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Reproductive Behavior in Muslim Countries

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Introduction

Demographic changes occurring within the context of a societal transformation from a predominantly traditional to a predominantly modern one are widely noticed. Ansley Coale (1984) notes that this "transformation is the substitution of slow growth achieved with low fertility and mortality for slow growth maintained with relatively high fertility and mortality rates." The impact of religion on fertility decisions and acceptance of family planning in traditional societies has been widely debated. For example, while reviewing the European Fertility Project, Coale (1973) suggested that the moral acceptance of birth control by the church was one of the necessary preconditions of fertility decline in Europe. Similarly, the high levels of fertility still observed in sub-Saharan Africa, and the resistance to small family norms, are argued by Caldwell and Caldwell (1987) to "have much to do with a religious belief system, that operates directly to sustain high fertility."

Several recent studies of Asian and African countries have been unable to conclusively demonstrate the effects of religious belief on fertility. In a review of such studies, Kollehlon (1994) reports that fertility levels among Muslim as against non-Muslim populations, provide contradictory evidence. For example, while earlier studies of fertility in Israel, the former Soviet Union, Jordan, India, and tropical Africa have reported Muslim fertility to be higher than the fertility of other religious groups, fertility levels among Muslims in Cameroon, Ghana, Nigeria, West Africa, and sub-Saharan Africa are lower than among non-Muslim populations. Kollehlon's study of fertility in Liberia finds that Muslim fertility is only slightly higher than that of Catholics and Protestants. In fact, this difference was found to be attributable mainly to socioeconomic and demographic differentials, not to religious affiliation. Similarly, Chaudhry (1982) has shown that the lower socioeconomic status of the Muslim population in India is the major contributory factor to their higher fertility, not their religious affiliation. In a review of 13 major studies on differential fertility by religion in India, Bose (1989) concluded that "we do not know whether or not Muslim fertility is higher than Hindu fertility."

While there exist a considerable number of studies comparing the reproductive behavior of Muslim and non-Muslim women, few comparative studies attempt to explain the differential patterns of behavior among the geographically spread Muslim population. Do the Muslim countries have a typical demographic pattern? In *The Demography of Islamic Nations*, Weeks (1988) found noticeable "regional and temporal" diversity in fertility among Muslim countries. He contends that, as a group, Muslim countries are still in the early stages of demographic transition, and that "the single most remarkable demographic aspect of Islamic societies is the nearly universal high level of fertility." On the other hand, Obermeyer (1992) maintains that "one of the problems with the Islamic explanation (of high fertility) is that it treats as monolithic a trait shared by close to a billion people worldwide, and that has adapted to, and been affected by, diverse regional contexts. The diversity in the doctrine and the cultural context of Islam calls into question the recourse to Islam as an explanation for demographic trends."

There are no a priori reasons for fertility to be higher among Muslims. While Islam does encourage all Muslims to marry, it does not forbid the use of contraception. Since the Islamic church (or priest) does not necessarily play a formal role in the day-to-day life of a Muslim, decisions regarding reproductive behavior in Muslim societies may follow secular trends. With the help of more recent and comparative data, we examine here whether Muslim countries indeed have similar patterns of reproductive behavior.

Today, the majority of Muslims are scattered across 50 countries, predominantly in Asia and Africa. In 1994, the population of Muslims was estimated at 1.033 billion, slightly fewer than the 1.055 billion estimated population of Roman Catholics (Encyclopedia Britannica, 1995). Muslims constitute approximately 40 percent of the population in Africa and approximately 20 percent in Asia. Weeks (1988) listed 39 countries[1] with 50 percent or more of their population classified as Muslims. The number of Muslim-majority countries

[1] Including Gaza, Western Sahara, and Albania.

has since increased, and now includes six countries from the former Soviet Union and Malaysia.[2] However, about two-thirds of the world's Muslim population is concentrated in six large countries, namely: Indonesia, Pakistan, Bangladesh, Iran, Turkey, and Egypt. Data for all of these countries, with the exception of Iran, are included in this report.

In this rapidly changing world, in which many societies have adopted smaller family norms, where do the Muslim countries stand? Table 1 presents total fertility rates (TFRs) for the preceding 30 years. The early 1960s saw high fertility rates in almost all Muslim countries. Since then, many countries have experienced fertility declines of more than 40 percent, (although none in East and West Africa). The most dramatic regional declines occurred in North Africa, where Egypt began with the greatest early decline, quickly joined by Tunisia, Morocco, and Algeria. These four countries experienced more than 50 percent declines in fertility over the past 30 years. Conversely, the 10 Muslim countries in East and West Africa saw negligible declines during the first 15 years, and modest declines among only a few countries in the previous 15 years. Muslim countries in Asia show varying levels of fertility decline. All three Muslim countries of South East Asia experienced declines of more than 50 percent in the past 30 years. Among Muslim countries of South and Central Asia, the former Soviet republics took the lead in fertility declines during the first 15 years, while others experienced substantial declines during the last 15 years, with the exception of Afghanistan and the Maldives. The most remarkable recent decline in fertility occurred in Bangladesh (42 percent).

