

## Trends in women's health in Iran. 1991-2000

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The concept of health as a human right has emerged as one of the most important aspirations of the world community. Women's health issues are now on integral part of the international agenda for development and human right. The improvement of women's status is a key factor in meeting any development challenge, either eliminating poverty, slowing population growth, or cutting the environmental costs of development. The reproductive health of women is important the family and society. Trend of women's health ties with other factors such as, reproductive health services, education and employment. In this regard, we tried to assess women's health indicators in Iran. We reviewed health information from national health reports, including 2 health surveys at the national level by sample size of 1/1000 of Iranian population, which were conducted in 1991 and 1999 and Iran demographic and health survey (DHS) 2000.<sup>1,2</sup>

**The National Health and Disease Surveys 1991 and 1999.**<sup>1</sup> The population sample of health surveys consisted of one thousand of the total Iranian population. Cluster sampling randomly chose them. Each cluster consisted of 8 families. The urban population sample comprised of 1097 clusters (8776 families) and the rural population sample 509 clusters (4719 families). A total of 6137 subjects, were interviewed.

**Demographic and Health Survey 2000 in Iran.**<sup>2</sup> Principal objective of that study was to determine population and health indicators. The specific objectives were to determine baseline households' welfare, fertility and contraceptive usage indicators. The sample size for each province (28 provinces and Tehran as the capital city) was set at 2000 urban and 2000 rural households. The actual number of households eventually accessed was 113957 including 537108 persons. The sampling method was single-stage cluster sampling (cluster of equal size). Each cluster consists of 10 ordinary residential households. Variables include safe motherhood, reproductive health, family planning, education, nutrition and menopause indicators.

Today 89.6% of deliveries are performed by physicians and trained midwives. Sixty one percent of deliveries are carried out by a physician and 35% of them result in childbirth by cesarean section. At the level of the country 12.4% of childbirth are carried out at home. Antenatal tetanus toxoid injection in 80% of women. Approximately 79% of mothers have prenatal cares.<sup>2</sup>

Maternal mortality rate has decreased to 37.4 per 100,000 live births in 1997 from 54 per 100,000 in 1991.<sup>1</sup> Approximately 45.2% of mothers have unplanned pregnancy but 22.5% of them have unwanted pregnancy.<sup>1</sup> Approximately 7.5% of women have unmet need in family planning. One percent stillbirth and 5.6% abortion rate have been reported.<sup>1</sup> Reproductive health indicators, marital status and prevalence of contraception usage are shown in **Table 1**.<sup>1,2</sup> Illiteracy rate in women in the age group of 15-49 years has decreased from 30.8% in 1991 to 23.4% in 1999.<sup>1,2</sup> Today, 91.5% of girls of 7-14 years of age go to school compared to 86.5% in previous report. Approximately 24.3% of 15-39 years old women have diploma or higher degree. Nevertheless, the number of female university students is 57% of the total national enrollment in 1999 but only 6.1% of women have academic education.

**Table 1** - Trends in reproductive health, marital status and contraception prevalence rates in Iranian women: 1991-2000.<sup>4,6</sup>

Case	1991	2000
<b>Reproductive health intentions</b>		
Age at first pregnancy (years)	20	22
Interval between marriage and the first pregnancy (months)	9.6	18
Family spacing between 2 living children (months)	33.1	47.8
Number of living children	4.1	3.2
Conception by age of 18 or less (%)	6	4.1
Conception by age of 40-49 years (%)	3	1.1
Pregnancy rates (%)	10.2	5.2
Population growth rate per year	1.47	1.2
Total fertility rate (%)	4.9	2
Cesarean section rate (%)	N/A	35
Antenatal injection of tetanus toxoids	N/A	79.6
<b>Marital status of women 15-49 years</b>		
Mean age at first marriage (years)		
Urban	19.2	20.8
Rural	18.2	19.7
Percent of married women	70.3	64.4
Percent of single women	23.3	26.3
Percent of divorced women	0.8	0.8
Percent of first marriage at the age of 18 or less	2	1.3
<b>Use of contraceptive methods by married women ages 15-49, currently using</b>		
Any method (%)	69	73.8
Any modern (effective) methods	51	55.9
Traditional (withdrawal) methods	17.87	17.8
Oral contraceptive pills	26.9	18.4
IUD	6.9	8.5
Condom	7.8	5.9
Female sterilization	6.35	8.5
Injectables/implants	3.17	3
Vasectomy	<1	2.7
IUD - intrauterine device, N/A - not available		

