SOCIO-CULTURAL DETERMINANTS OF MATERNAL HEALTH INURBAN POOR COMMUNITIES OF BANGKOK METROPOLIS

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Published by: The Institute for Population and Social Research, Mahidol University, Salaya, Phutthamonthon, Nakorn Pathom 73170, Thailand
Tel. (662)441-9663, 441-9518; Fax. (662)441-9333 Tlx. 84770 UNIMAHI TH; Cable: POPULATION SALAYA

Library of Congress Cataloguing-in-Publication Data

Boonlert Leoprapai

Socio-cultural determinants of maternal health in urban poor communities of Bangkok metropolis/ Boonlert Leoprapai [et al.]

(Mahidol University. Institute for Population and Social Research Publication; no. 180)

ISBN 974-587-808-1

1. Maternal and Child Health - Socio-cultural determinants I. Title II. Series: Mahidol University, Institute for Population and Social Research Publication; no.180.

HB 886 M214 No. 180 1994

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 International Development Research Centre (IDRC) Canada for providing financial support to this study through the Institute of Southeast Asian Studies (ISEAS), Singapore. Our thanks are due to Dr. Sharon Siddique, ISEAS' Deputy Director, for her valuable and incessant technical, administrative and moral support.

We are indebted to medical and health personnel at the two general hospitals and three Bangkok Metropolis health centers and to respondents in two communities of Bangkok for their cooperation in our data collection activities. We would like very much to mention the names of institutions, communities and individuals here but for research ethical reason, their names have to be withheld.

Lastly, we would like to express our thanks to Dr. Aphichat Chamratrithirong, Director, Institute for Population and Social Research and his administrative staff for providing administrative and logistics support.

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ISBN 974-587-808-1
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I. INTRODUCTION

Concurrent with a secular decline in mortality, measured by the crude death rate[1], during the last three decades from 1960 to 1990, the maternal deaths, measured by the maternal mortality rate[2], also showed a declining trend. In 1960, there were approximately 3,855 maternal deaths with the maternal mortality rate of about 4.2 per 1,000 live births. In 1970, the number of maternal deaths was below three thousands and the maternal mortality rate was reduced to 2.3 per 1,000 live births. In 1990, the number of maternal deaths was as low as 237 persons with maternal mortality rate of only 0.4 per 1,000 live births (Division of Health Statistics, Ministry of Public Health, 1990 and 1992). The maternal mortality rate was much lower in Bangkok with 0.2 per 1,000 live births in 1980 and as low as .04 in 1988 (Department of Policy and Planning, Bangkok Metropolis Administration, 1989). Although the number of maternal deaths is believed to be an underestimate either because of underregistration or miscategorization, the decreasing trend in maternal mortality as a cause of death seems to be significant. The role of abortion, direct and indirect obstetric causes in maternal deaths showed that in 1970, direct and indirect obstetric cuases accounted for about 95 per cent of meternal deaths. In 1990, direct and indirect obstetric cuases accounted for only 82 per cent of maternal deaths. Assuming that the report on number of maternal deaths by three cuase groups is reliable, the decreasing role of direct and indirect obstetric causes in maternal deaths probably reflects the impact of improved maternal care services of the country.

The declining trend in maternal mortality in maternal mortality in Thailand does not necessarily entail the reduction in the magnitude of illness from causes related to pregnancy, childbirth and the puerperium, Of 42.272 million outpatients classified by 17 cause groups of illness in 1990, about .575 million outpatients or 1.4 percent of all outpatiens were in the complications of pregnancy, childbirth and puerperium cause group. About 35 percent of outpatients in this cause group received services from health service units in Bangkok Metropolis. For inpatients, there were about .561 million inpatients in the complications of pregnancy,

childbirth and puerperium delivery without mention of complication category, accounting for about 19.6 percent of all inpatients in 1990. Approximately .120 million inpatients or 15.4 percent of all inpatients in this category received services from health service units in Bangkok Metropolis. Slightly over one-fifth or 21.6 percent of inpatients and outpatients of illness from causes related to pregnancy, childbirth and the puerperium received services from health service units in Bangkok Metropolis in 1990 were non residents of Bangkok. However, with about 50 general and specialized service hospitals and 18,000 hospital beds which represents about 23.1 percent of the national total hospital beds in Thailand 1990, Bangkok may be considered as being endowed with a disproportionate share of health resources. (Division of Health Statistics 1992). Outpatient health services are also available at 58 BMA health centers which are, in principle, intended to serve the urban poor, estimated to be about one-sixth of the total population of Bangkok Metropolis in 1990. However, availability of health resource does not necessarily means that the poor can have access to these resources. In a condensed areas urban area like Bangkok, physical accessibility may not be a problem. However, the extent of socio-economic and cultural accessibility to public health services is still unknown.

Most studies on maternal health seeking behaviour and practices to date are mostly conducted in the rural areas. Whenever such studies are conducted in urban areas, they are mostly hospital-based dealing with factors affecting abortion, direct and indirect obstretic causes of mortality. No attempts have been made to examine the predisposing factors linked to these causes. To date, the study on maternal health seeking behaviour of the urban women is practically nonexistent. Two most recent studies are confined to identifying socio-economic and demographic characteristics of pregnant women which affects the utilization of antenatal care services. It was found that younger women, women with higher educational attainment and women of higher family income visit ANC clinics either the BMA health centers or at the general hospitals more often than older women, women with less education and women of lower family income (Kanavacharakul, 1989; Jintanothaithavorn, 1993). It was also found that women with more time of

antenatal care had less complications at labour than those with fewer times of antaenatal care (Jintanothaithavorn, 1993).

This study aims to evolve a culturally appropriate participatory maternal health education and information program though the partnership between women in the community and the relevant health agency. This will be done by taking a fresh look at rationality schemes of decision making as they pertain to pregnancy, delivery, and postpartum care and the extent to which these can be incorporated in the maternal health education program. The specific objectives are as follows:

1. To examine and analyze local customs and traditional practices as they pertain to pregnancy, delivery and postpartum care;

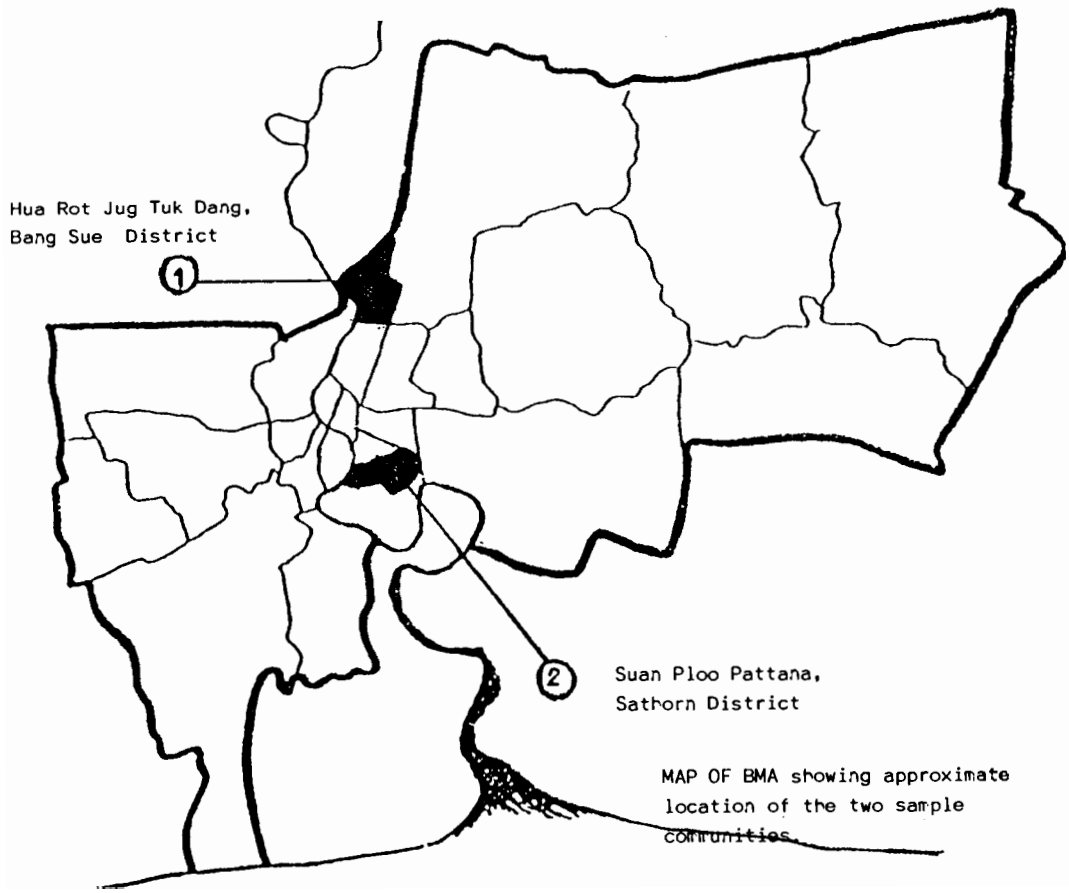
2. To assess the factors --- cultural, programmatic and socio-economic accounting for the selective utilization of health services for prenatal care and delivery;

3. To determine the prospects and nature of women's involvement in the planning, implementation, and evaluation of an education and information program for maternal health.

II. METHODOLOGY

STUDY SITE

The study was conducted in Bangkok as a part of joint study undertaken in poor communities in five cities of Asian region. These cities had been categorized into economic grids with Korea at the helm having reached a high stage of industrial development although mortality level remained high followed by Kuala Lumpur and Bangkok, which represent under going rapid industrilization. The third level is constituted by Jakarta and Manila, wherein the population problem acts as a deterrent to economic growth. The interest in this economic delineation is the extent to which industrilization, modernization and technological changes could interact with culture to effect behavioural modifications in pregnancy and postpartum care and how such behavioral change can influence the formulation of relevant maternal care programs. The two urban poor communities being the study site is show in a map below.



MAP OF BMA showing approximate location of the two sample communities.

QUANTITATIVE AND QUALITATIVE METHODS OF DATA COLLECTION

A community survey was first conducted in May 1992. Two low-income communities in Bangkok Metroposlis with approximately 1,900 households and 9,000 population were selected for data collection. A sample of 526 ever married women aged 15-40 years and have ever experienced pregnancy were interviewed, using a structured guestionnaire. From the community survey, the information on various types of ante-natal services which respondents receive was collected. These services can be categorized into two types, hospital services and public health center services. Two general hospitals and three BMA health centers which respondents stated they had attended were selected. Both hospitals provide ante-natal, delivery and post-natal services while the health centers provide only pre-natal and post-natal services and patients here are referred to hospitals for deliveries. An in-depth semi-structured questionnaire was used to interview to the hospital and health center personnel. The interview was also supplemented by tape recording the entire discussion in order to acquire more meaningful interpretation of the discussion.

In addition to the above, focus groups were conducted in two of the communities in which the community survey was conducted. The objective of conducting the focus group was to acquire community opinions concerning hospital and health center services from the acceptors point of view. Knowledge of health care and practices was also discussed. Participants were selected of whom were pregnant at the time or who had given birth for not more than three months prior to the discussion.

All data collection instruments - four structured and semi-structured interview schedules and the guidelines for focus group discussion - are presented in the Appendix II. It has to be mentioned here that the Interview Schedule for Maternal Death was not used because there was no recorded case of maternal death, based on the report made by all respondents who were asked whether nor not they

had known any of the member of the community who had died while pregnant or because of delivery.

III. SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

With a view to finding out whether selected socio-economic and demographic characteristics of women will have any influence on pregnancy, delivery and postpartum care practices, certain characteristics such as age, education, occupation, income and selected housing characteristics were collected.

Selected Socio-economic and Demographic Characteristics

Among 526 married women, more than three-fourths of them are wives of household's heads. About 15 percent are daughters and daughters in-law and 6 percent are heads of the households.

More than three-fourths of the respondents are between 20-34 years old. Only 5 percent are adolescent mothers (15-19 years old) and 17 percent are 35-40 years old. The everage age is 28 years old.

About 43 percent of respondents belong to families which have the monthly family income less than the average monthy family income, and 43 percent of the women belong to middle family income group (i.e. between 6,000 - 11,999 bath per month). Only 14 percent of women belong to high family income group (i.e. 12,000 bath or more per month). Most of them are housewife, unskilled labour, semi-skilled labour, and owner of small business. Only 2 percent of women are professional and clerical workers.

The majority of the women, i.e. nearly three-fourths, has primary education. About 7 percent of these women had never attended school.

Nearly 70 percent of respondents are lifetime migrants with about 64 percent being born in the rural areas and about 6 percent in other urban areas outside Bangkok. About 26 percent are 5-year migrants. Proportion of lifetime or

5-year migrants in the low-income communities are higher than of Bangkok Metropolis as a whole (National Statistical Office, 1993). Selected characteristics of respondents are in Table 3.1 below.

Table 3.1 : Selected Characteristics of the Respondents.

Characteristics	Percent	
Relationship to head of household		
Head of the house hold	6.1	(32)
Wife	77.8	(409)
Daughter	8.2	(43)
Daughter-in-law	6.7	(35)
Relatives	0.8	(4)
Grand daughter	0.6	(3)
Age (yrs.)		
15-19	5.1	(27)
20-24	22.6	(119)
25-29	32.3	(170)
30-34	22.6	(119)
35-40	17.3	(91)
(Mean age = 28.2 years)		
Monthly family income (Baht)		
0 - 2,999	8.2	(43)
3,000 - 5,999	34.8	(183)
6,000 - 8,999	32.9	(173)
9,000 - 11,999	9.7	(51)
12,000 - 75,000	14.4	(76)
(Mean income = baht 6,441)		

Table 3.1 : (Continued)

Characteristics	Percent	
Education		
Never attended school	6.8	(36)
Elementary school	72.6	(382)
Secondary school	13.7	(72)
High school	3.0	(16)
Vocational / commercial diploma	2.5	(13)
High diploma	0.8	(4)
Bachelor degree	0.6	(3)
Occupation		
Housewife	55.1	(290)
Professional (teacher, nurse)	0.6	(3)
Clerk in governmental / state enterprise sector	1.5	(8)
Staff / employee in private sector	9.1	(48)
Small trade	9.7	(51)
Skilled and semi-skilled labour	10.6	(56)
Unskilled labour	12.5	(66)
Looking for a job	0.6	(3)
No answer	0.2	(1)
Birthplace		
In Bangkok	30.6	(161)
Outside Bangkok but in municipality area	5.9	(31)
Rural area	63.5	(334)

Table 3.1 : (Continued)

Characteristics	Percent	
Duration of stay in Bangkok		
Less than 12 months	7.4	(39)
12-35 months	10.3	(54)
36-59 months	8.6	(45)
60-108 months	17.7	(93)
120 months or more	25.5	(134)
Born in Bangkok	30.6	(161)
Age at first staying in Bangkok (yrs.)		
0 - 10	5.5	(29)
11 - 15	11.0	(58)
16 - 20	20.9	(110)
21 - 25	16.9	(89)
26 - 30	11.4	(60)
31 - 36	3.6	(19)
Born in Bangkok	30.6	(161)
Duration of stay in the community		
Less than 12 months	13.1	(69)
12-35 months	18.8	(99)
36-59 months	17.1	(90)
60-108 months	19.2	(101)
120 months or more	21.5	(113)
Born in the Community	10.3	(54)
TOTAL	100.0	(526)

Selected Housing Characteristics

Slightly less than two-thirds respondents reported as having private toilets in their houses with almost all of them having pour (water-sealed) type of toilet. Using neighbours or relatives' toilets were the answers given by respondents whose houses have no toilet. Public garbage trucks are sources of garbage disposal of about 92 percent of respondents' houses. Screened cabinet or screened on the table are sources of food storage of about 87 percent of all houses whereas refrigerator is the source of food storage of only 5 percent of all houses (see Table 3.2 below).

Table 3.2 : Selected Housing Characteristics

Characteristics	Percent	
Have a private toilet?		
Yes	64.6	(340)
No	35.4	(186)
Total	100.0	(526)
Type of toilet		
Flush toilet	0	(0)
Pour (water-sealed)	98.5	(335)
Pit latrine	0	(0)
Others	1.5	(5)
Total	100.0	(340)
For houses with no toilets, place of excrete		
Neighbor/relatives' houses	100.0	(186)

Table 3.2 : (Continued)

Characteristics	Percent	
Garbage disposal		
Garbage truck	92.4	(486)
Burning/burying	1.1	(6)
Duping ground/beneath the house	6.5	(34)
Total	100.0	(526)
Food storage		
Refrigerator	4.6	(24)
Screened cabinet	47.5	(250)
Screened on the table	39.2	(206)
Open	3.2	(17)
Others	5.5	(29)
Total	100.0	(526)

From the socio-economic, demographic and housing characteristics of respondents briefly presented above, it can be stated that they are typical of people in the low income families of Bangkok. The monthly average family income was lower than that of the Bangkok households in 1988 (National Statistical Office, 1990). The educational attainment of women in the low-income communities was much lower than that of Bangkok's women (married and other marital status) in the same age group. Only 2 percent of women in Bangkok Metropolis in the age group 15-40 years had no education and 40 percent had primary education in 1990 (National Statistical Office, 1993).

IV DELIVERY AND PREGNANCY HISTORY

Delivery History

The first question on delivery history is about the number of delivery experienced by each woman. It includes all deliveries experienced by the women regardless of the outcome of delivery. About 49 percent of women have experienced 2 to 3 deliveries and 42 percent of women have only one delivery experience. About 6 percent of women having experienced 4 or more deliveries. An average number of deliveries experienced by the respondent is 1.8. Three percent of women are having the first pregnancy and have no delivery experience.

Among those women who have experienced one or more deliveries, the out come of delivery was that 99 percent were livebirths and only 0.8 percent was stillbirth. For mode of delivery, about 87 percent of all deliveries was vaginal which is, in effect, the normal delivery. About 6 percent of deliveries which instrument like forceps or vacuum were used to help the women during giving birth to the child. Only 7 percent of the women needed to have caesarian section (Table 4.1).

As for the place where women used for delivery, it is not surprising to find that government health services such as hospital and health centre were selected to be the place of delivery, by the relatively high proportion of women. Very few women used private hospital or private clinic. It is interesting to find that 8 percent of delivery took place at home. It is unfortunate that a probe was not carried out. According to respondents' perception, home may mean home town because about one foruth of respondents are 5-year migrant and, 93 percent of 75 women who reported home as their place of delivery were born outside Bangkok Methopolic or, in other words, life-time migrants. At least, 12 percent of women reported provincial hospital and rural health center as place of delivery. When asked for the reason for choosing that place for delivery, the most common reasons given by the women are convenience, suggested by friends or relatives and it was the place of prenatal care. These reasons were mentioned by

Table 4.1 : Delivery history of the respondent. (All deliveries regardless of the outcome of the delivery)

	Percent	
Number of delivery		
None (first pregnancy)	3.0	(16)
1 delivery	42.2	(222)
2 deliveries	35.6	(187)
3 deliveries	13.7	(72)
4 deliveries	4.0	(21)
5 deliveries	1.1	(6)
6 deliveries	0.2	(1)
10 deliveries	0.2	(1)
	100.0	(526)
(Mean = 1.8)		
Outcome of the delivery		
Livebirth	99.2	(934)
Still birth	0.8	(8)
Mode of delivery		
Caesarian Section	7.0	(66)
Vaginal	86.8	(818)
Instrument	6.2	(58)

a majority of the women. Only few women stated that they select the place of delivery because of low cost or good service.

The survival status of the livebirths was as high as 99 percent and only 1 percent was dead (Table 4.2).

Table 4.2: Place of delivery, reason for choosing and survival status of the child.

