

FERTILITY LEVELS, TRENDS, AND DIFFERENTIALS

Collins Opiyo

4.1 INTRODUCTION

Fertility is one of the three principal components of population dynamics, the others being mortality and migration (United Nations, 1973). Collection of data on fertility levels, trends and differentials has remained a prime objective of the Demographic and Health Surveys (DHS) programme since its inception in the 1980s. In Kenya, continued collection of such data through birth histories and other means has been important in recognising the important role that fertility plays in balancing Kenya's overall population growth equation. The fact that fertility reduction became the thrust of the country's population policy as early as 1967 underlines the deliberate efforts made by the Government to contain it.

The 2003 KDHS was conducted against the backdrop of a dramatic fertility transition that was first reported in the 1989 KDHS. On the basis of the 1999 Kenya Population and Housing Census, fertility was projected to continue to decline to a total fertility rate of 3.2 by 2015-2020 (Central Bureau of Statistics, 2002d: 27). The government and other stakeholders are therefore keen to monitor developments with respect to the fertility transition process, with a view to evaluating the course of the fertility transition through population and development policies and programmes.

This chapter presents an analysis of the fertility data collected in the 2003 KDHS. It includes a discussion on levels, trends, and differentials in fertility by selected background characteristics; data on lifetime fertility (children ever born and living); and a scrutiny of age at first birth and birth intervals. Thereafter, a brief discussion on adolescent fertility, which has become critical to the issue of fertility transition, particularly in the wake of a new policy modelled on adolescent reproductive health, is presented.

The fertility data were collected by asking all women of reproductive age (15-49 years) to provide complete birth histories of all children they had given birth to, those who were currently living with them, those who were living away, and those who had died. In addition, the following information was collected for each live birth: name, sex, date of birth, survival status, current age (if alive), and age at death (if dead). It is important to mention at the outset that the birth history approach has some limitations that might distort fertility levels and patterns. For instance, women may include relatives' children as their own or omit children who died young, while older women may forget grown children who have left home (United Nations, 1983). Accordingly, the results should be viewed with these caveats in mind.

4.2 CURRENT FERTILITY

Measures of current fertility are presented in Table 4.1 for the three-year period preceding the survey, corresponding to the period from mid-2000 to mid-2003. Several measures of current fertility are shown. Age-specific fertility rates (ASFRs) are calculated by dividing the number of births to women in a specific age group by the number of woman-years lived during a given period.¹ The total fertility rate (TFR) is a common measure of current fertility and is defined as the average number of children a woman

¹ Numerators for the age-specific fertility rates are calculated by summing all births that occurred during the 1 to 36 months preceding the survey, classified by the age of the mother at the time of birth in 5-year age groups. The denominators are the number of woman-years lived in each specific 5-year age group during the 1 to 36 months preceding the survey.

would have if she went through her entire reproductive period (15-49 years) reproducing at the prevailing ASFR. Two additional measures of fertility reported in this chapter are the general fertility rate (GFR), which represents the annual number of births per 1,000 women age 15-44, and the crude birth rate (CBR), which represents the annual number of births per 1,000 population. The CBR was estimated using the birth history data in conjunction with the population data collected in the household schedule.

Table 4.1 shows a TFR of 4.9 children per woman for the three-year period preceding the survey (mid-2000 to mid-2003). Fertility is considerably higher in the rural areas (5.4 children per woman) than urban areas (3.3 children per woman), a pattern that is evident at every age and that widens with age, with fertility of rural women age 35 and over becoming around twice that of urban women.

Overall, peak fertility occurs at age 20-24. In the rural areas, fertility also peaks at age 20-24, falling sharply after age 39. In the urban areas, however, fertility peaks at age 25-29 years (actually it tends to peak broadly at age 20-29) and tapers off sharply after age 34. The persistence of a disparity in fertility between urban and rural women is due to favourable factors most probably associated with urbanisation (e.g., better education, higher status of women, better access to family planning information and services and later marriage). This is well documented in the literature both in Kenya and elsewhere.

