

ANTENATAL CARE AND DELIVERY ASSISTANCE

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This chapter presents the TDHS-2003 findings concerning antenatal care and delivery assistance, which are areas of importance to maternal and child health. The results on antenatal care and assistance at delivery are based on data collected from mothers on all live births that occurred in the five years preceding the survey.

Aspects of antenatal care (ANC) that are examined include the type of provider, number of visits made, components of the antenatal care, and the stage of pregnancy at the time of the first visit. Similarly, the delivery services are described according to the person assisting and the type and place of delivery.

10.1 Antenatal Care

Table 10.1 shows the percent distribution of women who had a live birth in the five years preceding the survey by ANC provider during pregnancy for the most recent birth, according to the background characteristics and birth order of the child. The interviewers were instructed to record all persons a woman had consulted for care if more than one source of ANC was mentioned for the same pregnancy. However, for this tabulation, only the provider with the highest qualifications is considered if there were more than one provider. It should be considered, however, that the quality of antenatal services is not reflected in these figures.

As seen in Table 10.1, 81 percent of the mothers had at least one ANC visit from trained health personnel during the pregnancy of their most recent birth in the five years preceding the survey. Three-quarters of the mothers received care from the doctor. On the other hand, nearly one-fifth of the mothers did not receive any ANC.

To compare the results with those of the previous survey conducted in 1998, not only the most recent birth but all live births in the five years preceding the survey must be taken into account. This comparison indicates an 11 percentage point increase (from 60 to 71 percent) in the proportion of mothers seeing a doctor for ANC in the five years from 1998 to 2003. Furthermore, proportion of mothers who did not receive any ANC decreased from 32 to 23 percent between the two surveys.

There are marked differences in ANC by background characteristics. Younger mothers are more likely to seek ANC from trained health personnel than women over age 35 (Figure 10.1). In the case of 30 percent of the births to women age 35 and over, the mother did not receive any ANC. The differences in the proportions of live births with ANC according to birth order are also striking. As birth order increases proportions of live births that have

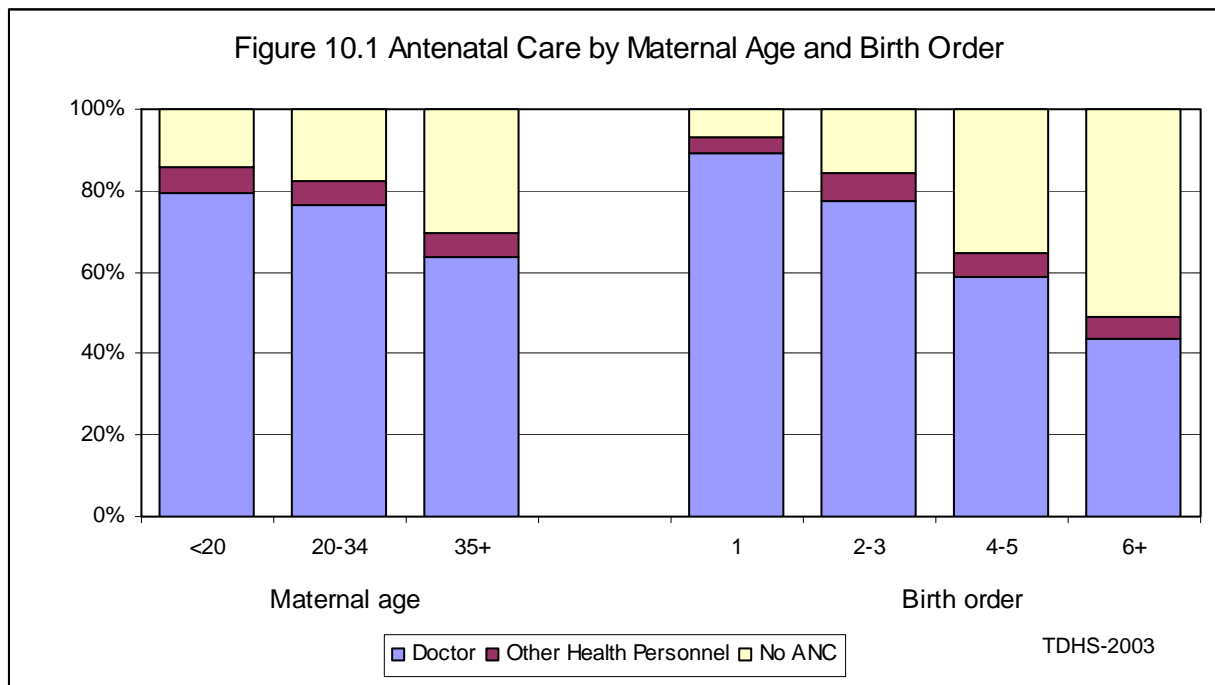
received ANC declines. Children of birth order three or lower are almost twice more likely to have received ANC than births of order six or higher.