West Asian fertility declines have been both great and small. Azerbaijan, Lebanon, and Turkey began significant early declines that have continued in recent years as well. These countries have been joined by Bahrain and Kuwait, resulting in five countries that have had fertility declines of more than 50 percent. During the past 15 years, most of the countries in West Asia experienced declines of 30 to 37 percent. However, during the same period, Saudi Arabia and Iraq had 20 percent declines while fertility remained high in Oman and Yemen.

Thus, the overall picture of fertility in Muslim countries has been from a regime of high fertility in the early 1960s, when most countries had a TFR of 6 to 7.5 children per woman, to a TFR below 4 in more than half of the countries by the mid-1990s.

Freedman (1995) has identified three factors associated with rapid changes in reproductive behavior in Asian countries: mortality decline, broad social and economic development, and effective national family planning programs.

Here we consider the human development index, which is based on life expectancy at birth, the literacy rate, and GNP per capita (UNDP, 1995), as an indicator of mortality decline and overall social and economic development. As shown in Table 2, there is a pattern of level of socioeconomic development in Muslim countries being relatively higher in North Africa, Central, Southeast and West Asia, and lower in South Asia and East and West Africa.

With the passage of time, more and more Muslim countries have adopted official policies to promote family planning. Ross and Mauldin (1996) rank Indonesia and Tunisia behind China, as the countries with the highest overall scores in family planning program efforts (Table 2). With the exception of Indonesia, the largest Muslim countries (with populations of more than 60 million), all received moderate scores in family planning program efforts. Among other Muslim countries for which data are available, only two have been identified as providing weak or no support to family planning program efforts—Saudi Arabia and United Arab Emirates.

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[2] As 49 percent of the Malaysian population was reported to be Muslim, Weeks did not consider Malaysia a Muslim-majority country. However, Govindasamy and DaVanzo (1992) report that in 1988, Muslims constituted 58 percent of the Malaysian population.

Table 1 TFRs in Muslim countries for preceding 30 years

Total fertility rates and percent change in rates in Muslim countries, 1965-70 to the mid-1990s

Region/country	Total fertility rate[1]			Percent decline		
	1960-65	1975-80	Mid-1990s	1960-65 to 1975-80	1975-80 to mid-1990s	1960-65 to mid-1990s
East Africa						
Comoros	6.9	7.1	6.0	-2.9	-15.5	-13.0
Djibouti	6.9	6.7	5.4	-2.9	-19.4	-21.7
Somalia	7.0	7.0	6.5	0.0	-7.1	-7.1
North Africa						
Algeria	7.4	7.2	3.4	-2.7	-52.8	-54.0
Egypt	7.1	5.3	3.4	-25.3	-35.8	-52.1
Libya	7.2	7.4	5.9	2.8	-20.3	-18.0
Morocco	7.2	5.9	3.1	-18.0	-47.5	-56.8
Sudan	6.7	6.8	5.4	1.5	-20.6	-19.4
Tunisia	7.2	5.7	2.7	-20.8	-52.6	-62.5
West Africa						
Chad	6.0	5.9	5.5	-1.7	-6.8	-8.3
Gambia	6.5	6.5	5.2	0.0	-20.0	-20.0
Guinea	7.0	7.0	6.5	-7.1	-7.1	0.0
Mali	7.1	7.1	6.6	0.0	-7.0	-7.0
Mauritania	6.5	6.5	5.0	0.0	-23.0	-23.0
Niger	7.1	8.1	7.1	14.1	-12.3	0.0
Senegal	7.0	7.0	5.6	0.0	-20.0	-20.0
Sierra Leone	6.3	6.5	6.1	3.1	-6.1	-3.1
South Central Asia						
Afghanistan	7.0	7.2	6.4	-2.8	-11.1	-8.6
Bangladesh	6.7	6.7	3.9	0.0	-41.8	-41.8
Iran	7.3	6.5	4.5	-11.4	-30.1	-38.4
Kazakstan	4.4	3.1	2.4	-29.5	-22.6	-45.5
Kyrgystan	5.4	4.1	3.3	-24.0	-19.5	-38.9
Maldives	7.0	7.0	6.1	0.0	-12.9	-12.9
Pakistan	7.0	7.0	5.6	0.0	-20.0	-20.0
Tajikistan	6.3	5.9	4.5	-6.3	-23.7	-28.6
Turkmenistan	6.8	5.3	3.6	-22.0	-32.1	-47.0
Uzbekistan	6.6	5.1	3.5	-22.7	-31.3	-47.0
Southeast Asia						
Brunei	6.7	4.4	2.8	-34.3	-36.4	-58.2
Indonesia	5.4	4.7	2.6	-13.0	-44.7	-51.9
Malaysia	6.7	4.2	3.2	-37.3	-23.8	-52.2
West Asia						
Azerbaijan	5.6	3.6	2.4	-35.7	-33.3	-57.1
Bahrain	7.2	5.2	3.4	-27.8	-34.6	-52.8
Iraq	7.2	6.6	5.2	-8.3	-21.2	-27.8
Jordan	8.0	7.4	5.1	-7.5	-31.1	-36.3
Kuwait	7.3	5.9	5.9	-19.2	-50.8	-60.0
Lebanon	6.4	4.3	2.7	-32.8	-37.2	-57.8
Oman	7.2	7.2	6.7	-0.0	-6.9	-6.9
Qatar	7.0	6.1	4.0	-12.9	-34.4	-42.9
Saudi Arabia	7.3	7.3	5.9	0.0	-19.2	-19.2
Syria	7.5	7.4	5.4	- 1.3	-27.0	-28.0
Turkey	6.1	4.5	3.0	-26.2	-33.3	-50.8
United Arab Emirates	6.9	5.7	3.9	-17.4	-31.5	-43.5
Yemen	7.6	7.6	7.1	0.0	-6.6	-6.6

