

CHAPTER 6

OBSTETRIC COMPLICATIONS AND TREATMENT

A major objective of the Safe Motherhood Survey was to quantify how frequently women experience symptoms of major obstetric complications requiring assessment and care. While the main causes of maternal death have been documented, thus far, less attention has been given to documenting the frequency with which women experience these potentially fatal complications. Such information is vital in planning for the services necessary for improved maternal survival.

The main focus of this chapter is on the life threatening obstetric complications of hemorrhage, obstructed labor, eclampsia, and puerperal sepsis. These problems have consistently ranked as the most common causes of maternal death in community-based studies conducted in numerous settings where maternal mortality is high (see, for example, Fauveau et al., 1988; Fortney et al., 1988; and Kane et al., 1992). Studies of maternal mortality must rely on interview-based diagnosis of cause of death because most births and deaths occur at home where clinical diagnosis is less common. These studies include interviews with someone who was present at the time of the woman's death focusing on symptoms and signs exhibited before death.

Death due to hemorrhage occurs because of massive blood loss, most commonly after giving birth. While there are many causes of postpartum hemorrhage, the most frequent are retained placenta, where the afterbirth fails to detach from the wall of the uterus; uterine atony, where the uterine muscle fails to contract after delivery; and uterine rupture from obstructed labor. Genital tract injury and episiotomy may also be associated with postpartum hemorrhage.

Complications of labor, or obstructed labor, may be due to cephalopelvic disproportion, where the woman's pelvis size or shape cannot accommodate the head of the fetus; transverse lie, where the fetus is lying horizontally inside the womb; and dysfunctional labor, where the uterus fails to contract in a manner conducive to delivery. These problems, if unmanaged, can result in prolonged labor, rupture of the uterus, fetal and maternal death.

Hypertensive diseases of pregnancy include both chronic and pregnancy induced hypertension. Pre-eclampsia is a hypertensive disease of pregnancy, diagnosed in a woman with hypertension, protein in the urine and/or severe edema. When convulsions accompany the signs of pre-eclampsia the condition is called eclampsia. Because pre-eclampsia is often asymptomatic, it cannot be diagnosed through interview alone, thus the focus on eclampsia.

Puerperal sepsis refers to severe infection of the uterus after delivery, which may spread throughout the body. Symptoms can include severe lower abdominal pain, high fever, lower back pain, and foul smelling vaginal discharge.

Chapter 2 of this report provides further details on validation of questions on symptoms of complications and other aspects of questionnaire development. This chapter presents findings on complications experienced by respondents during pregnancy, labor and delivery, and the postpartum period. All respondents were asked about problems ever experienced in any pregnancy. For pregnancies in the three years prior to interview, detailed questions were asked about the process respondents went through to get help for problems they experienced.

Because of the varied interests of those reading this report, and because of its experimental nature, the data on obstetric complications is presented in several formats. These include both woman-based and birth-based (stillbirths and live births) presentations, as well as a variety of combinations of problems reported. Table 6.1 describes the time frames covered in each table and whether they are woman-based or birth-based (see Table 6.1).

Table 6.1 Summary of time frames and units for tables in chapter 6

Table	Time frame	Units
6.1	Ever	Respondents (during pregnancy)
6.2	Ever	Respondents (during labor/delivery)
6.3	Ever	Respondents (postpartum)
6.4	Last 3 years	Respondents
6.5	Last 3 years	Respondents
6.6	Last 3 years	Respondents
6.7	Last 3 years	Respondents
6.8	Last 3 years	Stillbirths & live births
6.9	Last 3 years	Respondents
6.10	Last 3 years	Stillbirths & live births
6.11	Last 3 years	Stillbirths & live births
6.12	Last 3 years	Stillbirths & live births
6.13	Last 3 years	Respondents
6.14	Last 3 years	Respondents
6.15	Last 3 years	Stillbirths & live births
6.16	Last 3 years	Stillbirths & live births
6.17	Last 3 years	Stillbirths & live births
6.18	Last 3 years	Stillbirths & live births
6.19	Last 3 years	Stillbirths & live births
6.20	Last 3 years	Stillbirths & live births
6.21	Last 3 years	Stillbirths & live births

6.1 Obstetric Complications Ever Experienced

Pregnancy Problems/Complications

Each respondent was asked prompted questions about whether she had ever experienced specific problems during any pregnancy. Twenty-two percent of those interviewed reported vaginal bleeding, two percent reported convulsions, and six percent reported having a very high fever during at least one of their pregnancies (see Table 6.2).

The findings on bleeding during pregnancy should be interpreted with caution. Causes of bleeding during pregnancy vary depending on gestation. For instance, in the first trimester, bleeding is associated with spontaneous or induced abortion, while bleeding near term may be a sign of placenta previa or abruptio placenta. At the same time, some bleeding during pregnancy is not problematic, such as spotting at the time of implantation. The question asked in the survey did not differentiate these various types of bleeding.

Respondents 35 and older were almost twice as likely as the youngest to report bleeding during any of their pregnancies. Respondents with six or more pregnancies reported bleeding four times as often as those

Table 6.2 Symptoms of complications during pregnancy

Percentage of respondents who ever had symptoms of complications of vaginal bleeding, convulsions, or very high fever during pregnancy, by background characteristics and years since last pregnancy outcome, Philippines, 1993 SMS

Characteristic	Vaginal bleed- ing	Convul- sions	Very high fever	Number of respon- dents
Age group				
< 20	13.3	0.7	5.2	113
20-34	19.7	1.6	6.2	4,177
35+	24.9	2.2	5.3	4,191
No. of pregnancies				
1	8.3	0.4	4.7	988
2-3	16.2	1.1	4.2	2,858
4-5	22.9	2.3	6.1	2,263
6+	34.3	3.0	7.8	2,372
Education				
No educ./primary	23.4	2.6	7.4	3,739
High school/vo-tech	20.4	1.5	4.6	2,968
College	22.5	0.8	4.4	1,772
Residence				
Urban	21.2	1.6	4.9	4,383
Rural	23.2	2.2	6.7	4,098
Region				
Metro. Manila	16.8	0.6	2.9	1,232
Cordillera Admin.	19.9	1.8	6.6	147
Ilocos	26.1	2.6	6.1	484
Cagayan Valley	30.0	1.7	9.2	333
C-Luzon	26.4	1.6	4.3	914
S-Tagalog	27.9	0.6	2.8	1,157
Bicol	29.0	2.8	4.3	535
W-Visayas	15.7	0.9	6.3	655
C-Visayas	16.7	2.7	12.5	659
E-Visayas	24.7	5.7	10.4	382
W-Mindanao	17.9	4.0	7.1	457
N-Mindanao	22.2	2.9	7.5	473
S-Mindanao	18.6	1.4	6.0	616
C-Mindanao	19.9	1.8	4.9	438
Years since last outcome				
0-2	26.1	2.1	6.5	4,095
3-5	20.1	1.5	5.8	1,689
6-9	18.4	2.0	5.4	1,245
10+	16.7	1.4	3.9	1,452
Total	22.1	1.9	5.8	8,481

with one. These differences probably reflect both the higher risk to older, higher parity women, as well as the cumulative effect of exposure to pregnancy over time.

Respondents who had their last pregnancy outcome in the preceding two years were more likely to report vaginal bleeding during pregnancy than those whose last outcome occurred more than nine years ago (26 vs. 17 percent). Though the number of years since their last pregnancy outcome may not be the same as the time since the hemorrhage under discussion, one would expect them to be correlated. This difference in reporting raises the question of how well women recall their experiences of antepartum hemorrhage.

With the exception of some regional differences, there is very little variation in other background characteristics of respondents reporting convulsions or very high fever during pregnancy.

Labor and Delivery Problems/Complications

After reporting on pregnancy, respondents ever having given birth to a stillborn or live born child were asked whether they had ever had specific symptoms of complications during labor or delivery of any of their births (see Table 6.3). Respondents were asked if they had ever had labor that lasted for more than 12 hours to indicate those who may have had prolonged labor. They were also asked about massive vaginal bleeding around labor and delivery, which interviewers were trained to stress as an abnormally excessive amount of bleeding. Prolonged labor was the most frequently reported problem (15 percent), followed by massive vaginal bleeding (8 percent) and malpresentation (8 percent). Seven percent of the respondents had had a caesarean section delivery and five percent reported having had a retained placenta. Fewer than five percent reported convulsions, placenta previa, very high fever, or sickness of the baby in the womb (see Figure 6.1).

The most striking finding in the differentials for these complications is the selective nature of respondents reporting caesarean sections. Surgical delivery was more common among the most educated respondents and among urban residents, indicating the importance of service access; it was also higher among women who only had one pregnancy. Massive bleeding was most common among those who had six or more pregnancies (13 percent).

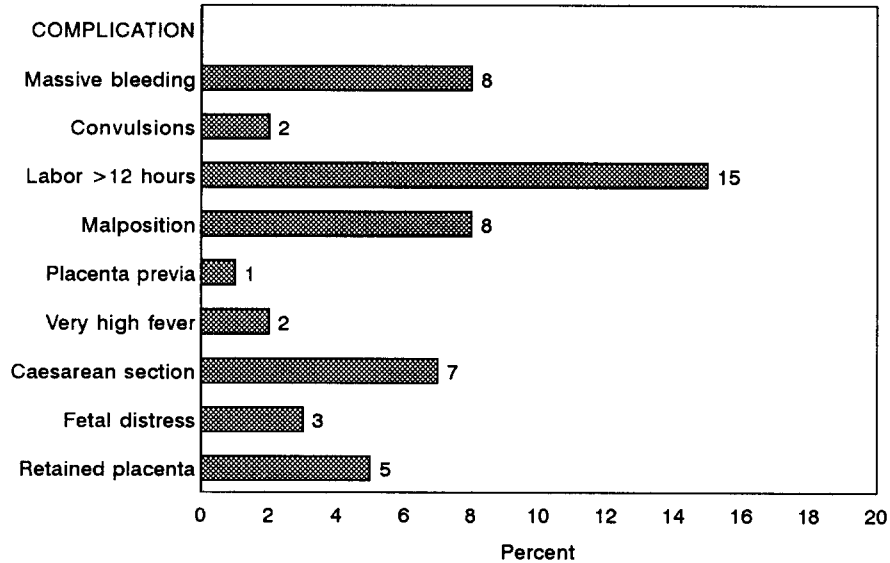
In contrast to complications during pregnancy (see Table 6.2), there are no major differences in reported symptoms of labor and delivery complications according to the number of years since the last pregnancy outcome (see Table 6.3). If the time since last pregnancy outcome can serve as a proxy for recall, it may indicate that for these most severe problems, recall does not have a significant impact on reporting.

Table 6.3 Symptoms of complications during labor or delivery

Among respondents who ever had a stillbirth or a live birth, the percentage who have ever had symptoms of complications during labor or delivery of massive bleeding, convulsions, labor more than 12 hours, malpresentation, placenta previa, very high fever, caesarean section delivery, fetal distress, or retained placenta, by background characteristics and years since last pregnancy outcome, Philippines, 1993 SMS

Characteristic	Symptoms of complications during labor or delivery									Number of respondents
	Massive bleeding	Convulsions	Labor > 12 hours	Malposition	Placenta previa	Very high fever	C-section	Fetal distress	Retained placenta	
Age group										
< 20	2.3	0.8	15.0	1.9	0.0	2.5	4.6	0.0	8.4	110
20-34	6.5	1.1	14.6	6.3	0.9	1.4	5.8	2.5	5.0	4,146
35+	9.4	2.0	15.8	9.4	1.8	1.9	7.4	4.3	4.4	4,170
No. of pregnancies										
1	3.3	0.5	15.0	3.8	0.8	0.9	10.1	0.7	3.2	949
2-3	5.3	1.1	15.0	5.8	0.9	1.1	9.4	1.9	3.8	2,845
4-5	7.2	1.5	15.2	7.2	1.4	1.8	5.3	3.0	4.6	2,260
6+	13.4	2.7	15.7	12.4	2.0	2.5	3.0	6.6	6.6	2,372
Education										
No educ./primary	9.7	2.0	15.0	8.4	1.3	1.9	2.9	4.2	5.1	3,725
High school/vo-tech	6.4	1.5	14.7	7.5	1.3	1.3	6.1	2.9	4.9	2,941
College	6.6	1.0	16.5	7.0	1.4	1.5	15.1	2.3	3.8	1,758
Residence										
Urban	6.9	1.6	15.7	7.2	1.2	1.6	9.2	2.9	4.8	4,349
Rural	8.9	1.6	14.7	8.4	1.5	1.6	3.8	3.9	4.7	4,077
Region										
Metro. Manila	3.6	0.8	12.7	5.4	0.6	1.4	12.9	1.6	3.8	1,223
Cordillera Admin.	11.8	2.6	35.7	8.8	1.1	2.9	6.6	4.4	7.4	147
Ilocos	10.9	2.6	17.0	7.9	1.9	1.8	6.1	1.4	4.0	481
Cagayan Valley	11.2	1.7	21.3	8.8	2.6	1.5	4.1	6.0	12.7	332
C-Luzon	6.2	1.2	16.8	6.4	1.8	1.3	10.0	1.6	3.3	903
S-Tagalog	4.3	0.9	16.7	7.9	0.7	0.9	5.4	1.8	2.2	1,150
Bicol	9.2	2.6	16.0	7.7	2.3	1.9	4.5	2.4	3.6	532
W-Visayas	10.7	2.6	18.6	9.5	2.4	1.4	6.3	3.2	6.8	650
C-Visayas	9.3	1.6	13.3	8.0	1.4	2.0	5.6	5.6	5.3	653
E-Visayas	15.4	4.4	23.9	12.4	0.9	1.8	3.2	5.1	6.0	376
W-Mindanao	5.8	1.6	10.6	6.8	0.7	1.6	2.6	5.9	3.8	456
N-Mindanao	10.6	1.5	16.5	10.6	1.3	2.8	4.2	5.1	4.9	470
S-Mindanao	9.9	1.2	5.4	8.1	1.1	2.4	5.0	5.6	5.9	615
C-Mindanao	7.6	0.7	8.1	6.3	0.7	1.8	3.3	4.8	6.7	438
Years since last outcome										
0-2	8.2	1.8	14.7	7.8	1.2	1.9	5.7	3.4	6.5	4,072
3-5	7.8	1.1	15.6	7.1	1.3	1.4	7.5	3.1	3.6	1,675
6-9	6.9	1.8	15.6	7.8	1.4	0.8	7.6	3.8	2.9	1,235
10+	7.9	1.4	15.7	8.6	1.8	2.0	7.0	3.1	2.6	1,444
Total	7.9	1.6	15.2	7.8	1.3	1.6	6.6	3.4	4.7	8,426

Figure 6.1
Percentage of respondents with complications
during labor/delivery in any past pregnancy



1993 SMS

Postpartum Problems/Complications

Respondents ever having given birth were asked about symptoms of complications experienced during the six-week postpartum period after any of their births. The most common problem reported was severe lower abdominal pain (10 percent), followed by those with a foul-smelling vaginal discharge (6 percent) (see Table 6.4). Massive vaginal bleeding, very high fever, and urinary incontinence were reported by three percent each.