	Percent	
Place of delivery		
At home	8.0	(75)
Governmental hospital	77.4	(729)
Private hospital	2.0	(19)
Private clinic	0.4	(4)
Provincial hospital	10.1	(95)
Tambon health center	1.8	(17)
Taxi / cart	0.8	(3)
Reason for choosing place of delivery		
Low cost	5.4	(51)
Convenience	52.8	(497)
Good service	3.7	(35)
Suggested by the others	11.8	(111)
Workplace of the husband	2.0	(19)
Hospital too for	6.1	(57)
Place of prenatal care	18.1	(171)
Do not know	0.1	(1)
For livebirth, the survival status of the child		
Alive	99.0	(925)
Dead	1.0	(9)

Previous Pregnancy Behavioral Experiences

When asked about the outcome of the last pregnancy, about 95 percent were livebirth, 4.8 percent were miscarriage and 0.2 percent were stillbirth.

The women recognized that they were pregnant from different symptoms / means. The common symptoms that made the women recognized that they were pregnant are cessation of menstruation, breast changes both in colour and size (breast congestion), morning sickness (also having evening sickness in certain cases), nausia and vomitting. Among these symptoms, cessation of menstruation is the most common sign to make the women recognizing that they were pregnant. The other means to help the women recognizing their pregnant are pregnancy test and ultrasound. The pregnancy test is much more prefered by the women compared to the ultrasound which needs a lot of precautions and is expensive. More than three-fourths of the women recognize the symptoms during the first or the second month, and less than 10 percent of women recognize these symptoms after the third month of pregnancy (Table 4.3).

Table 4.3 : Information on the last pregnancy

	Percent	
Outcome of the last pregnancy		
Livebirth	95.0	(440)
Still birth	0.2	(1)
Miscarriage / abortion	4.8	(22)
TOTAL	100.0	(463)

Table 4.3 : (Continued)

	Percent	
Symtoms that made the respondents know that they were pregnant		
Cessation of menstruation	89.0	(468)
Nausea, vomitting	64.8	(341)
Morning sickness	62.9	(331)
Swelling of the belly	52.1	(274)
Found a piece in the belly?	50.0	(263)
Breast changes	76.2	(401)
Urine test (Pregnancy test)	77.2	(406)
Others (i.e. ultrasound)	4.2	(22)
Month of pregnancy when recognizeing the first symtom		
1 month	43.2	(227)
2 months	35.6	(187)
3 months	13.5	(71)
4 months	4.2	(22)
5 months	1.9	(10)
6 months	0.8	(4)
7 months	0.4	(2)
No answer	0.6	(3)

Upon learning of their pregnancy, husband was the first person whom the women consult. The next person was the health personnel like doctors and nurses, friends, neighbours and elderly. The issues of consultation were about symptoms and sign of pregnancy, how to practice when being pregnant and complications of

pregnancy. In case the husband did not want the baby, there were discussion between the women and her husband about abortion and family planning.

Advices given by the persons consulted were to see the doctor or health personnel for antenatal care and not to seek abortion. Other advices were about the food, place where the women can go for prenatal care and the preparation for natal period (Table 4.4).

Table 4.4 : The first consultant and issues of consultation.

	Percent	
First consultant after pregnancy		
Elder relatives	7.3	(35)
Husband	39.9	(192)
Governmental health personnel	22.7	(109)
Private health personnel	3.3	(16)
Friends, neighbour,	18.3	(88)
Parent	6.4	(31)
Father/mother-in-law	2.1	(10)
TOTAL	100.0	(481)
Issues of consultation		
F.P. / the future of the child	1.9	(9)
How to behave when being pregnant	19.5	(94)
Abortion	7.5	(36)
Prenatal care /	8.1	(39)
Complications of pregnancy	3.9	(49)
Symptoms of pregnancy	47.2	(227)
How to take care of baby	0.6	(3)

Table 4.4 : Information on the last pregnancy

	Percent	
Gender of baby	5.0	(24)
Food and medicine	5.0	(24)
Method of delivery	1.2	(6)
TOTAL	100.0	(481)
Advices from consultant		
Nothing	5.8	(28)
See the doctor, ANC	45.1	(217)
Not to go for abortion	11.0	(53)
Suggest the place for prenatal care	8.1	(39)
Food during pregnant	16.6	(80)
Cleaning / Hygienic	0.6	(3)
Gender of baby	0.4	(2)
Method of delivery	6.7	(32)
Not remember	0.4	(2)
Abortion / Family Planning	5.2	(25)
TOTAL	100.0	(481)

For the contents of consultation by type of consultant, if the issue of consultation is related to family planning, almost 90 percent of pregnant women would consult their husbands and the remaining would consult their parents. For the issue about how to behave during pregnant, more than 60 percent of pregnant women would consult their husbands and some pregnant women consulted their friends, colleagues, health personnel and the elderly. For abortion,

more than 50 percent of the pregnant women consulted their husbands and 20 percent consulted their friends, colleagues and 17 percent consulted their in-laws or the elderly. For antenatal care, the pregnant women would consult their husbands, friends, colleagues, health personnel, and the eldery. For infant's health, unlike the previous issues, non of pregnant women would consult their husbands. More than half of pregnant women consulted health personnel and, one-fourth of pregnant women consulted their friends, colleagues and neighbours. For symptoms of pregnancy, the pregnant women consulted their husbands, health personnels, friends, colleagues and neighbours. For selection of baby's sex, more than 70 percent of pregnant women consulted their husbands while the issues related to foods and medicine they would consult health personnel, the elderly, friends, colleagues and neighbours. About the method of delivery, the pregnant women would consult health personnel, husbands and friends.

It can be stated that the husbands were consulted by about 40 percent of pregnant women in almost all issues except infant's health and food and medicine for pregnancy. Health personnel and friends were the next group of persons consulted by 33 and 18 percent of pregnant women respectively. It is interesting to observe that mothers in low has has been consulted by only 2 percent of pregnant women (Table 4.5).

Table 4.5 : The consultant after knowing the last pregnancy by the content of consultation.

Content / Consultant	Family planning	How to behave during pregnant	Abortion	ANC.	Infant's health pregnancy	Sysptom of clothing	Preparation of baby's sex	Selection of baby's medicine	Food & medicine	Method of delivery	Total
Eldery	-	6.4(6)	8.3(3)	15.4(6)	-	5.7(13)	33.3(1)	8.3(2)	16.7(4)	-	7.3(35)
Husband	88.9(8)	67.0(63)	52.8(19)	25.6(10)	-	31.7(72)	33.3(1)	70.8(17)	-	33.3(2)	39.9(19)
Governmental health personnel	-	8.5(8)	5.6(2)	20.5(8)	47.4(9)	27.3(62)	-	8.3(2)	62.5(15)	50.0(3)	27.7(109)
Private health personnel	-	-	5.6(2)	5.1(2)	21.0(4)	3.5(8)	-	-	-	-	3.3(16)
Friend, colleaque, neighbour	-	10.6(10)	19.5(7)	25.6(10)	26.3(5)	21.2(48)	33.3(1)	8.3(2)	16.7(4)	16.7(1)	18.3(88)
Parents	11.1(1)	4.3(4)	-	5.1(2)	5.3(1)	10.1(23)	-	-	-	-	6.5(31)
Mother/Father in-law	-	3.2(3)	8.3(3)	2.6(1)	-	0.4(1)	-	4.2(1)	4.2(1)	-	2.1(10)
TOTAL	100.0(9)	100.0(94)	100.0(36)	99.9(39)	100.0(19)	99.9(227)	99.9(3)	99.9(24)	100.1(24)	100.0(6)	100.0(481)

For place of prenatal care of the last pregnancy and family income (per month) of the women, it is found that a majority of women went to government hospitals in Bangkok for prenatal care, regardless the level of family income. For other places, other it is found that the low income group (less than 6,000 bath/month) went to government hospitals or health centers in their hometowns or to government health centers in Bangkok while the moderate income group (6,000 to 11,999 bath/month) went to Bangkok health centers or to government hospitals or health centers in their hometown. The high income group (12,000 or more/ month) went to private hospitals or private clinics at higher percentage as compared to the two former groups. The chi-square test found to be statistically significant at 0.05 level of confidence which indicate the significant relationship between family income and places for prenatal care of the last pregnancy.

As for occupation of women and place for prenatal care of the last pregnancy, it is found that the majority of women went to government hospitals, about 78 percent of white collar, 73 percent of blue collar, and 70 percent of do not work respectively. Among the places other than government hospitals, it is found that women who do not work went to Bangkok health center while the blue collar went to Bangkok health center and to government hospitals or health centers in their hometown. The chi-square test found to have no significant relationship between occupation of women and places for prenatal care of the last pregnancy (Table 4.6).

Table 4.6 : Place for prenatal care of the last pregnancy by family's income per month and occupation.

Characteristics	Place for prenatal care: The last pregnancy				
	Gov.Hos in BKK.	BKK. Health Center	Private Hos. and Clinics	Gov.Hos. and Health Center outside Bangkok	TOTAL (N)
Household's income (Bath)					
0 - 5,999	72.5 (148)	11.3 (23)	2.5 (5)	13.7 (28)	100.0 (204)
6,000 - 11,999	72.5 (145)	14.0 (28)	3.5 (7)	10.0 (20)	100.0 (200)
12,000 or more	84.1 (58)	4.3 (3)	7.2 (5)	4.3 (3)	100.0 (69)
X2 = 12.96	P < 0.05				
Occupation					
White collar	78.1 (114)	7.5 (11)	6.2 (9)	8.2 (12)	100.0 (146)
Blue collar	72.7 (216)	12.8 (38)	2.0 (6)	12.5 (37)	100.0 (297)
Don't work	70.0 (21)	16.7 (5)	6.7 (2)	6.7 (2)	100.0 (30)
X2 = 10.25	P > 0.05				

When asked about the illness during pregnancy, most of the women stated that they did not have any illness while being pregnant and very few women had minor illness e.g. common cold which was not a serious illness.

Regarding complications related to pregnancy among the first pregnancy, about 74 percent of pregnant women were suffering from edema, and muscle cramp. Approximately 7 percent of the women had vaginal bleeding and 4 percent of them had high blood pressure. The complications among the second pregnancy were similar to those of the first pregnancy. They were edema, muscle cramp, hypertension and vaginal bleeding. For the third and forth pregnancy, the complications were edema, muscle cramp and vaginal bleeding. The other complications related to pregnancy were low-back pain, stomatitis, anemia, haemorroid, and dental caries (Table 4.7).

Women have different ways to cope with their complications. The management of complications varied, according to type of complications. Among those women with vaginal bleeding, more than half would go to see doctor for treatment, nearly one-third would doing nothing and 10 percent would take rest. For the group of pregnant women with hypertension, slightly more than one-third would consult doctor and take rest and the remaining would take care of one self or doing nothing. The pregnant women, when having edema or cramp, 90 percent would not doing anything, 5 percent would take care of one self and only 3 percent would see doctor. Overall, when the pregnant women have any complications, 72 percent would not doing anything, 13 percent would see doctor, 10 percent would have self treatment, and 4 percent would take rest. It is interesting to note that only 1 woman with endema or cramp went to consult the traditional healer when having complications during pregnancy (Table 4.8).

Table 4.7 : Complications related to the pregnancy by pregnancy order.

Pregnancy order / Complication	1st Pregnancy	2nd Pregnancy	3rd Pregnancy	4th Pregnancy	5th Pregnancy	6th Pregnancy
Bleeding	6.8 (10)	8.6 (7)	10.7 (3)	33.3 (1)	-	-
Hypertension	4.0 (6)	8.6 (7)	-	-	-	50.0 (1)
Low-back pain	0.7 (1)	1.2 (1)	7.1 (2)	-	-	-
Edema, Cramp	74.3 (110)	65.4 (53)	60.7 (17)	66.7 (2)	100.0 (1)	50.0 (1)
Stomatitis	1.4 (2)	1.2 (1)	-	-	-	-
Anemia	1.4 (2)	2.5 (2)	3.6 (1)	-	-	-
Nausea, Vomiting	1.4 (2)	-	-	-	-	-
Haemorroid, dental-caries	10.1 (15)	12.4 (10)	17.9 (5)	-	-	-
TOTAL	100.1 (148)	99.9 (81)	100.0 (28)	100.0 (3)	100.0 (1)	100.0 (2)

Table 4.8 : Complications related to the pregnancy by how to cope with the complications.

How to cope / Complication	Do Nothing	See Doctor	Self Treatment	See Traditional Healer	Rest	Eat more	Exercise	Total
Vaginal Bleeding	28.6 (6)	57.1 (12)	4.8 (1)	-	9.6 (2)	-	-	100 (21)
Hypertension	14.3 (2)	35.7 (5)	14.3 (2)	-	35.7 (5)	-	-	100 (14)
Low-back pain	25.0 (1)	50.0 (2)	25.0 (1)	-	-	-	-	100 (4)
Stomatitis	66.6 (2)	33.3 (1)	-	-	-	-	-	100 (3)
Anemia	60.0 (3)	20.0 (1)	-	-		20.0 (1)	-	100 (5)
Nausea, Vomiting	-	100.0 (2)	-	-	-	-	-	100 (2)
Haemorrhoid, Dental caries	30.0 (9)	23.3 (7)	43.3 (13)	-	3.3 (1)	-	-	100 (30)
Edema, cramp	90.2 (166)	2.7 (5)	4.9 (9)	0.5 (1)	-	-	1.6 (3)	100 (184)
TOTAL	71.9 (189)	13.3 (35)	9.9 (26)	0.4 (1)	3.0 (8)	1.1 (3)	1.1 (3)	100 (263)

For complications related to previous delivery, it was found that one-third of the mothers had complications. When examining the type of complications, it was found that most of the complications were not that serious. More than 70 percent of the complications were numbness, cramp, headache, low-back pain, constipation, haemorrhoid and angular stomatitis. There were some serious complications such as hypertension and bleeding via vagina, but not many mother had these types of complication. The findings are corroborated by findings from the qualitative study where administrators of antenatal services at Bangkok Metropolis health centre reported that pregnancy complication were minimal. About 6 percent of the mothers had hypertension and 8 percent had vaginal bleeding (Table 4.9).

Table 4.9 : Complications related to previous delivery

Complications	Number	Percent
Suffer from complications		
Total	526	100.0
No	345	65.6
Yes	181	34.4
Type of complications		
Total	181	100.0
Vaginal Bleeding	15	8.3
Hypertension	10	5.5
Low-back pain	2	1.1
Numbness / cramp	129	71.3
Angular Stomatitis	3	1.7
Anemia	3	1.7
Headache	2	1.1
Hemorrhoid / Constipation	17	9.4

When asked about precautions which have been under taken by the women during pregnant to ensure a safe delivery, safeguard of maternal health and have a healthy infant, it was found that a majority of the women did not take any special precautions during pregnancy as they stated that they had the same food as usual, no special activity and no medicine or vitamins being taken by them. Regarding medicine, there were only 3 percent of women took some vitamins or minerals such as B.Complex, Multivitamin, calcium sulphate, and ferrous sulphate, and only 0.4 percent took herbal or traditional medicine. Special activities being undertaken by 50 percent of women during pregnant were exercise and deep breathing which would help the women to have strength to expel the baby during natal period. The other activities were take rest, pray, no bath at night, no running or lifting heavy things, not eating or sleeping too much, and not obstructing door or steps. All these activities were undertaken with belief to help ease delivery and to avoid accident.

There were some special foods being eaten by the women during pregnant with the belief that it will help to ease in delivery. Those were snake, eel, water of boiling lotus, egg laid on the ground, holy banana, and holy water. Some foods being eaten by the pregnant women with belief that it would be good for infant in uterus, such as fruit, vegetable, coconut, and not too hot or too sour food (Table 4.10).

Table 4.10 : Medicines, Activities and Foods Undertaken to Ensure a Safe Delivery.

Precautions undertaken	Number	Percent
TOTAL	510	100.0
Medicine		
Nothing	495	97.1
Vitamin, minerals	13	2.5
Herbal medicine	2	0.4
Activity		
Nothing	219	42.9
Not take bath at night	5	1.0
Not run, lift heavy thing	4	0.8
Exercise, deep breathing	255	50.0
Not eat or sleep too much	13	2.5
Not obstructing door, steps	1	0.2
Take rest / pray	7	1.4
Do heavy work,	4	0.8
Food		
Normal/ as usual	391	76.7
More vegetable / fruit	27	5.3
Snake, eel	3	0.6
Not so spicy	2	0.4
Coconut	49	9.6
Water of boiling lotus	16	3.1
Egg laid on the ground	2	0.4
Holy banana, Holy water	20	4.0

Beliefs and Practices in Antenatal Care, Delivery and Postpartum Care.

During pregnancy, there are some precautions undertaken by the pregnant women to ensure a safe delivery, safeguard of maternal health and have a healthy infant. These included special activities prescribed for pregnant women i.e. moderate exercise, taking a rest during the day for 1 or 2 hours a day, doing some light work and trying to made one's mind happy. These advices mainly come from health personnel, colleagues, neighbours, bossess, parents and the elderly. Some pregnant women mentioned that they learn from direct experiences, reading books and watching television. The reasons for prescribing those activities are to ensure maternal and infant health, good mental health of mother and prevention of abortion (Table 4.11).

Table 4.11 : Special activity prescribed for pregnant women, sources of advice and reasons.

	Percent	
Special activity prescribed	100.0	(596)
Exercise	24.8	(148)
Rest / sleep	17.4	(104)
Lie down on right or left side	0.3	(2)
Do light work	6.3	(56)
Do all usual work	8.3	(74)
Made happy mind	2.2	(20)
No answer	21.2	(109)

Table 4.11 : (Continued)

	Percent	
Sources of advice		
Elderly	4.0	(24)
Husband	2.9	(17)
Government health personnel	23.8	(142)
Private health personnel	0.3	(2)
Colleague, neighbour, boss	6.4	(38)
Parent	4.9	(29)
Direct experience, books, T.V.	25.3	(151)
No answer	32.4	(193)
Reasons for special activity prescribed		
To ensure healthy infant	8.7	(52)
To ensure healthy mother	19.5	(116)
To ensure maternal and infant health	10.7	(64)
Safe delivery	19.9	(119)
To ease delivery of placenta	0.3	(2)
Good for mother's mental health	3.8	(23)
To prevent abortion	3.3	(20)
No reason / no answer	29.2	(200)

There are some special activities prohibited for pregnant women. These include lifting the heavy object, running, jumping, sleeping too much, wearing high heel shoes, driving car, riding on bicycle or motorcycle, taking bath at night and having sex especially during the first trisemester. Sources of these advices

are health personnel, colleagues, neighbours, parents and husbands. The pregnant women also learn from direct experiences, books and television. The reasons for these prohibited activities are to prevent danger to infant and mother and also to prevent difficult delivery and infant deformity (Table 4.12).

Table 4.12 : Special activity prohibited for pregnant women, sources of advice and reasons.

	Percent	
Special activity prohibited	100.0	(569)
Take bath at night	0.5	(3)
Lifting heavy object	60.5	(344)
Run / Jump	7.9	(45)
Too much sleeping	2.1	(12)
Driving / Riding	1.6	(9)
Wear high heel shoes	1.7	(10)
Fixing nail	0.4	(2)
Stand in public bus	0.4	(2)
Having sex	1.4	(8)
No answer	22.7	(125)
Sources of advice		
Elderly	4.9	(28)
Husband	6.3	(36)
Government health personnel	25.0	(142)
Private health personnel	0.4	(2)
Colleague, neighbour	11.6	(66)
Parents	7.2	(41)
Direct experience, books, T.V.	22.0	(125)
No answer	22.7	(129)

Table 4.12 : (Continued)

	Percent	
Reasons for prohibited activity		
To prevent infant deformity	0.2	(1)
To prevent dangerous of infant	70.0	(398)
To prevent difficult delivery	2.8	(16)
Not good for maternal health	3.7	(21)
Do not know	1.6	(9)
No answer	21.8	(124)

Regarding food, there are some special food prescribed for pregnant women. The pregnant women are advised to eat more protein, sea foods, vegetables and fruits. The other advices are to have more of carbohydrate and every thing. Specifically for the Thai culture, the pregnant women are advised to drink coconut juice, water and plain rice. The advice regarding food for pregnant women come from different groups of people i.e. health personnel, colleaques, neighbours, bosses, husbands, parents and the elderly. More than one-fourth of pregnant women stated that they learn about the prescribed food for pregnant women from direct experiences, books and television. The reasons for advising the pregnant women to eat prescribed foods are that they are good for infant or maternal health or being good for both infant and maternal health. The other reason is to ease in delivery (Table 4.13).

