# Adolescent Reproductive Behaviour in Turkey

*İsmet KOÇ[1] and Turgay ÜNALAN[2]*

## Abstract

This study aims at providing information on various aspects of adolescent fertility in Turkey. Data collected from women aged 15-19 in the 1998 Turkish Demographic and Health Survey was used with the aim of 1) identifying levels, patterns, and determinants of adolescent fertility, 2) identifying individual, cultural, and contextual characteristics of adolescent fertility, and 3) providing policy recommendations on adolescent fertility in Turkey. The findings are also compared with findings from the other countries in the Middle East and Near Asia region.

## 1. Introduction

Adolescent pregnancy and sexual behaviour are much publicised concerns throughout the developed countries, particularly in the United States. A great deal has been written on this topic, the concerns range from the levels of adolescent pregnancy, abortion and child-bearing to whether the problem is essentially a health issue or an economic question (Trussell, 1988). The debate continues as to the best strategies to ameliorate the situation. Although teen-age fertility rates declined throughout the late 1960s and early 1970s, adolescent reproductive behaviour also emerged as a major concern in many developing countries. Although the fertility decline that has occurred among older women in most countries was achieved mostly through use of fertility control, reductions in fertility among younger women were mainly achieved through postponement of marriage. In many developing countries, the opportunity for further reductions through this means remains limited although adolescent fertility rates remain high. In others, very early marriage contributes to extremely high rates of childbearing among teenagers.

Much of the concerns about adolescent childbearing have been focussed on the younger adolescents. In a large number of developing countries, child marriages are still very common even though there are laws that set the minimum age for entry into marriage. Early marriage leads to the beginning of childbearing at very young ages. Among pregnant women under 18 years of age, there are greater risks of morbidity and mortality for both mother and child. The increase in age at marriage, while having the effect of lowering overall birth rates, may result in increased periods of potential exposure to the risk of out-of-wedlock pregnancy among adolescent women (Friedman, 1985). Delays in age at marriage are attributed, among other factors, to increased female education and increased employment opportunities for women. These factors are associated with urbanisation, with continuing rural-to-urban migration of young men and women seeking employment and schooling, and with the transmission of new ideas that influence adolescent's attitudes and behaviour including the timing of marriage and the selection of a marriage partner.

---

[1] Dr., Hacettepe University Institute of Population Studies, Ankara, Turkey. iskoc@hacettepe.edu.tr
[2] Dr. Hacettepe University Institute of Population Studies, Ankara, Turkey. tunalan@hacettepe.edu.tr

Women with unwanted pregnancies often choose to end them by abortion. In countries where abortion is legal and where data are available, teenagers account for a large proportion of abortions. Among teenagers who become pregnant, a very high proportion chooses to have an abortion rather than bring the pregnancy to term. Even in countries where abortion is legally available –like Turkey-, young girls often delay seeking an abortion early enough because they lack the support or resources. They frequently arrive too late for simple interventions so that more complicated procedures are required.

For many years, the needs of adolescents have largely been neglected in population and reproductive health programs, partly because issues relating to adolescent sexuality and reproductive health are extremely sensitive. At the ICPD held in Cairo in 1994, the international community acknowledged for the first time that adolescent reproductive health involves a specific set of needs that are distinct from adult needs. With a growing realisation of the importance of including adolescents in population and reproductive health programs worldwide, ICPD highlighted adolescents' reproductive health as a priority concern. The ICPD calls for recognising the rights of adolescents within the broader context of reproductive rights. While recognising the rights of all adolescents, the ICPD specifically the rights of adolescent women with regard to issues of gender inequality, their greater vulnerability to unprotected sexual activities, and stresses the rights of young women to reproductive health information and services (United Nations, 1995).

One-fifth of the world's population  -over one billion people- is between the ages of 10 and 19 years. Every year nearly 15 million young women under age of 20 become mothers. Surveys conducted in developing countries show that between 20 percent to 60 percent of the pregnancies and births to women under age 20 are mistimed or unwanted. Turkey is not an exception to be exposed to the problem of adolescent fertility. In Turkey, the population of age 15-19 age group is approximately 7 million (12 percent of the total population). The population of the same age group in 1935 was only 1 million that made up of the 6.5% of the total population. During the 1935-1999, as the population of 15-19 age group grew approximately seven times. In addition to these, it is estimated an increase of 2.5 million in this age group by the year of 2010.

The marriage and fertility behaviour is observed to be common among adolescent group in Turkey. As age at first marriage determines largely the onset of sexual activity, it is one of the important factors affecting lifetime fertility by extending the period of fertility with the phenomenon of early childbearing. Although the age at first marriage tends to increase across cohort, it still corresponds in the adolescent age group. In Turkey, marriage is almost universal and almost all births occur within marriage. Therefore, age at first marriage is an important demographic indicator since it represents the beginning of exposure to the risk of pregnancy. The 1998 Turkish Demographic and Health Survey results show that the median age at first marriage is 19.5 years among women 25-49 indicating that half of the women in those age groups married before that age. However, a steady increase is observed in the median age at first marriage, from 18.4 years for the 45-49 age group to 20.4 years for the 25-29 age group. There has been an especially marked decline in getting married at very young ages. For example, the percentage of women getting married by age 15 has dropped from 12 percent to only 4 percent in the last two decades.

## 2. Literature Survey

Although adolescent fertility has been an interesting and attractive topic for many researchers and in most of the MENA countries (rates are above 100 per 1000 women 15-19), there are relatively very few studies in the literature of MENA region countries. The issue has been taken up with its various different dimensions by many international studies; both focusing on developing and developed countries. Literature reviewed in this study concentrates primarily on developing countries for two reasons; first, the focus of this study is on Turkey, and second, the dynamics of reproductive behaviour of adolescents in developed countries are very different. There has been considerable studies connected with the reproductive behaviour of adolescents in developing countries beginning from the 1970s. The relationship between adolescent fertility and the consequences of fertility for survival of children have been reasonably well studied. Information used in the study is reviewed from 69 studies carried out in the past two decades. Of these studies, 17 were done in Africa, 19 in Asia and 33 in Latin America and Caribbean. The reviewed literature suggests that high level of adolescent fertility in the entire world is still persistence and the survival status of children may vary according to adolescent status of women.

Adolescent fertility in the context of developing world is one of the major and popular topics which many researchers have felt the need to address. There is a study about the trends in adolescent fertility and contraceptive use in the developing world which summarises findings from the US Census Bureau's International Data Base and other demographic surveys on the reproductive behaviour of the adolescent women in 56 developing countries. Findings pertain to the magnitude of adolescent fertility and the proximate determinants of fertility: residence, educational level, marriage age, and contraceptive usage (McDevitt et. al. 1996).

