



Mother Health in Turkey

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Abstract

The health status of mothers in Turkey is below the desired level, although data show some improvement in the last years. This paper aims to review current data about mother health and studies designed to improve mother health in Turkey.

Background

According to the census 2000 there are 16.3 million married women belonging to the reproductive period of 15-49 years in Turkey and this makes about 25% of the population. In 1990, 14.1 million women in this group were recorded.

It is shown that only 1% of women aged 45-49 have never married in Turkey. Age of first marriage is increasing in Turkey with the mean age of 18.3 years in the 45-49 year-old group which rises to 20 years in the 25-29 year-old group.

Marriages at young ages are responsible for complications related to pregnancy, birth and postpartum period that are seen in young women. The failure to obtain periodical care in the reproductive period restricts the success of the preventive measures against frequently seen diseases in women.

In 1993, the percentage of pregnant women obtaining antenatal care showed an increase with 63%. In addition, the mean time of first antenatal care has decreased from 7 months to 3 months. However, 68% of future pregnancies are related at least with one risk. Nutrition is insufficient and unbalanced and anemia is not rare.

Although the number of induced abortions is decreasing it is shown in 1993 that while 70% of families do not desire another child, the rate of families using family planning is

only 62.6% and only 34.5% use a modern method. Fifty percent of maternal deaths occur at birth and the rate of births at home without attendance is as high as 24%, similar to the results of 1988-93 surveys.

Maternal deaths

Deaths occurring after the beginning of pregnancy until day 42 after birth are accepted as maternal death by WHO. There are confusing data about maternal death rates and reasons in Turkey. In 1974, maternal death rate was reported to be 208 per 100 000 live births. In a study from the provinces Kahramanmaras and Adiyaman, maternal death rates were reported to be 284 and 94 per 100 000 live births, respectively. According to a study conducted by the National Statistics Institute in 1989, maternal death rate was reported to be 132/100 000 .It is estimated that the maternal death rate is about 100/100 000 at present.

There were 671 cases of maternal deaths among patients advised to the hospital for pregnancy and birth, according to the Hospital Yearbook published in 1993 by the Ministry of Health.

Causes for maternal deaths

The majority of maternal deaths occur at birth in Turkey. A study conducted by the National Statistics Institute confirmed this finding and reported that approximately half of the maternal deaths occur at birth, a quarter in pregnancy and a quarter in the postpartum period.

The major medical causes for maternal deaths are haemorrhage, infections and toxemia.

The main factors that contribute to maternal death are multiparity, insufficient prenatal care and nutrition, insufficient benefit from health care services and low status of women.

1- High birth rate:

In Turkey, the crude birth rate is about 23/1000 and approximately 1.4 million births occur in a year. Crude birth rate is higher (24/1000) in rural regions compared to urban areas (21.7/1000). At the end of their reproductivity (ages 40-49) women in Turkey show a ratio of 4.6 births. This ratio is 5.6 in rural areas, 4.0 in urban areas, 3.5 in the western and 7.3 in the eastern regions.

Total birth rate is more than three children in rural regions and about two in urban regions. The mean ratio for Turkey is 2.7 children per woman.

It seems that the traditional difference in total birth rate between urban and rural areas is decreasing. Compared with a rate of 4.05 in 1983, total birth rate has increased to 2.7 in 1993.

2- Abortions:

A high birth rate results in high rates of unwanted pregnancies which leads to an increase in induced abortions with related risk factors. Women with unintended pregnancies either decide to give birth or choose induced abortions. In the 3 years previous to the 1993 TNSA, there were 28 abortions per 100 pregnancies reported with a rate of 18 induced abortions and 10 non-induced abortions. For every 100 live births there were 25 induced and 15 spontaneous abortions (miscarriage). While in 1984 15.1 of 100 pregnant women have decided for an induced abortion, in 1987 23.6, in 1993 17.9 and in 1998 15.3 induced abortions per 100 pregnancies are seen (*Table1*).

Table 1 Induced abortion rates per 100 pregnancies in 1998

	Induced abortion rate	
	%	Number
Western region	20.3	1375
Eastern region	7.5	1018
Southern region	14.6	594
Northern region	16.3	337
Urban areas	17.1	2834
Rural areas	12.0	1501

With the revised Law for Population Planning in 1983, illegally realized induced abortions under unsafe circumstances and by unqualified providers were hindered and legalized under governmental control. This legal protection resulted in an important decrease in complications due to criminal abortions and maternal deaths. Although an increase in induced abortions was seen after the legalization, a trend towards a decline in the number of induced abortions in Turkey has been observed since 1990.

3- Utilization of Health Services:

The main reason for low utilization rates of health care services by child-bearing women and birth-giving mothers is that they accept pregnancy and birth as part of their daily lives and do not consider them as important. However, pregnancy and birth can be potentially dangerous for both the mother and the child.

