FERTILITY 4

This chapter looks at a number of fertility indicators including levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women initiate childbearing. Information on current and cumulative fertility is essential in monitoring the progress and evaluating the impact of the population program in Egypt. The data on birth intervals are important since short intervals are strongly associated with childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the child and the mother.

Data on childbearing patterns were collected in the 2005 EDHS in several ways. First, each woman was asked a series of questions on the number of her sons and daughters living with her, the number living elsewhere, and the number who may have died. Next, a complete history of all of the woman's births was obtained, including the name, sex, month and year of birth, age, and survival status for each of the births. For living children, a question was asked about whether the child was living in the household or away. For dead children, the age at death was recorded. Finally, information was collected on whether currently married women were pregnant at the time of the survey.

4.1 CURRENT FERTILITY LEVELS AND DIFFERENTIALS

The level of current fertility is one of the most important topics in this report because of its direct relevance to population policies and programs. Measures of current fertility presented in this chapter include age-specific fertility rates, the total fertility rate, the general fertility rate, and the crude birth rate. These rates are generally presented for the three-year period preceding the survey, a period covering portions of the calendar years 2002 through 2005. The three-year period was chosen for calculating these rates (rather than a longer or a shorter period) to provide the most current information, to reduce sampling error, and to avoid problems of the displacement of births.

Age-specific fertility rates are useful in understanding the age pattern of fertility. Numerators of age-specific fertility rates are calculated by identifying live births that occurred in the period 1-36 months prior to the survey (determined from the date of interview and date of birth of the child), and classifying them by the age (in five-year age groups) of the mother at the time of the child's birth. The denominators of these rates are the number of woman-years lived in each of the specified five-year age groups in the period 1-36 months prior to the survey. Although information on fertility was obtained only for ever-married women, the age-specific rates are presented for all women regardless of marital status. Data from the household questionnaire on the age structure of the population of never-married women were used to calculate the all-women rates. This procedure assumes that women who have never been married have had no children.

The total fertility rate (TFR) is a useful measure for examining the overall level of fertility. It can be interpreted as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the currently observed rates. The TFR is calculated by summing the age-specific fertility rates. It is presented for women age 15-44 and women 15-49 to facilitate comparisons with other surveys in which the age range of interviewed women may differ from that in the 2005 EDHS.

The general fertility rate (GFR) represents the annual number of births in a population per 1,000 women age 15-44. The crude birth rate (CBR) is the annual number of births in a population per 1,000

persons. Both measures are based on the birth history data for the three-year period before the survey and the age-sex distribution of the household population.

Current estimates of fertility levels are presented in Table 4.1 by residence. The total fertility rate indicates that, if fertility rates were to remain constant at the level prevailing during the three-year period before the 2005 EDHS (approximately April 2002 to March 2005), an Egyptian woman would bear 3.1 children during her lifetime. In rural areas, the TFR is 3.4 births per woman, around 25 percent higher than the rate in urban areas (2.7 births).

Table 4.1 Current fertility by residence

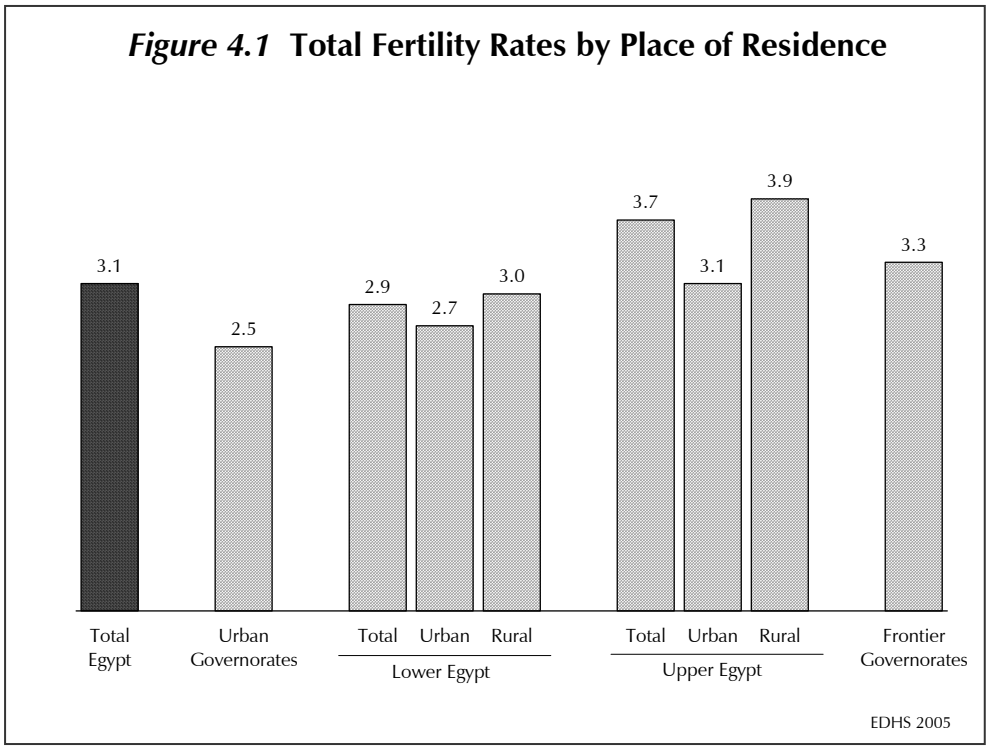
Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence and place of residence, Egypt 2005