Table 4.13 : Special food prescribed for pregnant women, sources of advice and reasons.

	Percent	
Special food prescribed		
Vegetables, fruits	42.0	(342)
Sea food, protein	47.0	(382)
Carbohydrate	3.3	(27)
Every thing	2.7	(22)
Water	0.9	(7)
Coconut juice	3.4	(28)
Plain food	0.6	(5)
Sources of advice		
Elderly	4.3	(35)
Husband	8.1	(66)
Government health personnel	42.2	(343)
Private health personnel	0.7	(6)
Colleague, neighbour	11.3	(92)
Parents	5.7	(46)
Direct experience, books, T.V.	27.7	(225)
Reasons for prescribed		
Good for infant health	60.8	(494)
Good for maternal health	7.0	(57)
Good for infant and maternal health	27.4	(223)
To help easing delivery	1.7	(14)
No reason / Don't know reason	3.1	(25)
Total	100.0	(813)

There are some special food prescribed on the one hand and there are also some special food prohibited for pregnant women on the other hand. The prohibited food for pregnant women are alcohol, soft drink, tea and coffee and not to smoke. Hot and spicy food, canned food, meat and animal fat, raw food, snake, eel and frog are also prohibited for pregnant women. The advices come mainly from health personnels i.e. physicians, nurse, midwifery. The pregnant women also mentioned that they learn partly from direct experiences, books and television. The other source of advices are colleagues, neighbours, husbands, parents and elderly. The reasons for prohibited foods are to prevent abortion and infant deformity and to prevent dystocia. The other reasons are those prohibited food are not good for maternal and infant health and some prohibited foods are not good for baby complexion (Table 4.14).

Table 4.14 : Special food prohibited for pregnant women, sources of advice and reasons.

	Percent	
Special food prohibited	100.0	(638)
Meat, fat	2.0	(13)
Alcohol, cigarette	36.1	(230)
Hot / Spicy food	20.8	(133)
Raw food	0.5	(3)
Coffee / tea	8.9	(57)
Soft drink	16.8	(107)
Canned food	14.7	(94)
Snake, eel, frog	0.2	(1)

Table 4.14 : (Continued)

	Percent	
Sources of advice		
Elderly	4.2	(27)
Husband	7.1	(45)
Government health personnel	40.6	(259)
Private health personnel	0.8	(5)
Colleague, neighbour	13.2	(84)
Parents	6.4	(41)
Direct experience, books, T.V.	27.7	(177)
Reasons for prohibited		
To prevent infant deformity	26.3	(168)
To prevent abortion	46.6	(297)
Not good for infant health	4.7	(30)
To prevent dystocia	1.3	(8)
Not good for maternal health	13.0	(83)
Not good for baby complexion	2.3	(15)
Do not know	5.8	(37)

There are some medicines prescribed for pregnant women such as ferrous tablets, vitamins and antiemetic drugs. These drugs are usually prescribed by physicians. There are also some medicines prohibited for pregnant women such as antianalgesic drugs and other medicines of selftreatment. The advices regarding medicines for pregnant women come mainly from health personnel especially government health personnel. The reasons for advices are good for maternal and infant health and to help easing delivery (Table 4.15).

Table 4.15 : Medicines prescribed prohibited for pregnant women, sources of advice and reasons.

	Percent	
Special medicine prescribed/prohibited	100.0	(565)
Take Ferrous / Vitamin Tablets	75.4	(426)
Take antiemetic drug	4.2	(24)
Do not take antianalgesic drugs	4.1	(23)
Do not take medicine by self prescribed	1.8	(10)
No answer	14.5	(82)
Sources of advice		
Elderly	0.9	(5)
Husband	0.2	(1)
Government health personnel	80.9	(457)
Private health personnel	0.7	(4)
Colleague, neighbour	0.4	(2)
Parents	0.9	(5)
Direct experience, books, T.V.	1.6	(9)
No answer	14.5	(82)
Reasons for advice		
Good for infants health	34.7	(196)
Good for maternal health	18.0	(102)
Good for infant and maternal health	27.4	(155)
To help easing delivery	1.9	(11)
No reason	32.0	(181)

For advices which pregnant women received from health personnel during prenatal care sessions, the highest percentage of advice are the matter on appropriate food to be taken during pregnancy. The second highest percentage is about exercise and rest during pregnancy. The pregnant women also received advice about medicine to be taken during pregnancy and to attend antenatal care sessions regularly. It is observed that 11 percent of the pregnant women did not receive any advice during antenatal care sessions (Table 4.16).

Table 4.16 : Advice received from health personnels during prenatal care sessions.

Advice	Percent	
No advice	10.5	(55)
Appropriate food to be taken	25.8	(136)
Medicine during pregnancy	14.1	(74)
Excercise / Rest	24.7	(130)
Preparation for baby	1.1	(6)
Hygienic matters	3.6	(19)
Appropriate Dress and Shoes	0.6	(3)
Family Planning	1.0	(5)
Regular attending ANC	4.8	(25)
Do not remember	3.0	(16)
No ANC	10.8	(57)
TOTAL	100.0	(526)

When asked whether or not they followed the advices received during the antenatal care sessions, about 72 percent of pregnant women followed the advices

of health personnel which they received during the antenatal care sessions. About 11 percent of pregnant women did not attend antenatal clinic and the other 10 percent received no advice. Among the 7 percent of pregnant women who did not follow the advices of health personnel provided during antenatal care sessions have given the reasons for not followed the advices that they have no time, no money, no social support, do not belief the advices, do not like medicine and lazy. Of these, 2 percent of pregnant women state that they could not remember the advices which they received during the prenatal care sessions (Table 4.17).

Table 4.17 : Following the advice or not and reasons for not following.

Following advice			Percent	
			100.0	(526)
Follow advice			71.9	(378)
Not Follow			6.8	(36)
Reason for not follow				
No social support	1.0	(5)		
No time	1.3	(7)		
Do not like medicine	1.0	(5)		
Do not belief	1.0	(5)		
No money	0.6	(3)		
Lazy	0.2	(1)		
Could not remember the advices	1.9	(10)		
No ANC			10.8	(57)
No advice			10.5	(55)

Regarding behavioral practices of women during pregnancy, it is found that 90 percent or more of the pregnant women did not smoke cigarette or drink alcohol. This is in conformity with the social norm of Thai people that only few women would smoke cigarette and/or drink alcohol. This is in contrast with the women in Western countries. It is found that more than 80 percent of pregnant women took vitamins during pregnant and did not take tea or coffee. These indicated good practices of the pregnant women which is good for health of both the mother and the baby. It is found that 38 percent of pregnant women took some medicine for treating illness during pregnant and 3 percent took herbal medicines. It is interesting to note that 12 percent of pregnant women took medicines to terminat pregnancy and this is not good for health of both the mother and infant (Table 4.18).

Table 4.18 : Practices during pregnancy regarding smoking, drinking alcohol, vitamins, coffee/tea, drug and herbal medincines.

Practice	Percent	
TOTAL	100.0	(526)
Smoking cigarette		
Smoking	9.3	(49)
Not smoking	90.7	(477)
Drinking alcohol		
Drinking	9.7	(51)
Not drinking	90.3	(475)
Vitamins		
Taking	84.2	(443)
Not taking	15.8	(83)

Table 4.18 : (Continued)

Practice	Percent	
Tea/coffee		
Taking	16.9	(89)
Not taking	83.1	(437)
Drug to terminate pregnancy		
Taking	12.0	(63)
Not taking	88.0	(463)
Medicine for treatment		
Taking	38.0	(200)
Not taking	62.0	(326)
Herbal medicine		
Taking	2.5	(13)
Not taking	97.5	(513)

For the method of delivery of the last pregnancy, it is found that more than 80 percent were vaginal delivery which is the normal delivery. About 7 percent of pregnant women were helped with some equipment such as forceps or vacuum extraction during giving birth, and 9 percent had caesarean section.

For duration of delivery which is counted from the start of true labour pain, it is found that about 56 percent had delivery at a rather short duration with less than 6 hours. About 30 percent of pregnant women had delivery took place at a rather long duration that is 16 hours or more. It should be noted that 14 percent

took duration longer than 72 hours which is very dangerous for both the mother and the baby (Table 4.19).

Table 4.19 : Method and duration of delivery of the last pregnancy.

	Percent	
Method of delivery		
Caesarean section	9.3	(49)
Vaginal delivery	81.2	(427)
Equipment	6.5	(34)
No experience	3.0	(16)
Duration of delivery (from the start of pain)		
Less than 1 hour	20.2	(106)
1-5 hours	36.3	(191)
6-10 hours	3.8	(20)
11-15 hours	2.3	(12)
16-20 hours	1.5	(8)
21-72 hours	15.0	(79)
More than 72 hours	14.0	(76)
Dont's know / Don't remember	3.4	(18)
No experience	3.0	(16)
Total	100.0	(526)

Regarding the position adopted by pregnant women during labour, it is found that more than 90 percent of the women were in supine position during

delivery. Only few percent of pregnant women adopted the other positions such as kneeling, sit on the floor, or standing position (Table 4.20).

Table 4.20 : Position adopted during labour

Position	Percent	
Standing	0.4	(2)
Kneeling	2.1	(11)
Supine	92.6	(487)
Sit on the floor	1.9	(10)
No experience (first pregnancy)	3.0	(16)
TOTAL	100.0	(526)

There are certain beliefs and practices in the community with regard to pregnancy. These include beliefs and practices on prohibitions and prescriptions. The beliefs and practices prohibited in the community are not to sit or stand obstructing the door or steps (belief to be the cause of obstructed delivery); not to take bath at night (belief to be the cause of natal and postnatal bleeding); not to associate with handicap person (belief to be the cause of having handicap baby); not to have sex especially during the first trisemester (belief to be the cause of abortion); not to drink alcohol or smoke cigarette (belief to be the cause of ill health of both mother and child); not to stitch the cloth, fix the nail (belief to be the cause of obstructed delivery); not to lift heavy objects (belief to be the cause of vaginal bleeding or abortion); not to prepare baby's clothing in advance (belief to be the cause of infant death); and, not to eat twin banana (belief to be the cause of twin baby). The beliefs and practices prescribed in the community are: to look

at beautiful things (belief to have a beautiful baby); to put needle near the waist (belief to prevent black magic); to finish eating before other and to be diligence (belief to have ease in delivery); to drink coconut juice (belief to have baby with beautiful complexion); to eat holy banana and to drink water of boiled lotus (belief to have ease delivery), (Table 4.21).

Table 4.21 : Beliefs / practices prohibited and prescribed in the community regarding pregnancy.

Beliefs/practices	Frequency
Prohibited	
Walk across the rope of cow	4
Prepare baby's clothing in advance	11
Eat egg	8
Lifting heavy objects	31
Sit or stand obstructing door / steps	107
Take bath at night	72
Stitching cloth	18
Fixing nail	8
Attending funeral	6
Associate with handicap people	38
Have sex	12
Angry / fighting with other	17
Eat twin banana	4
Drinking / smoking	5
Eat tamarind seeds / Bamboo shoot	7
Eating while walking	10
Eat meat or animal fat	4
Eat too much	4
To eat foods dropped on the floor	1

Table 4.21 : (Continued)

Beliefs/practices	Frequency
Prescribed	
Look at beautiful things	3
Put needle near the waist	2
Finish eating before other	9
Be diligence	8
Put holy picture infront of bed	2
Drink coconut juice	2
Take bath with holy water	1
Eat holy banana	1
Drink water of boiled lotus	2

Beliefs and practices related to pregnancy may be grouped on the basis of the effects to maternal and infant health or follows :

Group I - Beliefs and practices which give positive effects to maternal and infant health such as not to lift heavy objects, not to sit or stand obstructing door or steps, not to drink alcohol and smoke cigarette.

Group II - Beliefs and practices which give neutral effects to maternal and infant health such as not to eat twin banana, not to look at the moon, and not to cut the banana leave.

Group III - Beliefs and practices which give negative effects to maternal and infant health such as not to eat egg, not to eat meat, to be diligence, and to do all type of work.

When crosstabulate these three groups of beliefs and practices with the age groups of pregnant women, it is found that the young age group of pregnant women (15-19 years) have beliefs and practices with positive effect to maternal and infant health at higher percentage (81.8) than the higher age group and the pregnant women in age group 20-29 years have the lowest percentage (69.7). For the beliefs and practices which give negative effect to maternal and infant health, it is found that on 4.5 percent of the young age group (15-19 years) have this type of beliefs and practices while the higher age group have this type of beliefs and practices at higher percentage i.e. the age group 30 years or more have 8.3 percent and the age group 20-29 years have 10 percent. However the chi-square test indicates that the difference are not statistically significant meaning there is no significant relationships between age of pregnant women and prohibited or prescribed practices (Table 4.22).

Table 4.22 : Belief / practice related to pregnancy by age.

Age (years)	Belief/Practice Positive Effect.	Neutral Effects.	Negative Effects.	Total
15-19	81.8	13.6	4.5	100.0 (22)
20-29	69.7	20.3	10.0	100.0 (241)
30+	73.2	18.5	8.3	100.0 (168)
TOTAL	71.9 (309)	19.3 (83)	9.0 (39)	100.0 (431)

$X^2 = 1.87$ $P > 0.05$

Experiences in Health Resource Utilization and Preferences.

During the time of collecting data, 12 percent of women in the communities were pregnant. Among those who were pregnant 75 percent have already gone for prenatal care, whereas 25 percent have not yet gone for prenatal care. . Nearly two-thirds had the first prenatal care visit during the first tri-semester. Only 6 percent of whom went for the first prenatal care during the third tri-semester.

Places where pregnant women went for prenatal care were government hospital, public health center, private clinic and provincial hospital. Among these, the government hospital was the most popular as it was utilized by about 87 percent of pregnant women. The public health center served about 9 percent of pregnant women. Only 2 percent of pregnant women went to private clinic and also 2 percent went to provincial hospital for prenatal care. The reasons for government hospital being popular is that it is endowed with qualified health personnel and equipment and the cost of services is not high.

During prenatal care session, different services were provided for pregnant women such as blood examination (included complete blood count, VDRL, and anti, HIV), urine examination for sugar and albumin, taking blood pressure, general physical examination, abdominal examination, taking body weight and height and tetanus vaccination. Moreover, health education also being provided for the pregnant women, to know how to behave during pregnant, to ensure good health of both the mother and the baby (Table 4.23).

Table 4.23 : Information on the present pregnancy of the respondents who are being pregnant.

Information	Percent	
Being pregnant		
Yes	12.0	(63)
No	88.0	(463)
Total	100.0	(526)
Going for prenatal care		
Yes	74.6	(47)
No	25.4	(16)
Total	100.0	(63)
Month of pregnancy when going for first prenatal care		
1	6.4	(3)
2	32.0	(15)
3	25.5	(12)
4	21.3	(10)
5	2.1	(1)
6	6.4	(3)
7	4.2	(2)
8	2.1	(1)
Total	100.0	(47)
Place to go for prenatal care		
Government hospital	87.2	(41)
Public Health Center	8.5	(4)
Private clinic	2.1	(1)
Provincial hospital	2.1	(1)
Total	100.0	(47)

Table 4.23 : (Continued)

Information	Percent	
Services obtained from the place of prenatal care		
Blood test	100.0	(47)
Urine test	85.1	(40)
Blood pressure	91.5	(43)
Physical examination	66.0	(31)
Abdominal examination	89.4	(42)
Height & Weight	89.4	(42)
Health education	70.2	(33)
T.T.vaccination	34.0	(16)

As for the place for delivery of the last child by family income (per month), it is found that a majority of women went to government hospitals in Bangkok for delivery for every level of family income i.e. low income (less than 6,000 bath/ month), moderate income (6,000 to 11,999 bath/month) and high income (12,000 bath or more/month) with 79, 81 and 88 percent respectively. Among the places other than the government hospitals in Bangkok, it is found that 5 percent of low income women and also 5 percent of moderate income women a birth at home while 3 percent of high income women did so. Surprisingly, about 15 percent of the low income women a birth in private hospitals or private clinics while 11 percent of the moderate income women and only 8 percent of the high income women did so. The chi-square test indicates no statistically significant relationship between family income and place for delivery.

With regard to occupation of women and place for delivery, the majority of women all occupational group went to government hospitals in Bangkok for delivery with blue collar, while collar and do not work with 78, 85 and 88 percent respectively.

It is found that 14 percent of blue collar went to private hospital or private clinic for delivery while about 9 percent of white collar, and of the do not work women did so. About 5 percent of blue collar, 4 percent of white collar and 3 percent of the do not work women a birth at home. The chi-square test indicates no statistically significant relationship between occupation and place for delivery of the last child (Table 4.24).

When asked about their expected place to go for delivery, attendant and mode for delivery, it is found that more than four fifth expected to go to the government hospitals in Bangkok i.e. Chulalongkorn hospital, Lertsin hospital, Vajira hospital or Rajavithi hospital for delivery. Only 6 percent would go to provincial hospital. It is found that 6 percent still have no idea about the place for delivery.

For the health personnel to attend delivery, more than 70 percent of women expected to have a physician to attend her delivery. About 10 percent expected a nurse and one pregnant woman each expected a midwifery or a TBA to be their birth attendant. About 16 percent of women have no idea about the personnel who will attend their delivery.

Regarding mode of delivery, about three-fourths of the women expected to have vaginal delivery; that is normal delivery. About 14 percent are not sure about mode of delivery while 13 percent expected to have caesarian section or with the help of instrument e.g. forceps or vacuum extraction (Table 4.25).

Table 4.24 : Place for delivery of the last child by family income (permonth) and occupation.

Place to delivery / Charateristics	The last child					
	At home	Gov.Hos. in BKK.	BKK. Health Center	Private hos. and Clinics	Gov.Hos. Health Center in Non-BKK.	Total
Family income						
0 - 5,999	5.0 (11)	78.8 (175)	0.9 (2)	14.9 (33)	0.5 (1)	100.0 (222)
6,000 - 11,999	4.7 (10)	80.8 (173)	2.8 (6)	10.7 (23)	0.9 (2)	100.0 (214)
12,000 or more	2.7 (2)	87.8 (65)	1.4 (1)	8.1 (6)	-	100.0 (74)
X2 = 7.48 P > 0.05						
Occupation						
White collar	3.7 (6)	85.3 (139)	2.5 (4)	8.6 (4)	-	100.0 (32)
Blue collar	5.1 (16)	78.1 (246)	1.6 (5)	14.3 (45)	1.0 (3)	100.0 (315)
don't work	3.1 (1)	87.5 (28)	-	9.4 (3)	-	100.0 (32)
X2 = 7.15 P > 0.05						

Table 4.25 : Expected place, health personnel, and mode for delivery.

	Percent	
TOTAL	100.0	(63)
Expected place to go for delivery		
Government hospital in Bangkok	87.3	(55)
Provincial hospital	6.3	(4)
No idea	6.3	(4)
Expected personnel to attend delivery		
Physician	71.3	(45)
Nurse	9.5	(6)
Midwifery	1.6	(1)
TBA.	1.6	(1)
No idea	15.9	(10)
Expected mode of delivery		
Vaginal delivery	73.0	(46)
Caesarian Section	11.1	(7)
With help of instrument	1.6	(1)
No idea	14.3	(9)

For pregnancy status and age of women, it the percentage of pregnant women is highest in low age groups, 15-19 years. Percentages of pregnant women among higher age groups are lower. The chi-square test is found to

have statistically significant relationship between age and pregnancy status of women at 0.05 level.

