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This chapter presents the 2004 MDHS findings on maternal and child health in Malawi. Topics discussed include the utilisation of maternal and child health services; maternal and childhood immunisations; common childhood illnesses and their treatment; barriers to obtaining health care; ability to negotiate sex; and attitudes towards family violence. Combined with information on childhood mortality, this information can be used to identify women and children who are at risk because of nonuse of health services and to provide information that would assist in planning interventions to improve maternal and child health. The results presented in the following sections are based on data collected from mothers on all live births that occurred in the five years preceding the survey.

9.1 ANTENATAL CARE

Table 9.1 shows the percent distribution of women who had a live birth in the five years preceding the survey and used antenatal care (ANC) services. Overall, there has been no change in the coverage of ANC from a medical professional since 2000 (93 percent). Most women receive ANC from a nurse or a midwife (82 percent); 10 percent of pregnant women went to see a doctor for ANC.

Maternal age at birth and the birth order of the child are not strongly related to the practice of ANC. Urban women are more likely to have seen a health professional for antenatal services than women living in rural areas, though rural women are slightly more likely to have seen a doctor. The use of antenatal services is strongly associated with level of education and wealth. While 8 percent of women with no education had no antenatal care, the proportion among women with some secondary or higher education is only 2 percent. However, women with no education are slightly more likely than women with secondary education to receive antenatal care from a doctor/clinical officer (10 percent compared with 8 percent). This is the reverse of the situation observed in the 2000 DHS, where women with secondary or higher education are slightly more likely than women with less education to receive care from a doctor/clinical officer (10 percent compared with 9 percent).

Use of antenatal services varies among districts. Women receive ANC from health care providers most commonly in Mzimba, Blantyre, Salima, and Zomba (96 to 98 percent). However, lack of any antenatal care is as high as 6 to 7 percent in Lilongwe and Mangochi. The high level of nonuse of antenatal services in Lilongwe is also recorded in the 2000 MDHS (7 percent). Variations in the utilisation of doctors for antenatal care continue to persist among districts. As reported in the 2000 MDHS, women in Salima are more likely to go to a doctor for antenatal care than women in other districts (28 percent). However, this observation should be viewed with caution because the definition among respondents of what constitutes a “doctor” is loose and may vary by locality.

Benefits of antenatal care in influencing outcomes of pregnancy depend to a large extent on the timing of the antenatal care as well as the content and quality of the services provided. In

Malawi, women are advised to have a minimum of four ANC visits spread throughout the pregnancy, with the first visit in the first trimester.

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, Malawi 2004

Background characteristic	Doctor/clinical officer	Nurse/midwife	Patient attendant	Traditional birth attendant/other	No one	Missing	Total	Number of women
Age at birth								
<20	10.0	82.5	0.9	2.3	4.3	0.1	100.0	1,293
20-34	10.0	82.4	1.0	1.8	4.6	0.2	100.0	4,979
35-49	8.8	81.9	1.2	2.4	5.5	0.2	100.0	1,000
Birth order								
1	10.1	83.7	0.5	1.8	3.9	0.0	100.0	1,518
2-3	9.8	83.1	1.1	1.8	4.0	0.3	100.0	2,659
4-5	10.0	81.7	1.1	1.9	5.0	0.2	100.0	1,622
6+	9.5	80.3	1.1	2.8	6.1	0.2	100.0	1,473
Residence								
Urban	6.8	90.8	0.3	0.1	1.9	0.1	100.0	1,041
Rural	10.3	80.9	1.1	2.3	5.1	0.2	100.0	6,231
Region								
Northern	8.3	87.1	0.4	0.6	3.5	0.1	100.0	924
Central	11.4	79.5	0.5	1.7	6.6	0.3	100.0	2,959
Southern	8.9	83.5	1.6	2.6	3.2	0.1	100.0	3,389
District								
Blantyre	5.1	92.2	0.2	1.4	1.1	0.0	100.0	520
Kasungu	18.2	72.4	0.7	3.8	4.8	0.1	100.0	330
Machinga	4.7	81.1	7.6	4.0	2.3	0.3	100.0	284
Mangochi	17.9	73.3	1.1	1.8	6.0	0.0	100.0	411
Mzimba	5.8	91.0	0.4	0.2	2.5	0.1	100.0	464
Salima	28.1	68.4	0.0	0.8	2.5	0.2	100.0	199
Thyolo	10.0	80.9	0.2	5.2	3.4	0.3	100.0	386
Zomba	6.0	89.7	1.4	2.2	0.6	0.2	100.0	389
Lilongwe	3.4	88.3	0.0	1.4	6.5	0.5	100.0	1,013
Mulanje	10.4	79.0	1.1	7.0	1.9	0.8	100.0	296
Other districts	11.1	80.2	1.0	1.4	6.1	0.1	100.0	2,981
Education								
No education	10.3	76.2	1.6	3.2	8.4	0.2	100.0	1,885
Primary 1-4	11.0	80.2	0.9	2.8	4.8	0.3	100.0	2,021
Primary 5-8	9.1	86.3	0.7	1.0	2.7	0.2	100.0	2,485
Secondary+	8.1	89.3	0.5	0.3	1.7	0.2	100.0	880
Wealth quintile								
Lowest	10.6	78.1	1.0	2.5	7.4	0.4	100.0	1,380
Second	11.0	78.8	1.6	2.7	5.5	0.3	100.0	1,579
Middle	10.4	80.7	1.0	2.6	5.0	0.2	100.0	1,610
Fourth	9.0	85.9	0.7	1.2	3.1	0.0	100.0	1,432
Highest	7.7	89.5	0.3	0.7	1.8	0.1	100.0	1,271
Total	9.8	82.3	1.0	2.0	4.6	0.2	100.0	7,271

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

Table 9.2 presents information about the number and timing of ANC visits. For 57 percent of births, mothers meet the recommended number of four or more antenatal care visits. This is the same level reported in the 2000 MDHS. Women in urban areas are more likely than rural women to go for antenatal care visits.

Messages regarding the importance of initiating antenatal care in the first trimester have not made a significant impact on the timing of antenatal care. Table 9.2 shows that only 8 percent of women initiated antenatal care before the fourth month of pregnancy, about the same as found in the 2000 MDHS (7 percent). While urban women make more frequent visits for antenatal care than rural women, they initiate the ANC visit at about the same time as their rural counterparts (5.8-5.9 months). The persistent delay in initiating antenatal care indicates that a large proportion of pregnant women in Malawi miss out on intended benefits of early antenatal care services.

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 according to residence, Malawi 2004			
Number and timing of ANC visits	Residence		Total
	Urban	Rural	
Number of ANC visits			
None	1.9	5.1	4.6
1	3.4	2.3	2.5
2-3	28.7	36.2	35.2
4+	65.2	55.7	57.1
Don't know/missing	0.9	0.6	0.7
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	1.9	5.1	4.6
<4	9.4	7.4	7.7
4-5	46.3	43.0	43.5
6-7	39.3	41.5	41.2
8+	3.1	2.7	2.8
Don't know/missing	0.0	0.3	0.3
Total	100.0	100.0	100.0
Median months pregnant at first visit (for those with ANC)	5.8	5.9	5.9
Number of women	1,041	6,231	7,271

In addition to the number and timing of ANC visits, another important aspect of antenatal care is the content and quality of services. Women who received antenatal care in the five years preceding the survey were asked what services they received. The limited content of antenatal care services in Malawi indicates that women are not getting the care that would assist in the identification and management of complications that can have a negative impact on the mother and her baby.

Table 9.3 shows that seven in ten women report that they were told about pregnancy complications and where to go in case of problems during pregnancy. The most frequent checks for

Table 9.3 Components of antenatal care

Percentage of women with a live birth in the five years preceding the survey who received antenatal care for the most recent birth, by content of antenatal care, and percentage of women with a live birth in the five years preceding the survey who received iron tablets or syrup or antimalarial drugs for the most recent birth, according to background characteristics, Malawi 2004

Background characteristic	Among women who received antenatal care										Number of women	Received iron tablets or syrup	Received anti-malarial drugs	Number of women
	Informed of signs of pregnancy complications	Informed where to go with complications	Weight measured	Height measured	Blood pressure measured	Urine sample taken	Blood sample taken	Heart beat	Eye exam					
Age at birth														
<20	64.1	61.1	94.7	40.9	70.6	17.4	33.9	90.2	60.1	1,237	80.5	75.2	1,293	
20-34	71.5	68.4	94.8	40.4	78.9	21.4	36.1	90.8	66.2	4,750	79.5	82.8	4,979	
35-49	72.5	69.6	95.0	44.6	82.4	21.1	37.2	89.8	69.6	943	77.3	77.1	1,000	
Birth order														
1	67.5	64.4	95.1	41.9	73.7	22.3	37.9	92.1	60.7	1,458	82.4	77.5	1,518	
2-3	70.4	67.5	94.8	41.8	78.3	20.9	35.2	90.0	65.6	2,552	80.7	82.4	2,659	
4-5	70.0	67.0	94.8	39.9	79.5	20.8	35.0	89.6	65.7	1,537	77.0	81.8	1,622	
6+	73.4	70.1	94.5	40.0	80.0	18.5	35.8	91.0	70.4	1,383	76.4	79.4	1,473	
Residence														
Urban	71.1	68.8	96.5	57.6	89.3	39.7	57.4	94.1	73.9	1,021	83.4	86.7	1,041	
Rural	70.2	67.0	94.5	38.2	75.9	17.4	32.1	89.9	64.1	5,909	78.7	79.6	6,231	
Region														
Northern	76.1	74.2	93.4	37.5	85.7	23.1	47.2	86.1	58.6	891	91.2	86.6	924	
Central	66.6	63.5	94.5	32.6	78.8	22.4	32.0	88.9	65.4	2,763	75.9	77.9	2,959	
Southern	71.8	68.5	95.5	49.1	75.0	18.6	36.0	93.1	67.5	3,276	79.2	81.4	3,389	
District														
Blantyre	73.4	66.7	96.8	58.0	78.3	16.7	33.3	94.2	73.8	514	78.1	87.0	520	
Kasungu	67.6	65.7	94.9	23.4	76.2	7.2	14.1	85.6	71.6	314	84.1	78.2	330	
Machinga	67.7	65.2	96.0	50.5	62.6	15.3	20.3	88.6	70.1	277	72.7	79.6	284	
Mangochi	66.6	63.3	94.5	46.6	75.1	22.0	29.0	85.0	65.5	386	70.6	67.2	411	
Mzimba	79.7	77.5	93.0	40.9	90.5	23.1	44.1	79.4	58.4	452	91.5	88.9	464	
Salima	77.4	73.6	97.4	44.6	87.1	18.0	28.8	88.7	62.9	193	74.0	87.1	199	
Thyolo	84.4	82.4	93.1	47.2	74.6	24.1	38.0	94.7	73.5	372	84.9	81.2	386	
Zomba	77.7	74.3	97.1	62.0	84.6	34.2	58.4	97.1	62.2	386	84.4	88.5	389	
Lilongwe	61.9	60.1	96.1	38.5	86.1	37.1	44.9	91.2	65.9	947	72.2	76.8	1,013	
Mulanje	68.8	66.6	91.4	45.0	68.1	7.6	15.9	94.9	58.1	290	82.3	82.1	296	
Other districts	68.9	65.7	94.3	34.7	75.0	16.6	36.0	91.2	64.3	2,799	80.2	80.1	2,981	
Education														
No education	64.9	60.8	93.4	39.9	75.4	18.1	32.2	88.0	62.8	1,725	72.2	70.8	1,885	
Primary 1-4	66.4	63.4	94.4	39.4	74.6	18.1	31.3	91.4	66.4	1,923	78.3	78.0	2,021	
Primary 5-8	73.5	71.1	95.2	40.7	79.8	19.9	36.9	90.6	65.9	2,416	83.5	86.7	2,485	
Secondary+	80.5	78.3	97.4	47.8	84.9	33.9	50.1	93.6	68.1	864	85.6	90.8	880	
Wealth quintile														
Lowest	64.8	61.3	92.9	35.9	73.5	15.7	30.2	89.2	67.2	1,278	77.2	77.0	1,380	
Second	67.0	64.0	92.8	37.6	73.8	17.5	31.3	89.2	62.6	1,491	75.7	75.4	1,579	
Middle	72.1	68.9	94.8	39.8	76.1	16.1	31.1	90.8	61.6	1,526	79.2	78.0	1,610	
Fourth	72.4	69.7	96.5	39.6	79.4	20.1	37.5	91.0	63.9	1,386	81.5	84.6	1,432	
Highest	75.2	72.7	97.2	53.6	87.8	35.9	51.1	92.8	73.9	1,248	84.2	90.0	1,271	
Total	70.3	67.3	94.8	41.1	77.9	20.7	35.9	90.6	65.5	6,930	79.4	80.7	7,271	