				Lower Egypt			Upper Egypt				
Age	Urban	Rural	Urban Governorates	Total	Urban	Rural	Total	Urban	Rural	Frontier Governorates	Total
15-19	27	62	19	41	18	47	67	40	78	26	48
20-24	143	199	118	177	154	185	202	171	217	164	175
25-29	178	206	172	190	174	195	210	188	221	179	194
30-34	120	128	112	112	123	109	145	126	155	156	125
35-39	63	63	60	48	48	47	80	76	83	114	63
40-44	18	21	17	17	16	17	24	21	26	29	19
45-49	1	3	1	1	1	1	4	3	5	0	2
TFR	2.7	3.4	2.5	2.9	2.7	3.0	3.7	3.1	3.9	3.3	3.1
GFR	91	121	81	103	86	107	127	103	138	111	108
CBR	23.6	29.6	21.3	26.1	23.4	26.9	30.7	26.6	32.7	28.1	27.1

Note: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation.
TFR: Total fertility rate for ages 15-49, expressed per woman
GFR: General fertility rate (births divided by the number of women age 15-44), expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population

Considering the variation by place of residence, the TFR for rural Lower Egypt (3.0 births per woman) is almost similar to the rate for urban Upper Egypt (3.1 births per woman) and around one birth lower than the TFR for rural Upper Egypt (3.9 births). The TFR for the Frontier Governorates is 3.3 births, a rate that is higher than any other area except rural Upper Egypt (Figure 4.1). The lowest TFR is 2.5 births per woman in the Urban Governorates, almost 1.5 children lower than the rate in rural Upper Egypt.

Egyptian women are having children early in the childbearing period. According to the cumulative age-specific fertility rates shown in Table 4.1, the average Egyptian woman will give birth to 1.1 children by age 25 and 2.1 children by age 30. The age pattern of fertility is similar in urban and rural areas. Fertility peaks in the age group 25-29 among rural women (206 births per thousand) and urban women (178 births per thousand). Looking at the variation in age-specific fertility by place of residence, rates are generally higher in rural Upper Egypt than in the other areas except in the 35-44 age groups where the highest rates are observed in the Frontier Governorates.



Estimates of the crude birth rate and the general fertility rate also are presented in Table 4.1. For the period 2002-2005, the crude birth rate was 27 births per thousand population, and the general fertility rate was 108 births per thousand women. There are substantial differences by residence in both the CBR and the GFR. The lowest rates are found in the Urban Governorates, where the CBR was 21 births per thousand population and the GFR was 81 births per thousand women. In contrast, in rural Upper Egypt where the rates are highest, the CBR was 33 births per thousand population, and the GFR was 138 births per thousand women.

4.2 FERTILITY TRENDS

Using the 2005 EDHS data, the trend in fertility in Egypt can be assessed in several ways.

Comparison of Current and Cumulative Fertility Levels

One approach to assessing the long term trend in fertility is to compare the total fertility rate at the time of the survey with the mean number of children ever born (CEB) among women 40-49. The latter indicator takes into account the fertility behavior of older women who are nearing the end of their reproductive period and thus serves as a measure of cumulative fertility. If fertility is stable over time in a population, the TFR and the mean CEB for women 40-49 will be similar. If fertility levels have been falling, the TFR will be lower than the mean CEB among women age 40-49.

The comparison of the current TFR to the mean CEB among older women presented in Table 4.2 indicates that fertility has fallen sharply in Egypt over the past several decades. Women age 40-49 had an average of 4.5 births during their lifetime, about one and a half births more than women bearing children at the current fertility rates will have. The decline in fertility implied by a comparison of the TFR with completed fertility has been greater in rural than in urban areas. The largest implied decline in fertility by place of residence is observed in rural Upper Egypt, where the TFR was 2.2 births lower than the mean number of children ever born to women 40-49.

