

The health care that a mother receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and her child. This chapter presents findings on several areas of importance to maternal health: antenatal, delivery, and postnatal care, and problems in accessing health care. These findings are important to policymakers and programme implementers in formulating programmes and policies, and in designing appropriate strategies and interventions to improve maternal and child health care services.

Information on antenatal care (ANC) is of great value in identifying subgroups of women who do not utilise such services and is useful in planning improvements in the services. The data on ANC from the 2005-06 ZDHS provide details on the type of service provider, the number of ANC visits made, the stage of pregnancy at the time of the first and last visits, and the services and information provided during ANC including whether tetanus toxoid was received.

### 9.1 ANTENATAL CARE

Proper care during pregnancy and delivery is important for the health of both the mother and the baby. Antenatal care from a trained provider is important in order to monitor the pregnancy and reduce the risks for the mother and child during pregnancy and at delivery. In the 2005-06 ZDHS, women who had given birth in the five years preceding the survey were asked a number of questions about maternal care. For the last live birth in that period, the mothers were asked whether they had obtained antenatal care during the pregnancy. For women with two or more live births during the five-year period, data refer to the most recent birth.

Table 9.1 shows the percent distribution of mothers in the five years preceding the survey by source of antenatal care received during pregnancy, according to selected characteristics. Women were asked to report on all providers seen for antenatal care for their last birth. If a woman was seen by more than one provider, the provider with the highest qualification was recorded.

Ninety-four percent of women who gave birth in the five years preceding the survey received antenatal care from a trained health professional (doctor or nurse/midwife) at least once. The majority (84 percent) of women received antenatal care from a nurse or midwife, while 10 percent of women received antenatal care from a doctor. Less than 1 percent of women received antenatal care from a traditional birth attendant (trained or untrained).

The child's birth order is inversely associated with the use of antenatal care. Children of higher birth order are less likely to receive care from a trained professional. Table 9.1 indicates that 96 percent of women with one child received antenatal care from a doctor, nurse, or midwife, while 87 percent of women with six or more children received antenatal care from a trained health professional.

Table 9.1 Antenatal care

Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Zimbabwe 2005-2006

Background characteristic	Doctor	Nurse/ midwife	Trained traditional birth attendant	Untrained traditional birth attendant	Other	No one	Missing	Total	Number of women
<b>Age at birth</b>									
<20	9.2	83.8	0.3	0.3	0.4	5.8	0.2	100.0	766
20-34	10.3	84.6	0.2	0.2	0.1	4.6	0.0	100.0	2,905
35-49	9.5	82.2	0.3	0.2	0.8	6.8	0.2	100.0	428
<b>Birth order</b>									
1	11.8	83.9	0.1	0.3	0.2	3.7	0.1	100.0	1,236
2-3	11.2	84.0	0.2	0.1	0.2	4.3	0.0	100.0	1,764
4-5	5.9	87.5	0.3	0.0	0.1	6.1	0.0	100.0	715
6+	6.8	80.0	0.6	0.6	0.8	11.0	0.2	100.0	384
<b>Residence</b>									
Urban	20.5	75.6	0.1	0.1	0.2	3.4	0.1	100.0	1,284
Rural	5.2	88.2	0.3	0.2	0.2	5.8	0.1	100.0	2,815
<b>Province</b>									
Manicaland	8.3	80.0	0.6	0.8	0.5	9.8	0.0	100.0	497
Mashonaland Central	5.1	89.8	0.0	0.0	0.1	5.0	0.0	100.0	457
Mashonaland East	4.2	92.5	0.2	0.0	0.0	3.1	0.0	100.0	319
Mashonaland West	10.6	83.9	0.0	0.6	0.2	4.4	0.3	100.0	413
Matabeleland North	10.1	82.8	0.3	0.0	0.0	6.9	0.0	100.0	263
Matabeleland South	11.7	83.4	0.0	0.0	0.2	4.3	0.3	100.0	184
Midlands	5.3	88.9	0.0	0.1	0.2	5.6	0.0	100.0	584
Masvingo	2.9	92.8	0.5	0.2	0.2	3.4	0.0	100.0	609
Harare	20.0	76.0	0.0	0.0	0.3	3.5	0.1	100.0	566
Bulawayo	38.6	56.7	0.7	0.0	0.4	3.6	0.0	100.0	207
<b>Education</b>									
No education	6.1	87.9	0.0	0.0	0.0	5.9	0.0	100.0	166
Primary	4.9	86.3	0.5	0.2	0.5	7.6	0.1	100.0	1,443
Secondary	11.7	84.3	0.0	0.2	0.1	3.6	0.1	100.0	2,383
More than secondary	48.2	49.0	1.4	0.0	0.0	1.4	0.0	100.0	106
<b>Wealth quintile</b>									
Lowest	4.5	88.3	0.3	0.5	0.3	6.1	0.0	100.0	934
Second	4.1	88.0	0.3	0.1	0.4	7.1	0.1	100.0	823
Middle	7.1	87.4	0.2	0.1	0.0	5.1	0.0	100.0	714
Fourth	9.3	86.0	0.1	0.2	0.0	4.3	0.1	100.0	901
Highest	27.6	69.5	0.2	0.0	0.4	2.2	0.1	100.0	727
Total	10.0	84.2	0.2	0.2	0.2	5.0	0.1	100.0	4,099

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.

Coverage of antenatal care from a provider who is a doctor, nurse, or midwife is slightly higher in urban areas than in rural areas (96 percent and 93 percent, respectively). Antenatal care coverage is lowest in Manicaland with 88 percent of women receiving ANC from a doctor, nurse, or midwife and 10 percent of women receiving no ANC at all. In all other provinces, ANC from a doctor, nurse, or midwife ranges between 93 and 97 percent of women.