Differentials in fertility levels by urban-rural residence, province, educational attainment and wealth quintile are shown in Table 4.2 and Figure 4.1. Regionally, disparities are still large. Fertility is lowest in Nairobi Province (2.7 children per woman) and highest in North Eastern Province (7.0 children per woman). Fertility in Central Province is also relatively low (3.4), compared with Nyanza (5.6), Rift Valley (5.8), and Western (5.8) provinces. Regional differentials in fertility are closely associated with regional disparities in knowledge and use of family planning methods (see Chapter 5).

In accordance with expectations, education of women is strongly associated with lower fertility. The TFR decreases dramatically from 6.7 for women with no education to 3.2 for women with at least some secondary education. While some primary education is associated with lower fertility, complete primary education is associated with a reduction in fertility of almost two children per woman. Fertility is also very closely associated with wealth. The disparity in fertility between the poorest and the richest women is on the order of almost five children per woman.

Table 4.2 also presents a crude assessment of trends in fertility in the various subgroups by comparing current fertility with a measure of completed fertility, the mean number of children ever born to women age 40-49. Current fertility always falls substantially below lifetime fertility, except for respondents from the poorest households. This provides further evidence that fertility has fallen substantially over time for all of these subgroups. Overall, the table shows that fertility has fallen by about one child per woman in recent periods. However, it seems to have increased slightly for women from the poorest households.

Table 4.1 Current fertility

Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Kenya 2003

Age group	Residence		
	Urban	Rural	Total
15-19	88	123	114
20-24	162	278	243
25-29	168	254	231
30-34	136	217	196
35-39	78	137	123
40-44	23	62	55
45-49	(6)	17	15
TFR	3.3	5.4	4.9
GFR	123	187	170
CBR	35.3	38.1	37.5

Note: Rates for age group 45-49 may be slightly biased because of truncation. Rates in parentheses are based on 125 to 249 unweighted woman-years of exposure.

TFR: Total fertility rate for women age 15-49, expressed per woman

GFR: General fertility rate (births divided by the number of women age 15-44), expressed per 1,000 women

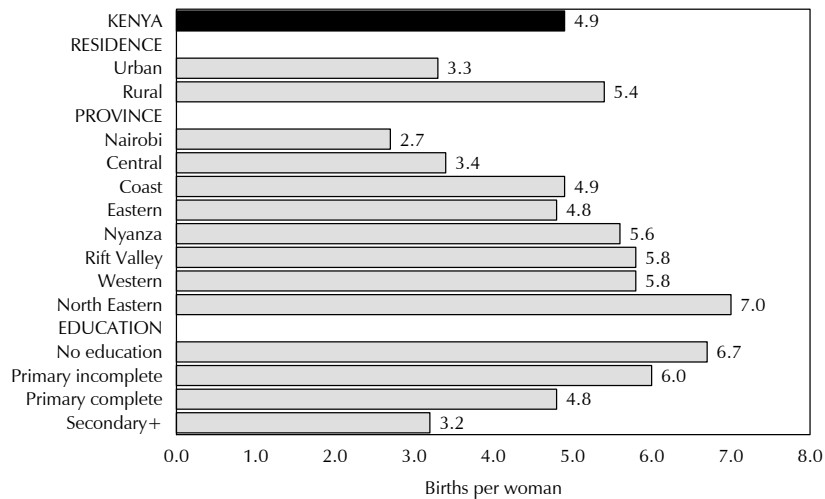
CBR: Crude birth rate, expressed per 1,000 population

Table 4.2 indicates that 8 percent of women were pregnant at the time of the survey. This is likely to be an underestimate, as women in the early stages of pregnancy may be unaware or unsure that they are pregnant, while some may refuse to declare that they are pregnant. Noticeably, differentials in pregnancy rates are generally consistent with the pattern depicted by fertility across the various subgroups.