pregnant women during an antenatal visit are measuring weight (95 percent) and blood pressure (78 percent). Blood samples were taken from 36 percent of women, and a urine sample was collected from 21 percent of pregnant women. For nine in ten women, the baby's heartbeat was checked; for two in three women, their eyes were examined during an antenatal visit for their most recent birth. These figures, as well as the coverage of iron supplementation and antimalarial treatments, are similar to those found in the 2000 MDHS, suggesting that there is no improvement in the utilisation of health services for expectant mothers.

There are variations in the provision of services during antenatal visits across subgroups of women. In general, women in urban areas, in the Northern Region, more educated women and women in the highest wealth quintile are more likely than other women to receive quality care during pregnancy. At the district level, the content of antenatal care varies widely. Blood pressure measurements were taken for only 63 percent of women in Machinga. The collection of blood and urine samples is even less common. The collection of blood samples ranges from 14 percent of women in Kasungu to 58 percent in Zomba. Women in Zomba seem to get the best antenatal care services based on the types of checks during pregnancy.

Table 9.4 shows that 85 percent of women who had a birth in the five years preceding the survey report that they received at least one tetanus toxoid injection during the pregnancy. The coverage of tetanus toxoid injection has not changed since 1992 (85-86 percent). Table 9.4 also shows that only 66 percent of women had two or more tetanus toxoid injections. This figure is lower than that reported in the 1992 MDHS (73 percent).

Table 9.4 Tetanus toxoid injections

Percent distribution of women who had a live birth in the five years preceding the survey by number of tetanus toxoid injections received during pregnancy for the most recent birth, according to background characteristics, Malawi 2004

Background characteristic	None	One injection	Two or more injections	Don't know/missing	Total	Number of women
Age at birth						
<20	12.2	16.5	70.7	0.6	100.0	1,293
20-34	14.8	19.3	65.4	0.6	100.0	4,979
35-49	18.3	16.4	64.7	0.7	100.0	1,000
Birth order						
1	11.1	15.6	72.8	0.5	100.0	1,518
2-3	12.7	19.6	66.8	0.8	100.0	2,659
4-5	17.5	20.2	62.1	0.1	100.0	1,622
6+	19.4	17.0	62.8	0.8	100.0	1,473
Residence						
Urban	9.6	18.5	71.5	0.4	100.0	1,041
Rural	15.7	18.4	65.3	0.6	100.0	6,231
Region						
Northern	14.2	18.3	67.2	0.3	100.0	924
Central	15.2	16.5	67.6	0.6	100.0	2,959
Southern	14.6	20.0	64.7	0.6	100.0	3,389
District						
Blantyre	15.0	16.4	67.7	0.8	100.0	520
Kasungu	20.9	17.5	60.4	1.2	100.0	330
Machinga	17.4	20.2	62.2	0.2	100.0	284
Mangochi	9.0	16.1	74.2	0.7	100.0	411
Mzimba	14.8	16.6	68.4	0.2	100.0	464
Salima	7.7	16.8	75.2	0.4	100.0	199
Thyolo	19.0	20.7	60.1	0.2	100.0	386
Zomba	11.2	21.7	66.5	0.6	100.0	389
Lilongwe	14.5	16.4	68.9	0.2	100.0	1,013
Mulanje	16.2	24.2	59.2	0.4	100.0	296
Other districts	15.0	18.7	65.5	0.8	100.0	2,981
Education						
No education	18.6	16.0	64.7	0.6	100.0	1,885
Primary 1-4	14.9	19.2	65.3	0.6	100.0	2,021
Primary 5-8	13.8	20.0	65.8	0.4	100.0	2,485
Secondary+	9.3	17.0	72.7	1.1	100.0	880
Wealth quintile						
Lowest	15.7	19.8	64.2	0.3	100.0	1,380
Second	16.6	16.8	65.7	0.8	100.0	1,579
Middle	14.8	18.6	66.1	0.4	100.0	1,610
Fourth	14.8	17.5	67.2	0.5	100.0	1,432
Highest	11.5	19.6	68.0	0.9	100.0	1,271
Total	14.8	18.4	66.2	0.6	100.0	7,271

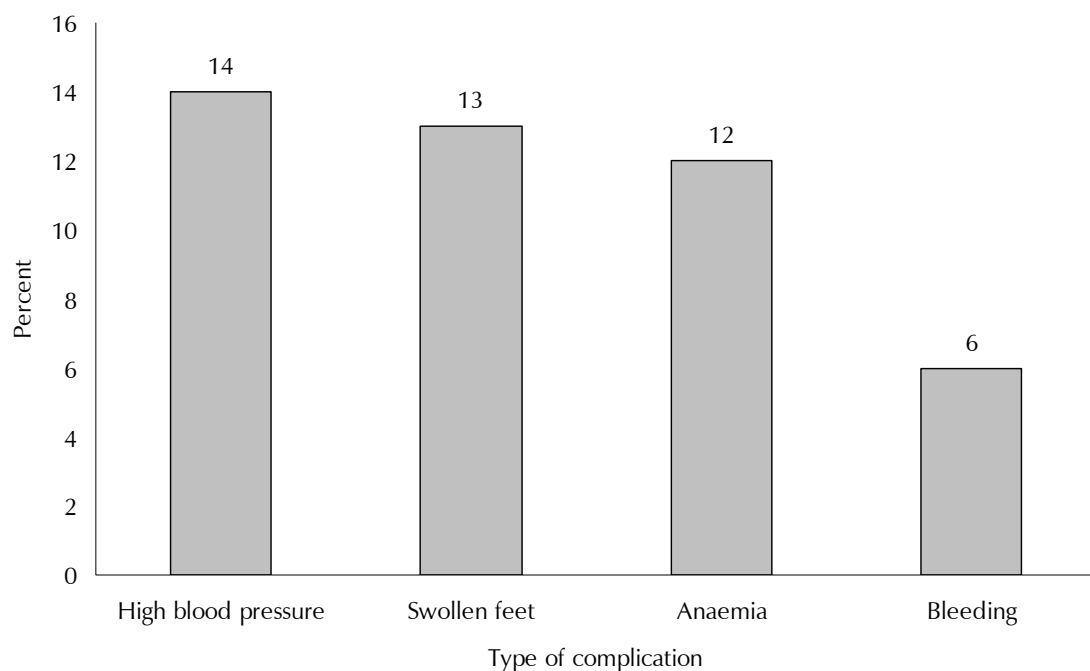
Younger women, women pregnant with their first child, and women who live in urban areas are more likely to have received two or more doses of tetanus toxoid injections. Women with secondary or higher education and women in the highest wealth quintile are also more likely than other women to have two or more tetanus toxoid injections. Across districts, coverage of two or more doses of tetanus toxoid is 59 to 60 percent in Mulanje, Kasungu, and Thyolo and 74 to 75 percent in Mangochi and Salima.

The aim of antenatal care is to minimise adverse maternal and fetal outcomes of pregnancy. Data in Table 9.5 and Figure 9.1 show that common complications among women are high blood pressure (14 percent) and swollen feet (13 percent), both indications of pre-eclampsia. Anaemia is reported by 12 percent of women, and 6 percent of women report experiencing bleeding during pregnancy. It is important to note that the data show self-reported complications as opposed to medically documented problems.

Table 9.5 Complications during pregnancy					
Among women who had a birth in the five years preceding the survey, percentage who had specific complications associated with the pregnancy leading to the most recent birth, by background characteristics, Malawi 2004					
Background characteristic	High blood pressure	Swollen feet	Anaemia	Bleeding	Number of women
Number of ANC visits					
None	na	na	na	na	337
1-3	13.9	12.7	12.1	5.7	3,703
4+	15.5	15.2	13.2	6.1	3,184
Age at birth					
<20	13.9	10.7	12.9	5.4	1,293
20-34	13.8	12.8	12.0	5.2	4,979
35-49	15.3	18.2	11.1	7.8	1,000
Birth order					
1	14.1	12.9	13.6	5.5	1,518
2-3	13.5	10.9	11.1	4.6	2,659
4-5	13.5	13.4	12.6	6.0	1,622
6+	15.5	17.3	11.5	7.0	1,473
Residence					
Urban	11.9	12.4	7.7	4.2	1,041
Rural	14.4	13.3	12.8	5.8	6,231
Region					
Northern	11.9	11.9	11.2	4.4	924
Central	16.6	15.6	14.8	6.2	2,959
Southern	12.3	11.4	9.9	5.4	3,389
District					
Blantyre	15.8	13.1	10.6	10.9	520
Kasungu	18.9	18.1	20.7	7.1	330
Machinga	8.4	8.4	7.4	2.8	284
Mangochi	16.4	15.7	12.7	5.2	411
Mzimba	12.1	12.6	13.6	5.1	464
Salima	17.7	15.5	15.4	5.7	199
Thyolo	14.0	8.9	10.9	5.7	386
Zomba	13.6	13.7	8.3	4.9	389
Lilongwe	12.3	13.1	10.5	3.3	1,013
Mulanje	9.2	9.0	7.7	3.8	296
Other districts	14.6	13.6	12.8	5.9	2,981
Education					
No education	13.3	13.5	12.4	6.6	1,885
Primary 1-4	15.6	12.1	13.3	6.3	2,021
Primary 5-8	13.5	12.7	11.3	5.0	2,485
Secondary+	13.5	16.3	10.8	3.2	880
Wealth quintile					
Lowest	13.4	11.0	13.0	6.0	1,380
Second	14.8	13.1	13.5	6.2	1,579
Middle	15.2	14.1	13.1	6.3	1,610
Fourth	12.9	12.2	11.4	4.5	1,432
Highest	13.5	15.6	8.8	4.8	1,271
Total	14.0	13.2	12.1	5.6	7,271

Note: Total includes 53 cases with number of ANC visits missing.
na = Not applicable

Figure 9.1 Complications During Pregnancy



MDHS 2004

These problems are slightly more prevalent in older women and women with higher order births. Women in rural areas and those living in the Central Region are also more likely to report having problems during pregnancy. In general, a woman's education and wealth status have no association with the likelihood of having pregnancy complications. Across districts, however, there are wide variations. Women in Kasungu are most likely to report problems during pregnancy, while women in Machinga are the least likely to do so.