For family income (per month) and pregnancy status of women, it is found that percentage of pregnant women in the moderate family income group (6,000 - 11,999 bahts per month) is highest. The chi-square test is found to have no statistically significant relationship between family income and pregnancy status of women at 0.05 level.

When consider womens' occupation and pregnancy status, it is found that percentage of pregnant women is low among the blue collar women and slight higher among the white collar women. The women who do not work are found to have incident of pregnancy at the highest percentage. However, the chi-square test is found to have no statistically significant relationship between womens' occupation and pregnancy status at 0.05 level of confidence (Table 4.26).

Table 4.26 : The respondents who are being pregnant by their percent age, family income permonth and occupation.

Charateristics	Pregnant Status	Being pregnant	Not being pregnant	Total	(N)
		12.0	(63)	88.0 (463)	100.0 (526)
Age (years)					
15 - 19		25.9	(7)	74.1 (20)	100.0 (27)
20 - 29		14.5	(42)	85.5 (247)	100.0 (289)
30 or more		6.7	(14)	93.3 (196)	100.0 (210)
$X^2 = 12.39$		$P < 0.05$			

Table 4.26 : (Continued)

Charateristics	Pregnant Status	Being pregnant	Not being pregnant	Total	(N)
Family income permonth (Baht)					
0 - 5,999		11.1	(25)	88.9 (201)	100.0 (226)
6,000 - 11,999		13.8	(31)	86.2 (193)	100.0 (224)
12,000 or more		9.2	(7)	90.8 (69)	100.0 (76)
$X^2 = 1.47$		P > 0.05			
Occupation					
White collar		13.0	(22)	87.0 (147)	100.0 (169)
Blue collar		11.1	(36)	88.9 (288)	100.0 (324)
Don't work		15.2	(5)	84.8 (28)	100.0 (33)
$X^2 = 0.72$		P > 0.05			

V. SUMMARY AND CONCLUSION

Summary

Findings of the study on Socio-cultural Determinants of maternal health conducted in Bangkok during April-May 1992 which confines its objectives to examining and analyzing local customs and traditional practices as they pertain to pregnancy, delivery and postpartum care and to assessing the socio-economic factors accounting for the selective utilization of health services for prenatal care and delivery are summarized below :

1. Fertility history of ever married women in reproductive age showed that about 42 percent of women had one delivery. Percentages of women having two or three deliveries were 42 and 36 respectively. The average number of delivery is 1.8. As for the out come of delivery, it was found that 99 percent were livebirths and only 0.8 percent were stillbirth and 84 percent were normal delivery. More than 90 percent of delivery were a attented by health personnel in the hospitals, health centers or clinics and only 8 percent of delivery took place at home. Among the livebirths, 99 percent of them are alive and still only 1 percent was dead.

2. Previous pregnancy behavioral experiences which based on the experiences of the last pregnancy showed that 95 percent of pregnancy ended in livebirth, 4.8 percent miscarriage and 0.2 percent stillbirth. The women recognized their pregnancy mainly from the symptom of amenorrhea and from pregnancy test. Upon learning of being pregnant, husband is the first person whom the woman consult, and the next person is health personnel, friend, neighbor and the elderly. For the place for prenatal care, it is found that a majority of women went to government hospitals and health centers regardless the level of family income. The high income women went to private hospital/clinic at the higher percentage while the middle and the low income women went to hospitals and health centers in their hometowns at the higher percentage. As for

the illness during pregnancy, it is found that only few women had minor illness and the majority did not have any illness. For complications, edema and cramp were complained by the mojority of women. Hypertension and bleeding were found to be complications of some pregnant women. The management of complications was based on the type of complication i.e. if bleeding and hypertension, the women would see doctor, if edema or cramp, the women would not doing any thing or would have self treatment.

3. For beliefs and practices in antenatal care, delivery, and postnatal care, there are some prescribed activities for the pregnant women such as taking rest and exercise, avoiding heavy work and making one's mind happy and some prohibited activities such as not lifting heavy object, not running, not jumping, not wearing high heel shoes and not taking bath at night. Regarding food, pregnant women are advised to eat more protein, sea food, vegetables and fruits and not to eat/drink spicy food, alcohol, soft drink, tea/coffee and raw food. For medicines, pregnant women are advised to take ferrous tablets, vitamins and antiemetic drugs, and some medicines are prohibited such as antianalgesic drugs and medicines of self-medication. These advices come mainly from health personnel. The advices also come from husbands, friends, colleagues, neigh bours and parents. Some women stated that they learn from experiences, books and television. The reasons for these advices are belief to be good for both maternal and child health and to help easing in delivery. During antenatal care sessions, pregnant women are advised by health personnel regarding appropriate food and medicines, taking rest and exercise, regularly attending ANC clinic, and hygienic matters. About 11 percent of pregnant women stated that they did not receive any advice. Among those who received advices, 72 percent followed the advices. Reasons given by those who did not follow the advices, having no time, no money, no social support, being lazy and do not belive in the advices and some stated that they could not remember the advices.

Regarding practices, it is found that 91 percent of pregnant women did not smoke cigarettes or drink alcoholic beverages. More than 80 percent took

vitamins and did not take coffee or tea. It is important to note that 12 percent of them ever taken medicines to terminate pregnancy. For the method of delivery, 81 percent are normal while 7 percent using equipment and 9 percent are caesarean section. Supine position is adopted during delivery by 90 percent of women.

4. Experiences in health resource utilization and preferences of pregnant women were that 75 percent had gone for antenatal care. More than 80 percent had the first antenatal care within the fourth month of pregnancy. The antenatal care services of the government hospitals were utilized by more than 85 percent of pregnant women while very few used private health services. Like antenatal care services, the majority of women went to government hospitals for delivery. Reasons for women seeking antenatal and delivery services from certain health service units are convenience (distance and time), cost and the manner which they were treated by health personnel at the time of their previous pregnancy and delivery. These were repeated time and again by participants in the course of focus group discussions.

For the expected place, attendant, and mode of delivery, the government hospitals were found to be the most popular expected places. Physicians and nurses were found to be the most popular expected attendants and, vaginal was found to be the most popular expected mode of delivery of the women.

5. From the service providers perspectives, it is not the lack of infrastructure or medical equipment and supplies but rather the lack of personnel at working level to cope with a large number of patients and increasing workload. Lack of empathy on the part of physicians has been mentioned repeatedly by health service providers (as well as by pregnant women) in the course of discussions. Service providers seemed to be satisfied that their services are well accepted by the communities and their advices are well heeded by the service recipients. Providers at service units with no delivery service stressed the importance of referral system to ensure that women, especially the highly mobile pregnant women such as

spouses of construction workers or periodic migrants can have access to any service units in the country.

Conclusion

Based on the summary of findings presented above, it may be concluded that, concurrent with the successful efforts in make maternal and child health services readily and accessible to the mother in the community is the gradual improvement of the quality of life of the population in general. However, the maternal and child health services in Thailand still need further improvements by means of informing, communicating and educating the members of the family which included the women, the husbands and the elderly.

For the policy implications with regard to the Thai maternal and child health programme which may be derived form the present study are as follows :

1. There should be efforts to promote the early and regular use of antenatal care services among the pregnant women in the localities where the antenatal care attending still late and irregular.

2. Special attention and efforts should be given to the women with certain beliefs and practices, especially those beliefs and practices which may result in the negative effects to the maternal and infant health.

3. Health information and education activities are still inadequate and inefficient, needing improvement both in terms of quantity and quality. This would help the pregnant women to acquire understanding of the progress of pregnancy and to know how to behave appropriately. It may also contribute to reducing the incidence of complications and abnormal delivery, and to add the incidence of well being of both the mother and the infant.

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APPENDIX I

Report on Health Services Providers and Users' Opinions on Maternal Health Services in Bangkok Metropolis : A Qualitative Approach

A community survey was first conducted in May 1992. Two low-income communities in Bangkok Metroposlis with approximately 1,900 households and 9,000 population were selected for data collection. A sample of 526 ever married women aged 15-40 years and have ever experienced pregnancy were interviewed, using a structured guestionnaire. From the community survey, the information on various types of ante-natal services which respondents receive was collected. These services can be categorized into two types, hospital services and public health center services. This report will present in-depth information acquired from general hospital and health centers regarding ante-natal, delivery and post-natal services. Two general hospitals and three BMA health centers which respondents stated they had attended were selected. For the purpose of identification, hospitals will be called hospital A and hospital B, while BMA health centers will be refered to only as center one, center two and center three.

Both hospitals provide ante-natal, delivery and post-natal services while the health centers provide only pre-natal and post-natal services and patients here are referred to hospitals for deliveries. Due to the exploratory nature of our study we administered an in-depth semi-structured questionnaire to the hospital and health center personnel. The interview was also supplemented by tape recording the entire discussion in order to acquire more meaningful interpretation of the discussion. The information presented in this chapter on hospital and health center services represents and analysis based on the in-depth interview schedule and the tapes.

In addition to the above, focus groups were conducted in two of the communities in which the community survey was conducted. The objective of conducting the focus group was to acquire community opinions concerning hospital and health center services from the acceptors point of view. Knowledge of health care and practices was also discussed. Participants were selected of whom were pregnant at the time or who had given birth for not more than three months prior to the discussion. The first community focus group was conducted on the second floor of a

large community center. The second floor was semi-open air and there was good air circulation since the discussion was carried out in the late morning. The second community focus group discussion was conducted on the second floor of the community's library. Since heat was a problem to be considered we were able to begin the discussion at 9:00 a.m.

Both group discussion were moderated by one of the co-investigators following focus group guidelines of the project. Three days prior to the discussion participants were screened with the help of the community leader and invited to join the group. The second focus group had eight participants, the first focus group was attended by nine participants.

The focus groups were tape recorded with two tape recorders use in each group, one as the main tape recorder and the second as a back up. Upon completion of the focus group the tapes were transcribed and entered into a word processing package. The objective of the transcription process is to get 100 percent of what was said, however, noise restrictions and participants talking at the same time limited this to around 90 percent. Contextual information acquired from the focus groups will be presented at the end of each section, where appropriate.

Findings

1. Ante-natal Services at the Hospital

A. Ante-natal hospital services from the administrative view Hospital A and hospital B are large general hospitals situated in Bangkok and serve a significant population of the Bangkok population. Both hospitals operate an pre-natal clinic five days a week from 8:00 a.m. to 12:00 noon. Hospital A has a special clinic for 'difficult births' two days a week in the afternoon as well as a 'mother class' which teaches infant rearing and voluntary breastfeeding.

Both hospitals are able to accommodate a relatively large number of patients daily. Hospital A has 220 old and 80 new pre-natal patients daily while Hospital B accommodates 130 old and 50 new pre-natal patients daily. With the on-going construction of a new building Hospital A expects to accommodate, in total, more than 400 pre-natal patients a day. Both hospitals note that on Mondays and Tuesdays there are particularly large numbers of patients

because of three main reasons. One, a back-log of patients from the previous week are re-appointed again on either Monday or Tuesdays, two, the beginning of the week there are a lot of new patients because there are no pre-natal services during the weekend, three, because of the first two reasons medical personnel, especially obstetricians, prepare themselves for the large number of patients in the early part of the week and generally work more quickly. Towards the end of the week the number of patients, especially new patients, decreases, this was stated by both hospital administrative officials.

Both hospital officials stated that they desired more nurses but this was not seen as a serious drawback in the services provided (i.e. 1 to 2 nurses). With the AIDS epidemic prevalent in Thailand additional services provided by these nurses include pre-counselling for HIV as well as general health education. With regard to medical equipment, medicine and other hardware, no problems were discussed. Both hospitals, in fact, were quite proud of the 'modern facilities' which they had, up to date medical equipment and supplies and the personnel informed us of the on-going construction of a new building and equipment which they were going to have in the near future. Various manuals were also available for reference in pre-natal examinations such as toxemia of pregnancy; hypertension; pre-eclampsia as well as possible crisis or critical situations which may occur during pregnancy.

Hospital A reports that services provided to patients are adequate and sufficient with little complications. However, Hospital B requires additional nurses because existing working conditions require nurses to do more than one job at the same time. The lack of nurses are due to the 24 hour monitoring of patients conditions as opposed to doctors who come in only on appointed times to do the rounds, both hospitals would want more nurses because of this fact. At present number of beds for patients are inadequate at Hospital A though with the construction of a new wing they feel that this problem will be overcome. Hospital A notes that, in their view, major obstacles in providing a good service are not due to a lack of facilities or personnel. The 'major problem', in their view, is lack of empathy of doctors towards nurses. This communication problem arises for example in doctors scolding nurses in front of patients and other hospital personnel. (This topic was also discussed in focus groups presented in a subsequent section.) Frequently mentioned was an air-conditioned lounge for doctors but none for nurses. This seemingly small issue has resulted in a lot of ill-feeling by the nurses. Doctors are seen as only

periodically attending to patients and then quickly going off to play golf or opening the doors of their private clinics (in-depth discussion with hospital nurse administrator). Yet, as discussed, the role of nurses is to provide 24 hour monitoring of patients. It is undoubtedly possible that minor mistakes may be made in their activities but these result in open scolding by doctors to nurses. The existence of the air-conditioned lounge for doctors and not nurses is a possible symbol for nurses to vent their stress upon. In Hospital A at least, nurses have a saying when they begin their duties each day. They ask the nurse on the previous duty whether today is an 'easy' or 'difficult' day meaning if it is 'easy' it means that doctors whom have good inter-personnel communication are on duty. If it is 'difficult' then doctors who have bad personal communications are on duty.

B. Ante-natal hospital services from the nurses perspective This section provides a discussion on actual practices and working conditions by nurses in the ante-natal clinic. Both informants had about 15 years of working experience in the ante-natal clinic. They were asked to discuss their own experiences as well as venture opinions concerning other nurses in the ante-natal clinic where appropriate.

Only one of the two nurse had attended a seminar/training session during this time and that was in nursing the elderly. She obviously felt that this seminar was of little importance to her work in the ante-natal clinic. However, she did use this knowledge in caring for her elderly parents at home. It is unclear whether such little attendance at seminars and training sessions is widespread among other practising nurses.

Ante-natal services were relatively comprehensive at both hospitals, these include urine and blood test, weighing; pregnancy check-up; vaccinations; health education; counselling on checking for ovulation to assist in conception; breastfeeding and case referrals. Both practising nurses did not see any major obstacles in providing services to their patients.

In the ante-natal clinic general health problems of patients included minor levels of malnutrition, syphilis and hepatitis at Hospital B and diarrhea, high blood pressure, D.M. at Hospital A. Though not frequently encountered, patients with complications were given advice and treatment and in certain cases referrals for special treatment made. For venereal disease patients

referrals were made to the STD clinic which also provide counselling services. Health and nutritional education and counselling were provided for malnourished patients at both hospitals. In both hospitals ultra-sound services are provided when necessary.

Interestingly, both providers voice similar opinions concerning service provided. That is, a severe lack of medical personnel at both hospitals in relation to the 'extremely large' number of patients. In regard to this both providers have to take on multiple roles of nursing, janitor as well as computer expert. Work structure, communication flows and conflicting opinions regarding job responsibilities seem to abound in both ante-natal clinics, from the health providers point of view. Hospital B emphasizes that providing health education to patients with a low level of education and income creates numerous obstacles for effective self-care for expectant mothers. Appointments, for example, at time are not kept because patients, though wishing to come and have the money at the time the appointment is made do not do so because on the day of the appointment they do not have enough money. At the same time, they may have felt that their health is good and thus do not have to keep the appointment. Nurses note that high risk patients are appointed to a high risk clinic on Wednesdays at Hospital B. Higher frequencies of appointments are made for high risk patients, health education is provided for expectant mothers and close relatives and appropriate referrals to specific wards are given.

Technical nurses at both hospitals informed us that most patients were receptive to the advice given by medical personnel in the ante-natal clinic. Reasons given were that if patients did as they are told and found it to be effective they continued to do so and this reinforced their confidence in further advice given. This has implications for medical personnel to provide detailed diagnosis and complete health education during the early stages of ante-natal care. Good advice can also be supplemented by clear examples of what had happened in previous cases to a patient who did not follow the advice given and subsequent complications which occurred to her. Hospital B state further that they do not force or coerce patients concerning maternal health care but explain the benefits and adverse effects of correct and incorrect practices and allow the patient to decide for themselves.

The minority of patients who do not follow the advice given was explained as mainly due to a low-level of education contributing to difficulties in communication between

medical personnel and the patient, low income which result in, as mentioned earlier, patients not keeping the appointments; incorrect beliefs regarding proper health care such as controlling one's weight for fear that the baby would be too large and woould result in problems during delivery; incorrect knowledge on sex education and a fear that one will not be able to lift relatively heavy objects (i.e. manual labor) after sterilization. Hospital B further notes that some mothers cannot make appointments because of child-rearing duties at home which necessitate them to remain at home. Yet in other cases even when post-term occurs, patients refuse to be admitted because they do not feel any pain yet.

In addition to reasons mentioned earlier for not keeping the appointments. Nurses state that some patients were migrant wage laborers, mostly in the construction industry and thus move around a lot not enabling thems to come and receive service. Though few in number, the lack of money, frequent migration and most important, the lack of understanding of the importance of regular pre-natal check-ups are the main reasons for patients not making their appointment at both hospitals.

Both ante-natal nurses are of the opinion that their hospitals are well received and accepted by the surrounding community which they serve due to their ability to accept large numbers of patients, low costs, especially at hospital B, adequate facilities, especially at hospital A, good and friendly service with a longer time spent for new patients.

Incorrect practices noted by the nurses were those of the belief that mothers should not eat taboo food (khong salang) resulting in nutritional deficiencies. Consumption of traditional medicine which are fermented with rice whiskey resulting in a high alcohol content in breastmilk; the discarding of mother's first milk which is high in protein. Other incorrect practices include bathing at night which may cause colds or accidents and fears that breastfeeding will make the mother less physically attractive.

2. Ante-natal Services at the Health Center

A. Ante-natal services from the administrative view Information presented here was collected from the three major health centers which survey respondents stated they attended. These centers were center one, center two and center three of the Bangkok Metropolitan Administration..

The three health centers have between one and three doctors providing pre-natal services. These doctors only treat patients who have complications or are at high risk. Thus, a large proportion of patients are provided service by nurses. There are between 4 and 7 professional nurses at the health center. Nurses vary in their duties, in addition to providing pre-natal services. These duties include general health check-ups, home visits (including primary health care) and mobile clinics. Center three also provides health check-ups at primary schools under its jurisdiction. None of the health centers have midwives. Depending upon each center's individual needs additional personnel are included. Cente two, for example, has a technical nurse and two nurse assistants because of their limited number of professional nurses. At health center three nurse assistants and family planning personnel are also hired to serve the large low-income community surrounding the center.

All three centers provide ante-natal service one day each week on Monday in the afternoon for three hours. This time period seems adequate to serve the community, according to all three centers. On average between 20-30 patients are provided ante-natal service, of these 10-20 are old patients and 7-10 are new patients. Because ante-natal services are given only on Monday, comparisons on day of preference were not possible. However, two health centers remarked that if a public holiday fell on a Monday the number of patients would increase the following day. Similarly, on national holiday such as New Year day or long weekend (which private companies close but government offices do not) number of patients reduce considerably. All health centers state that they need more nurses, particularly for home visits which take up a large part of their time. Home visits must cover all areas under the centers jurisdiction. Some centers, thus, are not able to cover areas with a large population with home visits. In addition to home visits other time consuming activities include providing health education; blood tests and blood pressure checks for every patient. No medical equipment or medicine was seen to be lacking in any of the three centers interviewed.

Services additional to ante-natal provided at each of the health centers include provisions for shock treatment; iron deficiencies; high blood pressure, family planning; home visits for infants with complications such as infectious umbilical chords and consistent fever. There is a referral system for all centers for complications not provided there. Such complications, for example, include delivery, caesarian, blood transfusions and pre-mature births. Center three states that they receive referrals also from social welfare agencies and private and public hospitals indicating that there are also a large referral network beyond public health agencies.

