which constitutes an important obstacle to the economic and social development of the nation," the Ministry of Public Health established the National Family Planning Programme (NFPP) to implement family planning activities. The first five-year programme was prepared and included in the Third National Economic and Social Development Plan (1972-1976). The major objective of this first five-year family planning programme was to reduce an annual average population growth rate from over 3 percent to about 2.5 percent by the end of 1976 by means of informing, educating and motivating married women in reproductive age to adopt contraceptive practise and by making service readily available throughout the country (National Economic and Social Development Board, 1972).

The attainment of demographic target during the Third Development Plan period encouraged the planners to develop comprehensive population plan in the subsequent five-year National Economic and Social Development Plans (1977-1981, 1982-1986 and 1987-1991). The population plan has, since the Fourth Development Plan period, encompassed three components: reduction of population growth rate; population distribution and human settlement; and quality of population. For the reduction of population growth rate, the specified targets of an annual average population growth rate were 2.1, 1.5 and 1.3 percent by the end of 1981, 1986 and 1991 respectively. The attainment of these demographic targets has been based on the recruitment of new acceptors and the retention of active users of various contraceptive methods. During the Sixth Development Plan period, for

example, it was estimated that about 6.7 millions of new acceptors and about 5.7 millions of active users of various modern contraceptive methods have to be recruited and retained. Using Bongaarts' Target-Setting Model, it was also estimated that in order to attain the demographic target of an annual average population growth rate of 1.3 percent by the end of 1991 the contraceptive prevalence rate of Thai married women in reproductive age must be as high as 75 percent.

For the purposes of programme planning, management, monitoring and evaluation, the NFPP has, even before its official inception in 1972, either directly conducted or supported the conduct of various family/population related studies and surveys, in addition to the operation of programme statistics. The programme statistics have shown that since 1972 onwards the number of new acceptors exceeded the specified targets of new acceptors in each year (Leoprapai, Pokpong and Isarabhakdi, 1985). The achievement of the family planning programme as indicated by programme statistics, has been supported by various sample demographic surveys conducted since 1969 (Knodel and Pitaktepsombati, 1975; Institute of Population Studies and National Statistical Office, 1977; Suvanajata and Kamnuansilpa, 1979; Kamnuansilpa and Chamratrithirong, 1982; 1985). Despite the differences in sample size, sampling procedures, areal coverage, methodology and the type of questions and responses sought in these surveys, trends in the contraceptive prevalence rate of the Thai married women showed a dramatic increase from a mere 14.8 percent in 1969-70 to 64.6 percent in 1984.

Among different national sample surveys collecting fertility and family planning data in Thailand since 1969, the Contraceptive Prevalence Survey (CPS) was the only survey which was repeated at fixed intervals. "The first in the series of Contraceptive Prevalence Survey (CPS 1) was conducted in late November 1978 to early January 1979 by the Research Center of the National Institute of Development Administration (NIDA). The second survey, CPS2, was also carried out by NIDA between March and June 1981. The most recent, CPS3, was conducted between April and July 1984, was a joint project of the Research Center of NIDA and the Institute for Population and Social Research (IPSR) of Mahidol University" in collaboration with the National Family Planning Programme, Ministry of Public Health (Kamnuansilpa and Chamratrithirong, 1985: 2).

Since the CPS is designed to provide the rapid feedback necessary to evaluate and improve family planning information and service delivery programmes and to gauge the impact of new or re-oriented programmes undertaken on the basis of earlier findings, the decision to discontinue another round of survey which ideally should be conducted in 1987 will create a gap in information useful and necessary for family planning programme management and evaluation. Moreover, it has also been demonstrated by a number of studies that concurrent with the increase in the contraceptive prevalence rate of married women in reproductive age is the decline of fertility. The total fertility rate, for example, declined from 6.5 per women in 1960-64 to about 3.5 per women in 1984 (Leoprapai, Pokpong and Isarabhakdi, 1985). Using Bongaarts' model of approximate determinants on fertility, it was estimated by one study that contraceptive practise accounted for about 89.5 percent of change in total fertility rate between 1968 and 1978 (Knodel et al., 1982). Findings of several other studies also corroborated with Knodel's study (Khoo and Park, 1978; Leoprapai and Piampiti, 1982; Kirananda et al., 1984). This is one of the reasons why it was estimated that in order to attain the demographic goal of approaching the replacement level of fertility by the end of the Sixth Five-Year National Economic and Social Development Plan (1987-1991), the contraceptive prevalence rate of the Thai women in reproductive age must have to increase to about 75 percent as mentioned earlier.

However, the recent increase in contraceptive prevalence rate (CPR) as determined from CPS1, CPS2 and CPS3 indicates a declining trend. The 1981 CPR index is 110.5 (using 1978 CPR as a base) and the 1984 CPR index is 109.5 (using 1981 CPR as a base). Although such trend may be inevitable as CPR is moving up to a higher and higher level, it has nevertheless raised some doubt on the feasibility of attaining the CPR target of 75 per cent by 1991. Whether such a planned increment in contraceptive practise is feasible depends on many factors. The comprehensive knowledge and understanding of what and how different socio-demographic and behavioural factors affect the decisions of individual or couples to accept a particular modern contraceptive method and continue practising it effectively and efficiently are important. Equally important from the point of view of policy and programme strategies are the knowledge and understanding of the consequences of practising a particular method of contraception on individuals and families. As is widely known, the Thai family planning programme has been based

on a cannon of "voluntary family planning" since its inception. Therefore, the service delivery system adopted has primarily been cafeteria approach where potential and current users have the choice of adopting a temporary, semi-permanent or a permanent method of contraception. According to CPS3, male and female accounted for 43 percent of currently married women aged 15-44 years practising permanent methods of contraception, whereas the remaining 57 percent used temporary, semi-permanent, conventional and even traditional methods of contraception (Kamnuansilpa and Chamratrithirong, 1985).

Although about 50 percent of current acceptors used modern contraceptive methods such as pills, injectables and IUD, the question of inefficient use, method failure and discontinuation become a matter of vital importance. Even if the desired target of contraceptive prevalence rate of 75 percent could be attained, it may not necessarily produce the desired demographic goal of attaining a near replacement level of fertility. Consequently, a study on the determinants and consequences of contraceptive use patterns in Thailand was undertaken in 1987. Specifically, the study aimed to:

(1) determine socio-demographic and behavioural factors affecting individuals/couples' choice in accepting a particular method of contraception;

(2) assess the relative contribution of social and behavioural determinants of each method on continuation, discontinuation and method shift;

(3) investigate the physical, psychological and behavioural effects of modern non-permanent contraceptive methods; and

(4) collect data on the level of contraceptive practise and fertility-related data necessary for monitoring and evaluating family planning programme performance and for examining the relationship between contraceptive practise and fertility.

This last specific objective was added as a response to the request made by the administrator of the National Family Planning Programme.

CHAPTER 2

METHODOLOGY

Sampling Procedures

In order to compare current contraceptive situation with previous Contraceptive Prevalence Surveys, CPS1 - CPS3, the sampling procedures employed the same sample design as of CPS3, i.e. they were designed to represent national level as well as regional level (Kamnuansilpa and Chamratrithirong, 1985). The sample size was 6,835 cases of ever married women aged 15-49 years old covering 25 changwats (see Table 2.1 and Map in Appendix B). For special interest in the role of religion in family planning, the sample size of 250 cases were also drawn from the two Muslim changwats, Yala and Satun. These extra samples were not included in the national analysis.

For rural sample, the CPS3's sample units were duplicated down to the village level, except the respondents. For urban areas including Bangkok (Metropolis), the duplication was ended at the selection of Muang municipality of the same changwats as CPS3. The probability proportional to size technique was applied to the selection of census blocks. Afterward, the simple random sampling technique was used in the selection of households of which one eligible women was interviewed.

In the analysis, a set of weighted coefficients was employed to the sampling data. The weighted coefficients were designed that the weighted data can represent country, regional as well as urban-rural areas.

Table 2.1: Number of samples and their unweighted and weighted percentages by changwats and regions.

Region/Changwat	Total	Percentage	
		Unweighted	Weighted
Bangkok	760	11.1	11.0
Central	1506	22.0	22.2
Chachoengsao	167	2.4	2.5
Rayong	129	1.9	2.5
Trad	52	0.8	2.5
Ayutthaya	208	3.0	2.5
Singburi	69	1.0	2.5
Lopburi	215	3.2	2.5
Suphanburi	247	3.6	2.5
Samutprakan	202	3.0	2.5
Ratburi	217	3.2	2.5
North	1535	22.5	19.6
Chiangmai	470	6.9	3.9
Chiangrai	366	5.4	3.9
Nan	154	2.2	3.9
Sukhothai	192	2.8	3.9
Phetchabun	353	5.2	3.9
Northeast	1516	22.2	34.8
Nakhon Ratchasima	438	6.4	7.0
Buriram	251	3.7	7.0
Ubon Ratchathani	335	4.9	7.0
Udon Thani	322	4.7	7.0
Sakon Nakhon	170	2.5	7.0
South	1518	22.2	12.4
Songkhla	431	6.3	2.5
Nakhon Sri Thammarat	581	8.5	2.5
Phangnga	84	1.2	2.5
Pattani	214	3.1	2.5
Narathiwat	208	3.0	2.5
Total	6835	100.0	100.0
Yala	154	-	-
Satun	96	-	-

Field Work

The interview schedule was conducted between April to June 1987 except Bangkok which was in July and August. The interviewers were divided into five teams, each responsible for each region, namely Central, North, Northeast, and South which was further divided into upper South and lower South. Each team members consisted of five interviewers who can speak local dialect fluently, one supervisor and one assistant supervisor. The interviewers were recent graduates with Bachelor of Arts degree. The supervisors and assistants were lecturers and researchers from the Institute for Population and Social Research, Mahidol University. For the lower South team, interviewers can also speak Yawee besides its local dialect and the supervisors as well as assistants were lecturers from the Prince of Songkhla University. The interviewers were given one week intensive courses in contraception and family planning aspects as well as techniques of interview, coding and editing at Mahidol University. The field practise of interview was conducted in a village in the Central.

Questionnaire Design

In line with the objectives of the study specified in Chapter 1, in addition to a series of questions asked in the CPS3 for the purpose of comparison and establishing trends, a number of questions on physical, psychological and behavioural effects of contraceptive use, pregnancy record and monthly data on contraceptive practises and reasons for not using covering each month from January 1982 through the month preceding the interview were asked. The questionnaire for interviewing ever married women 15-49 years old contained questions to obtain the data listed below.

Socio-demographic characteristics: age; religion; marital status; age and date of first marriage; education and occupation of respondents and spouses; type and place of residence; and exposure to mass media.

Reproductive behaviour and intention: pregnancies (history and outcome); live births; number of living children; number of dead children; desire for additional children; and the ideal number of children.

Breastfeeding: practise or not; duration of breastfeeding; and opinion on whether breastfeeding could prevent pregnancy.

Knowledge and use of contraceptive methods: knowledge (prompted and unprompted) of each contraceptive method (ever known, how to use, its effectiveness, side effects and price of each method); current and past contraceptive use (currently using or not using, using single method or switching method, reasons for stop using and perceived problems associated with use); and reasons for not using.

Perceived effects of contraceptive use: respondents and spouses' health; weight; sleeping; smoking; eating; relationship with spouse, neighbour and work mate; disposition; sexual relations; and sexual desire.

Pregnancy record and monthly contraceptive practise data: pregnancy termination and result; month of gestation; contraceptive practise at time of conception; amenorrhea; amenorrhea following 1981 delivery; contraceptive practise; and reasons for not using.

Sources of contraceptive services: type of sources; distance from home; travel time; convenience of service; cost of each method; respondents' perception on expensiveness; and method and source of service which never users intend to use.

Household socio-economic status: availability of amenities (piped water, toilet, gas, electricity); possession of household appliances; and annual family income.

In addition to the above, data on village characteristics, using village as an enumeration unit, were also collected. Included in the questionnaire were: distance from the nearest health centre; type of road or access way; electricity; school; sources of family planning service within or in nearby village (see questionnaire in Appendix A).

Coding and Editing

Since the questionnaire was precoded, the coding and editing was done in the field on the same day of interviewing, first by the interviewer and second by supervisor or assistant supervisor. The questionnaires were coded and edited again at the office for the uncoded answers before entering the data into computer diskettes.

CHAPTER 3

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

In order to form the general ideas of the population's characters, its similarity and its differentiation among regions, some socio-demographic characteristics will be discussed here. These personal characteristics are age, marital status, religion, education attainment, and occupation. It is known that these characteristics have some effects on fertility and contraception, directly or indirectly. Moreover, some characteristics may be different by chance, therefore, knowing these differentials is useful in the analysis.

The analysis treated Bangkok as a separate area. Bangkok was excluded from the urban areas as well as from the Central. It is known that Bangkok has her own special characteristics besides being a capital city. Therefore, the analysis would be less bias by exclusion of Bangkok from the Central and from the urban areas.

The majority of age groups was in between 25-34 years. For the whole kingdom, the average age was 32 years old which was similar for all types of residence and regions. Age structure of each area was also similar, thus the comparison among regions and types of residence was possible without age standardisation.

For marital status, it was divided into currently married (spouse present and not present), separated, divorced and widowed, since the respondents were ever married women. However, the latter three categories constituted about five to six percent in every region. Most of sample women were currently married and living with their husbands. Among currently married women, only five percent were those without spouses present (husbands were away from home for one month or more). The South had the lowest proportion of currently married without husbands present while the North had the highest.

Buddhism is predominant religion. This was the case in every region except the South where 40 percent of women were reported as Muslim.

For educational attainment, nine out of ten women completed at least elementary education or spent four years in school. Only six percent of women surveyed showed no education. Younger women tended to have higher education than older women. Women in Bangkok had the highest education, followed by women in the South, the North, the Central and the Northeast. Women in urban areas attained higher education than their counterparts.

Majority of women were working, about 18 percent were housewives or unemployed. Bangkok represented the highest proportion of women reported as housewives (nearly half of them) while there were small number of housewives in other regions. The majority of working women were engaged in agricultural activity. About one-third was in industrial and service sectors and less than three percent was in professional category. The types of work were different among regions, the Northeast recorded the highest proportion of those engaged in agricultural sector (86 percent of working women), followed by the North, the Central and the South. Bangkok had less than one percent of working women engaged in agriculture. Only one percent of working women in urban areas was reported as agricultural workers.

In sum, the majority of women were around middle age, currently married, had at least four years of schooling and working in agricultural sector. Among regions and urban-rural areas, their similarity was observed in the age patterns and marital status . However, educational attainment and occupation were different among regions and urban-rural areas. With the exception of the South, most women in every region were Buddhists (see Table 3.1).

Table 3.1: Percent of ever married women by residence, region and some socio-demographic characteristics

Characteristic	Residence		Region					Whole Kingdom
	Urban	Rural	Bangkok	Central	North	North-east	South	
Age group								
15 - 19	3.2	4.5	1.7	4.0	4.2	4.5	5.0	4.1
20 - 24	14.4	17.5	14.1	17.2	17.9	15.8	20.6	17.0
25 - 29	22.4	22.1	23.3	22.0	24.2	20.9	22.8	22.3
30 - 34	26.5	20.8	25.0	21.9	22.1	20.4	20.5	21.6
35 - 39	18.8	16.6	18.4	17.7	14.9	17.9	14.7	16.9
40 - 44	10.6	10.7	11.1	11.2	8.4	12.2	9.1	10.7
45 - 49	4.2	7.8	6.4	5.9	8.3	8.3	7.2	7.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean age	31.5	31.5	32.1	31.5	31.2	32.0	30.8	31.6
Marital status								
Married, spouse present	84.5	89.7	91.2	89.2	86.4	89.5	94.1	89.6
Married, spouse not present	6.3	4.9	3.3	4.8	8.0	4.9	0.8	4.8
Separated	2.0	0.9	0.4	2.1	0.6	0.7	0.2	0.9
Divorced	3.7	2.1	3.4	1.9	2.2	2.4	2.4	2.4
Widowed	3.6	2.3	1.7	2.0	2.8	2.5	2.4	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Religion								
Buddhist	93.9	93.0	91.7	95.5	99.4	99.8	59.8	92.9
Muslim	5.4	6.5	7.0	3.3	0.0	0.0	40.1	6.5
Christian	0.7	0.5	1.3	1.3	0.6	0.2	0.1	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Education								
0	3.5	5.6	5.7	6.1	6.6	2.5	10.8	5.5
1 - 3	3.3	4.2	3.2	4.8	3.3	3.8	5.1	4.0
4	45.4	72.5	47.2	69.5	66.0	78.4	58.7	68.1
5 - 10	35.0	15.6	30.4	17.1	19.0	14.1	21.1	18.4
11+	12.8	2.1	13.6	2.5	5.1	1.2	4.4	4.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Occupation								
Agriculture	0.8	64.5	0.4	45.8	58.4	77.6	40.7	53.7
Professional	12.0	1.4	3.0	2.3	3.4	0.9	2.7	2.2
Sales and business	25.1	8.8	22.9	11.4	13.9	6.5	10.6	11.3
Business, self-employed	1.2	0.4	3.0	0.5	0.5	0.4	0.3	0.7
Skilled and semi-skilled	8.1	2.6	12.1	3.2	5.7	0.7	4.6	4.0
Labour and servant	13.5	9.9	10.3	19.3	6.8	4.7	14.2	10.2
Housewife	39.1	12.4	47.8	17.4	11.3	9.1	26.9	17.8
Others	0.1	0.0	0.5	0.1		0.1		0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Compared with selected characteristics of the respondents obtained by CPS3 in 1984, it may be seen that at the national level, there was practically no change in terms of the mean age of respondents, percent of ever married women with spouses present and the percent of respondents who reported agriculture as their occupation. At the regional level, the percentage of respondents in certain selected characteristics might be somewhat different. It should be noted that in 1987 the percentage of respondents who reported agriculture as occupation was lower in Bangkok and the Central, but higher in the South. The only characteristic which showed some degree of difference between these two surveys was the educational attainment of the respondents. The percent of women with no education and with 1-3 years of education reported by respondents in CUPS was, with one exception, lower than that reported in CPS3 (see Table 3.2).

