

Toregeldy Sharmanov and Kia I. Weinstein

All women interviewed in the 1999 KDHS were asked to provide their complete pregnancy histories. For the data to accurately describe the fertility status of the population of Kazakhstan, it was important for women to report all their pregnancies. To encourage complete reporting of all such events, women were asked separate questions about pregnancies that had ended in live births, induced abortions, miscarriages, and stillbirths. An accounting of live births was achieved by asking separately about the number of sons and daughters living with the respondent, the number living elsewhere, and the number who had died. An accounting of all pregnancies was double-checked by interviewers probing for intervening pregnancies in all pregnancy intervals of four or more years.

Each woman's pregnancy history was obtained in reverse chronological order, from the most recent pregnancy to the respondent's first pregnancy. The outcome of each pregnancy was recorded (live birth, abortion, miscarriage, or stillbirth), as was the date the pregnancy ended. For each pregnancy that resulted in a live birth, information was collected on the sex of the child, survival status, and age (of living children) or age at death (of deceased children).

This chapter presents the findings pertaining to live births. Because ethnicity is a major determinant of fertility in Kazakhstan, fertility data are shown separately for ethnic Kazakhs and ethnic Russians, as well as the overall rates for all of Kazakhstan. Findings pertaining to pregnancy loss are presented in another chapter.

4.1 Current Fertility

Age-specific and total fertility rates presented in Table 4.1 and Figure 4.1 were calculated directly from the information obtained in the pregnancy history. The reported rates refer to the three-year period preceding the survey (mid-1996 to mid-1999). Age-specific fertility rates were calculated by dividing the number of births to women in a five-year age interval by the number of woman-years lived in that age interval.¹ The total fertility rate (TFR) is a construct of the age-specific rates computed by summing the age-specific rates and multiplying by five. The TFR is expressed per woman and is calculated to provide a snapshot view of current fertility levels. The TFR is interpreted as the number of children a woman would have in her lifetime if she experienced the currently observed age-specific fertility rates during her childbearing years.

Table 4.1 presents two other summary measures of fertility: the general fertility rate (GFR) and the crude birth rate (CBR). The GFR represents the annual number of births in the population per 1,000 women age 15-44. The crude birth rate is the annual number of births in the population per 1,000 population. These measures are calculated from the birth history data for the three-year period preceding the survey and the age and sex distribution of the household population.

¹ Numerators for age-specific fertility rates are calculated by summing the number of live births that occurred in the 1-36 months preceding the survey (determined from the date of interview and birth date of the child) and classifying them by age (in five-year groups) of the mother at the time of birth (determined from the birth date of the mother). The denominators of the rates are the number of woman-years lived in each of the specified five-year age groups during the 1-36 months preceding the survey.

Table 4.1 Current fertility

Age-specific and cumulative fertility rates and the crude birth rate for the three years preceding the survey, by residence and ethnicity, Kazakhstan 1999

| Age | Residence | | Ethnicity | | | Total |
|-----------|-----------|-------|-----------|---------|-------|-------|
| | Urban | Rural | Kazakh | Russian | Other | |
| 15-19 | 36 | 44 | 30 | 41 | 79 | 40 |
| 20-24 | 109 | 233 | 202 | 121 | (126) | 167 |
| 25-29 | 86 | 133 | 129 | 75 | 67 | 106 |
| 30-34 | 51 | 78 | 88 | 23 | 47 | 64 |
| 35-39 | 18 | 32 | 39 | 8 | 8 | 24 |
| 40-44 | 6 | 12 | 12 | 8 | 0 | 9 |
| 45-49 | 0 | 0 | 0 | 0 | (0) | 0 |
| TFR 15-49 | 1.52 | 2.66 | 2.50 | 1.38 | 1.63 | 2.05 |
| TFR 15-44 | 1.52 | 2.66 | 2.50 | 1.38 | 1.63 | 2.05 |
| GFR | 50.00 | 88.00 | 84.00 | 43.00 | 52.00 | 67.00 |
| CBR | 11.90 | 19.40 | - | - | - | 15.40 |