Table 4.2 highlights marked differences in fertility levels and trends by education. The TFR decreases rapidly with increasing educational level, from 3.8 births among women with no education to 3.0 births among women who had completed the secondary level or higher. The differentials in completed fertility across educational groups are even more striking. The mean number of children ever born is 5.2 among women age 40-49 with no education, compared to 3.0 among women who have completed secondary school. With regard to the trend in fertility, the decline in fertility implied by a comparison of the TFR with the mean CEB is substantial for women with less than a secondary education. However, the TFR for women with a secondary or higher education is the same as the mean number of children ever born among women age 40-49 who have completed at least the secondary level. This pattern suggests that fertility among highly educated women has remained relatively stable for several decades.

Table 4.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, Egypt 2005

Background characteristic	Total fertility rate	Percentage currently pregnant[1]	Mean number of children ever born to women age 40-49
Urban-rural residence			
Urban	2.7	5.2	3.7
Rural	3.4	6.9	5.2
Place of residence			
Urban Governorates	2.5	4.8	3.3
Lower Egypt	2.9	6.0	4.3
Urban	2.7	5.1	3.6
Rural	3.0	6.4	4.6
Upper Egypt	3.7	6.9	5.4
Urban	3.1	5.7	4.2
Rural	3.9	7.4	6.1
Frontier Governorates	3.3	7.3	4.5
Education			
No education	3.8	5.7	5.2
Some primary	3.4	4.5	5.0
Primary complete/some secondary	2.9	4.8	4.2
Secondary complete/higher	3.0	7.4	3.0
Wealth quintile			
Lowest	3.6	6.2	5.9
Second	3.3	6.4	5.5
Middle	3.3	6.3	4.6
Fourth	3.0	6.9	3.9
Highest	2.6	4.9	3.2
Total	3.1	6.1	4.5

[1] Women age 15-49 years

Fertility levels and trends vary substantially by wealth quintile. The TFR deceases from a level of 3.6 births among women in the lowest wealth quintile to 2.6 births among women in the highest wealth quintile. The differentials in completed fertility across different wealth quintiles also are striking. The mean number of children ever born among women 40-49 is 5.9 in the lowest wealth quintile compared to 3.2 among women in the highest wealth quintile. Comparisons of the mean CEB among older women with the TFR suggest that fertility has declined within each of the wealth quintiles between the 1970s when women currently in the 40-49 age cohort began their childbearing years and the current period.

Finally, Table 4.2 includes another indicator of current fertility, the percentage of women who are currently pregnant. Overall, 6 percent of the 2005 EDHS respondents were pregnant at the time of the survey. Looking at residential differentials, women in rural Upper Egypt and the Frontier Governorates have the highest percentage currently pregnant (7 percent), while the percentage is lowest in the Urban Governorates and urban Lower Egypt (5 percent).

Surprisingly, the percentage of women who were pregnant is higher for women with a secondary or higher education than for other women. This is due at least in part to the fact that, on average, highly educated women were married at older age than women in the other education categories and, thus, are more likely to currently be in the family-building stage than other women.

Retrospective Data

Table 4.3 uses information from the retrospective birth histories obtained from EDHS respondents to examine trends in age-specific fertility rates for successive five-year periods before the survey. To calculate these rates, births were classified according to the period of time in which the birth occurred and the mother's age at the time of birth. Because women 50 years and over were not interviewed in the 2005 EDHS, the rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age 45-49 for the period 5-9 years and more prior to the survey, because women in that age group would have been 50 years or older at the time of the survey.

Table 4.3 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Egypt 2005

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	48	60	73	103
20-24	182	204	220	251
25-29	195	217	224	279
30-34	129	147	158	[235]
35-39	65	79	[101]	-
40-44	20	[35]	-	-
45-49	[3]	-	-	-

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

The results in Table 4.3 confirm that fertility has fallen substantially among all age groups, with the most rapid relative decline occurring in the 15-19 age group. Overall, the cumulative fertility rate for women age 15-29 decreased by around one birth, from 3.2 births per woman during the period 15-19 years before the survey to 2.1 births per woman in the five-year period preceding the survey.

Comparison with Previous Surveys

Table 4.4 shows the TFR estimates from a series of surveys conducted in Egypt during the period 1979 through 2005. The surveys vary in the timeframes for which the TFR estimates are available. For example, the rates from the EFS, ECPS and the EMCHS are based on births in a one-year period before the survey, while the rates for the DHS surveys are based on a three-year period before the interview date. In general, three-year rates are subject to less sampling variability than one-year rates. The size of the sample covered in a specific survey is another factor related to sampling variability. In general, rates from surveys with comparatively large samples are subject to less sampling variability than rates from surveys with smaller samples. Thus, the rates for the 1997, 1998, and 2003 Interim DHS surveys have somewhat greater margins of error than the full scale DHS surveys (i.e., the surveys conducted in 1988, 1992, 1995, 2000, and 2005). Sampling errors for the TFRs derived from the 2005 EDHS are presented in Appendix C.