Table 10.1 Antenatal care

Percent distribution of ever-married 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, Turkey 2003

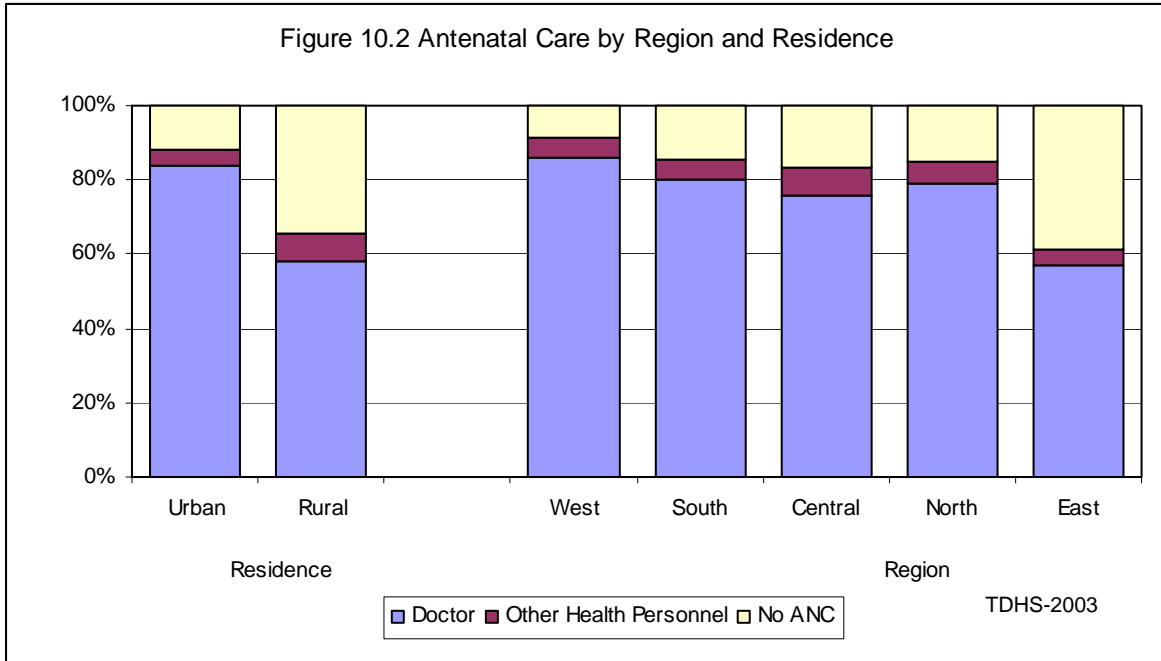
Background characteristic	Doctor	Nurse/ midwife	Traditional birth attendant/ other	No one	Missing	Total	Number of women
Age at birth							
<20	79.4	5.9	0.3	14.4	0.0	100.0	326
20-34	76.4	5.4	0.1	17.8	0.3	100.0	2,523
35-49	63.3	6.1	0.5	30.0	0.0	100.0	316
Birth order							
1	89.3	3.6	0.1	7.0	0.0	100.0	1,000
2-3	77.0	6.9	0.2	15.6	0.3	100.0	1,465
4-5	58.3	5.4	0.4	35.1	0.7	100.0	417
6+	43.5	5.2	0.2	51.1	0.0	100.0	283
Residence							
Urban	83.5	4.6	0.2	11.6	0.2	100.0	2,172
Rural	57.7	7.6	0.3	34.2	0.3	100.0	992
Region							
West	85.8	5.4	0.1	8.5	0.2	100.0	1,119
South	79.6	5.3	0.1	14.6	0.4	100.0	426
Central	75.4	7.3	0.3	16.6	0.5	100.0	673
North	78.4	6.2	0.6	14.8	0.0	100.0	192
East	57.0	4.0	0.2	38.8	0.0	100.0	754
NUTS 1 Region							
Istanbul	89.5	1.6	0.2	8.7	0.0	100.0	537
West Marmara	86.2	5.8	0.0	8.0	0.0	100.0	108
Aegean	75.2	12.6	0.0	12.2	0.0	100.0	330
East Marmara	87.1	3.7	0.0	8.1	1.1	100.0	260
West Anatolia	78.4	6.8	0.6	13.7	0.6	100.0	296
Mediterranean	79.6	5.3	0.1	14.6	0.4	100.0	426
Central Anatolia	71.6	8.3	0.0	19.6	0.4	100.0	185
West Black Sea	74.0	9.4	0.0	16.6	0.0	100.0	166
East Black Sea	80.3	4.6	1.1	13.9	0.0	100.0	102
Northeast Anatolia	49.9	7.1	0.0	43.0	0.0	100.0	131
Central East Anatolia	51.0	5.0	0.4	43.7	0.0	100.0	212
Southeast Anatolia	62.4	2.4	0.1	35.0	0.0	100.0	410
Education							
No education/Primary incom.	47.5	5.9	0.8	45.7	0.1	100.0	696
First level primary	78.0	6.6	0.0	15.1	0.3	100.0	1,665
Second level primary	88.7	5.6	0.0	5.7	0.0	100.0	260
High school and higher	97.1	1.5	0.0	1.1	0.3	100.0	543
Total	75.4	5.5	0.2	18.6	0.2	100.0	3,164