Mohamud (1996) made an overview of current trends in adolescent fertility and adolescent reproductive health in developing countries which consisted of: the dramatic effect of urbanisation on patterns of adolescent fertility (breakdown rites of passage for adolescents resulting in high extramarital birth rate); increased school enrolment and postponement of child-bearing; unwanted births and unsafe abortion (in Latin America and the Caribbean 20-60% of births to young women were unwanted in 1990); high-risk births; wanted births; the high social costs of adolescent child-bearing (in 1988 in Kenya 8000 girls dropped out of primary school because of pregnancy); the resistance to discussion of adolescent sexuality and fertility ; sex education and family life education: residual questions about effectiveness, significant barriers to provision of family planning services (lack of access to contraceptives); adolescents at high risk for HIV/AIDS and other sexually transmitted diseases (20 % of persons with AIDS contracted the disease in their teens); high-risk factors for AIDS among adolescents; and new program models for expansion of reproductive health services for youth.

 The occurrence of extended adolescence and teenage culture is rapidly becoming a global reality. The time between puberty and marriage is widening, menarche occurs earlier, premarital sexual activity is on the rise, and the age of marriage is later. Dryfoos (1994) argues that adolescent fertility is a valid world population concern. As 80% of the births to adolescents are in developing countries, it is stated that alternative roles for young women other than motherhood must emerge in the

transition to urbanisation. More than 15 million women aged 15-19 gives birth every year. Most births are to women in developing countries and many are not desired. Since the number of abortions to women of all ages in developing countries ranges from 10 to 22 million annually, it is conservatively estimated that 1-4.4 million abortions/year take place among adolescent women in developing countries. Conducted under unsafe conditions, these abortions may be life threatening. Evidence indicates that adolescents make up a high percentage of abortion-related complications and a significant percentage of deaths due to botched abortions. Interest in postponing pregnancy and childbearing has intensified in developing countries as women's secondary school enrolment and marriage age increase. (Center for Population Options, 1992).

In an article, Senanayake (1990) discusses adolescent fertility in the world in terms of sexual patterns and development, the significance and consequences of sexual behaviour, the status of women, and prevention. The study indicates that developed and transitional societies have experienced 3 patterns: 1) teen sex with low use of contraceptives, high incidence of unwanted non-marital pregnancies, and abortion; 2) early marriage near menarche, early and frequent childbearing, low incidence of premarital sex, and pregnancy, illicit and unsafe abortion, and sometimes a high rate of sexually transmitted diseases (STDs); and 3) mixed patterns of sexuality and fertility, rising age of marriage, premarital sex and pregnancy, abortion and rising use of contraceptives.

Sexual intercourse and contraceptive use are fertility-related behaviours. Such behaviour affects the risks of adolescent pregnancy, abortion, birth, adoption, and parenthood. The issue of adolescent sexuality gained prominence during the 1980s. In the paper by Miller and Dyk (1990), there is an introduction and a brief review of a group of five empirical studies, which focus upon the fertility-related behaviour of adolescents in the 1990s. It is stated that as the 1990s begin, there is no indication that adolescents will decrease their level of sexual activity, and it is too soon to tell whether the apparent recent increase in condom use will result in lower pregnancy rates.

The topic of adolescent fertility is also taken up in terms of its relations with some variables and in the social context that is in question. Klepinger et. al. (1995) present new findings on the relationship between teenage childbearing and early human capital development, and the resulting consequences for earnings in early adulthood. The analysis recognises that the adolescent childbearing decision is endogenous because it is likely to be related to the costs of and returns to investing in education, teen work experience, and early adult work experience.

Meekers' (1993) study about education and adolescent fertility in Sub-Saharan Africa indicates that the effects of increasing levels of education for women on adolescent fertility are unclear. There are social implications for increasing levels of female education, and it is generally believed that there is an association with an increase in age at first marriage. That paper aims to review the evidence of the association between education and adolescent fertility in Sub-Saharan Africa. Another interesting study about social dynamics of adolescent fertility in Sub-Saharan Africa by Bledsoe and Cohen (1993) indicates that adolescent fertility tends to be valued and sanctioned in the countries of Sub-Saharan Africa when parents have had adequate

ritual or training preparation for adulthood and the child has a recognised father. Young women and adolescents who conceive and bear children within this context are widely accepted by the society; those who conceive outside of marriage, however, are strongly condemned by the society.

Another subject matter is the determinants of adolescent fertility. In the study by Riley (1994) about the determinants of adolescent fertility and its consequences for maternal health, with special reference to rural Bangladesh, it is indicated that the impact of socioeconomic factors on fertility occurs throughout the life cycle through nutritional status. The theoretical model presented in this paper shows the transition from age at menarche to marriage and first birth. Nutritional status had the strongest impact on age at menarche, which indirectly affected age at first birth and directly affected marriage age. The links between menarche, adolescent growth, and adolescent sub-fertility are discussed. Later age at menarche was found to be associated with poor nutritional status. Sub-fertility for a period during adolescence followed menarche. The length of adolescent sub-fertility was linked inconsistently with both early and late menarche.


## 3.  Objectives

The objective of this study is to provide information relating to the various issues of adolescent fertility in Turkey that have been highlighted above. Differences in observed levels of adolescent fertility rates in Turkey are discussed and explained in terms of proximate determinants of adolescent fertility, such as prevalence of marriage, contraceptive use and abortion. Policy initiatives for the formulation of policies and programs directed to adolescents are discussed in the conclusion. In this framework of analysis, fertility rates among adolescents are seen as resulting from interactions between exposure, pregnancy, abortion and contraceptive use.

This study basically seeks to analyse the data collected in the 1998 Turkish Demographic and Health Survey with the aim of a) identifying levels, patterns and determinants of adolescent fertility in the country and its regional variations, b) identifying individual, cultural and contextual characteristics of adolescent fertility in Turkey, c) analyse the data to provide policy recommendations on adolescent fertility in Turkey in particular and in the Middle East countries in general.


## 4.  Definition of the Key Concept

The terms "adolescents" and teenagers" are used interchangeably throughout the study. The concept of adolescence has been variously defined as "the state or process of growing up" or the period of life from puberty to maturity", depending upon the subject matter being studied. In the study, for an operational definition of adolescence, the age criterion selected is less than 20 years regardless of the marital status of the adolescents. This definition thus covers a narrower range than the 10-19 years range proposed by WHO and used in many other studies of adolescence. Lack of the data is the most important reason for this age constraint. The main data sets include information collected from women who are between 15 and 49 years of age. Hence, the analyses conducted in the study are limited only to women who are less 20 years of age.  However, not only those who are currently aged less than 20 years

of age but all women whose age at first birth is less than so will be included in the analyses.