Table 3.2: Mean value and percent of selected characteristics of ever married women by region of residence: CPS3 (1984) and CUPS (1987)

Characteristic	Bangkok	Central	North	Northeast	South	Whole kingdom
Mean age of respondents						
CPS3	31.7	33.0	31.2	32.0	31.3	31.9
CUPS	32.1	31.5	31.2	32.0	30.8	31.6
Percent of ever married, spouse present						
CPS3	92.2	87.9	89.7	85.6	91.8	88.4
CUPS	91.2	89.2	86.4	89.5	94.1	89.6
Percent of those who reported agriculture as occupation						
CPS3	4.2	52.0	60.0	76.7	34.8	55.4
CUPS	0.4	45.8	58.4	77.6	40.7	53.7
Educational attainment (percentage)						
No education						
CPS3	4.6	6.7	8.6	4.6	13.1	7.0
CUPS	5.7	6.1	6.6	2.5	10.8	5.5
Grade 1-3						
CPS3	4.6	5.9	5.7	5.2	5.9	5.5
CUPS	3.2	4.8	3.3	3.8	5.1	4.0

Source: CPS3 are from Kamnuansilpa and Chamratrithirong (1985), Table 2.2, 2.5 - 2.7

One demographic characteristic which has shown to be associated with the increasing contraceptive prevalence rate is fertility, measured in terms of the mean number of children ever born per ever married woman. From the data presented in Table 3.3 below, it may be seen that fertility has been declining over time. The decline in fertility were relatively constant during the last decade. The number of children ever born declined by 10.8 percent during 1978-1981, by 9.1 percent during 1981-1984, and by 13.3 percent during 1984-1987. On the average, the declining number of children ever born was about 3.3 percent annually. The decline was more substantial among ever married women in the higher age groups than women in the lower age groups. In fact, there was no change in the fertility of the adolescents during the period covered by the four surveys.

Table 3.3: Mean number of children ever born per ever married woman by age, 1978-1987.

Age group	CPS1 1978	CPS2 1981	CPS3 1984	CUPS 1987
15 - 19	0.7	0.7	0.8	0.7
20 - 24	1.4	1.4	1.4	1.2
25 - 29	2.4	2.1	2.1	1.9
30 - 34	3.4	3.1	2.8	2.5
35 - 39	4.6	4.2	3.7	3.3
40 - 44	5.7	5.3	4.8	4.1
45 - 49	6.5	6.1	5.5	5.0
15 - 49	3.7	3.3	3.0	2.6

Source: CPS1 - CPS3 from Kamnuansilpa and Chamratrithirong (1985), Table 3.2

In 1987, fertility was still lower in urban areas than in rural areas. In urban areas, the average number of children ever born was 2.3 as compared to 2.7 in rural areas. By region, Bangkok and the North had the lowest number of children ever born, i.e. 2.1. The Northeast had the highest, followed by the South and the Central (see Table 3.4).

Table 3.4: Mean number of children ever born per ever married woman by age and residence, 1987.

Characteristic	Residence		Region					Whole Kingdom
	Urban	Rural	Bangkok	Central	North	North-east	South	
15 - 19	0.6	0.8	0.7	0.8	0.6	0.7	0.9	0.7
20 - 24	1.2	1.3	0.9	1.2	1.0	1.4	1.4	1.2
25 - 29	1.7	2.0	1.6	1.9	1.6	2.1	2.2	1.9
30 - 34	2.2	2.6	2.2	2.5	2.1	2.9	3.0	2.6
35 - 39	3.1	3.3	2.8	3.1	2.7	3.6	3.9	3.3
40 - 44	3.6	4.3	2.9	3.8	3.4	4.8	4.8	4.1
45 - 49	4.4	5.2	3.4	4.7	4.5	5.7	5.4	5.0
15 - 49	2.3	2.7	2.1	2.5	2.1	3.0	2.9	2.6

Although fertility was equal between Bangkok and the North, the decline occurred first in Bangkok as shown by the lower number of children ever born among older women in Bangkok as compared to their counterparts. For instance, number of children ever born in age group 45-49 in Bangkok was 1.1 lower than in the North. For age group 40-44, it was 0.5. By comparing the number of children ever born by age, it was also demonstrated that fertility declined first in urban areas as compared to rural areas. In other regions, the Northeast was the last in the process of fertility reduction, followed by the South and the Central .

In sum, fertility has been declining and has a tendency to decline further. Bangkok and the North had the lowest fertility, followed by the central, the South and the Northeast. Fertility was still lower in the urban areas than in the rural areas.

CHAPTER 4

KNOWLEDGE OF FAMILY PLANNING

Although it was stated in the report of CPS3 conducted in 1984 that contraceptive awareness was virtually universal in Thailand (Kamnuansilpa and Chamratrithirong, 1985), the data on the contraceptive knowledge were again collected. Objectives for collecting this type of information were not only to confirm the earlier findings but also to provide the background information for Infromation, Education and Communication (I E & C) programme and for decision making on whether it would be worthwhile to collect this type of information in the future surveys.

The Extent of Contraceptive Awareness

As seen from data in Table 4.1, knowledge on the more popular modern contraceptive methods could be considered as universal. Even the Norplant which was introduced recently by the National Family Planning Programme (NFPP) on a limited scale and mostly in the remote rural areas was known by about half of the respondents. Patterns of contraceptive knowledge were very similar in each region. In Bangkok and the South, however, the percentage of respondents knowing the natural and conventional methods was higher than in other regions.

Table 4.1: Percent of ever married women aware of contraceptive methods by region, 1987

Method	Whole Kingdom	Region				
		Bangkok	Central	North	Northeast	South
Female sterilisation	98.3	99.7	98.5	98.3	99.8	92.1
Male sterilisation	95.7	99.1	96.4	91.9	98.6	89.8
Pills	99.7	99.9	99.7	99.7	99.9	98.4
IUD	95.4	98.3	94.6	93.1	99.1	87.1
Injectables	98.5	98.7	99.2	98.3	98.6	97.4
Condom	90.1	96.8	88.7	87.3	92.2	85.2
Norplant	51.1	42.9	40.4	51.0	55.9	64.9
Safe period	35.9	62.8	37.2	28.2	27.4	45.7
Withdrawal	26.9	47.0	22.0	19.1	21.8	44.4
Vaginal methods	9.4	14.6	11.4	8.5	6.9	9.6
Abortion	80.0	94.6	78.3	74.4	82.1	73.1
Breastfeeding	26.1	38.3	33.6	18.0	17.2	39.7

With a view to finding out what contraceptive method was spontaneously mentioned by respondents, interviewers were asked to prompt the respondents with the more colloquial name of each method which the respondents did not mention. As seen in Table 4.2, the better known methods were spontaneously mentioned by a higher percentage of respondents than the lesser known methods. The most familiar method was contraceptive pills which nine out of ten women mentioned without prompting. Moreover, nearly all women would know pills after prompting. Other methods which more than 95 percent of women knew after prompting were injectables, female sterilisation, male sterilisation, and IUD. The range of these methods mentioned before prompting was from 71 percent for injectables to 48 percent for male sterilisation.

Table 4.2: Percent of ever married women aware of contraceptive methods with and without prompting, 1987

Method	Without prompting	With prompting	Total awareness
Female sterilisation	64.9	33.4	98.3
Male sterilisation	48.5	47.2	95.7
Pills	92.1	7.6	99.7
IUD	66.0	29.4	95.4
Injectables	70.9	27.6	98.5
Condom	36.4	53.7	90.1
Norplant	17.8	33.3	51.1
Safe period	5.1	30.8	35.9
Withdrawal	2.8	24.1	26.9
Vaginal methods	1.0	8.4	9.4
Abortion	2.7	77.3	80.0
Breastfeeding	1.4	24.7	26.1

Condom was also known by nine-tenths of ever married women. However, five of nine women had mentioned this method only after prompting. Norplant, the latest modern contraceptive method, was spontaneously stated by 18 percent of women. After prompting, the proportion of knowledgeable women rose to 51 percent.

Other modern contraceptive methods which were not included in the promotion plans of the NFPP, are vaginal methods (foam, jelly and cream) and abortion. One out of every ten women would know about vaginal methods after

prompting, but only one percent would mention them without prompting. On the contrary, abortion was known to eight out of ten ever married women as a contraceptive method, and most of them mentioned after prompting. The reason of their reluctance was that abortion is considered as an illegal activity by the government. Nevertheless, 3.4 percent of ever married women had experienced abortion.

For natural methods, only five percent of women mentioned safe period and only three percent stated withdrawal. After prompting, the percentages increased to 36 and 27 for safe period and withdrawal, respectively. These percentages are slightly lower than in 1984 (Kamnuansilpa and Chamratrithirong, 1985). This might be a good sign indicating the trend toward modern contraceptive methods.

Other traditional methods were also mentioned by about one percent of women. The majority of traditional methods mentioned was herbal medicine. Others were massage, jumping, magic arts, and praying. It was noteworthy that breastfeeding was spontaneously stated as contraceptive method by one percent of women and one-fourth of women mentioned it after prompting.

The proportion of ever married women who knew about specific contraceptive methods are not much different from CPS3. In 1984, most women knew all modern methods included in the NFPP's promotion plans. The percentage of knowledgeable women in male associated methods, condom and male sterilisation, was high only after prompting showing some reluctance to talk about these methods. After prompting, about half of women knew natural methods and only one-fourth knew vaginal methods (Kamnuansilpa and Chamratrithirong, 1985: 36).

Influence of Education on Knowledge of Family Planning

Contraceptive knowledge by the educational attainment of respondents followed an expected pattern, the higher the level of education, the higher the percentage of ever married women knowing each specific method. It was observed here, however, that the differences in the levels of contraceptive knowledge were more pronounced between women with no education and women with little or more education rather than between women with different educational categories. For the six widely known methods, i.e. pills, injectables, female sterilisation, male sterilisation, IUD and condom, the percentage differences between women with different levels of educational attainment were mostly not significant. For the lesser known contraceptive methods, levels of contraceptive knowledge were significantly different among women with different levels of educational attainment (see Table 4.3). Implications of the findings would be that there is still a need for different strategies in the promotion of contraceptive among eligible women with different educational categories.

Table 4.3: Percent of ever married women aware of contraceptive methods by educational categories,1987

Method	All	Educational status levels			
		No education	Grade 1-3	Grade 4	Grade 5+
Female sterilisation	98.3	90.1	96.2	98.8	99.0
Male sterilisation	95.8	85.6	93.2	96.4	96.7
Pills	99.6	97.6	99.4	99.7	99.9
IUD	95.3	79.8	93.2	96.4	96.4
Injectables	98.5	94.5	96.8	98.7	99.3
Condom	90.1	68.5	82.8	90.4	95.8
Norplant	51.2	30.2	42.2	50.7	59.5
Safe period	35.9	14.3	26.3	29.9	61.3
Withdrawal	26.9	9.2	16.9	22.0	47.8
Abortion	80.0	60.9	73.7	79.9	86.9
Breastfeeding	26.1	18.3	26.3	24.3	33.3

Accuracy of Knowledge of Contraceptive Methods

The contraceptive knowledge discussed above only indicated that women had heard of the methods, not to imply that they knew about its proper use or its effectiveness. Hence in this survey, those women who knew of particular methods were asked further whether they knew how to use the method properly and also its effectiveness in preventing birth. It was not a matter of surprise that about 90 percent or more of ever married women knew how to use injectables, pills, and condom correctly. The methods that they did not know its usage most were vaginal methods and male sterilisation, 43 and 40 percent, respectively. Other methods, the percentage of not knowing ranged from 15 to 24 percent (see Table 4.4). Therefore, among the methods including in the NFPP's promotion plan, more information on IUD and sterilisation should be emphasised, especially male sterilisation.

Table 4.4: Percent of ever married women who reported of knowing how to use contraceptive method by method, 1987

Method	Know how to use			Total
	Correct	Incorrect	Don't know	
Female sterilisation	84.3	1.2	14.5	100.0
Male sterilisation	57.3	2.7	40.0	100.0
Pills	91.1	1.1	7.8	100.0
IUD	77.3	1.4	21.3	100.0
Injectables	95.2	0.8	4.0	100.0
Condom	89.8	0.9	9.3	100.0
Norplant	70.8	4.7	24.4	100.0
Safe period	69.5	9.1	21.4	100.0
Withdrawal	84.2	1.4	14.4	100.0
Vaginal methods	54.8	2.3	42.9	100.0
Abortion	80.7	0.8	18.5	100.0
Breastfeeding	85.6	5.7	8.7	100.0

Once they stated that they knew how to use the methods, they really knew them correctly, especially the methods that users had to administer by themselves, such as pills, condom, and withdrawal (less than 2 percent gave incorrect answer). The exception was safe period, as one out of every eight women who knew how to use, did not know it correctly. This finding about safe period

should be taken into consideration particularly in the South where a number of women were using this method.

Respondents' Perception on the Effectiveness of Contraceptive Methods

The term contraceptive effectiveness, here, referred to women's perspective or perception of the effectiveness in preventing pregnancy or birth of the specific contraceptive method, even though they never used them. Thus, the answers might be effected by I E & C as well as rumours. The method with large proportion of women stated as do not know, means that they need more information about that method. The method which the answer did not correspond with the fact, means that the right information should be given to women.

The methods with the highest proportion of women stating "don't know" which means that they do not have any perception on method effectiveness, were vaginal methods and Norplant (about half), followed by condom (28 percent), natural methods (safe period and withdrawal, about 18 percent), abortion (18 percent), IUD (14 percent), and male sterilisation (12 percent). Other methods were less than 6 percent in "don't know" category. Therefore, if the NFPP wants to promote Norplant, the strategy is to distribute more information on its effectiveness as well as its proper use (only half of ever married women was aware about this method, out of this, 30 percent did not know how to use the method and half did not know its effectiveness).

It was surprising to find that about 28 percent of ever married women who knew condom, did not know the effectiveness of condom which is the method under NFPP's promotion plan (see Table 4.5). This means that one-fourth of women who knew about condom, did not plan to use this method at all as they did not pay any attention on its effectiveness. Another male contraceptive method, male sterilisation, also fell in the same category. Only 12 percent did not know about its effectiveness. But about 40 percent did not know its proper use. It implies that more details information on male methods should be emphasized on the promotion campaign.

Table 4.5: Percent of perception on effectiveness of contraceptive method of ever married women by method, 1987

Method	Effectiveness				Total
	High	Moderate	Low	Don't know	
Female sterilisation	89.1	6.2	1.1	3.6	100.0
Male sterilisation	77.2	8.1	2.6	12.1	100.0
Pills	85.1	9.4	1.6	3.9	100.0
IUD	54.2	21.4	10.9	13.6	100.0
Injectables	86.0	7.7	0.9	5.3	100.0
Condom	40.6	21.1	10.1	28.1	100.0
Norplant	42.7	6.8	1.2	49.4	100.0
Safe period	24.5	28.6	28.2	18.7	100.0
Withdrawal	25.5	24.4	32.3	17.8	100.0
Vaginal methods	22.7	15.4	11.2	50.6	100.0
Abortion	50.9	20.0	11.1	18.0	100.0
Breastfeeding	33.2	28.6	32.0	6.2	100.0

Permanent methods, male and female sterilisation, should be considered as highly effective by all women, but some women did not think so (about 10 percent for female sterilisation and 20 percent for male sterilisation). This might be due to rumour of method failure especially male sterilisation. IUD was also affected by the rumour of method failure (see Table 4.5). For other methods, the answers on effectiveness were quite acceptable. The exception is abortion in which less than half of women who knew the method considered it as highly effective method.

It should be noted that one fourth of ever married women thought that breastfeeding was also a contraceptive method. Of these women, eight out of ten had correct knowledge. This level of knowledge was the same as withdrawal but was better than safe period method.

In sum, although almost all of ever married women knew (aware) of the contraceptive methods promoted by NFPP, they did not have complete and correct knowledge (knew its usage and effectiveness) of the methods, with the exception of pills and injectables. The methods that need to be publicised are male sterilisation, IUD, female sterilisation and condom, respectively.

It can also be concluded that the information on contraceptive knowledge is quite useful for I E & C programme, especially the detailed information on contraceptive usage and effectiveness. Thus, this kind of information should be included in the future survey.

CHAPTER 5

CONTRACEPTIVE USE

Fertility reduction is directly influenced by four proximate variables: increasing in age at marriage, widespread use of contraception, increasing induced abortion, and widespread and prolong breastfeeding (Bongaarts, 1978, 1982). For Thailand, contraception has played a major role in fertility decline, as it was responsible for 75 percent of fertility reduction during 1968-1978 (Knodel, Chamratrithirong and Debvalya, 1987). Therefore, it can be stated that further reduction of fertility still depends on the levels and trends of contraceptive use.

Levels and Trends of Contraceptive Prevalence Rate

Contraceptive prevalence rate is measured by the percentage of currently married women in reproductive age using contraceptive methods. Since only few births occurred to women over the age of 44, the discussion will, therefore, include only currently married women aged 15-44.