Severe lower abdominal pain was more likely to be reported by respondents with less than a high school education, by those living in rural areas, and by those with six or more pregnancies. Most of the other background characteristics showed little variation.

6.2 Obstetric Complications in the Last Three Years

Respondents were questioned in depth about each pregnancy ending in the three years prior to the survey. This format allows analysis of data using either the woman or her pregnancy as the unit of analysis. Fifty-two percent of the respondents were not asked these questions because they had not been pregnant within the past three years (see Table 5.1). Ninety-four percent of those pregnant in the past three years delivered either a stillbirth or a live birth, another six percent had only an early loss(es) in that time period. Twenty-three percent of those who had a stillbirth or live birth had more than one birth in that time period (see Table 6.5).

Table 6.4 Postpartum symptoms of complications

Among respondents who ever had a stillbirth or a live birth, the percentage who ever had symptoms of complications in the six-week postpartum period of severe vaginal bleeding, very high fever, convulsions, foul smelling vaginal discharge, severe lower abdominal pain, retained placenta, or urinary incontinence, by background characteristics and years since last pregnancy outcome, Philippines, 1993 SMS

Characteristic	Postpartum symptoms of complications							Number of respondents
	Vaginal bleeding	Very high fever	Convulsions	Foul discharge	Lower abdominal pain	Retained placenta	Urinary incontinence	
Age group								
< 20	3.2	6.0	0.0	7.4	8.9	0.0	7.2	110
20-34	2.6	2.8	0.9	5.1	10.3	0.8	2.8	4,146
35+	3.2	2.9	0.8	6.2	10.6	1.2	3.5	4,170
No. of pregnancies								
1	1.8	2.7	0.4	3.8	4.2	0.0	2.7	949
2-3	2.0	2.1	0.7	4.4	8.5	0.3	2.5	2,845
4-5	3.1	2.4	0.9	5.3	11.9	1.4	2.8	2,260
6+	4.2	4.4	1.1	8.5	13.9	1.8	4.5	2,372
Education								
No educ./primary	3.0	3.6	1.1	7.7	12.8	1.3	4.1	3,725
High school/vo-tech	2.6	2.8	0.6	4.6	9.7	0.7	2.3	2,941
College	3.1	1.5	0.4	3.3	6.7	0.6	2.5	1,758
Residence								
Urban	2.6	2.5	0.6	4.5	8.4	0.9	2.5	4,349
Rural	3.2	3.3	1.0	7.0	12.7	1.1	3.8	4,077
Region								
Metro. Manila	1.5	1.5	0.5	1.4	3.0	0.3	0.9	1,223
Cordillera Admin.	10.7	3.3	0.4	13.6	12.1	1.8	4.0	147
Ilocos	2.8	3.5	0.4	10.4	10.4	0.7	2.6	481
Cagayan Valley	4.7	8.8	0.2	9.1	22.2	0.4	3.9	332
C-Luzon	1.8	2.0	0.4	4.6	8.3	1.1	1.8	903
S-Tagalog	0.7	1.2	0.0	2.0	3.7	0.1	2.0	1,150
Bicol	1.9	3.4	1.7	5.8	13.0	0.8	3.4	532
W-Visayas	2.7	2.9	0.9	4.7	10.0	1.2	3.6	650
C-Visayas	3.3	3.1	0.4	7.9	14.4	1.0	6.6	653
E-Visayas	6.2	6.4	4.4	14.5	32.2	4.6	6.4	376
W-Mindanao	4.4	3.7	1.9	3.8	8.0	1.0	4.2	456
N-Mindanao	4.6	2.9	1.8	10.3	19.2	1.6	4.9	470
S-Mindanao	3.5	3.3	0.2	5.6	9.0	1.4	4.1	615
C-Mindanao	4.2	1.9	0.9	7.4	12.1	0.9	2.1	438
Years since last outcome								
0-2	3.1	3.4	1.1	5.8	11.2	1.0	3.3	4,072
3-5	2.5	3.0	0.7	5.8	10.5	1.1	3.1	1,675
6-9	2.5	1.9	0.4	4.9	9.8	1.0	3.4	1,235
10+	3.2	2.1	0.7	6.0	8.9	0.7	2.6	1,444
Total	2.9	2.9	0.8	5.7	10.4	1.0	3.2	8,426

Table 6.5 Recent pregnancy outcomes

Percent distribution of respondents for whom an obstetric history was obtained, according to outcomes in the last three years, Philippines, 1993 SMS

Outcomes in last three years	Percentage of respondents
Early loss only (no births)	5.7
Only one stillbirth or live birth	73.0
More than one stillbirth or live birth	21.3
Number of respondents	4,080

Algorithms of reported symptoms used for identifying women most likely to have experienced hemorrhage, eclampsia, severe infection, and caesarean section due to obstructed labor were developed based on the results of a hospital-based validation study undertaken at the Philippine General Hospital (Stewart and Festin, 1994). This study is described in more detail in Chapter 2. The combination of questions used to identify respondents with symptoms of these complications is shown in Table 6.6.

Table 6.6 Criteria for identifying obstetric complications

Questions used to identify respondents with symptoms of four major obstetric complications: hemorrhage, eclampsia, sepsis, and caesarean section due to obstructed labor, Philippines, 1993 SMS

Hemorrhage:

Respondents were counted as having experienced a hemorrhage if they answered yes to any of the following three questions:

- 1) "Did you lose a lot of blood around the time of labor and delivery? PROBE: Did you bleed so much that you were afraid you might die?"
- 2) "Did anyone stick their hand up through your vagina into your womb to try to pull out the placenta?" (manual extraction of placenta)
- 3) "At any time during the six weeks after your delivery, did you have massive vaginal bleeding?"

Eclampsia:

Respondents considered to have experienced eclampsia were those who reported having convulsions not due to fever during pregnancy, during labor/delivery, or during the six weeks after delivery, but not outside of that period. Those experiencing convulsions outside of pregnancy were excluded because of the increased likelihood of another cause of the convulsions, such as epilepsy.

The wording "not due to fever" was used to avoid classifying tremors or trembling associated with high fever and chills as eclampsia.

Infection:

Respondents were classified as having infection if they reported a very high fever during labor or delivery or within the six weeks following delivery.

Caesarean section due to obstructed labor:

A respondent was considered to have caesarean section due to obstructed labor if she underwent a caesarean section delivery and gave as the reason for that procedure, one of the following: pelvis too small, transverse lie, or no progress of labor.

Twelve percent of the respondents giving birth in the three years prior to survey had symptoms of at least one of these problems (see Table 6.7). Hemorrhage was the most common complication (8 percent), followed by caesarean section due to obstructed labor (3 percent), severe infection (2 percent), and eclampsia (1 percent) (see Figure 6.2). These findings must be interpreted with caution. By restricting these questions to women who had births in the last three years, the subsample of births may overrepresent the experience of high fertility women. In addition, the window of experience being documented here does not represent the woman's full lifetime risk. However, the birth-based estimates are almost identical to these (see Table 6.10).

Very little population-based data is available for purposes of comparison of this data. These figures are remarkably similar to the global estimates made by WHO (WHO, 1993), although the proportion with symptoms of severe infection in the SMS is lower than their 8 percent estimate. A review of community-based studies on maternal morbidity by Koblinsky, Campbell, and Harlow (Koblinsky et al., 1993) attempts to bring the data together, but complications are grouped and de-

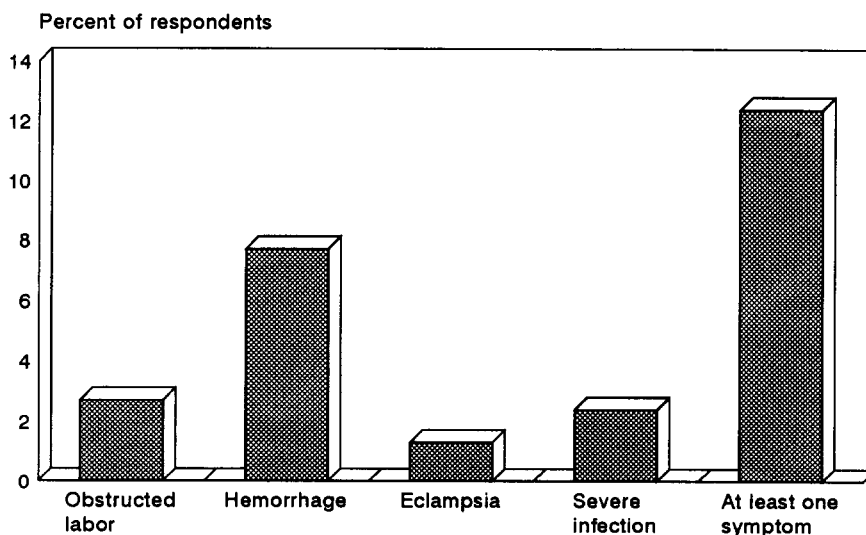
Table 6.7 Symptoms of obstetric complications among respondents who had a birth in the last three years

Percentage of respondents who had a stillbirth or a live birth in the last three years for which symptoms of one or more major obstetric complication(s) were present for one or more of the births, Philippines, 1993 SMS

Symptom	Percentage of respondents with symptoms of complications
C-section due to obstruction	2.7
Hemorrhage	7.7
Eclampsia	1.3
Severe infection	2.4
At least one symptom	12.4
Number of respondents	3,846

Note: Figures are based on criteria for identifying complications (see Table 6.6).

Figure 6.2
Percentage of respondents with symptoms of a major obstetric complication in the three years before the survey



1993 SMS

fined in a variety of ways making comparisons difficult. This review included studies from countries in Asia, Africa, and the Caribbean and found a range of 0.3 to 13 percent of births were to women with symptoms of obstructed labor and/or prolonged labor and/or cephalopelvic disproportion; less than one percent for eclampsia; two to eight percent for postpartum hemorrhage; and one to eight percent for symptoms of postpartum sepsis. A more recent population-based study in Ghana found convulsions experienced by two percent of their respondents; excessive postpartum bleeding in seven percent; and postpartum fever in five percent (de Graft-Johnson, 1994).

Two questions of interest are how often women experience more than one complication in the same birth, and what proportion of women experience the same complication in repeated births. Most of the respondents reporting symptoms of an obstetric complication did not experience more than one symptom (see Table 6.8).

Table 6.8 Perinatal deaths and live births surviving the first week of life, according to symptoms of obstetric complications

Percent distribution of perinatal deaths (PND) and live births surviving the first week of life (LBSFW) in the last three years, according to symptoms of major obstetric complication(s) experienced by the mother in that birth, Philippines, 1993 SMS

Symptom	PND	LBSFW	Total
C-section due to obstruction only	1.4	2.2	2.1
Hemorrhage only	13.5	5.5	5.7
Eclampsia	1.2	0.6	0.6
Severe infection only	0.8	1.2	1.2
C-S due to obstruction & hemorrhage	0.0	0.1	0.1
C-S due to obstruction & infection	0.0	0.0	0.0
C-S due to obstruction, hemorrhage & infection	1.0	0.0	0.0
Hemorrhage & infection	3.0	0.5	0.5
C-S due to obstruction & eclampsia	0.0	0.1	0.1
Hemorrhage & eclampsia	0.7	0.1	0.1
Other combination of symptoms	1.6	0.3	0.3
No symptoms	76.8	89.4	89.1
Total percent	100.0	100.0	100.0
Number of births	117	4,639	4,757

Note: Figures are based on criteria for identifying complications (see Table 6.6).

The question of repeating complications can only be addressed among respondents who had more than one birth in the three-year reference period. These respondents were asked about symptoms of complications experienced for each of those births. In this select sample of women and recent births, the proportion reporting a symptom of a complication in only one birth was two to four times higher than for those having a given symptom in more than one birth (see Table 6.9 and Figure 6.3). It is important to keep in mind that less than a quarter had more than one birth in the reference period, and that there may be adverse selection taking place. That is, those experiencing the symptom a second time may not have survived to the interview.

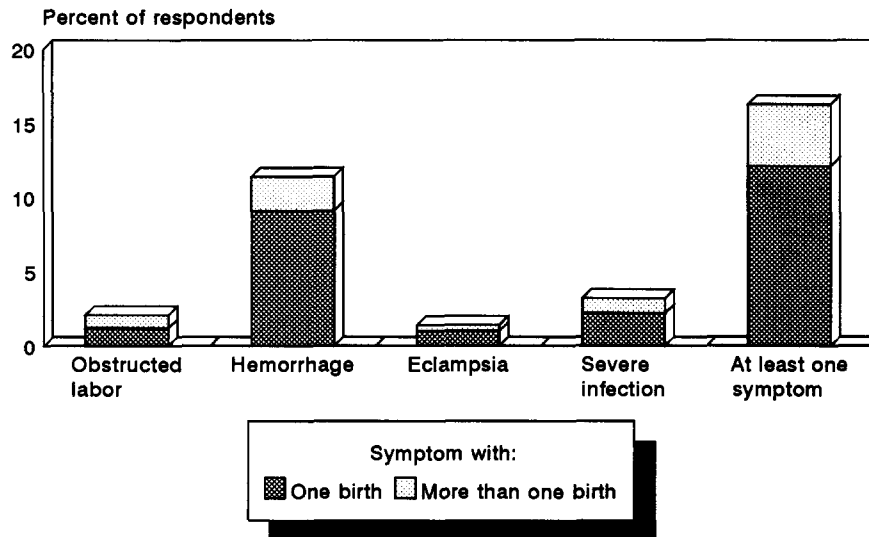
Table 6.9 Symptoms of obstetric complications among respondents with more than one birth in the last three years

Among respondents with more than one stillbirth or live birth in the last three years, the percentage with one or more symptoms of major obstetric complications, by whether the symptoms were associated with one or more outcomes, Philippines, 1993 SMS

Symptom	Symptom in 1 outcome	Symptom in > 1 outcome
C-section due to obstruction	1.2	0.9
Hemorrhage	9.1	2.3
Eclampsia	1.0	0.4
Severe infection	2.2	1.0
At least one symptom	12.1	4.2
Number of respondents	869	869

Note: Figures are based on criteria for identifying complications (see Table 6.6).

