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## Underage mothers in Turkey

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**Background:** All individuals under the age of 18 are considered as children by the Convention on the Rights of Children. Underage mothers are a pediatric-age group of children that become pregnant and give birth. It may be unfamiliar in Western countries, but in Middle-Eastern countries ruled by religious laws and old-fashioned traditions, it is common for an older man to marry a girl. The aim of this study was to describe the status of underage mothers within the framework of children's rights and to draw attention to this issue. We presented this study to increase awareness and sensitivity, and to scrutinize and discuss these topics.





**Material/Methods:** We retrospectively investigated cases of underaged pregnant girls who applied to Forensic Science Department outpatient clinics and Obstetrics and Gynecology Department outpatient clinics of Gaziosmanpasa University Faculty of Medicine between 2003 and 2013.

**Results:** We accessed records of 163 underage mothers ( $\leq 18$  age). Mean age was  $16.9 \pm 0.83$  (14–18 years). Gravida and parity rates increased proportionately with increasing age. Most of our cases were 16 and 17 years of age (n: 117, 71.8%).

**Conclusions:** Underage motherhood is not only a medical issue; it is a multi-dimensional problem with social, economic, traditional, religious, and legal aspects.

**MeSH Keywords:** **Adolescence, Pregnancy in • Forensic Medicine • Pregnancy**

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## Background

All individuals under the age of 18 are considered as children by the Convention on the Rights of Children [1]. Forced marriage at a young age conflicts with Turkish and international law. Imam (traditional religious) weddings are not legal and are made outside of formal marriage. Imam weddings engaged in by men who marry young children or more than 1 woman.

The 1998 Law on the Protection of the Family states that women who do not have legal marriages cannot benefit from protection provided by the law [2].

Underage mothers are the children in the pediatric age group who become pregnant and give birth. These cases are children who have been exposed to sexual assault in adolescence, were forced to marry by their family, or who ran away from home to marry. It may be unfamiliar in Western countries, but in Middle-Eastern countries ruled by religious laws and old-fashioned traditions, it is common for an older man to marry a girl. As a result, they get pregnant in childhood and become child-mothers. This situation reveals a multi-dimensional problem due to the mother being a child. These children, who did not complete the development of their own biopsychosocial aspects, assume very heavy responsibilities such as child-rearing and training.

Childhood marriages are by definition within the scope of forced marriages. Forced underage marriages reinforce the unequal position of women in society, reduce the choice of freedom in their lives, and make women more vulnerable to violence. At the same time, early pregnancy age has negative effects on quality of life of both mothers and infants.

According to the Fourth World Conference on Women Platform for Action, each year at least 15 million girls between the ages of 15 and 19 years give birth worldwide. Early motherhood increases the risk of complications during pregnancy and childbirth and also increases the rate of maternal mortality. Unfortunately, underage mothers are subjected to serious health and nutrition problems, poor economic and social conditions, and increased risk for committing crimes and exploitation [3].

Additionally, children of underage mothers have higher rates of mortality and illness than normal population ratios [1,4–9].

Approximately 26% of pregnancies in adolescents (<20 years) in the United States are terminated electively, 14% result in miscarriages, and 59% result in a birth [10]. The pregnancy termination rate is lower than that observed in 1990 (34%) and represents approximately one-fifth of all abortions performed in the United States. Data from 2010 indicate adolescents ages

18–19 years old account for 65% of abortions in adolescents, and adolescents <15 years old account for about 3% [11].

Adolescents appear to be at increased risk for adverse pregnancy outcomes such as low-birth-weight babies and infant deaths [13–18]. Whether these outcomes are the result of biologic immaturity or sociodemographic factors related to adolescent pregnancy (e.g., nonwhite race, less educated, unmarried, lower economic status) remains unclear. These relationships were examined in a study of more than 130 000 primiparous white girls and women in Utah aged 13–24 years who delivered singleton infants [13]. Teenaged ( $\leq 17$  years) married mothers with appropriate educational levels (for their age) and adequate prenatal care had higher risks of delivering an infant with low birth weight (relative risk [RR] 1.7), prematurity (RR 1.9), or small for gestational age (RR 1.3), compared with mothers aged 20–24. The authors suggested biologic immaturity might be responsible for the poorer pregnancy outcome among adolescents.

Adverse outcomes in teenage pregnancies have been confirmed in some [14,18,19], but not all [20,21], studies. Black adolescents do not have an inherent biologically increased risk for preterm birth compared with older black women [20].