Antenatal care does not vary much by education; however, ANC from a doctor, nurse, or midwife is more common among higher-educated women and is almost universal (at least 96 percent) for women with a secondary or higher education. What is most pronounced is that women with higher than a secondary education are much more likely to have received ANC from a doctor (48 percent), when compared with their counterparts with less education. As observed with higher levels of education, women in the highest wealth quintile (28 percent) are the most likely to have received antenatal care from a doctor.

## 9.2 NUMBER AND TIMING OF ANTENATAL VISITS

Antenatal care is more beneficial in preventing adverse pregnancy outcomes when it is sought early in the pregnancy and is continued through to delivery. Health professionals recommend that the first antenatal visit should occur within the first three months of pregnancy and continue on a monthly basis through the 28th week of pregnancy and every two weeks up to the 36th week (or until birth). Under normal circumstances, WHO recommends that a woman without complications have at least four ANC visits to provide sufficient care.

The ZDHS respondents were asked how many antenatal visits they made during the pregnancy preceding the last live birth in the five years before the survey and how many months pregnant they were at the time of the first visit. Information about this number and timing of visits made by pregnant women is presented in Table 9.2.

In the 2005-06 ZDHS, 94 percent of women who had a live birth in the five years preceding the survey had at least one antenatal care visit. Seventy-one percent of mothers had four or more antenatal care visits and 21 percent of mothers had two to three visits. Women in urban areas were more likely to have four or more visits than women living in rural areas (76 and 69 percent, respectively).

Table 9.2 also shows that 70 percent of women had their first ANC visit before their sixth month of pregnancy. Twenty-two percent had their first visit in the sixth or seventh month of pregnancy, and 3 percent had their first visit at eight months of pregnancy. Five percent of women received no antenatal care at all. The median duration of pregnancy at the first antenatal care visit was five months, which is identical to the timing of the first visit observed in the 1999 ZDHS.

## 9.3 COMPONENTS OF ANTENATAL CARE

Observing the content of antenatal care is essential for assessing the quality of antenatal care services. Pregnancy complications are a primary source of maternal and child morbidity and mortality. Therefore, ensuring that pregnant women receive information on the signs of complications and testing them for complications should be routinely included in all antenatal care visits. To help assess ANC

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Zimbabwe 2005-2006

Number and timing of ANC visits	Residence		Total
	Urban	Rural	
<b>Number of ANC visits</b>			
None	3.4	5.8	5.0
1	1.8	2.2	2.1
2-3	16.9	22.4	20.7
4+	75.8	68.9	71.1
Don't know/missing	2.1	0.7	1.1
Total	100.0	100.0	100.0
<b>Number of months pregnant at time of first ANC visit</b>			
No antenatal care	3.4	5.8	5.0
<4	28.6	26.6	27.2
4-5	40.2	43.7	42.6
6-7	24.3	21.2	22.2
8+	3.0	2.4	2.6
Don't know/missing	0.5	0.2	0.3
Total	100.0	100.0	100.0
Median months pregnant at first visit (for those with ANC)	5.0	4.9	5.0
Number of women	1,284	2,815	4,099

services, respondents were asked about whether they had been advised of complications or received certain screening tests during at least one of the antenatal visits. Table 9.3 presents information on the percentage of women who took iron tablets or syrup, were informed of the signs of pregnancy complications, and received routine selected services during antenatal care visits for their most recent birth in the last five years.

Among women with a live birth in the five years preceding the survey, 43 percent took iron tablets or syrup during their pregnancy. There are few variations by age, birth order, residence, and wealth quintile; however, there are differentials by province and education. Women in Harare were least likely to take iron supplements (29 percent) and women in Masvingo were the most likely to take iron tablets (56 percent). Women with more than a secondary education were most likely to take iron supplements during pregnancy (54 percent).

Half of the women who received antenatal care were informed of the signs of pregnancy complications. Women over the age of 20 are more likely to receive information on pregnancy complications than younger women. Birth order is not strongly associated with receiving information on signs of pregnancy complications. However, women in urban areas were more likely to receive information than those in the rural areas (65 percent compared with 43 percent). More than half of women in Harare, Midlands, and Bulawayo were informed of pregnancy complications (68, 59, and 57 percent, respectively), contrasted to only one in four women who live in Matabeleland North and Matabeleland South (22 and 26 percent, respectively). Around half of the women in the remaining provinces were informed of pregnancy complications, with the exception of Masvingo (41 percent).

Education and wealth quintile have a marked positive association with receiving information of the signs of pregnancy complications. More than 6 in 10 women with higher than a secondary education or who are in the highest wealth quintile were informed of pregnancy complications, contrasted to about 4 in 10 women with no education or a primary education and who are in the second and lowest wealth quintiles.

Table 9.3 also indicates that 95 percent of women who received antenatal care for their most recent birth were weighed and 93 percent had their blood pressure measured. Few variations are observed among the background characteristics. With the exception of women who live in Masvingo and women in the lowest wealth quintile, more than nine in ten women among all background characteristics were weighed and had their blood pressure measured.

A urine sample was taken for 69 percent of women who received antenatal care, and 68 percent of women had a blood sample taken. The 2005-06 ZDHS indicates that there are greater differentials by background characteristics than what was observed in the 1999 ZDHS. Women residing in rural areas were less likely to have a urine sample taken (60 percent) than women in urban areas (86 percent). The same pattern by residence is also observed with respect to whether blood samples were taken (58 percent for rural women and 89 percent for urban women). Women who never attended school (49 percent) and women in the lowest wealth quintile (51 percent) are almost half as likely to have had a urine sample taken as women with more than a secondary education (90 percent) and those in the highest wealth quintile (91 percent). Likewise, a similar trend is observed with regards to whether a blood sample was taken. Fifty percent of women with no education had a blood sample taken, compared with 88 percent of women with more than secondary education. Fifty percent of women in the lowest wealth quintile had a blood sample taken, compared with 91 percent of women in the highest wealth quintile.