The contraceptive prevalence rate had been increasing in the last decade. The rate increased from merely 53 percent to 59 percent, to 65 percent, and to 70 percent in 1978, 1981, 1984 and 1987 respectively. Although the contraceptive prevalence rates had increased at the rate of 3.2 percent per year on the average, the increasing rates were slightly lower since the first survey, i.e. the increasing rate was 10.5 percent during 1978-81, lower to 9.5 percent during 1981-1984, and it was 9.1 percent in the last period (1984-1987) (Leoprapai and Thongthai, 1988). Nevertheless, the decline in the rate of increase should not be a matter of concern since the higher the level of contraception, the lower the proportion of eligible women (women who want to control their fertility and are not using any contraceptive method) left.

Levels and trends in contraceptive use can be measured by the contraceptive prevalence rate (CPR) index. The CPR index is the percentage change of contraceptive prevalence rate by given base year as 100. The index which is higher than 100 shows the increase in contraceptive prevalence rate. On the contrary, the index which is lower than 100 shows the decrease in contraceptive

prevalence rate. Table 5.1 shows the changing values of CPR index by each contraceptive method during 1978-1987. In 1981 using 1978 as base year, values of CPR index showed a dramatic increase for three methods, namely, injectables 151, female sterilisation 144 and male sterilisation 120. In 1984, using 1981 as base year, values of CPR index of these three contraceptive methods still showed an increase but at a much lower rate, i.e. female sterilisation 126, male sterilisation 105 and injectables 107. The decline in the increase of values of CPR index was also observed in 1987 using 1984 as base year. For female sterilisation, CPR index in 1987 was only 108. The CPR index for male sterilisation in 1987 using 1984 as base year was in fact lower than 100 which means that the contraceptive prevalence rate for male sterilisation decreased by 14 percent from 1984. In 1987, only the value of CPR index of injectables showed a high rate of increase, i.e. 143.

Table 5.1: Percent of currently married women aged 15-44 practising contraception and CPR index by contraceptive methods, 1978-1987

Method	CPS1 1978	CPS2 1981	CPR Index 1981 1978=100	CPS3 1984	CPR Index 1984 1981=100	CUPS 1987	CPR Index 1987 1984=100
Female sterilisation	13.0	18.7	143.8	23.5	125.7	25.4	108.1
Male sterilisation	3.5	4.2	120.0	4.4	104.8	3.8	86.4
Pills	21.9	20.2	92.2	19.8	98.0	19.9	100.5
IUD	4.0	4.2	105.0	4.9	116.7	6.2	126.5
Injectables	4.7	7.1	151.1	7.6	107.0	10.9	143.4
Condom	2.2	1.9	86.4	1.8	94.7	1.9	105.6
Norplant	-	-	-	-	-	0.2	-
Others	4.1	2.7	65.8	2.6	96.3	2.3	88.5
Total	53.4	59.0	110.5	64.6	109.5	70.5	109.1

Source: CPS1-CPS3 from Kamnuansilpa and Chamratrithirong (1985), Table 5.6.

The CPR indices of pills showed no change or a slight decline during the intervals between the four surveys. A steady increase in the value of CPR index was observed for only one contraceptive method, IUD. The CPR index for IUD in 1981, 1984 and 1987 were 105, 117 and 126 respectively. The declining trend in the use of less reliable methods such as the natural and traditional methods during 1978-1987 shows the switching from less reliable contraceptive methods to more effective methods.

In sum, the levels and trends of contraceptive prevalence rate of all contraceptive methods show a steady with a very slightly decreasing rate of growth in each successive surveys as the level of contraceptive practise of currently married women is moving up to a higher level. The contraceptive prevalence rate of each effective modern contraceptive method, except pills and male sterilisation, also shows an increase but with some fluctuations between each survey interval.

Contraceptive Method Mix

It is known that contraceptive use-effectiveness varies from method to method. The contraceptive method which has the highest use-effectiveness is the permanent methods (female sterilisation and male sterilisation), followed by temporary methods such as, pills, IUD, injectables, condom, jelly, foam, safe period, and withdrawal. The lowest use-effectiveness methods are traditional ones. The differences in the combination of contraceptive methods used among populations, although with the same contraceptive prevalence rates, would have different effects on their fertilities. Therefore, it is essential to know the combination of contraceptive use.

Similar to the findings of CPS3, female sterilisation was the most widely used contraceptive method in 1987. It was used by more than one-third of currently contraceptive users or one-fourth of currently married women aged 15-44. Pills, which used to occupy the first rank in 1978 and 1981 but lost its place to female sterilisation in 1984, was also widely used, only second to the female sterilisation. Other popular methods were injectables, IUD, male sterilisation and condom respectively (see Table 5.1). Only 3 percent of current users reported their contraception as natural methods which included safe period, withdrawal and traditional contraception. It is noteworthy that most of the current users chose scientific methods. Moreover, female methods were chosen by more than 90 percent of current users.

Contraceptive method mix varies with age. At the younger age (15-19), almost contraceptive users were using temporary methods. Half of them were using pills, about one-fourth were using injectables. As age advanced, the proportion of contraceptive users who were using pills and injectables declined, while the proportion of contraceptive users who were using permanent methods

increased. By the aged 44-49, about 65 percent of contraceptive users were using either female sterilisation or male sterilisation (see Table 5.2 and Figure 5.1).

Table 5.2: Percent of current users who are currently married women aged 15-44 by method and age group, 1987

Method	15-19	20-24	25-29	30-34	35-39	40-44
Female sterilisation	2.5	12.0	27.5	42.0	53.5	52.5
Male sterilisation	1.7	0.5	4.3	5.3	7.6	12.3
Pills	50.9	43.4	32.4	26.4	16.3	16.7
IUD	8.5	9.8	11.0	8.8	6.8	6.0
Injectables	28.2	29.1	17.9	10.8	10.1	7.8
Condom	6.2	1.5	3.5	2.8	2.4	1.6
Others	1.9	3.7	3.5	3.9	3.3	3.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

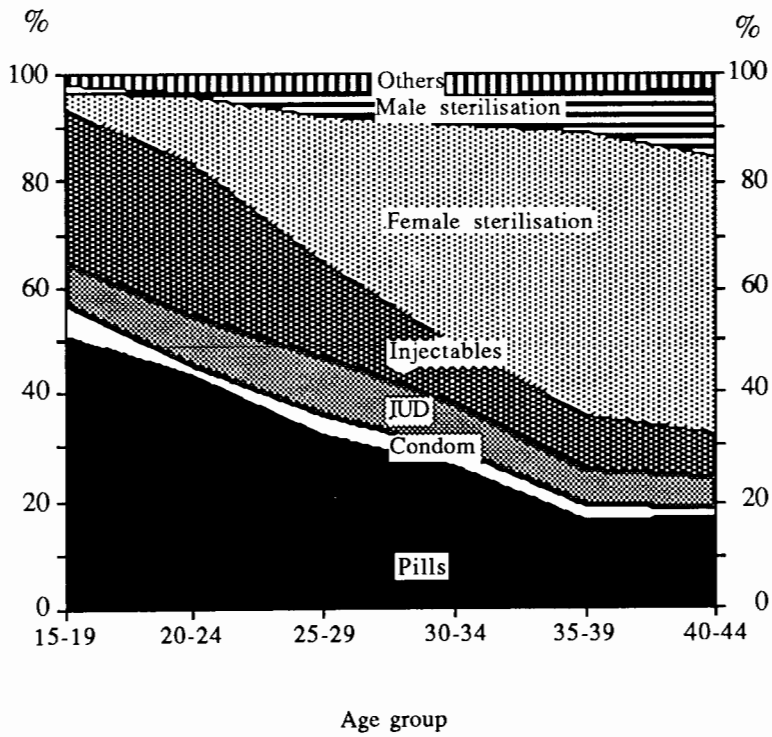

Figure 5.1: Percent distribution of contraceptive practise of currently married women aged 15-44, 1987

This pattern of contraceptive mix by age was similar to the pattern in 1984, with the exception of the proportion of IUD users. In 1984, the proportion of IUD users increased as age increased (Kamnuansilpa and Chamratrithirong, 1985: 50). But in 1987, the proportion of IUD users was nearly constant through age. The switching of contraceptive users from temporary methods to permanent methods as they grew older shows the willingness to terminate pregnancy rather than to space. With this pattern of contraceptive mix, Thailand was the only country in the Asia and Pacific region (beside the Republic of Korea) that had provided "well-balanced mixes of contraceptives" during 1975-1984 (The Fertility and Family Planning Section, 1985). In 1987, this well-balanced mixes of contraceptives was still prevalent.

Urban-rural and Regional Patterns

There is practically no difference in contraceptive prevalence rates between urban and rural areas. The higher rate of increase in contraceptive use in the rural areas during 1984-1987, as shown by CPR indices has even made the contraceptive prevalence rate in the rural areas looks slightly higher than in the urban areas.

Among the four regions and Bangkok, it is interesting to note that Bangkok which used to have the highest contraceptive prevalence rate in 1984 had now occupied the third rank with only 72 percent. The Central with the third highest contraceptive prevalence rate in 1984 had the highest rate at 77 percent in 1987. The North which had the second highest contraceptive prevalence rate in 1984 still maintained its rank in 1987. In fact, all four regions except Bangkok experienced the high increasing rate of contraception as shown by CPR indices in Table 5.3. The Northeast and the South which ranked fourth and fifth in terms of contraceptive prevalence rate in 1984 also maintained their ranks in 1987, although these two regions experienced the high rate of increase in contraceptive use. It is notable that the contraceptive prevalence rates of the Central and the North (77.0 and 76.2 respectively) were so high that could be possible theoretically (Institute for Population and Social Research, 1988).

Table 5.3: Percent of currently married women aged 15-44 practising contraception and CPR Index by type of residence and region, 1984-1987

Residence/ region	CPS3 1984	CUPS 1987	CPR Index 1987 (1984 = 100)
Residence			
Urban	64.7	69.5	107.4
Rural	63.7	70.4	110.5
Region			
Bangkok	71.8	71.9	100.1
Central	68.8	77.0	111.9
North	71.4	76.2	106.7
Northeast	60.8	68.2	112.2
South	50.4	55.4	109.9
Whole Kingdom	64.6	70.5	109.1

Source: CPS3 from Kamnuansilpa and Chamratrithirong (1985), Table 5.7

Residential and regional method mix is shown in Table 5.4 in terms of contraceptive prevalence rate of currently married women aged 15-44 and in Table 5.5 in terms of the percentage distribution of current users. Patterns of contraceptive use in urban and rural areas were similar to the national pattern. The regional patterns however, were somewhat different.

Table 5.4: Contraceptive prevalence rates of currently married women aged 15-44 by contraceptive method, residence and region, 1987

Method	Residence		Region					Whole Kingdom
	Urban	Rural	Bangkok	Central	North	North-east	South	
Female sterilisation	33.2	24.9	24.9	25.4	28.8	27.2	15.4	25.4
Male sterilisation	2.5	3.6	6.1	5.6	2.3	3.1	2.9	3.8
Pills	15.5	20.1	20.9	22.0	26.5	17.1	13.0	19.9
IUD	3.9	6.7	3.4	3.3	2.2	12.0	3.9	6.2
Injectables	8.5	11.4	8.3	16.4	14.0	6.7	10.3	10.9
Condom	2.6	1.5	4.6	2.4	1.7	0.8	1.7	1.9
Norplant	-	0.2	-	0.1	0.2	-	1.0	0.2
Safe period	1.9	0.6	2.2	1.0	0.3	0.6	1.1	0.9
Withdrawal	1.3	1.2	1.2	0.6	0.3	0.8	4.7	1.2
Others	0.1	0.3	0.4	0.3	0.1	-	1.3	0.3
Total	69.5	70.4	71.9	77.0	76.2	68.2	55.4	70.5

Female sterilisation and pills were the two most widely used contraceptive methods in both urban and rural areas and in every region, even in the Muslim predominant South. The order of popularity of other modern effective contraceptive methods in each region may be slightly different. For example, injectables were ranked third in terms of contraceptive prevalence rate in all regions except in the Northeast where IUD was ranked third. In Bangkok, contraceptive prevalence rates for male sterilisation and condom were 6.1 and 4.6, placing these two methods in the fourth and fifth ranks respectively. In the Central, the North, and the South, the contraceptive prevalence rates for injectables were as high as 16.4, 14.0 and 10.3 respectively. Although the contraceptive prevalence rates for the safe period, withdrawal and other methods were as high as 7.1 in the South, the corresponding rates in other regions were relatively low, except in Bangkok where the rate was 3.8. The varieties of method among regions may be due to the difference in their culture, tradition, or the availability and accessibility of contraceptive outlets (Chamratrithirong and Stephen, 1986).

Contraceptive mix in urban and rural areas showed that the two permanent contraceptive methods (female sterilisation and male sterilisation) were used by about half of the currently married users in the urban areas and by about 40 percent of currently married users in the rural areas (see Table 5.5). By region, slightly over 40 percent of currently married women used these two permanent methods except in South where the percentage was 33. It is noteworthy that in urban-rural areas and in each region, modern effective contraceptive methods (female sterilisation, male sterilisation, IUD, Norplant, injectables, pills and condom) were used by more than 90 percent of currently married users except in the South. Even in the Southern region, modern effective contraceptive methods were used by 87 percent of currently married users.

Table 5.5: Percent of currently married users aged 15-44 by contraceptive method, residence and region, 1987

Method	Residence			Region				Whole Kingdom
	Urban	Rural	Bangkok	Central	North	North-east	South	
Female sterilisation	47.8	35.4	34.6	33.0	37.8	39.9	27.8	36.0
Male sterilisation	3.6	5.1	8.5	7.3	3.0	4.5	5.2	5.4
Pills	22.3	28.6	29.1	28.6	34.8	25.1	23.5	28.2
IUD	5.6	9.5	4.7	4.3	2.9	17.6	7.0	8.8
Injectables	12.2	16.2	11.5	21.3	18.4	9.8	18.6	15.5
Condom	3.7	2.1	6.4	3.1	2.2	1.2	3.1	2.7
Safe period	2.7	0.8	3.0	1.3	0.4	0.9	2.0	1.3
Withdrawal	1.9	1.7	1.7	0.8	0.4	1.2	8.5	1.7
Others	0.1	0.4	0.6	0.4	0.1	-	2.3	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In conclusion, the contraceptive prevalence rate had been increasing in the last decade, from 53 percent in 1978 to 70 percent in 1987. In 1987, the most popular contraceptive method was female sterilisation, followed by pills and injectables. Furthermore, eight out of ten current users were using these methods which had been popular among Thai women since the beginning of the National Family Planning Programme.

CHAPTER 6

FACTORS AFFECTING CONTRACEPTIVE USE

There are many factors affecting women's decision on whether to practise contraception or not. These factors range from personal characteristics such as, age, education, occupation, etc., to behavioural factors such as, breastfeeding, religion, exposure to mass media, etc. Moreover, the availability and accessibility to contraceptive outlets also affect contraceptive use. However, in this chapter, only socio-demographic and behavioural factors will be discussed.

Effects of Age

Findings of the CPS1-CPS3 show that the extent of contraceptive use varies with age, reaching the peaks in the 30s and declining thereafter. Results of the 1987 CUPS also showed a similar age pattern of contraceptive use, that is the current use of contraception was most common among currently married women aged 30-39. Age was curvilinearly related to current contraceptive use. It is interesting to observe a substantial increase in the percentage of women in the youngest age group (adolescents) practising contraception, i.e. about 31 percentage points. Another interesting trend worth noting here is an incessant increase in the percentage of currently married women in the oldest age group (40-44 years) practising contraception (see Table 6.1). From the fertility regulation point of view, this group of women may feel less need for contraception. They have, nevertheless, continued practising contraception. Had such a trend continued, contraceptive practise among Thai currently married may be approaching a state of universal use of contraception in a not so distant future.

Table 6.1: Percent of currently married women aged 15-44 practising contraception by age group, 1978-1987

Age group	CPS1 1978	CPS2 1981	CPS3 1984	CUPS 1987	Percent increase from 1984
15-19	31.3	29.0	39.5	51.7	30.9
20-24	44.2	47.5	54.4	59.9	10.1
25-29	54.4	60.4	63.4	69.4	9.5
30-34	61.1	67.7	71.9	76.0	5.7
35-39	62.8	68.6	73.8	79.2	7.3
40-44	49.5	56.6	64.2	73.2	14.0
15-44	53.4	59.0	64.6	70.5	9.1

Source: CPS1-CPS3 from Kamnuansilpa and Chamratrithirong (1985), Table 5.10.

Effects of Other Socio-demographic and Behavioural Factors

Findings of surveys carried out in a number of developing countries including Thailand show that the contraceptive use is influenced by a variety of socio-demographic and behavioural factors in addition to the age discussed above. Some of these factors are residence, education, occupation, work status, number of living children, desire for additional children, knowledge of contraceptive method, exposure to mass media and others (United Nations, 1981; Morris et al., 1981; Kamnuansilpa and Chamratrithirong, 1982; 1985).

Since the contraceptive prevalence rates of urban- and rural-women were almost the same in 1987 (as discussed in chapter 5), type of residence will no longer be considered as one of the factors affecting contraceptive use. The effects of other factors are discussed below (Table 6.2 presents percent of currently married women aged 15-44 practising contraception by selected socio-demographic and behavioural characteristics).

Education

Although findings of the previous surveys in Thailand found a positive relationship between contraceptive use and the educational attainment of women, the only significant difference in the contraceptive use found in CUPS was between women with no education and women with one or more years of education. In fact, the relationship between current contraceptive use and education has now become curvilinear.

Occupation

Occupation, a proxy variable used for measuring the socio-economic status of women, had in the past some effects on the level of contraceptive use. In the present survey, although the highest percentages of married women currently practising contraception were in the professional and in the sales and business categories, the percentages of women in other occupation groups currently practising contraception were also in the range of 70 or higher, indicating that influence of this factor on contraceptive is dissipating.