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



There are substantial residential and regional variations in ANC (Figure 10.2). Mothers living in urban settlements are more likely to have ANC from a doctor than those living in rural areas (84 percent and 58 percent, respectively). For one-third of rural births in the five years preceding the survey, the mother did not receive any ANC at the most recent birth. Antenatal care coverage exceeds 80 percent in all regions except the East, where it was received by 61 percent of the mother at the most recent births in the five years prior to the survey. Especially in the Northeast and Central East Anatolia only 6 in 10 women received ANC at their recent birth in the last five years. The use of antenatal care services is strongly associated with mother's education. Almost all births to women with at least high school level education received antenatal care, while only half of births to women with less than primary education (53 percent) received any antenatal care. In all regions, the proportion of doctor providing ANC is markedly more than the other health personnel.

In Turkey, younger, low parity women, women living in urban areas and in the regions other than the East, and women with at least first primary level education are more likely to have received ANC compared to other women.



10.2 Number and Timing of Antenatal Care Visits

Antenatal care is most beneficial when it is sought early in pregnancy and is continued throughout a pregnancy. The first antenatal visit should take place before the third month of pregnancy. The advantage of early detection of pregnancy is that a woman's normal baseline health status can be assessed, making early diagnosis of any abnormalities easier. The total number of antenatal visits is also important in assessing the adequacy of ANC. According to the recommended schedule, antenatal care visits should be done monthly until 28 weeks' gestation (7th month), then every two weeks until 36 weeks, and then every week until 40 weeks or delivery. Regular visits allow proper monitoring of the mother and child throughout pregnancy.

Table 10.2 presents information on the timing and number of visits made to health providers for the most recent birth in the five years preceding the survey by residence. Overall, more than half of women made more than four ANC visits. The table shows that there is significant residential difference both in the timing and the number of visits made for ANC. The percentage of urban women who made four or more ANC visits is almost twice that of rural women. Proportion of women who did not receive any ANC are only 12 percent in the urban areas whereas this is one-third for those living in rural areas.

Table 10.2 indicates that many women in Turkey are aware of the importance of an early visit for ANC visit. Overall 71 percent of women made an ANC visit before the sixth month of their most recent pregnancy in the five years preceding the survey. More women in urban areas (80 percent) seek ANC before the sixth month of pregnancy compared to women in rural areas (52 percent). Reflecting the greater tendency among rural women to delay seeking care, the median duration of pregnancy at the first antenatal visit is 2.6 months in urban areas and 3.5 months in rural areas.

Table 10.2 Number of antenatal care visits and timing of first visit

Percent distribution of ever-married women who had a live birth in the five years preceding the survey by the number of antenatal care (ANC) visits for the most recent birth and the timing of the first visit, according to urban-rural residence, Turkey 2003

Number and timing of ANC visits	Urban	Rural	Total
Number of ANC visits			
None	11.6	34.2	18.6
1	5.8	11.2	7.5
2-3	17.8	21.5	18.9
4+	63.7	32.5	53.9
Don't know/missing	1.1	0.6	0.9
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	11.6	34.2	18.6
<4	66.5	37.8	57.5
4-5	13.5	14.6	13.8
6-7	6.2	9.6	7.2
8+	2.0	2.9	2.3
Don't know/missing	0.3	0.9	0.5
Total	100.0	100.0	100.0
Median months pregnant at first visit (for those with ANC)	2.6	3.5	2.8
Number of women	2,172	992	3,164

10.3 Components of Antenatal Care

Pregnancy complications are an important source of maternal and child mortality and morbidity. Thus, the effectiveness of ANC to ensure safe motherhood depends on the tests and measurements done during the checkups. In TDHS-2003, information was collected about the components of the ANC among women who received ANC for the most recent birth in the five years preceding the survey.

Among the most recent births in the last five years that involved some type of antenatal care, three in four women reported that they had their weight measured, while only 31 percent had their height measured as a part of the ANC checkup (Table 10.3). Eighty-nine percent of the mothers had their blood pressure measured, which is one of the most important that a woman receives during the ANC. Urine and blood sample were taken for 73 and 77 percent of women respectively. More than 90 percent of women reported that ultrasound was performed and the heartbeat of the baby was listened to. Women who had an internal examination and had their abdomen measured are 34 and 46 percent respectively.