Table 9.6 shows places where women sought advice and care for complications experienced in pregnancy. The 2004 MDHS did not explore the quality or effect of care received from these facilities. For any complication, the most common source of treatment is a public health facility (44 to 57 percent). About one in five women went to a private health facility for assistance with pregnancy complications. While 85 percent of pregnant women sought treatment for anaemia, one in three women with high blood pressure, swollen feet, and bleeding left the problem untreated.

Table 9.6 Treatment for complications during pregnancy

Among women with a birth in the five years preceding the survey who had complications associated with the most recent pregnancy, percentage who sought advice or treatment, by type of complication, Malawi 2004

Type of complication	Health facility		Home	Traditional birth attendant	Other	Not treated	Number of women with complications
	Public sector	Private sector					
High blood pressure	47.0	17.5	0.9	3.1	2.2	30.7	1,019
Swollen feet	44.5	17.4	1.1	2.6	2.0	33.5	958
Anaemia	56.9	20.1	1.1	3.7	5.4	15.5	877
Bleeding	43.7	18.1	0.5	5.3	4.3	31.9	406

9.2 ASSISTANCE AND MEDICAL CARE AT DELIVERY

An important component in the effort to reduce the health risks of mothers and children is to increase the proportion of babies that are delivered in facilities where skilled attendance is available. Services in a health facility include trained health workers, appropriate supplies, equipment to identify and manage complications in a timely manner, and maintenance of hygienic conditions to prevent infections. The 2004 MDHS respondents were asked to report the place of birth of all children born in the five years before the survey. Table 9.7 shows that 57 percent of births took place in a health facility. This figure shows that there has been no notable improvement from the 1992 and 2000 MDHS surveys (both 55 percent). Government-run health facilities were used for 42 percent of the births, while private facilities managed 15 percent of births. A considerable proportion of births took place at home, either in the respondent's home (29 percent) or the traditional birth attendant (TBA)'s home (12 percent).

Children born to women less than 34 years of age and first-order births are more likely to be delivered in a health facility than other children. Similarly, the majority of births in urban areas, births to women with secondary or higher education, and to women in the highest wealth quintile occurred in a health facility. The proportion of births delivered in a health facility varies from less than 50 percent in Kasungu and Salima (43 percent and 46 percent, respectively) to 79 percent in Blantyre. The assistance of a TBA during delivery is most common in Salima (23 percent) and least common in Mangochi (4 percent).

Table 9.7 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Malawi 2004

Background characteristic	Health facility		Home	Traditional birth attendant	Other	Missing	Total	Number of births
	Public sector	Private sector						
Mother's age at birth								
<20	43.3	13.6	29.7	12.3	1.0	0.1	100.0	2,205
20-34	42.3	16.0	28.3	12.2	1.2	0.1	100.0	7,321
35-49	37.2	14.7	35.1	11.7	1.1	0.2	100.0	1,246
Birth order								
1	47.6	15.8	24.2	11.4	0.8	0.2	100.0	2,530
2-3	42.3	15.6	28.7	11.9	1.3	0.2	100.0	3,945
4-5	39.8	15.1	32.2	11.7	1.1	0.0	100.0	2,308
6+	36.4	14.4	33.9	13.9	1.3	0.1	100.0	1,989
Residence								
Urban	66.4	17.9	12.3	2.7	0.6	0.1	100.0	1,425
Rural	38.2	14.9	32.0	13.6	1.2	0.1	100.0	9,347
Region								
Northern	46.9	20.0	23.2	8.7	1.1	0.1	100.0	1,345
Central	37.2	15.3	31.9	14.3	1.2	0.2	100.0	4,494
Southern	44.8	14.1	28.7	11.1	1.1	0.1	100.0	4,933
District								
Blantyre	70.0	8.6	14.1	5.7	1.7	0.0	100.0	724
Kasungu	36.0	7.4	36.9	18.9	0.9	0.0	100.0	525
Machinga	42.0	13.4	33.7	10.0	0.7	0.1	100.0	441
Mangochi	38.4	12.5	44.9	3.6	0.6	0.0	100.0	636
Mzimba	40.6	25.4	25.2	7.5	1.2	0.1	100.0	676
Salima	38.7	7.7	29.5	23.3	0.7	0.1	100.0	312
Thyolo	37.9	13.5	27.1	19.3	2.2	0.0	100.0	575
Zomba	47.7	18.0	22.9	11.0	0.5	0.0	100.0	544
Lilongwe	37.9	17.0	32.4	12.4	0.1	0.1	100.0	1,489
Mulanje	38.7	20.8	22.7	16.6	1.0	0.1	100.0	437
Other districts	40.4	15.8	29.7	12.4	1.5	0.2	100.0	4,414
Education								
No education	32.2	10.7	41.9	13.9	1.2	0.1	100.0	2,903
Primary 1-4	39.3	12.7	32.3	14.3	1.0	0.3	100.0	3,102
Primary 5-8	47.1	17.9	22.6	10.9	1.4	0.1	100.0	3,637
Secondary+	57.2	26.1	10.6	5.8	0.3	0.0	100.0	1,127
Antenatal care visits¹								
None	19.2	6.3	58.2	14.9	1.3	0.0	100.0	337
1-3	38.0	13.8	34.1	12.6	1.4	0.0	100.0	2,738
4+	47.4	17.5	23.2	10.9	1.0	0.1	100.0	4,149
Wealth quintile								
Lowest	36.2	10.6	40.4	11.9	0.8	0.0	100.0	2,099
Second	34.6	12.0	36.1	15.6	1.4	0.4	100.0	2,426
Middle	38.9	13.3	31.9	14.1	1.7	0.1	100.0	2,446
Fourth	45.3	18.2	23.3	12.4	0.6	0.2	100.0	2,091
Highest	59.6	25.1	10.1	4.4	0.8	0.0	100.0	1,709
Total	41.9	15.3	29.4	12.1	1.1	0.1	100.0	10,771

Note: Private health facility includes Mission health facility. Total includes 53 cases with the number of antenatal care visits missing.

¹ Includes only the most recent birth in the five years preceding the survey.

The 2004 MDHS asked questions about the person who assisted with the delivery. The majority of births were attended by medical professionals, 50 percent by a nurse or midwife, 6 percent by a doctor, and 1 percent by a patient attendant. In the four years since the 2000 MDHS there has been a slight increase in the proportion of births that are attended by a doctor—from 5 to 6 percent. The role of traditional birth attendants (TBAs) in delivery assistance has also increased—from 23 to 26 percent (Table 9.8).

Table 9.8 Assistance during delivery

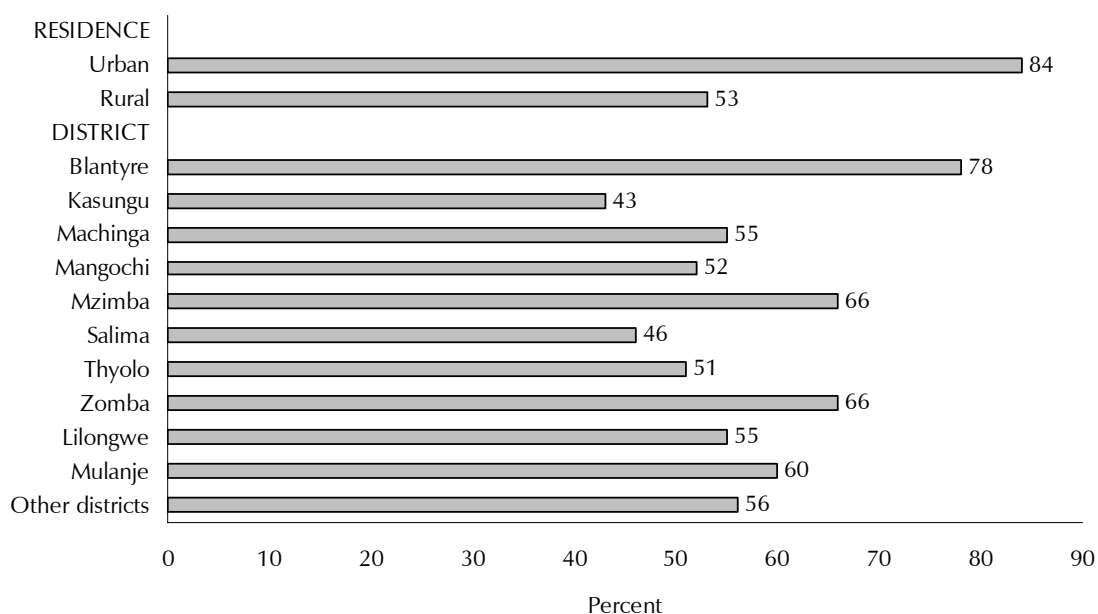
Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, according to background characteristics, Malawi 2004

Background characteristic	Doctor/clinical officer	Nurse or midwife	Patient attendant	Traditional birth attendant	Relative/friend/other	No one	Don't know/missing	Total	Number of births
Mother's age at birth									
<20	5.3	50.9	0.5	28.4	13.6	0.8	0.5	100.0	2,205
20-34	6.3	50.6	1.1	25.2	14.4	1.9	0.4	100.0	7,321
35-49	5.8	45.4	0.6	27.7	14.1	5.2	1.1	100.0	1,246
Birth order									
1	6.7	56.1	0.5	24.5	11.3	0.6	0.3	100.0	2,530
2-3	6.1	50.5	1.1	25.9	14.6	1.4	0.5	100.0	3,945
4-5	5.8	47.9	1.0	25.6	16.8	2.4	0.4	100.0	2,308
6+	5.3	44.1	1.3	29.5	14.1	4.9	0.9	100.0	1,989
Residence									
Urban	8.3	74.8	0.7	8.4	6.7	0.9	0.2	100.0	1,425
Rural	5.7	46.3	1.0	28.9	15.4	2.2	0.6	100.0	9,347
Region									
Northern	6.1	60.2	0.3	18.8	11.4	3.0	0.1	100.0	1,345
Central	5.8	45.5	0.8	31.5	14.1	1.7	0.8	100.0	4,494
Southern	6.2	51.5	1.3	23.4	15.1	2.2	0.4	100.0	4,933
District									
Blantyre	8.5	69.2	0.3	14.3	5.4	1.9	0.3	100.0	724
Kasungu	8.8	33.1	1.1	38.9	13.8	3.6	0.7	100.0	525
Machinga	2.3	46.5	6.2	16.2	25.2	2.2	1.4	100.0	441
Mangochi	11.9	38.3	2.0	24.8	21.0	1.9	0.1	100.0	636
Mzimba	7.0	58.6	0.3	15.8	14.5	3.6	0.1	100.0	676
Salima	8.8	37.1	0.1	41.6	10.7	0.4	1.4	100.0	312
Thyolo	6.0	44.9	0.3	35.8	10.5	2.3	0.3	100.0	575
Zomba	7.2	57.2	1.1	19.7	11.8	2.5	0.4	100.0	544
Lilongwe	3.7	50.2	0.8	30.0	14.5	0.7	0.1	100.0	1,489
Mulanje	5.2	53.7	1.0	24.9	14.1	0.8	0.4	100.0	437
Other districts	5.2	50.1	0.6	26.7	14.5	2.3	0.7	100.0	4,414
Education									
No education	3.9	37.9	1.0	31.8	21.2	3.5	0.7	100.0	2,903
Primary 1-4	6.2	44.2	1.3	29.5	16.0	2.1	0.7	100.0	3,102
Primary 5-8	6.2	57.8	0.8	23.4	10.1	1.3	0.3	100.0	3,637
Secondary+	10.1	72.8	0.5	11.7	4.5	0.4	0.1	100.0	1,127
Wealth quintile									
Lowest	5.5	40.4	0.7	30.5	19.9	2.3	0.7	100.0	2,099
Second	4.1	41.2	1.3	32.9	17.7	2.1	0.7	100.0	2,426
Middle	5.5	45.2	1.2	29.2	15.6	2.9	0.5	100.0	2,446
Fourth	6.4	56.2	0.6	24.0	10.8	1.7	0.4	100.0	2,091
Highest	9.5	74.2	0.9	9.8	4.5	1.0	0.1	100.0	1,709
Total	6.0	50.1	1.0	26.2	14.2	2.1	0.5	100.0	10,771

Note: If the respondent mentioned more than one attendant, only the most qualified attendant is considered in this tabulation.