Figure 6.3
Percentage of respondents with symptoms of obstetric complications by whether the symptom occurred with one or more than one birth



Note: Among respondents with more than one birth in the three years prior to survey (n=869).

1993 SMS

Among births in the past three years, all symptoms of complications were more common for births resulting in perinatal death (stillbirth or death in first week of life) except for caesarean sections due to obstructed labor (see Table 6.10). Hemorrhage, eclampsia, and fever occurred with perinatal deaths three times as often as with surviving births. Twenty-three percent and 11 percent of perinatal deaths and surviving births, respectively, were to respondents having at least one of these major obstetric complications in that birth.

These relationships are not surprising since conditions affecting the mother often inevitably affect the fetus as well. The case of hemorrhage invites further investigation however, since the causes of postpartum bleeding occur predominantly after delivery of the child. Table 6.11 presents, for those births where the mother reported excessive bleeding, the pregnancy outcome by a variety of other problems and conditions having a more direct effect on the fetus. In almost all cases, the birth resulting in perinatal death has a higher percentage of symptoms of problems like obstructed labor, convulsions, prolonged labor, breech presentation, and multiple birth. This indicates that the women with hemorrhage did suffer from other problems associated with a higher risk of perinatal mortality.

Examination of background characteristics of respondents reporting symptoms of major obstetric complications for births in the past three years reveals minimal variation, suggesting that such demographic indicators are inadequate predictors of women at risk (see Table 6.12).

Educational background is the only characteristic where the proportion with any symptom of a complication varies by more than five percentage points between categories, the highest proportion being among the most educated respondents. Review of specific complications shows that most of this variation can be explained by differences in the proportions experiencing caesarean section due to obstruction. This is consistent with the fact that this is the only complication of the four which, by definition, requires hospital treatment, i.e., caesarean section delivery. That is, the most educated respondents have better access to medical services.

Table 6.10 Perinatal deaths and live births surviving the first week of life associated with one or more symptoms of obstetric complications

Percentage of stillbirths and live births resulting in perinatal deaths (PND) or live births surviving the first week of life (LBSFW) in the last three years associated with one or more symptoms of major obstetric complication(s), Philippines, 1993 SMS

Symptom	PND	LBSFW	Total
C-section due to obstruction	2.4	2.4	2.4
Hemorrhage	18.9	6.3	6.6
Eclampsia	3.5	1.0	1.1
Severe infection	6.4	2.0	2.1
At least one symptom	23.2	10.6	10.9
More than one symptom	6.3	1.0	1.2
Number of births	117	4,639	4,757

Note: Figures are based on criteria for identifying complications (see Table 6.6).

Table 6.11 Symptoms of obstetric complications in cases of hemorrhage by pregnancy outcome

Among stillbirths and live births in the last three years for which the mothers experienced hemorrhage, the percentage of perinatal deaths (PND) and live births surviving the first week of live (LBSFW) associated with symptoms of specific obstetric complications or procedures, Philippines, 1993 SMS

Symptom or procedure	Pregnancy outcome	
	PND	LBSFW
C-section due to obstruction	(5.3)	1.9
Severe infection	(25.3)	9.3
Convulsion	(7.8)	3.4
Labor > 12 hours	(33.7)	23.2
Breech presentation	(16.1)	3.1
Multiple birth	(7.4)	2.8
Manual extraction of placenta	(26.5)	55.8
Caesarean section	(20.6)	3.5
Forceps	(7.2)	7.9
Number of births	22	293

Note: Figures are based on criteria for identifying complications (see Table 6.6).

() Based on 25-49 unweighted cases

Table 6.12 Symptoms of obstetric complications by background characteristics

Percentage of stillbirths and live births in the last three years, for which the respondent reported symptoms of four major obstetric complications: caesarean section due to obstructed labor, hemorrhage, eclampsia, infection, and any of these symptoms, by background characteristics, Philippines, 1993 SMS

Background characteristic	Percentage of births for which respondents had symptoms of obstetric complications				Percent with any symptom	Number of births
	C-section obstruction	Hemorrhage	Eclampsia	Severe infection		
Age group at event						
< 20	1.1	6.6	1.3	2.6	10.1	334
20-34	2.4	6.6	0.8	1.9	10.5	3,585
35+	2.7	6.8	2.4	3.0	12.6	838
No. of pregnancies at event						
1	4.3	7.4	1.2	3.2	13.5	769
2-3	3.4	5.9	0.8	1.1	10.5	1,678
4-5	1.3	5.6	1.0	1.8	9.0	1,082
6+	0.8	8.0	1.5	3.2	11.4	1,228
Education						
No educ./primary	1.0	6.7	1.5	2.4	10.1	2,059
High school/vo-tech	2.5	5.5	0.7	2.1	9.6	1,798
College	5.5	8.6	1.0	1.6	15.2	896
Residence						
Urban	3.3	7.0	1.0	2.3	11.8	2,295
Rural	1.5	6.3	1.2	1.9	10.0	2,462
Total	2.4	6.6	1.1	2.1	10.9	4,757

Note: Figures are based on criteria for identifying complications (see Table 6.6).

Overall, 28 percent of all births occurred in hospital or clinic facilities (see Table 6.13). However, births for which the respondent experienced symptoms of a major complication were more likely to occur in a facility (51 percent) than births for which no symptom was reported (25 percent).

Table 6.13 Symptoms of obstetric complications by place of delivery

Percentage of respondents with symptoms of a major obstetric complication in the last three years, by place of delivery, Philippines, 1993 SMS

Place of delivery	No symptom	C-section obstruction	Hemorrhage	Eclampsia	Severe infection	At least one symptom	Total
Home	72.6	0.0	57.9	54.7	65.4	47.3	70
Hospital/clinic	(25.2)	(100.0)	(40.1)	(45.3)	(34.6)	(51.3)	28
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	4,240	113	315	53	101	517	4,757

Note: Figures are based on criteria for identifying complications (see Table 6.6).
() Based on 25-49 unweighted cases

6.3 Other Obstetric Complications

Forty-three percent of the respondents giving birth in the past three years reported having had a perineal tear (other than an episiotomy) in at least one of those births; eight percent said that they had been in labor for more than twelve hours; and five percent of the respondents said it took more than one hour for the placenta to come out after the birth of the child (see Table 6.14).

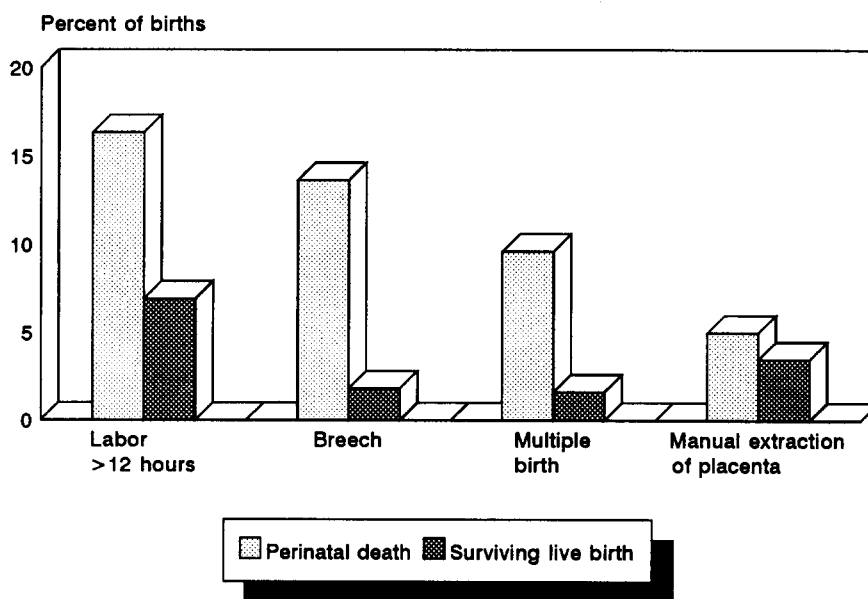
Prolonged labor occurred twice as frequently when there was a perinatal death (16 percent) (see Figure 6.4). Overall, breech presentation and multiple birth occurred in two percent of all births. However, breech presentation was seven times as frequent among births in which there was a perinatal death and multiple birth was five times as common among perinatal deaths (see Figure 6.4)

Table 6.14 Symptoms of other obstetric complications among respondents who had a birth in the last three years

Percentage of respondents with a birth in the last three years reporting symptoms of other obstetric complications: prolonged labor, prolonged rupture of membranes, breech presentation, multiple birth, cord prolapse, perineal laceration, retained placenta, or manual extraction of placenta, for one or more of those births, Philippines, 1993 SMS

Symptom	Percentage of respondents
Labor > 12 hours	8.2
Membranes ruptured > 24 hours	0.2
Breech presentation	2.5
Multiple birth	1.1
Prolapsed cord	0.8
Perineal laceration	42.5
Retained placenta	4.6
Placenta manually extracted	4.1
At least one symptom	51.9
Number of respondents	3,846

Figure 6.4
Pregnancy outcome by selected
symptoms of obstetric complications



1993 SMS

In two percent of the births, the respondent said she experienced a very high fever in the postpartum period (see Table 6.15). Fever was more common when labor lasted more than twelve hours (6 percent), in surgical deliveries (4 percent), and when the placenta was manually extracted (5 percent) (see Figure 6.5).

6.4 Medical Procedures for Births in the Last Three Years

Respondents reporting caesarean section delivery of any birth in the last three years were asked the reason the procedure was performed. More than one response was accepted. The main reasons given were "pelvis too small" (34 percent) and "repeat C-section" (23 percent), both of which were more common among urban births (see Table 6.16).

Table 6.15 Postpartum high fever and symptoms of other obstetric complications

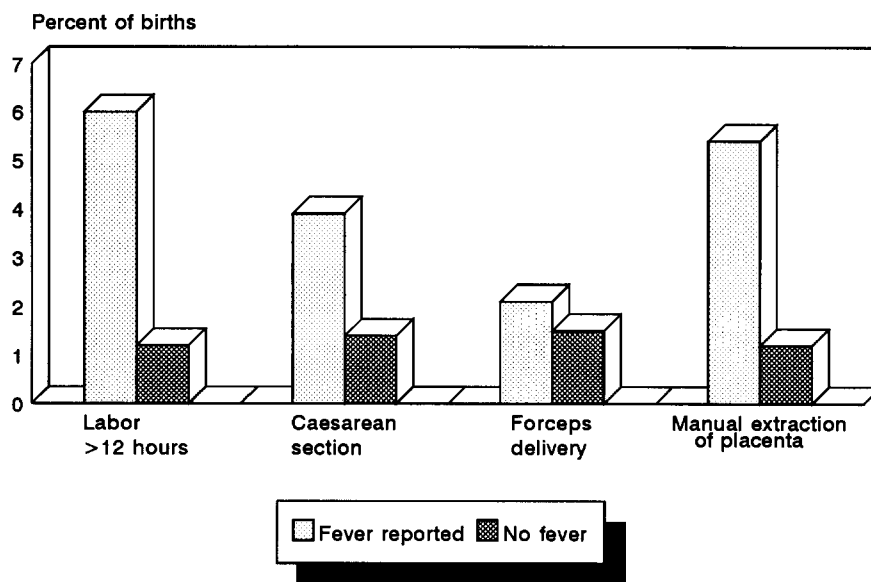
Percentage of stillbirths and live births in the last three years for which the respondent reported having a very high fever postpartum, by whether other symptoms of obstetric complications occurred during labor and/or delivery, who attended the delivery, and place of delivery, Philippines, 1993 SMS

Symptom/ delivery attendant/ place of delivery	Percent with high fever postpartum	Number of births
Labor > 12 hrs		
Yes	6.0	339
No	1.2	4,411
DK/missing	*	7
Caesarean section delivery		
Yes	3.9	220
No	1.4	4,516
Forceps assisted delivery		
Yes	2.1	119
No	1.5	4,619
Episiotomy		
Yes	1.8	791
No	1.3	3,688
DK/missing	3.1	278
Perineal laceration		
Yes	1.4	1,973
No	1.4	2,473
DK/missing	3.0	311
Placenta manually extracted		
Yes	5.4	169
No	1.2	4,176
DK/missing	2.9	412
Delivery attendant		
Health professional	1.4	2,235
Other person	1.6	2,513
Missing	0.0	8
Place of delivery		
Home	1.6	3,322
Public sector	1.7	909
Private sector	0.8	502
Other/missing	*	24
Total	1.5	4,757

Note: Missing cases include those not asked the question because it was not applicable; in most cases this was respondents who had a caesarean section delivery.

* Fewer than 25 unweighted cases

Figure 6.5
Postpartum fever by selected
symptoms of obstetric complications



1993 SMS

Table 6.16 Reasons for caesarean section delivery

Among stillbirths and live births in the last three years delivered by caesarean section, the percentage of those procedures performed for specific reasons, as reported by the respondent, by urban/rural residence, Philippines, 1993 SMS

Reported reason for caesarean section	Residence		Total
	Urban	Rural	
Pelvis too small	37.0	29.0	34.2
Baby transverse	5.8	8.1	6.6
Breech	8.8	7.6	8.4
Repeat C-section	26.9	15.3	22.9
Mother sick	3.5	6.7	4.6
Baby sick	6.4	0.7	4.5
Didn't know how to push	3.6	9.1	5.5
Baby overdue	8.8	4.3	7.2
No labor progress	12.7	17.4	14.4
Not told the reason	0.6	4.7	2.1
DK/missing	0.5	3.2	1.5
Other	15.7	14.2	15.2
Number of births	144	76	220

Seventeen percent of the births in the past three years were to respondents on whom an episiotomy was performed (see Table 6.17). That is, an incision at the opening of the vagina was intentionally made to facilitate delivery of the child. This procedure was more common among the youngest women (21 percent), in first births (39 percent), for more educated women (35 percent), in urban areas (26 percent), and in hospital deliveries (47 percent). Episiotomy was less common among births with a perinatal death (10 percent). Reporting of forceps delivery is quite low (3 percent overall), with more educated respondents having the highest proportion of forceps deliveries (6 percent).

The overall rate of caesarean section delivery is five percent. The pattern for C-section delivery is similar to that for obstructed labor, i.e., surgical delivery for any reason is more common for first births and among more educated respondents. Urban residence and urbanized regions, such as Metropolitan Manila and Central Luzon, also have higher rates of caesarean section delivery (see Figure 6.6).

Table 6.18 presents the percentage of births by perinatal outcome and symptoms/procedures experienced around delivery for both major complications and other problems, and the percentage for which at least one of these was reported. In half of all perinatal deaths, the mother experienced at least one symptom of obstetric complications, in contrast to one-fifth of surviving live births.