All centers have access to diagnostic manuals in their service provision , such as nutrition, home visits vaccinations primary health care. However, Center one stated that they did not have a specific ante-natal manual whilst Center three stated they did. It seems that a standardized published manual on pre-natal care is not widely distributed to all public health centers.

Pregnancy complications reported by the three health centers can be considered as minimal and part of the routine service provided by the health center. Major complications encountered included swelling; high blood pressure and vaginal bleeding. These complications were given appointments to the doctor at the center and if the condition does not improve are referred to the hospital. Other complications encountered, but much less frequent included diabetes; abnormal blood test results, low weight and HIV positive cases. Similarly, these were referred to appropriate channels i.e. low birth weight to nutrition services of the hospital; HIV+ for further specific counselling.

All centers state that they are able to provide ante-natal services under their jurisdiction. This was stated inspite of the centers' lack of license nurses. For example, Center two states that though they are able to manage all processes of ante-natal from weighing, monitoring blood pressure, blood and urinal tests, tetanus shots, pregnancy checks, medication and administrative work, they are working under a certain amount of stress because of a lack of personnel.

With regard to obstacles in provision of services to their community the three health centers replied in similar ways. The lack of nurses was again emphasized. Other obstacles

encountered were not the lack of equipment or money but a lack of communication between center and hospital officials and center and patients. Referral networks encountered problems when certain 'low-level' hospital personnel refused to accept delivery cases informing the patient that they should acquire delivery service at the place where they received ante-natal service. This resulted in tremendous misunderstanding by many patients of whom informed other expectant mothers in the community not to come and receive pre-natal service from the center.

Another important obstacles identified by the administrator was a problem of communication between the center and individual patients with little education. Center personnel stated that in some situations patients did not understand their health status as explained to them by nurses or doctors. Patients were not able to comprehend the reasons for taking certain medication continuously, for example, because of their special circumstances. This lack of comprehension resulted in further pregnancy complications by such patients.

Possible solutions to overcome obstacles were also discussed. Health centers state that formal meetings should be organized on a regular basis for integration of work between health centers and hospitals with regard to referral networks. They also state that high ranking officials at the ministry of public health and hospitals should discuss possible ways to overcome such obstacles. However, it is not clear to the researchers whether introducing regular meetings between hospitals and health center personnel would result in a positive outcome considering the existing heavy workload of public health personnel as stated by health center administration. Center one states that another alternative may be to consider printing monthly circulars providing information on referral systems from various health centers in which a particular hospital can accept. A possible variation is to print a small poster showing various hospitals and health centers and private clinics which can be referred to by them. These small posters can then be appropriately placed in pre-natal and delivery wards of hospitals. The problem which health centers say they cannot overcome is the lack of personnel. They feel that it is beyond their means to ask for more due to obvious budgetary constraints. All centers though stated that administrative work occupied a significant proportion of their time. Consideration of the type of administrative work which health centers are involved in and possible avenues in streamlining, cutting down duplication and increasing efficiency is a potential avenue for future research. With regard to communication

problems between health center personnel and patients, Center one's personnel states that home visits to provide IEC should be stressed for such patients.

Another interesting issue which was considered as a major problem by Center three personnel was impoliteness of nurses towards patients. Such impoliteness may occur at all stage of the ante-natal service, from asking patients about the personal history to actual conduct during physical check-ups. These problems were considered by the Center three official as an individual and attitudinal problem which would be difficult to overcome and which the best they could do was to remind individual personnel from time to time. From our study's perspective, we have heard about attitudinal problems between medical personnel and patients at all levels of the medical system from senior physicians to nurse aids. When a person's job involves continual long-term interaction with others from a position of advantage or given the likelihood that the inter-action process may be routinised and the patients considered not as an individual but more as a product. Humanism and the process of healing and caring must be somehow re-instilled on a regular basis for this to be overcome.

Out of the three centers, Center two did not provide any post-natal service because of lack of personnel. They only provide family planning service. The other two centers provided similar post-natal services which include check-ups on cervical cancer or receiving referrals from the hospital, contraceptive advice, including sterilization, breast feeding, home visits to weigh infants, checking umbilical chords and nipples and supplementary feeding advice.

Health center officials were not able to state specifically complications in post-natal check-ups of mothers but mentioned that a large proportion did not return after child-birth for check-ups. A major reason stated was that many mothers did not see the necessity for a check-up since they had a successful birth and their own health seemed normal. Some mothers also told them that they did not have any time and that if they came someone would have to look after their child at home. Low awareness of the importance of post-natal check-ups, as mentioned by Center three, are likely due to low education of mothers compounded with the migratory status of many low income dwellers. Many are construction workers who move from site to site depending upon the building contracts which their company acquires. Health center personnel can only minimally overcome this obstacle by conducting home visits to some of these mothers.

There is a program on knowledge and information provided on ante-natal and post-natal care which ranges from once a week to every day. Such information was given in various forms such as videos, pamphlets and manuals and the community loudspeaker network given to mothers. Health centers one and three state that individual consultation to mothers was also provided. Information given at the center during this time included, for example, nutritional needs during pregnancy and psychological changes which expectant mothers go through for first births. However, Center three states that a major problem during information dissemination is that mothers rarely have the concentration to watch the video program because they bring their children with the. Many mothers are also in a rush to return home because they worry about leaving their home unattended. Because of this need to return home, health center personnel provide quicker service to such mothers thus reducing even further the time available to provide pre-natal and post-natal knowledge.

All health centers have a mobile unit to visit communities under their responsibility. Center one states that, in fact, their main work emphasizes dissemination of knowledge and information to the community rather than in the Center. In addition to home visits which are an extension of check-ups at the center, all centers put up posters about child care and maternal health about once a month. General health check-ups to the community such as inoculations communicable diseases, pre and post natal care as well as nutritional and psychological information for expecting mothers. Center one states, quite interestingly, that certain diseases such as dengue fever, cholera occur seasonally and information is provided during the beginning of that season. Such a program is conducted once a week depending upon what is 'booming' at the time. Booming issue also may not necessarily be seasonal but also what is 'up to the times' as seen by the personnel, thus the AIDS campaign is presently being heavily promoted.

B. Pre and post-natal services from nurses' view This section will discuss pre-natal services from actual health providers' perspective. A semi-structured interview was conducted at the three health centers with providers. The discussion was also tape-recorded to assess not only what was said but how it was said. The semi-structured interview guide and transcripts from the tapes provide the basic data set for analysis in this section.

All three providers were female, married, each had a bachelors degree equivalent education and aged in their mid to early 40s. Ante-natal experience ranged from three to five years. The providers at Center two with the least ante-natal experience, three years, also had eight years experience in a delivery ward in a large Bangkok hospital. The most experienced practitioner, at Center three, had eight, seven, and 15 years experience in pre-natal care, delivery and post-natal services respectively. Together, the providers are seen as experienced, both in terms of professional qualifications and work years. The level of experience of those providers does not seem to be atypical to the three health centers as discussed informally during our in-depth interviews.

In addition to the services mentioned above, the provider also did home visits (three years), nutritional education (one and a half years) at primary schools; and ran a 'well-baby' clinic (six years). These additional services are conducted in conjunction with pre-natal services.

All providers had attended, past and present, a wide variety of workshops and training courses related to various aspects of child and maternal health care such as high risk pregnancies; nutritional requirements of mother and child; home visits, breastfeeding courses, etc. However, because of memory recall problems of exact titles of workshops, direct comparisons between the providers cannot be made. It seems however, that the providers at all three centers have attended, and continue to do so, many workshops directly related to their occupation.

As a result of this, providers emphasize even more strongly than those in the hospital that these workshops benefited them directly in the quality of their work. Reasons stated included:

> I think it [workshop] is very useful, especially that which is related to pre-natal care, primary school nutrition and breastfeeding. Sometimes I think that I have enough knowledge but when I had the chance to attend the training course I found out that there was much more I did not know about. I learnt more about the principles and procedures in conducting my job.
>
> It [training courses] can be adapted to [my] work. It complements my existing knowledge because it came directly from the master plan of the ministry health office, such as courses on AIDS, primary health care and the training given is

> directly related to our job such as home visits disease prevention, well-baby clinic.

Our topic of discussion on workshop and training received one of the most important and positive verbal responses from the health providers. In addition to training related to their specific jobs providers were also appreciative of additional knowledge on AIDS, STDs and drug abuse as these were often problems associated with the communities which they work in.

> I have learnt about AIDS and HIV and how to prevent it and protect myself as well as my patients who are addicted to drugs. [From such workshops] I have learnt about treating drug abuse patients, about psychological states of drug addicts and its causes.

All providers were involved in almost all procedures in the pre-natal clinic. The center three nurse had additional administrative work on expectant mothers. Duties undertaken at the pre-natal clinic range from weighing, pregnancy checks, blood and urinal tests, tetanus shots, breast and teeth checks as well as general advice. Post-natal duties were also undertaken with the exception of Center two which does not have a post-natal clinic.

General health complications encountered at the health centers were quite similar such as calcium deficiencies and anaemia. Some patients were referred to dentists, especially new patients. In cases of anaemia, Center two provides nutritional advice as well as medication as many of their patients are construction workers with little knowledge on nutritional. Center three does a follow-up on anaemic cases with home visits. Center one has encountered some cases with positive blood tests for venereal disease, hepatitis B and HIV. For these cases married couples are given counselling, provided with education and referrals to the hospital.

Pregnancy related problems encountered were also similar and included low blood pressure, bleeding, low weight, incorrect position of infants, calcium deficiency (especially at Center two). These again were provided with advice, medication and referrals to hospital when necessary.

Post-natal services received much less discussion at all health centers. Center two as referred to earlier does not provide a post-natal service but patients have been incorrectly referred to them by the hospital, a further indication of referral system problems. Part of the lack of discussion partly stems from much less attention given by parents in post-natal care. Center one has provided advice on improper nutritional care for infants but only rarely because not many people come to the center. Center one's providers had not encountered any general health problems of mothers but did mention one case of syphilis and another of block milked flow which was given medication and treatment.

In summary, post-natal services received was given much less attention to by others resulting in fewer services being provided. This seems to imply that if Center two did have a post-natal service it would not be attended by many mothers. Further implications for emphasis on post-natal care are obvious here and would necessitate a rather large campaigning effort by public health centers. For patients who migrate such as construction workers or even the general population, referral systems are even more important during post-natal care. Thus, in addition to a possible post-natal care program being emphasized referral systems between health centers within Bangkok hospitals as well as the provinces must first be established.

Obstacles to effective provision of service provided further interesting discussion. A common obstacle mentioned by providers was a lack of personnel. This resulted in one medical personnel having to do numerous jobs at the same time. A lot of the work deals with duties as a result of new administrative policies though these additional duties were not seen as insurmountable, it was felt by Center two that increased personnel would allow for more individual attention to patients. Such attention as providing one-to-one health education rather than as a large group and for each personnel to be responsible for specific duties. Increased work load and higher responsibilities resulted in many acquiring work at private schools as a school nurse which has good pay and privileges, according to the Center two's nurse.

Interestingly all three health providers stated that actual service provision was not convenient to patients. Various check-ups such as blood pressure, weight, internal, etc. were held in different rooms and at times also different parts of the building creating confusion to many patients. Center three health provider further states that their ante-natal check-up rooms are very

inconvenient because of its small size, hot and humid and the check-up bed is quite high, making it inconvenient for women in latter stages of pregnancy. It is quite likely that other centers would also have such standardized check-up beds such as this and with no air-conditioners and situated in a high density area. Patient inconvenience regarding ante-natal check-ups thus, may be more widespread than just this particular center.

With high risk cases all providers at the three centers have two major steps in which they take. The first is to diagnose what type of high risk a patient has. The second is to decide whether to refer the case to the hospital or provide treatment at the health center.

Cases which are referred directly to hospitals include swelling, very high blood pressure, high albumin, high protein levels in the urine and excessive bleeding. For young patients whom are also considered a high risk group health education is provided. Other non-serious cases are also provided with health education and periodic home visits to maintain their health status. The health provider at Center two further states that their doctors do not provide any services to patients but refer cases to either the hospital or the nearby health center number 16 for treatment. It is unclear why there are numerous difficulties with regard to inefficiencies, as stated by the Center two health provider. Some seem to be specific to the center such as doctors referring too many cases while others seem to indicate a widespread problem at health centers such as too much responsibility placed on any one personnel.

In general, all the nurses stated that a large majority of patients heeded the advice given to them. Reasons stated for this are because the health provider tried to create a positive atmosphere during consultation by providing example during their explanation, giving one-to-one consultation whenever possible and did not attempt to rush any kind of answer to questions from patients. However, as discussed earlier, pre-natal health education advice is heeded much more than post-natal. As mentioned earlier, attention given, though good, is hampered by the size of the group and the infants which mothers bring along. With regard to pre-natal advice, though, direct benefits are clearly seen more than Maternal and child care after child birth.

The nurses did not think there were any major problems of patients not listening to their advice. Similar comments arose concerning the lack of education and problematic

communication resulting in the information not coming across clearly to many mothers. In such cases, some patients felt that to attend pre-natal clinics is only a place to ultimately give birth to her child rather than a place to begin a process of a safe birth leading to a birth of a healthy child.

The minority of patients who do not make their appointments are due to their migratory status. Construction workers, for example, come to pre-natal clinics but because they move to find work such mothers miss the regular check-ups and it is presumed that they give birth back in their home provinces. In other cases some patients miss quite a few pre-natal check-ups because they are visiting their home province. Such cases seem to occur rather frequently as stated by Center two and Center three. Center one's health provider mentioned that there were a number of cases, though few, who came to the health center just to find a place to deliver their baby and afterwards did not come until they were about to deliver. Similarly, some came to the health centre only at the latter stages of their pregnancy because they felt it not necessary to come earlier. These above points emphasize that early and continuous as well as community health education is important if pre-natal service is to be more effective.

Problems related to pre-natal services are also linked to post-natal services, i.e. the migratory status of mothers and their families. Construction workers and labourers as well as street vendors move around within the city as well as the provinces. Some thus give birth in their home province and remain their to recuperate and care for their child. Such cases result in problems of follow-up by the health center.

With regard to general services other than maternal and child health provided to the community practising nurses stated that they had good relations with the community due to their daily house visits and mobile health center services. These visits create a sense of friendship between the center and the community. Coupled with the centers convenient location they stated that those community members who do receive services, mostly low to middle income families, come quite regularly. Center two states that their childrens vaccination program is quite popular because of the center's convenient location and low cost.

All three centers state that households with a high income generally do not come to receive service at the center. Reasons are mainly because these people feel that the center

provides a lower quality of care than the hospital. Cost of medication is also low and which makes these people think that the medication is of inferior quality. In addition, the nurses state that since health centers do not provide a delivery service many higher income households prefer to receive services directly from the hospital which provides pre-natal and post-natal service. Center two's particular problem, according to the health provider, is that they have one doctor who has bad interpersonal communication with patients. The doctor yells and is rather impolite to many patients causing some not to return. Center two has an additional doctor whom the provider says is quite polite and many patients like. Center two's provider highlights a particular problem in that professional doctors cannot be told what to do or not to do such as nurses. Doctors are not seen as under a specific line of command as are nurses and thus personal characteristics, behaviour and mannerisms are more subject to lesser control by the establishment.

Beliefs, traditional customs and practices seemed to play a minor role in either promoting correct or incorrect health practises. Beliefs and practices which nurses felt were of at least no harm or may in fact be beneficial consisted of not watching horror or violent movies and not attending funerals. Doing such activities is felt to affect the expectant mothers emotions which may affect her physical health and ultimately her baby.

Dietary customs mentioned by nurses included chicken and ginger which some patients felt would increase milk flow. Consumption of a lot of warm water was also felt to ease blood circulation. 'staying by the fire', a common customary practice for many Thais in the past but less presently is supposed to assist in healing the mothers womb and allow it to be 'put back in its proper place'. There are many variations of 'staying by the fire' in Thailand and other parts of Southeast Asia. One variation is to heat rocks over a fire underneath the mother's bed thus acting like a very strong sauna room. This practice usually carries on for approximately one month.

Possibly harmful practices which providers noticed included consuming alcoholic medicine which would affect the mother's milk. Some mothers also give bananas to their new-born resulting in undigestable food and if given in large amounts some babies may have to be operated on to remove the undigested food. Another customary practice is for the mother to

consume only salt or salted fish and rice or to refrain from eating eggs in the belief that it would heal the womb. This practise will ultimately result in a lack of nutrient in the mothers milk.

In spite of the above incorrect practices all nurses were of the opinion that they were a rare occurrence nowadays compared with the past. Our discussion on this matter did not seem to spark immediate examples and concern on the part of the nurses. The practising nurses, rather, took some time in recalling such incorrect practices as they were not seen as a major problem of many patients who received service at the center.

C. Focus group findings on pre-natal service Reasons for attending a certain hospital were considered to be its physical convenience to one's household. Discussions from both groups mentioned that knowledge of services was not known and the choice taken to go to a particular hospital depended mainly on the physical distance, the nearer the hospital the more the convenience.

Participant 1:	Vachira hospital is good because it is close to my house....
Moderator:	So why did you go there?
Participant 2:	I also went to Vachira hospital. I told my husband I was going to go to Klang hospital but he was afraid that I could not travel that far.
Participant 1:	Afraid that you could not bear the pain for that long [a ride in a taxi].
Participant 3:	And also because her husband works at night. Moderator: And what about Ramathibodhi hospital?
Participant 4:	That is also not far.
Participant 5:	I even think it is closer than Vachira hospital.
Participant 3:	Ramathibodhi hospital is closer if you take the direct route.

Such discussions, centered mainly on queries regarding how close a hospital is to one's house implying that the closer it is the more convenient.

For mothers who had already given birth to one child at a particular hospital they went to the same hospital not because of good or bad service but rather because of the convenience in not having to fill out forms all over again. It was discussed that they could just inform hospital personnel to bring out their file. Some participants did mention however that Ramthibodhi provided all clothes for mothers and the infants so that they would not have to prepare anything

when they go to deliver their child. This was considered as one reason why the chose this hospital. Thus, convenience was one overiding factor in hospital choice rather than positive or negative information acquired concerning a particular hospital.

Opinions concerning pre-natal services can be categorized into straightforward categories from findings of the focus groups, positive and negative opinions.

Positive opinions It was clear during the discussion in both groups that mothers had a reasonable knowledge about health care practices during pregnancy. A lot of the discussion centered on procedures taken during ante-natal check-ups and how these procedures were beneficial to themselves and their children. Discussion centered on information pamphlets given during initial ante-natal check-ups which were explained to the mothers with many in the group able to recall the information provided in the pamplets.

Moderator:	I would like to know if whether women in this community would read the pamplets which were distributed. I think there must be some who did not read it or do according to what the medical personnel said?
Participant 1:	Well, like this I really don't know.
Participant 2:	But what I do know is that those that are sitting here all have read the pamphlets.
Moderator:	All of you read the pamphlets?
Participant 3:	The first day I went to the clinic I read it (read the pamphlet).
Participant 1:	They told us to read it. They distributed it and told us to read and understand it.

Some in the group were able to discuss information given to them during the group education class on breast-feeding practices as well as the importance of taking vitamins during pregnancy . Medical personnel also informed them what injections they are about to receive such as for measles and tetanus and why these are necessary. Ramathibodhi and Vachira hospitals seemed to involved mothers in ante-natal check-up procedures, at least to a limited extent. Mothers were told to weigh themselves on each check up and to inform hospital personnel what their weight was.

Participant 1:	At Ramathibodhi hospital they have a computer scale. .....
Participant 2:	We go and stand on it and we write our weight down on a piece of paper....write on our own file. .....

Participant 1: I would know my weight because it is my own file.
Participant 3: But at another hospital they tell us to stand with our back facing the scale. After they weigh us they tell us to get down, so we don't know our weight. .....
Participant 4: But at Vachira, [though they don't let us write down our weight] they tell us our weight.