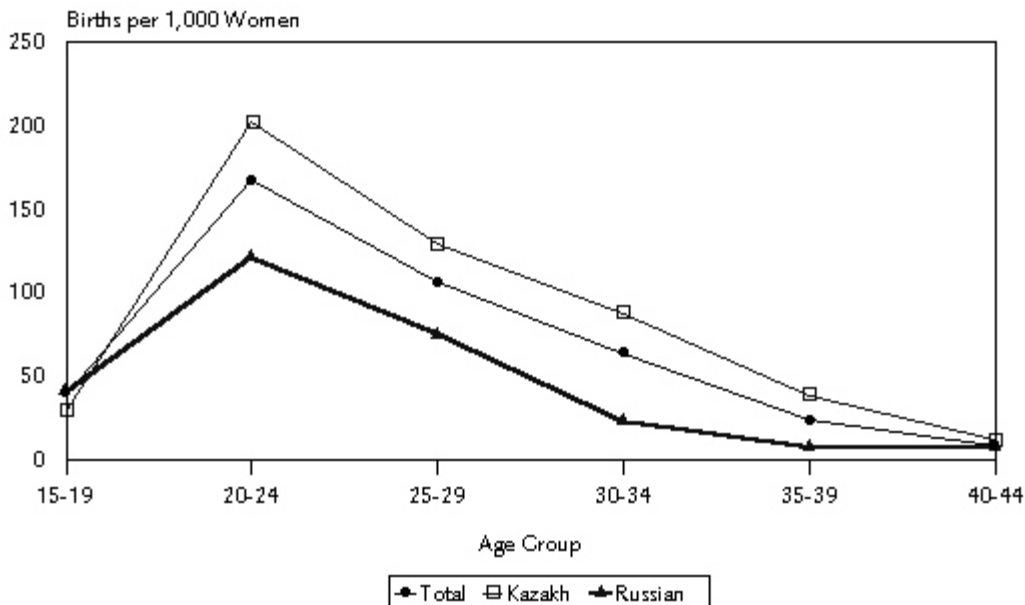
Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation. Rates in parentheses indicate that one or more of the component age-specific rates is based on fewer than 250 woman-years of exposure.

TFR: Total fertility rate, expressed per woman

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

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

Figure 4.1 Age-specific Fertility Rates by Ethnicity



Fertility among urban women is lower than it is among rural women throughout all the childbearing years, resulting in a TFR among urban women that is one child lower than among rural women. If fertility were to remain constant at current levels, a woman in Kazakhstan would give birth to an average of 2.1 children; urban women would have 1.5, while rural women would have 2.7 children. The peak childbearing years for both urban and rural women are during the early twenties (age 20-24). No respondents age 45-49 reported having a live birth in the three years preceding the survey.

Ethnic Kazakhs and ethnic Russians both experience their peak childbearing years during their early twenties. However, ethnic Kazakhs achieve a TFR that is higher (2.5 children per woman) than the overall TFR of 2.1, and ethnic Russians achieve a TFR that is lower (1.4 children per woman) than the overall TFR. The lower TFR of ethnic Russians is a result of lower age-specific rates at every age, with the exception of women age 15-19, among whom ethnic Russians exhibit slightly higher fertility than do ethnic Kazakhs.

Table 4.2 and Figure 4.2 present TFRs for the three years preceding the survey by background characteristics. It can be seen that regional variation in fertility is substantial, varying by nearly two children. The TFR is lowest among women in Almaty City (1.0 children per woman) and the East region (1.4); intermediate in the Central region (1.6), North region (1.7), and West region (2.3); and highest in the South region (2.9).

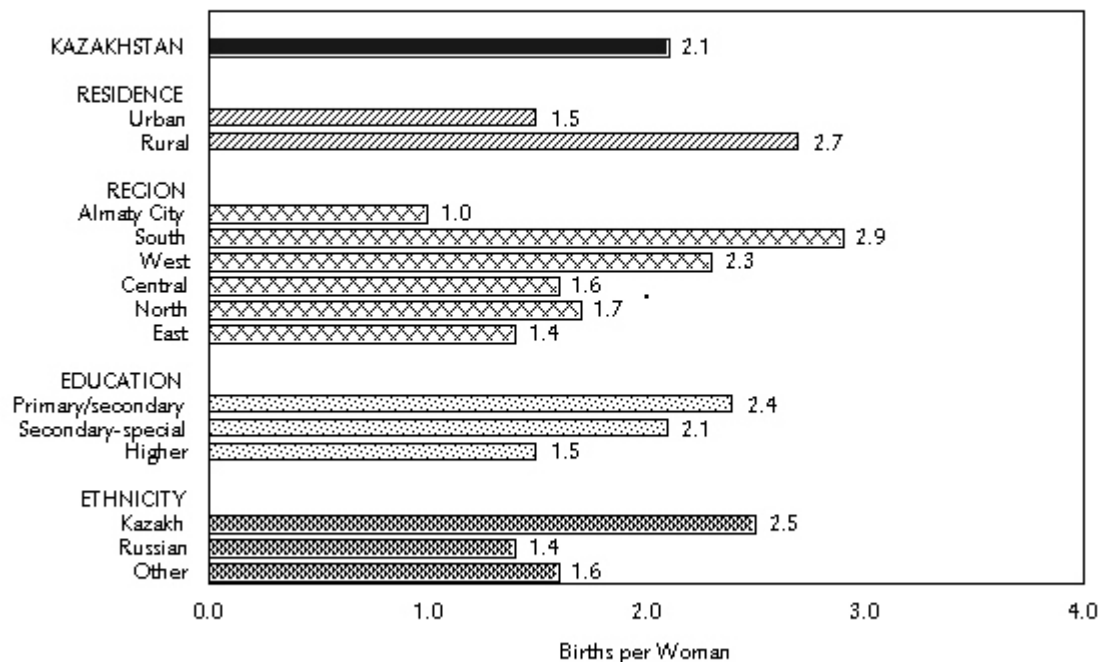
Table 4.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage currently pregnant and mean number of children ever born to women age 40-49, by selected background characteristics, Kazakhstan 1999