As Table 4.4 shows, fertility levels have declined almost continuously in Egypt over the past two decades, from 5.3 births per woman at the time of the 1980 EFS to 3.1 births per woman at the time of the 2005 EDHS. The decline in fertility was especially rapid during the period between the mid-1980s and the mid-1990s. During the ten-year period between the 1995 and 2005 EDHS surveys, the downward trend in the TFR continued although at a slower pace and with some fluctuation.

The results in Table 4.4 indicate that all age groups have shared in the decline in fertility rates. However, the decline has been more rapid among older women than among younger women. Age-specific fertility rates among women age 30 and over fell by around 50 percent or more between the 1980 EFS and the 2005 EDHS. In contrast, fertility rates among women under age 30 declined by around one-third during this period. As a result of the differences in the pace of fertility change across various age groups, childbearing has become somewhat more concentrated among women under age 30. Currently, a woman will have an average of 2.1 births by her 30th birthday, roughly two-thirds of her lifetime births. This pattern is typical of countries like Egypt in which fertility levels are declining.

Table 4.4 Trends in fertility

Age-specific fertility rates (per 1,000 women) and total fertility rates, Egypt 1979-2005

Age	EFS 1979-1980[1]	ECPS 1983-1984[1]	1988 EDHS 1986-1988[2]	1991 EMCHS 1990-1991[1]	1992 EDHS 1990-1992[2]	1995 EDHS 1993-1995[2]	1997 Interim EDHS 1995-1997[2]	1998 Interim EDHS 1996-1998[2]	2000 EDHS 1997-2000[2]	2003 Interim EDHS 2000-2003[2]	2005 EDHS 2002-2005[2]
15-19	78	73	72	73	63	61	52	64	51	47	48
20-24	256	205	220	207	208	200	186	192	196	185	175
25-29	280	265	243	235	222	210	189	194	208	190	194
30-34	239	223	182	158	155	140	135	135	147	128	125
35-39	139	151	118	97	89	81	65	73	75	62	63
40-44	53	42	41	41	43	27	18	22	24	19	19
45-49	12	13	6	14	6	7	5	1	4	6	2
TFR	5.3	4.9	4.4	4.1	3.9	3.6	3.3	3.4	3.5	3.2	3.1

[1] Rates are for the 12-month period preceding the survey.
[2] Rates are for the 36-month period preceding the survey.
Note: Rates for the age group 45-49 may be slightly biased due to truncation.
Source: El-Zanaty and Way, 2004, Table 2.2

The trend in fertility by residence is presented in Table 4.5 for the period between the 1988 EDHS and the 2005 EDHS.[1] Urban fertility declined between the 1988 and 1992 surveys, from 3.5 to 2.9 births. The decline leveled off early in the 1990s, with the urban TFR fluctuating around three births throughout the rest of the 1990s, before falling to a level of 2.7 births in 2005. In rural areas, fertility levels declined continuously, from 5.4 births per woman at the time of the 1988 EDHS to 3.4 births per woman at the time of the 2005 EDHS.

Table 4.5 Trends in fertility by residence

Total fertility rates by urban-rural residence and place of residence, Egypt 1986-2005

Residence	1988 EDHS 1986-1988[2]	1991 EMCHS 1990-1991[1]	1992 EDHS 1990-1992[2]	1995 EDHS 1993-1995[2]	1997 Interim EDHS 1995-1997[2]	1998 Interim EDHS 1996-1998[2]	2000 EDHS 1997-2000[2]	2003 Interim EDHS 2000-2003[2]	2005 EDHS 2002-2005[2]
Urban-rural residence									
Urban	3.5	3.3	2.9	3.0	2.7	2.8	3.1	2.6	2.7
Rural	5.4	5.6	4.9	4.2	3.7	3.9	3.9	3.6	3.4
Place of residence									
Urban Governorates	3.0	2.9	2.7	2.8	2.5	2.7	2.9	2.3	2.5
Lower Egypt	4.5	na	3.7	3.2	3.0	3.1	3.2	3.1	2.9
Urban	3.8	3.5	2.8	2.7	2.6	2.4	3.1	2.8	2.7
Rural	4.7	4.9	4.1	3.5	3.2	3.2	3.3	3.2	3.0
Upper Egypt	5.4	na	5.2	4.7	4.2	4.3	4.2	3.8	3.7
Urban	4.2	3.9	3.6	3.8	3.3	3.3	3.4	2.9	3.1
Rural	6.2	6.7	6.0	5.2	4.6	4.5	4.7	4.2	3.9
Frontier Governorates	na	na	na	4.0	na	na	3.8	na	3.3
TFR 15-49	4.4	4.1	3.9	3.6	3.3	3.4	3.5	3.2	3.1

Note: Rates for the age group 45-49 may be slightly biased due to truncation.
[1] Rates are for the 12-month period preceding the survey.
[2] Rates are for the 36-month period preceding the survey.
na = Not available
Source: El-Zanaty and Way, 2004, Table 2.3

[1] Residential differentials in the TFR are not available for the 1980 EFS and the 1984 ECPS surveys.