6.5 Problem Recognition and Referral for Major Complications

As described above, for each birth in the past three years, respondents were asked if their labor lasted longer than twelve hours, if they had convulsions, and if they had a lot of bleeding around labor and delivery. For each of these three problems, positive responses were followed up with a series of questions to determine if the symptom was considered to be a problem and if so, who thought it was a problem. If a respondent reported that the problem was recognized, she was asked where she was at the time, and whether or not it was recommended that she go somewhere else for help. For those referred, further questions were asked about where she was referred, how much time it takes to reach there, whether or not she went to the place of referral, and if not, why not.

This sequence of questions was designed to shed light on the process women experience when they develop a complication requiring medical attention. Of particular interest is what happens to women who develop a major complication at home. The difficulty with trying to document the process of seeking care for these complications is the relative rarity with which they occur and the wide range of possible responses that must be considered. Multiple stratification of cases based on what actions were taken results in very small numbers.

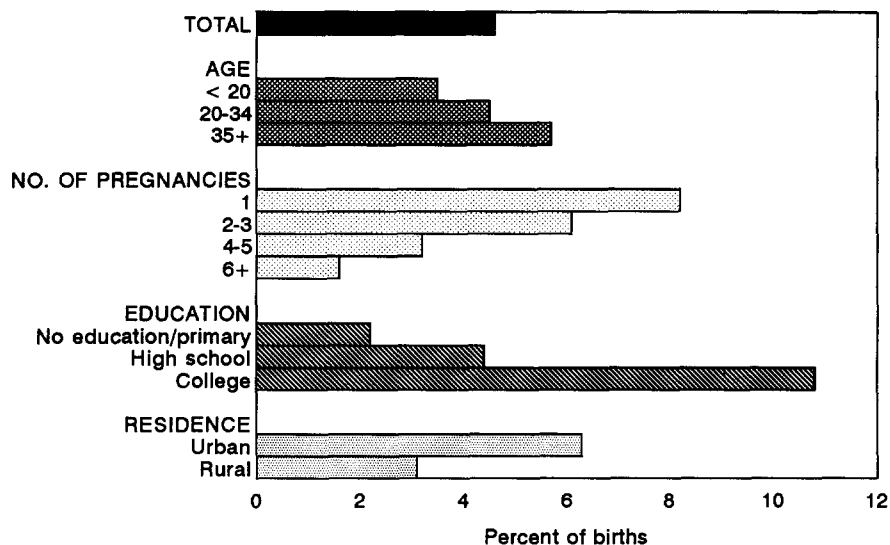
Prolonged labor, convulsions, and excessive bleeding were reported for 7, 1, and 3 percent of all births in the past three years, respectively. In 62, 72, and 77 percent of the births where women had prolonged labor, convulsions, or excessive bleeding, respectively, the respondent herself or someone assisting her considered this to be a problem (see Table 6.19). The respondent herself and her husband or partner were most frequently reported as the person who recognized the problem (see Table 6.20).

Table 6.17 Delivery procedures associated with symptoms of obstetric complications

Percentage of stillbirths and live births in the last three years for which the respondent reported receiving an episiotomy, or having a forceps-assisted delivery, or a caesarean section delivery, or any of these, by background characteristics, perinatal outcome, and place of delivery, Philippines, 1993 SMS

Characteristic	Delivery procedure				Number of births
	Episiotomy	Forceps delivery	C-section delivery	At least one procedure	
Age group at event					
< 20	21.2	2.7	3.5	25.1	334
20-34	18.2	2.6	4.5	23.8	3,585
35+	8.0	1.8	5.7	14.3	838
No. of pregnancies at event					
1	38.7	5.3	8.2	48.2	769
2-3	19.0	2.4	6.1	25.9	1,678
4-5	11.0	2.2	3.2	15.5	1,082
6+	4.5	1.2	1.6	6.9	1,228
Education					
No educ./primary	6.5	1.3	2.2	9.2	2,059
High school/vo-tech	18.9	2.3	4.4	24.4	1,798
College	35.1	5.7	10.8	47.7	896
Residence					
Urban	25.9	3.3	6.3	33.4	2,295
Rural	8.0	1.7	3.1	11.8	2,462
Region					
Metro. Manila	43.3	4.5	8.9	54.9	584
Cordillera Admin.	16.1	5.7	2.1	20.2	105
Ilocos	11.0	2.8	5.7	18.0	267
Cagayan Valley	8.8	2.9	2.5	12.6	170
C-Luzon	21.7	2.2	10.2	32.1	432
S-Tagalog	17.1	4.6	5.1	23.3	638
Bicol	7.3	1.1	3.0	10.8	371
W-Visayas	15.5	2.1	2.8	19.2	379
C-Visayas	16.5	1.0	3.7	20.9	379
E-Visayas	11.9	1.2	1.9	14.2	225
W-Mindanao	5.0	1.3	1.6	7.1	301
N-Mindanao	7.0	1.6	1.8	9.8	297
S-Mindanao	11.4	1.7	3.9	15.3	332
C-Mindanao	8.7	1.1	2.5	11.7	276
Perinatal outcome					
Perinatal death	9.8	5.7	6.9	19.7	117
Live birth surviving 1st week	16.8	2.4	4.6	22.3	4,639
Place of delivery					
Home	3.7	0.5	0.1	4.1	3,322
Hospital	47.4	7.5	16.3	66.2	1,332
Other	36.4	1.4	0.7	37.2	103
Total	16.6	2.5	4.6	22.2	4,757

Figure 6.6
Percentage of births delivered by caesarean section
by selected background characteristics



Note: Births in the three years prior to the survey.

1993 SMS

Table 6.18 Perinatal outcome and symptoms of obstetric complications

Percentage of stillbirths and live births resulting in perinatal deaths (PND) or live births surviving the first week of life (LBSFW) in the last three years by specific symptoms of obstetric complications or procedures, Philippines, 1993 SMS

Symptom/ procedure	Perinatal outcome	
	PND	LBSFW
C-section due to obstruction	2.4	2.4
Severe infection	6.4	2.0
Hemorrhage	18.9	6.3
Eclampsia	3.5	1.0
Labor > 12 hours	16.3	6.9
Membranes ruptured > 24 hours	0.8	0.1
Breech presentation	13.6	1.8
Multiple birth	9.6	1.6
Manual removal of placenta	5.0	3.5
Caesarean section	6.9	4.6
Forceps	5.7	2.4
At least one symptom/procedure	49.7	20.6
Number of births	117	4,639

Note: Figures are based on criteria for identifying complications (see Table 6.6).

Table 6.19 Recognition of problem status of symptoms of obstetric complications

Among stillbirths and live births for which the respondent reported prolonged labor, convulsions, or excessive bleeding, the percentage for which the symptom was recognized as a problem, by background characteristics, Philippines, 1993 SMS

Background characteristic	Labor > 12 hours	Convulsions	Excessive bleeding
Age group at event			
< 20	41.5	(100.0)	87.7
20-34	62.1	(54.9)	70.3
35+	79.9	(87.0)	92.0
Education			
No educ./primary	62.5	(69.0)	76.2
High school/vo-tech	65.9	(66.1)	77.7
College	56.4	(100.0)	75.7
No. of pregnancies at event			
1	56.0	(62.5)	80.4
2-3	57.7	(35.6)	68.6
4-5	62.5	(100.0)	73.6
6+	79.9	(86.9)	80.1
Residence			
Urban	55.8	(87.1)	73.0
Rural	69.1	(58.0)	79.2
Region			
Metro. Manila	60.0	(100.0)	50.0
Cordillera Admin.	72.0	*	100.0
Ilocos	82.6	(66.7)	70.0
Cagayan Valley	73.9	*	100.0
C-Luzon	60.6	(100.0)	55.6
S-Tagalog	50.0	(100.0)	75.0
Bicol	48.6	(60.0)	78.6
W-Visayas	69.7	(80.0)	75.0
C-Visayas	68.4	(33.3)	88.9
E-Visayas	55.6	(50.0)	87.5
W-Mindanao	57.1	(50.0)	80.0
N-Mindanao	75.0	(66.7)	75.0
S-Mindanao	100.0	(100.0)	69.2
C-Mindanao	88.9	(100.0)	88.9
Total	62.4	71.6	76.5
Percent of all births	7.1	0.6	2.6
Number of births	332	29	122

() Based on 25-49 cases

* Fewer than 25 unweighted cases

Table 6.20 Recognition of problem status of symptoms of major obstetric complications by various persons

Among stillbirths and live births in the last three years for which there was a recognized symptom of a major obstetric complication of prolonged labor, or excessive vaginal bleeding, the percentage of various types of persons who thought it was a problem, by symptom, Philippines, 1993 SMS

Symptom	Doctor	Nurse	Midwife	Hilot	Husband	Mother	Other relative	Respondent	Other	Number of births
Labor > 12 hours	15.2	2.8	17.5	22.3	39.8	27.2	21.1	40.2	0.4	207
Excessive vaginal bleeding	22.4	2.7	13.4	25.7	43.6	18.3	26.2	43.1	0.9	93

Note: Multiple responses were accepted.

Among those who were at home when the labor was recognized as prolonged, 48 percent were not referred elsewhere (see Table 6.21). Fifty-six percent of those with excessive bleeding were not referred. Over seventy percent of those who were referred for either problem went where they were referred.

Table 6.21 Responses to recognition of problem status of symptoms of obstetric complications

Among stillbirths and live births for which the respondent had prolonged labor or excessive vaginal bleeding around delivery, and the problem was recognized, and the woman was at home when it was recognized, the percentage for which no referral was recommended, the percentage for which the woman was referred and went where she was referred, and the percentage for which she was referred but did not go, Philippines, 1993 SMS

Symptom	No referral suggested	Went where referred	Did not go where referred	Total percent	Number of births
Labor > 12 hours	47.9	37.0	15.0	100.0	162
Excessive vaginal bleeding	55.5	32.4	12.1	100.0	65

For each of the three symptoms of obstetric complications—prolonged labor, convulsions, and excessive bleeding—between 70 and 80 percent of the events were first recognized when the respondent was at home (data not shown). This proportion is only slightly higher than the overall percent who delivered at home (69 percent). In most cases where the respondent was referred when she was at home, she was referred to a government hospital or clinic. The second most common place of referral was a private hospital or clinic.

CHAPTER 7

GENERAL HEALTH, ANTHROPOMETRY, CHRONIC AND OTHER REPRODUCTIVE MORBIDITIES AND INDUCED ABORTION

This chapter presents findings related to several objectives of the SMS. One goal of the SMS was to explore some of the issues encompassed in a broader definition of reproductive health. In the SMS this goal was pursued in a number of ways. One method was to ask women about symptoms of chronic and other reproductive morbidities and treatment sought. Questions on complications of unsafe abortion and on sexual exposure were included, since these issues can increase the risk of some reproductive morbidities. The nutritional anthropometry of SMS respondents was also documented.

A cautionary note is worth making here on some of the methodological issues involved in this process. These fall into the separate but related categories of biomedical diagnosis; socio-cultural definitions of health and illness; and the sensitive concerns of privacy and confidentiality. These latter concerns are highly trust-dependent and relate back to questions of methodology. For a number of the conditions included in this broader definition of reproductive health, definitive diagnosis depends on clinical and laboratory examination. While suggestive symptoms are sometimes present, some reproductive morbidities produce few symptoms until late in the course of disease. In addition, some of the symptoms that do occur may be accepted as the norm by women with chronic poor health and low social status. Abortion and sexual behavior are both difficult areas of data collection because of the extremely sensitive and private nature of these practices.

7.1 Perceived General Health Condition

As an introduction to the set of questions on symptoms of reproductive morbidities, respondents were asked about their general health condition. Each respondent was asked to rate her general health condition, whether it is good, fair, or poor, and whether her health now is better, the same, or worse compared to that at about the same time last year. They were also asked whether their health limits them in any way in doing vigorous or moderate activities. Table 7.1 shows the respondents' perceptions about their general health condition, how it compares to last year, and whether they have health limitations, according to background characteristics.

Overall, 95 percent of respondents reported their health as good or fair (see Table 7.1). How well these perceptions correlate with their true health condition is unknown. Respondents' perceptions of their health varied most with parity, education, and region of residence. A relatively higher percentage of respondents reporting poor health is found in the 35 and over age group. Respondents with six or more pregnancies comprise the largest percentage reporting poor health. Generally, reporting of poor health condition is associated with regions with the poorest economic condition. The highest percentages of respondents with perceived poor health are in Bicol and Eastern Visayas, two of the least developed regions in the country. Two-thirds of the respondents in Mindanao considered themselves in good condition compared with just over a third in Metropolitan Manila and Western Visayas. Most of the respondents in the latter regions, however, rated their health as fair.