The primary cesarean birth rate for teenagers was approximately 20% in 2005 and appears to be increasing in all age groups [22]. Teenage mothers require instrumental deliveries approximately twice as often as do women aged 20–24 years [17,23], but the reason for this is not clear. Proposed explanations include the physical immaturity of the younger mother and fear or lack of cooperation during the second stage of labor [23,24].

Other reports have evaluated the outcomes of subsequent pregnancies after a first teenage pregnancy. In a population-based series limited to teenage pregnancies, adverse perinatal outcomes were more common among second, but not first, births to nonsmoking teenage mothers [25]. In another study, the increased rate of preterm birth diminished in subsequent pregnancies after the teenage period [26].

In a prospective study of 623 adolescent mothers ( $\leq 18$  years) who were followed for 4 years postpartum, 57% reported moderate to severe depressive symptoms [27]. The prevalence of depressive symptoms was highest during the first 3 months after delivery.

Adolescent pregnancy is associated with several adverse socioeconomic outcomes for the mother, father, and child. Mothers are less likely to receive a high-school diploma, are more likely to live in poverty and receive public assistance for long periods, and are at risk for intimate-partner violence. Children

**Table 1.** Age of underage mothers.

Age	n	%
≤15	7	4.3
16–17	117	71.8
18	39	23.9
Total	163	100.0
<b>(Mean ±SD)</b>	<b>16.9±0.83 (Min.: 14 Max.: 18)</b>	

are more likely to have health and cognitive disorders and are more likely to be neglected or abused [12,17,28–33].

In Turkey, we do not have reliable data on the number of underage mothers. In this report, we retrospectively evaluated 163 underage mothers who were patients at Gaziosmanpasa University Faculty of Medicine between January 2003 and January 2013.

We present this study to increase awareness and sensitivity, to scrutinize and discuss these topics, to describe the status of underage mothers within the framework of children's rights, and to draw attention to this issue.

## Material and Methods

Underage pregnant girls who were seen at Forensic Science Department outpatient clinics and Obstetrics and Gynecology Department outpatient clinics of Gaziosmanpasa University Faculty of Medicine between 2003 and 2013 were investigated retrospectively. We accessed records of 163 underage mothers (≤18 age). Social, demographic, and clinical characteristics of underage mothers were analyzed. We collected data on mean age, gravida, parity, abortion, curettage, live children, gestational age of mothers, and how they attended the clinic (brought by police or by consultation of forensic medicine, or voluntarily). Statistical analyses were performed with the SPSS software (Version 20, Chicago, USA).

## Results

This study included 163 underage mothers. Mean age was 16.9±0.83 (14–18 years). The majority of cases were nulliparous. Gravida and parity rates increased proportionately with increasing age. Most of our cases were between 16 and 17 years of age (n: 117, 71.8%) (Table 1).

Nine cases had gravida 2, 1 had gravida 3, and 1 adolescent pregnant girl had gravida 4, while the remaining 152 patients

**Table 2.** Obstetric history of underage mothers.

	Mean ±SD	Min.–Max.
Gravid	1.09±0.36	1–4
Parity	0.03±0.17	0–1
Abortus	0.06±0.31	0–1
Curettag	0	0
Alive Baby	0.25±0.16	0–1
Pregnancy week at application	16.12±6.13	0–36

were found to have their first pregnancy. The average age of the multigravid patients was 17–18 years (Table 2).

Eight patients (4.9%) had a previous spontaneous abortion (1 case had 3 abortions and the other 7 had 1 abortion).

There was no elective curettage history in patients.

Four patients had given birth before. One patient had type 1 diabetes mellitus but no pregestational hypertension history was detected. One patient was found to have pregestational hypothyroidism.

Three patients were accompanied with police escort (sent by the judicial authorities) and 4 patients were referred from the forensic outpatient clinic. The average age of patients sent by the judicial authorities was 15.5 years. Two cases were 14 years old, while the other two were 16 and 18 years old. Only 1 patient had a history of rape.

## Discussion

The rate of teen childbearing in the United States has fallen steeply since the late 1950s, from an all-time high of 96 births per 1000 women aged 15–19 in 1957 to an all-time low of 49 in 2000. Birthrates fell steadily throughout the 1960s and 1970s, they were fairly steady in the early 1980s, then rose sharply between 1988 and 1991 before declining throughout the 1990s. In recent years, this downward trend has occurred among teens of all ages and races [9].