## 5. Data Sources

The main data source for this study is the *1998 Turkish Demographic and Health Survey* (TDHS) which was carried out by Hacettepe University Institute of Population Studies (HIPS) as part of the worldwide MEASURE/DHS + project. The survey was based on a nation-wide representative sample selected by multi-stage, stratified, cluster sampling. In this study, data from four national surveys that have preceded the 1998 TDHS are used to complement the analyses from 1998 TDHS. The earliest of these is the 1978 Turkish Fertility Survey (TFS) which was carried out as part of the World Fertility Survey project. In between these two surveys, which were conducted within the frameworks of international WFS and DHS projects, three other national demographic surveys were carried out in Turkey. Data from these surveys are also used in this study; namely, 1983 Turkish Fertility and Health Survey (TFHS), 1988 Turkish Population and Health Survey (TPHS) and 1993 Turkish Demographic and Health Survey (TDHS). Hence, the study reviews and evaluates findings from prior research with a view of policy implications that can be modelled by Middle East Countries.

Four main types of questionnaires were used to collect the TDHS-98 data: the Household Questionnaire, Ever-married Women Questionnaire, Never-married Women Questionnaire and the Husband Questionnaire. The content of these questionnaires were based on the DHS Model "A" Questionnaire. Additions, deletions and modifications were made to the model questionnaires in order to collect information particularly relevant to Turkey; a number of questions were included to ascertain the comparability of the TDHS findings with previous surveys carried out HIPS. Data used in this study mainly come from the Household and Ever-married Women Questionnaires. The Household Questionnaire was used to enumerate all members of the selected households and to collect information relating to the socioeconomic position of the households. The individual questionnaire for ever-married women of reproductive ages was designed with the following section headings: background characteristics, reproduction, marriage, contraception, pregnancy and breastfeeding, immunisation and health, fertility preferences, husband's background and woman's work, values, attitudes and beliefs, AIDS and maternal and child anthropometry. Two data sets that include variables mentioned above were prepared using SPSS for Windows 8.0. The first data set contains above-mentioned variables from the TDHS-98 that is the main data sources of the study. The second data set contains information derived from previous demographic surveys that are complements of the analyses from 1998 TDHS.

## 6. Results of the Descriptive Analysis

According to the weighted case numbers, the percentage distribution of women in reproductive ages (15-49 years of age) is given in Table 1. Women in the youngest age group, 15-19, constitutes one-fifth of all women included in the survey.

The percentage distribution of women in adolescent age group by selected background characteristics is given in Table 2. Sixty percent of women age 15-19 live in urban areas and nearly one out of every three adolescent women live in the Western region. However, these percentages are somewhat lower among women age 17. Compared to all ever-married women, less adolescent women were living in urban areas while more adolescent women were living in the West.

**Table 1. Percentage distribution of all women, adolescent women, and ever-married women by age, 1998 TDHS**

|  | All women | | | All women | | | Ever-married | |
| Age group | n | % | Age | n | % | Age | n | % |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15-19 | 1720 | 20.1 | 15 | 305 | 17.7 | 15 | 8 | 3.1 |
| 20-24 | 1558 | 18.2 | 16 | 372 | 21.6 | 16 | 24 | 9.1 |
| 25-29 | 1397 | 16.3 | 17 | 347 | 20.2 | 17 | 47 | 17.7 |
| 30-34 | 1202 | 14.0 | 18 | 396 | 23.0 | 18 | 94 | 35.3 |
| 35-39 | 1081 | 12.6 | 19 | 301 | 17.5 | 19 | 92 | 34.7 |
| 40-44 | 885 | 10.3 |  |  |  |  |  |  |
| 45-49 | 773 | 8.5 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Total | 8576 | 100.0 |  | 1720 | 100.0 |  | 266 | 100.0 |

One out of every two respondents aged 15-19 was primary school graduate and another 45 percent had secondary education or more (Table 2). Compared to all ever-married women, adolescent women had much higher education levels. It was also found in the TDHS-1998 that 36.6 percent of adolescent women were reading newspaper regularly (32.4 percent among all women). According to the data from household questionnaire, 70.4 percent of women age 6-10, 55.1 percent of those ages 11-15, and 19.6 percent of those ages 16-20 were enrolled in school at the time of the survey. According to the 1998 TDHS, 33.6 percent of adolescent women were currently employed and among them 57.9 percent were working in agriculture (corresponding percentages were 35.4 and 49.4 for all women).

**Table 2. Percentage distribution of adolescent and all women by background characteristics according to age, 1998 TDHS**

|  | Current age | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Background variables | 15 | 16 | 17 | 18 | 19 | 15-19 | 15-49 |
| **Region** |  |  |  |  |  |  |  |
| West | 31,6 | 32,0 | 23,6 | 38,2 | 30,3 | 31,4 | 37.4 |
| South | 14,1 | 14,0 | 15,0 | 16,2 | 16,3 | 15,1 | 14.7 |
| Centre | 21,7 | 22,6 | 20,7 | 21,0 | 25,0 | 22,1 | 23.1 |
| North | 8,9 | 8,9 | 9,5 | 4,8 | 7,7 | 7,9 | 8.1 |
| East | 23,7 | 22,6 | 31,1 | 19,7 | 20,7 | 23,5 | 16.8 |
| **Type of place of residence** |  |  |  |  |  |  |  |
| Urban | 63,6 | 59,7 | 54,8 | 62,5 | 60,3 | 60,2 | 66.5 |
| Rural | 36,4 | 40,3 | 45,2 | 37,5 | 39,7 | 39,8 | 33.5 |
| **Level of education** |  |  |  |  |  |  |  |
| None | 5,6 | 5,1 | 6,1 | 6,3 | 6,0 | 5,8 | 21.7 |
| Primary | 42,0 | 48,4 | 50,4 | 55,1 | 48,8 | 49,3 | 60.1 |
| Secondary + | 52,5 | 46,5 | 43,5 | 38,6 | 45,2 | 44,9 | 18.1 |

Adolescent women in Turkey are expected to become sexually active only after she has married. In 1998 TDHS, nearly 16 percent of all adolescent women were married at the time of the survey. The proportion of married adolescent women increased from 3 percent among women age 15 to as high as 31 percent among those aged 19. For nearly one-third of adolescent women, age at first marriage is 15 years or before and for another 28 percent it is 16 years (Table 3).