| Background characteristic | Total fertility rate ¹ | Percentage currently pregnant ¹ | Mean number of children ever born to women age 40-49 |
|---------------------------|-----------------------------------|--|--|
| Residence | | | |
| Urban | 1.52 | 2.51 | 2.40 |
| Rural | 2.66 | 3.36 | 3.71 |
| Region | | | |
| Almaty City | 1.00 | 1.73 | 1.94 |
| South | 2.86 | 4.75 | 3.81 |
| West | 2.26 | 2.20 | 3.22 |
| Central | 1.59 | 2.30 | 2.25 |
| North | 1.72 | 2.28 | 2.62 |
| East | 1.42 | 1.58 | 2.57 |
| Education | | | |
| Primary/secondary | 2.42 | 3.38 | 3.62 |
| Secondary-special | 2.06 | 2.61 | 2.77 |
| Higher | 1.51 | 2.44 | 2.11 |
| Ethnicity | | | |
| Kazakh | 2.50 | 2.95 | 3.71 |
| Russian | 1.38 | 2.49 | 2.12 |
| Other | 1.63 | 3.42 | 2.67 |
| Total | 2.05 | 2.89 | 2.92 |

¹ Women age 15-49 years

Figure 4.2 Total Fertility Rate by Background Characteristics



KDHS 1999

Women in Kazakhstan exhibit a childbearing pattern, observed in many societies, of decreasing fertility with increasing education. The TFR declines from 2.4 children per woman among women with primary or secondary schooling to 2.1 among women with secondary-special schooling and then down to 1.5 children per woman among those with higher education.

Table 4.2 shows the percent of women who report themselves to be currently pregnant. Because women at early stages of pregnancy may not yet know they are pregnant, this proportion may be underestimated. Percentages are generally low, commensurate with fertility that is relatively low overall. The percentage of pregnant women generally exhibits the same patterns by background characteristics as the TFR.

Trends in fertility can be inferred by comparing the TFR (a measure of current fertility) with the mean number of children ever born (CEB) to women age 40-49 (a measure of completed fertility). If there had been no change in fertility for three or more decades before the survey, the TFR and CEB would be nearly the same. That the TFR (2.1 children per woman) is lower than the CEB (2.9) indicates that fertility has declined in Kazakhstan over the past three decades. The TFR is lower than the CEB among both urban and rural women, and in every region, education level, and ethnic group. More recent changes in fertility need not be inferred; they may be analyzed directly by comparing 1999 KDHS data with other available data sources.

4.2 Fertility Trends

The most direct way of observing fertility trends is to examine changes in age-specific rates over time. Table 4.3 compares age-specific fertility rates (ASFRs) from the 1999 KDHS (which were shown in Table 4.1) with ASFRs reported in the 1989 Census and the 1995 KDHS. The data provide evidence of continual declines in fertility over the past decade. The TFR declined from 2.9 children per woman for the period of 1988-1989 (Darsky and Dworak, 1993) to 2.5 for the period 1992-1995 (National Institute of Nutrition and Macro International Inc., 1996) to 2.1 for the period 1996-1999.

Table 4.3 Trends in fertility

Age-specific fertility rates and total fertility rates for Kazakh, Russian, and total populations, 1989 Census, 1995 KDHS, and 1999 KDHS, Kazakhstan 1999