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, Kenya 2003			
Background characteristic	Total fertility rate ¹	Percentage currently pregnant ¹	Mean number of children ever born to women age 40-49
Residence			
Urban	3.3	6.6	4.4
Rural	5.4	8.2	6.4
Province			
Nairobi	2.7	6.6	3.5
Central	3.4	5.0	4.9
Coast	4.9	8.5	6.2
Eastern	4.8	7.9	5.8
Nyanza	5.6	8.3	6.8
Rift Valley	5.8	8.4	6.8
Western	5.8	9.4	6.5
North Eastern	7.0	11.5	8.3
Education			
No education	6.7	9.1	6.9
Primary incomplete	6.0	9.1	6.8
Primary complete	4.8	8.4	6.0
Secondary+	3.2	5.3	4.4
Wealth quintile			
Lowest	7.6	9.4	7.4
Second	5.8	9.3	6.8
Middle	5.1	7.9	6.5
Fourth	4.0	6.8	5.5
Highest	3.1	6.5	4.2
Total	4.9	7.8	6.0

¹ Women age 15-49

Figure 4.1 Total Fertility Rate, by Background Characteristics



KDHS 2003

4.3 FERTILITY TRENDS

Kenya is endowed with a wealth of demographic data. Accordingly, changes in fertility levels over time can be tracked by examining fertility estimates from various surveys and censuses, spanning the last three decades. Table 4.3 and Figure 4.2 indicate that the TFR declined dramatically during the last two decades of the 20th century, changing from a high of 8.1 children per woman in the late 1970s, through 6.7 in the late 1980s, to 4.7 during the last half of the 1990s. However, fertility seems to have started rising, albeit marginally, from 1998, reaching a TFR of 4.9 children per woman during the period from mid-2000 to mid-2003.² This upturn in birth rates has especially affected age groups 25-39.

The stagnation in fertility is one of the most surprising and worrisome findings from the 2003 KDHS, since fertility decline was first observed about 15 years ago. Nevertheless, this trend seems to be corroborated by the findings of the 1999 Population and Housing Census, where a TFR of 5.0 was estimated for a period varying from 12 months to a little less than 5 years before the census (Figure 4.2).

Further, data on other fertility correlates collected in the 2003 KDHS are internally consistent with this new trend: contraceptive use has only inched up from 39 percent of married women in 1998 to 41 percent in 2003 (excluding the northern areas); pronatalist desires have reemerged (the proportion of women who either want no more children or are sterilised decreased from 53 percent in 1998 to 50 percent in 2003 excluding the north); child mortality has risen since the early 1990s, which tends to reintroduce the “insurance effect” phenomenon; and age at first marriage and age at first birth have largely remained the same or have slightly increased.

² Although both the census data and the 2003 KDHS are nationally representative, data from all previous surveys exclude the northern half of the country. Retabulation of the 2003 KDHS data excluding the same northern areas produces a TFR of 4.8.

Table 4.3 Trends in fertility

Age-specific fertility rates (per 1,000 women) and total fertility rates from selected surveys and censuses: 1977-78 KFS, 1989 KDHS, 1993 KDHS, 1998 KDHS, 1999 Population and Housing Census, and 2003 KDHS