**Table 3. Percentage distribution of adolescent women by marital status and age at first marriage according to age, 1998 TDHS**

| | Current age | | | | | |
|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 15-19 |
| **Marital status** | | | | | | |
| Never married | 97,4 | 93,5 | 86,4 | 76,3 | 69,1 | 84,5 |
| Ever married | 2,6 | 6,5 | 13,6 | 23,7 | 30,9 | 15,5 |
| **Age at first marriage (ever-married)** | | | | | | |
| <= 15 | 100,0 | 68,0 | 37,5 | 31,9 | 18,5 | 33,7 |
| 16 | - | 32,0 | 43,8 | 25,5 | 23,9 | 28,1 |
| 17 | - | - | 18,8 | 23,4 | 18,5 | 18,0 |
| 18 | - | - | - | 19,1 | 25,0 | 15,4 |
| 19 | - | - | - | - | 14,1 | 4,9 |

When women age 25-49 are considered, it is observed that median age at marriage has increased from 17.7 years in 1978 to 19.5 years in 1998. Figures derived from 1998-TDHS clearly show that half of the women in those age groups married in the adolescent period. However, when the age cohorts are taken into account, 2 years increase observed in the median age at first marriage, from 18.4 years to 20.4, in the last two decades (Table 4). Trends observed over time and over different cohorts imply that women in Turkey are delaying marriage beyond adolescence

**Table 4. Median age at first marriage by age groups, 1978 TFS, 1983 TFHS, 1988 TPHS, 1993 TDHS and 1998 TDHS**

| Age Groups | 1978 | 1983 | 1988 | 1993 | 1998 |
|---|---|---|---|---|---|
| 25-29 | 18,1 | 17,9 | 17,6 | 20,0 | 20,4 |
| 30-34 | 17,7 | 17,8 | 17,9 | 19,0 | 20,3 |
| 35-39 | 17,3 | 17,7 | 18,0 | 18,6 | 19,0 |
| 40-44 | 17,6 | 17,4 | 18,4 | 18,5 | 18,5 |
| 45-49 | 17,3 | 17,5 | 18,5 | 18,3 | 18,4 |
| | | | | | |
| **25-49** | 17,7 | 17,6 | 18,2 | 19,0 | 19,5 |

Table 5 shows that knowledge of any modern contraceptive method is almost universal among adolescent women (96.4%) in Turkey. The modern methods are the most widely known by the adolescents. These figures clearly imply that lack of information about contraceptive methods is not a barrier to contraceptive use in Turkey. However, the high level of knowledge of modern contraception among adolescent women do not lead the them to a corresponding level of modern contraceptive use; approximately two-thirds of adolescents do not use any of contraceptive methods and approximately a half of the current users practice

traditional methods. The percentage of adolescent women using a method and percentage of contraceptive users relying on a modern method tend to increase with the age of women. The percentage of women using traditional methods increases with age until it reaches a peak of 26.6 percent at the age of 18, and then declines to 14 percent at the age of 19. Contrary to high level of ineffective contraceptive use among adolescents, only 5.5 percent of adolescent women stated that they had an induced abortion. The number of induced abortions per 100 pregnancies was 5.8 among adolescent women in 1998, up from 3.8 in 1993 TDHS.

**Table 5. Percentage distribution of adolescent women by knowledge, ever use and current use of contraceptive methods according to age, 1998 TDHS**

| Contraceptive knowledge/use | Current age | | | | | |
|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 15-19 |
| **Knowledge** | | | | | | |
| Knows no method | 5,2 | 4,6 | 2,6 | 2,8 | 3,3 | 3,7 |
| Knows only traditional | - | - | - | 0,3 | - | 0,1 |
| Knows modern | 94,8 | 95,4 | 97,4 | 97,0 | 96,7 | 96,3 |
| **Ever use (all 15-19)** | | | | | | |
| Never used | 99,3 | 97,0 | 94,2 | 85,1 | 81,7 | 91,5 |
| Used only traditional | 0,7 | 2,2 | 3,2 | 9,1 | 6,0 | 4,4 |
| Used modern | - | 0,8 | 2,6 | 5,8 | 12,3 | 4,2 |
| **Ever use (ever-married)** | | | | | | |
| Never used | 75,0 | 54,2 | 57,4 | 37,2 | 40,2 | 44,5 |
| Used only traditional | 25,0 | 33,3 | 23,4 | 38,3 | 19,6 | 28,3 |
| Used modern | - | 12,5 | 19,1 | 24,5 | 40,2 | 27,2 |
| **Current use (ever-married)** | | | | | | |
| Not using | 87,5 | 82,6 | 83,3 | 57,4 | 61,3 | 66,5 |
| Using traditional | 12,5 | 13,0 | 10,4 | 26,6 | 14,0 | 17,7 |
| Using modern | - | 4,3 | 6,3 | 16,0 | 24,7 | 15,8 |

The low level of contraceptive use among adolescent women seems to be attributable to the high level of demand for children. As seen in Table 6, three-fourths of the adolescent women wants next birth within 2 years, and only 6 percent of them want limiting their childbearing. Approximately 19 percent of adolescents want to delay next birth for 2 or more years. The low level of demand for limiting childbearing observed among adolescents may be explained by the fact that adolescent women have not reached the desired family size yet. Mean ideal number of children was 2.3 among adolescent women compared to 2.5 among all women.

**Table 6. Percentage distribution of births in the five years preceding the survey by fertility planning status, 1998 TDHS**

| Planning status | Age at birth | |
|---|---|---|
| | Less than 20 | All women |
| Wanted then | 74.8 | 69.2 |
| Wanted later | 18.8 | 11.2 |
| Not wanted | 6.1 | 18.8 |
| Missing | 0.3 | 0.7 |
| Total | 100.0 | 100.0 |
| n | 554 | 3891 |

Source: HIPS (1998), Table 7.7

Table 7 shows the percentage of women age 15-19 who are mothers or pregnant with their first child. When the percentage of adolescents who have begun childbearing are considered, a steady increase in adolescent childbearing is observed from 9.3 percent in 1993 to 10.2 percent in 1998. The 1998-TDHS indicates that about one in twelve (9 percent) of women age 17 have become mothers or are pregnant with their first child. The proportion increases steeply to one in seven (16 percent) among women age 18 and close to one in four (23 percent) among women age 19. Higher proportions of teenagers living in urban areas have begun childbearing than teenagers living in rural areas (11 percent and 9 percent respectively). Although fertility is highest in the eastern region, the highest percentage of teenagers who have begun childbearing is found in the central region (11.2 percent). Levels of education again appear to be the most influential variable on teenage fertility, not only because of the years of schooling, which have postponed births, but also because of changes in childbearing attitudes.