Table 9.3 Components of antenatal care

Among women with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Zimbabwe 2005-2006

Background characteristic	Among women with a live birth in the last five years, the percentage who during the pregnancy of their last birth:		Among women who received antenatal care for their most recent birth in the past five years, the percentage with selected services:					
	Took iron tablets or syrup	Number of women	Informed of signs of pregnancy complications	Weighed	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women
<b>Age at birth</b>								
<20	43.0	766	43.6	89.5	88.8	59.0	64.7	720
20-34	42.7	2,905	50.2	96.2	94.3	70.8	68.5	2,772
35-49	44.2	428	56.1	94.6	87.5	71.0	69.3	398
<b>Birth order</b>								
1	44.7	1,236	47.6	92.6	92.8	67.1	71.4	1,189
2-3	42.0	1,764	50.6	95.6	92.6	68.6	67.4	1,688
4-5	43.2	715	50.0	97.3	96.0	72.2	65.6	671
6+	40.5	384	50.7	93.4	85.0	66.9	62.2	341
<b>Residence</b>								
Urban	41.4	1,284	64.6	97.9	97.8	86.1	89.2	1,240
Rural	43.6	2,815	42.5	93.4	90.1	60.4	57.8	2,650
<b>Province</b>								
Manicaland	39.2	497	47.9	96.3	93.0	64.7	61.5	448
Mashonaland Central	40.1	457	46.8	95.8	92.3	59.9	56.4	434
Mashonaland East	31.5	319	49.7	97.4	94.0	64.1	55.1	309
Mashonaland West	44.0	413	51.5	92.9	94.0	69.2	74.5	394
Matabeleland North	51.0	263	21.8	95.4	91.2	74.7	67.9	245
Matabeleland South	53.4	184	25.9	97.8	92.5	76.7	79.1	176
Midlands	43.0	584	59.0	95.2	93.6	66.6	59.2	552
Masvingo	56.0	609	41.4	87.4	84.4	51.2	57.8	588
Harare	28.5	566	68.4	97.6	96.4	87.4	90.0	545
Bulawayo	54.5	207	57.1	98.7	99.5	92.8	96.4	200
<b>Education</b>								
No education	47.1	166	39.8	91.6	75.2	48.8	49.8	156
Primary	41.8	1,443	40.5	91.4	88.6	59.0	59.0	1,333
Secondary	42.8	2,383	54.8	96.8	95.7	74.6	73.3	2,296
More than secondary	54.1	106	64.9	98.2	99.2	89.7	87.7	105
<b>Wealth quintile</b>								
Lowest	45.6	934	32.9	88.4	84.9	51.4	49.9	877
Second	42.8	823	42.8	96.5	92.0	61.2	57.4	764
Middle	40.0	714	49.2	95.3	92.4	65.3	61.8	677
Fourth	42.0	901	57.4	96.8	96.5	77.3	80.9	861
Highest	43.5	727	68.4	98.0	98.1	90.5	91.2	710
Total	42.9	4,099	49.6	94.8	92.6	68.6	67.8	3,890

## 9.4 TETANUS TOXOID

Tetanus toxoid (TT) injections are given during pregnancy to prevent neonatal tetanus, a major cause of early infant death in many developing countries that is often due to poor observance of hygienic procedures during delivery. For full protection, a pregnant woman should receive at least two doses during each pregnancy. If a woman has been vaccinated during a previous pregnancy, however, she may only require one dose for the current pregnancy. Five doses are considered to provide lifetime protection. Table 9.4 presents the percent distribution of women who had a live birth in the five years preceding the survey by whether the last birth was protected against neonatal tetanus.

Fifty-eight percent of women had the number of tetanus toxoid injections needed to ensure that their last-born child was protected against neonatal tetanus. Most of these women (55 percent) received two or more tetanus toxoid injections while pregnant with the last birth. The remaining 3 percent of women either had one TT injection during last pregnancy plus one additional TT injection in the 10 years prior to the last pregnancy, or they did not have a TT injection during the last pregnancy but had at least five lifetime TT injections. Births to women who are first-time mothers, those who reside in urban areas, and women who have a secondary education are slightly more protected than women with more children, those residing in rural areas, and mothers with less education.

## 9.5 PLACE OF DELIVERY

Increasing the number of babies that are delivered in health facilities is an important factor in reducing the health risks to both the mother and the baby. Proper medical attention and hygienic conditions during delivery can reduce the risks of complications and infections that can cause morbidity and mortality to either the mother or the baby. Table 9.5 presents the percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics.

Table 9.4 Tetanus toxoid injections

Among mothers with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Zimbabwe 2005-2006

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage of last births protected against neonatal tetanus	Number of women
<b>Age at birth</b>			
<20	54.4	57.4	766
20-34	55.5	58.6	2,905
35-49	48.2	51.7	428
<b>Birth order</b>			
1	59.0	61.4	1,236
2-3	54.7	58.0	1,764
4-5	51.8	55.3	715
6+	44.3	48.5	384
<b>Residence</b>			
Urban	58.1	61.6	1,284
Rural	52.9	55.9	2,815
<b>Province</b>			
Manicaland	51.6	55.0	497
Mashonaland Central	58.2	61.2	457
Mashonaland East	69.4	70.5	319
Mashonaland West	56.6	59.3	413
Matabeleland North	45.7	48.0	263
Matabeleland South	48.2	56.7	184
Midlands	61.0	64.3	584
Masvingo	45.5	47.9	609
Harare	52.7	56.3	566
Bulawayo	56.3	59.6	207
<b>Education</b>			
No education	39.9	42.5	166
Primary	47.3	49.8	1,443
Secondary	60.4	63.7	2,383
More than secondary	45.4	51.8	106
<b>Wealth quintile</b>			
Lowest	46.5	49.4	934
Second	53.1	56.4	823
Middle	57.7	60.5	714
Fourth	57.2	60.3	901
Highest	60.1	63.6	727
Total	54.5	57.6	4,099