While 78 percent of births in Blantyre were assisted by a health professional, the corresponding proportions in Kasungu and Salima are 43 and 46 percent, respectively (Figure 9.2). Delivery by a TBA is most common in Salima (42 percent) and Kasungu (39 percent), while Blantyre has the lowest level of TBA deliveries (14 percent). In rural areas 15 percent of births are attended by relatives or other persons who may not be trained in assisting deliveries, and 29 percent of the births are assisted by TBAs. With poor quality and inadequate antenatal care, as well as limited access to skilled attendance at delivery, the concept of safe pregnancy and child birth may not be realised by some Malawian women, especially those residing in rural areas.

Figure 9.2 Assistance at Delivery from a Health Professional, by Residence and District



MDHS 2004

One outcome of pregnancy assessed during the survey was assisted operative delivery such as caesarean section (C-section). This operation is one of the emergency obstetric care functions recommended for addressing some complications that contribute to high maternal mortality. According to the survey data, 3 percent of births in the five years preceding the survey were delivered by C-section. This rate is similar to that recorded in the 2000 MDHS. The stagnation in the C-section rate since 1992 in Malawi suggests that emergency obstetric care is limited to a small proportion of women.

Table 9.9 shows that C-section deliveries are more common among births to younger women, for the first child, births to women with higher education, and women residing in urban areas. In four districts, Blantyre, Mzimba, Thyolo, and Zomba, the proportion of births delivered by C-section is slightly higher (4 to 5 percent) than the national average of 3 percent. The higher proportion of C-section operations in Blantyre and Zomba was also reported in the 2000 MDHS.

Table 9.9 Delivery characteristics

Percentage of live births in the five years preceding the survey delivered by caesarean section, and percent distribution by birth weight and by mother's estimate of baby's size at birth, according to background characteristics, Malawi 2004

Background characteristic	Delivery by C-section	Birth weight			Total	Size of child at birth				Total	Number of births
		Less than 2.5 kg	2.5 kg or more	Don't know/missing		Very small	Smaller than average	Average or larger	Don't know/missing		
Mother's age at birth											
<20	3.9	6.5	40.0	53.5	100.0	4.3	15.4	77.4	3.0	100.0	2,205
20-34	3.0	5.2	45.1	49.7	100.0	3.6	10.9	83.2	2.3	100.0	7,321
35-49	2.0	4.2	39.1	56.7	100.0	4.2	10.4	83.0	2.4	100.0	1,246
Birth order											
1	4.7	6.7	45.2	48.1	100.0	4.2	14.0	78.9	2.9	100.0	2,530
2-3	3.1	5.0	45.2	49.8	100.0	3.3	10.9	83.4	2.4	100.0	3,945
4-5	2.5	5.0	43.3	51.7	100.0	3.5	11.0	82.9	2.6	100.0	2,308
6+	1.8	4.7	37.4	57.9	100.0	4.9	11.4	82.0	1.8	100.0	1,989
Residence											
Urban	4.4	6.1	67.5	26.3	100.0	2.4	7.7	88.8	1.0	100.0	1,425
Rural	2.9	5.2	39.7	55.1	100.0	4.0	12.3	80.9	2.7	100.0	9,347
Region											
Northern	4.6	7.5	63.0	29.5	100.0	2.9	7.3	88.4	1.4	100.0	1,345
Central	2.8	4.8	36.7	58.5	100.0	4.8	13.7	79.5	2.0	100.0	4,494
Southern	2.9	5.2	44.1	50.7	100.0	3.2	11.1	82.5	3.2	100.0	4,933
District											
Blantyre	3.5	7.5	62.3	30.1	100.0	3.2	9.6	85.2	2.0	100.0	724
Kasungu	1.9	7.3	44.0	48.7	100.0	6.7	14.8	77.5	1.0	100.0	525
Machinga	1.3	7.1	29.4	63.4	100.0	4.9	11.9	82.0	1.2	100.0	441
Mangochi	2.5	4.3	37.7	58.0	100.0	1.8	15.1	81.4	1.7	100.0	636
Mzimba	5.2	7.9	61.7	30.4	100.0	3.1	11.4	84.4	1.1	100.0	676
Salima	2.5	3.5	26.3	70.2	100.0	5.6	13.1	73.0	8.3	100.0	312
Thyolo	4.2	4.9	41.6	53.5	100.0	3.6	9.8	78.4	8.3	100.0	575
Zomba	3.5	6.3	56.1	37.6	100.0	5.0	12.0	79.6	3.4	100.0	544
Lilongwe	2.6	5.1	41.2	53.6	100.0	6.4	12.4	80.2	1.0	100.0	1,489
Mulanje	2.6	5.8	45.8	48.3	100.0	2.5	8.2	85.6	3.7	100.0	437
Other districts	3.2	4.4	39.9	55.7	100.0	3.0	11.5	83.3	2.2	100.0	4,414
Education											
No education	1.9	4.7	27.4	67.9	100.0	4.5	14.1	78.3	3.0	100.0	2,903
Primary 1-4	2.9	3.9	36.4	59.7	100.0	4.1	12.9	79.9	3.2	100.0	3,102
Primary 5-8	3.2	6.4	52.1	41.5	100.0	3.1	10.4	84.6	1.9	100.0	3,637
Secondary+	6.3	7.5	75.3	17.2	100.0	3.8	6.6	88.9	0.7	100.0	1,127
Wealth quintile											
Lowest	3.4	4.5	31.6	64.0	100.0	4.3	14.1	78.4	3.2	100.0	2,099
Second	2.5	5.1	33.4	61.5	100.0	4.7	13.4	78.5	3.3	100.0	2,426
Middle	2.2	5.0	39.4	55.6	100.0	3.7	12.0	81.7	2.6	100.0	2,446
Fourth	3.3	5.8	48.6	45.6	100.0	3.4	10.1	84.8	1.7	100.0	2,091
Highest	4.5	6.8	71.2	22.0	100.0	2.6	8.0	88.3	1.1	100.0	1,709
Total	3.1	5.3	43.4	51.3	100.0	3.8	11.7	82.0	2.5	100.0	10,771

Women who gave birth in the five years before the survey were asked whether their baby was weighed at birth and, if so, what the baby's weight was. Interviewers were instructed to use any written record of birth weight available. In addition, because many women do not deliver at a health facility, and hence the baby was not weighed, all respondents were asked for their own subjective assessment of their child's size. Table 9.9 also provides information on the birth weights according to the background characteristics of the mother. Birth weight was reported for slightly less than one-

half of the births. Forty-three percent of all births (or 89 percent of those with a birth weight reported) were reported to be of 2.5 kilograms or more. Five percent of births (11 percent of those with a birth weight) were less than 2.5 kilograms, the cutoff point below which a baby is considered to have low birth weight. The proportion of low birth weight babies is 7 percent or higher in Blantyre, Kasungu, Machinga, and Mzimba.

Regarding the size of the child at birth, 82 percent of births were reported by the mother as being average or larger than average in size. For 16 percent of births, mothers said that their child was smaller than average (12 percent) or very small (4 percent); in the 2000 MDHS, 17 percent of births were reported as smaller than average or very small. District estimates of low birth weight, using subjective assessment, vary from a low of 11 percent in Mulanje to 22 percent in Kasungu.

9.3 POSTNATAL CARE

Postnatal care is an important component of obstetric and neonatal care aimed at preventing and managing any complications that may endanger the survival of the mother and the baby. Postnatal care is therefore recommended immediately after the birth of the baby and placenta to 42 days after delivery. Respondents who gave birth in a health facility are assumed to have received a postnatal check during their stay in the health facility. Those who gave birth outside a health facility were asked whether someone checked on their health following the delivery. Table 9.10 shows that 31 percent of women received postnatal care, and 21 percent of these women reported receiving care within two days of delivery. Few women had a checkup 3 to 6 days after delivery, and 8 percent received care between the first and sixth week after delivery. Table 9.10 further shows that postnatal care is more common for older women, women residing in urban areas, more educated women, and women in the highest wealth quintile. Women who live in Blantyre and Thyolo are the most likely to have had a postnatal checkup, whereas three in four women in Salima and Lilongwe did not receive postnatal care.

The low utilisation of health facilities for delivery as well as nonutilisation of postnatal care services shows that most women do not get skilled care during delivery and the postpartum period. Strategies for improving maternal health should therefore focus on pull factors for health facility care or bringing the skilled care to the home.

Table 9.10 Postnatal care

Among women who gave birth in the five years preceding the survey, the percent distribution by timing of postnatal checkup, according to background characteristics, Malawi 2004

Background characteristic	Timing of first postnatal checkup				Did not receive postnatal checkup ¹	Total	Number of women
	Within 2 days of delivery	3-6 days after delivery	7-41 days after delivery	Don't know/missing			
Age at birth							
<20	19.9	2.0	6.5	0.2	71.3	100.0	1,293
20-34	19.9	3.1	8.3	0.1	68.5	100.0	4,979
35-49	24.4	2.6	6.6	0.3	66.0	100.0	1,000
Birth order							
1	21.8	2.8	8.7	0.2	66.5	100.0	1,518
2-3	19.8	3.1	8.3	0.2	68.6	100.0	2,659
4-5	18.1	2.9	8.4	0.2	70.4	100.0	1,622
6+	23.3	2.3	5.3	0.2	68.9	100.0	1,473
Residence							
Urban	27.2	2.6	12.1	0.1	57.9	100.0	1,041
Rural	19.4	2.9	7.0	0.2	70.4	100.0	6,231
Region							
Northern	25.0	3.6	5.8	0.3	65.3	100.0	924
Central	17.6	2.3	6.7	0.0	73.4	100.0	2,959
Southern	21.9	3.1	9.3	0.3	65.4	100.0	3,389
District							
Blantyre	22.8	3.8	18.4	0.2	54.7	100.0	520
Kasungu	25.9	1.1	5.0	0.0	68.0	100.0	330
Machinga	22.2	2.5	3.2	0.5	71.6	100.0	284
Mangochi	28.0	4.3	7.4	0.5	59.8	100.0	411
Mzimba	22.9	3.3	7.0	0.3	66.5	100.0	464
Salima	11.6	3.8	9.8	0.2	74.5	100.0	199
Thyolo	29.8	2.6	11.6	0.2	55.8	100.0	386
Zomba	20.6	2.9	7.3	0.0	69.2	100.0	389
Lilongwe	17.3	2.3	5.7	0.0	74.7	100.0	1,013
Mulanje	16.9	4.8	13.3	0.7	64.2	100.0	296
Other districts	18.9	2.5	6.4	0.1	72.0	100.0	2,981
Education							
No education	16.8	2.4	4.6	0.1	76.1	100.0	1,885
Primary 1-4	19.2	3.0	6.7	0.2	70.9	100.0	2,021
Primary 5-8	22.6	2.7	8.2	0.3	66.2	100.0	2,485
Secondary+	25.7	3.8	15.9	0.2	54.4	100.0	880
Wealth quintile							
Lowest	16.9	1.9	5.3	0.2	75.7	100.0	1,380
Second	18.8	2.4	6.2	0.3	72.3	100.0	1,579
Middle	18.4	3.5	6.7	0.1	71.3	100.0	1,610
Fourth	23.0	2.5	7.9	0.3	66.3	100.0	1,432
Highest	26.8	3.9	13.6	0.0	55.7	100.0	1,271
Total	20.6	2.8	7.8	0.2	68.6	100.0	7,271

Note: If a woman had more than one live birth outside a health facility, only the most recent birth is considered.