**Table 7. Percentage of adolescents who are mothers or pregnant with their first child, by Selected background characteristics, 1993 TDHS and 1998 TDHS**

| Background variables | Percentage who are mothers | | Percentage who are pregnant with first child | | Percentage who have begun childbearing | | Number of adolescents | |
|---|---|---|---|---|---|---|---|---|
| | 1993 | 1998 | 1993 | 1998 | 1993 | 1998 | 1993 | 1998 |
| **Age** | | | | | | | | |
| 15 | 0,2 | 1.3 | 0,8 | 0.5 | 1,0 | 1.8 | 765 | 305 |
| 16 | 1,9 | 1.6 | 1,5 | 0.3 | 3,4 | 1.9 | 287 | 372 |
| 17 | 3,8 | 4.9 | 4,3 | 3.8 | 8,1 | 8.8 | 489 | 347 |
| 18 | 9,6 | 12.2 | 4,9 | 3.7 | 14,5 | 16.0 | 460 | 396 |
| 19 | 17,8 | 20.1 | 5,2 | 3.0 | 23,1 | 23.1 | 459 | 301 |
| **Type of Place of Residence** | | | | | | | | |
| Urban | 6,7 | 7.4 | 3,3 | 2.0 | 10,1 | 9.4 | 1360 | 1304 |
| Rural | 4,2 | 8.6 | 2,3 | 2.8 | 6,5 | 11.4 | 1419 | 686 |
| **Region** | | | | | | | | |
| West | 5,2 | 7.2 | 3,2 | 2.2 | 8,3 | 9.3 | 669 | 539 |
| South | 6,8 | 8.4 | 2,8 | 2.6 | 9,5 | 11.0 | 364 | 261 |
| Central | 6,8 | 8.8 | 3,4 | 2.4 | 10,3 | 11.2 | 541 | 380 |
| North | 7,8 | 4.3 | 3,7 | 2.5 | 11,4 | 6.7 | 165 | 136 |
| East | 7,2 | 8.8 | 3,7 | 2.2 | 10,9 | 11.0 | 592 | 404 |
| **Level of education** | | | | | | | | |
| No education | 14,2 | 15.3 | 5,5 | 6.7 | 19,7 | 22.0 | 217 | 183 |
| Primary Completed | 7,1 | 8.3 | 3,6 | 2.1 | 10,7 | 10.4 | 1570 | 1239 |
| Secondary Completed + | 1,6 | 1.6 | 1,4 | 0.4 | 3,0 | 2.0 | 610 | 297 |
| **Total** | 6,2 | 7.9 | 3,2 | 2.3 | 9,3 | 10.2 | 2460 | 1720 |

Although most adolescents who have begun childbearing have given birth only once, a small proportion have given birth twice. Table 8 shows the distribution of women age 15-19 by number of children ever born, excluding those who are currently pregnant. Consistent with the finding indicating a steady increase in adolescent childbearing in the last five years, mean number of children ever born to adolescent women is also found to be higher in 1998 than those in 1993. The results derived from the TDHS-1998 imply that approximately 2 percent of women age 18 and 4 percent of women age 19 have given birth to two children. By giving birth early and presumably with short

intervals, these women and their children are at a higher risk of dying. The evidence for the high-risk childbearing is given in Table 9.

**Table 8. Percent distribution of adolescents 15-19 by number of children ever born, 1993 TDHS and 1998 TDHS**

| | **1993 TDHS** | | | | | |
|---|---|---|---|---|---|---|
| **Age** | **Number of children ever born** | | | **Total** | **Mean Number of CEB** | **Number of adolescents** |
| | **0** | **1** | **2+** | | | |
| 15 | 99,8 | 0,2 | 0,0 | 100,0 | 0,00 | 765 |
| 16 | 98,1 | 1,9 | 0,0 | 100,0 | 0,02 | 287 |
| 17 | 96,2 | 3,8 | 0,0 | 100,0 | 0,04 | 489 |
| 18 | 90,4 | 8,6 | 1,0 | 100,0 | 0,11 | 460 |
| 19 | 82,2 | 13,8 | 4,0 | 100,0 | 0,22 | 459 |
| **Total** | 93,8 | 5,2 | 1,0 | 100,0 | 0,07 | 2460 |
| | **1998 TDHS** | | | | | |
| Age | **Number of children ever born** | | | **Total** | **Mean Number of CEB** | **Number of adolescents** |
| | **0** | **1** | **2+** | | | |
| 15 | 98,7 | 1,3 | 0,0 | 100,0 | 0,01 | 305 |
| 16 | 98,4 | 1,6 | 0,0 | 100,0 | 0,02 | 372 |
| 17 | 95,1 | 4,6 | 0,3 | 100,0 | 0,05 | 347 |
| 18 | 87,6 | 10,9 | 1,5 | 100,0 | 0,14 | 396 |
| 19 | 79,7 | 15,9 | 4,3 | 100,0 | 0,26 | 301 |
| **Total** | 92,0 | 6,8 | 1,2 | 100,0 | 0,09 | 1720 |

Age of mother at birth seems to be strongly related with the infant and child mortality rates (Table 9). Lowest mortality rates are associated with children whose mother are age 20-29 years at their birth; infant mortality rates are 69 percent higher in cases where the mother is younger than 20 years. The strongest effect of mother's age on childhood mortality occurs in the case of neonatal mortality. For example, children of mother who are in adolescent period at the time of birth experienced 88 percent higher mortality risks during the first months of the life than children of mothers who are age 20-29 at their birth.

**Table 9. Neonatal, post-neonatal, infant, child, and under-five mortality among Adolescent and all ever-married women, 1998 TDHS**

| | Age of mother at birth | |
|---|---|---|
| **Mortality variables** | **Less than 20** | **Women 20-29** |
| Neonatal mortality | 52.0 | 27.7 |
| Post-neonatal mortality | 40.8 | 27.3 |
| Infant mortality | 92.8 | 55.0 |
| Child mortality | 11.9 | 13.5 |
| Under-five mortality | 103.5 | 67.8 |

Source: HIPS (1998), Table 8.3

The proportion of women who become mothers before the age of 20 is another measure of the magnitude of adolescent fertility. Table 10 presents the distribution of all ever-married women by age at first birth, according to their current age. It is evident that age of first birth is increasing gradually; the median has risen from 20.6 years among women age 45-49 to 22.2 among women age 25-29 years. The table also shows dramatic declines in adolescent fertility over time. While more than 40 percent or more of women age 35-44 had become mothers in their adolescent ages, this percentage is down to 32 among women age 30-34 years and further down to 26.2 among women age 20-24 years. The TDHS-98 results show that the difference between median age at first marriage (19.5 years) and median age at first birth (21.3 years) is approximately 14 months for women age 25-49.