Considering the place of residence, declines in fertility were observed in all areas between the 1988 and 2005 surveys. Women in rural Upper Egypt experienced the greatest absolute change in fertility levels, with the TFR dropping from 6.2 births at the time of the 1988 survey to 3.9 births per woman at the 2005 EDHS. The TFR in rural Lower Egypt, which was 4.7 births at the time of the 1988 survey (the level reached in 2000 in rural Upper Egypt), dropped to 3.0 births at the time of the 2005 EDHS.

4.3 CHILDREN EVER BORN AND LIVING

Table 4.6 presents the distributions of all women and currently married women by the total number of children ever born. These distributions reflect the accumulation of births among EDHS respondents over the past 30 years and, therefore, their relevance to the current situation is limited. However, the information is useful in looking at how average family size varies across age groups and for looking at the level of primary infertility.

Table 4.6 Children ever born and living

Percent distribution of all women and currently married women by number of children ever born, and mean number of children ever born and mean number of living children, according to age group, Egypt 2005

	Number of children ever born														
Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	Mean number of children ever born	Mean number of living children
								All WOMEN							
15-19	94.1	5.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	6,446	0.07	0.07
20-24	59.8	20.1	14.9	4.2	0.7	0.2	0.0	0.0	0.0	0.0	0.0	100.0	5,807	0.66	0.64
25-29	25.9	15.7	28.4	19.2	7.2	2.8	0.6	0.2	0.0	0.0	0.0	100.0	4,655	1.78	1.69
30-34	10.1	7.8	23.1	28.3	14.8	8.6	4.5	1.8	0.9	0.2	0.0	100.0	3,413	2.89	2.73
35-39	7.1	4.2	14.3	24.3	20.6	12.7	7.8	4.7	2.3	1.4	0.6	100.0	3,310	3.68	3.40
40-44	6.1	2.7	11.6	20.6	20.8	14.9	8.5	5.9	4.3	2.4	2.2	100.0	2,933	4.17	3.74
45-49	5.6	2.9	8.5	16.2	16.2	14.2	12.0	9.1	6.4	3.8	5.1	100.0	2,705	4.81	4.17
Total	39.8	9.5	13.9	13.5	8.9	5.7	3.5	2.2	1.4	0.8	0.8	100.0	29,270	2.05	1.87
								CURRENTLY MARRIED WOMEN							
15-19	52.9	41.3	5.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	792	0.53	0.52
20-24	21.2	38.9	29.7	8.5	1.4	0.3	0.1	0.0	0.0	0.0	0.0	100.0	2,898	1.31	1.26
25-29	8.3	18.5	35.4	24.2	9.0	3.5	0.8	0.3	0.0	0.0	0.0	100.0	3,653	2.22	2.11
30-34	3.8	7.3	25.0	30.5	16.1	9.4	4.9	1.9	0.9	0.2	0.0	100.0	3,077	3.12	2.95
35-39	3.3	3.7	14.3	25.4	22.1	13.4	8.4	5.1	2.4	1.4	0.6	100.0	3,010	3.88	3.59
40-44	3.1	2.1	11.4	21.2	21.6	15.7	8.9	6.0	4.7	2.7	2.4	100.0	2,525	4.37	3.92
45-49	3.6	2.5	7.7	16.0	17.2	14.2	12.1	10.1	6.5	4.1	5.9	100.0	2,233	5.03	4.36
Total	9.4	14.2	21.2	20.5	13.5	8.5	5.1	3.3	2.0	1.1	1.2	100.0	18,187	3.07	2.82

Since only ever-married women were interviewed in the 2005 EDHS, information on the reproductive histories of never-married women is not available. However, virtually all births in Egypt occur within marriage; thus, in calculating these fertility measures for all women, never-married women were assumed to have had no births. The marked differences between the results for currently married women and for all women under age 30 are due to the comparatively large numbers of never-married women in those age groups who, as noted, are assumed to have had no births.

Table 4.6 shows that the average Egyptian woman has given birth to 2.1 children. Out of that number, 1.9 children are still alive, indicating that about 10 percent of the children ever born to EDHS respondents have died.

Reflecting the natural family-building process, the number of children that women have born increases directly with age from an average of less than one child among women age 15-19 to an average of 4.8 births among women 45-49. As expected, the likelihood that at least one of a woman's children will have died also increases with the woman's age. Out of the average of 4.8 children born to women 45-49, an average of 0.6 children or 13 percent are no longer alive.