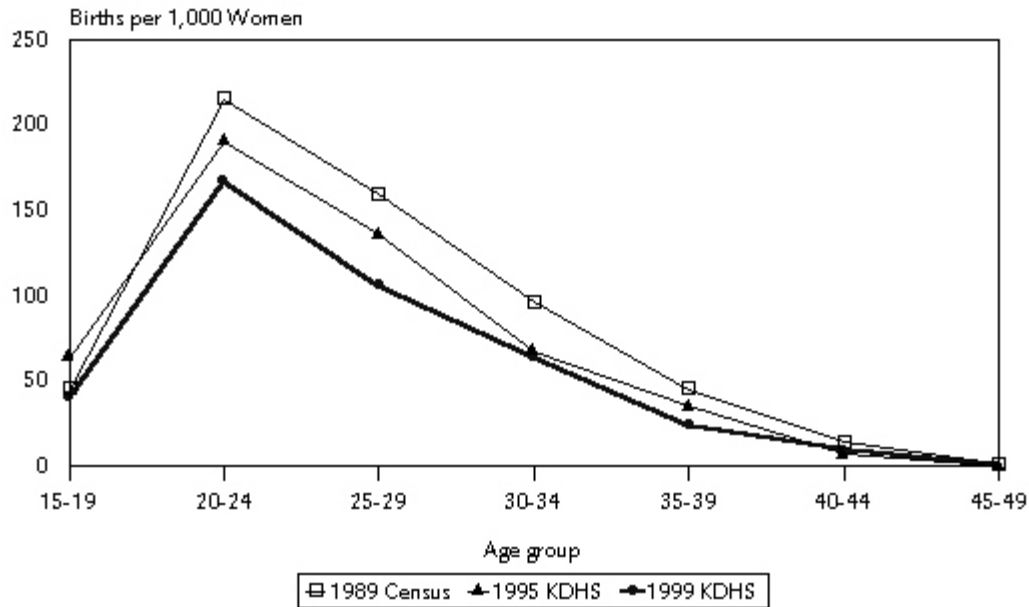
| Age of woman | Kazakh | | | Russian | | | Total ¹ | | |
|----------------------|-------------|-----------|-----------|-------------|-----------|-----------|--------------------|-----------|-----------|
| | 1989 Census | 1995 KDHS | 1999 KDHS | 1989 Census | 1995 KDHS | 1999 KDHS | 1989 Census | 1995 KDHS | 1999 KDHS |
| 15-19 | 31 | 37 | 30 | 59 | 97 | 41 | 45 | 64 | 40 |
| 20-24 | 232 | 229 | 202 | 182 | 125 | 121 | 215 | 190 | 167 |
| 25-29 | 208 | 180 | 129 | 110 | 73 | 75 | 159 | 136 | 106 |
| 30-34 | 140 | 100 | 88 | 63 | 27 | 23 | 96 | 67 | 64 |
| 35-39 | 76 | 60 | 39 | 27 | 15 | 8 | 45 | 35 | 24 |
| 40-44 | 27 | 14 | 12 | 7 | 1 | 8 | 14 | 7 | 9 |
| 45-49 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Total fertility rate | 3.58 | 3.11 | 2.50 | 2.24 | 1.69 | 1.38 | 2.88 | 2.49 | 2.05 |

Note: Single-year period rates are used for the census; three-year period rates are used for the KDHS.
¹ Includes Kazakh, Russian, and other ethnic groups.

Figure 4.3 shows that fertility has fallen in almost every age group. During the decade between the 1989 Census and the 1999 KDHS, the TFR declined by 29 percent, almost one child per woman. The fertility decline has been exhibited by both ethnic Kazakh women and ethnic Russian women. The TFR among ethnic Kazakh women has declined from 3.6 to 2.5 over the past decade, a decline of one child per woman. Among ethnic Russians, the TFR has declined from 2.2 to 1.4 over the past decade, a decline of not quite one child per woman, but resulting in a TFR below replacement levels.

Comparisons of the 1999 KDHS and the 1995 KDHS show that fertility declines over the four years between the surveys occurred not only among ethnic Kazakh and ethnic Russian women, but also among urban and rural women, among women of all regions of Kazakhstan, and among all education groups. One of the greatest areas of decline has been in the Central region, where the TFR fell by one child per woman, from 2.7 to 1.6.

**Figure 4.3 Age-specific Fertility Rates
1989 Census, 1995 KDHS, and 1999 KDHS**



Evidence of a recent decline in fertility is also supported by the ASFRs calculated over time, using only data from the 1999 KDHS. Table 4.4 presents age-specific fertility rates for five-year periods preceding the survey using data on live births from respondents' pregnancy histories.² Declines from 5-9 to 0-4 years prior to the survey are seen among women of all age groups (with the exception of women age 45-49, who reported no live births). Declines of about 25-30 percent are seen among women under the age of 35, and even greater declines are seen among older women (declines of 37 and 65 percent among women age 35-39 and 40-44, respectively).

Table 4.4 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 birth, Kazakhstan 1999

| Mother's age | Number of years preceding the survey | | | |
|--------------|--------------------------------------|------|-------|-------|
| | 0-4 | 5-9 | 10-14 | 15-19 |
| 15-19 | 44 | 64 | 45 | 42 |
| 20-24 | 166 | 214 | 222 | 202 |
| 25-29 | 115 | 162 | 188 | 179 |
| 30-34 | 63 | 82 | 119 | [108] |
| 35-39 | 29 | 46 | [70] | - |
| 40-44 | 6 | [17] | - | - |
| 45-49 | [0] | - | - | - |

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

² The rates for the older age groups (shown in brackets in Table 4.4) represent partial fertility rates due to truncation. Women 50 years of age and older were not included in the survey, and the further back in time that the rates are calculated, the more severe is the truncation. For example, rates cannot be calculated for women age 40-44 for the period 10-14 years before the survey because these women would have been over age 50 years at the time of the survey and thus were not interviewed.