¹Includes women who received the first postnatal checkup after 41 days

Women who gave birth in the five years preceding the survey were asked to report any problems, such as heavy bleeding, high blood pressure, stroke or convulsions, infection or fever, postpartum depression, and leakage of urine or stools from the vagina (probable fistula) post partum for their most recent birth. Table 9.11 shows that heavy bleeding is the most often reported problem (7 percent), followed by infection and high blood pressure (3 percent each). Probable fistula, postpartum depression, and stroke/convulsions were each reported by two percent of women.

Background characteristic	Heavy bleeding	High blood pressure	Stroke/convulsions	Infection/fever	Leakage of urine or stool from vagina	Postpartum depression/blues	Number of women
Number of ANC visits							
None	3.0	2.2	1.6	3.0	3.0	2.1	337
1-3	6.7	2.7	1.5	2.7	1.6	1.7	3,703
4+	7.2	3.3	1.4	4.1	1.5	1.6	3,184
Age at birth							
<20	6.8	2.8	1.5	2.3	2.7	1.7	1,293
20-34	6.5	2.6	1.3	3.2	1.3	1.8	4,979
35-49	7.6	4.7	1.9	4.9	1.5	1.0	1,000
Birth order							
1	6.6	1.8	1.5	2.8	2.3	1.6	1,518
2-3	6.5	3.1	1.3	2.8	1.5	1.4	2,659
4-5	6.5	2.4	1.1	3.8	1.6	2.4	1,622
6+	7.4	4.4	2.0	4.1	1.0	1.5	1,473
Residence							
Urban	6.1	2.2	0.7	2.3	1.6	1.5	1,041
Rural	6.8	3.0	1.6	3.5	1.6	1.7	6,231
Region							
Northern	6.8	2.4	1.8	2.9	1.3	1.4	924
Central	6.4	2.6	1.8	3.6	1.4	1.3	2,959
Southern	6.9	3.4	1.1	3.1	1.9	2.1	3,389
District							
Blantyre	8.7	4.5	0.9	4.1	4.0	3.3	520
Kasungu	8.4	4.0	3.8	3.8	2.1	1.3	330
Machinga	5.9	3.7	0.9	2.0	1.4	0.8	284
Mangochi	8.7	6.2	3.0	6.3	2.7	3.5	411
Mzimba	7.0	3.4	2.9	3.0	1.3	2.3	464
Salima	4.9	1.4	2.3	2.4	1.1	1.6	199
Thyolo	7.6	4.4	1.6	3.9	2.3	1.3	386
Zomba	6.5	2.9	1.5	3.3	1.8	1.2	389
Lilongwe	5.3	1.3	0.9	3.2	1.7	1.7	1,013
Mulanje	5.9	3.3	0.5	1.5	1.1	1.5	296
Other districts	6.5	2.4	1.1	3.1	1.0	1.3	2,981
Education							
No education	5.5	2.5	1.5	3.0	1.4	1.4	1,885
Primary 1-4	6.9	4.0	1.5	2.9	1.6	2.0	2,021
Primary 5-8	8.1	2.9	1.5	3.9	1.9	1.8	2,485
Secondary+	5.1	1.5	0.9	3.3	1.0	1.4	880
Wealth quintile							
Lowest	5.4	3.1	1.7	2.4	1.4	1.4	1,380
Second	6.4	3.1	1.7	3.4	1.8	1.4	1,579
Middle	6.4	2.8	1.3	3.3	2.0	1.4	1,610
Fourth	8.6	3.4	1.3	3.0	1.3	2.1	1,432
Highest	6.8	2.1	1.2	4.4	1.3	2.2	1,271
Total	6.7	2.9	1.5	3.3	1.6	1.7	7,271

Note: Total includes 53 cases with the number of antenatal care visits missing.

9.4 WOMEN'S PARTICIPATION IN DECISIONMAKING

Health-seeking behaviour is influenced by a number of factors, including the ability to make decisions regarding one's health or to have control over family income. Lack of these abilities has been cited as a barrier for proper utilisation of maternal and child health services. Women who had a live birth in the five years preceding the survey were asked whether they participated in making decisions about their own health care, making large household purchases, purchasing daily household needs, visiting family members or relatives, and determining what food to cook each day. Women were also asked about their attitude towards a wife's ability to negotiate sex with her husband, as well as their perceptions about wife beating (see Chapter 3).

Data in Table 9.12 indicate that women who were more empowered were generally somewhat more likely to receive health care during pregnancy, delivery, and the postpartum period. For example, the proportion of women who received antenatal care increases from 91 percent among women who have no final say in decisionmaking to 93 percent or higher for women who participated in one or more decisions. Similarly, the percentage of women who received delivery care from a health professional declines from 60 percent among women who do not think there was any reason for a husband to beat his wife to 52 percent or lower for women who think that a husband is justified in beating his wife.

Women's status indicator	Percentage of women who:			Percentage of births assisted by a doctor, clinical officer, nurse/ midwife/ patient attendant	
	Received antenatal care from a doctor, clinical officer, nurse, midwife, or patient attendant	Received postnatal care within the first two days of delivery ¹	Number of women	Number of births	Number of births
Number of decisions in which woman has final say²					
0	91.4	59.6	1,264	55.2	1,911
1-2	93.1	58.8	3,227	54.9	4,880
3-4	94.8	63.8	1,476	61.7	2,184
5	93.0	64.0	1,305	59.2	1,797
Number of reasons to refuse sex with husband					
0	91.1	59.9	753	54.1	1,130
1-2	92.1	58.2	1,362	55.2	2,028
3-4	93.8	61.7	5,157	58.0	7,614
Number of reasons wife beating is justified					
0	93.4	63.1	5,159	59.9	7,628
1-2	92.5	56.1	1,245	52.2	1,840
3-4	93.7	52.6	582	45.9	866
5	89.9	57.6	286	50.5	437
Total	93.2	60.9	7,271	57.0	10,771

¹Includes mothers who delivered in a health facility
²Either by herself or jointly with others

9.5 CHILDHOOD VACCINATIONS

Malawi's Expanded Programme on Immunisation (EPI) follows guidelines for vaccinating children set by the World Health Organisation (WHO). A child is considered fully vaccinated if she or he has received one dose of BCG vaccine, three doses each of DPT and polio vaccine, and one dose of measles vaccine. BCG protects against tuberculosis and should be given at birth or first clinic contact. DPT protects against diphtheria, pertussis (whooping cough), and tetanus. DPT and polio vaccines are given at approximately 6, 10, and 14 weeks of age. The measles vaccine should be given at or soon after the child reaches nine months of age. The Malawi EPI recommends that children receive the complete schedule of vaccinations before 12 months of age. A dose of polio vaccine at or around birth is being promoted, although it is not yet widely practised in Malawi. To assist in the evaluation of the EPI, the 2004 MDHS survey collected information on vaccination coverage for all living children born in the five years preceding the survey.

Information on vaccination coverage was collected in two ways: from child health cards seen by the interviewer and from mothers' verbal reports. Health cards on which vaccinations are recorded are typically provided by health centres and clinics. If a mother was able to present such a card to the interviewer, this was used as the source of information, with the interviewer recording vaccination dates directly from the card. In addition to collecting vaccination information from cards, there were two ways of collecting the information from the mother herself. If a vaccination card was presented but a vaccine was not recorded on the card as being given, the mother was asked to recall whether or not that particular vaccine had been given. If the mother was not able to provide a card for the child at all, she was asked through a series of probing questions whether or not the child had received BCG, polio, DPT (including the number of doses for each), and measles vaccinations.

Table 9.13 presents information on vaccination coverage for children age 12-23 months¹ according to the source of information used to determine coverage, i.e., the child health card or mother's report. Based on information from the health card and mother's report, 91 percent of children age 12-23 months had been vaccinated against tuberculosis, 82 percent received DPT3, 78 percent received polio3, and 79 percent received measles vaccine. Overall, 64 percent of children age 12-23 months have received all the recommended vaccines, and 4 percent of children have received none.

Vaccinations are most effective when given at the proper age. While 79 percent of children age 12-23 months have been vaccinated against measles, only 63 percent were vaccinated before their first birthday, indicating that some children were late in receiving their measles vaccination. This is important because measles at a young age is potentially life threatening, especially in malnourished children.

Figure 9.3 shows the percentage of children age 12-23 months who received the recommended six vaccines by 12 months of age. Coverage of DPT1 and polio1 is 94 percent, 90 percent for BCG, and 63 percent for measles. Another way to evaluate the success of an immunisation programme is to calculate the dropout rate for DPT and polio. The dropout rate is defined as the percentage of children who receive the first dose but do not receive the third dose of a

¹ These children are supposed to have received a complete schedule of vaccinations.

specific vaccine. Using data in Table 9.13, the dropout rate for DPT is 14 percent, and that for polio is 18 percent.

Table 9.13 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Malawi 2004

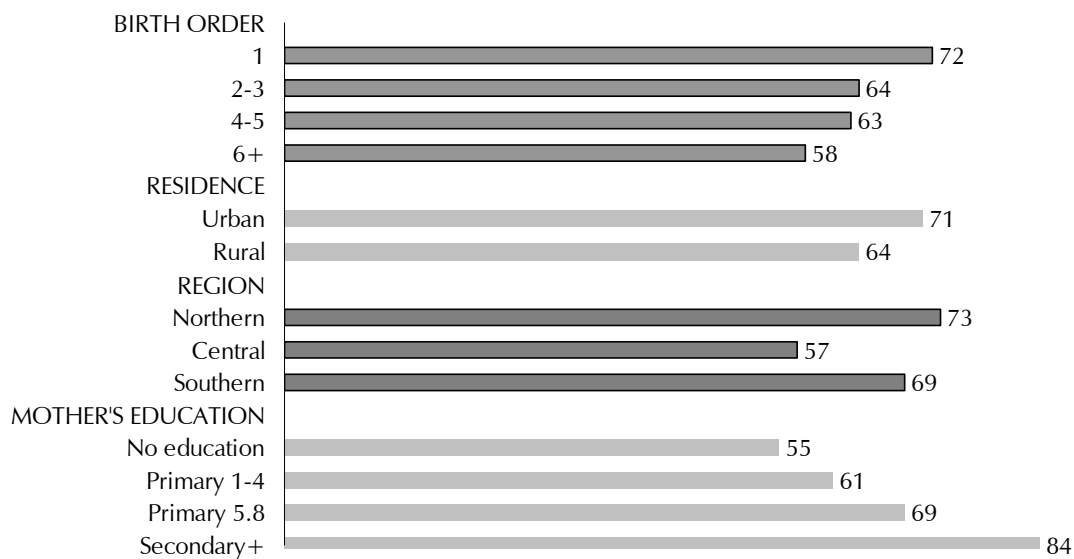
Source of information	BCG	DPT			Polio			Measles	All ²	No vaccinations	Number of children	
		1	2	3	0 ¹	1	2					3
Vaccinated at any time before survey												
Vaccination card	70.3	73.3	71.8	67.2	29.1	73.7	71.8	67.4	61.8	57.4	0.2	1,631
Mother's report	21.1	21.6	18.8	14.3	8.0	21.3	18.0	10.2	16.9	7.0	3.3	563
Either source	91.4	95.0	90.6	81.5	37.1	94.9	89.7	77.7	78.7	64.4	3.5	2,194
Vaccinated by 12 months of age³												
	89.7	94.0	88.4	76.1	36.8	93.9	87.7	73.2	62.7	51.1	4.3	2,194

¹ Polio 0 is the polio vaccination given at birth.

² BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

³ For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

Figure 9.3 Percentage of Children Age 12-23 Months Who Were Vaccinated by 12 Months of Age



MDHS 2004

Table 9.14 shows the trends in childhood vaccination coverage reported in MDHS surveys from 1992 to 2004. Data in the table indicate that vaccination coverage in Malawi has declined. The first indication comes from a small drop in the percentage of children with a vaccination card from 86 percent in 1992 to 81 in 2000 and to 74 percent in 2004. The decline may indicate decreased access to services. The failure of some children to complete the polio and the DPT series has resulted in a decline in polio3 coverage from 88 percent in 1992 to 80 percent in 2000 and to 78 percent in 2004. Similarly, DPT3 coverage dropped from 89 percent in 1992 to 84 percent in 2000 and to 82 percent in 2004. The percentage of children considered fully immunized declined from 82 percent in 1992 to 64 percent in 2004.

Source	DPT			Polio				Measles	All	No vaccinations	Percentage with card	Number of children	
	BCG	1	2	3	0	1	2						3
1992 MDHS	97.0	96.9	94.3	88.6	na	96.9	94.2	88.1	85.8	81.8	2.5	86.3	772
2000 MDHS	92.4	95.9	92.6	84.2	46.9	95.7	91.3	79.8	83.2	70.1	2.8	81.1	2,238
2004 MDHS	91.4	95.0	90.6	81.5	37.1	94.9	89.7	77.7	78.7	64.4	3.5	74.3	2,194

na = Not applicable

Table 9.15 presents the vaccination coverage in 2004 among children age 12-23 months by selected background characteristics. First-born children, children in urban areas, children in the Northern Region, children born to women with secondary and higher education, and those born to women in the higher wealth quintiles are more likely than other children to be fully vaccinated. Among the oversampled districts, vaccination coverage ranges from 53 percent or lower in Kasungu, Salima, and Lilongwe to 84 percent in Blantyre. While nationally 4 percent of children age 12-23 months have never received any vaccination, the percentage varies substantially across districts. Lilongwe shows the highest percentage of children who have had no vaccinations (10 percent).

Table 9.15 Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Malawi 2004

Background characteristic	DPT			Polio ¹				Measles	All ²	No vaccinations	Percentage with a vaccination card	Number of children	
	BCG	1	2	3	0	1	2						3
Sex													
Male	90.7	94.5	90.9	81.5	36.2	94.2	89.1	77.7	78.8	65.7	4.3	75.4	1,100
Female	92.1	95.5	90.4	81.6	38.0	95.6	90.4	77.7	78.6	63.1	2.7	73.2	1,094
Birth order													
1	94.8	97.6	94.8	86.7	41.4	96.7	92.1	84.1	84.0	72.2	1.8	75.3	473
2-3	91.7	94.7	91.8	83.1	37.4	95.2	90.4	77.3	78.1	64.1	3.7	75.4	811
4-5	92.0	96.4	89.1	79.0	35.6	95.7	89.7	76.0	78.7	62.8	2.3	76.0	489
6+	86.5	91.0	85.2	75.7	33.5	91.5	85.8	73.1	73.8	58.3	6.6	69.2	421
Residence													
Urban	97.2	98.5	95.1	89.8	56.5	99.3	94.0	81.7	86.8	70.7	0.7	73.7	274
Rural	90.6	94.5	90.0	80.3	34.4	94.3	89.1	77.1	77.6	63.5	3.9	74.4	1,920
Region													
Northern	93.9	97.2	95.0	89.7	59.6	97.3	95.0	82.4	84.9	72.5	1.5	78.8	250
Central	88.2	91.4	86.0	75.4	35.5	91.5	85.5	70.7	72.5	56.8	6.1	68.6	921
Southern	93.7	97.6	93.7	85.1	33.1	97.5	92.3	82.7	82.8	69.3	1.7	78.4	1,023
District													
Blantyre	95.9	100.0	99.1	95.7	55.8	100.0	97.6	92.9	93.0	83.7	0.0	78.6	147
Kasungu	84.6	89.4	81.8	75.4	36.3	89.6	81.2	72.7	64.6	53.4	9.0	74.6	116
Machinga	87.3	94.7	91.1	81.4	25.3	95.2	89.5	80.0	72.7	61.1	3.9	83.3	97
Mangochi	92.5	93.3	87.6	82.5	33.8	92.8	88.1	73.8	76.9	59.5	4.3	68.6	138
Mzimba	94.3	98.3	96.1	92.1	63.8	98.3	96.1	84.3	82.8	72.3	1.7	81.1	129
Salima	94.1	95.6	86.0	71.3	37.9	94.6	84.6	67.4	77.2	51.1	1.5	60.3	69
Thyolo	97.9	99.0	96.8	88.4	22.2	98.9	96.8	87.2	87.0	74.8	0.0	74.7	116
Zomba	93.4	98.3	97.7	91.3	30.9	98.3	93.6	88.1	84.7	72.9	1.7	81.0	108
Lilongwe	85.8	87.2	80.4	69.0	32.5	88.6	82.5	65.3	70.7	52.5	10.0	59.0	292
Mulanje	94.4	98.5	95.0	83.9	24.7	97.8	90.4	83.2	81.2	68.5	1.5	85.9	81
Other districts	91.7	95.9	91.6	80.9	37.4	95.5	90.2	77.0	79.2	64.9	2.4	76.7	901
Mother's education													
No education	89.3	93.7	86.3	74.9	29.4	92.9	85.7	68.7	72.1	54.8	4.6	70.5	586
Primary 1-4	88.0	92.3	87.5	76.4	29.9	93.0	87.9	76.1	75.7	61.2	5.1	72.2	643
Primary 5-8	93.9	97.2	94.4	87.3	44.3	97.1	92.4	82.7	81.7	68.5	2.0	77.0	729
Secondary+	98.4	98.5	98.3	94.1	53.9	98.6	96.7	88.6	93.9	84.3	1.4	81.2	236
Wealth quintile													
Lowest	86.2	92.4	85.2	73.8	30.3	91.8	84.3	68.7	67.4	51.9	5.5	67.6	449
Second	90.4	93.3	87.3	77.4	30.5	94.0	87.9	73.4	76.5	58.0	4.5	69.8	519
Middle	91.9	96.3	93.3	82.6	34.7	95.7	91.1	79.4	78.9	65.5	2.2	80.6	473
Fourth	94.5	95.9	94.3	87.1	40.6	96.3	93.2	83.9	85.6	73.8	2.9	74.5	413
Highest	95.5	97.8	94.6	89.9	55.4	97.5	93.8	85.9	88.3	77.7	2.2	81.1	340
Total	91.4	95.0	90.6	81.5	37.1	94.9	89.7	77.7	78.7	64.4	3.5	74.3	2,194

¹ Polio 0 is the polio vaccination given at birth.

² BCG, measles, and three doses of DPT and polio vaccine (excluding polio vaccine given at birth).

9.6 ACUTE RESPIRATORY INFECTION

Pneumonia is a leading cause of death of young children in Malawi. The programme to control acute respiratory infection (ARI) aims at treating cases of ARI early, before complications develop. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths due to pneumonia. Emphasis is therefore placed on recognition of signs of impending severity, both by mothers and primary health care workers, so help can be sought. The prevalence of ARI was estimated by asking mothers whether their children under age five had been ill with cough accompanied by short, rapid breathing in the two weeks preceding the survey. These symptoms are compatible with pneumonia. It should be borne in mind that morbidity data collected in surveys are subjective (i.e., mother's perception of illness) and not validated by medical examination.

Table 9.16 shows that 19 percent of children under five years of age were ill with a cough and short, rapid breathing at some time in the two weeks preceding the survey. Using the same definition, the 2000 MDHS and 1992 MDHS survey reported that 27 percent and 15 percent of children had ARI in the previous two weeks, respectively. Prevalence of respiratory illness varies by age of the child, with the highest prevalence occurring at 6-11 months. Since 1992, symptoms of respiratory illnesses have increased among children age 6-11 months. Children in rural areas are more likely to have symptoms of ARI than their urban counterparts, and children born to women with less education are more likely to have ARI symptoms than those born to women with no education or secondary and higher education. ARI is higher among children born to women in the middle wealth quintile.

ARI is slightly higher in the Central and Southern regions (20 and 19 percent, respectively) than in the Northern Region (15 percent). District prevalence is as low as 14 percent in Blantyre and as high as 25 percent in Kasungu and Zomba. It cannot be ascertained from these data whether this wide range in ARI prevalence reflects genuine differences in morbidity or rather socio-cultural differences in the perception of disease or disease severity.

Just over one-third of children were reported to have had a fever in the two weeks preceding the survey. The percentage of children with fever is highest among children age 6-11 months (53 percent) and lowest among children age 48-49 months (21 percent). Children born to rural women, women in the Central Region, women with less education, and women living in households in the lowest wealth quintiles are more likely to have had fever than other children.

Among children with symptoms of ARI and/or fever, just 20 percent were taken to a health facility. Younger children age less than 6 months are more likely to be taken to a health facility, as are urban children, children born to women in the Southern Region, children of women with upper primary or higher education, and children of women in the highest wealth quintiles. By district, children are most likely to be taken to a health facility in Salima and Zomba districts (28 percent each) and least likely to be taken in Machinga District (13 percent).

These findings, although underscoring serious problems of access to health services, may also suggest that mothers and other household members do not always understand the importance of quick response to ARI symptoms and fever.