4.4 BIRTH INTERVALS

Intervals between Births

A birth interval is the period between two successive live births. Research has shown that children born soon after a previous birth (i.e., within 24 months) are at greater risk of illness and death than those born after a longer interval. In addition, short birth intervals may have consequences for other children in the family. The occurrence of closely spaced births gives the mother insufficient time to restore her health, which may limit her ability to take care of her children. The duration of breastfeeding for the older child may also be shortened if the mother becomes pregnant.

Table 4.7 shows the percent distribution of second order and higher (non-first) births in the five years preceding the survey by length of the previous birth interval. Birth intervals are relatively long, with eight in ten non-first births occurring at least two years after the previous birth. Around half of births took place at least three years after a prior birth. The median interval is 35.4 months, which is slightly longer than the median interval at the 2000 EDHS (34.3 months). Although the majority of non-first births are appropriately spaced, 21 percent were born too soon after a prior birth, i.e., within 24 months of a previous birth.

Younger women have shorter birth intervals than older women. The median interval varies from 24.5 months among the small number of births to women age 15-19 to 64.6 months among births to women age 40-49. Birth intervals do not vary as much with the child sex of the prior birth. However, birth intervals are markedly different depending on the survival status of the prior birth; the average interval is 10 months longer in cases where the prior birth is alive than when that child has died (35.8 months and 25.9 months, respectively).

As Table 4.7 shows, the median birth interval in urban areas is 38 months, compared to 34 months in rural areas. Birth intervals are longer in Urban Governorates and urban Lower Egypt (39.9 months and 39.1 months, respectively) than in urban Upper Egypt (36.5 months). In rural areas, the median birth interval is much longer in Lower Egypt (37.0 months) than in Upper Egypt (31.4 months).

No clear association is observed between the woman's educational level and the average birth interval. However, intervals are substantially longer for births to women who are working for cash than for births to other women (39.7 months and 34.8 months, respectively). The average birth interval among women in the highest quintile wealth is around 6 months longer than that observed among women in the lowest quintile.

Table 4.7 Birth intervals by background characteristics

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, according to background characteristics, Egypt 2005

Background characteristic	Months since preceding birth					Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48+			
Sex of preceding birth								
Male	8.3	11.9	29.0	19.8	31.0	100.0	4,681	36.2
Female	8.9	13.2	31.3	20.2	26.3	100.0	4,722	34.5
Survival of preceding birth								
Living	7.6	12.4	30.4	20.2	29.3	100.0	8,946	35.8
Dead	27.8	16.4	25.1	15.3	15.5	100.0	458	25.9
Birth order								
2-3	9.6	13.8	32.9	21.2	22.5	100.0	6,055	33.6
4-5	6.8	10.6	24.5	16.4	41.7	100.0	2,233	41.2
6+	7.0	10.0	26.6	20.5	35.8	100.0	1,116	39.1
Age								
15-19	15.8	29.8	47.4	6.9	0.0	100.0	48	24.5
20-29	11.8	17.0	37.3	21.0	12.9	100.0	4,637	30.5
30-39	5.8	8.6	24.5	20.2	40.8	100.0	3,981	42.2
40-49	3.1	5.2	14.6	13.1	64.0	100.0	737	64.6
Urban-rural residence								
Urban	7.7	9.8	27.9	19.7	34.9	100.0	3,258	38.0
Rural	9.1	14.0	31.4	20.2	25.3	100.0	6,145	34.0
Place of residence								
Urban Governorates	7.6	9.7	24.8	21.3	36.6	100.0	1,209	39.9
Lower Egypt	7.6	10.1	28.6	20.9	32.8	100.0	3,554	37.3
Urban	7.5	8.1	29.6	16.9	37.8	100.0	827	39.1
Rural	7.6	10.6	28.3	22.1	31.3	100.0	2,727	37.0
Upper Egypt	9.7	15.3	32.9	18.9	23.2	100.0	4,516	32.6
Urban	7.7	11.0	29.9	19.9	31.5	100.0	1,146	36.5
Rural	10.4	16.7	33.8	18.6	20.4	100.0	3,370	31.4
Frontier Governorates	7.3	13.5	29.9	20.1	29.3	100.0	125	35.7
Education								
No education	8.8	14.2	30.4	19.1	27.6	100.0	3,359	34.2
Some primary	7.3	11.1	28.2	20.1	33.3	100.0	949	36.9
Primary complete/some secondary	9.7	13.6	28.8	18.4	29.6	100.0	1,397	35.3
Secondary complete/higher	8.4	11.1	31.0	21.4	28.0	100.0	3,698	35.8
Work status								
Working for cash	6.3	8.7	27.7	20.0	37.2	100.0	1,180	39.7
Not working for cash	8.9	13.1	30.5	20.0	27.4	100.0	8,224	34.8
Wealth quintile								
Lowest	9.9	14.2	33.9	19.4	22.5	100.0	2,135	32.5
Second	9.3	16.0	29.3	19.6	25.7	100.0	2,045	34.0
Middle	8.1	12.0	29.6	21.8	28.5	100.0	1,990	36.1
Fourth	8.3	10.4	28.9	19.1	33.3	100.0	1,821	37.0
Highest	6.7	8.7	28.3	20.1	36.3	100.0	1,413	38.7
Total	8.6	12.6	30.2	20.0	28.6	100.0	9,403	35.4