Many in the group discussion felt that this made them more conscious of the importance of their weight gain during each month of pregnancy. Thus, the discussion on weight gain was relatively detailed. Participants were also able to discuss their monthly weight gain.

Negative Opinions Negative opinions were varied and extensive. These opinions can be seperated into two categories: firstly, the human factor of stress resulting in bad services; secondly, and to a lesser extent, bad hospital administration.

It was apparent that participants realized the amount of work and stress involved in working in a busy hospital or health center. Some remarked throughout the discussion that working in a hospital where many people come and go is a rather stressful environment. However, they were of the opinion that this should not mean that hospital or medical personnel at certain hospitals should be rude and provide bad service to patients.

Participant 1: They [at Hospital A] are very rude and provide bad service not like the Police Hospital. .....
Participant 2: Some [personnel] are good and some are bad. .....
Participant 3: It depends on the doctor (medical personnel).
Participant 4: I have been to receive service many times [at Hospital A].
Moderator: In what way do they speak?
Participant 4: Like, well...like they only want their own way.
Participant 1: (cutting in) Like they are in a bad mood and speakly harshly.

An example was also given of a stressful doctor who yelled at the nurse for working slowly thus making all the waiting patients in the pre-natal clinic very nervous and afraid. Scolding the patients who did not answer questions correctly or, not looking at a patients face during consultation also contributed to a certain amount of criticism by the participants.

Participant: Harsh in a way that makes me scared. Like the nurse called in the next patient slowly, and the doctors said 'what are you doing out there, why haven't you called the next patient in!' And so the patient is afraid and some [of these patients] are afraid to go

in....the voice carries all the way out of the room and the rest of us are afraid.

Participant: And when I go into the room I am afraid and when I speak my voice shakes, something like that. And so the doctor gets mad and the doctor begins to ask questions quickly and so loud that the voice travel outside the room and so the people outside must also be afraid.

Negative remarks regarding the hospital administration concerned the extremely long waiting periods commonly encountered when attending the ante-natal clinic. A bad referral system was also discussed though it was not considered a major problem. It was felt that one contributing reason to this was the occurence of queue jumping.

Participant 1: Suppose it is our turn in the line. We are about to get our check-up. But someone else knows the personnel and gives them money to cut in the queue, so they get a check-up before we do.

Participant 2: They cut in the queue.

Participant 1: So we have to wait because they cut in the queue... I went to the hospital at 6:00 a.m. and got my check-up at 4:00 p.m..

Perhaps what may be most disconcerting from the discussions is the remark that money seems to change personnel behavior and that if one is admitted into the special check-up clinic, by paying more money, these same personnel seem to display a more helpful attitude.

Participant 1: If we don't have enough money then it will be bad (will receive bad service).

Participant 2: If we have enough money then the service will be a bit better, [they] will not scold us like this.

Participant 1: Like if it is my turn in the queue, I am about to get my check-up and somebody knows someone or has money to give and so cut in the queue. On that day I was able to go home at 3:00 p.m. (meaning very late).

Another important category of negative opinions is the lack of communication between hospital personnel and patients. We have termed this lack of communication as conflicting diagnosis between patients and hospital personnel. Participants stated that in some instance they did not feel normal and were worried that they may have pregancy complications. However, after visiting the pre-natal clinic they were informed only that there was nothing wrong. Yet, they were certain that their body was telling them that something was abnormal.

Participant 1: I went to get a checkup at the health center (because she thought she was preganant)....the doctor said he/she was not sure....checked my urine. I thought I was pregnant because I did not have my period (she was actually pregnant) .

Participant 1: The doctor told me to get ultra sound check...I did not know what for. The doctor just said there may be some complication so we should see if there is something wrong with the baby...because I was two months [pregnant] and the baby did not move... But I felt I was okay and normal.

In contrast another participant stated that she felt completely well but was informed that she had a complication in her pregnancy which required some medication . It is likely that the process of ante-natal check-ups does not allow enough time for consultation between personnel and patient. Patients should be given as much information as possible, even if it means an 'I don't know answer' and it is likely that the hospital process, as a routinesed one does not allow for this. Physical facilities seem adequate, though some waiting time is obvious. Thus, ante-natal services are seem to be relatively sound, from the particpants view but its dehumanization factor may be the one important criteria which needs to be addressed.

3. Delivery Services at the Hospital

A. Delivery services from the hospital administrative view Hospital B has 28 physicians, 26 nurses and five auxiliary nurses attending the delivery ward. Hospital A has 31 physicians, 74 nurses and six midwives in its delivery ward. The higher number of nurses in hospital A is most likely due to its expansion program seen in the almost completed delivery ward currently under construction.

All delivery services are provided at the hospital, there are no delivery services provided at any government health center in Bangkok. However, as mentioned earlier, all health centers provide a referral system in which expectant mothers are able to give birth at a government hospital.

After giving birth mothers stay at the hospital between three to seven days for both hospitals depending on their health. Hospital A charges approximately 700 Baht for their services, 200 Baht of this goes to the costs for the actual delivery with the remaining going to medical and

room costs. Hospital B charges approximately 500 Baht for their service. For both hospitals, payment is mostly by the mother herself. Patients who want a special or private room or who need a caesarian will have to pay additional costs. For both hospitals medical personnel undertaking the delivery include nurses, interns and student nurses. Medical physicians are directly involved only in complicated deliveries such as caesarians, awkward postioning of the child and pro-longed labour. Hospital provides a complete range of post-natal service which is situated in a different building from delivery services. Hospital B also provides a wide range of post-natal services. Post-natal services provided at both hospitals include check-ups, family planning counselling and services, difficult birth clinics and breast cancer check-ups.

Health education is provided to all mothers who come for service by both hospitals. The services provided by both hospitals include cleanliness practices, handling birth pains, delivery, caring for stitches, breastfeeding, nutritional supplement for expectant mothers. Hospital A's personnel state that their consultation is done on a one-to-one basis for the objective of a successful delivery and cooperation of mothers. Hospital B holds daily Mother Classes for groups of 12 expectant mothers, poster and video presentations are shown and pamphlets are distributed. Both hospitals do not visit communities as this job is for health centers. Hospital A only sends out student nurses on occasional community visits. It would obviously seem beneficial that the services provided at the hospital, regarding health education, be developed with some knowledge of the community context. The current health education programs may encounter difficulties in their actual practice within the community. Knowledge of these difficulties or obstacles would be helpful in developing the program to be able to overcome them. It is likely that occasional visits by Hospital A student nurses are undertaken only for the personal experience of the nurses rather than in any way related to the development of the health education program.

B. Delivery services from the nurses view Our in-depth discussions were carried out with two nurses who worked in the delivery ward. The nurse at hospital A had 25 years of service experience compared to eight years for the nurse at hospital B. Additional activities beyond deliveries included teaching student nurses for the nurse at hospital A and for the hospital B nurse, occasionally conducting community visits for health awareness. Both nurses attended the occasional training and seminars. These seminar arrangements last from one to five days. The hospital A nurse, having more experience, attended much more seminars, on the average two

seminar/training sessions per year. The hospital B nurse attended only one seminar/training session per year. The seminars attended include topics on developing efficiency of nurses; caring for AIDS patients; early child care; hospital administration, etc. Both nurses were of the opinion that the content of the these courses were rather useful and that they gained more knowledge from attending them. They also felt that the courses made them better nurses as it contributed to their personal development. However, work constraints at times do not alllow them to put the knowledge to practise. The Hospital B nurse, for example, felt that the breastfeeding seminar she attended was useful but she was unable to put this knowledge to practise because there were not enough nurses to do other activities such as administrative and paper work which kept increasing every day. She felt she had very little time left to put this knowledge to practice. The Hospital B nurse, however, stated that the training course for caring for AIDS patients was quite useful because she actually put this knowledge to use. This is not surprising, given the importance and money spent on AIDS research and training by the MOPH and other related agencies.

With regard to delivery service procedure both nurses were involved in all activities immediately prior to, during and after delivery. These include pre-delivery washing and check-ups; delivering, recording vital signs and observation after delivery. Problems encountered during delivery did not seem to be an obstacle at both hospitals, according to the nurses view. Being a large general hospital both Hospital A and B have an extensive referral network within which enable them to handle various obstacles encountered during childbirth.

Obstacles to providing efficient services mentioned include an insufficient number of nurses due to a large number of patients. Hospital B nurse mentioned that births occuring between shifts made their work inconvenient, contacting medical physicians in time of emergency was difficult, implying an inadequate intra-hospital communication system. In addition, cases where there is a lot of blood lost need to be moved into a different room causing inconvenience and possible danger to the patient. High risk cases in both hospitals are seperated out and given closer monitoring. Abnormal indications are reported directly to the physician on duty.

Both nurses were of the opinion that most patients in the delivery ward heeded their advice. Reasons for this was because patients wanted to have a safe birth and had a high level of trust, as stated by both providers and the medical personnel at the hospital.

Nurse state that their service is well accepted by the community because it has a good reputation with a qualified staff. Hospital B states that they are accepted by the community because of their low cost for delivery, close access to many inner city communities and a staff which is generally quite friendly. Unsatisfied patients at hospital B, according to the nurses, were minor and included cases where patients complained about not receiving anasthesia injections when they were being sewn up or patients who lost their child during childbirth. Both nurses mentioned only certain negative practices of patients some of which were not beneficial to mothers and their children. Some of these practices included eating only rice and salty fish resulting in high blood pressure, hair washing prior to birth and consuming herbal remedies in alcohol. Cultural practises not directly affecting deliveries was seen in patients bringing in holy water and sacred string into delivery rooms in the belief that it would result in a successful birth of a healthy child.

C. Focus group findings on delivery services Discussion on delivery services centered mainly on implementation of services by hospital personnel. The major issue of discussion was on differences between male and female personnel and not on availability of medical equipment or hospital facilities.

Though it was mentioned throughout both focus groups that some personnel were helpful and some were not and that this depended upon individual personalities. Doctors were seen to scold a lot during deliveries, especially when patients were crying out loud with labor pains. This resulted in some in the focus group to bear the pain quietly.

Moderator:	Why are you afraid of the doctor scolding you? Can you tell us how you felt at the time?
Participant 1:	It was like...even though it hurt I had to bear it. The woman on the bed next to me was in pain and was crying. The doctor yelled at her that "when you were doing it (having sex) you did not cry so why are you crying now?...and if you are in pain why do you have to cry?" He told her to go home and give birth at home.
Participant 2:	I was also afraid of crying...The doctor said to the women in the bed next to me that he would cut the baby out of her if she kept on crying. That she was screaming all day and that she had no strength.

It was also discussed that senior doctors tended to be much nicer with warm and encouraging words. Though not discussed often it was mentioned that the senior is the ones who

every other personnel gathers around upon his/her arrival in the clinic. That this person showed up only very infrequently to say a few kind and encouraging words. It was also mentioned that their warm and friendly attitude might be because they had lesser working hours and visited patients only occasionally.

Nevertheless major differences were discussed between male and female medical personnel. Generally, male personnel were seen as more helpful than female personnel. Participants stated that female doctors had a tendency to scold and lacked empathy and used rough language.

Participant 1:	Well for women doctors oh! when they come.
Participant 2:	Sometimes they scold you if you cry out in pain a lot. Some people say that some of these female doctors are like this.
Participant 1:	I am so afraid of crying out, I never cry out loud.
Participant 3:	When I cry out the female doctor comes to me and says "how many times have you given birth?" I told her it was my second birth. "your second birth and why are you still crying?"
Moderator:	Were these male or female doctors?
Participant 1:	Female.
Participant 3:	Female.

Conversely male medical personnel were seen to have a much better temperament, to be patient and displayed a much more empathetic attitude during deliveries. Reasons given for this was that it might be due to a better psychological strategy used by male doctors.

Participant 1:	Usually male doctors are kind.
Participant 2:	When I push and the baby comes out he says its a boy!
Participant 1:	I feel that male doctors have a good temparament.
Participant 2:	They are very patient.
Participant 3:	It is like when a male doctor comes to check on me during delivery I feel like I have a lot of energy.
Participant 4:	He uses encouraging words.
Participant 3:	When the male doctor comes he reassures me that "in only a few moments the baby will come out, don't be afraid, don't be afraid just be patient." He talks like this, the words are so different (compared to a female doctor).
Participant 1:	For male doctors hard [to tell their real feelings] They may just be saying words just to give one a sense of encouragement. [Inside] they may be tired of all the noise and confusion but say things just to make us quiet down. Their are of speaking is much better [than women].

Participant 3: It is very important for a medical doctor to be able to use psychology to talk to patients. The doctor should not let their own personal feelings out.

4. Post-natal Services

Both hospitals have a relatively small post-natal staff. Hospital B have six midwives, Hospital A has five nurses and three physicians. It is likely that at least some of this number are also working in other wards and thus not full-time post-natal staff. Post-natal services are provided five days a week on week days during working hours at Hospital A. Hospital B's services are seven days a week. Both hospitals provide check-ups for infections of the womb, breast cancer and promote an extensive family planning advice and service on IUDs, injections, sterilization Norplant and the condom.

At health centers post-natal services are provided oncc a week for three hours at Center three and Center two. Center one provides two days a week in which mothers can come to the center for post-natal care and advice on each of these days. Other services include health check-ups for children twice a week at health Center three and mobile health units for vasectomies, family planning, counselling and service for Center two. Due to a lack of health personnel Center two has temporarily closed its post-natal clinic for the last six months prior to our visit. However, consultation is still provided in child care practices and family planning advice. At Center three and one services include physical check-up for pep smear for cancer of the womb, such cases can also be referrals from the hospital. Urine test and breast checks are also provided. Consultation on family planning and possible contraception methods to be used are included. Sterilization cases are first interviewed and if considered appropriate are referred to the hospital. Breastfeeding information and procedures are also provided. Center one stresses home visits to the community to weigh children, check umbilicial chords, supplementary nutrition and breast checks.

Only one in ten mothers make their appointments for post-natal check-ups at health Center three. At Center one a higher proportion (around 80 percent) make their appointments. At Center three, the nurses states that there is a large number of households who are construction workers at various construction sites throughout the city whom have little spare time. This coupled with their low level of education accounts for a lack of importance by them to come for

post-natal check-ups and monitoring. Perhaps, just as important is that construction workers are a very mobile population and post-natal visits to the health center may not be possible if some move out to another site after the birth of a child. The large number of construction site workers situated near the Center three may likely account for higher number of mothers who do not bring their children for post-natal check-ups.

For those mothers that do come for check-up at Center one and three, nurses at both centers state that there were only a few cases which had health complications. Such cases include a mother who had syphilis whom was provided with treatment or another mother who was on birth control and did not have her period so she stopped take the pill to await her period for many weeks. Again, as mentioned, such cases of complications were so few that nurse providers were able to identify and discuss them.

5. Conclusion

From the in-depth discussion and focus group findings, problems with medical equipment and hospital infrastructure were not evident, either from medical personnel or the focus group participants point of view.

A major problem from the nurses point of view is the lack of nurses working in ante-natal and delivery wards as well as health centers. Interestingly, this lack of personnel was not seen as a major problem by hospital administrators. The lack of personnel, however, was brought up and discussed rather extensively in the focus group discussion with various examples given. A tentative conclusion can be made here that a lack of personnel or overworking existing personnel should be seriously looked at in both hospitals and health centers.

A second major problem is the human factor involved in daily hospital activities and services to patients. The scolding of nurses in front of patients was discussed as a major problem by nursing staff, both nurse at administrative level and at working level. Very importantly, the context of scolding in front of patients was also highlighted in the focus group discussions. Nursing personnel explained how this affected their work and focus group participants discussed how this made them fear doctors. Our information on this topic are somewhat limited in that we

did not conduct any in-depth discussions with medical doctors concerning the topic of scolding or social interaction within the hospital. It seems, however, that humanism and the process of healing should be continually instilled to a certain proportion of medical doctors.

Two potential problems are identified with regard to effective post-natal care. Firstly, an efficient referral network both within Bangkok and the provinces are necessary to refer cases and monitor maternal and child health. Secondly, mothers must be instilled a value of the importance of getting their file from the health center before they move away because they and their baby may encounter certain illnesses which could be easily overcome if they monitor their health by regular ANC visits at any health centre around the country.

The opinions stated by both providers of 'not enough time' seems to be a recurring pattern throughout our in-depth discussion, in both hospital and health center activities. It would seem useful that importance be given to a seminar programme on assessing and managing work activities of nurses from the providers point of view. A seminar of this kind would be able to address whether or not there is a heavy workload being placed on nurse providers in the pre-natal, post-natal and delivery wards and its effects on work efficiency. An issue seems to emerging here is that administrators are explaining the activities that their ward is undertaken and of its seemingly complete and efficient coverage. However, nurse providers seem to highlight the heavy workload being placed on themselves and its negative impact on their efficiency. Its seems unlikely that subordinates would complain without any basis. It also seems likely that strains do exists in the daily work activities and avenues to constructive criticisms seem very limited.

APPENDIX II.1

Schedule No. 1 [ ][ ][ ]

Community..... 1. Suanploo 2. Huarotchak Tuekdaeng 4[ ]

Household No. ..... 5[ ]

DETERMINANTS OF MATERNAL HEALTH IN URBAN AREA RESEARCH PROJECT

Community Survey

(Ever pregnant women 15-40 years old)*

Respondent's Name .....

Address .....

Ordinal number in the household schedule .....

Relationship to head of household ..... 6[ ]

Visit no.	Date/Month/Year	RECORD OF VISITS Time Started	Finished	Total	Result of call**
1.	.....	.....	.....	.....	.....
2.	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....

TOTAL CALLS: ..... ** RESULT OF CALL:

---

* Ever pregnant women include those who are currently married, divorced, separated and in consensual union

Code

1 Completed

2 Respondent not at home

3 Respondent refused

4 Posponed to .....

5 Incomplete, interview appoinment made

6 Others (SPECIFY)

Name of interviewer ..... Date/Month/Year .....

Name of supervisor ..... Date/Month/Year .....

Name of Coder ..... Date/Month/Year .....

Section 1 : Household Information

	1	2	3	4	5	6	7	8	9	10	11	12
No.	First & family name	Relationship to head of household Code: 1. Head 2. Spouse 3. Children 4. Parents 5. In-laws 6. Relatives 7. Grand-children 8. Others	Sex 1. Male 2. Female	Age (Completed years)	Date of birth (Month year)	Marital status 1. Married 2. Single 3. Widowed 4. Divorced/ separated	Highest education	What is your occupation at present? (See codes below)	Place of birth 1. Inside Bangkok (skip to Question 12) 2. Outside Bangkok (urban areas) 3. Outside Bangkok (rural areas)	Duration of stay in Bangkok (If born in Bangkok	Age at moving to Bangkok (If born in Bangkok code as 88) (If move in and and out several times ask age at last last move)	Duration of stay in this community. (Month/Year)
1.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Occupational codes: 0 Not working/housewife
1. High level professionals (e.g. doctors, nurses, teachers, lawyers, accountants, engineer, architect, etc); 2. Employees of public sectors who are not in professional category in code 1; 3. Employees or workers in large scale private enterprises; 4. Self-employed small Scale business; 5. Skilled/semiskilled workers (carpenters, mechnics, electricians, electronicians, masons, etc.); 6. Unskilled workers; 7. Students/below working age; 8. Looking for work.

Section 2 : Environmental Sanitary

1. Do you have a private toilet? 7[ ]
   1. Yes
   2. No

IF YES, What type? 8[ ]
1. Flush
2. Pour (water-sealed)
3. Pit Latrine
4. Others (Specify).....

(1) IF NO, Where do you excrete? 9[ ]
1. Public toilet
2. Neighbor/relative's toilet (ask No.2)
3. Others (Specify).....

(2) IF SHARING, What type of toilet? 10[ ]
1. Flush
2. Pour (water-sealed)
3. Pit Latrine
4. Others (Specify).....