Table 10.3 Components of antenatal care

Percentage of ever-married 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 ever-married women with a live birth in the five years preceding the survey who received iron tablets or syrup during the most recent pregnancy, according to background characteristics, Turkey 2003

Background characteristic	Weight measured	Height measured	Blood pressure measured	Blood sample taken	Urine sample taken	Abdomen measured	Baby's heart-beat	Ultra-sound	Internal examination	Number of women receiving ANC	Received iron tablets or syrup	Number of women
Age at birth												
<20	71.6	24.5	82.4	75.3	69.7	42.5	90.2	90.5	32.7	279	64.5	326
20-34	76.8	32.2	89.5	77.8	73.3	46.1	92.0	90.4	33.3	2,067	66.7	2,523
35-49	64.1	29.5	88.2	70.4	69.9	52.7	86.6	90.7	36.8	221	45.8	316
Birth order												
1	83.2	36.1	90.5	86.0	81.2	48.3	93.4	94.6	41.4	930	77.2	1,000
2-3	77.1	30.2	89.5	74.8	69.6	46.3	92.1	89.9	29.3	1,232	68.1	1,465
4-5	56.7	23.9	83.2	63.0	61.1	45.4	88.5	83.7	30.0	267	46.0	417
6+	39.3	19.2	78.0	61.2	63.8	34.5	75.9	80.3	25.3	138	26.8	283
Residence												
Urban	78.7	32.8	90.1	80.0	76.8	47.2	92.5	93.4	35.6	1,917	71.4	2,172
Rural	64.6	26.2	84.2	67.6	60.3	43.7	87.9	81.8	27.5	650	49.1	992
Region												
West	84.2	34.5	91.1	83.3	78.5	52.4	94.9	94.4	40.0	1,022	76.5	1,119
South	76.3	33.8	93.2	73.0	66.9	40.7	91.3	89.6	26.0	362	67.8	426
Central	78.9	32.6	89.0	79.7	73.4	45.8	93.1	87.3	33.9	558	65.7	673
North	68.1	23.5	86.1	80.3	78.5	47.1	95.2	91.0	26.7	164	71.2	192
East	52.0	22.1	79.7	60.9	61.0	37.6	79.8	86.0	27.1	461	41.6	754
NUTS 1 Region												
Istanbul	79.9	25.4	90.5	82.4	79.3	51.8	93.2	97.9	40.0	490	75.3	537
West Marmara	93.2	42.3	96.4	85.7	74.9	54.6	96.9	93.6	33.1	99	83.9	108
Aegean	86.6	49.7	91.3	85.2	76.4	54.4	96.1	86.9	46.2	290	68.5	330
East Marmara	87.7	29.9	89.8	85.0	83.1	45.2	96.5	93.1	37.3	236	78.9	260
West Anatolia	78.7	30.6	90.3	82.3	77.2	44.8	92.7	91.3	34.8	254	67.1	296
Mediterranean	76.3	33.8	93.2	73.0	66.9	40.7	91.3	89.6	26.0	362	67.8	426
Central Anatolia	74.1	36.7	82.9	70.3	63.2	53.5	91.5	82.7	25.5	148	64.3	185
West Black Sea	71.6	27.0	91.1	78.0	72.2	47.2	94.2	88.1	30.7	138	70.4	166
East Black Sea	69.8	26.2	85.2	79.8	79.8	42.0	96.4	91.5	25.4	88	72.5	102
Northeast Anatolia	61.7	18.4	88.6	61.5	60.0	44.0	84.7	83.2	29.3	75	32.3	131
Central East Anatolia	56.9	27.5	81.5	66.8	71.3	42.2	76.2	82.0	28.1	120	38.3	212
Southeast Anatolia	47.1	20.8	76.5	58.0	56.7	33.8	80.0	88.6	26.0	267	46.3	410
Education												
No education/Primary incomplete	43.8	20.3	76.9	55.5	55.8	37.4	77.7	77.9	30.0	377	32.6	696
First level primary	75.6	28.5	87.4	75.9	70.9	46.1	92.1	90.8	31.4	1,409	67.4	1,665
Second level primary	80.3	31.0	94.6	83.4	76.0	41.5	94.3	92.5	32.4	246	83.4	260
High school and higher	93.5	45.6	97.0	91.4	87.5	55.2	97.5	97.5	42.3	536	86.8	543
Total	75.1	31.1	88.6	76.9	72.6	46.3	91.3	90.5	33.5	2,567	64.4	3,164

Women age 20-34 were more likely than older or younger women to receive all components of ANC except an ultrasound examination, abdominal measurement, and an internal examination. An inverse relationship is observed with an increase in the birth order. Women who were pregnant with their first child were more likely to receive all components of ANC. A similar pattern is seen by urban-rural residence, in which urban women were more likely than their rural counterparts to receive the components of ANC.

Regional variations in the components of ANC are marked. In general, women living in the West, especially those living in West Marmara, received the ANC components more often than women living in other regions. However, women living in the East Region had the lowest percentages for the components of ANC among all regions. Among NUTS 1 regions the lowest percentages for most of the components of antenatal care are observed for women living in the Southeast. However, listening to baby's heartbeat and performance of ultrasound are lowest in the Central East Anatolia, whereas measurement of height and receiving iron tablets are lowest in the Northeast.