Table 4.5 presents fertility rates for ever-married women by duration since first marriage for five-year periods preceding the survey. Fertility decline usually begins among older women who want to stop their childbearing, but as Table 4.5 shows, the fertility decline in Kazakhstan has been achieved by women at all marital durations, including those of less than five years. This decline at even the shortest marital durations was not observed at the time of the 1995 KDHS.

4.3 Children Ever Born and Living

Table 4.6 presents the distribution of all women and currently married women by number of children ever born. The modal number of children among all women age 30 and above is two. Perhaps the most notable change since the 1995 KDHS is the change among women in their twenties. At the time of the 1995 KDHS, the modal number of children among women in their late twenties was two; it is one in the 1999 KDHS. And more women in their early twenties (age 20-24) have not yet begun childbearing. Forty-four percent of women age 20-24 had not yet had any children at the time of the 1995 KDHS; that percent has risen to 54 percent in the 1999 KDHS. The greatest difference between the data for currently married women and the total sample occurs among young women due to the large number of unmarried young women with minimal fertility. Differences at older ages reflect the generally fertility-reducing impact of marital dissolution (divorce or widowhood).

Table 4.5 Trends in fertility by marital duration

Fertility rates for ever-married women by duration (years) since first marriage for five-year periods preceding the survey, Kazakhstan 1999

| Marriage duration at birth | Number of years preceding the survey | | | |
|----------------------------|--------------------------------------|-----|-------|-------|
| | 0-4 | 5-9 | 10-14 | 15-19 |
| 0-4 | 261 | 329 | 351 | 346 |
| 5-9 | 99 | 120 | 165 | 162 |
| 10-14 | 45 | 62 | 97 | 111 |
| 15-19 | 16 | 40 | 82 | 109 |
| 20-24 | 6 | 20 | 67 | - |
| 25-29 | 0 | 36 | - | - |

Note: Duration-specific fertility rates are per 1,000 women.

Table 4.6 Children ever born and living

Percent distribution of all women and of currently married women age 15-49 by number of children ever born (CEB) and mean number ever born and living, according to five-year age groups, Kazakhstan 1999

| Age group | Number of children ever born (CEB) | | | | | | | | | | | Total | Number of women | Mean no. of CEB | Mean no. of living children | |
|--------------------------------|------------------------------------|------|------|------|------|------|-----|-----|-----|-----|-----|-------|-----------------|-----------------|-----------------------------|------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ | | | | | |
| ALL WOMEN | | | | | | | | | | | | | | | | |
| 15-19 | 95.6 | 4.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 791 | 0.05 | 0.05 |
| 20-24 | 53.7 | 28.4 | 15.3 | 2.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 666 | 0.67 | 0.63 |
| 25-29 | 18.8 | 35.2 | 28.1 | 13.1 | 3.9 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 692 | 1.51 | 1.38 |
| 30-34 | 9.0 | 23.8 | 33.1 | 20.1 | 9.7 | 2.5 | 0.9 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 698 | 2.13 | 1.99 |
| 35-39 | 4.7 | 15.6 | 35.1 | 22.8 | 12.0 | 5.6 | 2.9 | 0.8 | 0.6 | 0.0 | 0.0 | 0.0 | 100.0 | 749 | 2.58 | 2.40 |
| 40-44 | 5.4 | 9.4 | 35.5 | 21.9 | 12.7 | 6.6 | 4.0 | 2.8 | 1.3 | 0.4 | 0.0 | 0.0 | 100.0 | 681 | 2.88 | 2.67 |
| 45-49 | 5.7 | 14.7 | 31.3 | 19.5 | 8.3 | 7.8 | 5.9 | 2.5 | 2.1 | 1.5 | 0.7 | 0.0 | 100.0 | 522 | 2.99 | 2.68 |
| Total | 29.3 | 18.5 | 24.9 | 13.9 | 6.6 | 3.1 | 1.8 | 0.9 | 0.5 | 0.2 | 0.1 | 100.0 | 4,800 | 1.76 | 1.63 | |
| CURRENTLY MARRIED WOMEN | | | | | | | | | | | | | | | | |
| 15-19 | 53.6 | 43.1 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 63 | 0.50 | 0.48 |
| 20-24 | 23.2 | 44.5 | 27.3 | 4.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 353 | 1.14 | 1.08 |
| 25-29 | 6.2 | 35.6 | 34.5 | 17.4 | 5.1 | 0.9 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 506 | 1.83 | 1.67 |
| 30-34 | 3.5 | 19.7 | 37.1 | 22.8 | 11.8 | 3.0 | 1.1 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 546 | 2.38 | 2.22 |
| 35-39 | 1.7 | 12.9 | 36.5 | 23.9 | 13.2 | 6.8 | 3.3 | 1.0 | 0.7 | 0.0 | 0.0 | 0.0 | 100.0 | 617 | 2.77 | 2.57 |
| 40-44 | 2.0 | 6.6 | 36.8 | 23.0 | 14.1 | 7.6 | 5.0 | 2.9 | 1.6 | 0.6 | 0.0 | 0.0 | 100.0 | 548 | 3.11 | 2.91 |
| 45-49 | 1.6 | 10.4 | 34.1 | 19.8 | 9.3 | 10.2 | 6.3 | 3.2 | 2.9 | 1.3 | 1.0 | 0.0 | 100.0 | 385 | 3.31 | 2.95 |
| Total | 6.4 | 20.8 | 34.3 | 19.1 | 9.5 | 4.8 | 2.6 | 1.3 | 0.8 | 0.3 | 0.1 | 100.0 | 3,018 | 2.43 | 2.25 | |