2. How do you dispose the garbage? 11[ ]
   1. Garbage truck
   2. Burning/burying
   3. Dumping grounds/beneath the house
   4. Others (Specify) .....

3. How do you store your cooked food? 12[ ]
   1. Refrigeration
   2. Screened Cabinet
   3. Screened on the Table
   4. Open
   5. Others (Specify) .....

Section 3 : Family Income

Kindly give information on your and members of your family income.
(If there are more than one families in the household,
ask only income of respondents' family members)

Type of income earner	No. of working days	Total income per month (In case of daily wage, calculate income per month by multiplying with number of working days
Husband	.....	.....
Wife	.....	.....
Other*(Specify)	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
Total	.....	.....

13[ ][ ][ ][ ][ ]

Note * Only those who pool thier income for household expenditure.

Section 4 : Delivery History

Kindly give information on child delivery, include all deliveries regardless whether a child was alive or not.

Total number of delivery ....

1	2	3	4	5	6	7	8	9		10
Delivery Number	Date/Month/ Year of Delivery	Outcome of Delivery: 1. Livebirth (Ask Q.4-10) 2. Stillborn (skip to Q. 5-8)	Name of children	Sex 1. Male 2. Female	Mode of delivery: 1. Caesarian 2. Vaginal 3. Instrument	Place of delivery: 1. Government Hospital 2. Public Health Center 3. Private Hospital 4. Private Clinic 5. Home 6. Others (specify)	Reason for choice of Delivery	For livebirth 9.1 Is this Child still 1. If "alive" (skip to Q. 10 2. If "dead" (ask Q.9.2)	9.2 At what age this child died? (Months/ Years)	Is this child still live with the family? 1. Yes 2. No
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....

Section 5 : Present Pregnancy Status

1. Are you pregnant now? 18[ ]
   1. Yes 2. No (Skip to Section 6)

If "Yes" What is the duration of pregnancy? ..... Months 19[ ]
Expected date of delivery..... 20[ ][ ]

2. Where do you intend to deliver? 22[ ]
   1. Government hospital (Specify name of hospital) .....
   2. Health center (Specify name of health center) .....
   3. Private hospital (Specify name of hospital) .....
   4. Private clinic
   5. At home
   6. Others (Specify) .....
   7. Have not thought about it yet

3. Whom do you want to be attendant at delivery? 23[ ]
   1. Doctor
   2. Nurse
   3. Midwife
   4. Relative
   5. Others (Specify) .....

4. What is your perceived route of delivery? 24[ ]
   1. Natural way (vaginal)
   2. Caesarian
   3. Don't know/No idea
   4. Others (Specify) .....

5. Did you go for prenatal care? 25[ ]

1. Yes 2. No (Skip to Section 6)

IF "YES"

(1) When was your first visit? ..... month of pregnancy 26[ ]

(2) Where did you go for prenatal care? 27[ ]

1. Government hospital (Specify name) .....
2. Public health center (Specify name) .....
3. Private hospital (Specify name) .....
4. Private clinic
5. Others (Specify) .....

(3) Did you receive any services? 28[ ]

1. Yes 2. No

IF "YES" What types of service? (Spell out services listed below and more than one answers allowed)

1. Blood examination	a. Yes	b. No	29[ ]
2. Urine examination	a. Yes	b. No	30[ ]
3. Measuring blood	a. Yes	b. No	31[ ]
4. Physical examination	a. Yes	b. No	32[ ]
5. Abdominal examination	a. Yes	b. No	33[ ]
6. Weighing/Measuring height	a. Yes	b. No	34[ ]
7. Advice on health care	a. Yes	b. No	35[ ]
8. Others (Specify).....	a. Yes	b. No	36[ ]

Section 6: Belief sand Practices Related to Antenatal Care, Delivery and Postpartum Care

Antenatal Care

1. What was the outcome of your last pregnancy? 37[ ]
   1. live birth
   2. stillbirth
   3. abortion
   4. currently pregnant

For Quetion No.2 to Quetion No.9 (i.e. page 13), ask about last or current pregnancy only.

2. How did you know that you are pregnant? (Read out each item listed below)

1.	Cessation of menstruation	a. Yes	b. No	38[ ]
2.	Nausea, vomiting	a. Yes	b. No	39[ ]
3.	Morning sickness	a. Yes	b. No	40[ ]
4.	Swelling of belly	a. Yes	b. No	41[ ]
5.	Abdominal palpitation	a. Yes	b. No	42[ ]
6.	Breast change	a. Yes	b. No	43[ ]
7.	Urine examination for pregnancy test	a. Yes	b. No	44[ ]
8.	Others (Specify)	a. Yes	b. No	45[ ]

2.1 From the symptoms listed above, what was your first symptom? 46[ ]

2.2 At what stage of your pregnancy did your recognize these symptoms? 47[ ]
.....months

3. Upon learning of your pregnancy, whom did you consult?
(Do not lead, multiple answers allowed)
   1. Relatives (Specify)..... 48[ ]
   2. Husband 49[ ]
   3. Government madical/health personnel 50[ ]
      (Specify).....
   4. Private medical/health personnel 51[ ]
      (Specify).....
   5. Others (Specify)..... 52[ ]

4. Whom did you consult? On what subject and what advice was given to you?

Person consulted (See reponse in Q.3 as reference)	Subject of discussion	Advice given	
1.	.....	.....	53[ ]54[ ]55[ ]
	.....	.....	56[ ]57[ ]
	.....	.....	58[ ]59[ ]
2.	.....	.....	60[ ]61[ ]62[ ]
	.....	.....	63[ ]64[ ]
	.....	.....	65[ ]66[ ]
3.	.....	.....	67[ ]68[ ]69[ ]
	.....	.....	70[ ]71[ ]
	.....	.....	72[ ]73[ ]

5. During you pregnant, were there any prescribed or prohibited practices on the followings?

Item	Type	Advice given by	Reasons	
Food/Drinks				
Prescribed	.....	.....	.....	74[ ]75[ ]76[ ]
	.....	.....	.....	77[ ]78[ ]79[ ]
	.....	.....	.....	80[ ]81[ ]82[ ]
Prohibited	.....	.....	.....	83[ ]84[ ]85[ ]
	.....	.....	.....	86[ ]87[ ]88[ ]
	.....	.....	.....	89[ ]90[ ]91[ ]
Activities				
Prescribed	.....	.....	.....	92[ ]93[ ]94[ ]
	.....	.....	.....	95[ ]96[ ]97[ ]
	.....	.....	.....	98[ ]99[ ]100[ ]
Prohibited	.....	.....	.....	101[ ]102[ ]103[ ]
	.....	.....	.....	104[ ]105[ ]106[ ]
	.....	.....	.....	107[ ]108[ ]109[ ]
Medicines				
Traditional	.....	.....	.....	110[ ]111[ ]112[ ]
	.....	.....	.....	113[ ]114[ ]115[ ]
	.....	.....	.....	116[ ]117[ ]118[ ]
Modern	.....	.....	.....	119[ ]120[ ]121[ ]
	.....	.....	.....	122[ ]123[ ]124[ ]
	.....	.....	.....	125[ ]126[ ]127[ ]

6. Were there any beliefs/practices regarding pregnancy that you knew of?

Beleifs/Practices	Believe: or not? Yes/No	Practice or not? Yes/No	Reasons for practicing/not practicing
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

128[ ][ ]130[ ][ ]
132[ ][ ]134[ ][ ]
136[ ][ ]138[ ][ ]
140[ ][ ]142[ ][ ]
144[ ][ ]146[ ][ ]

7. The following questions will be on sources of prenatal care and the utilization of the sources by you yourself.

7.1 Do you know about sources of prenatal care? (Do not lead, multiple answers allowed)

1. Government hospitals (Specify name)..... 148[ ]
2. Public health centre (Specify name) ..... 149[ ]
3. Private hospital (Specify name) ..... 150[ ]
4. Private clinic 151[ ]
5. Others (Specify) ..... 152[ ]

7.2 During you last pregnancy, what were soures of antenatal care you used? (Do not lead) 153[ ]

(IF MORE THAN ONE SOURCES WERE MENTIONED, select one source which was used most often)

1. Government hospital (Specify name) .....
2. Public health centre (Specify name) .....
3. Private hospital (Specify name) .....
4. Private clinic
5. Others (Specify) .....
7. Have not yeat sought prenatal care

7.3 How frequently did you use the source(s)? 154[ ]
About.....time/month

7.4 What services were provided by this source? (Do not lead, multiple answers allowed)

1. Blood examination 155[ ]
2. Urine examination 156[ ]
3. Measuring blood pressure 157[ ]
4. Physical examination 158[ ]
5. Abdominal examination 159[ ]
6. Weighing/measuring height 160[ ]
7. Others (Specify) ..... 161[ ]

7.5 What were the reasons for utilizing this source? 162[ ]
.....
.....
.....

7.6 How long does it take you to reach this source? 163[ ]

1. Less than 30 minutes
2. 30-59 minutes
3. 60-89 minutes
4. 90 minutes or more

7.7 How did you reach the source (mode of transport)?
(Do not lead, multiple answers allowed)

1. On foot 164[ ]
2. Private/hired motor cycle 165[ ]
3. Bus/mini bus 166[ ]
4. Motor tricycle (Tuk Tuk) 167[ ]
5. Taxi 168[ ]
6. Private car 169[ ]
7. Others (Specify)..... 170[ ]

7.8 How much did you pay per consultation? .....Baht 171[ ][ ][ ]

7.9 Were you satisfied with the services provided? 174[ ]

1. Yes, because.....
2. No, because.....

7.10 Are there any resources which you were aware of but did not utilize? 176[ ][ ]

1. Yes 2. No

Reasons for not utilizaing the resources.....
.....
.....

8. For respondent who used the prenatal services of the hospital/public health centre (To be determined from Question No. 7.2) (For respondent who did not use prenatal services of public health center or hospital, skip to Question No.9)

8.1 What examinations were done? (Read out each item)

1. Blood examination	a. Yes	b. No	178[ ]
2. Urine examination	a. Yes	b. No	179[ ]
3. Measuring blood pressure	a. Yes	b. No	180[ ]
4. Physical examination	a. Yes	b. No	181[ ]
5. Abdominal examination	a. Yes	b. No	182[ ]
6. Weighing/measuring height	a. Yes	b. No	183[ ]
7. Others (Specify).....	a. Yes	b. No	184[ ]

8.2 What advice did you get during your prenatal sessions? 185[ ][ ]

.....
.....
.....

8.3 Did you follow the advice? 187[ ][ ]

1. Yes
2. No: Why not? .....

.....
.....

8.4 What medicines or vaccinations did you get? 189[ ]

.....

.....

.....

9. During your current or last pregnancy (apply to only one pregnancy), have you ever been ill from causes not related to pregnancy? 190[ ]

1. Yes 2. No

IF "YES" Give details

Pregnancy order	Illness Type*	Management	
Current pregnancy	.....	.....	191[ ]192[ ]
or	.....	.....	193[ ]194[ ]
Last pregnancy	.....	.....	195[ ]196[ ]
	.....	.....	197[ ]198[ ]

* Illness refers to sickness or suffering from diseases or accidents which are not due to pregnancy.

10. What are common complications of pregnancy that you are aware of, and how are they managed?

Perceived complications*	Perceived causation	Perceived management	
.....	.....	.....	199[ ]200[ ]201[ ]
.....	.....	.....	202[ ]203[ ]204[ ]
.....	.....	.....	205[ ]206[ ]207[ ]
.....	.....	.....	208[ ]209[ ]210[ ]
.....	.....	.....	211[ ]212[ ]213[ ]

* Complications refer to symptoms which are due to pregnancy such as swelling, bleeding, high blood pressure, fever.

Ask for information on every pregnancy.

11. Have you ever experienced complications (such as swelling, bleeding, having fever) while being pregnant? 214[ ]

    1. Yes 2. No

    IF "YES" please specify by order of pregnancy

Pregnancy No.	Complications	Management	Cause	
.....	.....	.....	.....	215[ ]216[ ]217[ ]218[ ]
.....	.....	.....	.....	219[ ]220[ ]221[ ]222[ ]
.....	.....	.....	.....	223[ ]224[ ]225[ ]226[ ]
.....	.....	.....	.....	227[ ]228[ ]229[ ]230[ ]

12. Do you know of any member of the community who died while pregnant or because of delivery? 231[ ]
    (Include the one who died within six weeks after delivery)

    1. Yes 2. No

    IF "YES," please specify

Name	Causes	Management (before death)	
.....	.....	.....	232[ ]233[ ]
.....	.....	.....	234[ ]235[ ]
.....	.....	.....	236[ ]237[ ]
.....	.....	.....	238[ ]239[ ]

13. During the current or last pregnancy (only one pregnancy) are (were) you doing the followings?

13.1 Smoking 240[ ]
1. Yes 2. No

13.2 Drinking alcohol 241[ ]
1. Yes 2. No

13.3 Taking vitamins 242[ ]
1. Yes 2. No

13.4 Drinking coffee/tea 243[ ]
1. Yes 2. No

13.5 Taking any drugs to terminate pregnancy 244[ ]
1. Yes 2. No
|
IF "YES," please specify name of the drug.....

13.6 Taking any other drugs (Anti-morning sickness, antibiotics) 245[ ]
1. Yes 2. No
|
IF "YES," please specify name of the drug.....

13.7 Taking herbal medicines 246[ ]
1. Yes 2. No
|
IF "YES," please specify name of the medicine
.....

B. INFORMATION ON DELIVERY (FOR LAST PREGNANCY ONLY)

Question in B & C Subsections will asked only respondents who had ever delivered a child.

1. What were the sings of begining labor? (Lead and multiple answers allowed)

1.	Breaking of the bag of water	a. Yes	b. No	247[ ]
2.	Abdominal pain	a. Yes	b. No	248[ ]
3.	Seeing the baby's hair	a. Yes	b. No	249[ ]
4.	Heat, flushing/sweating	a. Yes	b. No	250[ ]
5.	Others (Specify).....	a. Yes	b. No	251[ ]
6.	No symptom whatsoever	a. Yes	b. No	252[ ]

2. Where did you go for delivery 253[ ]
   1. Public hospital (Specify name).....
   2. Public health center (Specify name) .....
   3. Private hospital (Specify name) .....
   4. Private clinic
   5. At home
   6. Others (Specify) .....

3. Who attended you? 254[ ]
   1. Physician
   2. Nurse
   3. Midwife
   4. Relative
   5. Others (Specify) .....

4. What was the route of delivery? 255[ ]
   1. Caesarian
   2. Vaginal
   3. Instrument
   4. Others (Specify) .....

5. What position did you adopt during labour? 256[ ]
   1. Standing/vertical
   2. Kneeling
   3. Supine
   4. Squatting
   5. Others (Specify) .....

6. Who were present during your delivery? Did they participate in the delivery procedures?

Person present	Participation during delivery
.....	.....
.....	.....
.....	.....
.....	.....

257[ ]258[ ]
259[ ]260[ ]
261[ ]262[ ]
263[ ]264[ ]

7. What procedures were undertaken to induce the delivery?
(Starting from arrival at place of delivery)

.....
.....
.....

8. How long was the labor? (Start from the pain/in case of caesarian, count the time from entering the delivery ward) 265[ ][ ]
.....Hours

9. Did you have any difficulty in labor? 267[ ]
1. Yes 2. No

(1) IF "YES," please specify in details 268[ ]
.....
.....
.....

(2) What are the causes of labor difficulty? 269[ ]
.....
.....
.....

10. Was there any abnormality in your labor? 270[ ]

1. No 2. Yes

IF "YES," please specify 271[ ]
1. Breech delivery
2. Others (Specify) .....

11. Did you notice what was used in cutting the umbilical cord? 272[ ]

1. Yes 2. No, don't know/don't see

IF "YES," what was used? 273[ ]
1. Knife
2. Scissors
3. Others (Specify).....

12. What was used to expel the placenta? 274[ ]

.....
.....
.....

13. Were there medicines/food that you took or practices you observed during pregnancy for ease in delivery?

3.1 Medicines ..... 275[ ]
.....

3.2 Foods ..... 276[ ]
.....

3.3 Practices ..... 277[ ]
.....

14. For case delivered at Hospital only_ (See Question No.2, page 16)
(If delivery is not at the hospital, skip to Question No.15)

14.1 How long did you stay in the hospital after delivery? 278[ ][ ]
.....days

14.2 Were your relatives allowed to stay with you? 280[ ]
1. Yes
2. No

15. Did you suffer from complications related to delivery? 281[ ]
(such as bleeding, ratained placenta, high fever, lochia blocked)
1. Yes 2. No

IF "YES," please specify 282[ ]
.....
.....

16. During your pregnancy and delivery, did you seek assistance from the same community? (Any one other than members of your family) 283[ ]
1. Yes 2. No

IF "YES," Why did you seek assistnace?
.....
Kind specify types of assistance asked

Type of assistance	Relationship go providers	
Advice	.....	285[ ][ ]
Financial Aid	.....	287[ ][ ]
Medicines	.....	289[ ][ ]
Others (Specify)	.....	291[ ][ ]

17. How much did you pay for the delivery? 293[ ][ ][ ][ ]
.....Baht

C. POSTPARTUM CARE (FOR THE LAST DELIVERY)

1. After delivery (within 6 weeks after delivery) how were you taken care of? 297[ ]

	Type of care	Reasons	
By doctor/nurse/	.....	.....	298[ ]299[ ]
public health	.....	.....	
nurse	.....	.....	
By relative	.....	.....	300[ ]301[ ]
	.....	.....	

2. What are your beliefs concerning the expelled placenta? 302[ ]
.....
.....
.....

3. What was the duration of your convalescence after delivery? 303[ ][ ]
.....days

4. Immediately after delivery, did you take any special diet? 305[ ]
(Foods different from what you have normally been eating)
1. Yes 2. No

IF "YES," What food did you take? 306[ ][ ]
.....
Why? 308[ ]
.....
.....

4.1 A few days later, did you take any special diet? 309[ ]
(Foods different from what you have normally been eating).
1. Yes 2. No

IF "YES," What food did you take? 310[ ][ ]
Why? 312[ ]
.....
.....

5. After delivery (six weeks after delivery), what kinds of medicines did you take? 313[ ]
(traditional/herbal/western medicines)
.....
.....
.....

6. After delivery, were you visited by a public health nurse or did you go to see public health nurse? 315[ ]
1. Yes 2. No

IF "YES," How many days after delivery?	IF "NO," Why?
.....days	.... (Skip to Question No.8)

316[ ][ ]

7. What advice or assistance did you obtain from a public health nurse? 318[ ][ ][ ]
.....
.....
.....

8. What are the common practices related to postpartum care? 321[ ][ ]

.....

.....

.....

How did you learn about them? 323[ ]

.....

.....

.....

Section 7 : Surces of Information

1. Are there people with whom you discussed or consulted on matters related to reproduction? What is the content of discussion? How often do you meet them?

Relationship with persons discussed	Contjents of discussion	Frequency of interaction
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

324[ ]325[ ][ ]327[ ]
328[ ]329[ ][ ]331[ ]
332[ ]333[ ][ ]335[ ]
336[ ]337[ ][ ]339[ ]
340[ ]341[ ][ ]343[ ]

2. Have you ever seen/received educational materials related to pregnancy and delivery? 344[ ]

1. Yes 2. No

Type	Source	Content	Usefulness
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

354[ ]346[ ]347[ ]348[ ]
349[ ]350[ ]351[ ]352[ ]
353[ ]354[ ]355[ ]356[ ]
357[ ]358[ ]359[ ]360[ ]
361[ ]362[ ]363[ ]364[ ]

APPENDIX II.2

DETERMINANTS OF MATERNAL HEALTH IN URBAN AREA RESEARCH PROJECT

Interview Schedule for Maternal Death

(For interviewing close relative of the deceased and supplement with data and information from the health service unit)

Respondent's Name ..... Age .....Years

Address .....

Relationship to the deceased .....