Women with higher education were more likely to have received all routine components of ANC than less educated women. For instance, more than 90 percent of women with high school and higher level of education had their weight and blood pressure measured, blood sample taken, baby's heartbeat listened to and were examined through ultrasound during their most recent birth in the five years prior to the survey. Unfortunately, women who had no education or did not complete primary education constitute the group with the lowest percentages benefiting from the components of ANC. Even a substantial difference can be observed in favor of women with at least a first level primary education in receiving the tests, measurements and other components of ANC compared with that of the women who have less than primary education.

All respondents who gave birth in the five years preceding the survey, regardless of whether or not they received ANC were asked if they received iron tablets or syrup during the last pregnancy. Sixty-four percent of the women indicated that they received iron tablets or syrup.

10.4 Place of Delivery and Assistance during Delivery

Hygienic conditions during delivery and proper medical attention reduce the health risks to mothers and children. The TDHS-2003 collected information on the place of delivery and the person assisting delivery for all children born in the five years preceding the survey. Overall, 78 percent of all births were delivered at a health facility (Table 10.4), representing a 5 percentage points increase (from 73 percent) in the level since 1998. Public sector health facilities were preferred for delivery to a much greater extent (65 percent), than privately run health facilities (13 percent). Home deliveries constitute one fifth of the births in the five years preceding the survey.

Table 10.4 Place of delivery

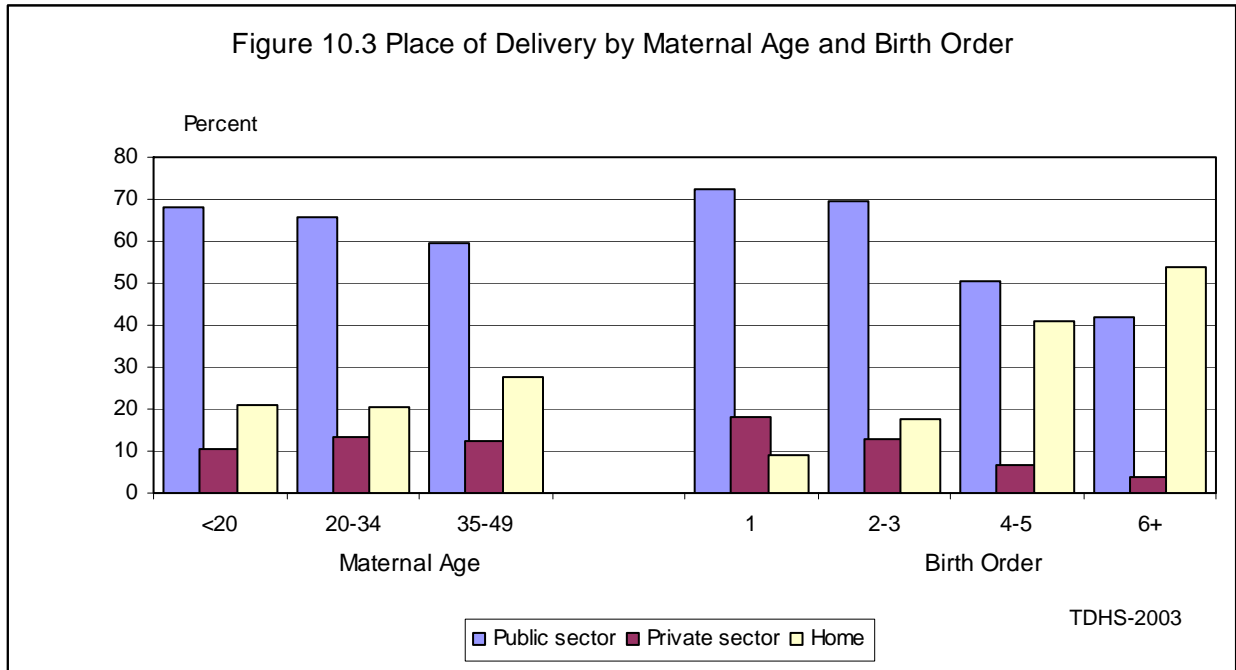
Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Turkey 2003