Table 9.5 shows that 68 percent of births occurred in health facilities. This figure is slightly lower than that recorded in the 1999 ZDHS (72 percent) and the 1994 ZDHS (69 percent). In the 2005-06 ZDHS, 55 percent of births occurred in public health facilities and 13 percent occurred in private health facilities. Thirty-one percent of births occurred at home in the 2005-06 ZDHS, compared with 23 percent in the 1999 ZDHS. Younger mothers are more likely to deliver in a health institution than older mothers (68 percent for women under 20 years old, compared with 56 percent for women 35 years and older). Higher-order births are associated with a greater likelihood of being delivered at home: 55 percent of mothers with six or more children had their last birth at home, compared with 21 percent of mothers with one child.

Table 9.5 Place of delivery							
Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Zimbabwe 2005-2006							
Background characteristic	Health facility		Home	Other	Missing	Total	Number of births
	Public sector	Private sector					
<b>Mother's age at birth</b>							
<20	56.9	11.2	31.4	0.5	0.0	100.0	1,070
20-34	56.7	12.8	29.4	1.0	0.2	100.0	3,668
35-49	42.6	13.4	43.1	0.5	0.4	100.0	492
<b>Birth order</b>							
1	65.7	12.6	21.2	0.4	0.1	100.0	1,654
2-3	56.1	13.7	29.0	1.1	0.2	100.0	2,207
4-5	45.7	11.2	41.9	1.0	0.2	100.0	886
6+	34.6	9.4	54.6	0.9	0.4	100.0	484
<b>Antenatal care visits<sup>1</sup></b>							
None	24.1	4.3	70.2	0.9	0.5	100.0	206
1-3	52.1	9.4	37.4	1.0	0.1	100.0	932
4+	60.1	14.7	24.3	0.8	0.0	100.0	2,914
Don't know/missing	69.4	7.5	15.6	2.0	5.5	100.0	46
<b>Residence</b>							
Urban	80.0	12.7	6.3	0.6	0.4	100.0	1,513
Rural	45.3	12.4	41.2	0.9	0.1	100.0	3,718
<b>Province</b>							
Manicaland	49.6	10.4	38.0	1.9	0.0	100.0	679
Mashonaland Central	43.1	17.6	38.7	0.6	0.0	100.0	585
Mashonaland East	61.6	5.4	31.9	0.8	0.3	100.0	387
Mashonaland West	53.5	6.8	38.4	0.9	0.4	100.0	519
Matabeleland North	45.8	11.7	42.4	0.2	0.0	100.0	340
Matabeleland South	55.3	8.6	34.9	0.7	0.5	100.0	243
Midlands	43.5	20.4	35.9	0.2	0.0	100.0	774
Masvingo	53.3	13.4	31.6	1.5	0.1	100.0	790
Harare	79.5	12.1	7.5	0.3	0.6	100.0	666
Bulawayo	86.3	8.0	5.0	0.7	0.0	100.0	248
<b>Mother's education</b>							
No education	27.5	6.7	65.5	0.3	0.0	100.0	213
Primary	40.7	11.0	47.4	0.9	0.1	100.0	1,922
Secondary	67.0	12.5	19.4	0.9	0.2	100.0	2,972
More than secondary	52.0	45.9	0.8	0.6	0.8	100.0	124
<b>Wealth quintile</b>							
Lowest	35.0	10.6	53.5	0.8	0.1	100.0	1,296
Second	45.3	10.5	43.0	1.1	0.1	100.0	1,093
Middle	56.4	13.7	29.0	0.9	0.1	100.0	911
Fourth	73.8	10.7	14.5	0.9	0.1	100.0	1,091
Highest	75.0	18.9	4.8	0.4	0.8	100.0	839
Total <sup>1</sup>	55.4	12.5	31.1	0.8	0.2	100.0	5,231

<sup>1</sup> Includes only the most recent birth in the five years preceding the survey

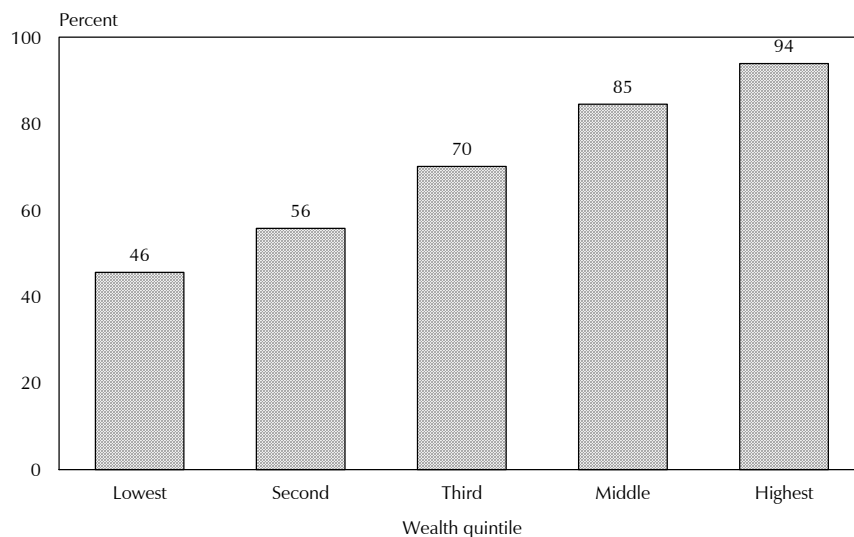
Place of delivery varies by urban-rural residence, with 93 percent of births in urban areas and 58 percent of births in rural areas occurring in a health facility. The urban-rural differential recorded in the 2005-06 ZDHS is greater than that recorded in the 1999 ZDHS when 89 percent of urban births and 64 percent of rural births occurred in health facilities.