Table 4.6 also shows the mean number of children ever born and the mean number surviving by five-year age group of the mother. On average, women in their early twenties have had 0.7 children, women in their late twenties have had 1.5 children, women in their thirties have had two children, and women in their forties have had nearly three children.

A cursory view of the survival status of children can be made by comparing the mean number of children ever born to the mean number surviving. Overall, 7 percent of live births had not survived to the time of the survey. This survival level generally holds true for women age 20-44. Ten percent of children born to women age 45-49 at the time of the survey had not survived.

4.4 Birth Intervals

The length of birth intervals is an important component of childbearing. Research has shown that children born too close to a previous birth have an increased risk of dying, especially when the interval between births is less than 24 months. Table 4.7 presents the percent distribution of second- and higher-order births in the five years prior to the survey by the number of months since the previous birth. Overall, about one-third of births (32 percent) were born within 24 months of the previous birth. The median birth interval is 35 months, up from a median of 32 months in the 1995 KDHS.

The length of birth intervals by region shows some correlation with patterns of fertility. The region with the highest fertility (the South region) exhibits the shortest median birth interval (only 28 months); 41 percent of non-first births in the South region were born within 24 months of the previous birth. The regions with the lowest fertility (Almaty City and the East region) exhibit much longer median birth intervals (49 and 48 months, respectively). The North region exhibits a median birth interval of 49 months, although it exhibits an intermediate level of fertility.

Urban and rural women also exhibit significant differentials in birth intervals. Births to urban women have a median interval of 48 months while births to rural women have a median interval of 30 months; birth interval length among urban women represents a significant increase since the 1995 KDHS when it was 39 months. Birth intervals are significantly longer among births to Russian mothers (median interval of 52 months) than among births to Kazakh mothers (median interval of 31 months). Median interval length among births to Russian mothers increased from 44 months at the time of the 1995 KDHS. Median interval length also increases with increasing education of the mother, from 29 months among mothers with primary or secondary education to as high as 54 months among women with higher education.

4.5 Age at First Birth

The age at which childbearing begins has important demographic consequences for societies as a whole, as well as for the health and welfare of mothers and children. Early initiation into childbearing is generally associated with large family size and rapid population growth when family planning is not widely practiced.

Table 4.8 presents the percent distribution of women by age at first birth according to current age. Initiation into childbearing has a relatively narrow age range in Kazakhstan. While the age at which women begin childbearing has not changed greatly over time, women currently age 20-24 are less likely to have begun childbearing than were women who were age 20-24 at the time of the 1995 KDHS. The 1995 KDHS found that 44 percent of women age 20-24 had not yet had a birth, compared with 54 percent in the 1999 KDHS.

Table 4.7 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since previous birth, according to demographic and socioeconomic characteristics, Kazakhstan 1999