Background characteristic	Health facility		Home	Other	Missing	Total	Number of births
	Public sector	Private sector					
Age at birth							
<20	68.0	10.6	20.8	0.6	0.0	100.0	518
20-34	65.6	13.3	20.6	0.3	0.3	100.0	3,257
35-49	59.5	12.5	27.7	0.3	0.0	100.0	357
Birth order							
1	72.6	18.2	9.2	0.0	0.0	100.0	1,397
2-3	69.4	12.7	17.4	0.3	0.3	100.0	1,796
4-5	50.6	6.7	41.0	1.0	0.8	100.0	532
6+	41.8	3.9	53.6	0.6	0.0	100.0	407
Residence							
Urban	68.2	17.4	14.1	0.2	0.2	100.0	2,722
Rural	59.9	4.4	35.0	0.5	0.4	100.0	1,410
Region							
West	62.5	29.0	8.1	0.2	0.1	100.0	1,342
South	70.4	8.1	20.6	0.4	0.5	100.0	557
Central	85.7	2.5	10.9	0.6	0.3	100.0	813
North	83.7	1.6	13.3	0.6	0.9	100.0	252
East	48.0	6.4	45.5	0.1	0.0	100.0	1,168
NUTS 1 Region							
İstanbul	43.7	48.2	8.0	0.0	0.0	100.0	643
West Marmara	90.7	5.8	3.5	0.0	0.0	100.0	124
Aegean	80.7	8.7	10.6	0.0	0.0	100.0	392
East Marmara	80.0	12.0	5.8	1.3	0.9	100.0	328
West Anatolia	87.2	2.8	9.2	0.8	0.0	100.0	349
Mediterranean	70.4	8.1	20.6	0.4	0.5	100.0	557
Central Anatolia	77.7	3.3	18.3	0.0	0.7	100.0	232
West Black Sea	91.0	1.6	5.9	0.9	0.5	100.0	202
East Black Sea	77.2	1.7	19.9	0.3	0.9	100.0	137
Northeast Anatolia	58.0	7.2	34.8	0.0	0.0	100.0	185
Central East Anatolia	46.4	2.7	50.9	0.0	0.0	100.0	314
Southeast Anatolia	46.0	7.9	45.9	0.2	0.0	100.0	670
Education							
No education/Primary incomplete	42.8	5.5	51.1	0.4	0.2	100.0	1,099
First level primary	74.5	11.7	13.2	0.3	0.2	100.0	2,112
Second level primary	69.5	23.8	6.3	0.1	0.3	100.0	307
High school and higher	71.9	24.9	2.7	0.2	0.3	100.0	615
Antenatal care visits¹							
None	45.0	4.9	49.5	0.7	0.0	100.0	590
1-3	71.6	8.1	19.7	0.6	0.0	100.0	838
4+	75.0	20.7	4.2	0.0	0.0	100.0	1,706
Don't know/missing	(67.3)	(13.1)	(2.0)	(0.0)	(17.6)	100.0	30
Total	65.3	12.9	21.2	0.3	0.2	100.0	4,132

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

Note: Parentheses indicate that a figure is based on 25-49 unweighted cases.

Younger women (less than age 35) are more likely to deliver at a health facility (79 percent) than older women (72 percent). Likewise, lower birth order of the child is associated with greater likelihood of delivery at a health facility (Figure 10.4). The percentage of women delivering at a health facility declines as the birth order increases. For instance, 91 percent of women deliver their first child at a health facility, which is twice the woman with birth order six or more. The number of antenatal care visits is also positively associated with health facility delivery. Ninety-six percent of the most recent deliveries with more than four ANC visits have been delivered at a health facility while only half of the deliveries without any ANC visit took place at a health institution.



The level of education is strongly related to the utilization of health institutions for delivery. The proportion of births delivered in a health facility increases from 48 percent among births to women with no education to 97 percent among births to women with high school or higher level education. Furthermore, more than half of the women with either no education or less than primary education delivered at home. The results indicate a preference towards the private sector as the women’s level of education increases. For instance, one-fourth of the deliveries whose mothers have at least secondary level education are delivered at a health facility run by the private sector, compared with 6 percent of deliveries whose mothers have no education.

There are apparent regional and residential differences. A child born in an urban area is 1.3 times more likely to have been delivered at a health facility than a rural child. In all regions except the East region, where nearly half of the births took place at home, the majority of births are delivered in health facilities. The West region exhibits the highest percentage (92 percent) for the deliveries that took place at a health institution, followed by the Central region (88 percent). The West region is dissimilar in terms of utilizing the health facilities of the private sector; in this region 3 in every 10 deliveries took place at the private

sector which is more than twice the national average. Furthermore, in İstanbul, the share of the private sector (48 percent) is more than that of the public sector (44 percent). Unlike İstanbul, the majority of the births (91 percent) are delivered at health institutions of the public sector in the West Marmara and West Black Sea regions.

The type of assistance a woman receives during the birth of her child depends to great extent on the place of delivery. Births that are delivered outside the health facility are much less likely to receive assistance from a doctor or other trained health professional. The proportion of all births delivered with the assistance of a doctor or trained health personnel is 83 percent (Table 10.5).

Maternal age and child's birth order are associated with type of assistance at delivery. Older women and women who have already had a number of births are less likely to receive assistance from medical personnel. Mother's education is also closely tied to medical supervision at delivery. Almost all women with high school or more education received medical assistance at delivery.

Assistance from medical personnel during delivery is higher than the national average in all regions except the East. In the West region almost all deliveries are attended by a health professional. In addition to the regional and residential variation in assistance during delivery, there are differences in the percentage of deliveries assisted by a doctor. For instance, in the East region, where medical personnel assisted 60 percent of the deliveries, doctors assisted with 21 percent of the births. The likelihood of delivery under a doctor's supervision is 1.9 times greater for urban women compared to rural women. Traditional birth attendants assisted with the 9 percent of all deliveries. However, older women, women with birth order 6 or more, women living in rural areas and in the East –in particular Southeast and Central East Anatolia- and women who do not have education are more likely to receive delivery assistance from traditional birth attendants with percentages higher than the national average.