One in five respondents thought her health was better now than last year; 72 percent said it is the same while nine percent reported their health as worse than last year. Those who thought their health was worse now than last year were more likely to be older, have more than five pregnancies, and have primary

Table 7.1 Health status of respondents

Percent distribution of respondents by perceived current health status (good, fair, or poor), perceived current health status compared to last year (better, the same, or worse), and current ability to do activities (unlimited, limited on vigorous activities only, or limited on moderate activities), according to background characteristics, Philippines, 1993 SMS

Background characteristic	Current health condition			Current health compared to last year			Ability to do activities			Total percent	Number of respondents
	Good	Fair	Poor	Better	Same	Worse	Unlimited	Limit on vigorous	Limit on moderate		
Age group											
< 20	52.8	46.2	1.0	21.2	75.6	3.3	96.8	2.8	0.0	100.0	113
20-34	54.2	42.5	3.3	19.3	74.1	6.5	92.3	6.0	1.7	100.0	4,177
35+	48.6	45.4	6.1	19.6	69.8	10.6	89.4	8.1	2.5	100.0	4,191
No. of pregnancies											
1	57.1	40.2	2.8	20.7	74.1	5.1	94.0	5.0	1.0	100.0	988
2-3	55.0	41.7	3.3	19.8	73.8	6.4	92.7	5.8	1.5	100.0	2,858
4-5	50.6	45.4	4.0	20.0	71.3	8.7	90.7	6.6	2.7	100.0	2,263
6+	45.5	46.8	7.7	18.1	69.7	12.2	87.8	9.7	2.5	100.0	2,372
Education											
No educ./primary	48.6	44.8	6.6	18.3	70.8	10.9	90.0	7.8	2.2	100.0	3,739
High school/vo-tech	51.0	45.5	3.4	19.9	72.8	7.2	91.4	6.6	2.0	100.0	2,968
College	58.0	39.3	2.7	21.4	73.0	5.6	92.2	6.0	1.8	100.0	1,772
Residence											
Urban	51.6	45.0	3.3	19.7	73.2	7.1	92.0	6.0	2.0	100.0	4,383
Rural	51.2	42.8	6.1	19.3	70.7	10.0	89.9	7.9	2.2	100.0	4,098
Region											
Metro. Manila	39.7	58.2	2.1	23.2	71.6	5.2	95.5	3.1	1.4	100.0	1,232
Cordillera Admin.	71.3	24.6	4.0	9.2	73.9	16.9	64.7	29.8	5.5	100.0	147
Ilocos	52.3	42.2	5.6	19.9	72.0	8.2	86.9	8.4	4.7	100.0	484
Cagayan Valley	48.3	47.9	3.9	16.3	63.3	20.4	68.9	29.8	1.3	100.0	333
C-Luzon	55.7	39.1	5.2	19.0	75.8	5.2	92.6	4.3	3.1	100.0	914
S-Tagalog	51.6	45.2	3.2	15.8	78.5	5.7	92.4	5.8	1.8	100.0	1,157
Bicol	41.0	49.4	9.6	20.0	70.4	9.6	94.6	3.7	1.7	100.0	535
W-Visayas	38.4	57.4	4.2	22.9	63.1	13.8	90.7	7.3	2.0	100.0	655
C-Visayas	64.3	29.9	5.8	15.6	73.3	11.1	90.1	6.6	3.3	100.0	659
E-Visayas	32.0	58.5	9.5	24.9	66.7	8.4	93.2	5.2	1.6	100.0	382
W-Mindanao	62.5	32.9	4.5	26.3	66.7	6.6	96.7	3.1	0.2	100.0	457
N-Mindanao	62.2	33.0	4.9	21.1	68.2	10.7	89.9	8.6	1.5	100.0	473
S-Mindanao	60.2	34.8	5.0	18.5	71.2	10.4	89.0	9.2	1.8	100.0	616
C-Mindanao	63.4	34.0	2.6	13.4	82.4	4.2	94.0	4.9	1.1	100.0	438
Total	51.4	43.9	4.7	19.5	72.0	8.5	90.9	7.0	2.1	100.0	8,481

or no education. A higher percentage of respondents who reported poorer health than last year was found in CAR and Cagayan Valley.

Seven percent of respondents reported that their health limits their ability to do vigorous activities such as scrubbing the floor. Two percent reported a limited ability to do moderate activities. Respondents with limited mobility tended to be older and higher parity, as was seen for the other self-reported indicators of health status.

7.2 Diagnosed Illnesses

Respondents were asked whether they had ever been told by a doctor or a nurse, at any time in their life, that they had any of the following health problems: tuberculosis, diabetes mellitus, high blood pressure/hypertension, malaria, hepatitis, kidney disease, heart disease, anemia, goiter, or any other medical problems. These questions help to estimate the levels of diagnosed illness among ever-pregnant women; however, they do not reflect the actual prevalence of disease. This point is born out through comparisons with prevalence surveys as described below.

The most commonly reported diagnosed illness was anemia, reported by 16 percent of the respondents (see Table 7.2). This is followed by high blood pressure (10 percent), kidney disease (9 percent), other (uncategorized) morbidities (8 percent), and heart disease (5 percent). Less than five percent of the respondents reported having been diagnosed with goiter, malaria, tuberculosis, diabetes, or hepatitis.

Table 7.2 Diagnosed illnesses

Percentage of respondents who reported ever having various illnesses diagnosed by a doctor or a nurse, by background characteristics, Philippines, 1993 SMS

Background characteristic	Diagnosed illness										Number of respondents
	Tuberculosis	Diabetes	High blood pressure	Malaria	Hepatitis	Kidney disease	Heart disease	Anemia	Goiter	Other	
Age group											
<20	0.0	0.0	3.2	8.3	0.9	4.2	1.0	14.0	1.7	1.9	113
20-34	1.2	0.5	5.8	2.4	1.0	7.2	3.4	17.0	3.7	6.6	4,177
35+	3.0	1.7	14.4	3.4	1.0	10.5	7.4	15.6	5.7	9.6	4,191
No. of pregnancies											
1	1.0	0.5	8.0	2.1	0.8	7.9	3.9	9.7	3.6	8.3	988
2-3	1.4	0.7	9.1	1.9	0.9	7.1	4.4	15.4	4.2	7.4	2,858
4-5	1.6	1.4	10.4	3.3	1.1	9.7	4.4	16.7	4.7	8.3	2,263
6+	3.7	1.5	11.8	4.5	1.0	10.2	7.9	19.7	5.6	8.4	2,372
Education											
No educ./primary	2.9	1.1	9.9	4.4	0.7	9.3	5.7	17.3	4.8	6.6	3,739
High school/vo-tech	1.6	0.7	10.0	2.4	1.2	8.8	5.1	16.7	4.3	7.8	2,968
College	1.0	1.6	10.3	1.1	1.1	7.6	5.1	13.4	5.1	11.3	1,772
Residence											
Urban	2.1	1.2	10.4	1.9	0.7	8.8	5.2	14.0	4.5	8.8	4,383
Rural	2.1	0.9	9.7	4.2	1.3	8.7	5.4	18.6	4.9	7.2	4,098
Region											
Metro. Manila	2.4	1.6	8.0	0.2	0.5	4.2	4.0	5.7	3.2	11.7	1,232
Cordillera Admin.	1.1	0.7	15.1	17.6	3.3	12.5	5.1	28.7	15.4	14.7	147
Ilocos	2.6	0.3	11.8	1.0	0.9	7.0	5.2	24.9	1.7	8.0	484
Cagayan Valley	1.3	1.1	13.1	20.4	3.9	14.4	7.7	44.0	10.3	17.8	333
C-Luzon	1.9	0.9	11.6	1.8	0.9	13.0	4.9	12.9	5.2	4.2	914
S-Tagalog	1.3	0.6	12.2	4.0	1.5	9.7	4.8	9.8	7.0	6.9	1,157
Bicol	5.4	1.1	9.2	0.9	0.2	5.2	2.8	16.1	2.6	6.2	535
W-Visayas	3.9	0.9	9.9	0.7	2.2	4.8	5.2	11.4	2.8	10.5	655
C-Visayas	0.7	1.1	11.9	0.0	0.1	11.1	7.8	18.7	3.3	5.5	659
E-Visayas	3.9	1.1	10.9	1.4	1.1	9.1	6.8	26.8	2.7	12.2	382
W-Mindanao	1.0	0.3	5.4	2.4	0.2	7.0	2.8	11.5	3.0	4.2	457
N-Mindanao	0.8	2.3	6.8	2.9	0.3	10.2	6.5	14.6	5.7	2.4	473
S-Mindanao	1.4	1.2	9.3	4.8	0.6	12.0	7.2	28.4	6.0	6.3	616
C-Mindanao	0.9	1.2	7.9	4.6	0.5	9.2	6.7	19.4	4.6	10.0	438
Total	2.1	1.1	10.0	3.0	1.0	8.8	5.3	16.3	4.7	8.0	8,481

The level of diagnosed anemia reported here is considerably lower than the estimate of 37.2 from the FNRI 1987 National Nutrition Survey (Villavieja et al., 1989). This raises the point of how few providers actually test for anemia. Another study finding higher rates of anemia was conducted in 1987 in Metropolitan Manila among urban poor mothers of infants in their third trimester of pregnancy. The prevalence of anemia in this high-risk group was 21 percent (Raymundo, 1987).

Older women were more likely to report a diagnosis of tuberculosis, high blood pressure, kidney and heart disease, while younger women were more likely to report malaria. There is very little variation in the percentage of respondents reporting diagnosis of the various morbidities by parity, except for high blood pressure, malaria, heart disease, and anemia where levels were higher for women with six or more pregnancies than for those with one. Less educated women were more likely to report tuberculosis, malaria, kidney disease, and anemia than better educated women, while the latter were more likely to report other morbidities. There was little variation in reporting by urban/rural residence other than for malaria and anemia, both of which were more commonly reported by respondents from rural areas.

7.3 Illness during Pregnancy

Women who reported ever having had any of the illnesses mentioned above diagnosed by a doctor or a nurse, were asked whether they had that problem when they were pregnant. Over half of the women reporting anemia had the illness while they were pregnant, while only 19 percent of those diagnosed with diabetes said they had it when they were pregnant (see Table 7.3). For the other morbidities, from about one in five (for hepatitis) to one in three (for goiter) respondents with the illness experienced it during pregnancy (Figure 7.1).

7.4 Anthropometry

Several indicators can be used to assess the nutritional status of women (Krasovec and Anderson, 1991). While anthropometric data are now routinely collected in DHS surveys for mothers with living children under five, the SMS broadened this to include all SMS respondents, that is, women of reproductive age who reported ever having been pregnant. This allows analysis of height, weight, and mid-upper arm circumference (MUAC) measurements for women who are normally underrepresented in DHS surveys. However, because of the SMS focus on ever-pregnant women and the relatively late age of onset of childbearing in the Philippines, women under age 20 are still relatively underrepresented in the SMS as well.

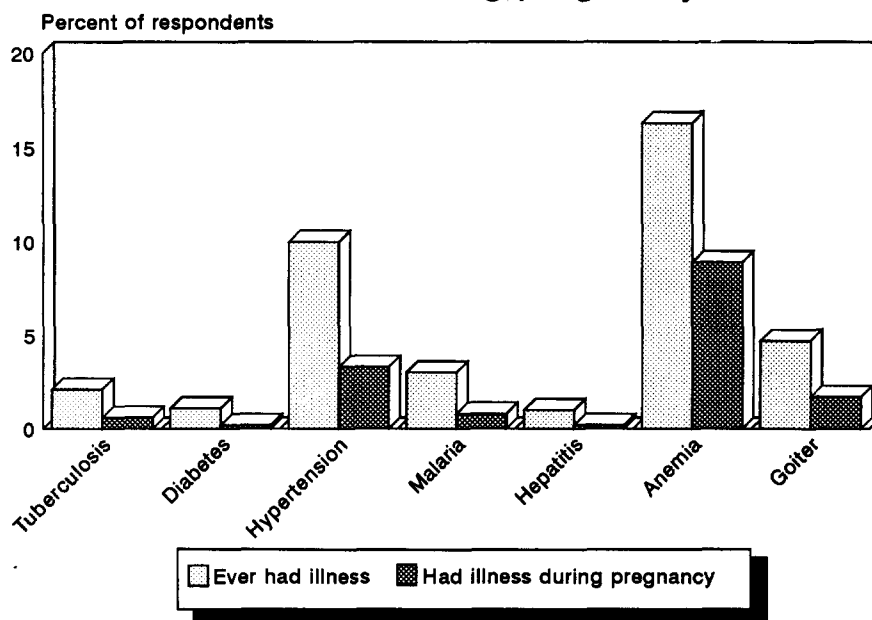
The measuring equipment used in the SMS was the same as that routinely used to measure mothers and children in DHS surveys. Height was measured using a wooden measuring board, equipped with an extension for measuring adults. A digital bathroom scale with accuracy of ± 100 grams was used to obtain weights. An insertion tape was used to measure arm circumference.

Table 7.3 Diagnosed illness during pregnancy

Among respondents who reported ever having various illnesses diagnosed by a doctor or a nurse, the percentage who reported experiencing the illness(es) during pregnancy, Philippines, 1993 SMS

Illness	Percent ill while pregnant	Number with illness/problem
Tuberculosis	28.1	176
Diabetes mellitus	18.9	90
High blood pressure	33.1	852
Malaria	28.2	255
Hepatitis	22.5	83
Kidney disease	31.4	744
Heart disease	30.1	453
Anemia	54.7	1,379
Goiter	35.3	396
Other	26.2	680

Figure 7.1
Percentage of respondents ever diagnosed with selected illnesses and whether they ever had illness during pregnancy



1993 SMS

Table 7.4 presents the mean, standard deviation, and percent distribution for four anthropometric indicators: height, weight, body mass index (BMI), and mid-upper arm circumference (MUAC).

Height is associated with socioeconomic status over generations and is useful in identifying women at nutritional risk. Maternal height has also been used to identify women at risk of difficult delivery, since short stature is sometimes correlated with small pelvis size. The risk of low birth weight also appears to be higher for children of short women. The optimal cut-off point varies among populations, but is likely to be in the range 140-150 cm. The mean height of women measured in the SMS was 151.6 cm. Ten percent of the respondents were shorter than 145 cm, while 37 percent were below 150 cm. The mean weight was 51.2 kg, excluding pregnant women.

Body mass indices are used to assess thinness or obesity. The most commonly used index is the *body mass index* (BMI), which is defined as weight in kilograms divided by the squared height in meters. Chronic energy deficiency is generally defined as a BMI of 18.5 or lower. Obesity has not been clearly defined. The mean BMI among respondents who were not pregnant at the time of the survey was 22.2. However, almost 13 percent had a BMI below 18.5, suggesting chronic energy deficiency.

Mid-upper arm circumference (MUAC) can be used as an indicator of maternal nutritional status in non-pregnant women because of its high correlation with maternal weight-for-height. It is also used as a tool during pregnancy to screen for risk of low birth weight and late fetal and infant mortality. The recommended cut-off points for assessing both of these risks are on the order of 21-23 cm. The mean arm circumference of all SMS respondents was 26.5 cm. Two percent had an arm circumference below 21 cm, while 12 percent were below 23 cm.