**Table 10. Percentage distribution of women 15-49 by age at first birth, according to current age, 1998 TDHS**

| Current age | Women with no births | Age at first birth | | | | Total | n | Median age at first birth |
| | | < 15 | 16-17 | 18-19 | 20 or more | | | |
|---|---|---|---|---|---|---|---|---|
| 15-19 | 92.1 | 0.3 | 5.2 | 2.4 | - | 100.0 | 1720 | A |
| 20-24 | 53.9 | 0.9 | 10.0 | 15.3 | 19.9 | 100.0 | 1558 | A |
| 25-29 | 22.8 | 1.7 | 12.7 | 15.6 | 47.1 | 100.0 | 1397 | 22.2 |
| 30-34 | 10.2 | 1.8 | 13.0 | 17.2 | 57.8 | 100.0 | 1202 | 21.9 |
| 35-39 | 6.0 | 3.0 | 17.4 | 21.2 | 52.3 | 100.0 | 1081 | 20.9 |
| 40-44 | 3.8 | 1.6 | 18.4 | 24.2 | 52.0 | 100.0 | 885 | 20.5 |
| 45-49 | 3.7 | 3.7 | 20.0 | 20.2 | 52.6 | 100.0 | 733 | 20.6 |
| | | | | | | | | |
| Total | - | - | - | - | - | - | - | 21.3 |

Source: HIPS (1998), Table 3.7
A: Less than 50 percent of the women in group x to x + 4 have had a birth by age x.

## 7. Results of the Multivariate Analysis

The dependent variable of the study is "*having first birth in adolescent period*". Women under analysis are categorised as women having a birth in adolescent period and women not having a birth in adolescent period. In the logistic regression model, women who were having first birth in adolescent period are coded 1 and those who were not having first birth in adolescent period are coded 0. In order to examine the adolescent reproductive behaviour, logistic regression model is used in the study since the dependent variable is dichotomous. For dependent variable, the model fitting process involves four stages of estimation. The first model includes only the individual level variables (education of women and working status of women before marriage). In the second model, the cultural level variables (residence of women lived in childhood period and ethnicity) are introduced into the regression equation. The third model incorporates the fertility level variables (contraceptive use and age at first marriage) into the equation. The fourth model includes the contextual level variables (region and type of settlement) in order to estimate additive effects of the micro-level and macro-level variables simultaneously.

**Table 11. Results of stepwise logistic regression showing odds ratios for predicting having first birth in adolescent period (Women age 25-29)**

| Characteristics | Individual level analysis | Cultural variables added | Fertility variables added | Contextual variables added |
|---|---|---|---|---|
| **Women's education** | | | | |
| No education | 7,5326* | 8,8068* | 3,0869* | 2,2542* |
| Primary | 2,5090* | 3,9007* | 2,6546* | 2,4725* |
| Secondary | 1,6597** | 1,5297** | 1,7827** | 1,6240** |
| Higher | 1,0000 | 1,0000 | 1,0000 | 1,0000 |
| | | | | |
| **Working status before marriage** | | | | |
| Out of labour-force | 2,8377* | 2,8592* | 1,4850* | 1,3555* |
| Working with social insurance | 1,6485** | 1,7480** | 1,0209 | 1,2210** |
| Working without social insurance | 1,0000 | 1,0000 | 1,0000 | 1,0000 |
| | | | | |
| **Childhood residence** | | | | |
| City | NA | 1,0000 | 1,0000 | 1,0000 |
| Town | NA | 1,0220 | 0,8789 | 0,8512 |
| Countryside | NA | 0,8163 | 0,9195 | 1,2302** |
| Abroad | NA | 1,0682 | 1,1934 | 0.8115 |
| | | | | |
| **Ethnicity** | | | | |
| Turkish | NA | 1,0000 | 1,0000 | 1,0000 |
| Kurdish | NA | 1,7420* | 1,8111* | 1,6175* |
| Other | NA | 1,0682 | 0,9195 | 0,8491 |
| | | | | |
| **Contraceptive use** | | | | |
| Not using | NA | NA | 2,4463* | 2,4139* |
| Using traditional method | NA | NA | 1,9324* | 1,5504** |
| Using Modern Method | NA | NA | 1,0000 | 1,0000 |
| | | | | |
| **Age at marriage** | NA | NA | 0,2684* | 0,2651* |
| | | | | |
| **Region** | | | | |
| West | NA | NA | NA | 1,0000 |
| South | NA | NA | NA | 1,8096* |
| Central | NA | NA | NA | 1,5705** |
| North | NA | NA | NA | 2,6346* |
| East | NA | NA | NA | 2,9612* |
| | | | | |
| **Type of residence** | | | | |
| Urban | NA | NA | NA | 1,000 |
| Rural | NA | NA | NA | 1,7605* |
| Constant | -4.4994* | -4,2745* | 24.4176* | 24.2477* |
| -2 x log likelihood | 1306.213 | 1302,419 | 539.268 | 531.141 |
| $X^2$ | 133.409* | 136,188* | 899,339* | 907.466* |
| Df | 5 | 10 | 13 | 18 |

Notes: 1. Differences are significant at p<0.01 indicated *; at p<0.05 indicated **; otherwise those differences are statistically insignificant.
2. NA: Not Applicable.

Table 11 presents the logistic regression results of the effect of various factors on the likelihood that a woman was having first birth in the adolescent period. Education is usually expected to change a person's attitude and as a consequence her behaviour. In the context of adolescent fertility, it has been hypothesised and generally observed

empirically that higher education decreases the likelihood of having first birth in the period of adolescence. Model 1 shows that education has a highly significant effect, with the likelihood of having first birth in adolescent period decreasing with the women's educational level. The relative odds of having first birth in adolescent period are 7.5 times higher among illiterate women than they are among women with education over secondary education.

The second model reveals that the effects of educational level of women persist after the cultural variables are added into the regression equation. The second model also shows that women out of labour force are more than two and half times as likely as women working with social insurance top have an adolescent birth. The odds of having first birth in the adolescent period are 74% higher among Kurdish women than those are Turkish women.