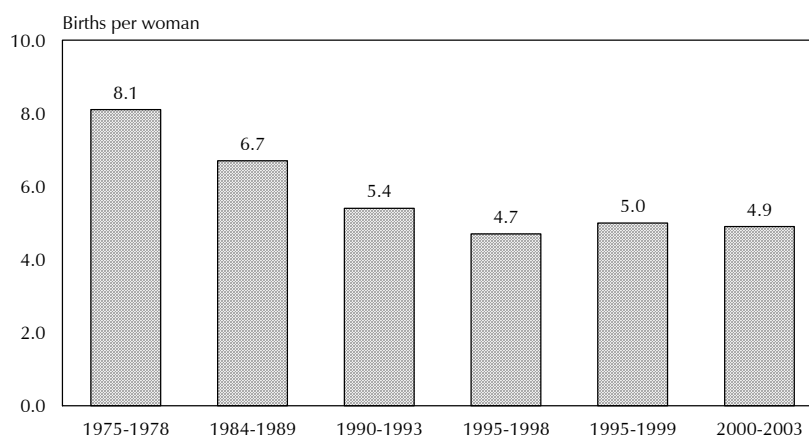
Age group	1977-1978 KFS ¹ 1975-1978	1989 KDHS ¹ 1984-1989	1993 KDHS ¹ 1990-1993	1998 KDHS ¹ 1995-1998	1999 Census	2003 KDHS 2000-03 ¹	2003 KDHS 2000-03
15-19	168	152	110	111	142	114	114
20-24	342	314	257	248	254	241	243
25-29	357	303	241	218	236	227	231
30-34	293	255	197	188	185	193	196
35-39	239	183	154	109	127	119	123
40-44	145	99	70	51	56	55	55
45-49	59	35	50	16	7	15	15
TFR	8.1	6.7	5.4	4.7	5.0	4.8	4.9

Note: Rates refer to the three-year period preceding the surveys, except for the 1989 KDHS, which uses a five-year period, and the 1999 census, which uses a period that varies with the age groups used to make the correction.

Sources: National Council for Population and Development et al., 1999: 31 and Central Bureau of Statistics, 2002b: 25

¹ Excludes the northern part of the country

Figure 4.2 Total Fertility Rates, Kenya 1975-2003



Note: Rates for the first four time periods exclude the northern half of Kenya, while the rates from the 1999 census and the 2003 KDHS cover the entire country.

Table 4.4 shows the changes in fertility between the 1998 KDHS and the 2003 KDHS by selected background characteristics. Overall, the table shows that the rise in the TFR was statistically insignificant, from 4.7 children per woman during the 1995-1998 period to 4.8 during the 2000-2003 period. Across the provinces, fertility increased in all except Central and Coast provinces. Nyanza Province recorded the highest increase in TFR (12 percent). With respect to education, the data show that fertility increased for women with no education and those who had not completed primary education. However, fertility remained the same for women who completed primary education and declined for women with at least some secondary education. According to place of residence, fertility increased in both urban and rural areas, but the rise was a little larger for women in the urban areas (7 percent) than those in the rural (4 percent).

Table 4.4 Trends in fertility by background characteristics

Total fertility rates and percent change according to province, residence, and education, Kenya 1998 and 2003

Background characteristic	1998	2003	Percentage change
	KDHS 1995-1998	KDHS 2000-2003	
Residence			
Urban	3.1	3.3	+6.5
Rural	5.2	5.4	+3.8
Province			
Nairobi	2.6	2.7	+3.8
Central	3.7	3.4	-8.1
Coast	5.1	4.9	-3.9
Eastern	4.7	4.8	+2.1
Nyanza	5.0	5.6	+12.0
Rift Valley	5.3	5.8	+9.4
Western	5.6	5.8	+3.6
Education			
No education	5.8	6.7	+15.5
Primary incomplete	5.2	6.1	+17.3
Primary complete	4.8	4.8	+0.0
Secondary and above	3.5	3.2	-8.6
Total	4.7	4.8	+2.1

Note: The TFRs for the 2003 KDHS in this table differ from those in Table 4.2 because, for comparison the areas covered in the 1998 KDHS, areas in the northern part of Kenya have been excluded.

- Indicates net decline/decrease

+ Indicates net rise/increase

Table 4.5 presents the ASFRs for five-year periods preceding the 2003 KDHS. A mixed pattern is observed, in which fertility seems to have declined steadily for women age 20-24 and 25-29, while it tended to increase between the most recent periods for women age 15-19 and 30-34.