Table 7.4. Anthropometric indicators of maternal nutritional status

Mean, standard deviation, and percent distribution for all respondents, for those with a live birth in the last five years, and for those with a live birth in the last three years, by selected anthropometric indicators (height, weight, body mass index (BMI), and mid-upper arm circumference), Philippines, 1993 SMS

Anthropometric indicator	All respondents	Respondents with:	
		Birth in last 5 years	Birth in last 3 years
Height in centimeters			
Mean height	151.6	151.4	151.3
Standard deviation	5.5	5.4	5.5
0-129.9	0.1	0.1	0.1
130.0-134.9	0.1	0.1	0.1
135.0-139.9	1.3	1.4	1.5
140.0-144.9	8.7	9.2	9.4
145.0-149.9	26.8	27.8	28.4
150.0-154.9	37.2	36.7	36.6
155.0-159.9	19.7	19.2	18.5
160.0-164.9	4.9	4.5	4.5
165.0-169.9	1.1	0.9	0.9
170.0-174.9	0.1	0.1	0.1
≥ 175.0	0.0	0.0	0.0
Missing	186	123	90
No. of women	8,293	5,207	4,005
Weight in kg.			
Mean weight	51.2	49.9	49.5
Standard deviation	9.4	8.7	8.6
0-34.9	1.4	1.2	1.3
35.0-39.9	6.9	8.1	8.1
40.0-49.9	40.5	45.9	48.1
50.0-59.9	35.7	33.2	31.9
≥ 60.0	15.5	11.6	10.6
Missing	288	179	138
No. of women	7,284	4,304	3,219
BMI in kg/m²			
Mean BMI	22.2	21.7	21.6
Standard deviation	3.7	3.4	3.3
0-11.9	0.0	0.0	0.0
12.0-15.9 (severe)	1.3	1.0	1.0
16.0-16.9 (moderate)	2.4	2.9	2.7
17.0-18.4 (mild)	9.0	10.1	10.9
18.5-20.4 (normal)	21.3	25.2	26.8
20.5-22.9 (normal)	30.3	31.5	31.3
23.0-24.9 (normal)	16.8	14.6	14.0
25.0-26.9 (overweight)	9.3	8.0	7.3
27.0-28.9 (overweight)	5.0	3.3	3.0
≥ 29.9 (overweight)	4.7	3.3	2.9
Missing	303	188	141
No. of women	7,271	4,296	3,214
Mid-upper arm circumference (cm)			
Mean mid-upper arm circumference	26.5	26.0	25.8
Standard deviation	3.3	3.0	2.9
0-19.9	0.7	0.7	0.7
20.0-20.9	1.7	1.9	2.1
21.0-21.9	3.1	3.9	4.3
22.0-22.9	6.5	7.8	8.3
23.0-23.9	9.5	11.1	12.1
24.0-24.9	12.2	13.8	14.7
25.0-25.9	11.4	12.4	12.5
26.0-26.9	14.0	14.7	14.6
27.0-27.9	9.7	9.0	8.7
28.0-28.9	10.1	8.8	8.1
≥ 29.0	21.1	15.9	14.0
Missing	85	59	45
No. of women	8,399	5,273	4,050

Note: Currently pregnant women are excluded from weight and BMI calculations. Missing cases are not included in percent calculations.

Review of the nutritional status indices of SMS respondents who have had a live birth in the last five years and in the last three years shows little variation (see Table 7.4). However, the means are consistently lower and the percentages below cut-off are consistently greater in the selected group having a birth in the five or three years prior to the survey than among the total sample of respondents.

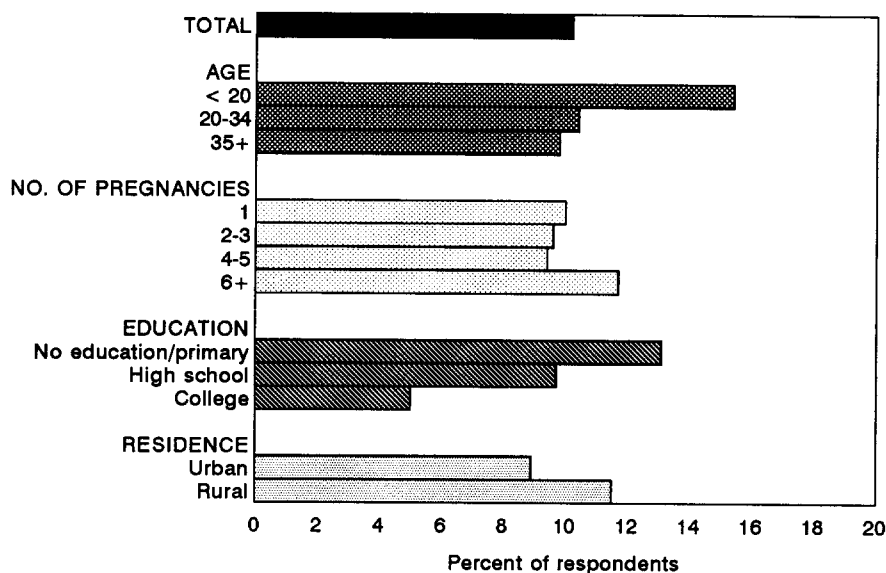
Table 7.5 presents mean height, percent below 145 cm, mean BMI, percent with BMI below 18.5, mean mid-upper arm circumference, and percent with arm circumference less than 23 cm, by background characteristics. Although there is little difference in the means for each indicator, the lowest means are consistently found among the youngest respondents, those with one or more than five pregnancies, those with primary or no education, and those from rural areas (see Figure 7.2). This pattern is more evident for percentages below the cut-offs for each indicator.

Table 7.5 Differentials in maternal anthropometric indicators

Mean height and percentage of respondents shorter than 145 centimeters, mean body mass index (BMI) and percentage of respondents whose BMI is less than 18.5, and mean mid-upper arm circumference and percentage of respondents with arm circumference less than 23 centimeters, by selected background characteristics, Philippines, 1993 SMS

Background characteristic	Height			BMI			Mid-upper arm circumference		
	Mean	Percent < 145	Number	Mean	Percent < 18.5	Number	Mean	Percent < 23.0	Number
Age group									
< 20	150.6	15.4	113	20.5	15.9	89	24.3	23.9	113
20-34	151.6	10.4	4,086	21.7	13.4	3,345	26.1	13.5	4,137
35+	151.6	9.8	4,094	22.6	12.0	3,836	27.0	10.1	4,148
No. of pregnancies									
1	151.7	10.0	966	21.9	13.4	805	26.1	12.9	981
2-3	152.0	9.6	2,798	22.2	11.6	2,448	26.5	11.4	2,834
4-5	151.6	9.4	2,224	22.5	10.7	1,981	26.8	10.1	2,242
6+	151.0	11.7	2,305	22.0	15.6	2,037	26.4	14.1	2,342
Education									
No educ./primary	150.7	13.1	3,655	21.9	15.5	3,174	26.2	14.7	3,700
High school	151.7	9.7	2,908	22.2	11.8	2,542	26.5	11.8	2,944
College	153.2	5.0	1,730	22.8	8.1	1,554	27.2	6.7	1,754
Residence									
Urban	152.1	8.9	4,292	22.6	10.5	3,848	27.0	9.7	4,342
Rural	151.0	11.5	4,001	21.7	15.0	3,422	26.0	14.4	4,057
Region									
Metro. Manila	152.2	8.4	1,210	23.1	8.0	1,106	27.2	8.1	1,219
Cordillera Admin.	150.4	9.6	141	23.0	5.8	122	26.9	8.8	142
Ilocos	151.8	7.4	470	21.6	17.2	416	26.2	14.3	472
Cagayan Valley	151.2	9.7	332	21.2	17.2	299	26.0	13.6	332
C-Luzon	154.1	5.8	905	22.3	11.3	827	27.2	8.4	906
S-Tagalog	151.7	10.4	1,122	22.1	10.5	1,024	26.2	12.4	1,151
Bicol	150.0	17.0	524	21.7	15.3	445	26.2	12.8	533
W-Visayas	151.0	11.8	648	21.3	21.6	573	25.7	19.2	655
C-Visayas	150.8	13.7	654	21.7	17.3	577	26.6	12.1	658
E-Visayas	150.7	14.0	377	22.8	11.3	330	26.4	12.1	379
W-Mindanao	151.4	7.4	454	22.6	8.3	268	26.1	13.9	457
N-Mindanao	150.8	12.5	471	22.6	10.8	414	26.7	11.2	473
S-Mindanao	150.8	11.7	555	22.4	10.4	496	26.6	11.4	586
C-Mindanao	151.6	6.8	430	22.2	13.8	374	26.3	14.3	436
Total	151.6	10.2	8,293	22.2	12.7	7,271	26.5	12.0	8,399

Figure 7.2
Percentage of respondents with height < 145 cm
by selected background characteristics



1993 SMS

Table 7.6 presents the percentage of respondents in each height category by whether or not, for births in the last three years, they had a caesarean section due to obstructed labor, a caesarean section delivery, or labor for more than 12 hours. The percentage below 145 cm for those with prolonged or obstructed labor is only three percentage points higher than the percentage below this cut-off among those without the complication. Similar differences are seen for those with caesarean section due to obstructed labor and for caesarean section in general. These findings indicate that in this sample of respondents, who are for the most part 20 or older, height is not associated with risk of obstructed labor. It is important to note, however, that these findings underrepresent the risk burden in settings where many very young women, that is, under 18 years of age, are giving birth.

7.5 Other Reproductive Morbidities

After being questioned about diagnosed disease, respondents were also asked about symptoms suggestive of the following reproductive morbidities: infertility, uterine prolapse, urinary incontinence, reproductive tract infection, urinary tract infection, dyspareunia, and menstrual disorders. These questions were not asked to determine the prevalence of these morbidities, per se, but rather to indicate what proportion of respondents had symptoms requiring evaluation for care. It is important to note that the figures reported here are likely to underestimate the burden of disease for reasons described above regarding asymptomatic disease.

A respondent had to meet certain criteria in order to be counted as having symptoms of infertility in the SMS. These criteria were as follows: 1) she was not pregnant at the time of interview and had not been pregnant in the past 12 months; 2) she had been trying to get pregnant without success for more than twelve months; 3) she had been living with her husband/partner during most of the time she was trying; and 4) she had not used any kind of contraception during that time.

Table 7.6 Caesarean section and prolonged labor according to height

Percent distribution of respondents by whether or not they reported symptoms of caesaeen section due to obstructed labor in the last three years, and whether they had labor for more than 12 hours in the last three years, according to height, Philippines, 1993 SMS

Symptom	Height				Total percent	No. of respondents
	< 145 cm	145-159.9 cm	160 + cm	Missing		
Caesarean section due to obstructed labor in last three years						
Yes	13.5	80.2	5.5	0.8	100.0	105
No	10.8	81.4	5.4	2.3	100.0	3,741
Caesarean section in last three years						
Yes	13.1	79.5	5.9	1.6	100.0	201
No	10.8	81.5	5.3	2.3	100.0	3,645
Labor for > 12 hours in last three years						
Yes	13.6	77.6	6.1	3.0	100.0	315
No	10.6	81.7	5.5	2.2	100.0	3,531

For the chronic conditions of uterine prolapse and urinary incontinence, respondents were asked about their current status. Respondents considered symptomatic of uterine prolapse were those who said they had a feeling that their womb was coming out or slipping. The symptom considered suggestive of urinary incontinence was if a woman was having a problem controlling her urine.

Symptoms of the more acute problems of reproductive and urinary tract infections were asked about in reference to the last three months prior to the survey. The main symptom asked about for reproductive tract infections was the presence of an abnormal vaginal discharge. For respondents reporting a discharge, further questions were asked to determine whether or not they had localized itching, irritation, or bad odor, and whether they had severe lower abdominal pain or fever with the discharge. Symptoms considered indicative of a urinary tract infection included pain or burning while urinating, or more frequent or difficult urination.

Diagnosis of dyspareunia, or painful intercourse, is dependent on the woman's report. For this condition, respondents were asked if they often feel pain in their abdomen or vagina during intercourse. A general question was also asked to suggest women who might be suffering from menstrual disorders. This question, focused on the respondent's last period, asked about problems with severe pain, and changes in the duration, amount, or onset of bleeding.

Table 7.7 shows that the most prevalent of these reproductive disorders, as suggested by the symptoms reported by the respondents, is uterine prolapse, with 14 percent of women reporting symptoms. This is followed by urinary incontinence and menstrual disorder, with about six percent each. Five percent each of women reported symptoms of urinary tract infection and dyspareunia, and two percent each have symptoms of abnormal vaginal discharge and infertility. Eight percent of the women reported symptoms of more than one morbidity.

Table 7.7 Symptoms of reproductive health problems

Percentage of respondents reporting symptoms of infertility, uterine prolapse, urinary incontinence, vaginal discharge, urinary tract infection, dyspareunia, menstrual disorders, by background characteristics, Philippines, 1993 SMS

Background characteristic	Infertility		Uterine prolapse	Urinary incontinence	Vaginal discharge	Urinary infection	Dyspareunia	Menstrual disorders	Any symptom	> 1 symptom	Number of respondents
	Percent with symptom	Number									
Age group											
< 20	(0.0)	41	11.5	2.3	1.4	3.9	8.2	5.3	24.4	6.2	113
20-34	1.5	2,440	13.9	5.8	2.0	4.8	5.4	5.3	26.1	8.1	4,177
35+	2.2	3,632	13.2	6.7	2.1	5.5	4.4	5.8	28.2	8.3	4,191
No. of pregnancies											
1	7.1	669	11.5	6.6	1.8	4.3	4.6	5.1	26.7	8.8	988
2-3	2.0	2,039	11.9	5.2	1.9	4.1	4.5	4.5	24.3	6.4	2,858
4-5	0.9	1,684	13.3	6.3	2.1	5.4	5.1	6.0	27.5	8.1	2,263
6+	0.7	1,720	16.5	7.2	2.2	6.6	5.6	6.5	30.4	10.1	2,372
Education											
No educ./primary	1.9	2,688	15.5	5.8	2.1	5.9	5.0	6.1	28.4	8.9	3,739
High school/vo-tech	1.8	2,071	12.7	6.7	1.9	4.8	5.4	5.2	26.9	8.1	2,968
College	2.0	1,353	10.7	6.3	2.0	4.2	4.3	4.8	24.9	6.9	1,772
Residence											
Urban	1.9	3,293	11.5	7.1	2.2	4.6	4.4	4.8	25.2	7.7	4,383
Rural	1.9	2,819	15.7	5.2	1.8	5.8	5.6	6.3	29.2	8.7	4,098
Region											
Metro. Manila	1.6	940	6.6	11.3	2.2	4.4	4.1	3.0	22.7	6.8	1,232
Cordillera Admin.	0.6	97	15.4	6.2	2.9	14.3	9.2	8.8	40.8	10.7	147
Ilocos	2.7	341	15.5	4.5	3.3	7.5	5.7	6.3	31.0	9.8	484
Cagayan Valley	1.5	244	17.6	1.9	2.4	6.9	3.6	9.7	30.0	9.0	333
C-Luzon	1.7	698	7.9	5.6	1.4	3.9	3.6	2.6	18.7	5.2	914
S-Tagalog	2.5	848	7.4	6.4	2.1	2.8	2.7	2.3	19.3	5.2	1,157
Bicol	0.9	336	10.3	7.9	0.4	4.7	7.9	3.9	24.3	8.1	535
W-Visayas	3.1	476	16.0	3.4	2.5	4.6	9.3	7.6	30.7	9.6	655
C-Visayas	2.8	473	15.5	5.5	2.4	5.1	4.4	10.9	33.2	9.2	659
E-Visayas	1.0	261	23.4	4.8	2.7	11.8	6.1	6.8	36.7	14.1	382
W-Mindanao	0.0	309	17.1	5.9	0.9	5.4	1.2	5.2	25.8	7.5	457
N-Mindanao	1.4	334	24.2	3.9	2.4	4.5	3.2	11.9	38.5	10.4	473
S-Mindanao	2.2	455	21.6	6.9	2.1	7.7	7.7	6.3	33.9	12.6	616
C-Mindanao	2.1	300	17.1	3.9	0.9	2.1	6.7	4.0	27.1	6.3	438
Total	1.9	6,112	13.5	6.2	2.0	5.2	5.0	5.5	27.1	8.2	8,481

Note: Women with symptoms of infertility were women who had not been pregnant in the past 12 months and were not currently pregnant, who reported trying to get pregnant without success for 12 months or longer and were living with their husband most of the time and not using contraception.