It should be noted that the lowest contraceptive prevalence rates were among those who were not working and housewife. There was still positive relationship between woman labour force participation and contraception.

Work Status

Whether women are working or not working still makes some difference in contraceptive use. However, there was no difference in the percentage of women practising contraception among those working in the farm and non-farm sectors.

Number of Living Children

The percentage of childless women practising contraception was still low, i.e. about 24 percent. The percentage, however, increased sharply to a much higher level among women with children, reaching the peaks among women with 3 children and declining thereafter. Again, the relationship between currently contraceptive use and the number of living children is curvilinear.

Number of Additional Children Wanted

Whether a woman wants one, two, three or more additional children still has a great deal of influence on contraceptive practise. About 61 percent of women who wanted one more child practised contraception. The corresponding percentages of those who wanted two and three more additional children dropped to 42 and 25 respectively.

Intention to Space

As expected, the percentage of women who have no intention to space, namely desire for an additional child as soon as possible, practising contraception was very low, about 8 percent. The percentage of women who intended to space the practising of contraception rose sharply. As high as 71 percent of women who intended to space more than two years were practising contraception.

Breastfeeding

Although the percentage of currently married women in reproductive age reporting experienced in breastfeeding practise was as high as 93, breastfeeding status of the women had no effects on contraceptive use.

Religion

A substantial difference in the percentage of women practising contraception among Buddhists and Muslims was still prevailing, i.e. the difference of 31 percentage points.

Knowledge in Family Planning

Women's knowledge in contraceptive methods seems to have some influence on contraceptive use. The percentage of women who knew only one or two methods of contraceptive methods practising contraception was quite low, about 12 percent. The corresponding percentage for women who knew three or more methods of rose sharply to a much higher level. The relationship between the

number of contraceptive methods a woman knew and the contraceptive use was positive.

Exposure to Mass Media

In this study, an exposure to mass media was operationally defined by the frequency which a woman read newspaper and magazine, listened to radio or watched television. The frequencies were then classified into four categories: high (daily); moderate (weekly); low (monthly or longer) and none (never). As seen in Table 6.2, there was practically no difference in the percentage of women practising contraception among those who were exposed to the mass media at different levels. It should be noted that those who did not watch television at all, the percentage of practising contraception was lower than those who watched television daily by 10 percentage points.

In summary, the following factors may be considered as having effects on the contraceptive use: age, education, work status, parity, number of living children, number of additional children wanted, intention to space, religion, and knowledge in family planning (a number of contraceptive a woman knows). It should be observed that the relationships between some of these factors such as age, parity, education and contraceptive use are curvilinear.

Table 6.2: Percent of currently married women aged 15-44 practising contraception by selected socio-demographic and behavioural characteristics

Characteristic	Percent
Education	
No education	63.0
1-3 years	71.0
4 years	72.1
5-10 years	67.2
11 years or more	68.4
Occupation	
Agriculture	71.3
Professional	76.7
Sales and business	80.0
Business, self-employed	72.4
Skilled and semi-skilled	70.1
Labour and servant	72.6
House wife	65.3
Others	65.3
Work status	
Not in labour force	65.2
In labour force:	
Farm	71.3
Non-farm	72.7
Number of living children	
0	24.0
1	59.6
2	80.1
3	83.2
4-5	79.7
6 or more	65.0
Number of additional children wanted	
1	60.7
2	42.1
3 or more	25.2
Intention to space (when an additional child is wanted)	
As soon as possible	8.5
Within 1 year	59.8
Within 2 years	58.1
Longer than 2 years	71.0
Breastfeeding	
Yes	70.8
No	72.6

Characteristic	Percent
Religion	
Buddhist	72.6
Muslim	41.1
Christian	81.6
Knowledge in family planning (number of contraceptive methods known)	
Know 1-2 methods	11.8
Know 3-4 methods	52.5
Know 5-6 methods	67.6
Know 7 methods or more	71.9
Exposure to mass media	
Newspaper:	
High	71.2
Moderate	73.2
Low	71.3
None	70.0
Magazine:	
High	72.4
Moderate	69.0
Low	70.5
None	70.9
Radio:	
High	69.7
Moderate	73.5
Low	71.1
None	67.8
Television:	
High	72.1
Moderate	70.0
Low	68.7
None	62.5

CHAPTER 7

PHYSICAL, PSYCHOLOGICAL AND BEHAVIOURAL EFFECTS OF CONTRACEPTIVE USE

In the process of practising contraception, when a user is satisfied with one of nonpermanent methods which she is using (because most of nonpermanent methods are female methods), she may continue using the same method, although at one time or another she may stop practising contraception temporarily, for one reason or another. In the analysis presented below, users in this category will be classified as "single method users." The single users, however, constituted only 3 percent of currently married women aged 15-44 who were the current users in 1987. It should be mentioned here, at least for the record, that there is another type of single method users who have used the same nonpermanent method uninterruptedly. They are not, however, included in the present analysis.

On the other hand, when a user finds that the contraceptive method which she is using is no longer satisfactory, she may either switch to another method or stop using the method. Users in the former category will be classified as "method switchers" and those in the latter category as "ever users." The method switchers constituted about 70 percent of currently married women aged 15-44 practising contraception, whereas the ever users constituted about 27 percent of currently married women aged 15-44. Further, it should be noted that dissatisfaction with the contraceptive method is the only one among several reasons for a user to switch to another method or to stop using the method. Reasons for discontinuing use of nonpermanent methods of contraception among all ever users who stops or switches the method are varied, according to the findings of CPS3. Reasons which may be considered as directly related to contraception accounted for about 63, 68 and 58 percent of the reasons for discontinuing the use of pills, injectables to IUD in 1984. The corresponding percentages for reasons not directly related to contraception* were 37, 32 and 42 respectively (Kamnuansilpa and Chamratrithirong, 1985).

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* Classification of reasons directly and indirectly related to contraception is based on Morris et al. (1981). Included in the first type are: having had or fearing side effects, citing doctor's recommendation or husband/friend/relative's opposition; dislike of the method; can not afford; IUD expelled; and others. Included in the second type are: being pregnant; being subfecund or infecund; being sexually inactive; and desiring pregnancy.

Before discussing the results of the analysis, it should be stated here that data on the effects of the nonpermanent methods of contraception (pills, condom, injectables, IUD and all other natural and traditional method) presented below were based mostly on the perceptions of respondents. They are the effects which respondents perceived or reported were attributable to a particular nonpermanent contraceptive method which they were currently using at the time of survey (method switchers and single method users), and to particular nonpermanent method which they had ever used (ever users). Validity, reliability and accuracy of the responses depend on many factors: respondents' correct understanding of the questions asked; their own perceptions with respect to various aspects; their memory and cultural factors. In the Thai culture and probably in the Asian culture as well, there is a tendency to play down certain feeling or behaviour involving sexuality.

Bangkok will not be included in the analysis, as it was found that questions involved sexuality were difficult to ask in the urban settings. Therefore, this section was substituted by the questions about knowledge and awareness of AIDS. Furthermore with the reasons that the data in this part are mainly the respondents' perception in which the leading questions/conversation could influence the answer, the sequence of analysis will follow the sequence of the questionnaire (see questionnaire in Appendix A).

Perceptions on Their Own Health in General and on Their Spouses' Health

When being asked "Would you say your health in general is better or worse than it was before or is it about the same?," 62 percent of method switchers, 53 percent of ever users and 53 percent of single method users perceived that their health was about the same. The percentage of women who perceived their health becoming worse were higher than the percentages of women perceiving their health becoming better. The difference in the percentages of women perceiving their health becoming better or worse among the method switchers and single method users was quite small although the difference among ever users was as high as 19 percentage points.

As for the perception of respondents on their spouses' health, about 90 percent and over perceived that their spouses' health was about the same. By contrast, percentages of women perceiving their husbands' health becoming better were higher than those perceiving husbands' health becoming worse among single method users and ever users. Only among the method switchers where the percentage perceiving their husbands' health becoming better was about the same as those perceiving their husbands' health becoming worse.

When being asked about reasons for their respective perceptions, "feeling healthy or gaining weight," and "physically strong, can work harder" were the two main reasons mentioned by more than four-fifths of women who responded that their own health becoming better. The percentages of women between two groups of users mentioning the above two reasons for their perceptions of their husbands' health becoming better were even higher, 94 percent among method switchers and 97 percent among ever users.

As for reasons for perceptions on their own or their spouses' health becoming worse, "being sick easily," "easily exhausted, can't work hard," "weight loss" and "headache and dizziness" were the four main reasons mentioned by 84 percent of method switchers and 88 percent of ever users. In this connection, it is a matter of surprise to find that only a very small proportion of women mentioning menstrual problem which is one of the most direct problems associated with the use of certain modern contraceptive methods, i.e. only 3 percent of method switchers and 5 percent of ever users. As for reasons for perceiving their husbands' health becoming worse, nearly half of method switchers and ever users mentioned "being sick easily". The reasons, "easily exhausted, can't work hard" and "weight loss" were the other two main reasons mentioned by 41 percent of method switchers and 48 percent of ever users. Since among the single method users, the number of women perceiving their own or their husbands' health becoming better or worse is too small to be classified by reasons, they are not analysed.

Table 7.1: Percent of currently married women aged 15-44 perceiving or reporting the effects of nonpermanent methods of contraception on health by method switchers, single method users and ever users

Effects on (and reasons for selected responses)	Method switchers	Single method users	Ever users
Respondents' health in general:			
Better	17.6	23.1	14.0
Worse	20.5	21.6	32.7
About the same	61.7	53.3	53.1
Don't know, no answers	0.1	2.0	0.2
Total	100.0	100.0	100.0
Reasons for perceiving own health becoming better:			
Feeling healthy/gaining weight	61.3	81.8	61.3
Physically strong, can work harder	24.3	5.9	23.6
Better mental health	13.2	8.9	9.1
Other	10.0	-*	3.9
Don't know, no answers	0.3	3.3	0.8
Total	100.0	100.0	100.0
Number	(401)	(18)	(123)
Reasons for perceiving own health becoming worse:			
Headache, dizziness	21.0	55.7	38.6
Losing weight	17.3	10.3	16.2
Easily exhausted, cant's work hard	24.0	14.6	20.2
Get sick easily	21.3	-	13.3
Emotional problem	13.8	14.6	6.2
Menstrual problem	2.6	4.9	5.4
Total	100.0	100.0	100.0
Number	(467)	(17)	(287)
Spouses' health in general:			
Better	4.0	6.9	2.7
Worse	4.1	1.9	2.3
About the same	91.8	89.1	94.8
Don't know, no answers	0.1	2.0	0.2
Total	100.0	100.0	100.0
Reasons for perceiving spouses' health becoming better:			
Feeling healthy/gaining weight	5.0	n.a.**	70.7
Physically strong, can work harder	8.8	n.a.	26.6
Better mental health	4.0	n.a.	2.7
Others	0.9	n.a	-
Don't know, no answer	1.3	n.a.	-
Total	100.0	n.a.	100.0
Number	(90)	n.a.	(24)
Reasons for perceiving spouses' health becoming worse:			
Headache, dizziness	4.2	n.a.	3.9
Weight lost	14.7	n.a.	8.2
Easily exhausted, can't work hard	26.8	n.a.	39.9
Get sick easily	44.9	n.a.	48.0
Emotional problem	6.0	n.a.	-
Others	2.0	n.a.	-
Don't know, no answers	1.4	n.a.	-
Total	100.0	n.a.	100.0
Number	(93)	n.a.	(20)
Number of cases ***	2,272	79	878

* No case
** Number of cases is too small
*** Except items where number was specified in brackets

From the reasons mentioned by respondents on perceptions that health status becoming better or worse, it may be seen that weight gain and physically strong are perceived to be associated with better health. By contrast, weight loss and easily exhausted (physically weak) are perceived to be associated with worse health.

Gaining or Losing Weight

If gaining weight is perceived to be associated with better health as mentioned above, then the use of nonpermanent methods of contraception should be considered as having positive effects on the health conditions of users. About one-third of women reported that there was no change in their weight. The percentages of women reported that they have gained weight were higher than those who reported that they have lost weight. The percentage difference was quite substantial except among the ever users where the difference was only 11 percentage points.

Sleeping Habit

All three groups of users reported their sleeping habit had improved after the use of contraceptive methods. Forty seven percent among single method switchers, 42 percent among ever users and 49 percent among single methods users. The percentages were substantially higher than those reporting their sleeping had deteriorated which were 10, 17 and 14 percent respectively. Percentages of women who reported that their sleeping habit had not changed were 43 percent (method switchers), 41 percent (ever users) and 35 percent (single method users).

Smoking Habit

Smoking was not prevalent among respondents. Percentages of women reported smoking were 6 percent among method switchers, 6 percent among ever users and 5 percent among single method users. Since the number of smokers among single methods users is too small, they are not included in the analysis. Percentages of women who reported that they smoked less or stop smoking after using contraceptive methods were much higher than those of who reported that they smoked more, i.e. 22 and 19 percent (method switchers and ever users) as against

6 and 7 percent respectively. Sixty percent of method switchers and of ever users reported that their smoking habit had remained the same as before.

Alcoholic Beverage Drinking Habit

Percentages of women reported drinking alcoholic beverages were somewhat higher than smoking: 16 percent of method switchers and 14 percent of ever users. Slightly over 70 percent of women in these two groups reported that their drinking habit had remained the same. Percentages reported that their drinking of alcoholic beverages decreased and that they had stopped drinking were higher than reported that their drinking increased, i.e. 17 and 19 percent as against 9 and 6 percent.

Appetite

About one-third of single method users and slightly over two-fifths of method switchers and ever users reported no change in their appetite. Percentage of women whose appetite increased was much higher than those who reported otherwise. It should be mentioned here that in the context of the Thai culture, having appetite is perceived to be associated with the state of good health.

Table 7.2: Percent of currently married women aged 15-44 perceiving or reporting the effects of nonpermanent methods of contraception on health and habit by method switchers, single method users and ever users

Effects on (and reasons for selected responses)	Method switchers	Single method users	Ever users
Weight gained/lost:			
Gained	48.7	56.1	37.1
Lost	18.0	10.1	26.1
No change	33.2	31.9	36.7
Don't know, no answers	0.1	2.0	0.2
Total	100.0	100.0	100.0
Sleeping habit:			
Better	47.0	48.6	42.3
Worse	9.8	14.1	16.8
About the same	43.1	35.3	40.8
Don't know, no answers	0.1	2.0	0.2
Total	100.0	100.0	100.0
Smoking habit:			
More	6.1	n.a.*	7.0
Less	22.1	n.a.	19.3
No change	59.5	n.a.	59.6
Stop smoking	10.7	n.a.	10.5
Don't know, no answers	1.5	n.a.	3.5
Total	100.0	n.a.	100.0
Number	(131)	n.a.	(57)
Alcoholic beverage drinking habit:			
Increased	9.3	n.a.	6.3
Decreased	12.4	n.a.	13.5
About the same	72.8	n.a.	73.0
Stop drinking	4.9	n.a.	5.6
Don't know, no answers	0.5	n.a.	1.6
Total	100.0	n.a.	100.0
Number	(364)	n.a.	(126)
Eating (appetite):			
More	44.4	52.4	37.7
Less	11.8	11.2	22.3
No change	43.6	34.3	39.8
Don't know, no answers	0.1	2.0	0.2
Total	100.0	100.0	100.0
Number of cases **	2,272	79	878

* Number of cases is too small
** Except items where number was specified in brackets

Perceptions on the Relationship with Spouses in General: Before and After the Use of Contraceptive Methods

About 70 percent of women in the three groups of users perceived that their relationship with their spouses was "about the same as others." Percentages of women who perceived that their relationships with their husbands were "much better than the others" and "about the same as others" before and after the use of contraception did not change. There was some change in the percentage of women who perceived that their relationships with their husband were "not as good as others" and "very poor" before and after the use of contraception. Percentages before the use among method switchers, ever uses and single method users were 3, 3 and 5. The corresponding percentages after the use were 5, 6 and 10 respectively.

Table 7.3: Percent of currently married women aged 15-44 perceiving or reporting the effects of nonpermanent methods of contraception on relationship with spouse by method switchers, single method users and ever users

Effects on (and reasons for selected responses)	Method switchers	Single method users	Ever users
Relationship with husbands in general - Before using:			
Much better than others	8.1	3.5	8.5
Somewhat better than others	16.8	15.3	15.8
About the same as others	72.2	74.5	72.9
Not as good as others	2.7	2.1	2.5
Very poor	0.1	2.6	0.1
Don't know, no answers	0.1	2.0	0.3
Total	100.0	100.0	100.0
Relationship with husbands in general - After using:			
Much better than others	7.8	4.8	8.1
Somewhat better than others	17.9	12.8	15.1
About the same as others	68.7	70.3	70.1
Not as good as others	5.0	7.6	6.4
Very poor	0.4	2.6	-*
Don't know, no answers	0.1	2.0	0.3
Total	100.0	100.0	100.0
Number of cases	2,272	79	878

* no case

Perceptions on Being More Tense or Relaxed

Among method switchers, the percentage of those who perceived themselves to be more relaxed was about three times higher than those who perceived themselves to be more tense. Among single method users and ever users, however, the reverse was the case, although the percentage difference was relatively small, about 4 percent. Reasons given by respondents perceiving to be more tense among the method switchers and ever users were: fear of side effects (28 and 47 percent); afraid of being pregnant (19 and 20 percent) and emotional problem (32 and 28 percent). Not being concerned about being pregnant was the main reason given by respondents feeling more relaxed: 78 percent among method switchers and 70 percent among ever users. Having confidence in the contraceptive methods and no emotional problem were other two reasons given by 9 and 16 percent of method switchers and ever users who perceived themselves to be more relaxed.