Ninety-four percent of births occurred in health facilities in Bulawayo and 92 percent of births occurred in health facilities in Harare. In all other provinces, this coverage ranges from 58 percent to 67 percent. Home deliveries are most prevalent in Matabeleland North (42 percent) and least prevalent in Bulawayo (5 percent) and Harare (8 percent).

Mothers with more than a secondary education are almost three times more likely to deliver in a health facility than mothers with no education (98 percent compared with 34 percent). While the percentage of births to mothers with more than secondary education that were delivered in a health facility has remained the same as in 1999, the proportion of births to mothers with less education occurring in a health facility over the same period has decreased. In the 2005-06 ZDHS, 34 percent of births to mothers with no education occurred in a health facility, compared with 43 percent of birth in the 1999 ZDHS. Likewise, a higher percentage of births to women with less education occurred at home in the latest ZDHS. Sixty-six percent of women with no education gave birth at home in the 2005-06 ZDHS, compared with 46 percent in the 1999 ZDHS. The percentage of women with more than a secondary education who gave birth at home remained constant between surveys (1 percent).

There is a marked association between the mother's wealth quintile and place of delivery. Figure 9.1 shows that the likelihood of births occurring in health facilities increases with each wealth quintile. Mothers in the highest wealth quintile are twice as likely to give birth in a health facility as mothers in the lowest wealth quintile (94 percent compared with 46 percent, respectively).

**Figure 9.1 Delivery in Health Facility by Wealth Quintile**



ZDHS 2005-06



## 9.6 ASSISTANCE DURING DELIVERY

Obstetric care from a trained provider during delivery is recognized as a critical element for the reduction of maternal and neonatal mortality. Births delivered at home are usually more likely to be delivered without assistance from a health professional, whereas births delivered at a health facility are more likely to be delivered by a trained health professional. Table 9.6 shows the type of assistance during delivery by selected background characteristics.

Table 9.6 shows that 9 percent of births were assisted by a doctor, 60 percent by a nurse or midwife, 11 percent by a trained traditional birth attendant, 16 percent by an untrained traditional birth attendant, 2 percent by a relative, and 2 percent of births had no assistance at all. Overall, more births were attended by traditional birth attendants in the 2005-06 ZDHS than in 1999 (27 percent compared with 18 percent). Maternal age and child's birth order are associated with the type of assistance at delivery. Younger women and women with fewer children are more likely to receive assistance at delivery than their older counterparts or women with more children.

Of the births that took place in a health facility, 86 percent were assisted by a nurse or midwife, and 13 percent were assisted by a doctor. Ninety-four percent of births in urban areas were delivered by a doctor, nurse, or midwife. Eighty-five percent of births occurring outside of a health facility were assisted by a traditional birth attendant.

In urban areas, 94 percent of births were assisted by a health professional (doctor, nurse, or midwife) compared with 58 percent in rural areas. Doctors assisted 20 percent of births in urban areas, compared with 5 percent in rural areas.

More than nine in ten deliveries in Harare (94 percent) and Bulawayo (95 percent) were assisted by a health professional. In other provinces, the coverage ranges from 58 percent in Matabeleland North to 67 percent in Masvingo. Approximately 6 percent of births in Manicaland, Mashonaland Central, Mashonaland East, and Masvingo were assisted by a relative or were unattended.

Maternal education is strongly related to health professional assistance during delivery. Women with secondary and higher education are more likely to seek assistance from a health professional during delivery. A doctor, nurse, or midwife assisted 99 percent of births to women with higher than a secondary education, compared with only 35 percent of births to mothers with no education. Approximately half of women with a primary or no education had their births attended by a traditional birth attendant compared with 1 percent among women with more than a secondary education.

As with education, wealth quintile is strongly associated with professional assistance during delivery. Women in the highest wealth quintile were twice as likely as women in the lowest wealth quintile to have assistance from a health professional (95 percent compared with 46 percent). Furthermore, women in the highest wealth quintile were nine times more likely than women in the lowest wealth quintile to have their births attended by a doctor (26 percent compared to 3 percent).

Respondents were asked whether the delivery was by caesarean section (C-section). According to the 2005-06 ZDHS, 5 percent of babies were delivered by C-section. This figure is slightly less than what was recorded in the 1999 ZDHS (7 percent). Caesarean sections are most common among first births (6 percent), urban births (9 percent), births to women in urban provinces (9 percent for Bulawayo and 7 percent for Harare), births to higher-educated mothers (14 percent), and births to mothers in higher wealth quintiles (10 percent). The sharpest difference in C-section coverage is reflected in the mother's education. Women with higher than secondary education are 14 times more likely to have a C-section than women with no education, seven times more likely than women with a primary education, and more than twice as likely as women with a secondary education.