Table 4.5 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, Kenya 2003

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	116	113	147	145
20-24	248	266	287	317
25-29	231	245	280	294
30-34	196	190	233	[272]
35-39	128	139	[203]	-
40-44	58	[90]	-	-
45-49	[19]	-	-	-

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

4.4 CHILDREN EVER BORN AND CHILDREN SURVIVING

Table 4.6 shows the distribution of all women and of currently married women age 15-49 years by number of children ever born and mean number of living children. More than four-fifths of women age 15-19 (82 percent) have never given birth. However, this proportion declines rapidly to less than 4 percent for women age 30 years and above, indicating that childbearing among Kenyan women is nearly universal. On average, Kenyan women attain a parity of 6.5 children per woman at the end of their childbearing. This is a little more than 1.5 children above the total fertility rate, a discrepancy that is attributable to the dramatic decline in fertility during the 1980s and 1990s.

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, Kenya 2003

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	81.5	14.7	3.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,856	0.23	0.21
20-24	32.7	31.1	22.1	10.9	2.8	0.2	0.2	0.0	0.0	0.0	0.0	100.0	1,691	1.21	1.09
25-29	10.6	17.9	20.5	22.5	16.3	7.3	3.2	1.0	0.3	0.1	0.2	100.0	1,382	2.60	2.32
30-34	3.8	8.5	16.7	17.7	17.5	13.0	11.1	6.0	3.8	1.1	0.8	100.0	1,086	3.88	3.48
35-39	2.8	3.7	8.9	13.2	15.0	15.9	13.4	11.1	8.3	3.5	4.2	100.0	871	5.01	4.34
40-44	1.9	3.1	4.4	11.9	13.5	15.6	12.4	11.5	9.2	7.5	9.0	100.0	788	5.72	5.07
45-49	2.7	2.8	4.6	6.9	7.9	11.8	12.9	11.0	13.9	8.6	17.1	100.0	521	6.52	5.53
Total	28.1	14.8	12.7	11.5	9.0	6.9	5.5	4.0	3.2	1.8	2.5	100.0	8,195	2.75	2.43
CURRENTLY MARRIED WOMEN															
15-19	34.7	46.4	16.8	1.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	100.0	333	0.86	0.80
20-24	10.7	33.5	32.6	17.7	4.9	0.3	0.3	0.0	0.0	0.0	0.0	100.0	965	1.75	1.57
25-29	4.0	13.3	22.6	26.3	19.2	9.2	3.5	1.1	0.4	0.2	0.2	100.0	1,056	2.96	2.65
30-34	2.0	6.5	15.3	18.8	18.3	13.7	12.2	6.9	4.3	1.1	1.0	100.0	873	4.11	3.70
35-39	1.0	2.7	7.8	12.6	15.6	16.1	13.2	12.5	10.0	3.6	5.0	100.0	691	5.31	4.62
40-44	1.5	1.7	3.3	11.0	13.6	16.1	12.6	11.9	10.2	8.0	10.2	100.0	614	5.97	5.30
45-49	2.8	0.6	3.7	6.4	6.7	13.1	11.6	11.0	14.5	10.2	19.5	100.0	388	6.87	5.86
Total	6.2	14.3	16.9	16.2	12.7	9.8	7.3	5.6	4.7	2.5	3.7	100.0	4,919	3.80	3.36

The same pattern is replicated for currently married women, except that only a little more than one-third (35 percent) of the married women age 15-19 have not borne a child. As with all women, this proportion diminishes, although more rapidly, to 4 percent or less for women age 25 and above. This difference in childbearing can be explained by the presence of many young and unmarried women in the “all women” category, who are known to exhibit extremely low fertility. On average, currently married women age 45-49 have borne 6.9 children each, of which one child on average has died. As expected, women above 40 years have much higher parities, with substantial proportions having 10 or more births by the end of their childbearing years.

Consonant with expectations, the mean number of children ever born and mean number living rise monotonically with rising age of women, thus presupposing minimal or no recall lapse, which heightens confidence in the birth history reports.

4.5 BIRTH INTERVALS

Examination of birth intervals is important in providing insights into birth spacing patterns and, subsequently, maternal and child health. Studies have shown that children born less than 24 months after a previous sibling risk poorer health and also threaten maternal health. Table 4.7 provides a glimpse into the birth intervals of children born to Kenyan women of reproductive age during the five years preceding the survey across selected subgroups.