Table 10.5 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, Turkey 2003

Background characteristic	Doctor	Nurse/ midwife	Traditional birth attendant	Relative/ other	No one	Don't know/ missing	Total	Number of births
Age at birth								
<20	40.2	42.7	8.2	7.7	1.2	0.0	100.0	518
20-34	47.8	35.8	8.5	7.2	0.3	0.4	100.0	3,257
35-49	46.1	31.6	11.9	8.9	1.4	0.0	100.0	357
Birth order								
1	60.2	33.7	3.9	2.1	0.1	0.0	100.0	1,397
2-3	48.1	38.7	6.7	5.6	0.6	0.3	100.0	1,796
4-5	26.8	38.1	17.5	15.5	0.7	1.4	100.0	532
6+	20.2	32.4	23.0	22.7	1.6	0.1	100.0	407
Residence								
Urban	55.6	34.7	4.8	4.3	0.4	0.2	100.0	2,722
Rural	29.5	39.4	16.5	13.3	0.8	0.5	100.0	1,410
Region								
West	66.0	29.3	1.2	3.0	0.1	0.3	100.0	1,342
South	40.1	48.7	7.3	3.2	0.4	0.5	100.0	557
Central	56.9	34.1	2.5	5.7	0.4	0.3	100.0	813
North	45.2	41.3	7.9	3.8	1.0	0.9	100.0	252
East	20.9	38.8	22.6	16.4	1.0	0.2	100.0	1,168
NUTS 1 Region								
İstanbul	83.1	12.2	1.7	2.5	0.3	0.3	100.0	643
West Marmara	52.2	45.6	0.6	1.6	0.0	0.0	100.0	124
Aegean	53.1	41.5	0.6	4.8	0.0	0.0	100.0	392
East Marmara	51.0	43.4	0.8	3.5	0.3	0.9	100.0	328
West Anatolia	68.2	24.8	1.8	4.7	0.5	0.0	100.0	349
Mediterranean	40.1	48.7	7.3	3.2	0.4	0.5	100.0	557
Central Anatolia	37.7	48.3	6.2	6.7	0.4	0.7	100.0	232
West Black Sea	50.6	42.7	1.8	3.4	1.0	0.5	100.0	202
East Black Sea	44.0	36.7	11.9	6.3	0.3	0.9	100.0	137
Northeast Anatolia	20.4	49.5	14.7	14.2	1.2	0.0	100.0	185
Central East Anatolia	22.0	31.1	25.6	20.7	0.6	0.0	100.0	314
Southeast Anatolia	20.6	39.5	23.4	15.0	1.2	0.3	100.0	670
Education								
No education/Prim. incomplete	21.1	33.8	23.0	20.6	0.9	0.6	100.0	1,099
First level primary	49.2	41.9	4.5	3.6	0.5	0.2	100.0	2,112
Second level primary	57.9	38.5	2.0	0.9	0.3	0.3	100.0	307
High school and higher	78.3	20.2	1.1	0.2	0.0	0.3	100.0	615
Total	46.7	36.3	8.8	7.4	0.5	0.3	100.0	4,132

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

10.5 Characteristics of Delivery

Table 10.6 indicates that, according to the mother's reports, 21 percent of babies born in Turkey in the five years preceding the survey were delivered by caesarean section. This

percentage confirms that a major increase of 7 percentage points have taken place (from 19 percent) in caesarean section since 1998. Caesarean sections are more common among births to older women, women with lower birth orders, women residing in urban areas and in the West and North regions, and more educated women. It is also noteworthy that 3 in every 10 first births in the five-year period preceding the survey were delivered by caesarean section. The prevalence of caesarean sections is above 30 percent in İstanbul, in the West Marmara and East Black Sea regions

In TDHS-2003, respondents were asked whether their baby had been weighed at birth, and if so, how much the baby weighed. For 70 percent of the babies born in the five years preceding the survey, a birth weight was reported. A majority of the babies (62 percent) are reported to have weighed at least 2.5 kg or more. However, among births for which a birth weight was reported, 11 percent (8 percent of all births) were reported to have a weight less than 2.5 kilograms, the cut-off point below which a baby is considered to be low birth weight. Children classified as low-birth-weight births, are considered to have a higher than average risk of early mortality. Babies were more likely to be classified as low birth weight in the Aegean, Mediterranean, and West and East Black Sea regions compared to other regions.

The subjective assessment of the mother about the size of the baby at birth was also taken. Mothers' evaluation of the size of the baby at birth is also shown in Table 10.6. According to the mothers' subjective evaluation of birth size, most of the babies (71 percent) are reported as average or larger, 12 percent of all births were reported to be very small and 17 percent were considered to be smaller than average. Relatively higher percentages are observed for babies regarded as very small among births to younger and older women, births with birth order above four and births to women without education.