Prenatal Care: Prenatal care is one of the most important means intending to protect the health of the mother and child and is provided by health posts, health units, mother and child health-family planning centres, hospitals and by private sector in Turkey. Following up at least six times in the prenatal period with physical examination, blood pressure, weight and height measurement, tetanus prophylaxis and counseling is recommended. It is shown that only 63% of pregnant women in Turkey receive (at least) one prenatal care

(46.8% from a physician, 15.5% from a nurse or midwife) and only 43% see a doctor or a health professional before their last delivery.

There are differences between regions in terms of antenatal care. The proportion of women receiving antenatal care is higher in urban areas compared to rural areas. It is observed that higher levels of education results in a significant increase in the proportion of antenatal care rate among pregnant women (*Table 2*).

Table 2 Antenatal care rates by region, residence and education

	No antenatal care (%)	Inadequate antenatal care (%)	Adequate antenatal care (%)
Western region	13.5	37.1	49.5
Eastern region	61.7	27.7	10.6
Southern region	27.1	42.4	30.5
Northern region	34.0	38.2	27.8
Urban areas	22.5	39.1	38.4
Rural areas	49.0	34.0	17.0
No education or primary school incomplete	62.4	28.0	9.6
Secondary school or higher	4.0	23.8	72.2

It is shown that antenatal care generally starts early in Turkey with half of the visits starting before the fifth month of pregnancy. Antenatal care in the first trimester for first pregnancies is of great importance. Women receiving antenatal care were visited 4.7 times in average in Turkey and 46.8% of them were seen by a doctor (*Table 3*).

Table 3 Antenatal care provider rates in 1998

	Inadequate antenatal care	Adequate antenatal care
Midwife/nurse	74.1	25.9
Physician	52.0	48.0
Primary care public institution	68.9	31.1
Public hospital	58.7	41.3
Private sector	48.6	51.4

Table 4 Birth rates by place of delivery, birth attendance and birth conditions in 1993 and 1998

	1993 (n=3700) (%)	1998 (n=3401) (%)
Health institution	59.5	73.0
Home	40.2	26.9
Physician	33.7	39.8
Midwife/nurse	42.2	40.7
Other (not health worker)	24.1	19.4
Unhealthy conditions	24.0	18.5
At home by assistance of health workers	16.5	8.4
In health institution	59.5	73.0

Place of Delivery: It is shown that the place of residence effects assistance rates at birth. The prevalence of births delivered by assistance of health personnel or doctor is significantly lower in places out of health institutions compared to births in health institutions. In 1993, 59.6% of all deliveries took place in a health institution similar to rates seen in 1988 and 75.9% of births were delivered by assistance of a doctor or other health personnel (*Table 4*). Obviously, the rate of deliveries under attendance is higher than the rate of antenatal care (63%). Women living in eastern regions and rural areas show a lower rate of health care utilization.

Family Planning: Contraceptive methods that prevent unwanted pregnancies and induced abortions are well known by Turkish women. All women interviewed could report at least one method. The rate of ever married women with knowledge about efficient and modern methods was 86% in 1978, 90% in 1983, 97% in 1988 and raised to 99% in 1993.

Although, contraceptive methods are well-known in Turkey, 37.4% of women exposed to the risk of becoming pregnant are non-users, while 34.5% are using an effective and 28.1% are using an ineffective method. The proportion of women using an effective and modern method is higher in Western regions compared to the Eastern and Northern Anatolia (*see Table 5 next screen*).

Table 5 Distribution rates of contraceptive methods by region and residence, 1998

	The pill	IUD	Condom	Other reversible modern	Sterilization	Withdrawal	Other traditional
Western region	13.5	20.5	14.3	2.2	2.6	44.0	2.8
Eastern region	17.9	22.5	13.2	3.6	2.6	37.5	2.8
Southern region	10.5	26.8	13.3	2.7	3.0	41.3	2.3
Northern region	12.3	13.5					
Urban areas	13.8	22.5	16.0	3.0	2.7	39.3	2.8
Rural areas	14.3	18.1	11.2	2.5	2.5	49.7	1.5

Mother's age at birth being <20 and >35, birth interval being <2-3 years, and number of deliveries being >4 are risk factors related to maternal and child mortality. It is shown that these risk factors are not rare in Turkey.

Mother health and family planning services:

Considering the increase in the population of reproductive women aged 15-49, the prevalence of mother and child health problems and the effect of the health status of mother health on the child health, it can be seen that specific programs for mother health should have a priority in Turkey. Regarding the problem as a "women's health" problem rather than only a "mother's health" problem is both a necessary and a scientific obligation. With this purpose a "Women's Health Strategy Plan" was prepared and implemented by the Ministry of Health with the participation from various sectors. Main titles of this plan are:

- 1- To decrease maternal and perinatal mortality by 50%.
- 2- To increase the rate of modern methods to 70% in the group of users.
- 3- To determine all pregnancies and provide them with antenatal care.
- 4- To ensure healthy delivery conditions for all births.
- 5- To reduce the differences in health care provision between regions.