Table 4.7 Birth intervals

Percent distribution of nonfirst births in the five years preceding the survey, by number of months since preceding birth, according to background characteristics, Kenya 2003

Background characteristic	Months since preceding birth					Total	Number of nonfirst births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48+			
Age								
15-19	22.4	29.3	35.5	8.1	4.8	100.0	79	23.7
20-29	10.8	16.4	42.4	16.0	14.4	100.0	2,289	29.6
30-39	7.5	10.9	32.5	17.2	31.9	100.0	1,801	35.6
40-49	7.6	6.9	22.4	21.2	41.9	100.0	454	42.1
Birth order								
2-3	10.1	14.5	36.3	15.8	23.3	100.0	2,168	32.1
4-6	8.1	11.7	37.5	16.8	25.9	100.0	1,628	33.3
7+	10.1	14.6	34.8	19.8	20.8	100.0	828	32.2
Sex of preceding birth								
Male	9.3	14.6	37.0	15.3	23.8	100.0	2,329	32.4
Female	9.4	12.5	36.0	18.4	23.7	100.0	2,294	32.7
Survival of preceding birth								
Living	7.0	12.6	37.4	18.0	24.9	100.0	4,069	33.5
Dead	26.8	20.3	29.2	8.3	15.4	100.0	554	24.6
Residence								
Urban	9.8	14.1	26.1	17.3	32.8	100.0	748	36.0
Rural	9.3	13.4	38.5	16.8	22.0	100.0	3,875	32.1
Province								
Nairobi	11.3	14.5	26.3	15.2	32.7	100.0	242	34.9
Central	6.3	9.3	32.7	14.7	37.0	100.0	449	36.6
Coast	9.0	12.5	35.4	19.6	23.5	100.0	384	34.0
Eastern	8.5	9.9	37.3	17.4	26.9	100.0	731	33.7
Nyanza	10.2	15.0	36.6	17.3	20.9	100.0	786	31.6
Rift Valley	9.2	14.2	37.7	17.1	21.8	100.0	1,266	31.9
Western	8.6	17.1	40.1	16.1	18.0	100.0	609	30.3
North Eastern	20.5	17.3	36.4	15.0	10.8	100.0	157	27.2
Education								
No education	10.0	14.8	35.0	18.4	21.8	100.0	801	32.5
Primary incomplete	8.5	13.6	42.0	16.1	19.7	100.0	1,764	31.4
Primary complete	9.6	13.6	35.8	16.2	24.7	100.0	1,218	32.7
Secondary+	10.2	12.0	27.2	17.8	32.8	100.0	840	36.2
Wealth quintile								
Lowest	11.1	15.3	41.7	16.8	15.1	100.0	1,285	30.2
Second	8.0	11.5	40.4	18.5	21.7	100.0	1,005	32.2
Middle	9.1	14.6	34.3	16.0	26.0	100.0	896	33.6
Fourth	8.4	11.2	35.1	15.3	30.0	100.0	721	34.0
Highest	9.6	14.3	25.7	17.3	33.1	100.0	716	36.1
Total	9.4	13.5	36.5	16.9	23.7	100.0	4,623	32.6

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.

Overall, the median birth interval has remained constant since 1998, changing marginally from 32.9 months in the 1998 KDHS to 32.6 months in the 2003 KDHS. However, the median birth interval is relatively shorter for children born to younger women; to women in the rural areas; to women in North Eastern, Western, Nyanza, and Rift Valley provinces; to women with less than secondary education; and to women from poorer households.

The shortest birth interval is observed among children born to women age 15-19 (23.7 months) and children whose preceding sibling died (24.6 months), while the longest is among children born to women with at least some secondary education (36.2 months) and women age 40-49 (42.1 months).