() Based on 25-49 unweighted cases

Variations in the likelihood of having symptoms of these morbidities by selected characteristics of respondents are very small. Nevertheless, some patterns are evident for a few illnesses. Infertility symptoms are relatively common among respondents with only one pregnancy. Symptoms of uterine prolapse are more frequent among respondents who have at least six pregnancies, have primary or no education, and reside in rural areas.

Symptoms of at least one of the health problems indicated in Table 7.7 were experienced by over a quarter of all women interviewed. A slightly higher percentage of older women, those with high parity, those with primary or no education, and those residing in rural areas experienced symptoms than women in other categories. However, these differences were not great.

Whenever a respondent reported having a symptom of one of these reproductive morbidities, she was asked whether she had seen anyone for advice or treatment. Table 7.8 presents the percentage of respondents

Table 7.8 Percentage of respondents who sought treatment for symptoms of reproductive health problems

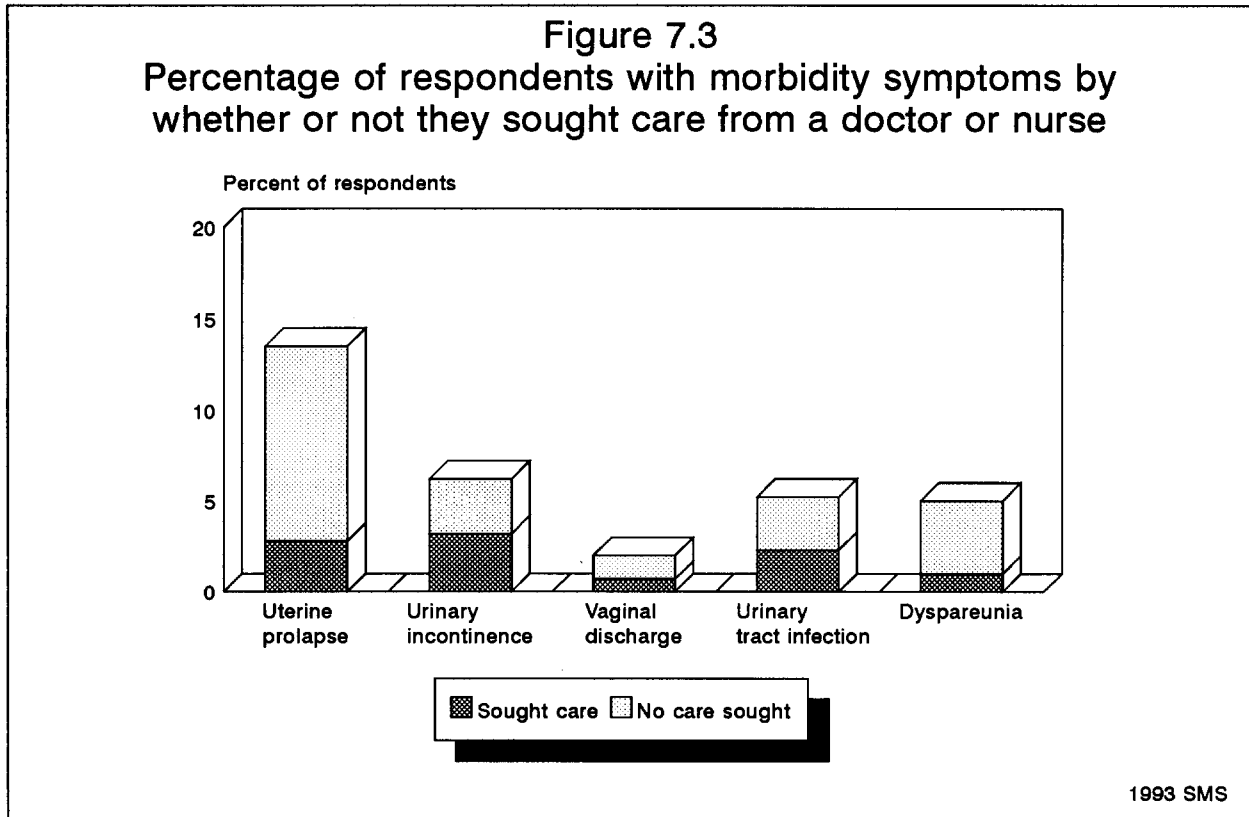
Among respondents with symptoms of infertility, uterine prolapse, urinary incontinence, vaginal discharge, urinary tract infection, dyspareunia, or menstrual disorders, the percentage who sought treatment from a doctor or nurse for that problem, by background characteristics, Philippines, 1993 SMS

Background characteristic	Sought treatment for symptoms of:						
	Infertility	Uterine prolapse	Urinary incontinence	Vaginal discharge	Urinary infection	Dyspareunia	Menstrual disorders
Age group							
< 20	*	11.7	45.8	0.0	34.6	0.0	0.0
20-34	40.7	15.2	51.1	31.8	48.1	18.2	14.6
35+	35.5	26.3	52.9	39.1	40.6	21.2	20.7
No. of pregnancies							
1	38.6	18.7	53.1	41.7	53.2	16.5	24.0
2-3	47.8	20.2	59.6	39.8	48.8	19.9	21.7
4-5	16.4	23.5	52.9	31.8	44.0	20.3	16.3
6+	21.6	19.0	44.2	31.5	38.0	18.4	13.2
Education							
No educ./primary	23.0	14.5	36.7	21.5	31.7	12.2	11.3
High school/vo-tech	42.5	24.3	59.2	46.3	49.5	25.2	20.0
College	55.7	31.3	68.6	47.9	70.6	23.2	30.3
Residence							
Urban	47.0	29.1	60.6	46.4	50.3	21.5	22.3
Rural	26.1	13.8	39.5	20.1	38.6	17.2	13.8
Region							
Metro. Manila	80.0	56.6	72.5	61.1	65.7	27.3	41.7
Cordillera Admin.	0.0	21.4	17.6	25.0	71.8	32.0	25.0
Ilocos	27.3	20.2	42.3	15.8	32.6	15.2	16.7
Cagayan Valley	60.0	20.7	22.2	63.6	53.1	17.6	20.0
C-Luzon	20.0	42.6	58.1	27.3	46.7	10.7	20.0
S-Tagalog	33.3	23.0	45.3	58.8	39.1	22.7	10.5
Bicol	0.0	9.1	54.8	0.0	28.0	7.1	14.3
W-Visayas	46.7	31.8	60.9	29.4	41.9	22.6	27.5
C-Visayas	28.6	15.6	30.8	29.4	47.2	22.6	10.4
E-Visayas	66.7	8.7	28.6	0.0	25.0	7.4	23.3
W-Mindanao	*	4.1	26.5	20.0	22.6	14.3	23.3
N-Mindanao	16.7	12.1	45.8	33.3	42.9	30.0	5.5
S-Mindanao	36.4	13.2	50.0	14.3	49.0	15.7	7.1
C-Mindanao	0.0	13.4	40.9	20.0	50.0	26.3	17.4
Total	37.2	20.5	52.0	35.2	44.0	19.2	17.6

Note: Women with symptoms of infertility were women who had not been pregnant in the past 12 months and were not currently pregnant, who reported trying to get pregnant without success for 12 months or longer and were living with their husband most of the time and not using contraception.

* Fewer than 25 unweighted cases

who reported seeking advice or treatment from a doctor or nurse, by morbidity and background characteristics. The data show that among those with symptoms, over a third of the respondents sought treatment from a doctor, nurse or midwife for infertility symptoms, half (52 percent) for symptoms of incontinence, and 44 percent for symptoms of urinary tract infection. About one in five respondents sought care for uterine prolapse (21 percent), dyspareunia (19 percent) and menstrual disorders (18 percent) (see Figure 7.3).



Apart from infertility and urinary tract infection, the percentage of respondents who sought care for symptoms of the various morbidities increases with age. The percentage also increases with education for all the morbidities, with the percentage among the college educated more than twice that for women with primary or no education. Generally, rural women and those with more than six pregnancies are less likely to seek care.

7.6 Type of Provider Sought

Table 7.9 shows the providers sought for treatment of symptoms of reproductive health problems. Multiple responses for type of provider were allowed. The main problems prompting help from traditional healers were symptoms of infertility and uterine prolapse. Over 40 percent of respondents consulted a doctor, nurse, or midwife for symptoms of infertility, urinary incontinence, vaginal discharge, and urinary tract infection. More women went to traditional healers (41 percent) for symptoms of uterine prolapse than to a doctor, nurse, or midwife (26 percent). One in five of those with dyspareunia and menstrual disorders sought care from medical personnel. Some respondents sought treatment or advice from relatives or used self-treatment; these ranged from 10 percent for dyspareunia to 18 percent for urinary tract infection. A sizeable proportion (29 to 62 percent) did not seek help. Respondents with dyspareunia or menstrual disorders were three times more likely to not seek treatment than to seek care from a doctor, nurse or midwife.

Table 7.9 Providers sought for treatment of symptoms of reproductive health problems

Among respondents with symptoms of infertility, uterine prolapse, urinary incontinence, vaginal discharge, urinary tract infection, dyspareunia, or menstrual disorders, the percentage who sought care from specific providers, by symptoms of reproductive health problems, Philippines, 1993 SMS

Symptom	Provider			No treatment	Number of respondents
	Doctor, nurse, midwife	Chemist, herbalist, hilot, shaman, healer	Relative, self-treatment, others		
Infertility	42.0	36.7	3.4	32.0	116
Uterine prolapse	26.2	40.5	12.7	29.4	1,147
Urinary incontinence	54.8	8.2	11.2	30.5	527
Vaginal discharge	41.1	8.4	15.1	40.8	170
Urinary tract infect	46.0	8.4	18.2	31.7	439
Dyspareunia	21.9	7.6	10.4	62.4	421
Menstrual disorders	22.0	6.7	14.4	59.7	468

7.7 Reasons for Not Seeking Care

Respondents with symptoms who did not see anyone for advice or treatment were asked why they did not seek care (see Table 7.10). With the exception of those with symptoms of infertility and menstrual disorders, three in five respondents did not seek treatment because they did not think the problem was serious enough. About a quarter to a third of the respondents expressed resource-related reasons such as cost, transportation, and time. Except for infertility, where one-third of respondents believed that seeking care would not help with their problem, less than seven percent with symptoms of other ailments gave this reason for not seeking care.

Table 7.10 Reasons for not seeking care for symptoms of reproductive health problems

Among respondents with symptoms of infertility, uterine prolapse, urinary incontinence, vaginal discharge, urinary tract infection, dyspareunia, or menstrual disorders who did not seek care, the percentage reporting reasons for not seeking care, by symptoms of reproductive health problems, Philippines, 1993 SMS

Symptom	Reason for not seeking care				Number of respondents
	Did not think it would help	Cost, no transportation, no time	Not serious enough	Embarrassed, afraid	
Infertility	(33.0)	(27.8)	(35.3)	(20.2)	37
Uterine prolapse	5.6	34.2	62.7	10.7	338
Urinary incontinence	4.2	31.0	59.3	15.1	161
Vaginal discharge	3.5	33.2	59.9	22.3	69
Urinary tract infect	6.8	37.8	59.2	9.1	139
Dyspareunia	4.1	23.6	59.5	24.2	263
Menstrual disorders	6.4	23.1	42.2	44.6	280

() Based on 25-49 unweighted cases

7.8 Sexual Activity

In order to estimate the prevalence of sexual behavior placing women at high risk of sexually transmitted diseases (STDs), SMS respondents were asked about their lifetime number of sexual partners, and, for those in union, their perceptions of their partner's sexual behavior. Respondents were also asked about recent use of a condom, and for those reporting recent condom use, whether condoms were used to prevent pregnancy and/or sexually transmitted diseases.

Less than one percent of SMS respondents reported having three or more sex partners in their life and the vast majority (93 percent) reported a single lifetime partner (see Table 7.11). It is important to remember, however, that SMS respondents are ever-pregnant women (primarily married), and, therefore, do not represent all women of childbearing age.

Among currently married or in-union women, only nine percent reported that they believed their husband/partner had had sex with other women and six percent believed their husband/partner had paid to have sex with women (see Table 7.12). One-quarter of women reported that they believed their husband/partner had previous partners before them. Extramarital partners, sex prior to the current union, and commercial sex among the husbands of in-union SMS respondents were all more common in urban than in rural areas.

Current use of condoms among SMS respondents is very low (see Table 7.13). Less than three percent of SMS respondents used a condom during their most recent sexual intercourse. This mirrors findings from the NDS indicating that only one percent of respondents were currently using the condom. Among the few SMS respondents reporting condom use at last sexual intercourse, over 90 percent claimed use as a means of pregnancy prevention; fewer than one in five claimed condom use for purposes of STD prevention. Motivation for condom use varies little by background characteristics except for women less than 20 years old. In this age group, all women reported condom use as a means of pregnancy prevention; only 61 percent reported using a condom for prevention of STDs.

7.9 Induced Abortion

Complications of induced abortion are a well-known cause of maternal mortality and morbidity. At the same time, it is often in settings where access to safe abortion is most lacking that the toll on women's lives is most difficult to document (Coeytaux et al., 1989; Barreto et al., 1992). Because induced abortion is both socially and legally unacceptable in the Philippines, it is expected that such information would be hard to obtain in this setting.

Clearly, collection of data on induced abortion and resulting complications is problematic. If no attempt is made to gather information, the problem remains invisible. If, on the other hand, data are collected and events are not reported, the problem must be recognized but the magnitude remains unknown. Prior to the SMS, qualitative work was conducted to aid in the development of questions on induced abortion (see Chapter 2). This led to two less direct lines of questioning on what women did to bring on a delayed period and on what women did in response to an unwanted pregnancy. In spite of these various efforts, the results of the SMS are still considered to be a serious underestimate of the true magnitude of the problem of unsafe abortion. These findings demonstrate the need to further explore methods of collecting data on unsafe abortion in settings where the issue is a highly sensitive one.