Perceptions on Their Spouses Being More Tense or Relaxed

About four-fifths or slightly over of the three groups of users perceived that there was no change in their husbands' behaviour. Percentages of respondents who perceived that their husbands were more relaxed were higher than the percentages of respondents perceiving their husbands to be more tense. Reasons given were similar to those given for themselves, ie. no concern about wife getting pregnant was the most common reason (more than 80 percent) the respondents perceiving their husbands to be more relaxed. It is interesting to note that "want another child" was one of the reasons given by method switchers and ever users who perceived that their husbands were more tense.

Table 7.4: Percent of currently married women aged 15-44 perceiving or reporting psychological effects of nonpermanent methods of contraception by method switchers, single method users and ever users

Effects on (and reasons for selected responses)	Method switchers	Single method users	Ever users
Respondents being more tense or relaxed:			
More tense	14.3	22.6	24.3
More relaxed	40.5	20.5	20.2
No change	45.1	54.9	55.3
Don't know, no answers	0.1	2.0	0.2
Total	100.0	100.0	100.0
Reason for perceiving themselves being more tense:			
Fear of side effects, health problem	28.4	9.0	47.0
Family life problem	10.2	3.4	7.6
Afraid of being pregnant	18.7	23.9	10.8
Economic problem	9.6	- *	5.4
Emotional problem	31.5	63.7	27.8
Want additional child	1.7	-	0.8
Others	-	-	0.4
Total	100.0	100.0	100.0
Number	(324)	(18)	(213)
Reasons for perceiving themselves being more relaxed:			
Feeling healthy, no side effects	4.7	5.5	7.3
No concern about being pregnant	78.0	92.8	70.0
No concern about economic problem	7.2	-	5.0
Having confidence in the contraceptive methods	5.6	1.7	6.6
No emotional problem	3.0	-	9.9
No answers	1.5	-	1.2
Total	100.0	100.0	100.0
Number	(921)	(16)	(177)
Spouses being more tense or relaxed:			
More tense	4.2	3.9	7.1
More relaxed	16.5	12.2	7.8
No change	79.2	81.9	84.8
Don't know, no answers	0.1	2.0	0.2
Total	100.0	100.0	100.0
Reasons for perceiving spouses being more tense:			
Health problem	19.2	n.a.**	1.5
Family life problem	3.1	n.a.	3.2
No confidence in the contraceptive method	1.1	n.a.	10.3
Economic problem	20.1	n.a.	1.8
Emotional problem	19.8	n.a.	21.1
Want additional child	15.5	n.a.	18.3
Others	-	n.a	2.4
Don't know, no answers	1.2	n.a.	1.2
Total	100.0	n.a.	100.0
Number	(95)	n.a.	(63)
Reasons for perceiving spouses being more relaxed:			
Healthy	3.3	n.a.	-
No concern about wife getting pregnant	83.5	n.a.	83.5
No concern about economic problem	9.5	n.a.	8.4
Confidence in the contraceptive method	0.6	n.a.	-
No emotional problem	2.1	n.a.	3.7
Want additional child	-	n.a.	2.9
Don't know, no answers	1.0	n.a.	1.5
Total	100.0	n.a.	100.0
Number	(375)	n.a.	(69)
Number of cases ***	2,272	79	878

* No case ** Number of cases is too small

*** Except items where number was specified in brackets

Perceptions on Change in the Relationship with Friends and Neighbours

Nearly all respondents perceived "no change" in their relationship with friends and neighbours: 98 percent among methods switchers; 96 percent among ever users; and, 95 percent among single method users.

Perceptions on Change in the Relationship with Employers and Fellow Workers: Only Those Working Outside Home

Percentages of respondents working outside home were about 26 percent among method switchers, 22 percent among ever users and 38 percent among single method users. Almost all of the method switchers and ever users perceived no change in their relationship with their employers and fellow workers.

Perceptions on Enjoying Working More or Less

Among method switchers, 74 percent perceived no change, 17 percent perceived enjoying more and 9 percent perceived enjoying less. By contrast, 21 percent of ever users perceived enjoying less and 12 percent perceived enjoying more. Percentage of those who perceived that there was no change was 68 percent of ever users. Reasons given by those who perceived enjoying working less were not related to contraceptive practise, although among those who perceived that they enjoyed working more gave reasons directly related to contraceptive practise.

Feelings on Security in Job

About three-fourths and slightly more of method switchers and ever users reported that their feelings on security in job did not change. Percentage of women feeling more secure in their job was twice as high as of those feeling less secure among method switchers. By contrast, among ever users, the percentage of women feeling less secure was twice as high as of those feeling less secure. Reasons given were similar to those given on enjoying working more or less.

Table 7.5: Percent of currently married women aged 15-44 perceiving or reporting behavioural and psychological effects of nonpermanent methods of contraception by method switchers, single method users and ever users

Effects on (and reasons for selected responses)	Method switchers	Single method users	Ever users
Change in relationship with friends and neighbours since practising contraception			
Yes	1.7	2.7	3.4
No (no change)	98.1	95.3	96.4
Don't know, no answers	0.2	2.0	0.2
Total	100.0	100.0	100.0
Change in relationship with employers and fellow workers (for respondents working outside home only)			
Yes	3.2	- *	5.2
No (no change)	96.6	100.0	94.8
Don't know, no answers	0.2	-	-
Total	100.0	100.0	100.0
Number	(587)	(30)	(194)
Enjoying working more or less since practising contraception (for respondents working outside home only):			
More	17.0	-	11.9
Less	9.3	23.3	20.6
No change	73.6	76.7	67.5
Don't know, no answers	0.2	-	-
Total	100.0	100.0	100.0
Number	(587)	(30)	(194)
Reasons for enjoying working more:			
Not worry about being pregnant	12.8	n.a.**	11.0
Not worry about raising children	13.8	n.a.	2.9
Able to get more work done	64.3	n.a.	76.9
Not worry about the contraceptive methods	7.8	n.a.	9.3
No emotional problem	0.6	n.a.	-
Don't know, no answers	0.8	n.a.	-
Total	100.0	n.a.	100.0
Number	(100)	n.a.	(23)
Reasons for enjoying working less:			
Worry about economic problem	2.6	n.a.	5.0
Physical health problem	77.9	n.a.	61.2
Mental health problem	17.4	n.a.	33.9
Don't know, no answers	2.1	n.a.	-
Total	100.0	n.a.	100.0
Number	(55)	n.a.	(40)
Feeling more or less secure about job now than did before practising contraception			
More	15.5	10.3	7.2
Less	8.2	6.9	14.4
No change	76.1	82.8	78.4
Don't know, no answers	0.2	-	-
Total	100.0	100.0	100.0
Number	(587)	(29)	(194)
Reasons for feeling more secure about job:			
Not worry about being pregnant	17.3	n.a.	6.0
No need to raise children	11.9	n.a.	4.7
Able to get more work done	65.3	n.a.	83.6
No worry about the contraceptive method	2.7	n.a.	-
No emotional problems	0.7	n.a.	-
No answer	2.2	n.a.	5.7
Total	100.0	n.a.	100.0
Number	(91)	n.a	(14)

Effects on (and reasons for selected responses)	Method switchers	Single method users	Ever users
Reasons for feeling less secure about job:			
Worry about economic problem	29.9	n.a.	22.4
Physical health problem	54.8	n.a.	56.6
Mental health problem	9.6	n.a.	21.0
No answer	5.7	n.a.	-
Total	100.0	n.a.	100.0
Number	(48)	n.a.	(28)
Number of cases ***	2,272	79	878

* No case
** Number of cases is too small
*** Except items where number was specified in brackets

Perceptions on Respondents and Their Spouses' Sexual Desire

Although the majority of respondents reported that there was no change in their own or their spouses' sexual desire, the percentages of respondents who perceived that their own sexual desire or their spouses' sexual desire becoming less were much higher than those who perceived their own or their spouses' sexual desire becoming more.

Change in Coital Frequency

Quite a high proportion of respondents reported no change in the coital frequency as a result of using a particular methods of contraception. Again, percentages of women reported that coital frequency becoming less was much higher than those reported as becoming more, especially when the respondents reporting about themselves.

Perceptions on Satisfaction from Coitus

About three-fourths of method switchers and ever users and about seven-tenths of single method users reported no change in their satisfaction from coitus. Again, the percentages of women who reported that they found coitus to be more satisfactory were lower than those who found coitus to be less satisfactory.

Table 7.6: Percent of currently married women aged 15-44 perceiving or reporting sexual behavioural effects of nonpermanent methods of contraception by method switchers, single method users and ever users

Effects on (and reasons for selected responses)	Method switchers	Single method users	Ever users
Respondents' sexual desire:			
More	2.5	2.2	3.7
Less	22.9	29.0	21.1
No change	74.1	66.8	74.9
No sexual intercourse	0.3	-*	0.1
Don't know, no answers	0.2	2.0	0.2
Total	100.0	100.0	100.0
Husbands' sexual desire:			
More	5.6	12.5	4.3
Less	10.2	8.3	7.0
No change	83.6	77.2	88.5
No sexual intercourse	0.4	-	0.1
Don't know, no answers	0.2	2.0	0.2
Total	100.0	100.0	100.0
Change in coital frequency:			
More	4.7	13.1	4.7
Less	31.6	35.7	25.0
No change	62.9	49.2	69.8
No sexual intercourse	0.6	-	0.2
Don't know, no answers	0.2	2.0	0.2
Total	100.0	100.0	100.0
Satisfaction from coitus:			
More	11.7	10.1	8.7
Less	11.9	18.7	15.1
No change	75.7	69.2	75.7
No sexual intercourse	0.6	-	0.2
Don't know, no answers	0.2	2.0	0.2
Total	100.0	100.0	100.0
Number of cases	2,272	79	878

* No case

From the analysis made above, it can be summarized that the nonpermanent contraceptive methods have no effects on physical, psychological and behavioural effects on users. Some effects, as perceived and reported by respondents, tend to be more positive rather than negative, such as sleeping better, smoking less, drinking less alcoholic beverages, having more appetite. Only the feeling or behaviour involving sexuality where respondents tended to understate their feelings and activities.

CHAPTER 8

SUMMARY AND CONCLUSION

Summary

Findings of the first report of the Study on Determinants and Consequences of Contraceptive Use Patterns in Thailand which confines its analysis to determining the extent to which the married women in reproductive age are aware of contraceptive methods, patterns of their contraceptive practise, factors affecting contraceptive use and physical, psychological and behavioural effects of contraceptive use are recapitulated below:

1. Knowledge of ever married women in reproductive age on the five modern contraceptive methods, namely pills, injectables, female sterilisation, male sterilisation and IUD which were used by about 94 percent of currently married women aged 15-44 in 1987 could be considered as universal. Among the five modern contraceptive methods mentioned above, only pills were spontaneously mentioned by over 92 percent of ever married women in reproductive age. Percentages of ever married women mentioning each of four remaining contraceptive methods spontaneously ranged from 48 percent for male sterilisation to about 71 percent for injectables. However, after being prompted, percentages of women knowing each method of contraception rose up to 95 percent and higher. Patterns of contraceptive knowledge were similar in each region except in Bangkok and the South where the percentages of women knowing the natural and conventional methods were higher than in other regions.

2. Educational attainment of women still had some influence on the knowledge of contraceptive methods. However, the difference in the level of contraceptive knowledge were more pronounced between women with no education and women with some or more education rather than between women with different levels of educational attainment.

3. Quite a high proportion of women had a correct knowledge on how to use each of the widely known method, ranging from 57 percent for male sterilisation to 95 percent for injectables. Percentages of women having the correct

knowledge on some lesser known methods such as withdrawal and safe period were also high. Women's perceptions on the effectiveness of each contraceptive method were, on the whole, fairly good.

4. Levels and trends of contraceptive use as measured by the contraceptive prevalence rate (the percentage of currently married women using contraceptive methods) showed that the contraceptive prevalence rate (CPR) had incessantly increased at each 3-year survey interval since 1978. The rate of increase of CPR during each survey interval, however, tended to be lower as the level of contraceptive practise have moved up to a higher level. For each contraceptive method, using CPR index (the percentage change of contraceptive prevalence rate by given base year as 100) showed that over the 9-year period from 1978 to 1987, CPR index of injectables had the highest value, i.e. 232, followed by female sterilisation 195, IUD 151 and male sterilisation 109. Value of the CPR index for pills, the most popular method in 1978 and 1981, declined to 91. The values of CPR index for conventional and traditional methods declined even further, indicating a tendency to shift towards to more effective contraceptive methods as shown by the contraceptive method mix.

5. Patterns of contraceptive mix for the whole country, in urban and rural areas and in each of the five regions of Thailand in 1987 showed that female sterilisation was the most widely used contraceptive method. The second most popular method was pills which lost its rank to female sterilisation in 1984. Overall, the fact that slightly more than half of the currently married women aged 15-44 and their spouses used female sterilisation and male sterilisation, the two most effective contraceptive methods, would indicate that more and more couples are practising contraception for the purpose of birth termination rather than birth spacing. Regardless of the purpose of couples in practising contraception, it is worthy to note that in urban and rural areas and in each region except the South, more than 90 percent of currently married women aged 15-44 used modern effective contraceptive methods. Even in the South, percentage of women using modern effective contraceptive methods was as high as 87.

6. Another interesting trend in the level of contraceptive practise is the disappearance of urban-rural difference in CPR which in 1984 the value of CPR in the rural areas was lower than the value of CPR in the urban areas. In 1987, value

of CPR in the Northeast was approaching the CPR value for the country but the CPR value in the South was still 15 percentage points below the national CPR value.

7. As the level of contraceptive practise among currently married women is moving up, the influence of some socio-demographic and behavioural factor has gradually dissipated or even disappeared. Gone were type of residence as mentioned above. Educational attainment of women which showed a strong positive relationship between the level of educational attainment and contraceptive use in the past had become curvilinear. The only significant difference in the level of contraceptive use was between women with no education and some education but not between women with different levels of educational attainment. Influence of occupation was much less than what it used to be. Although employment of women may still have some effects on contraceptive use, but as far as the currently married Thai women are concerned, there was no difference in the percentage of women practising contraception among those working in the farm and nonfarm sectors. Since type of residence, education, occupation, farm and nonfarm sectors of employment are closely interrelated, the lesser influence found in one of the characteristics of women would also be found in other characteristics. Other characteristics of women or factors which were found to have no effects on contraceptive use were breastfeeding practise and women's exposure to mass media. As for factors which still have strong and some effects on contraceptive use were age, education, work status, number of living children, number of additional children wanted, intention to space, religion and the number of contraceptive methods which a woman knows.

8. A fairly to a very high proportion of current and ever users on nonpermanent contraceptive methods perceived or reported no change in their physical, psychological and behavioural conditions after using any one of the nonpermanent methods of contraception. The change, if there is any, tended to be on the positive rather than the negative aspects such as gaining weight (perceived by the Thai women as an indication of being healthy), an increase in appetite, sleeping better, smoking less or drinking an alcoholic beverages less, especially among the method switchers who constituted more than 70 percent of currently married aged 15-44 using nonpermanent contraceptive methods. Some negative effects on sexual

behaviour and practise may have been due to the tendency to understate the fact in this aspect rather than what actually perceived or experienced.

Conclusion

From the summary of findings presented above, it may be observed that as the level of contraceptive use among currently married women in reproductive age is approaching the near universal state, the influence of some socio-demographic and behavioural factors which they used to have on the contraceptive acceptance starts dissipating.

In the case of Thailand, it has been generally recognized that concurrent with the successful efforts in making contraceptive services readily and widely available and easily accessible to couples is the gradual improvement in the quality of life of the population in general. However, the achievement in family planning made within the period of less than 20 years may have demonstrated that it is not really necessary to wait until all the often-stated prerequisites have to be attained first or have to happen at the same pace. The key to the achievement of the family planning programme to date has been that after the couples have been informed, educated and decided, services are readily available with a variety of methods to choose at no cost or at the minimal cost, depending on the types of service unit and the couples' ability and willingness to afford.

The policy implications for the Thai family planning programme which may be derived from the present study are stated hereunder.

1. The principle of voluntary family planning by adopting the service delivery system of cafeteria approach where potential and current users have the choice of using a temporary or semipermanent or permanent method of contraception should be retained.

2. In addition to the efforts to promote the wider use of contraception among currently married women in reproductive age in regions and localities where the CPR is still below the national average, special attention and efforts should also be given to population in certain cultural and social groups in both rural and urban areas.

3. In light of the fact that CPR of currently married women aged 30 and over have been well above 70s, indicating that women exposed to the risk of pregnancy may have nearly or already been exhausted, attention and efforts may now be shifted to the younger age groups, namely 25-29 and below.

4. Counselling service, a means to ensure that couples are well informed and educated, and the decisions made are based on the full understanding of the consequences and that they are made voluntarily and responsibly, should be instituted as an integral function of the service delivery system. The counselling will also contribute to the reduction of the incidence of method switching although the fact that a high proportion of nonpermanent method contraceptive users have switched the method should not be a cause of concern.

5. One of the factors motivating couples to practise contraception is "the number of living children" they have. Thus, in addition to the efforts to reduce infant and child mortality and to improve the health status of infants and children, efforts to promote and cultivate the small family size norm should be initiated, if the demographic goal of Thailand is to reduce fertility to a replacement level.

REFERENCES

Bongaarts, John

1978 "A framework for analyzing the proximate determinants of fertility." *Population and Development Review* 4(1): 105-132.