Overall, 23 percent of Kenyan children are born less than 24 months after a previous birth, an interval perceived to be “too short.” This is identical to the level in 1998. A larger proportion of such children is born to younger women age 15-19 (52 percent) relative to other age groups, to women in North Eastern Province (38 percent) compared with other provinces, and to women with no education (25 percent) relative to other education categories.

4.6 AGE AT FIRST BIRTH

The onset of childbearing has a direct bearing on fertility. Early initiation into childbearing lengthens the reproductive period and subsequently increases fertility.

Table 4.8 shows median age at first birth as well as the percentage of women who gave birth by a given exact age, by five-year age groups of women. The youngest cohort of women for whom median age at first birth can be calculated is 25-29 years (the medians for groups age 15-19 and 20-24 cannot be determined, as less than half of the women had a birth before reaching the lowest age of the age group).

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	1.5	na	na	na	na	81.5	1,856	a
20-24	3.4	22.7	45.4	na	na	32.7	1,691	a
25-29	4.4	24.9	48.3	68.0	84.8	10.6	1,382	20.1
30-34	5.7	30.6	54.9	71.2	85.7	3.8	1,086	19.6
35-39	6.1	27.6	50.7	72.8	89.0	2.8	871	19.9
40-44	5.7	31.3	56.9	75.2	89.9	1.9	788	19.4
45-49	7.6	33.8	57.3	73.5	88.5	2.7	521	19.3

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

The median age at first birth is 20.1 years for women age 25-29 in 2003, reflecting a marginal rise from the 19.6 years recorded for the same women in the 1998 KDHS. Generally, age at first birth has shown some slight increase over the years, being later for younger women as compared with older women. However, caution should be exercised in interpreting these slight changes, as they are likely to be statistically insignificant.

Further insights into the onset of childbearing can be discerned by examining the percentage of women who had a first birth by the given exact ages for various age groups of women. While this per-

centage increases progressively by increasing exact ages as expected, the proportion having their first birth by age 18, for instance, is slightly lower for younger women, compared with older ones. This observation is consistent with a slightly rising age at first birth.

Table 4.9 depicts the differential patterns in age at first birth using the median among women age 25-49 by current age, according to selected background characteristics. A significantly higher median age at first birth is observed in the urban areas, compared with rural areas for all age groups. Among the provinces, a higher median is recorded in Nairobi (22.0 years) for women age 25-49, followed by Central Province (20.3 years), while the lowest was recorded in Nyanza Province (18.4 years). This implies that women in Nyanza Province, on average, have their first birth nearly four years earlier than those in Nairobi.

Clearly, the onset of childbearing is significantly related to education of women. According to Table 4.9, women with some secondary education and above begin their childbearing more than three years (22.2 years) later than women with no education (18.7 years). Delayed onset of childbearing of about three years is also exhibited by wealthier women, relative to poorer ones.

Table 4.9 Median age at first birth by background characteristics						
Median age at first birth among women age 25-49, by current age and background characteristics, Kenya 2003						
Background characteristic	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
Residence						
Urban	22.4	21.3	20.8	20.4	20.7	21.2
Rural	19.6	19.3	19.7	19.2	19.0	19.4
Province						
Nairobi	23.0	22.0	21.7	21.6	21.0	22.0
Central	21.0	20.6	20.7	19.7	19.2	20.3
Coast	20.0	20.4	19.0	19.5	19.0	19.8
Eastern	19.9	19.7	20.3	20.1	19.0	19.9
Nyanza	19.1	18.0	18.6	18.0	18.3	18.4
Rift Valley	20.0	19.1	19.8	19.0	20.1	19.6
Western	19.9	19.2	19.6	19.0	18.5	19.4
North Eastern	18.0	19.0	19.6	21.5	(21.6)	19.4
Education						
No education	18.7	17.4	18.8	19.1	19.4	18.7
Primary incomplete	18.7	18.3	18.5	18.3	18.4	18.5
Primary complete	19.9	19.7	19.8	19.1	18.4	19.6
Secondary+	23.0	22.2	22.0	21.2	22.2	22.2
Wealth quintile						
Lowest	18.9	18.1	18.2	18.9	18.9	18.6
Second	19.7	18.7	19.5	18.8	18.7	19.3
Middle	19.1	19.3	20.1	19.1	19.0	19.3
Fourth	20.6	19.9	20.4	19.4	19.4	20.0
Highest	22.6	21.8	21.2	21.2	21.0	21.8
Total	20.1	19.6	19.9	19.4	19.3	19.8

Note: Figures in parentheses are based on fewer than 25 unweighted women.