Table 9.6 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, and percentage delivered by caesarean section (C-section), according to background characteristics, Zimbabwe 2005-2006

Background characteristic	Doctor	Nurse/ midwife	Trained traditional birth attendant	Untrained traditional birth attendant	Relative/ other	No one	Don't know/ missing	Total	Percentage delivered by C-section	Number of births
<b>Mother's age at birth</b>										
<20	8.2	60.5	11.5	16.5	2.2	0.9	0.3	100.0	3.2	1,070
20-34	9.0	60.9	10.9	15.6	1.3	2.0	0.2	100.0	5.1	3,668
35-49	10.6	46.6	12.9	20.2	4.0	5.9	0.0	100.0	6.1	492
<b>Birth order</b>										
1	11.0	67.8	7.4	11.7	1.3	0.5	0.2	100.0	5.6	1,654
2-3	9.9	60.3	12.2	14.6	1.2	1.4	0.3	100.0	5.2	2,207
4-5	5.3	52.3	13.2	22.5	1.5	5.1	0.2	100.0	3.4	886
6+	4.6	40.7	15.6	27.7	5.7	5.7	0.0	100.0	2.3	484
<b>Place of delivery</b>										
Health facility	13.1	86.3	0.2	0.1	0.1	0.1	0.1	100.0	7.0	3,551
Elsewhere	0.3	2.7	34.6	50.6	5.0	6.5	0.3	100.0	0.0	1,671
Missing	*	*	*	*	*	*	*	*	*	10
<b>Residence</b>										
Urban	20.1	73.7	2.4	2.4	0.8	0.6	0.1	100.0	8.7	1,513
Rural	4.5	53.7	14.7	21.9	2.1	2.8	0.3	100.0	3.2	3,718
<b>Province</b>										
Manicaland	4.5	56.9	11.8	20.1	3.8	2.6	0.4	100.0	4.0	679
Mashonaland Central	5.2	55.2	20.1	13.8	1.4	4.4	0.0	100.0	2.8	585
Mashonaland East	6.2	62.4	11.3	14.0	3.8	1.8	0.6	100.0	4.5	387
Mashonaland West	7.7	52.7	15.1	21.0	1.9	1.5	0.1	100.0	5.9	519
Matabeleland North	8.9	49.4	13.7	24.4	0.4	3.3	0.0	100.0	3.6	340
Matabeleland South	9.6	53.7	14.7	19.4	0.3	1.9	0.5	100.0	3.1	243
Midlands	4.8	59.1	12.5	22.1	0.5	1.0	0.0	100.0	5.0	774
Masvingo	3.7	63.1	8.2	18.8	2.1	3.4	0.7	100.0	3.7	790
Harare	20.4	73.3	2.6	2.1	1.2	0.3	0.0	100.0	7.4	666
Bulawayo	36.6	58.4	1.3	2.0	0.6	1.1	0.0	100.0	8.7	248
<b>Mother's education</b>										
No education	1.8	32.8	17.9	36.5	3.9	7.1	0.0	100.0	1.2	213
Primary	3.9	48.4	17.0	24.9	2.4	3.2	0.2	100.0	2.4	1,922
Secondary	11.3	68.8	7.4	9.8	1.1	1.2	0.3	100.0	6.2	2,972
More than secondary	45.3	53.3	0.0	0.8	0.6	0.0	0.0	100.0	13.7	124
<b>Wealth quintile</b>										
Lowest	3.3	42.8	18.3	29.9	2.4	3.1	0.3	100.0	1.9	1,296
Second	3.7	52.4	15.9	22.3	2.7	2.6	0.5	100.0	3.1	1,093
Middle	4.3	66.2	11.2	14.6	1.7	2.0	0.0	100.0	4.0	911
Fourth	12.1	73.3	5.5	6.7	0.6	1.7	0.1	100.0	6.6	1,091
Highest	25.8	69.4	1.4	1.4	0.9	1.0	0.1	100.0	9.9	839
Total	9.0	59.5	11.2	16.2	1.7	2.2	0.2	100.0	4.8	5,231

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

## 9.7 POSTNATAL CARE

A large proportion of maternal and neonatal deaths occur during the first 48 hours after delivery. Thus, postnatal care is important for both the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. Safe motherhood programmes recommend that all women receive a check on their health within two days of delivery. To assess the extent of postnatal care utilization, respondents were asked for the last birth in the five years preceding the survey whether they had received a health check after the delivery, the timing of the first checkup, and the type of health provider performing the postnatal checkup. This information is presented according to background characteristics in Tables 9.7 and 9.8.

Overall, 54 percent of mothers received a postnatal checkup for the most recent birth in the five years preceding the survey. Thirty percent of mothers received a postnatal checkup within the first 48 hours after delivery. Thirteen percent of mothers received a checkup less than four hours after delivery, 16 percent between four and 23 hours, and 24 percent had a postnatal checkup between three and 40 days after delivery. Forty-five percent of mothers had no postnatal checkup.

Women under 20 years old were less likely to have had a postnatal checkup within two days of delivery than their older counterparts. Women who are in the highest parity category were also less likely to have a postnatal checkup within two days after delivery than women with fewer children.

Urban residence and higher education and wealth quintiles are highly associated with obtaining a postnatal checkup within two days of delivery. Forty-eight percent of women living in urban areas had a postnatal checkup within two days, compared with 23 percent of women living in rural areas. Likewise, mothers living in Bulawayo (74 percent) and Harare (43 percent) were most likely to have a postnatal checkup within two days of delivery. Women living in Manicaland and Mashonaland East were least likely to have a postnatal checkup within the same period of time (16 and 17 percent, respectively). The percentage of postnatal checkups within two days of delivery for the remaining provinces ranges from 22 to 38 percent.

Mothers with more than a secondary education are three times as likely as mothers with no education to have had a postnatal checkup within two days of delivery (57 percent and 18 percent, respectively). Mothers in the highest wealth quintile are also three times as likely as mothers in the lowest quintile to have had a checkup within two days of delivery (52 percent and 16 percent, respectively).