The third model shows that the difference in having birth in adolescent period between women working with social security and women working without social security is no longer significant, although the difference between women out of labour force and women working with social security remains highly significant. It is worth noting that the contribution of women's education in explaining variation in receiving a birth in the adolescent period is still significant after cultural and fertility related factors are controlled. In relation with the contraceptive use, third model shows that the probability of having first birth in the adolescent period increases with using a traditional method or not using a method. The odds of having first birth in the adolescent period are 2.4 times higher among couples not using a method and those practicing a modern method. The third model yields particularly interesting results on the effect of age at first marriage[3] on the adolescent fertility indicating that the likelihood of having a birth in the adolescent period decreases with age at first marriage.

The fourth model shows the pattern of contraceptive use once region and type of settlement are added to the equation. The effects of individual, cultural and fertility level variables on adolescent fertility still continue after controlling the contextual level variables. In terms of childhood residence, the difference in having adolescent birth between women lived in countryside and women lived in the city is no longer insignificant after controlled the contextual variables. Type of settlement is a highly effective predictor of method choice; urban women are 76% more likely to receive a birth in the adolescent period than are their rural counterparts. In addition, the odds of having first an adolescent birth is almost 3 times higher among women living in the East than among those living in the West. In comparison with women living in the South, Central and the North, women living in the West are less likely to have a birth in the adolescent period.

In order to check for significant interaction effects among explanatory variables, major interaction terms were constructed and tested, but they were not statistically significant (results not shown). Therefore, Model 4 without interaction terms is the most parsimonious model and provides the best estimation of the effects of the explanatory variables.

---

[3] The odds ratios for interval variables have a multiplicative effect on the odds of having first birth in the adolescent period. Thus, an odds ratio that is smaller than one implies that the variable has a negative effect on the likelihood of having an adolescent birth.

## 8. Conclusion and Policy Implications

Marriage and childbearing have always been central areas of women's lives and the foundation of families and societies. Adolescence, which is a powerfully formative time of transition to adulthood, usually coincides with the time of marriage and the start of childbearing. As the timing and context of marriage and childbearing change, the impact is felt by young women in particular. During the last few decades, there has been a steady increase in the age at first marriage and the age at first birth in Turkey. This is also reflected in the declining age specific rates among adolescent women as well as the total fertility rate for all women.

As in many other countries, the Demographic and Health Surveys conducted in Turkey serve as the primary source of data for the studies of adolescents by researchers. Inclusion of never-married women in the sample design of the 1998 TDHS provided a better opportunity to analyse the fertility related characteristics of the women age 15-19 in Turkey. Women age 15-19 constitute 11 percent of all female population and 20 percent of women in reproductive ages (15-49). Level of education among adolescents is higher compared to all women in reproductive ages. Although early marriage is not common in Turkey and the age at first marriage has an increasing trend over time, nearly one-fourth of women age 18 and one-third of women age 19 is married, according to 1998 TDHS. If the trend in the median age at first marriage is examined over different surveys since 1978, it is seen that age at first marriage has increased nearly two years. Similarly, age at first birth has a clear increasing trend when different cohorts of women are examined.

Knowledge of contraceptives is quite high among adolescents in Turkey. Even among women age 15, majorities of them know at least one method of contraception. However, the level of contraceptive use is low as a result of higher demand for children among this age group. More women in adolescent ages want to have child soon and less women declare that their (last) birth is unwanted. It was also found that if the mother is at adolescent ages at birth, higher mortality rates are associated with children compared to those age 20-29.

Compared to other countries in the region (see Annex 1) Turkey has the lowest total fertility rate. Knowledge of contraceptives is also high in other countries like Egypt, Jordan and Morocco. The proportions of adolescent women who have ever used contraceptives and currently using contraceptives are highest in Turkey. However, if only ever use and current use of modern contraceptives are considered, Morocco has the highest proportion for ever use and Egypt has the highest proportion for current use. Although the median age at first marriage is very similar among the Middle East countries, it is lower in North African countries (Sudan and Yemen). Median age at first birth is also similar around at age 21 except for Tunisia. Adolescent women in Turkey has the lowest mean desired family size in the region and the largest proportion of adolescent women who do not want a child soon (with Tunisia)

Public policy must set an agenda for adolescents that is organised around the distinctive features of their lives: their risk of exploitative living arrangements; confinement to domestic roles and responsibilities; restricted mobility; inadequate and occasionally threatening school experience; unacknowledged work needs and

compromising work situations; pressure to marry and begin childbearing early; and limited control over and knowledge about their reproductive health and fertility. Considering these points, we identify six interrelated policy challenges:

1. Create a safe, supported passage for girls from age 10 to 19, recognising that the second decade of their lives is a period of critical capability-building and heightened vulnerability, which does not end with marriage and childbearing.

2. Acknowledge that adolescent girls' lives are often governed by harmful, culturally sanctioned gender rules imposed by males, parents and other elders and perpetuated at times by girls themselves.

3. Expanded girls' social participation, schooling and economic opportunities, understanding that these are basic entitlements and that they frame adolescents' reproductive behaviour.

4. Recognising that large proportions of adolescents are already wives and mothers, whom need support and investment at least as much as do their unmarried peers.

5. Most of the analyses of adolescents are restricted to women and to 15-19 years of age. The demographic surveys are principally designed to monitor the fertility behaviour of women aged 15-49. Although there has been growing interest regarding the role of men in sexual and reproductive decision-making and some large scale surveys are beginning to include men in their national samples, more research is needed to document the lives and needs of young men too. Demographic surveys rarely interviews adolescent men. As in many other countries, most of the available data on men are limited to husbands of female respondents. In order to develop our understanding of the adolescent reproductive behaviour we need to collect detailed information from those aged 10-14 and from adolescent men as well.

6. Finally, some data on adolescents of both sexes and all ages are lacking. Measures of sexual activity among unmarried tend to be scarce, as are measures of abortion and the incidence of sexually transmitted diseases. Inadequate information in these areas limits the ability to examine critical aspects of adolescent life and draw conclusions from which policymakers can reach informed decisions. Consequently, developing a means to assess the needs and behaviours of the adolescents should be a priority in the processes of policy formulation and implementation.

## 9. References

The Alan Guttmacher Institute, (1998), **Into a New World: Young Women's Sexual and Reproductive Lives,** The Alan Guttmacher Institute, New York.

Bledsoe, C.H. and Cohen, B. (1993), **Social dynamics of adolescent fertility in Sub-Saharan Africa**, Washington, D.C., National Academy Press, 1993, xv, 208 p.