Bongaarts, John

1982 "The fertility-inbiliting effects of the intermediate fertility variables." *Studies in Family Planning* 13(6-7): 179-189.

Chamratrithirong, Aphichat and Elizabeth Hervey Stephen

1986 *Determinants of Contraceptive Method Choice in Thailand.* IPSR Publication No. 98. Institute for Population and Social Research, Mahidol University.

Institute for Population and Social Research

1988 *Contraceptive Practice of the Thai MWRA, 1987: An Advance Report of the Study of the Determinants and Consequences of Contraceptive Use Patterns in Thailand.* Presented at the Seminar on the Study of Programme Effort and Performance of Family Planning Services in Thailand. Asia Hotel, Bangkok. March 2-4.

Institute of Population Studies and National Statistical Office

1977 *The Survey of Fertility in Thailand: Country Report.* Vol I. Bangkok: Allied Printers.

Kamnuansilpa, Peerasit and Aphichat Chamratrithirong

1982 *A New Decade of Fertility and Family Planning in Thailand: 1981 Contraceptive Prevalence Survey.* Bangkok: Research Center, National Institute of Development Administration.

Kamnuansilpa, Peerasit and Aphichat Chamratrithirong

1985 *Contraceptive Use and Family Planning in Thailand: Results from the 1984 Contraceptive Prevalence Survey.* Bangkok: Research Center, National Institute of Development Administration; Institute for Population and Social Research, Mahidol University; and National Family Planning , Ministry of Public Health.

Khoo, S. and C. B. Park

1978 "The effect of family planning programs on fertility decline in four Asian countries." *International Family Planning Perspective and Digest* 4(3): 67-72.

Kiranandana, Theinchay; Suchada Kiranandana; Suwanee Surasiengsunk and Rachaniwan Uthaisri

1984 *Planning for Family Planning Program and Social Services in Thailand.* A Research Report. Bangkok: Chulalongkorn University.

Knodel, John; Aphichat Chamratrithirong; Napaporn Chayovan and Nibhon Debavalya

1982 *Fertility in Thailand: Trends, Differentials, and Proximate Determinants.* Washinton, D.C.: National Academy of Sciences.

Knodel, John; Aphichat Chamratrithirong and Nibhon Debavalya

1987 *Thailand's Reproductive Revolution: Rapid Fertility Decline in a Third World Setting.* Wisconsin: University of Wisconsin Press

Knodel, John and Phichit Pitaktepsombati

1975 "Fertility and family planning in Thailand: Results from two round of a national study." *Studies in Family Planning* 6: 402-413.

Leoprapai, Boonlert

1985 "Effects of family planning on the size and structure of the population of Thailand." *Proceedings of the Seminar on Family Planning and Development.* Bangkok: National Family Planning Program, Ministry of Public Health.

Leoprapai, Boonlert and Sauvaluck Piampiti

1982 "Application of methods of measuring the impact of family planning programmes on fertility: The case of Thailand." in United Nations, *Evaluation of Family Planning Programmes on Fertility, Source of Variance.* Population Studies No. 76. Department of International Economic and Social Affairs. New York.

Leoprapai, Boonlert; Sivaporn Pokpong and Pimonpan Isarabhakdi

1985 *A Study of Family Planning Incentive Programs in Thailand.* IPSR Publication No. 89. Institute for Population and Social Research, Mahidol University.

Leoprapai, Boonlert and Varachai Thongthai

1988 *Fertility and Family Planning in Thailand, 1987.* Paper presented at the National Dissemination Seminar, Royal Garden Resort Hotel, Hua Hin, August 31 - September 1.

Morris, Leo, G. Lewis, D.L. Powell, J. Anderson, A. Way, J. Cusshing and G. Lawless

1981 *Contraceptive Prevalence Surveys: A New source of Family Planning Data.* Population Reports, Ser. M., No. 5. Baltimore, Maryland: Population Information Programs, The John Hopkins University.

National Economic and Social Development Board

1972 *The Third National Economic and Social Development Plan (1972-1976).* Office of the Prime Minister.

The Fertility and Family Planning Section

1985 "The use of contraception in the Asian and Pacific region." *Population Research Leads.* No. 21. Populaiton Division, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).

Suvanajata, Titaya and Peerasit Kamnuansilpa

1979 *Thailand Contraceptive Prevalence Survey: Country Report 1979.* National Institute of Development Administration, Minister of Public Health and Westinghouse Health System.

United Nations

1981 *Variation in the Incidence of Knowledge and Use of Contraception: A comparative Analysis of World Fertility Survey Results for Twenty Developing Countries.* New York.

United Nations

1986 *World Population Prospects: Estimates and Projections as Assessed in 1984*. New York.

Appendix A

CUPS QUESTIONNAIRES

Institute for Population and Social Research
Mahidol University
Questionnaire

Determinants and Consequences of Contraceptive Use Patterns in Thailand
(Interview only married women aged 15-49 year old)

QUESTIONNAIRE I.D.	1 □□□□
Respondent's name	
Name of respondent's husband	
Address	
Muban name ..... Muban number	
Tambon .....Amphoe	5 6 8 □ □□ □□
Changwat ..... Region	
Location	
1. Municipality	10 □
2. Rural area	
Name and address of close relative or friend	
Name	
Address	

Interviewer's name .....

Date of interview .....

Begin interview at time .....Finish at time ..... 11 12 □ □□

Time taken for interview .....

Supervisor's name .....

Coder's name .....

Editor's name .....

SECTION I : GENERAL INFORMATION

1.1 How old were you on your last birthday? 14
..... years □□

1.2 In what month and year were you born? 16 18
Month..... year ..... □□ □□

1.3 What is your religion? 20
1 Buddhist □
2 Islam
3 Christian
4 Others (specify)

1.4 What is your marital status? 21
1 Currently married and husband is present □
2 Currently married but husband is not present (away for one month or more)
3 Separated
4 Divorced
5 Widowed

1.5 How old were you when you first married? 22
.....years □□

In what month and year when you first married ? 24 26
Month ..... year ..... □□ □□

1.6 How many times have you been married? 28
..... times □

1. If more than 1 time, record the duration of each marriage by asking the beginning and ending month and year of each marriage
2. If less than 1 year, code "oo"
3. If married once, record the duration of marriage from the beginning until present (from Q.1.5)

Marriage	Beginning		Ending		Duration	
	month	year	month	year	(year)	
First						29 □□
Second						31 □□
Third						33 □□
Fourth						35 □□
Fifth						37 □□

1.7 Does your present husband has another wife? How many? 39
- 1 Yes, 1 other wife
- 2 Yes, 2 other wives
- 3 Yes, 3 other wives
- 4 Yes, 4 other wives
- 5 Yes, 5 other wives or more
- 6 No
- 7 Don't know / no answer

1.8 Have you ever attended school? 40
- 1 Yes
- 2 No (marks " 0 " in Q. 1.9)

1.9 What is the highest grade level you passed at school or college? 41
- 1 Elementary 0 1 2 3 4 5 6 7
- 2 Secondary 1 2 3 4 5 6
- 3 College 1 2 3 4 5 6 7 8 9
- 4 Other (specify) .....

1.10 What is your occupation? 43
- 1 Farming
- 2 Animal husbandry / or fishing
- 3 Professional (e.g. doctor, nurse, teacher, lawyer, accountant, engineer, architect, etc)
- 4 Other government worker
- 5 Business (employee)
- 6 Trade
- 7 Business (self-employed)
- 8 Skilled and semi-skilled labour
- 9 Unskilled labour
- 10 Housewife
- 11 Student
- 12 Other (specify) .....

1.11 Has your husband ever attended school? 45
- 1 Yes
- 2 No (marks " 0 " in Q. 1.12)

1.12 What is the highest grade level your husband passed at school or college? 46
- 1 Elementary 0 1 2 3 4 5 6 7
- 2 Secondary 1 2 3 4 5 6
- 3 College 1 2 3 4 5 6 7 8 9
- 4 Other (specify) .....

1.13 What is your husband's occupation? 48 □□

1 Farming
2 Animal husbandry and / or fishing
3 Professional
4 Other government worker
5 Business (employee)
6 Trade
7 Business (self-employed)
8 Skilled and semi-skilled labour
9 Unskilled labour
10 Unemployed
11 Student
12 Other (specify) .....

1.14 How often do you do these following things?

- Reading newspaper	1 Everyday	2 Every week	3 Every month	4 Occasional	5 Never	50 □
- Reading magazine	1 Everyday	2 Every week	3 Every month	4 Occasional	5 Never	51 □
- Listening to a radio	1 Everyday	2 Every week	3 Every month	4 Occasional	5 Never	52 □
- Watching television	1 Everyday	2 Every week	3 Every month	4 Occasional	5 Never	53 □
- going to the city*	1 Everyday	2 Every week	3 Every month	4 Occasional	5 Never	54 □

* If living in the city, mark " 1 " without interview

SECTION II : FERTILITY

2.1 Are you pregnant now? 55 □

1 Yes 2 No 3 Don't know/not sure

2.2 Have you ever been pregnant before this time? 56 □
1 Yes
2 No (skip to Q. 2.12)

Have you ever been pregnant before?
1 Yes
2 No (skip Q. 2.13)

2.3 If yes, what was the outcome of the last pregnancy? 57 □
1 Miscarriage
2 Abortion
3 Stillbirth
4 Live birth (mark " 1 " in Q. 2.4 then skip to Q. 2.5)
8 Not applicable

2.4 Have you ever had a live birth? 58 □
1 Yes
2 No (skip to Q. 2.9)
8 Not applicable

2.5 How many of your children are living with you now? 59 □□
Number .....

2.6 How many of your children are not living with you now? 61 □□
Number .....

2.7 How many of your children died? (count the live birth child even he/she lived a short time and died) 63 □□
Number.....

2.8 How many of your living children are girls and how many are boys? 65 □□
Girls .....

67 □□
Boys .....

2.9 Since January 1, 1981, have you ever been pregnant? 69 □
1 Yes
2 No (skip to Q. 2.12)
8 Not applicable

2.10 How many times have you ever been pregnant since January 1, 1981? ..... times 70 □

2.11 Pregnancy history (From January 1, 1981 until present by asking backward from the last pregnancy)

Beginning of pregnancy (month/year) A	Ending of pregnancy (month/year) B	Pregnancy's outcome C	Is this child still alive? D	code only B, C, and D
.....	.....	1 2 3 4 8	1 Yes 2 No 8 Not applicable	71 73 75 76 □□ □□ □ □
.....	.....	1 2 3 4 8	1 Yes 2 No 8 Not applicable	77 79 81 82 □□ □□ □ □
.....	.....	1 2 3 4 8	1 Yes 2 No 8 Not applicable	83 85 87 88 □□ □□ □ □
.....	.....	1 2 3 4 8	1 Yes 2 No 8 Not applicable	89 91 93 94 □□ □□ □ □
.....	.....	1 2 3 4 8	1 Yes 2 No 8 Not applicable	95 97 99 100 □□ □□ □ □
.....	.....	1 2 3 4 8	1 Yes 2 No 8 Not applicable	101 103 105 106 □□ □□ □ □

Code description for pregnancy's outcome
1 Miscarriage 2 Abortion 3 Stillbirth
4 Live birth 8 Not applicable
[Only live birth (4), ask the question "D"]

2.12 Before your last pregnancy did you want to have a child? 107
1 Yes ☐
2 No
3 Indifferent
8 Not applicable
9 Don't know / not sure

2.13 Do you want to have children in the future? 108
(If she is pregnant, ask "After this pregnancy, do you want to have children in the future?) ☐
1 Yes
2 No (skip to Q. 2.17)
3 Having sterilisation or male sterilisation already(skip to Q.2.17)
4 Not sure (skip to Q. 2.17)

2.14 If you or your husband want more children, can you or your husband have another child? (ability to have a child means fecundability) 109
1 yes ☐
2 No (either wife or husband is incapable by any reasons including sterilisation and male sterilisation)
8 Not applicable
9 Do not know / not sure

2.15 How many more children do you want? 110
Number ..... ☐

2.16 If it were entirely up to you, when would you prefer to have the next child?
(In case of never had any child, asks "When would you prefer to have the first child?") 111
1 As soon as possible ☐
2 Within six months
3 Within one year
4 Within two years
5 Whenever it happens
6 Depend on economic situation
7 Other (specify) .....
8 Not applicable
9 Do not know/not sure

2.17 If you could have had exactly the number of children you wanted, how many children would you have had? 112
Number ..... ☐

SECTION III : BREASTFEEDING

If the respondent did not have any live birth or her last live birth occurred before January 1, 1982, skip this section.

3.1 Did you breastfeed your youngest child? 113 ☐
1 Yes
2 No (skip to Q. 3.4)
8 Not applicable

3.2 Are you still breastfeeding? 114 ☐
1 Yes (skip to Q. 3.4)
2 No
8 Not applicable

3.3 Exactly how old was the child when you stopped breastfeeding? 115 ☐☐
..... Days
..... Weeks
..... Months
..... Years

Equivalent to .....Months

3.4 Exactly how many months after your last birth did you experience the return of menstruation? 117 ☐☐
..... Months
96 Not having had menstruation yet
97 Not having had menstruation yet, and being pregnant at present
98 Not applicable

3.5 Do you think that breastfeeding could keep a woman from becoming pregnant? 119 ☐
1 Yes
2 No (Skip to section IV)
8 Not applicable (Skip to section IV)
9 Do not know (Skip to section IV)

3.6 How many months do you think that breastfeeding could keep a woman from becoming pregnant? 120 ☐☐
..... Months

SECTION IV FAMILY PLANNING

4.1 There are various ways a couple can delay the next pregnancy or avoid having children if they do not want them. It is called "family planning". Do you know or have you heard of any such contraceptive methods? 122 □

1 Yes
2 No (skip to Q. 4.3)

Record responses to Q. 4.2-4.7 in Table 1

4.2 What family planning methods do you know (Probe : Any other?)

Circle code " 1 " (yes) in column A for each method the respondent mentions

4.3 For each method not circled in column A ask : Just to be sure have you ever heard of .....?
(method)

Circle response in column B

From Q. 4.4-4.8 ask for each method circled " Yes " in column A or column B

4.4 Do you know how to use .....?
(method)

Check response with the correct answer, then circle the result in column C

4.5 Do you think how efficient ..... can prevent you method from being pregnant?

Circle response in column D

4.6 What are the side effects of using .....?
(method)

Record response in column E

4.7 How much money do you think it will cost on using .....?
(method)

Record response in column F

4.8 Have you or your husband ever used ..... ?
(method)

Record response in column G

Table 1

Method	A Knowledge (Unprompted) Q.4.2	B Knowledge (Prompted) Q.4.3	Corrected answers of Q.4.4	C Know how to use Q.4.4	D Efficiency in birth control Q.4.5	E Side Effects (in detail) Q.4.6	F Price per unit Q.4.7	G Ever Used Q.4.8	
Pills	1 Yes	3 yes 2 No	Taken daily	1 Correct 2 Not Corect 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	123 124 125 126 127 129
Condom	1 Yes	3 Yes 2 No	Use by husband	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	130 131 132 133 134 136
Vaginal Methods	1 Yes	3 Yes 2 No	Used before having sexual intercourse	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	137 138 139 140 141 143
Injectables	1 Yes	3 Yes 2 No	Inject every 3 or 6 months	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	144 145 146 147 148 150
I U D	1 Yes	3 Yes 2 No	Insert in uterus	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	151 152 153 154 155 157
Norplant	1 Yes	3 Yes 2 No	Subdermal implant	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	158 159 160 161 162 164
Female Sterilisation	1 Yes	3 Yes 2 No	Permanent control hy having operation	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know				165 166 167 168 169
Male Sterilisation	1 Yes	3 Yes 2 No	Permanent control by having operation	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know				171 172 173 174 175
Abortion	1 Yes	3 yes 2 No	Pregnancy termination by force	1 Correct 2 Not Corect 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	177 178 179 180 181 183
Safe period	1 Yes	3 Yes 2 No	Having sexual intercourse on the safty period	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	184 185 186 187 188
Withdrawal	1 Yes	3 Yes 2 No	To be done during sexual intercourse	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	189 190 191 192 193
Breast-feeding	1 Yes	3 Yes 2 No	Have no menstruation during breastfeeding	1 Correct 2 Not correct 3 Do not know 8 Not applicable	1 High 2 Moderate 3 Low 4 Do not know			1 Yes 2 No 8 Not applicable	194 195 196 197 198
Other (specify)								1 Yes 2 No 8 Not applicable	199 200

4.9 Are you or your spouse currently using some contraceptive method? 201

1 Yes

2 No (skip to Q. 4.13)

4.10 If yes, what method are you using? 202 □□

01 Pills
02 Condom
03 Vaginal methods
04 Injectables
05 IUD
06 Norplant
07 Female sterilisation
08 Male sterilisation
09 Abortion
10 Safe period
11 Withdrawal
12 Breastfeeding
13 Other (specify) .....
98 Not applicable

4.11 When did you start using the current method? 204 □□ 206 □□

Month .....Year .....