Strategies:

A: Strategies for women's health/family planning (WH/FP) service supply

- Volunteers and leaders from community will help to reduce the differences in WH/FP outcomes between urban and rural areas.
- WH/FP services will be improved especially in deprived areas.
- The role of the private sector in improving WH/FP services will be assessed and increased.
- A specific approach will be developed for the risk groups in WH/FP.
- The use of reversible contraceptive methods like IUD, oral contraceptives and condom will be increased.
- Tubal ligation and vasectomy services will become widespread.
- Application of Norplant will be expanded and be continuous.
- For purposes of diversity, hormonal methods like long-acting medroxyprogesterone injections will take part in the National Family Planning Program.
- Postpartum and postabortus counselling and method providing services will be improved and postnatal and postabortus utilization rates of effective modern methods will be raised.

B: WH/FP services infrastructure and management strategies

- In every institution, committees including technical personnel will prepare nationwide programs and control their implementation.
- A Population Planning Council or a representative organization will evaluate the international guidelines and their application.
- Managers will be educated.
- Data collecting, follow-up and evaluation systems will be improved.
- A system for follow-up and evaluation of WH/FP services will be established.
- Appointment regulations considering the Ministry of Health will be controlled.
- Existing units will be improved and equipped and new care units will be built.

- WH/FP clinics will be established.
- Building and restoration of health care units will be financed by community assistance and participation.

C: Logistics, finance and purchase strategies

- IUD, pills and condoms will be purchased by the Ministry of Health, Social Insurance Institution (SSK), private sector and voluntary institutions via native producers or importers.

Distribution and storing

- Existing Contraceptive Logistic System will be improved and "Top up" will be established stepwise.
- An inventory system will be developed. Minimum-maximum inventory system will be implemented in every distribution phase.
- Administrative provinces will be supplied regularly by central stores and approved provinces with pilot studies will adopt the "Top up" system.

Development of a Logistic Management Information System

- The minimum information needed on contraceptive logistics will be determined and a system to obtain this will be developed.

Logistic manpower education

- Teams responsible for family planning supplies will be educated.

Strategies about finance

- The budget of the Mother and Child Health General Directory of the Ministry of Health will cover the basic costs of contraceptive material supply.

THE STATUS OF WOMEN

Problems

Basic educational continuity and occupational success is limited by the traditional cultural structure and professional unconsciousness. This hinders the improvement in the status of women.

Aim

- To improve every stage related to women's status.

Strategies

- Community education through the media will be used.
- Basic educational level will be raised in order to increase women's level of consciousness.
- Adult education studies will be used to obtain a high profession rate among women.
- Governmental organizations, NGO's and professional associations will cooperate for women's priorities.
- Politicians' way of thinking about women's status and consciousness and regulations causing inequality among men and women will be changed.
- Sexual annoyance and violence will be regarded as a health problem and community awareness of sexual annoyance and violence will be raised and protecting organizations will be established.
- Factors contributing to the rise in women's occupational success will be determined.
- Women's conditions at workplace will be improved and occupational participation and status will be raised.
- Policies for the improvement of women's status will be developed.
- Units dealing with women's problems will be established in every sector.

REFERENCES

- 1- Contraception, Abortion and Maternal Health Services in Turkey: Results of Further Analysis of the 1998 Turkish Demographic and Health Survey. Ed. Akin A. Hacettepe University, TFHP Foundation and UNFPA, January 2002.
- 2- Turkish Ministry of Health , General Directorate of Mother and Child Health/ Family Planning; Hacettepe University, Institute of Population Studies (HIPS); and Macro International Inc. (MI). 1994. Turkish Demographic and Health Survey 1993 Ankara, Turkey
- 3- Turkish Ministry of Health, General Directorate of Mother and Child Health/ Family Planning; Women Health and Family Planning National Activity Plan, 1998, Ankara
- 4- Hacettepe University, Institute of Population Studies (HIPS). Turkish Population and Health Survey. 1983 Ankara, Turkey.

5- Hacettepe University, Institute of Population Studies (HIPS). Turkish Population and Health Survey . 1988 Ankara, Turkey

6- Akin A, Dogan BG, Mihciokur S: Maternal Mortality and reasons in Hospital Records in Turkey, in Hacettepe University Dept of Public Health, Turkish Ministry of Health (MOH), General Directorate of Mother and Child Health/Family Planning , UNFPA and WHO, 2000.

7- Dogan BG, Enünlü T: "Contraceptive Practice in Turkey". In Contraception, Abortion and Maternal Services in Turkey. Eds: Akin A and Bertan M. Calverton, Maryland: Ministry of Health(Turkey) and Macro International Inc, 1996.

8- Reducing Maternal Mortality. WHO Publications, 1998, Geneva.