Carr, D. and Way, A., (1994), **Women's Lives and Experiences: A Decade of Research Findings from the Demographic and Health Surveys,** Macro International Inc., Maryland.

Center for Population Options (1992), **Adolescent abortion and mandated parental involvement: the impact of back alley laws on young women**, Washington, D.C., Center for Population Options, Jan. [11].

Dryfoos, J. (1994), "Adolescent fertility: a valid world population concern?" **Psay Network**, June, 2(2): 3-4.

Friedman, H.L. (1985), "The Health of Adolescents and Youth: A Global Overview", **World Health Statistics Quarterly**, 38(3): 256-266.

HIPS (Hacettepe Institute of Population Studies), (1999), **1998 Turkish Demographic and Health Survey**, Hacettepe University Institute of Population Studies and Macro International Inc., Ankara.

Karim, M.S., (1997), **Reproductive Behaviour in Muslim Countries,** Demographic and Health Surveys Working Papers, No. 23, Macro International Inc., Maryland.

Lema, V.M., Makokha, A.E., Sanghvi, H.C., and Wanjala, S.H. (1991), "A review of the medical aspects of adolescent fertility in Kenya", **Journal of Obstetrics and Gynaecology of Eastern and Central Africa**, 9(1): 37-43.

Mboup, G. and Saha, T., (1998), **Fertility Levels, Trends, and Differentials,** Demographic and Health Surveys Comparative Studies, No. 28, Macro International Inc., Maryland.

McDevitt, T.M., Adlakha, A. Fowler, T.B., and Harris-Bourne, V. (1996), **Trends in adolescent fertility and contraceptive use in the developing world**, Washington, D.C., Bureau of the Census, Mar. viii, 54, 27 p.

Meekers, D. (1993), **Education and adolescent fertility in Sub-Saharan Africa**, University Park, Pennsylvania, Pennsylvania State University, Population Research Institute, Feb. [3], 87 p. Working Paper No. 1993-05.

Mensch, B.S., Bruce, J. and Greene, M.E., (1998), **The Uncharted Passage: Girls' Adolescence in the Developing World,** Population Council, New York.

Miller, B.C., Dyk, P.H. (1990), "Adolescent fertility-related behaviour in the 1990s: risking the future continued", **Journal Of Family Issues**, Sep; 11(3): 235-238.

Ministry of Health [Turkey], Hacettepe University Institute of Population Studies and Macro International Inc. (1994), **1993 Turkish Demographic and Health Survey**, Ankara.

Muhuri, P.K., Blanc, A.K., and Rutstein, S.O., (1994), **Socioeconomic Differentials in Fertility,** Demographic and Health Surveys Comparative Studies, No. 13, Macro International Inc., Maryland.

Mohamud, A.A. (1996), "Adolescent fertility and adolescent reproductive health", In: **Family Planning, Health and Family Well-being**, Proceedings of the United Nations Expert Group Meeting on Family Planning, Health and Family Well-Being, Bangalore, India, 26-30 October 1992, United Nations, Department for Economic and Social Information and Policy Analysis, Population Division. New York, New York, United Nations, 152-165.

Riley, A.P. (1994), "Determinants of adolescent fertility and its consequences for maternal health, with special reference to rural Bangladesh", **Annals of The New York Academy Of Sciences**, 709:86-100.

Rutstein, S.O., (1998), **Change in the Desired Number of Children: A Cross-Country Cohort Analysis of Levels and Correlates of Change,** Demographic and Health Surveys Analytical Reports, No. 9, Macro International Inc., Maryland.

Senanayake, P. (1990), "Adolescent fertility", In: **Health care of women and children in developing countries**, [edited by] Helen M. Wallace, Kanti Giri, Oaklands, California, Third Party Publishing, 470-475.

Trussel, J. (1988), "Teenage pregnancy in the United States", **Family Planning Perspectives**, Nov.-Dec. 20(6): 262-272.

United Nations (1995) **Population and Development**, Program of Action Adopted at the 1994 International Conference on Population and Development, published in Ankara.

**ANNEX 1.**
**Comparative DHS Findings on Adolescent Women Age 15-19**
**Selected Middle East and North Africa Countries**

| | Egypt 1992 | Jordan 1990-91 | Morocco 1992 | Sudan 1989-90 | Tunisia 1988 | Turkey 1993 | Turkey 1998 | Yemen 1991-92 |
|---|---|---|---|---|---|---|---|---|
| % of population (age 10-19) | 22 | | 22 | 23 | 22 | 20 | 22 | 23 |
| % who can read easily | 49 | | 42 | 46 | 59 | 88 | | 36 |
| % married | 14 | | 12 | 15 | 4 | 13 | 15 | 24 |
| Knowledge of any contraceptives | 98 | 99 | 99 | | | 99 | 97 | 51 |
| Knowledge of modern contraceptives | 100 | 88 | 100 | | | 98 | 96 | |
| Ever use of any contraceptives | 20 | 21 | 43 | | | 37 | 55 | |
| Ever use of modern contraceptives | 19 | 9 | 40 | | | 17 | 26 | |
| Current use of any contraceptives | 13 | 12 | 23 | | | 24 | 34 | |
| Current use of modern contraceptives | 13 | 4 | 22 | | | 9 | 16 | |
| Median age at first marriage (age 25-49) | 19,2 | 19,6 | 19,7 | 17,8 | 21,1 | 19,0 | 19,5 | 15.8 |
| Median age at first birth (age 25-49) | 21,2 | 21,2 | 22,1 | 20,5 | 23,1 | 20,8 | 21,3 | 20,4 |
| Age specific fertility rate (age 15-19) (3 years) | 63 | 49 | 40 | 65[*] | 27 | 55 | 60 | 102 |
| Total fertility rate (age 15-49) (3 years) | 3,9 | 5,6 | 4,0 | 4,7 | 4,2 | 2,5 | 2,6 | 7,7 |
| Mean desired family size | 2,5 | | 2,9 | 5,5 | 3,2 | 2,3 | 2,3 | 5,0 |
| % who do not want child soon | 64 | | 56 | 59 | 70 | 71 | 70 | 14 |

(*) 5 years

Sources:     Alan Guttmacher Institute (1998)
             Carr and Way (1994)
             HIPS (1999)
             Karim (1997)
             Mboup and Saha (1998)
             Mensch et. al. (1998)
             Ministry of Health et al. (1994)
             Muhuri et. al. (1994)
             Rutstein                                                                              (1998