Visit No.	Date/Month/ Year	RECORED OF VISITS Time Started	Finished	Total	Result of call*
1.	.....	.....	.....	.....	.....
2.	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....

TOTAL CALLS_____

* RESULT OF CALL:

Code

1. Completed
2. Respondent not at home
3. Respondent refused
4. Postponed to_____
5. Incomplete, interview appoinment made
6. Others (Specify)_____

INTERVIEWER'S Name .....

Date/Month/Year of Inverview .....

Name of deceased mother .....

Address .....

Date of birth (date/month/year) ..... Age.....Years

Marital status .....

Duration of pregnancy at time of death .....

1. Pregnancy history Pregnancy No. .....

   Number of livebirth .....

   Number of children still alive .....

   Number of stillbirth .....

   Number of abortion .....

2. IF HAVING EXPERIENCED CHILD DELIVERY

   2.1 Delivery was done at .....

   2.2 Date of delivery .....

   2.3 Details of a baby:

   Born Alive/Stillborn

   Sex: Male/Female

   Duration of pregnancy at time of delivery ..... Month(s)

   Place of death .....

   Date of death .....

3. Prenatal care (Information from service unit, if available)

Number	Place of ANC	Date/Month/Year of examination	Results of examination
1.	.....	.....	.....
2.	.....	.....	.....
3.	.....	.....	.....
4.	.....	.....	.....
5.	.....	.....	.....
6.	.....	.....	.....
7.	.....	.....	.....
8.	.....	.....	.....
9.	.....	.....	.....

4. Causes of death

.....

.....

.....

5. Source of information on circumstances surrounding death

.....

.....

.....

FOR CASE OF MATERNAL DEATH DURING DELIVERY ONLY

1. At what stage of delivery did the death occur?
    1. Before abdominal pain
    2. Having pain but before a baby was born
    3. After a body was born
    4. Others (Specify) .....

2. IF AFTER A BABY WAS BORN, How long was it from the begining of abdominal pain until the birth of a baby?

    Approximately ..... Hours

3. IF THE MATERNAL DEATH OCCURRED AFTER DELIVERED A BABY, How long from the date of delivery until the date which a mother died?

    Approximately ..... Days

4. Where did the maternal death occur?
    1. At home
    2. Public health center
    3. Public hospital .....
    4. Private hospital .....
    5. Private clinic .....
    6. Others (Specify) .....

5. If "death" occurred at home, ASK Why wasn't the deceased taken to hospital (or any other medical or health service unit)?

    .....

    .....

    .....

    .....

FOR CASE OF MATERNAL DEATH AT HOSPITAL ONLY

6. IF MATERNAL DEATH OCCURRED AT THE HOSPITAL (or any other medical service unit), What were the indications or conditions of a woman when she was taken to the hospital?

.....

.....

.....

6.1 Who made a decision to send her to the hospital? .....

What were the reasons for making such decision? .....

.....

.....

7. What made of transportation was used when taking her to the hospital?

.....

.....

8. Who accompanied her to the hospital?

.....

9. Before she died, how many days was she hospitalized?

About ..... days

10. Where there any other people making advice that a woman should be sent to the hospital?

1. Yes 2. No

11. IF "YES," Who were they?

.....

FOR CASE OF MATERNAL DEATH AT HOME ONLY

12. IF MATERNAL DEATH OCCURED AT HOME, Who attended the delivery?
    1. Traidtional birth attendant
    2. Trained (by health authority) tradition birth attendant
    3. Relative
    4. Neighborer
    5. Midwife
    6. Nurse
    7. Physician from a private clinic
    8. Physician from a public service unit
    9. Others (Specify).....

13. Did the attendant inform the deceased's family members that the deceased was seriously ill or her conditions was serious?
    1. Yes 2. No 3. Don't know

14. What did the attendant say and what advice did she/he give?
    The attendant informed other members of the family that: .....
    .....
    .....

    The advice given by the attendant was:
    .....
    .....

15. Did the deceased having the following indications?

	Yes	No	Don't know
Shivering	[ ]	[ ]	[ ]
High fever	[ ]	[ ]	[ ]
Convulsion	[ ]	[ ]	[ ]
Others (Specity)	[ ]	[ ]	[ ]

16. In your view, what was the major cause of maternal death?

.....

.....

17. During the last pregnancy, did the deceased suffer from the following diseases?

	Yes	No	Don't know
Anemia	[ ]	[ ]	[ ]
Heart Disease	[ ]	[ ]	[ ]
Diabetes Mellitus	[ ]	[ ]	[ ]
Hypertension	[ ]	[ ]	[ ]
Urinary Infection	[ ]	[ ]	[ ]
Asthma	[ ]	[ ]	[ ]

18. Do you think this maternal death could be preventable?

1. Yes 2. No

IF "YES," How?

.....

.....

19. Who assisted the deceased during her labor?

1. None
2. Relative
3. Neighbor
4. (Public health authority trained) Traditional birth attendant
5. Birth attendant
6. Physician from a public service unit
7. Physician from a private service unit
8. Others (Specify).....

20. During her pregnancy, what were the beliefs and practices of the deceased on the following?

	Beliefs and practices	Reasons
Foods	.....	.....
	.....	.....
	.....	.....
Taboos	.....	.....
	.....	.....
	.....	.....
Practices	.....	.....
	.....	.....
	.....	.....
Beliefs	.....	.....
	.....	.....
	.....	.....

21. In your view, was it possible that the deceased may have suffered from one or more of the diseases listed below before pregnant and may have cuased complications during delivery and thus leading to death?

	Yes	No	Don't know
Anemia	[ ]	[ ]	[ ]
Heart Disease	[ ]	[ ]	[ ]
Diabetes Mellitus	[ ]	[ ]	[ ]
Hypertension	[ ]	[ ]	[ ]
Upper Tract Respiratory Tract Infection	[ ]	[ ]	[ ]
Asthma	[ ]	[ ]	[ ]
Janndice	[ ]	[ ]	[ ]
Pnuemonia	[ ]	[ ]	[ ]
Malaria	[ ]	[ ]	[ ]
Peptic Ulcer	[ ]	[ ]	[ ]
Hepatitis	[ ]	[ ]	[ ]
Others (Specify).....	[ ]	[ ]	[ ]

22. Had the deceased ever sough prenatal care when pregnant?

1. Yes 2. No 3. Don't know

IF "YES," Where did she go for prenatal care?

1. Hospital
2. Public health center
3. Traditional medicine practitioner
4. Prive clinic

APPENDIX II.3

DETERMINANTS OF MATERNAL HEALTH IN URBAN AREA RESEARCH PROJECT

Interview Schedule for Maternal Health Service Provider

(For providers of ANC/Delivery/Postpartum Care)

Name ..... Family name .....

Sex .....

Position .....

Duration of service ..... Years

1. Marital Status
    1. Single
    2. Married
    3. Widowed
    4. Divorced/Separated

2. Place of work
    1. Public health center
    2. Public hospital
    3. Private hospital
    4. Private clinic
    5. Others (Specify).....

3. Educational level
    1. Certificate (13 years of education)
    2. Diploma (15 years of education)
    3. Bachelor degree or highter
    4. Others (Specify).....

4. How long have you been providing services listed below? (Multiple answers allowed)

   1. Antenatal care.....years
   2. Delivery.....years
   3. Postpartum care.....years
   4. Other medical/health services

      (Specify) ....years

      ....years

      ....years

5. In the past 5 years, have you ever attended the seminars, workshops or training courses to increase your skills and experience?

   1. Yes 2. No

   IF "YES," What were the names of seminars and subjects, workshops or training courses, for how long and who were the organizers?

Date/ Month/Year	Name and subject of seminar, workshop and training course	Duration (No.of days/ months)	Names of organizer
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

6. In your opinion, how useful are these training and workshop to your work?
   Why (If ever participated in more than one, list one by one.)

   .....

   .....

   .....

   .....

   .....

   .....

7. Currently, what antenatal, delivery and postpartum care services do you provide?
   (Please specify).

Antenatal care	Delivery	Postpartum care
1.	1.	1. .....
.....	.....	.....
2.	2.	2. .....
.....	.....	.....
3.	3.	3. .....
.....	.....	.....
4.	4.	4. .....
.....	.....	.....
5.	5.	5. .....
.....	.....	.....

8. What are the major health problems and obstetrical problems presented by the pregnant women and how do you manage them?

Problems	Management
Before delivery Health problems ..... Obstetrical problems ..... **During delivery** Health problems ..... Obstetrical problems ..... **After delivery** Health problems ..... Obstetrical problems	....

9. What are the contraints to the adequate and high quality service delivery?

1. .....
2. .....
3. .....
4. .....
5. .....

10. When you encounter the high risk pregnant women, how and what management procedures do you undertake to ensure her safe delivery?

    .....

    .....

    .....

11. Do you think the pregnant women who come to you for services follow your advice?

    1. Yes .....

       Because .....

    2. No .....

       Because .....

12. Do you know the reasons why pregnant women do not come for examination or service as appointed?

ANC Clinic	Postpartum Clinic
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

13. In your opinion, what kind of services provided by your center are acceptable to the people in communities covered by your center? Why? What services are not accepted? Why?

    1. Service acceptable, because .....
    .....
    .....
    .....
    2. Services not acceptable, because .....
    .....
    .....
    .....

14. What are the beliefs, customs and practices concerning pregnancy and delivery?

    1. Those which are beneficial and should be promoted: .....
    .....
    .....
    .....
    .....
    .....
    .....
    .....
    .....
    2. Those which are harmful and should be rectified: .....
    .....
    .....
    .....
    .....
    .....
    .....
    .....
    .....

APPENDIX II.4

DETERMINANTS OF MATERNAL HEALTH IN URBAN AREA RESEARCH PROJECT

Interview Schedule for Health Service Delivery Unit

(For interviewing a person/persons most knowledgable about the operations)

Name of respondent(s) ..... Family name(s) .....

Position(s) .....

Type of Service Delivery Unit

1. Public Health Center

   [ ] Antenatal care service [ ] Postpartum care service

2. Public hospital

   [ ] Antenatal care service [ ] Delivery service

   [ ] Postpartum care

1. In your unit, how big is the size of personnel?

Postion	Total Number	Responsible for antental care (Number)	Responsible for delivery (Number)	Responsible for postpartum care (Number)
Physician	.....	.....	.....	.....
Nurse	.....	.....	.....	.....
Midwife	.....	.....	.....	.....
Others (Specify)	.....	.....	.....	.....
.....	.....	.....	.....	.....

2. What antenatal and postpartum care services are provided by your unit?
   How many days per week and how many hours per day?

	Number of days in a week	Time: From..... ....hours To.... .....hours	Number of hours
Antenatal care	.....	.....	.....
Postpartum care	.....	.....	.....
Home visits	.....	.....	.....
Others (Specify)...	.....	.....	.....
.....	.....	.....	.....

[Question No.3 Ask only PRENATAL CARE UNIT]

3. a. In each day, how many pregnant women come for prenatal care, on the average?

   Old patients ..... persons
   Nes patients ..... persons
   Total ..... persons

   b. On what day of the week when more than average number of pregnant women come for prenatal service?

   ..... Because .....

   c. On what day of the week when less than average number of pregnant women come for service?

   ..... Because .....

4. Does you unit have following resources adequately for delivery of services?

4.1 Personnel

[ ] Yes

[ ] No (Specify type) .....

.....

.....

.....

4.2 Equipment/instruments

[ ] Yes

[ ] No (Specify type) .....

.....

.....

.....

4.3 Medicines and medical supplies

[ ] Yes

[ ] No (Specify type) .....

.....

.....

.....

4.4 Other supplies/materials

[ ] Yes

[ ] No (Specify type) .....

.....

.....

.....

5. Does your unit provide the following services?

	At the Unit		Referrals	
	Yes	No	Yes	No
Normal delivery	.....	.....	.....	.....
Surgical procedures (caesarean, laparotomy, ectopic pregnancy)	.....	.....	.....	.....
Anaesthesia	.....	.....	.....	.....
Medical treatment (Shock, Iron infusion, Sepsis, Hypertensive disorders)	.....	.....	.....	.....
Blood replacement	.....	.....	.....	.....
Family planning	.....	.....	.....	.....
Management for women at risk				
- Prenatal	.....	.....	.....	.....
- Intrapatal	.....	.....	.....	.....
Neonatal special care	.....	.....	.....	.....
Nursing (newborn)	.....	.....	.....	.....

6. Does your unit have operating manuals for assessment?

1. Yes 2. No

IF "YES," What manuals?

1. .....
2. .....
3. .....

7. Does your unit encounter any pregnancy complications?

Pregnancy complications	Percent of case	Problems in Management		Resolution
		Yes	No	
1.	.....	.....	.....	.....
2.	.....	.....	.....	.....
3.	.....	.....	.....	.....
4.	.....	.....	.....	.....
5.	.....	.....	.....	.....
6.	.....	.....	.....	.....
7.	.....	.....	.....	.....
8.	.....	.....	.....	.....
9.	.....	.....	.....	.....
10.	.....	.....	.....	.....
11.	.....	.....	.....	.....
12.	.....	.....	.....	.....
13.	.....	.....	.....	.....
14.	.....	.....	.....	.....
15.	.....	.....	.....	.....
16.	.....	.....	.....	.....
17.	.....	.....	.....	.....
18.	.....	.....	.....	.....
19.	.....	.....	.....	.....
20.	.....	.....	.....	.....

8. Do you think your unit is able to adequately serve the pregnant women who come for services?

	Yes	No	Reason(s)
Antenatal care	.....	.....	.....
	.....	.....	.....
	.....	.....	.....
	.....	.....	.....
Delivery	.....	.....	.....
(Ask only unit/center	.....	.....	.....
with delivery	.....	.....	.....
facilities)	.....	.....	.....
	.....	.....	.....

9. What are the operational constraints to effective delivery of obstetric services which your unit encounter? How do you propose to solve them?

	Constraints	Solutions
1.	.....	.....
	.....	.....
2.	.....	.....
	.....	.....
3.	.....	.....
	.....	.....
4.	.....	.....
	.....	.....
5.	.....	.....
	.....	.....

APPLICABLE TO UNIT/CENTER WITH DELIVERY FACILITIES ONLY

10. a. When pregnant women come for normal delivery, how long do they normally stay? ..... days

    b. On the average, how much do they pay for normal delivery services?

    ..... bahts

    c. Mostly, Who pay for the service?

        1. Self
        2. Employers/Government or state enterprise employees by charging to offices' accounts
        3. Health insurance
        4. Others (Specify) .....

    d. If it is normal delivery, who normally perform the service?

    .....

    .....

    e. Under what circumstances when doctor only will perform the service?

    .....

    .....

11. What are the postpartum care services which your unit/center provide?

    1. .....
    2. .....
    3. .....
    4. .....
    5. .....

12. a. Normally, how many percent of women who were asked to come for postnatal care come back as appointed? ..... Per cent

    b. Do you know why don't these women come back?

    .....

    .....

    .....

13. Does you unit provide maternal health education?

1. Yes
2. No

IF "YES," plese give details

Content	Mode of Dissemination	Frequency per week	Target
Within the unit/center	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
In the community	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

APPENDIX II.5

DETERMINANTS OF MATERNAL HEALTH IN URBAN AREA RESEARCH PROJECT

Focus Group Discussion: Pregnant and Postpartum Women

Pregnant Women

	Name	Age	Educational level	Pregnancy No.	Special characteristics of household
1.	.....	.....	.....	.....	.....
2.	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....
4.	.....	.....	.....	.....	.....
5.	.....	.....	.....	.....	.....
6.	.....	.....	.....	.....	.....
7.	.....	.....	.....	.....	.....
8.	.....	.....	.....	.....	.....
9.	.....	.....	.....	.....	.....
10.	.....	.....	.....	.....	.....

Postpartum Women

	Name	Age	Educational level	Pregnancy No.	Special characteristics of household
1.	.....	.....	.....	.....	.....
2.	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....
4.	.....	.....	.....	.....	.....
5.	.....	.....	.....	.....	.....
6.	.....	.....	.....	.....	.....
7.	.....	.....	.....	.....	.....
8.	.....	.....	.....	.....	.....
9.	.....	.....	.....	.....	.....
10.	.....	.....	.....	.....	.....

Venue of the focus group discussion :

Date/month/year :

Time spent :

Starting time :

Ending time :

GUIDELINES

FOR

FOCUS GROUP DISCUSSION: PREGNANT AND POSTPARTUM WOMEN

This group consists of 10 pregnant mothers and 10 postpartum women within the village, a moderator and two note-takers/supervisors.

How to Conduct FGD

1. The participants of the group discussion introduce themselves.

2. The facilitators will explain their role and their expectations from the group.

3. The aims of the discussions are as follows:
    a. To elicit the perceptions/views, and attitudes of the group toward matters related to pregnancy, delivery, and postpartum care.
    b. To extricate present anxieties, beliefs, practices, and rituals related to pregnancy.
    c. To distill potential inputs to a relevant education programs.

4. Inform the participants that they can interject during discussion. The discussion will be recorded and noted down.

Issues for Discussion

1. Care during pregnancy:
    a. How do women detect pregnancy? At what stage of pregnancy do they start to recognize that they are pregnant? What are the maifestations of pregnancy? What are the indications that a mother is a high-risk candidate? What should be done when the pregnancy is threatened?

b. Where do women go for antenatal care? Who provides advice on prenatal care? Where? From what month of gestation? Reasons? Frequency? Cost? Are they familiar with blood improvement drugs? Have they ever taken in those drugs? Are there any consequences for the pregnant women?

c. What are the views towards IT injection for pregnant women? Is it necessary or not? At what month is IT injection provided? How much is paid for such injection?

d. Was the working pattern of the woman during her pregnancy changed or not? Did she rest, or did she undertake more work? What are the reasons?

e. Eating habits: Did she eat more during pregnancy or less? Why?

f. Prohibition: Are there any prohibitions with regard to food or activities that should be followed by the pregnant women? What are they?

g. What is the opinion of the women about miscarriages? Why does miscarriage happen? What does one do when a miscarriage/abortion occurs? Where doe the woman go? for women who have more than one miscarriages, can they relate their experience?

h. Are there any ceremonies/rituals during the pregnancy? Usually, for which pregnancy order? Are the family members involved in these ceremonies?

i. What is the attitude of the women towards their pregnancy: Dit they want it or not? Ever participated in family planning programs? Have they had an abortion?

j. What are the women's opinions about risks in pregnancy?

k. For women who have been pregnant for the fourth time or more, ask their opinion/view about the pregnancy?

l. Current complications observed, reasons and management.

m. Attitude towards the various delivery sources.

n. Illness during pregnancy.

o. Where do mothers expect to give birth? Basis for selection. Who decides on the delivery site?

2. Health Centre/Private Clinic/Traditional Birth Attendant:
    a. Mother's attitude towards the health centre/traditional birth attendant.
    b. Which clinic or delivery hospital is nearest to her house? Has R used the place? If Not, why not? _____
    c. Past delivery experiences: where delivered? What are the impressions or opinions towards the health centre, staff, building, services, etc.
    d. Advantages/disadvantages of using the specific health services.

ON COMMUNITY-BASED MATERNAL HEALTH PROGRAM

1. Do you think women in the community are interested in educational program to provide knowledge on prenatal, delivery and post-natal care?

   IF "YES," In what areas do you think women in the community can do?

Educational Program on	Yes		No. Reasons
	Planning	Operation	
Antenatal care	.....	.....	.....
Delivery	.....	.....	.....
Postnatal care	.....	.....	.....

2. If you are interested to participate, how much time you have available?

   At what period of the day? What area you will be participating?

3. Are there any other persons in the community interested in participating in the maternal health information and educational program? How can they participate?

4. In following activites, how well do you think the women in this community can perform?

   Giving education/adivce

   Screening

   Referral

   Risk identifcation

   Others (Specify).....

5. In what areas of information and educational program on maternal health you want to participate? How are you going to present information and knowledge?

   In your view, what should be done to make information reaching as much mothers in the community as possible?