How old were you at that time? .....years 208 □□

4.12 If the respondent is using either female or male sterilisation ask : After you or your husband having sterilisation, did you/your husband think that your decision was right? 210 □

1 Yes
2 No, because .....
8 Not applicable

4.13 Family planning status of respondent.

(Interviewer : classify respondent's family planning status. If the status is 2, or 3., ask about the previous method.)

a) Currently using 211 □
1 Single method
2 Switching method, and the previous method was ..... (skip to Q. 4.16) 212 □□

b) Currently not using
3 Stop using now, and the last method was .....(skip to Q. 4.16)
4 Never use (skip to Q. 4.29 : Section for NEVER USER)

Code for the last method used of 2. and 3. in Q. 4.13		
01 Pills	02 Condom	03 Vaginal methods
04 Injectables	05 IUD	06 Norplant
09 Abortion	10 Safe period	11 Withdrawal
12 Breastfeeding		

4.14 ASK ONLY THE RESPONDENT USING SINGLE METHOD 214

Did you start using this method at the beginning of your marriage? ☐

1 Yes
2 No (skip to Q. 4.19)
8 Not applicable

4.15 After you started using (method) ..... Had you ever stopped using? 215 ☐

1 Yes (temporary)
2 No [skip to Q. 4.19 without asking Q. 4.22]
8 Not applicable

4.16 When did you stop using (method recorded in Q. 4.13)..... ? 216 218

Month ..... Year ..... ☐☐ ☐☐

220

Age ..... Years ☐☐

4.17 Why did you stop using .....?

(The last method or previous method) 222 ☐☐

1 Pregnant/postpartum/post abortion
2 Doctor's recommendation
3 Infecund
4 Hysterectomy
5 Health problem
6 Had side effect
7 Husband forbade, husband did not allow
8 Sexual inactive
9 Couple residentially separated
10 Divorced or widowed
11 Desired pregnancy
12 Inconvenient to use that method
13 Disliked old method/wanted to use other method
14 Supply run out
15 Forgot to use
16 Could not afford
17 Fear of illness, e.g. cancer
18 IUD expulsion
19 Other (specify) .....
98 Not applicable
99 No reason

4.18 Who suggested you to stop or change that temporary method? 224 ☐

1 No-one (self-decision)
2 Doctor at the hospital/clinic
3 Nurse or health personnel
4 Family planning personnel
5 Husband
6 Relatives or friend
7 Other (specify) .....
8 Not applicable
9 Don't know/no answer

FOR THE RESPONDENT NOT USING NOW, SKIP TO Q. 4.20

4.19 Who suggested you to use this current method? 225 □

1 No-one (self-decision)
2 Doctor at the hospital/clinic
3 Nurse or health personnel
4 Family planning personnel
5 Husband
6 Relatives or friends
7 Other (specify) .....
8 Not applicable
9 Don't know/no answer

4.20 Do you have any problem or difficulty on using the current method (or last method)? 226 □

1 Yes
2 No (skip to Q. 4.22)
8 Not applicable
9 Don't know/no answer

4.21 If yes, What is your problem or difficulty? 227 □□

(3 answers can be mentioned) 229 □□

1 Medical problem 231 □□
2 Visual problem
3 Headaches/dizziness
4 Anxiety/nervousness
5 Loss of sleep
6 Loss of appetite
7 Emotional or mental problem
8 Change of personal habits
9 Change in sexual behaviour (increase, decrease, inactive)
10 Fear of abnormalities and fear of illness, e.g. cancer
11 Husband disliked
12 Inconvenient to obtain
13 Inconvenient to use
14 Cannot afford the cost involved
15 Other (specify) .....
98 Not applicable

THIS SECTION (Q 4.22) IS FOR THE RESPONDENT WHO CURRENTLY USING OR HAD EVER USED CONTRACEPTION

(Ask only the respondent answered in Q. 1.4 "1 & 2")
Note For the respondent who had ever used family planning method, ask about the last method.
Note If the respondent has used only one method since marriage until now, circle " 2 " in Q. 4.15, then skip to Q. 4.23

4.22 We are interested to know if the following changes have occurred to you or your husband since practising the present (last) method of contraception.

4.22.1 Would you say your health in general is better or worse than it was before or is it about the same? 233 ☐
1 Better (seek explanation)
2 Worse (seek explanation)
3 About the same
8 Not applicable

Better / Worse (explanation) ..... 234 ☐

4.22.2 How about health of your spouse? 235 ☐
1 Better (seek explanation)
2 Worse (seek explanation)
3 About the same
8 Not applicable 236

Better / Worse (explanation) ..... ☐

4.22.3 How about your weight? Has it increased, decreased or remained about the same since practising contraception? 237 ☐
1 Yes, gain
2 Yes, loss
3 No change
8 Not applicable

4.22.4 Are you sleeping better, worse or about the same as you did prior to practising contraception? 238 ☐
1 Better
2 Worse
3 No change
8 Not applicable

4.22.5 (If you smoke) Would you say that you smoke more since practising, or less, or about the same as before? 239 ☐
1 More
2 Less
3 No change
4 Stop smoking
5 Never smoke
8 Not applicable

4.22.6 (If you drink) How about drinking alcoholic beverages?
Has it increased, decreased, or remained about the same as before? 240
1 Increased ☐
2 Decreased
3 Remained about the same
4 Stopped dringing
5 Never drink
8 Not applicable

4.22.7 Do you eat more than you did prior to practising, or less, or about the same as before? 241
1 More ☐
2 Less
3 No change
8 Not applicable

4.22.8 Before practising this contraception, what do you think about your relationship with your husband, in general? 242
1 Much better than others ☐
2 Some what better than others
3 About the same as others
4 Not as well as others
5 Very badly
8 Not applicable

4.22.9 At present, what do you think about your relationship with your husband, in general? 243
1 Much better than others ☐
2 Somewhat better than others
3 About the same as others
4 Not as good as others
5 Very badly
8 Not applicable

4.22.10 Since practising contraception, are you more tense or relaxed, or about the same as before? 244
1 More tense (seek explanation) ☐
2 More relaxed (seek explanation)
3 No change
8 Not applicable 245
More tense/relaxed (explanation) ..... ☐

4.22.11 Since practising contraception, do you think you husband has become more tense or more relaxed, or has there been no change? 246
1 More tense (seek explanation) ☐
2 More relaxed (seek explanation)
3 No change
8 Not applicable
More tense/relaxed (explanation) ..... 247 ☐

4.22.12 Since practising contraception, has there been any change in your relationship with your friends and neighbours? 248
1 Some change (explain) ..... ☐
2 No change 249
8 Not applicable ☐

4.22.13 Are you working outside the house or working with someone? 250
1 Yes ☐
2 No (skip to Q. 4.22.17)
8 Not applicable

4.22.14 (If yes) Has there been any change in the way you get along with your employer or your fellow workers? 251
1 Yes (explain) ..... ☐
2 No change 252
8 Not applicable ☐

4.22.15 Speaking about your job, do you enjoy your work more or less or as much as you did before practising contraception? 253
1 More (seek explanation) ☐
2 Less (seek explanation)
3 No change
8 Not applicable
More/less (explanation) 254
..... ☐

4.22.16 Do you feel more secure or less secure, about your job now as compared to the feeling before you practise contraception? 255
1 More (seek explanation) ☐
2 Less (seek explanation)
8 Not applicable 256
More/Less (explanation)..... ☐

Interviewer Please explain the necessity of asking about sexual change before and after practising the current contraception (for ever user means the last method)

4.22.17 Since practising contraception, has there been any change in your sexual relationship with your spouse?
For instance, do you feel less inhibited, or more so in your sexual behaviour, or has there been no change? 257
1 More ☐
2 Less
3 No change
8 Not applicable

4.22.18 About your spouse, do you think he is less inhibited in his sexual behaviour, or more so, or has there been no change? 258
1 More ☐
2 Less
3 No change
8 Not applicable

4.22.19 Since practising contraception, has there been any change in the frequency of coitus, more or less, or has there been no change? 259
1 More ☐
2 Less
3 No change
8 Not applicable

4.22.20 Would you say that you find coitus more satisfactory, or less, since practising contraception? 260
1 More ☐
2 Less
3 No change
8 Not applicable

THIS SECTION (Q.22) IS FOR THE RESPONDENT WHO NEVER USED ANY METHOD

(Ask only the respondent who answered in Q. 1.4 as "1 & 2")
Note For the respondent who has never used any contraceptive method, *THE FOLLOWING QUESTIONS COMPARE BETWEEN LAST YEAR AND PRESENT*. If the duration of marriage, or age of last child (pregnancy) is less than 1 year, ask about that time and now.

4.22 We are interested to know if the following changes have occurred to you or your husband since last year.

4.22.1 Would you say your health in general, is better or worse than it was before, or is it about the same since last year? 233
1 Better (seek explanation) ☐
2 Worse (seek explanation)
3 About the same
8 Not applicable 234
Better/Worse (explanation) ..... ☐

4.22.2 How about health of your spouse since last year? 235
1 Better (seek explanation) ☐
2 Worse (seek explanation)
3 About the same
8 Not applicable 236
Better/Worse (explanation) ..... ☐

4.22.3 How about your weight? Has it increased, decreased or remained about the same since last year? 237
1 Yes, gain ☐
2 Yes, loss
3 No change
8 Not applicable

4.22.4 Are you sleeping better, worse, or about the same as you did last year? 238
1 Better ☐
2 Worse
3 No change
8 Not applicable

4.22.5 Would you say that you smoke more since last year, or less, or about the same as before? 239
1 More ☐
2 Less
3 No change
4 Stopped smoking
5 Never smoke
8 Not applicable

4.22.6 How about drinking alcoholic beverages? Has it increased, decreased, or remained about the same as you did last year? 240
1 Increased ☐
2 Decreased
3 Remained about the same
4 Stopped drinking
5 Never drink
8 Not applicable

4.22.7 Do you eat more than you did last year, or less, or about the same as before? 241
1 More ☐
2 Less
3 No change
8 Not Applicable

4.22.8 What do you think about your relationship with your husband during the past year, in general? 242
1 Much better than others ☐
2 Somewhat better than others
3 About the same as others
4 Not as good as others
5 Very badly
8 Not applicable

4.22.9 What do you think about your relationship with your husband at present, in general? 243
1 Much better than others ☐
2 Somewhat better that others
3 About the same as others
4 Not as good as others
5 Very badly
8 Not applicable

4.22.10 Since last year, do you think you are more tense, or relaxed or about the same as before? 244
1 More tense (seek explanation) ☐
2 More relaxed (seek explanation)
3 No change
8 Not applicable 245
More tense/relaxed (explanation) ..... ☐

4.22.11 Do you think your husband has become more tense, or more relaxed, since last year, or has there been no change? 246
1 More tense (seek explanation) ☐
2 More relaxed (seek explanation)
3 No change
8 Not applicable 247
More tense/relaxed (explanation) ..... ☐
.....

4.22.12 Since last year, has there been any change in your relationship with your friends and neighbours? 248
1 Some change (explain) ..... ☐
2 No change 249
8 Not applicable ☐

4.22.13 Are you working outside the house or working with someone? 250
1 Yes ☐
2 No (skip to Q. 4.22.17)
8 Not applicable

4.22.14 (If yes) Has there been any change in the way you get along with your employer or your fellow workers? 251
1 Yes (explain) ..... ☐
2 No 252
8 Not applicable ☐

4.22.15 Speaking about your job do you enjoy your work more or less or as much as you did last year? 253
1 More (seek explanation) ☐
2 Less (seek explanation)
3 No change
8 Not applicable 254
More/Less (explanation) ..... ☐

4.22.16 Do you feel more secure, or less secure, about your job now as compared to last year? 255
1 More (seek explanation) ☐
2 Less (seek explanation)
3 No change
4 Not applicable 256
More/Less (explanation) ..... ☐

Interviewer Please explain the necessity of asking about the sexual change since last year

4.22.17 Since last year, has there been any change in your sexual relationship with your spouse? For instance, do you feel less inhibited, or more so, in your sexual behaviour, or has there been no change? 257 □

1 More
2 Less
3 No change
8 Not applicable

4.22.18 About your spouse, do you think he is less inhibited in his sexual behaviour, or more so, or has there been no change? 258 □

1 More
2 Less
3 No change
8 Not applicable

4.22.19 Since last year, has there been any change in the frequency of coitus, or less, or has there been no change? 259 □

1 More
2 Less
3 No change
8 Not applicable

4.22.20 Would you say that you find coitus more satisfactory, or less, since last year? 260 □

1 More
2 Less
3 No change
8 Not applicable

SKIP TO Q. 4.29

4.23 How many living children did you have at the time you started to use contraception? 261 □

Number .....

4.24 When did you first start using contraception? 263 □□ 265 □□

Month ..... Year .....

Age ..... 267 □□

For the respondent currently using single method circle "method" as same as Q. 4.10

4.25 (For the initial start) What method did you use? 269 □□

01 Pills
02 Condom
03 Vaginal methods
04 Injectables
05 I.U.D
06 Norplant
07 Female sterilisation
08 Male sterilisation
09 Abortion
10 Safe period
11 Withdrawal
12 Breastfeeding
13 Other (specify .....)
98 Not applicable

4.26 Since your initial practise of contraception, have you ever got pregnant? 271 □

1 Yes
2 No (skip to Q. 4.28)
3 Not applicable

4.27 When did you get pregnant since your initial use of contraception? 272 274 □□ □□

Month ..... Year .....

276 □□

Age .....

4.28 Did you consider practising the first contraception mainly for spacing or for regulating number of children? 278 □

1 Spacing (skip to Q. 4.31)
2 Regulating number of children (skip to Q. 4.31)
8 Not applicable

4.29 What is the main reason that you are not using any contraceptive method? 279 □□

1 Pregnant/postpartum/post abortion
2 Doctor's recommendation
3 Infecund
4 Subfecund
5 Hysterectomy
6 Menopause / too old
7 Fear of health effects/side effect
8 Husband forbade, husband did not allow
9 Friends and/or relatives recommended against
10 Sexual inactive, couple residentially separated
11 Desired pregnancy
12 Inconvenient to get
13 Did not like the service provider
14 Could not afford the cost involved
15 Religious taboo (or belief)
16 Other (specify) .....
98 Not applicable
99 Don't know/no answer

4.30 Do any of the following reasons made you not to use any contraceptive method?
(mentioning all reasons below)

Reason	Yes (1)	No (2)	No answer (3)	answered in Q. 4.29 or NotApp (8)	
Fear of health effects/side effects					281 ☐
Husband did not allow					282 ☐
Friends and/or relatives recommended against					283 ☐
Desired pregnancy					284 ☐
Inconvenient to get					285 ☐
Did not like the service provider					286 ☐
Could not afford the cost involved					287 ☐
Religious taboo (belief)					288 ☐

Q. 4.31-4.33 ASK ONLY THE RESPONDENT IN SOUTHERN REGION

4.31 Do you believe that deliberately spacing your births to allow more time between them is in conflict with your religion? 289 ☐
1 Against
2 Consistent
3 Unrelated
4 Other (specify) .....
8 Not applicable

4.32 Do you believe that deliberately limiting the number of children you have is against your religion, consistent with it, or unrelated? 290 ☐
1 Against
2 Consistent
3 Unrelated
4 Other (specify) .....
8 Not applicable

4.33 Check the known method from table 1 (Q. 4.2-4.3) column A and B then ask "Do you believe your religion is against, consistent with, or unrelated to the following methods of controlling birth?

Method	Known ( ) √	Whether in conflict with religion					
		Against (1)	Consistent (2)	Unrelated (3)	Other (4)	N.App (8)	
Pills							291 ☐
Condom							292 ☐
Vaginal method							293 ☐
Injectables							294 ☐
IUD							295 ☐
Norplant							296 ☐
F.sterilisation							297 ☐
M.sterilisation							298 ☐
Abortion							299 ☐
Safe period							300 ☐
Withdrawal							301 ☐

4.34 PREGNANCY RECORD AND MONTHLY FAMILY PLANNING

Interviewer Interview pregnancy history and monthly family planning from January 1982 to present, then record in the table below using these codes for the following events.

1. Pregnancy Termination (Check with pregnancy record in Q.2.11) record outcome on the last month of pregnancy as
(18)-LB-Live birth
(19)-FL-Feotal loss

2. Month of Gestation (Ask how many months for each pregnancy)
(20)-G-Gestation - Write one G for each month; first G is conception month.
Put "G ( )" for the conception month.

3. Family Planning at time of Conception (Verify month of conception and ask whether using contraception at that time.)
If using contraception, add code letter from method in ( ); if not using contraception, write letter for reason of not using in ( ).

4. Amenorrhoea :Am

For each LB and FL ask how many month until menstruation resumed. Write "Am ( )" for that number of months minus one. If respondent menstruated one month after delivery, do not mark any month.

5. Amenorrhoea following 1981 delivery

Check pregnancy record for delivery in 1981. If so, ask whether still amenorrhoeic in 1982, and mark "Am( )" for all such months except month of resumption.

6. Contraceptive practise

Starting at current month or most recent month still blank or marked "Am ( )", ask whether using any method to avoid pregnancy, and if so, how long. (Probe to make sure that use was continuous during period of more than two months.) Work backward through time asking about all months still blank or marked "Am ( )"

If changed methods or stopped using during a month, mark only the status at the end of month.

(10) P - Pills
(02) C - Condom
(03) VM - Vaginal methods
(04) I - Injectables
(05) IUD - IUD
(06) Imp - Subdermal Implant
(07) L - Ligation
(08) V - Vasectomy
(10) R - Rhythm
(11) W - Withdrawal
(13) Ab - Abstinence

7. Reason for nonuse

Ask the reason of not using for all months still blank. If more than one reason is given for any month, ask for the most important one. For months still marked "Am ( )" place "hyphen" in the parentheses.

(81) U - Unable or unlikely to bear children including subfertile
(82) N - No sexual contact
(83) D - Desire pregnancy
(81) B - Breastfeeding
(85) SE - Side effect
(86) DM - Dislike method
(70) Am (-) - Amenorrhoeic and not using contraception
X - Other reason (note under the table)
(98) Not applicable/Widowed/Divorced/Separated

8. Review

Check to be sure all months up to and including month of interview are marked, especially all months marked "Am ( )" and all conception months first month of "G", are followed by a code letter or hyphen in parentheses.