Table 9.7 Timing of first postnatal checkup

Among women giving birth in the five years preceding the survey, the percent distribution of the mother's first postnatal checkup for the last live birth by time after delivery, according to background characteristics, Zimbabwe 2005-2006

Background characteristic	Timing after delivery of mother's first postnatal checkup						Total	Number of women
	Less than 4 hours	4-23 hours	2 days	3-41 days	Don't know/missing	No checkup		
<b>Age at birth</b>								
<20	11.7	13.7	1.6	21.7	1.0	50.4	100.0	766
20-34	13.8	16.1	1.1	24.4	1.0	43.6	100.0	2,905
35-49	13.7	15.8	2.3	25.6	0.5	42.1	100.0	428
<b>Birth order</b>								
1	12.7	16.9	1.7	23.0	1.4	44.4	100.0	1,236
2-3	14.8	15.6	0.8	24.4	0.9	43.5	100.0	1,764
4-5	14.0	14.8	1.4	24.4	0.5	44.9	100.0	715
6+	8.2	13.1	2.4	24.4	0.6	51.3	100.0	384
<b>Residence</b>								
Urban	22.2	24.0	1.3	25.9	1.6	25.0	100.0	1,284
Rural	9.4	11.8	1.3	23.1	0.7	53.7	100.0	2,815
<b>Province</b>								
Manicaland	5.5	10.2	0.7	22.5	1.8	59.4	100.0	497
Mashonaland Central	7.2	20.0	0.8	32.4	0.6	39.0	100.0	457
Mashonaland East	8.5	7.3	0.8	25.9	0.2	57.3	100.0	319
Mashonaland West	9.8	10.5	1.6	27.4	1.4	49.3	100.0	413
Matabeleland North	14.6	15.2	1.9	21.1	0.5	46.7	100.0	263
Matabeleland South	20.1	15.6	2.3	19.7	2.4	39.9	100.0	184
Midlands	20.8	11.7	1.2	17.7	0.2	48.4	100.0	584
Masvingo	8.5	13.6	1.9	23.7	0.0	52.3	100.0	609
Harare	20.5	21.1	1.0	30.3	1.2	26.1	100.0	566
Bulawayo	27.4	44.9	2.0	8.2	3.6	14.0	100.0	207
<b>Education</b>								
No education	7.5	9.6	0.7	25.4	0.5	56.3	100.0	166
Primary	8.7	9.4	1.8	21.2	0.5	58.5	100.0	1,443
Secondary	16.2	19.0	1.0	25.4	1.3	37.0	100.0	2,383
More than secondary	23.5	32.4	1.5	28.5	0.0	14.1	100.0	106
<b>Wealth quintile</b>								
Lowest	6.7	8.7	1.0	20.2	0.5	62.9	100.0	934
Second	9.1	11.9	0.8	23.3	0.8	54.1	100.0	823
Middle	12.4	15.4	2.3	23.1	1.0	45.7	100.0	714
Fourth	15.5	18.5	1.2	26.9	1.2	36.7	100.0	901
Highest	25.3	25.2	1.4	26.9	1.4	19.8	100.0	727
Total	13.4	15.6	1.3	24.0	1.0	44.7	100.0	4,099

## 9.8 POSTNATAL CARE PROVIDERS

Table 9.8 shows that 55 percent of women received their first postnatal checkup from a doctor, nurse, or midwife for the last live birth. Findings according to background characteristics for this indicator are consistent with findings observed for women who received a postnatal checkup within two days after delivery.

Background characteristic	Type of health provider of mother's first postnatal checkup					Total	Number of women
	Doctor/nurse/midwife	Trained traditional birth attendant	Untrained traditional birth attendant	Other	No checkup		
<b>Age at birth</b>							
<20	48.9	0.2	0.3	0.1	50.4	100.0	766
20-34	55.8	0.3	0.0	0.2	43.6	100.0	2,905
35-49	56.8	0.7	0.0	0.4	42.1	100.0	428
<b>Birth order</b>							
1	55.3	0.2	0.1	0.1	44.4	100.0	1,236
2-3	55.8	0.3	0.1	0.2	43.5	100.0	1,764
4-5	54.3	0.6	0.0	0.1	44.9	100.0	715
6+	47.5	0.8	0.0	0.5	51.3	100.0	384
<b>Residence</b>							
Urban	74.7	0.1	0.1	0.1	25.0	100.0	1,284
Rural	45.4	0.5	0.0	0.2	53.7	100.0	2,815
<b>Province</b>							
Manicaland	40.3	0.1	0.0	0.2	59.4	100.0	497
Mashonaland Central	60.3	0.3	0.0	0.3	39.0	100.0	457
Mashonaland East	42.7	0.0	0.0	0.0	57.3	100.0	319
Mashonaland West	49.4	0.1	0.5	0.4	49.3	100.0	413
Matabeleland North	50.8	2.2	0.3	0.0	46.7	100.0	263
Matabeleland South	57.1	2.1	0.0	0.9	39.9	100.0	184
Midlands	51.3	0.3	0.0	0.0	48.4	100.0	584
Masvingo	47.5	0.0	0.0	0.2	52.3	100.0	609
Harare	73.9	0.0	0.0	0.0	26.1	100.0	566
Bulawayo	85.0	0.4	0.0	0.7	14.0	100.0	207
<b>Education</b>							
No education	42.8	0.4	0.0	0.5	56.3	100.0	166
Primary	40.6	0.7	0.0	0.2	58.5	100.0	1,443
Secondary	62.5	0.2	0.1	0.2	37.0	100.0	2,383
More than secondary	85.9	0.0	0.0	0.0	14.1	100.0	106
<b>Wealth quintile</b>							
Lowest	36.2	0.7	0.1	0.1	62.9	100.0	934
Second	44.6	0.6	0.1	0.5	54.1	100.0	823
Middle	54.0	0.2	0.0	0.1	45.7	100.0	714
Fourth	62.7	0.2	0.2	0.2	36.7	100.0	901
Highest	80.2	0.0	0.0	0.0	19.8	100.0	727
<b>Total</b>	54.6	0.4	0.1	0.2	44.7	100.0	4,099

## 9.9 PROBLEMS IN ACCESSING HEALTH CARE

Many factors can prevent women from getting medical advice or treatment for themselves when they are sick. Information on such factors is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and at the time of delivery.