| Characteristic | Number of months since previous birth | | | | | Total | Median number of months since previous birth | Number of births |
|--------------------------------|---------------------------------------|--------|--------|--------|--------|-------|--|------------------|
| | 7-17 | 18-23 | 24-35 | 36-47 | 48+ | | | |
| Age of mother | | | | | | | | |
| 15-19 | * | * | * | * | * | 100.0 | * | * |
| 20-29 | 20.5 | 25.7 | 22.3 | 8.3 | 23.2 | 100.0 | 24.8 | 446 |
| 30-39 | 7.2 | 12.9 | 16.0 | 13.2 | 50.8 | 100.0 | 48.5 | 414 |
| 40+ | 4.9 | 4.9 | 14.6 | 8.9 | 66.7 | 100.0 | 68.6 ¹ | 56 |
| Birth order | | | | | | | | |
| 2-3 | 13.9 | 20.7 | 16.8 | 9.8 | 38.8 | 100.0 | 34.6 | 680 |
| 4-6 | 12.2 | 13.8 | 24.7 | 11.7 | 37.6 | 100.0 | 35.4 | 216 |
| 7+ | (16.0) | (8.3) | (27.8) | (20.6) | (27.3) | 100.0 | (34.7) | 22 |
| Sex of prior birth | | | | | | | | |
| Male | 13.0 | 16.2 | 18.7 | 9.3 | 42.9 | 100.0 | 40.0 | 462 |
| Female | 14.1 | 21.5 | 19.2 | 11.7 | 33.5 | 100.0 | 31.5 | 456 |
| Survival of prior birth | | | | | | | | |
| Living | 33.5 | 17.6 | 23.7 | 12.9 | 12.3 | 100.0 | 22.7 | 77 |
| Dead | 11.7 | 18.9 | 18.5 | 10.3 | 40.6 | 100.0 | 38.1 | 841 |
| Residence | | | | | | | | |
| Urban | 10.5 | 13.3 | 16.6 | 9.3 | 50.3 | 100.0 | 48.2 | 353 |
| Rural | 15.4 | 22.3 | 20.4 | 11.2 | 30.7 | 100.0 | 30.0 | 565 |
| Region | | | | | | | | |
| Almaty City | (6.2) | (14.6) | (14.6) | (12.5) | (52.1) | 100.0 | (48.5) | 22 |
| South | 18.7 | 21.8 | 19.6 | 11.7 | 28.3 | 100.0 | 28.0 | 466 |
| West | 7.6 | 14.2 | 23.1 | 11.4 | 43.7 | 100.0 | 42.4 | 130 |
| Central | 9.8 | 14.7 | 20.4 | 6.4 | 48.6 | 100.0 | 41.6 | 72 |
| North | 9.6 | 18.0 | 14.3 | 7.1 | 50.9 | 100.0 | 48.8 | 157 |
| East | 5.4 | 15.2 | 17.3 | 11.8 | 50.2 | 100.0 | 48.1 | 71 |
| Education | | | | | | | | |
| Primary/secondary | 17.3 | 23.7 | 18.5 | 11.1 | 29.5 | 100.0 | 28.6 | 381 |
| Secondary-special | 12.3 | 14.4 | 21.6 | 11.4 | 40.3 | 100.0 | 38.9 | 402 |
| Higher | 6.9 | 18.2 | 12.5 | 6.2 | 56.3 | 100.0 | 53.9 ¹ | 136 |
| Ethnicity | | | | | | | | |
| Kazakh | 14.8 | 20.5 | 19.7 | 11.5 | 33.5 | 100.0 | 31.1 | 673 |
| Russian | 6.8 | 15.2 | 13.0 | 7.3 | 57.7 | 100.0 | 51.5 ¹ | 118 |
| Other | 13.1 | 13.1 | 20.5 | 8.3 | 45.0 | 100.0 | 40.2 | 127 |
| Total | 13.5 | 18.8 | 18.9 | 10.5 | 38.2 | 100.0 | 34.7 | 918 |

Note: First births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

¹ Median number is more than 48 months.

Table 4.9 presents the median age at first birth for women age 25-49 by background characteristics. The median age at first birth hovers around age 22 for all five-year age cohorts, as was reported in the 1995 KDHS. The greatest differentials are by education; the median age at first birth increases by two to three years with increasing education.

Table 4.8 Age at first birth

Percent distribution of women 15-49 by age at first birth, according to current age, Kazakhstan 1999

| Current age | Women with no births | Age at first birth | | | | | | Total | Number of women | Median age at first birth |
|-------------|----------------------|--------------------|-------|-------|-------|-------|------|-------|-----------------|---------------------------|
| | | <15 | 15-17 | 18-19 | 20-21 | 22-24 | 25+ | | | |
| 15-19 | 95.6 | 0.0 | 1.8 | 2.7 | NA | NA | NA | 100.0 | 791 | ^a |
| 20-24 | 53.7 | 0.2 | 5.8 | 16.1 | 19.1 | 5.2 | 0.0 | 100.0 | 666 | ^a |
| 25-29 | 18.8 | 0.1 | 4.2 | 20.1 | 27.1 | 23.2 | 6.4 | 100.0 | 692 | 21.9 |
| 30-34 | 9.0 | 0.1 | 3.3 | 16.3 | 28.8 | 26.5 | 16.0 | 100.0 | 698 | 22.1 |
| 35-39 | 4.7 | 0.0 | 2.9 | 14.3 | 23.9 | 31.2 | 22.9 | 100.0 | 749 | 22.6 |
| 40-44 | 5.4 | 0.0 | 1.6 | 16.4 | 23.4 | 30.7 | 22.4 | 100.0 | 681 | 22.6 |
| 45-49 | 5.7 | 0.0 | 3.4 | 15.1 | 27.6 | 24.2 | 24.0 | 100.0 | 522 | 22.4 |

NA = Not applicable

^a Omitted because less than 50 percent of the women in the age group x to x+4 have had a birth by age x