The SMS questionnaire experimented with four different approaches to the collection of information on induced abortion. The first approach was included in the pregnancy history table of the questionnaire and involved asking respondents reporting any pregnancy that terminated at zero to six months gestation if she

Table 7.11 High-risk sexual activity: number of sex partners

Percent distribution of respondents by the number of partners they have had in the preceding year, and by the number of partners they have had in their whole lifetime, according to background characteristics, Philippines, 1993 SMS

Background characteristic	Number of sex partners in preceding year					Number of sex partners in lifetime					No. of respondents
	0	1	2	Missing	Total percent	1	2	3 +	Missing	Total percent	
Age group											
< 20	3.1	96.9	0.0	0.0	100.0	98.6	0.0	1.4	0.0	100.0	113
20-34	3.0	96.8	0.1	0.1	100.0	94.7	4.7	0.5	0.1	100.0	4,177
35+	6.0	93.7	0.3	0.0	100.0	91.5	7.7	0.7	0.0	100.0	4,191
No. of pregnancies											
1	11.6	88.3	0.0	0.1	100.0	95.7	3.4	0.6	0.2	100.0	988
2-3	3.4	96.3	0.2	0.1	100.0	94.1	5.2	0.5	0.1	100.0	2,858
4-5	3.4	96.4	0.1	0.0	100.0	93.3	6.1	0.6	0.1	100.0	2,263
6+	3.8	95.9	0.3	0.0	100.0	90.8	8.4	0.8	0.0	100.0	2,372
Education											
No educ./primary	4.5	95.2	0.3	0.0	100.0	90.7	8.5	0.7	0.1	100.0	3,739
High school/vo-tech	3.7	96.1	0.1	0.1	100.0	94.0	5.2	0.7	0.1	100.0	2,968
College	5.7	94.1	0.1	0.1	100.0	96.8	2.8	0.4	0.1	100.0	1,772
Residence											
Urban	4.5	95.3	0.1	0.1	100.0	93.4	5.7	0.8	0.1	100.0	4,383
Rural	4.5	95.2	0.2	0.1	100.0	92.9	6.6	0.5	0.1	100.0	4,098
Region											
Metro. Manila	4.2	95.5	0.1	0.1	100.0	93.6	5.2	1.0	0.1	100.0	1,232
Cordillera Admin.	5.5	94.1	0.4	0.0	100.0	94.9	4.0	1.1	0.0	100.0	147
Ilocos	6.6	93.4	0.0	0.0	100.0	94.9	4.7	0.3	0.0	100.0	484
Cagayan Valley	3.0	96.8	0.0	0.2	100.0	95.5	3.9	0.4	0.2	100.0	333
C-Luzon	5.7	94.2	0.1	0.0	100.0	94.3	5.1	0.5	0.1	100.0	914
S-Tagalog	4.0	95.9	0.1	0.0	100.0	93.2	6.2	0.6	0.0	100.0	1,157
Bicol	3.7	94.6	1.7	0.0	100.0	95.1	4.5	0.4	0.0	100.0	535
W-Visayas	4.5	95.5	0.0	0.0	100.0	94.0	6.0	0.0	0.0	100.0	655
C-Visayas	3.5	96.3	0.1	0.0	100.0	91.3	7.5	1.1	0.0	100.0	659
E-Visayas	4.1	95.9	0.0	0.0	100.0	90.2	9.1	0.7	0.0	100.0	382
W-Mindanao	5.6	94.3	0.0	0.2	100.0	90.8	8.5	0.5	0.2	100.0	457
N-Mindanao	4.9	94.6	0.2	0.3	100.0	90.3	8.3	1.0	0.5	100.0	473
S-Mindanao	4.4	95.5	0.2	0.0	100.0	91.9	7.4	0.8	0.0	100.0	616
C-Mindanao	3.2	96.8	0.0	0.0	100.0	93.8	5.6	0.4	0.2	100.0	438
Total	4.5	95.3	0.2	0.1	100.0	93.2	6.1	0.6	0.1	100.0	8,481

Table 7.12 High-risk sexual activity: respondent's perceptions of partner's sexual practices

Among respondents currently married or having a sex partner, the percentage reporting that their partner had sex with others while being their partner, before becoming their partner, and whether partner paid for sex from others, according to background characteristics, Philippines, 1993 SMS

Background characteristic	Respondent's perception of partner's sexual practices						No. of respondents married or having a sex partner
	Has your partner had sex with others while being your partner?		Did your partner have sex with others before being your partner?		Does your partner ever pay other women to have sex with him?		
	Yes	Don't know	Yes	Don't know	Yes	Don't know	
Age group							
< 20	7.9	10.1	22.1	20.7	2.7	15.9	105
20-34	6.7	9.2	25.4	17.5	4.3	16.0	4,008
35+	12.1	11.3	27.0	20.4	7.0	17.1	3,873
No. of pregnancies							
1	5.5	8.8	27.7	17.6	3.2	14.0	832
2-3	6.9	10.9	25.4	18.3	4.7	16.3	2,724
4-5	10.7	10.5	26.3	19.1	7.3	16.6	2,174
6+	12.2	9.6	26.3	20.3	6.0	17.6	2,256
Education							
No educ./primary	9.6	10.0	24.8	19.7	5.6	17.4	3,498
High school/vo-tech	9.6	9.7	26.7	17.9	5.7	16.2	2,833
College	8.3	11.6	28.3	19.3	5.3	15.0	1,652
Residence							
Urban	11.4	10.8	29.2	18.0	7.1	16.0	4,116
Rural	7.1	9.6	22.9	20.0	4.0	17.0	3,870
Region							
Metro. Manila	11.5	8.9	31.0	14.8	7.3	15.0	1,138
Cordillera Admin.	7.1	8.7	25.0	20.6	2.0	13.1	137
Ilocos	9.4	9.6	19.3	15.3	6.3	7.4	458
Cagayan Valley	5.6	10.7	18.7	21.3	4.4	13.1	322
C-Luzon	9.7	16.5	22.0	23.0	8.0	18.0	858
S-Tagalog	9.7	17.6	23.2	23.9	6.5	21.1	1,102
Bicol	10.2	7.4	30.2	21.2	6.0	25.8	501
W-Visayas	7.7	8.8	26.5	14.2	5.7	10.4	623
C-Visayas	11.8	9.2	35.3	20.4	5.6	16.2	619
E-Visayas	5.8	2.4	33.7	7.7	5.3	8.2	359
W-Mindanao	5.2	10.1	13.6	18.4	0.9	18.1	427
N-Mindanao	7.4	7.9	32.1	18.3	4.0	21.6	445
S-Mindanao	13.5	6.0	34.2	24.2	4.9	22.3	582
C-Mindanao	6.3	4.5	13.0	17.1	2.2	9.6	416
Total	9.3	10.2	26.2	19.0	5.6	16.5	7,986

Table 7.13 Condom use

Percentage of respondents reporting condom use during last sex and the percentage using the condom to prevent pregnancy and/or to prevent STDs, by background characteristics, Philippines, 1993 SMS

Background characteristic	Percent using condom	Number of respondents	Condom used to prevent pregnancy	Condom used to prevent STDs
Age group				
< 20	2.2	113	100.0	61.0
20-34	3.0	4,177	93.7	17.0
35+	2.1	4,191	91.7	14.3
No. of pregnancies				
1	1.9	988	91.6	21.1
2-3	2.9	2,858	91.3	20.1
4-5	2.5	2,263	98.7	17.1
6+	2.6	2,372	90.2	9.6
Education				
No educ./primary	1.4	3,739	91.2	15.5
High school/vo-tech	3.0	2,968	94.5	13.5
College	4.5	1,772	92.4	20.3
Residence				
Urban	3.4	4,383	92.4	17.5
Rural	1.7	4,098	94.1	14.4
Region				
Metro. Manila	3.9	1,232	93.5	19.4
Cordillera Admin.	8.1	147	100.0	4.5
Ilocos	2.4	484	92.9	7.1
Cagayan Valley	1.1	333	80.0	0.0
C-Luzon	1.7	914	76.9	15.4
S-Tagalog	1.3	1,157	81.8	9.1
Bicol	2.2	535	100.0	16.7
W-Visayas	2.7	655	100.0	33.3
C-Visayas	4.5	659	90.6	31.3
E-Visayas	1.6	382	100.0	14.3
W-Mindanao	0.7	457	100.0	50.0
N-Mindanao	5.4	473	93.9	0.0
S-Mindanao	2.9	616	100.0	10.5
C-Mindanao	0.2	438	100.0	0.0
Total	2.6	8,481	93.0	16.5

or anyone else did anything to end the pregnancy. If something specific was done by the respondent or another person, the pregnancy was coded as an induced abortion. If nothing was done, the pregnancy was coded as a spontaneous abortion or, a miscarriage.

The second approach, aimed at identifying women who may have suffered complications from an unsafe abortion, was included in section three of the questionnaire. In this section, respondents reporting an early loss in the last three years in the pregnancy history were asked about hospitalization at the time of their loss. For each pregnancy in the last three years, respondents were also asked whether they had wanted to be pregnant then, later, or not at all.

The third and fourth approaches to collecting information on abortions were asked in section five of the questionnaire. Results from qualitative research preceding this survey indicated that women may not consider efforts to "bring on a delayed period" as an abortion because an early pregnancy is considered as "just blood" (Jacobson, 1993). In light of these findings, questions were asked first about efforts to bring on a delayed period, that is, methods used and problems, if any, experienced. Following these less direct questions, women were asked about whether they had ever had an unwanted pregnancy, and if so, what action was taken at that time.

Results from the survey are presented according to the set of questions from which the data were drawn. All findings are discussed in the text, that is, the data are not shown in tabular form.

7.10 Results from the Pregnancy History

In the pregnancy history, more than one-quarter of the SMS respondents reported having had an early pregnancy loss. Seven percent of the early pregnancy losses were reported as induced abortions. Given the reticence of women to report induced abortions, particularly in settings in which induced abortion is illegal, it is not possible to infer the degree of underreporting of induced abortion in the SMS, nor the degree to which respondents may have reported an induced abortion as a miscarriage. Of all pregnancies, 0.5 percent were reported as induced abortions.

Reporting of induced abortion appears to increase with both age and number of pregnancies. Ignoring the possibility of selective underreporting, these data suggest that induced abortion is used more as a means of avoiding unwanted higher birth order children than it is to avoid or postpone a first birth. For example, nearly one in ten (9 percent) early pregnancy losses among women with four or more pregnancies were reported as induced abortions compared with one in 100 (1 percent) among women with one pregnancy. (Seven percent were reported by women with two or three pregnancies.) Higher education is also associated with increased reporting of induced abortion. It is unclear, if these findings reflect true differences in behavior or differential reporting among women. There is substantial variation in the reported induced abortion by region, ranging from two percent of pregnancy losses in Western Visayas and Central Mindanao, to 14 and 16 percent in Cagayan Valley and Ilocos, respectively. The proportion of early losses reported as induced abortion in Metropolitan Manila is in the middle range at nine percent.

The results from Manila are in contrast to another survey conducted in Metropolitan Manila in 1994, which found a reported prevalence of 17 percent for ever having had an induced abortion (Cabigon, 1994).

7.11 Results on Hospitalization after an Early Loss

Among those with an early loss in the last three years, 29 percent had to be hospitalized. There was no difference in the duration of the hospital stay by pregnancy desire, however, 79 percent of those reporting hospitalization for an induced abortion stayed for four or more days, compared with only 18 percent of those with spontaneous losses.

7.12 Results from Later Section of Questionnaire

Brought on Delayed Period

Only seven percent of the respondents reported they had ever done something to bring on their period. The percentage is slightly higher among women with six or more pregnancies and among those with low education. As to the method used, close to two in three women reported taking a bitter drink or tablet to bring on their period, and the percentage using this method varies little by education or type of residence. Higher parity women are more likely to use this method. The bitter drinks contain different types of roots and herbs of unknown effectiveness; they are frequently seen for sale in local markets and gathering places.

Nine percent of the respondents reported having hard abdominal massage to bring on their period. The percentage who used hard massage is higher among women of higher parity (12 percent), those with low education, and those residing in rural areas. Eight percent did some strenuous work or scrubbed floors; this method is more commonly tried by women without college education. Six percent prayed. Relatively higher percentages of women with four to five pregnancies and those with low education prayed to bring on their period. Of note is the finding that only three respondents reported using a catheter or object in the womb to bring on their period, and none reported the use of more effective methods such as suction or curettage.

Unwanted Pregnancy

Following the questions on bringing on a late period, respondents were asked more directly whether they had ever been pregnant when they did not want to be. Those responding positively were then asked what they did. Multiple responses were accepted for this question. Respondents who attempted abortion were asked about methods used and providers seen. In addition, women were asked whether they experienced subsequent health problems.

A quarter (24 percent) of all respondents reported having had an unwanted pregnancy. This percentage was highest among respondents aged 20-34, those with at least six pregnancies, and those with more than three surviving children. There is little difference in responses by education and urban/rural residence. However, unwanted pregnancy is less likely to occur among women in Metropolitan Manila and Central Luzon.

Among the quarter reporting an unwanted pregnancy, eight in ten (81 percent) respondents reported they continued the pregnancy or did nothing. Five percent reported that they aborted the pregnancy, 14 percent tried to abort but failed, and 4 percent did something to bring on their period. Successful abortion was higher among older women. The percentage who aborted or tried to abort among women with at least six pregnancies is more than twice that among women with only one pregnancy.

Again, bitter drinks or tablets were reported by the highest percentage of respondents (76 percent). However, 22 percent reported hard abdominal massage, and 6 percent reported use of a catheter, suction, or curettage. The numbers of very young and primiparous respondents reporting abortion were too small to

assess differences for these groups. However, respondents 35 and older, those with more education, and those from urbanized regions were more likely to use catheters, or suction, or curettage.

Respondents were also asked who provided the method they used to abort. Eleven percent reported getting help from a doctor, nurse, or midwife. Twenty-two percent went to traditional sources and 73 percent sought help from someone else. Older, higher parity, more educated respondents were more likely to report going to a doctor, nurse, or midwife.

Lastly, respondents reporting abortion were asked whether they subsequently experienced any health problems, such as bleeding or high fever, and whether they had to be hospitalized as a result. Only three percent reported high fever; 10 percent said they had excessive vaginal bleeding. Five percent had to be hospitalized for care.

There is very little data available on abortion in the Philippines with which to compare the SMS data. Seventeen percent of women interviewed in Cavite in 1976 reported having had at least one induced abortion (Flavier and Chen, 1980). This study was a community-based survey in five rural villages in Cavite where the International Institute of Rural Reconstruction (IIRR) had been working and had established rapport with women in the community. The context of this study may explain why women were more willing to discuss their personal experiences openly. These types of differences in the circumstances of data collection clearly have an important impact on study results. Even after taking into consideration changes over time and regional differences, the results of the Cavite study are in sharp contrast to the one percent of abortions detected in the SMS.