Table 9.16 Prevalence and treatment of symptoms of ARI and fever

Percentage of children under five years of age who had a cough accompanied by short, rapid breathing (symptoms of ARI) and percentage of children who had fever in the two weeks preceding the survey, and percentage of children with symptoms of ARI and/or fever for whom treatment was sought from a health facility or provider, by background characteristics, Malawi 2004

Background characteristic	Percentage of children with symptoms of ARI	Percentage of children with fever	Number of children	Among children with symptoms of ARI and/or fever, percentage for whom treatment was sought from a health facility/provider ¹	Number of children
Age in months					
<6	20.8	30.7	1,109	22.6	431
6-11	26.6	53.2	1,188	21.0	732
12-23	22.2	49.5	2,194	20.7	1,227
24-35	17.6	39.5	1,743	15.6	817
36-47	15.7	28.8	1,741	20.5	630
48-59	12.5	21.1	1,802	17.9	522
Sex					
Male	20.2	37.1	4,839	20.4	2,197
Female	17.5	37.2	4,938	18.8	2,163
Residence					
Urban	11.3	29.9	1,341	22.6	466
Rural	20.0	38.3	8,436	19.3	3,894
Region					
Northern	15.2	28.4	1,239	17.9	459
Central	19.6	39.9	4,071	18.2	1,925
Southern	19.1	37.1	4,468	21.4	1,976
District					
Blantyre	14.4	29.4	670	20.8	237
Kasungu	24.5	40.0	471	13.9	241
Machinga	16.0	35.6	405	13.0	162
Mangochi	21.5	36.8	566	20.8	259
Mzimba	17.4	28.9	630	14.7	237
Salima	18.1	42.1	281	28.2	139
Thyolo	21.9	47.3	514	23.6	281
Zomba	24.5	40.1	498	27.8	249
Lilongwe	16.0	38.3	1,376	15.5	601
Mulanje	22.2	44.3	375	21.9	184
Other districts	18.6	36.5	3,992	20.0	1,770
Mother's education					
No education	17.6	37.3	2,594	17.0	1,136
Primary 1-4	20.6	40.4	2,805	16.9	1,358
Primary 5-8	19.7	35.9	3,314	22.4	1,457
Secondary+	14.5	32.1	1,062	26.0	407
Wealth quintile					
Lowest	19.7	40.0	1,889	15.6	903
Second	19.9	41.2	2,170	18.3	1,042
Middle	23.4	37.6	2,206	20.2	1,044
Fourth	17.6	35.3	1,916	22.5	818
Highest	11.5	29.7	1,597	23.2	553
Total	18.8	37.1	9,777	19.6	4,360

ARI = Acute respiratory infection

¹ Excludes pharmacy, shop, and traditional practitioner.

9.7 DIARRHOEAL DISEASE

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children in Malawi. Exposure to agents that cause diarrhoea is frequently related to use of contaminated water and unhygienic practices in food preparation and excreta disposal.

Table 9.17 shows the prevalence of diarrhoea in children under five years of age according to background characteristics. The results indicate that 22 percent of children had diarrhoea at some time in the two weeks preceding the survey, an increase from 18 percent reported in the 2000 MDHS survey. As reported in previous MDHS surveys, diarrhoea prevalence peaks at age 6-11 months (41 percent). The prevalence of diarrhoea varies little by the child's sex. Children in urban areas experience a lower rate of diarrhoea than rural children. Children in the Central Region are more likely to have diarrhoea (27 percent) than children in the Southern Region (21 percent) and Northern Region (12 percent).

Diarrhoea is less prevalent among children who live in houses with piped water and children in the highest wealth quintile. Among the oversampled districts, diarrhoea is most prevalent in Salima, Kasungu, and Thyolo (27 percent or higher), and least prevalent in Blantyre and Mzimba (17 percent or lower).

Table 9.17 Prevalence of diarrhoea

Percentage of children under five years with diarrhoea in the two weeks preceding the survey, by background characteristics, Malawi 2004

Background characteristic	Diarrhoea in the two weeks preceding the survey	Number of children
Age in months		
<6	9.2	1,109
6-11	41.2	1,188
12-23	38.9	2,194
24-35	21.5	1,743
36-47	11.8	1,741
48-59	8.3	1,802
Sex		
Male	23.4	4,839
Female	21.1	4,938
Residence		
Urban	17.5	1,341
Rural	23.0	8,436
Region		
Northern	12.3	1,239
Central	26.6	4,071
Southern	21.1	4,468
District		
Blantyre	17.0	670
Kasungu	27.8	471
Machinga	19.3	405
Mangochi	25.0	566
Mzimba	15.7	630
Salima	28.8	281
Thyolo	27.4	514
Zomba	24.0	498
Lilongwe	24.4	1,376
Mulanje	22.1	375
Other districts	21.4	3,992
Mother's education		
No education	21.4	2,594
Primary 1-4	25.8	2,805
Primary 5-8	20.6	3,314
Secondary+	20.3	1,062
Source of drinking water		
Piped	18.3	1,699
Protected well	22.6	4,248
Open well	24.9	2,648
Surface	21.2	1,169
Wealth quintile		
Lowest	26.4	1,889
Second	23.9	2,170
Middle	22.4	2,206
Fourth	19.6	1,916
Highest	18.1	1,597
Total	22.3	9,777

Table 9.18 Knowledge of ORS packets

Percentage of mothers with births in the five years preceding the survey who know about ORS packets for treatment of diarrhoea, by background characteristics, Malawi 2004

Background characteristic	Percentage of mothers who know about ORS packets	Number of mothers
Age		
15-19	92.2	605
20-24	94.6	2,345
25-29	95.0	1,835
30-34	92.1	1,132
35-49	93.0	1,354
Residence		
Urban	96.5	1,041
Rural	93.4	6,231
Region		
Northern	92.8	924
Central	92.9	2,959
Southern	94.9	3,389
District		
Blantyre	96.4	520
Kasungu	93.4	330
Machinga	91.8	284
Mangochi	87.8	411
Mzimba	94.1	464
Salima	93.4	199
Thyolo	97.9	386
Zomba	98.4	389
Lilongwe	92.0	1,013
Mulanje	96.7	296
Other districts	93.7	2,981
Education		
No education	88.6	1,885
Primary 1-4	93.7	2,021
Primary 5-8	96.1	2,485
Secondary+	98.7	880
Wealth quintile		
Lowest	92.8	1,380
Second	93.0	1,579
Middle	92.2	1,610
Fourth	94.7	1,432
Highest	97.0	1,271
Total	93.8	7,271

A simple and effective response to a child's dehydration is a prompt increase in the intake of appropriate fluids, i.e., oral rehydration therapy (ORT), which has been promoted in Malawi since the early 1980s. ORT is promoted in three types of interventions. The first is the mixture of commercially prepared packets of oral rehydration salts (ORS) commonly known as Thanzi, and water. The other two types are facility-based provision of premixed ORS, and various home-made grain-based rehydration fluids such as rice water and maize water.

In the 2004 MDHS survey, women who had a birth in the last five years were asked questions about their knowledge of ORS packets. Table 9.18 shows that almost all women (94 percent) know of these packets. Knowledge of ORS has increased from 90 percent in 1992 and 86 percent in 2000. Knowledge of this life-saving technology is slightly higher among women in urban areas, more educated women, women in the Southern Region, and women in the highest wealth quintile. Age differences in the knowledge of ORS packets are minimal.

Mothers of children who were reported to have had diarrhoea in the two weeks prior to the survey were asked about their response to the illness. Treatment of children with diarrhoea has improved since 2000. While 28 percent of mothers reported that they took their child to a health facility in 2000, the proportion had increased to 36 percent in 2004. In 2000, 24 percent of children with diarrhoea received no treatment (Table 9.19). This number dropped to 18 percent in 2004. ORS was given to 61 percent of children with diarrhoea, an increase from 43 percent in the 1992 MDHS and 48 percent in the 2000 MDHS. Overall, 70 percent of children were given either ORS or increased fluids, an increase from 63 percent in the 1992 MDHS and 62 percent in 2000 MDHS.

Table 9.19 Diarrhoea treatment

Among children under five years who had diarrhoea in the two weeks preceding the survey, percentage taken for treatment to a health provider, percentage who received oral rehydration therapy (ORT), and percentage given other treatments, according to background characteristics, Malawi 2004

Background characteristic	Percentage taken to a health facility ¹	Oral rehydration therapy (ORT)			Other treatments					Number of children	
		ORS packets	Increased fluids	ORS or increased fluids	Pill/syrup	Injection	Intra-venous solution	Home remedy/other	Missing		No treatment
Age in months											
<6	22.5	35.8	30.6	51.8	9.8	0.0	0.0	13.9	0.3	38.0	102
6-11	41.3	62.1	34.0	70.6	26.3	0.3	0.1	12.5	0.0	18.5	490
12-23	39.5	67.3	38.4	74.7	27.6	0.4	0.0	12.8	0.1	14.0	853
24-35	29.2	58.2	34.4	69.6	29.8	0.3	0.2	10.9	0.1	19.0	375
36-47	35.3	55.1	30.2	62.1	28.4	0.8	0.0	12.4	0.2	18.1	206
48-59	32.0	55.3	42.1	66.9	23.0	0.9	2.1	15.7	0.0	19.2	150
Sex											
Male	37.9	63.2	37.1	72.7	27.5	0.1	0.4	14.1	0.1	15.3	1,134
Female	34.9	58.9	34.5	67.2	25.7	0.7	0.0	11.1	0.1	20.3	1,043
Residence											
Urban	38.7	67.0	52.8	79.2	27.9	0.6	0.0	5.2	0.0	17.1	234
Rural	36.2	60.4	33.8	69.0	26.5	0.4	0.2	13.5	0.1	17.8	1,943
Region											
Northern	24.3	48.5	24.5	59.9	19.6	1.2	0.7	21.0	0.0	19.2	153
Central	32.4	57.8	30.8	67.0	25.2	0.2	0.2	13.8	0.1	19.4	1,083
Southern	43.0	67.0	43.5	75.3	29.3	0.5	0.1	9.9	0.1	15.6	942
District											
Blantyre	47.7	68.7	61.6	82.9	31.4	0.0	0.0	6.8	0.0	12.4	114
Kasungu	23.8	48.3	16.5	55.0	31.2	0.0	0.2	18.4	0.0	23.4	131
Machinga	32.7	57.0	20.8	62.4	33.2	0.0	0.0	7.8	0.6	19.5	78
Mangochi	33.3	59.5	33.3	66.7	31.9	0.8	0.5	9.8	0.0	20.9	142
Mzimba	15.6	41.5	32.9	55.8	20.5	0.7	0.0	28.4	0.0	20.2	99
Salima	43.0	65.9	40.4	77.7	38.7	0.4	0.0	11.5	1.2	13.1	81
Thyolo	53.2	80.2	45.9	85.0	24.0	0.9	0.0	7.6	0.0	9.3	141
Zomba	47.3	68.9	45.7	77.6	33.3	2.0	0.0	3.5	0.6	15.3	120
Lilongwe	29.0	59.5	35.7	69.1	20.0	0.0	0.6	9.6	0.0	21.5	336
Mulanje	34.2	57.5	44.4	68.3	29.4	0.0	0.7	13.3	0.0	24.2	83
Other districts	38.4	61.3	33.4	69.9	25.2	0.4	0.1	14.9	0.0	16.7	854
Education											
No education	29.1	59.1	29.5	68.4	22.4	0.0	0.5	15.0	0.1	19.3	554
Primary 1-4	36.6	58.9	31.4	65.6	25.9	0.8	0.2	14.1	0.0	19.8	724
Primary 5-8	36.7	63.0	41.8	73.2	28.4	0.4	0.0	10.5	0.1	15.4	683
Secondary+	53.9	68.2	48.5	79.5	34.1	0.0	0.3	8.7	0.2	14.2	216
Wealth quintile											
Lowest	34.6	56.0	29.2	64.9	23.6	0.1	0.4	17.3	0.1	18.2	498
Second	40.6	63.4	36.6	72.3	27.2	0.5	0.0	11.8	0.0	17.2	519
Middle	31.7	59.0	31.5	66.5	25.5	0.0	0.1	13.7	0.1	22.0	495
Fourth	35.9	63.6	38.8	74.2	28.0	1.5	0.5	9.7	0.1	15.1	375
Highest	40.9	66.4	49.7	75.9	30.6	0.1	0.0	8.2	0.2	14.1	289
Total	36.4	61.1	35.9	70.1	26.6	0.4	0.2	12.6	0.1	17.7	2,177

¹ Excludes pharmacy, shop, and traditional practitioners.