Table 4.9 Median age at first birth

Median age at first birth among women age 25-49 years, by current age and selected background characteristics, Kazakhstan 1999

| Background characteristic | Current age | | | | | Ages 25-49 |
|---------------------------|-------------|-------|-------|-------|-------|------------|
| | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Residence | | | | | | |
| Urban | 22.1 | 22.2 | 22.6 | 22.6 | 23.2 | 22.5 |
| Rural | 21.6 | 22.1 | 22.7 | 22.6 | 21.5 | 22.2 |
| Region | | | | | | |
| Almaty City | 22.1 | 22.9 | 23.9 | 23.7 | 24.2 | 23.3 |
| South | 21.8 | 21.8 | 22.7 | 22.1 | 21.7 | 22.0 |
| West | 22.2 | 22.3 | 22.8 | 23.3 | 23.1 | 22.7 |
| Central | 21.8 | 22.0 | 22.7 | 22.2 | 22.9 | 22.3 |
| North | 21.6 | 21.9 | 22.4 | 22.7 | 22.1 | 22.2 |
| East | 22.4 | 22.8 | 22.7 | 22.8 | 22.4 | 22.6 |
| Education | | | | | | |
| Primary/Secondary | 20.8 | 20.9 | 21.0 | 21.7 | 21.2 | 21.1 |
| Secondary-special | 22.0 | 22.2 | 22.6 | 22.5 | 22.0 | 22.3 |
| Higher | 23.6 | 23.4 | 25.1 | 25.0 | 25.8 | 24.7 |
| Ethnicity | | | | | | |
| Kazakh | 22.4 | 22.5 | 23.2 | 23.2 | 22.5 | 22.7 |
| Russian | 21.3 | 21.6 | 22.0 | 22.0 | 22.4 | 21.9 |
| Other | 20.7 | 21.8 | 22.2 | 22.8 | 21.9 | 21.9 |
| Total | 21.9 | 22.1 | 22.6 | 22.6 | 22.4 | 22.4 |

Note: The medians for cohorts 15-19 and 20-24 could not be determined because half the women have not yet had a birth.

4.6 Pregnancy and Motherhood Among Teenage Women

Fertility among women age 15-19 warrants special attention because young mothers at this age, as well as their children, are at high risk of encountering social and health problems. There has been much research on this topic, and the causes of the problems have proven difficult to identify. Children born to young mothers are associated with higher levels of illness and mortality during childhood than are children born to older mothers.

Table 4.10 presents the percentage of women age 15-19 who are mothers or are pregnant with their first child. Overall, 7 percent of women age 15-19 have begun childbearing (have already given birth or were pregnant with their first child at the time of the survey), a decline from 9 percent at the time of the 1995 KDHS.

Table 4.10 Pregnancy and motherhood among teenage women

Percentage of women 15-19 who are mothers or pregnant with their first child, by selected background characteristics, Kazakhstan 1999

| Background characteristic | Percentage who are: | | Percentage who have begun child-bearing | Number of women |
|---------------------------|---------------------|---------------------------|---|-----------------|
| | Mothers | Pregnant with first child | | |
| Age | | | | |
| 15 | 0.0 | 0.0 | 0.0 | 153 |
| 16 | 0.3 | 1.0 | 1.3 | 177 |
| 17 | 1.5 | 1.6 | 3.1 | 162 |
| 18 | 5.4 | 4.7 | 10.1 | 160 |
| 19 | 16.8 | 4.4 | 21.2 | 138 |
| Residence | | | | |
| Urban | 4.4 | 2.6 | 7.0 | 409 |
| Rural | 4.4 | 1.9 | 6.4 | 382 |
| Region | | | | |
| Almaty City | (3.8) | (1.9) | (5.7) | 48 |
| South | 4.3 | 3.1 | 7.4 | 271 |
| West | 3.7 | 0.6 | 4.3 | 110 |
| Central | 3.9 | 4.1 | 8.0 | 68 |
| North | 4.8 | 0.9 | 5.7 | 197 |
| East | 5.3 | 3.5 | 8.8 | 98 |
| Education | | | | |
| Primary/secondary | 4.0 | 2.1 | 6.2 | 601 |
| Secondary-special | 7.9 | 4.6 | 12.5 | 102 |
| Higher | 2.9 | 0.5 | 3.4 | 88 |
| Ethnicity | | | | |
| Kazakh | 2.6 | 1.9 | 4.5 | 473 |
| Russian | 4.7 | 4.0 | 8.7 | 213 |
| Other | 11.8 | 0.4 | 12.3 | 105 |
| Total | 4.4 | 2.3 | 6.7 | 791 |

Note: Figures in parentheses are based on 25-49 unweighted cases.

The percentage of women who become mothers does increase during the teenage years, so that one in five 19-year-olds (21 percent) has begun childbearing. However, fewer women are beginning childbearing in their teen years than just a few years ago; the 1995 KDHS found that one in four 19-year-olds had begun childbearing. The percentage of women who mothers in their teen years has decreased among both ethnic Kazakh and ethnic Russian women; however, it has increased among women of other ethnicities. Figure 4.4 shows the percentage of women 15-19 who are mothers according to ethnicity in the 1995 KDHS and the 1999 KDHS.

Figure 4.4 Percentage of Women 15-19 Who Are Mothers by Ethnicity, 1995 KDHS and 1999 KDHS