Regional estimates of subjective assessment of 'very small' vary from a low of 5 percent in the West Anatolia to a high of 19 percent in Central East and Southeast Anatolia. It is also noteworthy that one-fourth of the mothers in the West Black Sea region reported the babies born in the five years preceding the survey as 'smaller than average'.

Table 10.6 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, Turkey 2003

Background characteristic	Delivery by Caesarean section	Birth weight					Total	Size of child at birth					Number of births
		Not weighed	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	Total		
Age at birth													
<20	11.5	28.3	9.8	58.7	3.2	100.0	13.3	18.6	67.4	0.6	100.0	518	
20-34	22.5	23.6	7.5	63.9	5.1	100.0	10.7	16.2	72.3	0.8	100.0	3,257	
35-49	24.0	32.1	8.7	52.9	6.3	100.0	16.1	18.8	64.6	0.5	100.0	357	
Birth order													
1	28.8	12.2	10.0	73.5	4.2	100.0	11.3	19.3	68.8	0.6	100.0	1,397	
2-3	21.5	20.5	6.6	68.9	4.0	100.0	8.6	14.6	76.0	0.8	100.0	1,796	
4-5	11.2	45.4	8.3	39.6	6.7	100.0	16.7	16.1	65.9	1.3	100.0	532	
6+	7.2	61.0	5.3	24.3	9.4	100.0	18.1	17.9	63.8	0.2	100.0	407	
Residence													
Urban	25.6	16.4	7.8	71.8	4.1	100.0	10.1	15.1	74.0	0.8	100.0	2,722	
Rural	12.9	41.3	8.0	44.0	6.6	100.0	14.1	19.9	65.4	0.6	100.0	1,410	
Region													
West	30.7	6.5	7.9	83.6	2.0	100.0	7.3	13.1	79.1	0.5	100.0	1,342	
South	20.7	19.8	11.6	62.9	5.7	100.0	16.2	14.0	68.3	1.4	100.0	557	
Central	20.9	11.6	9.1	76.2	3.2	100.0	6.1	22.2	70.3	1.4	100.0	813	
North	31.1	14.3	10.2	71.9	3.6	100.0	12.5	16.2	70.5	0.9	100.0	252	
East	8.7	60.0	4.7	25.9	9.4	100.0	17.5	18.6	63.8	0.2	100.0	1,168	
NUTS 1 Region													
İstanbul	34.3	6.5	9.6	83.1	0.8	100.0	8.2	14.3	77.1	0.4	100.0	643	
West Marmara	39.7	3.5	7.3	84.2	5.0	100.0	10.2	10.8	79.0	0.0	100.0	124	
Aegean	27.8	7.0	11.9	78.4	2.7	100.0	5.8	21.7	72.3	0.3	100.0	392	
East Marmara	22.3	8.0	5.1	84.9	2.0	100.0	5.6	8.4	84.6	1.4	100.0	328	
West Anatolia	20.6	9.7	6.4	80.6	3.4	100.0	5.2	19.8	74.4	0.6	100.0	349	
Mediterranean	20.7	19.8	11.6	62.9	5.7	100.0	16.2	14.0	68.3	1.4	100.0	557	
Central Anatolia	16.4	16.7	5.7	73.2	4.4	100.0	9.1	16.9	72.6	1.4	100.0	232	
West Black Sea	27.8	6.1	10.5	80.2	3.2	100.0	7.0	24.8	65.6	2.6	100.0	202	
East Black Sea	30.9	23.3	10.6	61.8	4.3	100.0	15.1	14.4	69.6	0.9	100.0	137	
Northeast Anatolia													
Anatolia	9.8	49.8	7.3	38.5	4.4	100.0	10.3	17.5	71.8	0.3	100.0	185	
Central East Anatolia													
Anatolia	7.4	60.4	3.8	27.9	7.9	100.0	19.2	16.6	64.1	0.0	100.0	314	
Southeast Anatolia													
Anatolia	9.0	62.7	4.4	21.4	11.5	100.0	18.6	19.8	61.4	0.3	100.0	670	
Education													
No education/													
Primary incom.	7.6	60.3	6.3	24.3	9.1	100.0	17.7	19.0	62.7	0.6	100.0	1,099	
First level primary	19.9	15.8	9.3	70.4	4.5	100.0	10.4	17.0	71.5	1.0	100.0	2,112	
Second level													
primary	24.6	6.5	5.7	86.6	1.2	100.0	9.2	12.9	77.4	0.5	100.0	307	
High school/ higher	48.5	1.9	6.7	90.4	0.9	100.0	5.0	13.5	81.2	0.3	100.0	615	
Total	21.2	24.9	7.9	62.3	4.9	100.0	11.5	16.7	71.1	0.7	100.0	4,132	