Treatment-seeking behaviour, particularly the use of ORT, is found most commonly among more educated mothers, mothers in urban areas, and those in the Southern Region. Children age 6-23 months are more likely to get ORS than other children. Other differentials are small.

There are other common responses to diarrhoea; 27 percent of children were given a pill or syrup, and 13 percent were given some type of home remedy. Home remedies, including herbal medicines, are more common in rural areas and in the Northern Region, among children with less educated mothers, and children in households in the lowest wealth quintile.

All mothers of children with diarrhoea in the past two weeks were asked whether they modified the child's feeding practices because of the illness. Table 9.20 indicates that only 36 percent of children with diarrhoea were given more to drink, the recommended action in response to diarrhoea. One in four children were given the same amount as usual, 32 percent were given less than usual, and 8 percent were given no fluids at all, which greatly increases the risks of serious complications and death. Data in Table 9.20 show that only 25 percent of children with diarrhoea received more food, 30 percent were receiving the same amount of food as usual, 35 percent received less food, and 6 percent were given no food at all. Four percent of children were never given food, presumably because they were being exclusively breastfed. These figures reflect a gap in practical knowledge among mothers about the nutritional requirements of children during episodes of diarrhoeal illness.

9.8 WOMEN'S PERCEPTIONS OF PROBLEMS IN ACCESSING HEALTH CARE

In the 2004 MDHS, all women were asked whether they thought certain issues or circumstances were "a big problem or not" when they are sick and want to get medical advice or treatment. Table 9.21 shows the percentage of women who reported that they have big problems in accessing health care for themselves when they are sick. The most often cited problems have to do with distance and cost. Overall, 63 percent of women mention the cost of transport, 62 percent mention the cost for treatment, 60 percent say that distance to a health facility is a big problem, and 55 percent say that having to take transport is a problem. Additionally, 16 percent of women say that knowledge of a source was a big problem for them in gaining access to health services. Concern that there may not be a female health provider is mentioned by only 13 percent of women (Figure 9.4). More than one-fourth of women (27 percent) say that not wanting to go alone is a big problem in accessing health care for themselves, while only 9 percent say getting permission to go for treatment is a big problem.

Table 9.20 Feeding practices during diarrhoea

Percent distribution of children under five years who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, Malawi 2004

	Percent
Amount of liquids offered	
Same as usual	24.8
More	35.9
Somewhat less	16.6
Much less	15.1
None	7.5
Don't know/missing	0.2
Total	100.0
Amount of food offered	
Same as usual	30.0
More	25.1
Somewhat less	20.0
Much less	15.1
None	5.7
Never gave food	4.0
Don't know/missing	0.2
Total	100.0
Number of children	2,177

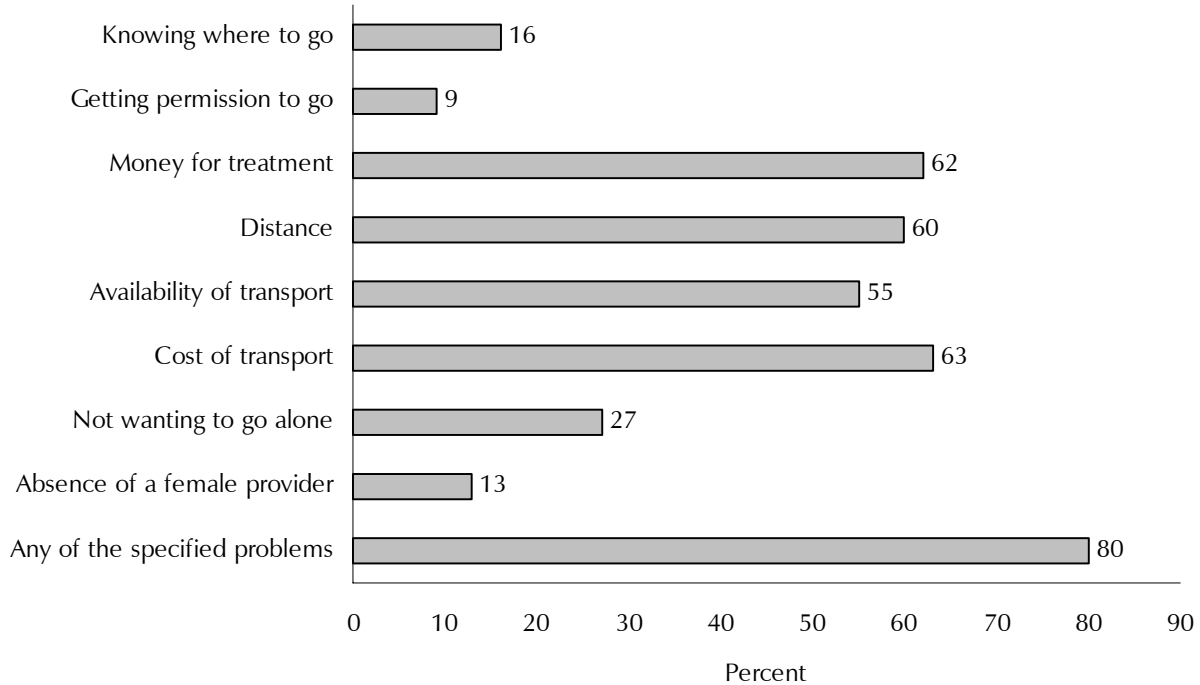
Table 9.21 Problems in accessing health care

Percentage of women who reported they have big problems in accessing health care for themselves when they are sick, by type of problem and background characteristics, Malawi 2004

Background characteristic	Problems in accessing health care								Any of the specified problems	Number of women
	Knowing where to go for treatment	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Cost of transport	Not wanting to go alone	Concern there may not be a female provider		
Age										
15-19	15.5	11.2	57.5	57.7	52.5	58.8	30.4	16.2	78.8	2,392
20-29	15.0	8.4	59.4	57.5	51.6	60.1	24.5	12.1	78.1	5,027
30-39	16.5	8.4	64.9	63.4	59.3	67.9	27.2	13.3	81.7	2,595
40-49	16.2	7.9	68.0	64.8	60.6	69.6	27.4	13.5	83.2	1,684
Number of living children										
0	17.0	11.1	55.5	54.8	48.9	56.1	29.7	16.5	75.7	2,655
1-2	14.0	8.3	59.3	59.0	53.2	61.1	26.0	12.1	78.7	4,092
3-4	15.9	8.4	64.3	61.7	56.9	65.4	24.0	12.1	81.3	2,726
5+	16.5	8.1	69.1	65.5	62.2	71.4	27.6	13.6	84.6	2,225
Marital status										
Never married	15.3	10.7	54.2	52.6	47.1	53.0	29.3	15.6	73.5	1,970
Married or living together	15.1	8.3	61.4	61.0	55.5	63.7	25.6	13.1	80.5	8,312
Divorced/separated/widowed	19.2	10.0	71.8	63.4	61.2	72.0	29.6	12.4	83.9	1,416
Residence										
Urban	9.5	6.3	37.4	30.6	23.0	31.2	12.6	7.6	51.0	2,076
Rural	16.9	9.5	66.7	66.2	61.7	69.8	29.7	14.7	86.0	9,621
Region										
Northern	20.8	10.5	44.0	57.0	46.7	52.6	24.9	13.7	74.9	1,552
Central	16.7	9.8	64.5	61.1	57.7	66.2	29.9	15.7	81.9	4,734
Southern	13.2	7.8	63.8	59.7	54.5	63.0	24.5	11.3	79.3	5,412
District										
Blantyre	11.8	6.8	50.4	48.7	39.3	48.1	18.5	9.1	67.5	914
Kasungu	22.1	10.7	69.9	74.9	67.2	76.2	30.5	27.0	90.5	497
Machinga	13.4	8.9	62.8	64.0	61.6	63.6	25.8	12.3	77.0	427
Mangochi	14.0	9.2	58.3	53.2	43.7	59.7	25.5	13.1	77.3	599
Mzimba	21.9	10.0	52.5	56.9	49.1	57.1	27.6	16.9	75.1	778
Salima	27.9	22.1	69.0	68.3	62.2	68.6	43.8	31.3	89.5	303
Thyolo	19.9	5.2	70.2	65.3	62.5	68.8	34.2	13.0	81.9	618
Zomba	13.1	10.5	59.1	56.7	56.9	59.7	24.5	13.6	76.0	637
Lilongwe	12.6	9.8	52.2	50.7	50.9	56.3	26.0	11.2	70.4	1,705
Mulanje	11.0	5.4	65.6	59.2	58.4	69.8	33.1	16.2	79.9	512
Other Districts	15.6	8.5	66.1	64.1	57.5	66.6	25.8	11.7	85.3	4,708
Education										
No education	18.0	10.2	74.3	69.8	66.4	75.5	28.7	15.8	88.9	2,734
Primary 1-4	18.2	9.7	67.1	65.0	63.0	69.1	30.3	15.2	85.9	2,998
Primary 5-8	14.9	8.8	58.6	57.9	51.3	60.7	26.7	12.5	78.9	4,154
Secondary+	9.4	6.1	39.2	41.0	31.7	38.7	17.8	9.0	57.6	1,811
Employment										
Not employed	15.6	9.5	59.6	56.6	52.2	60.1	25.6	13.3	77.2	4,874
Working for cash	14.9	7.7	54.3	53.7	46.4	54.8	24.4	11.8	73.3	2,125
Not working for cash	16.0	8.9	66.7	66.1	61.3	69.6	28.9	14.3	85.4	4,693
Wealth quintile										
Lowest	17.0	9.9	75.8	71.5	68.8	77.1	32.0	15.2	90.3	2,037
Second	20.1	11.0	73.1	68.3	65.6	74.6	32.8	16.9	89.8	2,277
Middle	18.5	10.9	68.8	68.3	63.8	71.4	29.3	14.9	87.7	2,383
Fourth	14.5	7.8	60.3	60.2	54.5	62.7	26.1	12.9	81.3	2,361
Highest	9.0	5.5	34.8	35.9	26.8	34.4	15.6	8.1	54.4	2,639
Total	15.6	8.9	61.5	59.9	54.8	62.9	26.7	13.4	79.8	11,698

Note: Total includes 7 women with missing information on employment.

Figure 9.4 Percentage of Women Who Reported They Have Big Problems in Accessing Health Care, by Type of Problem



MDHS 2004

In general, older women, rural women, women in the Central Region, less-educated women, women who are not working for cash, and women in the lowest wealth quintiles are more likely than other women to mention specified problems in accessing health care.

Needing permission to obtain treatment is cited as a problem more often by younger women and women with no children. Getting money for treatment, on the other hand, is more often mentioned by older women, women with a large number of children, divorced, separated, or widowed women, rural women, and women living in households in the lowest wealth quintiles.

Not surprisingly, money and distance are the major constraints to women's access to health services. These problems are felt most acutely by women living in remote parts of the country and women living in poorer households. Still, these findings underscore the inequities in real access to health care in the country. As an example, 76 percent of women without formal education mentioned cost of transport as a big problem in getting health services, compared with 39 percent of women with some secondary education (Figure 9.5).

Figure 9.5 Percentage of Women Who Reported the Cost of Transport as a Big Problem in Accessing Health Care