In Turkey, the adolescent fertility ratio was 0.90% in 1990. The rate of pregnancy among females ages 15–19 years was 6% in 2008. In this age group the pregnancy rate was 0.45% in 1988, 0.60% in 1988, and 0.35% in 2008 [34].

The seriousness of teenage pregnancy as a health issue is reflected in the Health of the Nation initiative. The target was

**Table 3.** Adolescent fertility rate in Turkey between 2008–2011.

Years	Total	Mothers age				
		15	16	17	18	19
2008	3.9	0.6	1.6	3.5	5.9	8.1
2009	3.6	0.4	1.4	3.3	5.4	7.7
2010	3.3	0.3	1.2	3.1	5.0	7.0
2011	3.1	0.2	1.0	2.7	4.8	6.8

to reduce the conception rate for girls under age 16 years in England by at least 50% from its 1989 base of 9.5 per 1000 to 4.8 by the year 2000. In England and Wales, for girls under age 16, there has been little variation in conception rates since 1969. Approximately 8 girls in every 1000 become pregnant before their 16th birthday. The number of girls aged under age 16 becoming pregnant rose slightly for the third year running in 1996. There were 8800 conceptions to girls aged under age 16 in 1996 compared with 8000 in 1995. The conception rate for girls aged 13–15 years in 1996 was 9.4 per 1000, higher than 8.5 per 1000 girls in 1995. Therefore, these rates have not yet fallen sufficiently to reach the Health of the Nation targets. A similar pattern was seen in Scotland, with rates falling until 1995 and then increasing again in 1996. These pregnant girls had low socio-economic and education levels and they also had low-birth-weights infants, high infant mortality risk, and increased congenital anomaly risks [35].

Turkey Demographic and Health Survey (DHS) data from 2008 indicate that by the adolescent period, 6% of the females started to bear children: 4% of these have children, and 2% were pregnant with their first child during the survey. According to data from the TDHS-2003, fertility has begun in 8% of females in the adolescent period, but according to TDHS-2008 data, this rate decreased to 6% [36].

Adolescent motherhood was found to be more common in rural than in urban areas (9% and 5%, respectively). Adolescent fertility levels indicate significant differences between regions (3% in the eastern Black Sea region and 10% in Middle-Eastern Anatolia) Adolescent fertility was high in the Aegean Region (9%); according to TDHS-2003 data, adolescent fertility is higher in this region (13%) and this has been described as a surprising finding [37].

The Turkish adolescent fertility rate is decreasing. This rate was 3.9 in 2008, 3.6 in 2009, continued to decline in 2010, and was 3.1 in 2011 (Table 3) [38].

Physical and mental development has not yet finished in girls, thus childbirth and the post-partum period may lead to physical

and psychological problems that may lead to increased maternal and infant mortality rates and disease development.

In a survey by Kükner et al., 36.2% of female high school students know how to become pregnant. Today, in developed societies, “fear of pregnancy” has decreased because of the spread of contraception and also by granting the legal right to abortion. However, in underdeveloped societies, traditions and family pressures force young girls to marry at an early age; accordingly, there is an increase in adolescent pregnancies. The power of this tradition can be reduced by increasing the level of education. Psychological problems do not occur only because of pregnancy, childbirth, and the post-partum period – they can also occur due to sexual assault that causes pregnancy and early-age motherhood [39].

Psychological problems are not only caused by pregnancy, childbirth, and the post-partum period, but also by sexual assault and the continuation of the resultant pregnancy. The most commonly seen mental problems are post-traumatic stress disorder, anxiety disorder, and depression [6,35,40–44]

Keskinoglu et al. examined the socio-economic level of 945 pregnant adolescents and reported that 99.7% were from unemployed families, 59.8% had no health insurance, and 81.5% of them are nulligravid. In the employed families, 18.2% of pregnant adolescents had preterm delivery and 12.1% delivered low birth weight infants. Preterm labor and cesarean section rates were significantly higher in underage mothers compared to adult mothers [45].

According to the 2008 Turkish Demographic and Health Survey, 7% of uneducated females begin to bear children during the adolescence period, but this rate was only 4% in those who graduated from high school [36].

## Conclusions

The concept of underage motherhood is not only a medical issue – it is a multi-dimensional problem with social,

economic, cultural, religious, and legal aspects. Therefore, there must be collaboration with civil organizations, as well as other clinical and social services to consider the best interests of the child in the creation of social protection

programs. The new Turkish Penal Code, which came into effect 1 June 2005, initiated positive changes in children's rights, but practice is always more important than laws that may exist only on paper.

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