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

Attitudes about the Ideal Birth Interval

Ever-married women were asked about the ideal length of time that a woman should wait between births. The responses for this question are presented in Table 4.8. Around six in ten women believe a woman should wait three or more years between births, and almost one-quarter think that ideally a woman should wait at least four years before having another child. Although these attitudes are encouraging, it also must be noted that around one-third of the women think that the ideal spacing between births should be less than three years. Women in urban areas, particularly in the Urban Governorates, are much less likely than rural women to think births should be spaced less than three years apart.

Table 4.8 Ideal birth interval by residence

Percent distribution of ever-married women 15-49 by the ideal length of time that a woman should wait between births and median ideal birth interval, Egypt 2005

Ideal interval between births (months)	Urban	Rural	Urban Governorates	Lower Egypt			Upper Egypt			Frontier Governorates	Total
				Total	Urban	Rural	Total	Urban	Rural		
<24 months	1.3	2.4	1.2	1.5	1.0	1.6	2.7	1.7	3.2	4.2	1.9
24-35 months	27.2	38.6	22.0	37.2	33.3	38.6	35.4	28.7	38.6	36.2	33.9
36-47 months	39.6	38.3	38.7	41.2	42.0	40.9	36.2	38.5	35.1	39.0	38.8
48-59 months	21.5	12.0	26.3	12.5	15.1	11.5	15.4	21.0	12.7	14.1	16.0
60+ months	9.6	7.0	11.3	6.7	7.9	6.4	8.2	9.0	7.9	5.8	8.1
Don't know/missing	0.7	1.7	0.4	0.9	0.8	1.0	2.1	1.2	2.5	0.6	1.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8,033	11,441	3,293	8,410	2,199	6,211	7,552	2,411	5,141	218	19,474
Median number of months[1]	36.5	36.2	36.7	36.3	36.4	36.2	36.3	36.5	36.2	36.2	36.3

[1] Women falling into the "don't know/missing" categories are excluded from calculation of the median.

4.5 AGE AT FIRST BIRTH

The age at which childbearing begins has important demographic consequences for society as a whole as well as for the health and welfare of mother and child. In many countries, postponement of first births has contributed greatly to overall fertility decline. Table 4.9 presents the distribution of women by age at first birth, according to their current age. For women under age 25, the median age at first birth is not shown because less than 50 percent of women in those ages had given birth at the time of the survey.

The results in Table 4.9 suggest that there has been a slightly rise in the age at first birth among Egyptian women. Women in younger cohorts are much less likely than older women to have given birth to their first child while they were in their teens. For example, among women age 45-49, 31 percent were mothers before age 20, while only 24 percent of women age 25-29 had given birth to their first child before age 20. Overall, Table 4.9 shows that the median age at first birth ranges from a low of 22.3 years among women age 45-49 to 22.8 years among women age 25-29. These cohort changes parallel increases in the median age at first marriage that took place during the same period (see Chapter 8).

Table 4.9 Age at first birth

Percentage of all women who gave birth by exact ages, and median age at first birth, by current age, Egypt 2005

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	0.2	na	na	na	na	94.1	6,446	a
20-24	0.7	7.5	20.8	na	na	59.8	5,807	a
25-29	1.2	10.7	24.3	43.0	64.9	25.9	4,655	22.8
30-34	2.2	14.7	28.6	46.7	69.2	10.1	3,413	22.4
35-39	2.0	16.3	34.1	50.1	70.4	7.1	3,310	22.0
40-44	1.8	16.0	33.4	50.4	70.8	6.1	2,933	22.0
45-49	2.8	15.7	31.4	48.1	70.0	5.6	2,705	22.3

na = Not applicable
a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

Table 4.10 presents trends in the median age at first birth across age cohorts for key subgroups. The measures are presented for women age 25-49 years to ensure that half of the women have already had a birth. Overall, the median age at first birth is 22.4 years for women 25-49. However, there are wide differences in the age at which women first gave birth among the various subgroups. Urban women started childbearing nearly three years later than their rural counterparts. On average, women in rural Upper Egypt had their first birth around one and half years earlier than women in rural Lower Egypt and about four years earlier than women in the Urban Governorates. Women who have a secondary or higher education had their first birth an average of more than four years later than women with no education. There is a 4.5 year difference in the median age at first birth between women in the highest wealth quintile and women in the first wealth quintile.