Age of menopause is 50 years.<sup>1</sup> By age group of 40-69 years, hypertension is seen in 20.6% of women, hypercholesterolemia  $\geq 240$ mg in 20.7%, obesity of bone marrow indexing  $>30$  in 27.9% of urban and 15.6% of rural women, arthralgia or arthritis in 39.4%, low back pain in 49.2% and kyphosis in 3.5%. Besides, 2.6% of women 60-69 years of age have had hip or spine fractures in the recent year.<sup>1</sup> Compared to previous study, except for hypertension had been seen in 14.7% of women; other indicators have no significant difference. By age of 18 years, height of girls is 158.1cm and their mean weight is 54.1kg.<sup>1</sup> Approximately 12% of women in urban and 6.9% in rural areas are obese by age of 15-39 years<sup>1</sup> but in the age group of 40-69 years obesity reaches to 27.9% in urban and 15.6% in rural areas. 6.8% of women in reproductive ages of 15-39 years have intermediate to severe anemia (iron deficiency).<sup>1</sup> Approximately 25.4% of women suffer from anxiety, 24.6% are depressed; somatization in 10.6%, neurosis in 6.2% and psychosis are seen in 0.3% of women.<sup>1</sup> Four out of 466331 blood samplings have been reported positive for human immunodeficiency virus (HIV)<sup>1</sup> and 31 out of 413 cases (7.5%) having acquired immune deficiency syndrome (AIDS) disease have been females and 178 out of 3912 cases infected with HIV (4.55%) are female. Route of infection have been sexual intercourse in 61% of women but intravenous drug abuse in male cases was the main route of infection in 67%.

Approximately 98.3% of women reported no cigarette smoking in survey of 1999 compared to

96.6% in previous survey.<sup>4,5</sup> However, it may have been underestimated. Age at first cigarette smoking is after 25 years and most consume less than 10 cigarettes a day. An official report of the prevalence of addiction is not available. Approximately 2.4% of women work as governmental employees compared to 8.5% of men,<sup>2</sup> 54% of women are housekeepers but just 10% of women who work outside receive their own income.

Skilled medical assistance during childbirth can save women's lives. In Iran, the percentage of married women who gave birth in a medical facility has increased somewhat from 1991 to 2000. Untreated or improperly treated complications of pregnancy, delivery, and postpartum period are a leading cause of maternal death. The tragedy of maternal death has multiple strategic aspects comprising community mobilization, prenatal care, clean and safe delivery with trained assistance and, most critically, primary referral care for management of complication. In Iran, the referral system has its weakness and some maternal death occur before reaching the hospital, however, 80% of mothers have antenatal cares mostly in the field of primary health cares. Rate of cesarean section is too high in Iran, this is not related to obstetrical indications alone, but patient's requests are contributed. Antenatal counseling and change in attitudes can improve this rate. Maternal tetanus killed an estimated 150,000 to 300,000 women during the 1990s.<sup>3</sup> Tetanus toxoid vaccines can prevent infections and save lives of mothers and infants alike. Pregnant women should receive at

**Table 2** - Maternal health indicators, 1990-2000. Percentage of women receiving services in developing countries.<sup>1-3</sup>