In the 2005-06 ZDHS, women were asked whether each of the following factors would be a big problem or not a big problem in seeking medical care: getting permission to go for treatment, getting money for treatment, distance to a health facility, having to take transportation, not wanting to go alone, concern that there may not be a female health provider, concern that there may not be a health provider, and concern that there may be no drugs available. Table 9.9 shows that 79 percent of women reported at least one of these concerns was a big problem when it came to accessing health care.

The most important concern impeding women from accessing health care for themselves is not having money for treatment; 58 percent of women shared this concern. The majority of women reporting this concern were either of high parity (73 percent); divorced, separated, or widowed (72 percent); resided in rural areas (67 percent); had no education (84 percent); or were in the lowest wealth quintile (75 percent). Approximately half (48 percent) of women also reported that they were concerned that no drugs would be available at the health facility. About four in ten women reported that transportation (42 percent) and distance to the health facility (41 percent) were a big problem.

Table 9.9 Problems in accessing health care

Percentage of women who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Zimbabwe 2005-2006

Background characteristic	Problems in accessing health care									Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take trans- portation	Not wanting to go alone	Concern no female provider available	Concern no provider available	Concern no drug available	At least one problem accessing health care	
<b>Age</b>										
15-19	8.6	53.2	38.3	40.1	24.6	12.1	24.5	44.2	78.0	2,152
20-34	6.1	56.0	40.6	41.2	21.9	8.7	21.5	47.4	78.1	4,634
35-49	5.5	66.3	45.7	46.0	22.8	9.9	23.2	51.2	83.3	2,121
<b>Number of living children</b>										
0	7.6	50.5	34.5	36.7	23.3	11.4	24.7	43.9	75.6	2,724
1-2	6.4	54.6	39.4	40.2	20.7	7.9	20.5	46.6	76.8	3,295
3-4	4.7	65.1	45.9	45.6	22.7	8.9	21.1	51.6	83.9	1,775
5+	7.3	73.2	56.2	55.5	28.0	12.9	26.5	52.6	88.8	1,113
<b>Marital status</b>										
Never married	6.5	50.5	33.5	36.1	23.0	11.8	26.3	46.2	75.7	2,404
Married or living together	7.0	57.5	44.5	43.9	23.1	9.3	21.6	48.1	79.6	5,143
Divorced/separated/ widowed	5.0	71.6	43.0	45.7	21.1	8.0	20.0	47.6	84.7	1,360
<b>Employment</b>										
Not employed	6.4	60.8	43.6	43.5	23.4	10.9	24.8	49.7	80.9	5,033
Employed for cash	5.9	52.4	34.9	37.1	19.9	6.7	16.3	43.1	75.6	2,888
Employed not for cash	9.2	58.0	48.1	49.6	27.9	13.4	30.2	49.5	82.6	981
Missing	*	*	*	*	*	*	*	*	*	6
<b>Residence</b>										
Urban	4.3	42.9	15.8	18.8	13.9	7.6	20.4	39.7	65.0	3,502
Rural	8.0	67.4	57.8	57.2	28.6	11.2	24.1	52.6	88.7	5,405
<b>Province</b>										
Manicaland	8.5	67.9	53.7	50.4	23.4	4.6	6.1	33.8	82.5	1,043
Mashonaland Central	10.1	70.1	61.7	57.2	26.1	6.6	20.4	53.2	90.1	825
Mashonaland East	3.6	64.3	43.5	43.6	15.0	7.8	11.6	61.6	81.7	714
Mashonaland West	7.0	59.8	50.7	51.5	21.4	11.7	24.8	50.5	83.3	829
Matabeleland North	8.0	66.5	56.7	57.2	39.0	25.1	38.0	46.8	84.9	536
Matabeleland South	6.4	46.8	46.5	46.6	31.3	16.2	56.9	73.7	87.2	439
Midlands	6.4	52.4	40.0	37.5	22.0	9.7	21.2	51.7	78.2	1,193
Masvingo	6.0	64.7	47.0	53.5	27.8	8.7	21.7	43.1	84.3	1,137
Harare	6.2	42.0	14.7	17.8	13.9	5.6	8.6	27.8	61.1	1,492
Bulawayo	2.8	50.8	20.1	26.0	21.9	16.0	59.3	69.8	78.7	697
<b>Education</b>										
No education	6.1	83.6	64.9	66.9	34.9	16.0	30.6	54.9	92.8	380
Primary	8.5	69.8	53.5	55.2	27.6	12.0	24.3	51.0	88.0	2,902
Secondary	5.7	51.3	34.5	34.6	20.0	8.3	21.4	45.7	75.2	5,355
More than secondary	1.7	19.5	12.6	13.7	7.9	7.3	17.3	35.5	49.6	270
<b>Wealth quintile</b>										
Lowest	8.9	74.5	62.5	64.8	34.3	16.2	29.6	55.7	92.7	1,552
Second	8.8	72.6	61.3	59.8	30.4	11.8	27.4	53.8	91.8	1,500
Middle	8.1	66.5	58.0	54.0	26.1	8.5	19.4	50.9	87.9	1,546
Fourth	5.5	53.6	29.6	32.4	16.8	6.4	19.7	46.0	76.9	2,006
Highest	3.3	34.6	12.9	15.7	13.0	8.0	19.6	37.0	58.7	2,304
Total	6.6	57.8	41.3	42.1	22.8	9.8	22.6	47.5	79.4	8,907

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.