Table 4.10 Median age at first birth by background characteristics

Median age at first birth among women age 25-49 years, by current age and background characteristics, Egypt 2005

Background characteristic	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
Urban-rural residence						
Urban	24.2	23.9	23.4	23.3	23.6	23.7
Rural	21.9	21.3	20.8	20.7	21.1	21.3
Place of residence						
Urban Governorates	a	24.4	23.8	23.8	24.1	24.3
Lower Egypt	22.9	22.3	22.2	21.8	22.2	22.3
Urban	24.0	23.4	23.6	23.4	23.4	23.6
Rural	22.5	22.1	21.5	21.2	21.6	21.9
Upper Egypt	21.8	21.1	20.8	20.8	21.3	21.3
Urban	23.1	23.6	22.8	22.7	23.4	23.2
Rural	21.2	19.8	19.9	19.8	20.3	20.4
Frontier Governorates	23.8	22.3	22.4	23.4	22.5	23.0
Education						
No education	20.8	19.9	19.9	20.2	20.8	20.3
Some primary	20.9	20.2	19.8	20.4	21.1	20.5
Primary complete/some secondary	21.6	21.0	20.6	21.6	22.0	21.3
Secondary complete/higher	24.2	24.4	24.6	25.1	25.9	24.6
Wealth quintile						
Lowest	21.0	19.9	19.8	19.7	20.8	20.3
Second	21.7	21.1	20.4	20.3	20.9	21.0
Middle	22.2	22.0	21.2	21.2	21.1	21.7
Fourth	23.2	23.4	23.0	22.4	22.6	22.9
Highest	a	24.5	24.7	24.5	24.7	24.8
Total	22.8	22.4	22.0	22.0	22.3	22.4

a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

4.6 TEENAGE PREGNANCY AND MOTHERHOOD

Teenage fertility is a major health concern because teenage mothers and their children are at high risk of illness and death. Childbearing during the teenage years also frequently has adverse social consequences, particularly on female educational attainment since women who become mothers in their teens are more likely to curtail education.

Using information from the 2005 EDHS, Table 4.11 shows the percentage of women age 15-19 who are mothers or who are pregnant with their first child. The overall level of teenage childbearing is nine percent. This percentage is virtually the same as that recorded in the 2000 EDHS.

Table 4.11 shows that the proportion of women who have begun childbearing rises rapidly throughout the teenage years, from less than one percent among 15-year-olds to seven percent among 17-year-olds, 15 percent among 18-year-olds, and 23 percent among 19-year-olds. There are significant residential differences in the level of teenage childbearing. In rural areas, the level of teenage fertility (12 percent) is almost twice the level in urban areas (6 percent). Upper Egypt has the highest level of teenage childbearing, especially in the rural areas (14 percent), while the lowest level is observed in urban Lower Egypt (4 percent).

Table 4.11 Teenage pregnancy and motherhood by background characteristics

Percentage of women age 15-19 who are mothers or pregnant with their first child, by background characteristics, Egypt 2005

Background characteristic	Percentage who are: Mothers	Percentage who are: Pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	0.0	0.4	0.5	1,211
16	0.5	1.8	2.2	1,230
17	3.4	3.1	6.5	1,455
18	9.6	5.4	15.0	1,270
19	15.8	6.9	22.7	1,280
Urban-rural residence				
Urban	4.3	1.6	6.0	2,644
Rural	6.9	4.8	11.7	3,850
Place of residence				
Urban Governorates	3.7	1.0	4.8	1,081
Lower Egypt	5.4	4.4	9.8	2,334
Urban	2.8	1.6	4.4	690
Rural	5.5	4.6	10.1	1,959
Upper Egypt	9.3	5.1	14.4	2,249
Urban	6.4	2.4	8.8	835
Rural	8.4	5.1	13.5	1,859
Frontier Governorates	3.8	1.7	5.5	79
Education				
No education	15.7	7.3	23.0	831
Some primary	11.3	3.9	15.2	265
Primary complete/some secondary	3.1	1.8	4.9	3,386
Secondary complete/higher	5.8	5.0	10.8	1,978
Wealth quintile				
Lowest	6.9	3.2	10.0	1,373
Second	7.5	4.6	12.1	1,349
Middle	7.2	4.6	11.8	1,308
Fourth	5.3	4.1	9.4	1,226
Highest	2.1	1.0	3.1	1,209
Total	5.9	3.6	9.4	6,446

The level of teenage fertility is strongly associated with a woman's educational level. The proportion of women age 15-19 who are pregnant or who have already given birth is highesst among women with no education (23 percent). Teenagers in the lower wealth quintile are three to four times as likely as women in the highest wealth quintile to have begun bearing children.