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul .	Aug.	Sep.	Oct.	Nov.	Dec.
1982												
1983												
1984												
1985												
1986												
1987												

FOR CODING

Use Table below, code 2 columns in each block by month as recorded in the table above.

	1	2	3	4
QUESTIONNAIRE No.				

5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	
77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	
125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140									

SECTION V : AVAILABILITY

5.1 Check the user status of respondent (using Q. 4.10 or Q. 4.13)

1 Current user of any method between 1-9 (see below)
Method is .....

2 Not currently using method 1-9 but previously used method 1-9. Last method is ..... 302 □

3 Never used method 1-9 (skip to Q. 5.11)
(Circle the method that the respondent is either currently using or had ever previously used.)

303 □□

Method

01 Pills	
02 Condom	
03 Vaginal method	
04 Injectables	
05 IUD	
06 Norplant	
07 Female sterilisation	
08 Male sterilisation	
09 Abortion	
10 Safe period	(skip to Q. 5.11)
11 Withdrawal	(skip to Q. 5.11)
12 Breastfeeding	(skip to Q. 5.11)
13 Other (specify)	(skip to Q. 5.11)
98 Not using	(skip to Q. 5.11)

5.2 Normally from where do you (or your husband) receive the family planning service? 305 □□

1 Tambon Health Center
2 District Health Center
3 Community Hospital
4 Provincial Hospital (Government)
5 Private Hospital
6 Private Clinic
7 Drugstore (general)
8 Tambon Paramedic
9 Bangkok Metropolitan Health Center
10 MCH Center
11 PDA office or clinic (Meechai)
12 Meechai Volunteer/Meechai Drugstore
13 Local practitioner/Quack
14 Mobile unit (Government)
15 Mobile unit (Private)
16 Army Medical Corps
17 Army Health Volunteer
18 Village Health Volunteer/Village Health Communicator
19 Granny Midwife
20 Other government hospital
21 Office Welfare (Private)
22 Other (specify) .....
98 Not applicable
99 Don't Know/can't remember

5.3 How far from home to that place? 307
Distance ..... kilometers. □□

5.4 How did you (your husband) get to that source? 309
1 Walk □
2 Private vehicle
3 Public vehicle
4 Walk and public vehicle
5 Governmental or private free transportation
6 Receive home service
7 Ask someone to buy
8 Not applicable

5.5 How much time does it take from your home to that place? 310 312
Hours ..... Minutes ..... □□ □□

5.6 Did you (your husband) find the service of that source convenient? 314
1 Very convenient □
2 Convenient
3 Acceptable
4 Inconvenient
5 Very inconvenient
6 Don't know due to asking someone to buy
8 Not applicable

5.7 How much did the service cost (per unit)? 315
Bath ..... □□□□
9997 Free service (skip to Q. 5.10)
9998 Not applicable

5.8 Do you think the fee was expensive or not? 319
1 Too expensive □
2 Not expensive (skip to Q. 5.10)
8 Not applicable

5.9 If too expensive, what is your recommended price? 320
Baht ..... □□□□

5.10 Suppose if we were going to improve the quality of services at the source you prefer, what improvement we should first consider? 324 ☐☐

01 Increase number of available methods
02 Increasing or altering the office hours or frequency of service
03 Personnel should be more friendly or courteous
04 Increasing number of staffs
05 Personnel should be working more efficiently
06 Service should be more speedy so that family planning acceptors do not have to waste too much time in waiting
07 Office should be staffed with personnel of higher qualification or more experiences
08 Providing home visit service
09 Improving public relationship programme
10 Increasing supplies to ensure that acceptors can always obtain the methods of their choices
11 Providing free service or lowering the cost
12 Improving the appearance or cleanliness of the office
13 Treating all acceptors more equally, no discrimination
14 Relocating the outlet to a new site where it is closer to community or to the majority of potential acceptors
15 Other (specify) .....
97 Good enough
98 Not applicable
99 Don't know/not sure

SKIP TO SECTION VI

Q. 5.11 TO 5.13 FOR THE RESPONDENT WHO NEVER USED METHOD 1-9

5.11 Suppose if you want to use a method of contraception (for those who are using non-scientific methods, e.g., safe period, withdrawal, ask whether you want to change to scientific method), what method would you want to use? 326 ☐☐

1 Pills
2 Condom
3 Vaginal methods
4 Injections
5 IUD
6 Norplant
7 Female sterilisation
8 Male sterilisation
9 Abortion
10 Other (specify) .....
97 Not going to use any method (skip to Section VI)
98 Not applicable
99 Don't know/not sure

5.12 Suppose if you were going to practise family planning what source would you go to? 328 ☐☐

1 Tambon Health Center
2 District Health Center
3 Community Hospital
4 Provincial Hospital (government)
5 Private Hospital
6 Private Clinic
7 Drugstore (general)
8 Tambon Paramedic
9 Bangkok Metropolitan Health Center
10 MCH Center
11 PDA Office or clinic (Meechai)
12 Meechai Volunteer/Meechai Drugstore
13 Local practitioner/Quack
14 Mobile unit (Government)
15 Mobile unit (Private)
16 Army Medical Corps
17 Army Health Volunteer
18 Village Health Volunteer/Village Health Communicator
19 Granny midwife
20 Other government hospital
21 Office welfare (Private)
22 Other (specify) .....
98 Not applicable
99 Don't know

SECTION VI : HOUSEHOLD CHARACTERISTICS AND SOCIAL STATUS

6.1 Amenities :

Piped water	1 Yes	2 No	330 ☐
Latrine outside	1 Yes	2 No	331 ☐
Toilet in house	1 Yes	2 No	332 ☐
Gas stove	1 Yes	2 No	333 ☐
Electricity	1 Yes	2 No	334 ☐

6.2 Possessions :			335
Black - white TV	1 Yes	2 No	☐
			336
Color TV	1 Yes	2 No	☐
			337
V.D.O.	1 Yes	2 No	☐
			338
Refrigerator	1 Yes	2 No	☐
			339
Stereo	1 Yes	2 No	☐
			340
Radio	1 Yes	2 No	☐
			341
Electric fan	1 yes	2 No	☐
			342
Electric rice cooker	1 Yes	2 No	☐
			343
Electric oven/microwave	1 Yes	2 No	☐
			344
Car	1 Yes	2 No	☐
			345
Pick-up	1 Yes	2 No	☐
			346
Motorcycle	1 Yes	2 No	☐

6.3 How much was your annual family income last year? 347
Baht ..... ☐☐☐☐

7. Interviewer : Please evaluate degree of cooperation from respondent

7.1 Cooperation during interview 351

None		Average		Very good
:	:	:	:	:
1	2	3	4	5

☐

7.2 Respondent's sincerity during interview 352

None		Average		Very good
:	:	:	:	:
1	2	3	4	5

☐

Community Profile Record

Project

Determinants and Consequences of Contraceptive Use Patterns in Thailand

Questionnaire number 1 _ _ _

Village name _____ No. _____ 4 _

Tambon (sub-district) _____ Amphoe (district) _____ 5 _/_

Changwat (province) _____ Region _____ 7 _/_/_

Location

1. Municipality
2. Rural area

10 _

Village characteristics

1. Cluster
2. Scatter

11 _

Interviewer's name _____

Date of interview _____ 12 _ _/_ _

Supervisor's name _____

Coder's name _____

Editor's name _____

This questions are administered by the supervisor and will be asked from a knowledgeable respondents, usually the village head man, public health personnels, or collected from administrative records.

1. What is the population size of the village ?		
Number _____	16	_ _ _ _
2. What is the number of the households in the village ?		
Households _____	20	_ _ _
3. Is the village electrified ?		
1. Yes	23	_
2. No (Skip to Q.5)		
4. (If yes) How long has the village been electrified ?		
Year (s) _____	24	_ _
5. Is there public piped water in the village ?		
1. Yes	26	_
2. No (Skip to Q.7)		
6. (If yes) How long has the public piped water been used ?		
Year (s) _____	27	_ _
7. Is this village a new or an old village ?		
1. New	29	_
2. Old		
8. How long has the village been established ?		
Year (s) _____	30	_ _
9. Was this village separated from the old village or was it newly formed ?		
1. Old one	32	_
2. Separated from the old village		
3. Newly formed		
10. How far away is the village from the district center ?		
(measure distance by road) km _____	33	_ _
11. What is the condition of the route from the village to the district center ?		
1. Have to go all the way through canal	35	_
2. Have to go in part through canal and the rest through laterite road		
3. Have to go in part through canal and the rest through asphalt road		
4. Laterite road all the way		
5. Laterite road from the village to the main road (where it becomes asphalt)		
6. Asphalt road all the way to the district center		
12. Usually, what kind of vehicles people take to the district center ?		
- Bus 1. Yes 2. No	36	_
- Mini bus 1. Yes 2. No	37	_
- Taxi 1. Yes 2. No	38	_
- Boat for hire 1. Yes 2. No	39	_
- Other (specify) _____	40	_

13. Does the village or the nearby village have these following public utilities ?

Public utilities	Within the village	If within the village, how long has it been established ?	If not within village, how far is it from the village ? (Kms)	
School				
- Elementary	1.Yes 2.No	_____	_____	41 _/_ _/_ _
- Secondary	1.Yes 2.No	_____	_____	46 _/_ _/_ _
- Higher/ vocational school	1.Yes 2.No	_____	_____	51 _/_ _/_ _
- Post office	1.Yes 2.No	_____	_____	56 _/_ _/_ _
- Weekend market	1.Yes 2.No	_____	_____	61 _/_ _/_ _
- Market	1.Yes 2.No	_____	_____	66 _/_ _/_ _
- House of entertain ment	1.Yes 2.No	_____	_____	71 _/_ _/_ _

14. Since last year, are there any of the following family planning services in the village ?

1. Provide services in the village
2. Number of visit
3. Contraceptive method provided
4. Price per unit of contraceptive method

Family planning services	Ever visit (1)	Number of visit (2)	Contraceptive method (3)	Price per unit (4)	
Mobile motivation services	1.Yes 2.No	_____			76 _/_ _
Mobile services	1.Yes 2.No	_____	_____	_____	79 _/_ _/_/_ _
			_____	_____	85 _/_ _
			_____	_____	88 _/_ _
			_____	_____	91 _/_ _
			_____	_____	94 _/_ _
			_____	_____	97 _/_ _
Other (specify)		_____	_____	_____	100 _/_ _/_/_ _
			_____	_____	106 _/_ _
			_____	_____	109 _/_ _

Code of contraceptive method

1. Pills
2. Condom
3. Male sterilisation
4. Injectables
5. IUD
6. Norplant
7. Other
8. Not applicable

15. Sources of contraceptive outlets which are located in this village, ask distance of the one nearest to the village, type of contraceptive services provided, price per unit, number of personnels.

Sources	Located in the village	Distance of the one nearest to the village (kms)	Contraceptive services provided	Price per unit	Number of doctors	Number of nurses	Number of public health personnels		
								112	⌟⌟__
District Hospital Name __	1.Yes 2.No	_____	1. Pills	_____				116	⌟__
			1. Condom	_____				119	⌟__
			1. Injectables	_____				122	⌟__
			1. IUD	_____				125	⌟__
			1. Norplant	_____				128	⌟__
			1. F.S.	_____				131	⌟__
			1. M.S.	_____				134	⌟__
			Other ___	_____				137	⌟_⌟__ _⌟__
								146	⌟⌟_
Tambon Health Centre Name	1.Yes 2.No	_____	1. Pills	_____				150	⌟__
			1. Condom	_____				153	⌟__
			1. Injectables	_____				156	⌟__
			1. IUD	_____				159	⌟__
			1. Norplant	_____				162	⌟__
			1. F.S.	_____				165	⌟__
			1. M.S.	_____				168	⌟__
			Other ___	_____				171	⌟_⌟__ _⌟__

Sources	Located in the village	Distance of the one nearest to the village	Contraceptive services provided	Price per unit	
Private Clinic Name ___ Number ___	1.Yes 2.No	_____	1.Pills 1.Condom 1.Injectables 1.IUD 1.Norplant 1.F.S. 1.M.S. Other _____	_____ _____ _____ _____ _____ _____ _____ _____	180 _/ _/ _ _ 184 _/ _ _ 187 _/ _ _ 190 _/ _ _ 193 _/ _ _ 196 _/ _ _ 199 _/ _ _ 202 _/ _ _ 205 _/ _ _
Drug Store Name ___ Number ___	1.Yes 2.No	_____	1.Pills 1.Condom Other____	_____ _____ _____	208 _/ _/ _ _ 212 _/ _ _ 215 _/ _ _ 218 _/ _ _
Health Volunteer/ Health Communicator	1.Yes 2.No	_____	1.Pills 1.Condom Other____	_____ _____ _____	221 _/ _ _/_/_ _ 227 _/ _ _ 230 _/ _ _
Meecchai Volunteer/ Clinic/ Drugstore	1.Yes 2.No	_____	1.Pills 1.Condom Other____	_____ _____ _____	233 _/ _ _/_/_ _ 239 _/ _ _ 242 _/ _ _
Other ___ (specify)		_____ _____	_____ _____	_____ _____	245 _/ _ _/ _/ _ _ 251 _/ _ _

16. Sources which most people prefer to get the family planning services.
    1. If at the District Hospital, which district and the distance from the village
    2. If at the Tambon Health Center, which Tambon and the distance from the village

    Also ask contraceptive method provided, price per unit, number of doctor, nurses and public health personnels.

Sources	Located in the village	Distance of the one nearest the village (kms)	Contraceptive services provided	Price per unit	Number of doctors	Number of nurses	Number of public health personnels	
District Hospital Name _ _ 7.Same as the answer of Q.15	1.Yes 2.No	_____	1. Pills 1. Condom 1. Injectables 1. IUD 1. Norplant 1. F.S. 1. M.S. Other ___	_____ _____ _____ _____ _____ _____ _____ _____				254 _/_/_ _ 258 _/_ _ 261 _/_ _ 264 _/_ _ 267 _/_ _ 270 _/_ _ 273 _/_ _ 276 _/_ _ 279 _/_ _/_ _ _ _/_ _
Tambon Health Centre Name _ _ 7.Same as the answer of Q.15	1.Yes 2.No	_____	1. Pills 1. Condom 1. Injectables 1. IUD 1. Norplant 1. F.S. 1. M.S. Other ___	_____ _____ _____ _____ _____ _____ _____ _____				288 _/_/_ _ 292 _/_ _ 295 _/_ _ 298 _/_ _ 301 _/_ _ 304 _/_ _ 307 _/_ _ 310 _/_ _ 313 _/_ _/_ _ _ _/_ _

For the following questions, ask only respondents in Southern region

17. Ask the domicile and religion of the chief personnel of such sources (Q.15), including the domicile and religion of other personnels of such sources

Sources	Chief personnel		Most personnels		
	Domicile	Religion	Domicile	Religion	
District Hospital Name _____					322 _/_/_/_
District Health Centre Name _____					326 _/_/_/_
Tambon Health Centre Name _____					330 _/_/_/_
Private Clinic Name _____					334 _/_/_/_
Drugstore Name _____					338 _/_/_/_
Health Volunteer/Health Communicator					342 _/_/_/_
Meechai Volunteer/Clin c/ Drugstore					346 _/_/_/_
Other (specify) _____					350 _/_/_/_/_

Code of domicile
1. Same village as the source
2. Same sub-district as the sources (different village)
3. Same district as the source (different sub-district)
4. Same province as the source (different district)
5. Southern region.
6. Other region
8. Not applicable (due to no personnel)

Code of religion
1. Buddhist
2. Muslim
3. Christian
4. Other
8. Not applicable (due to no personnel)

18. What percentage of Muslim is in the village ? 355 _ _
    Percentage _____

19. What language do they usually speak when they are at home ?
    1. Yawee 357 _
    2. Southern
    3. Yawee and Southern
    4. Other (specify) _____
20. Are there any of the following places in the village ?
    a. Temple
    1. Yes, number _____ 358 _
    2. Yes, but in nearby village, number _____ 359 _
    3. No.
    b. Mosque
    1. Yes, number _____ 360 _
    2. Yes, but in near by village, number ____ 361 _
    3. No.
    c. Islamic school
    1. Yes, number _____ 362 _
    2. Yes, but in nearly village, number _____ 363 _
    3. No.

Appendix B

SURVEY STAFF AND MAP

Survey Staff

Project Consultants	Pramote Prasartkul Aphichat Chamratrithirong
Project Director	Boonlert Leoprapai
Deputy Director	Varachai Thongthai
Researchers, Field Supervisors and Assistants	Koramas Wuttisuk Kanchana Tangchonlatip Buppha Sirirassamee Pimonpan Isarabhakdi Phenphon Pramuansuk Panee Vong-ek Mali Leunanonchai Sirinan Saiprasert Sivaporn Pokpong Sureeporn Punpuing Phetnoi Singchangchai* Sukri Mekthan* Suphot Kowithaya*
Administration	Aurapan Hunchangsith Juthakan Atithananan Sukhon Singim Pornpong Pradapthong

* Affiliated with the Prince of Songkhla University

1. Bangkok

Central :
2. Chachoengsao
3. Rayong
4. Trad
5. Ayutthaya
6. Singburi
7. Lopburi
8. Suphanburi
9. Samutprakan
10. Ratburi

North :
11. Chiangmai
12. Chiangrai
13. Nan
14. Sukhothai
15. Petchabun

South :
16. Songkhla
17. Nakhon Sri Thammarat
18. Phangnga
19. Pattani
20. Narathiwat
21. Yala
22. Satun

Northeast :
23. Nakhon Ratchasima
24. Buriram
25. Ubon Ratchathani
26. Udon Thani
27. Sakon Nakhon

Figure B.1 CUPS Sample Changwats