Regions/country	Total fertility rates	Contraception use		Unmet need for family planning	Median age at first marriage	Tetanus toxoid injection	Skilled attendants at birth
		Any method	Modern method				
<i>Sub-Saharan Africa</i>							
Gabon 2000	4.2	29	12	28	20.4	80	87
South-Africa 1998	2.9	56	55	15	24.8	59	84
<i>Near East and North Africa</i>							
Egypt 2000	3.5	55	54	11	N/A	72	61
Jordan 1997	4.4	50	38	14	N/A	40	97
<i>Asia</i>							
Bangladesh 2000	3.3	53	44	15	N/A	81	12
India 1999	2.8	48	43	16	21	75	42
Iran 2000	2	73.8	56	7.5	20.8	79.6	89.6
<i>Latin America</i>							
Colombia 2000	2.6	76	63	6	21.4	83	86
<i>Eastern Europe and Central Asia</i>							
Armenia 2000	1.7	57	20	12	19.8	N/A	97
Ukraine 1999	1.4	68	38	17	20	N/A	N/A
N/A - not available							

least 2 doses of tetanus toxoid.<sup>4</sup> In Iran, 79.6% of women have coverage of antenatal injection of tetanus toxoids. Age at first marriage is 20.8 in Iran. A rising age at first marriage helps lower the birth rate, especially where there is little control of fertility within marriage. While the precise relationship of age at marriage to fertility is difficult to measure, surveys reveal a strong inverse relationship between the average age at marriage and the total fertility in a country (Table 2).<sup>3</sup> Age of menopause is 50 in Iran and life expectancy has increased not only in Iran, but also in most countries, the proportion of the middle age and elderly people are growing. Lifestyle, good health programs and exercise can contribute women in their climacterics periods.

Human immunodeficiency virus and AIDS are other crucial factors affecting women's health. However, HIV and AIDS are seen more in male cases compared to females, mostly due to intravenous drug abuse in addicts but its impact on women can not be ignored, they should become aware of HIV and AIDS more and more and know how to avoid infection.

Women, who are not using contraception, even though they are sexually active and want to avoid pregnancy, are at risk of unwanted pregnancy. Such women are considered to have unmet need for family planning. In Iran, we do not have any formal data for unsafe abortion. However, estimates of the level of clandestine abortion do not exist for most countries where abortion is illegal. Reduction of abortion rates can occur if couples switch to more effective family planning methods. The comparison between 2 surveys in 1991 and 1999 in Iran indicates that the number of women with contraception has increased from 69-73.6%, but traditional contraceptives or withdrawal methods are still used and they have high failure rates.<sup>3,5</sup> Contraception has potential in making a significant contribution towards improving health and status of women. It allows women to determine the number and timing of their children and control their fertility and it is a corner stone element in population growth control. The women have access to contraception more easily when they are literate, and can read and understand the risks to their health. Literacy improves women's ability to reduce risks to fertility, to avoid sexually transmitted disease and to promote safe pregnancy and childbirth. Education is nevertheless a key factor in improving the overall well-being of the family, but, facilitating the participation of women in the labor market, and improving and equipping them for leadership roles in community and national life. In Iran, women

have made progress in the field of education, and more women are receiving higher education, too. Economic development affects women in more different ways than men. Women's working conditions are more difficult than those of men because of the obligations associated with their reproductive and family roles.

Over the last decade, health surveys and DHS have determined trends of health topics including women's health. The Surveys and DHS programs provided unique data in Iran that are valuable in a number of ways. They filled information gaps needed about maternal care, family planning, maternal and child health and other key topics, but unfortunately, they lack reliable information about HIV and AIDS, abortion, economic and social status of women. However, there have been great advances in the fields of education and contraception prevalence rate and safe motherhood but some fields still need more effort, to provide women with the opportunity for employment and training in commerce, management, science and technology, to ensure that women are accorded legal recognition and equality in their own right.

In Iran, while significant progress have been made in the field of women's health, a lot more still needs to be carried out especially in the area of family health rights. This task could not be accomplished without the socio-political participation of women.

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