4.7 TEENAGE FERTILITY

Adolescent fertility in Kenya occupies a prime place in the design and implementation of reproductive health strategies, policies, and programmes. In an attempt to address the reproductive health needs

and to reduce fertility of this special group, the government, through the Ministry of Health and the National Council for Population and Development, has recently put in place an Adolescent Reproductive Health Policy to help meet the needs of this group.

It is important to examine the fertility of adolescents for various reasons. First, children born to very young mothers are normally predisposed to higher risks of illness and death. Second, adolescent mothers are more likely to experience complications during pregnancy and are less likely to be prepared to deal with them, which often leads to maternal deaths. Third, their early entry into reproduction denies them the opportunity to pursue basic and further academic goals. This is detrimental to their prospects for good careers, which often lowers their status in society.

Table 4.10 displays the percentage of women age 15-19 who were mothers or were pregnant with their first child at the time of the 2003 KDHS, by selected background characteristics. Generally, teenage fertility has edged slightly upward, with the proportion that have begun childbearing rising from 21 percent in 1998 to 23 percent in 2003. The proportion of teenage mothers rose from 17 percent in 1998 to 19 percent in 2003, while the proportion of those pregnant with their first child rose as well, from 4 percent in 1998 to 5 percent in 2003.

Table 4.10 also shows that the proportion of teenagers who have begun childbearing increases dramatically from 4 percent at age 15 to 46 percent at age 19. Not much disparity, though, is observed in this parameter between rural and urban women. Teenage fertility is much higher in Rift Valley, North Eastern, Coast, and Nyanza provinces, where at least one-fourth of women age 15-19 have begun childbearing. Almost half of uneducated teenagers (46 percent) have begun childbearing, compared with only 10 percent of those with some secondary education and above. Teenagers from poorer households are more likely to have begun childbearing (29 percent), as compared with those from wealthier households (21 percent).

Table 4.10 Teenage pregnancy and motherhood

Percentage of women age 15-19 who are mothers or pregnant with their first child, by background characteristics, Kenya 2003

Background characteristic	Percentage who are:		Percentage who have begun child-bearing	Number of women
	Mothers	Pregnant with first child		
Age				
15	2.4	1.8	4.1	351
16	5.3	3.0	8.3	360
17	12.0	4.1	16.1	365
18	30.4	7.2	37.7	397
19	39.4	6.2	45.6	383
Residence				
Urban	17.7	4.5	22.2	388
Rural	18.7	4.5	23.3	1,467
Province				
Nairobi	15.2	4.4	19.5	144
Central	13.8	1.5	15.3	230
Coast	23.5	5.9	29.4	145
Eastern	11.0	3.7	14.8	316
Nyanza	21.3	5.8	27.1	325
Rift Valley	25.5	5.0	30.5	390
Western	16.4	4.7	21.1	268
North Eastern	20.8	8.2	29.0	39
Education				
No education	40.2	5.7	45.9	127
Primary incomplete	18.1	5.2	23.3	921
Primary complete	23.6	5.1	28.7	386
Secondary+	8.1	2.3	10.4	422
Wealth quintile				
Lowest	21.5	7.3	28.8	316
Second	21.4	4.8	26.1	360
Middle	18.1	3.8	21.8	380
Fourth	15.6	3.1	18.7	401
Highest	16.8	4.3	21.2	398
Total	18.5	4.5	23.0	1,856