[1] Source: United Nations (1995)

Table 2 Socioeconomic development patterns in Muslim countries

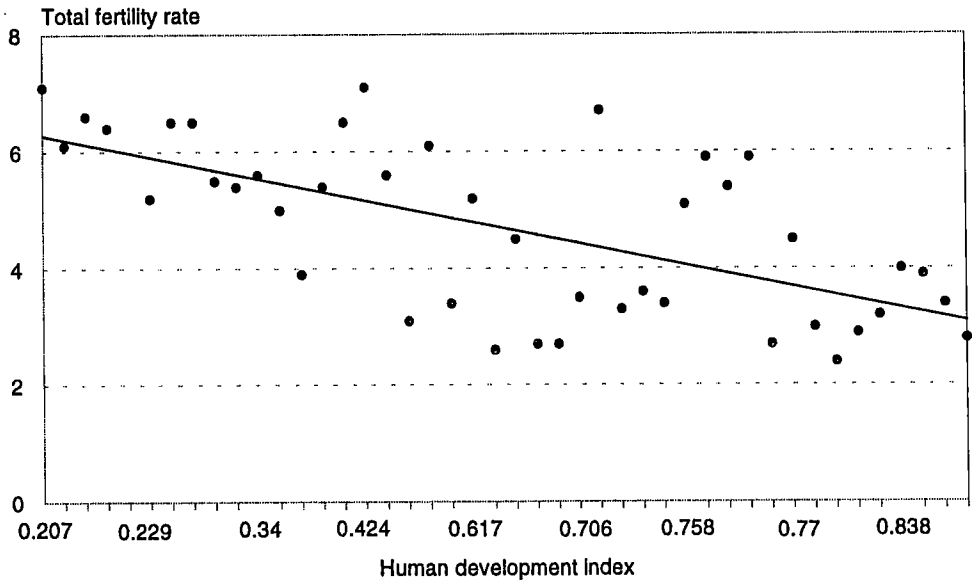
Total population, human development index and family planning program effort score, Muslim countries, 1994-1996

Region/country	Total population[1] (millions) 1996	Human development index[2] 1995	Family planning effort score[3] 1994
East Africa			
Comoros	0.7	.415	NA
Djibouti	0.6	.336	NA
Somalia	9.5	.246	NA
North Africa			
Algeria	28.6	.732	44
Egypt	64.2	.613	59
Libya	5.6	.716	NA
Morocco	27.6	.554	63
Sudan	28.9	.379	29
Tunisia	9.1	.736	82
West Africa			
Chad	6.5	.296	27
Gambia	1.2	.229	NA
Guinea	6.9	.237	50
Mali	11.1	.222	45
Mauritania	2.3	.359	32
Niger	9.5	.207	46
Senegal	8.5	.340	50
Sierra Leone	4.6	.221	47
South Central Asia			
Afghanistan	21.5	.228	NA
Bangladesh	123.1	.369	69
Iran	68.7	.770	61
Kazakstan	17.2	.798	34
Kyrgystan	4.8	.717	36
Maldives	0.3	.554	NA
Pakistan	144.5	.483	49
Tajikistan	6.3	.643	NA
Turkmenistan	4.2	.731	NA
Uzbekistan	23.3	.706	54
Southeast Asia			
Brunei	0.3	.868	NA
Indonesia	200.6	.637	84
Malaysia	20.6	.822	54
West Asia			
Azerbaijan	7.6	.696	NA
Bahrain	0.6	.862	NA
Iraq	21.0	.617	NA
Jordan	5.7	.758	40
Kuwait	1.5	.821	23
Lebanon	3.1	.675	32
Oman	2.3	.715	45
Qatar	0.6	.838	NA
Saudi Arabia	18.4	.762	5
Syria	15.2	.761	48
Turkey	63.9	.792	54
United Arab Emirates	1.9	.861	14
Yemen	15.1	.324	30

NA = Not applicable
[1] UNFPA (1996
[2] UNDP (1995)
[3] Ross and Mauldin (1996)

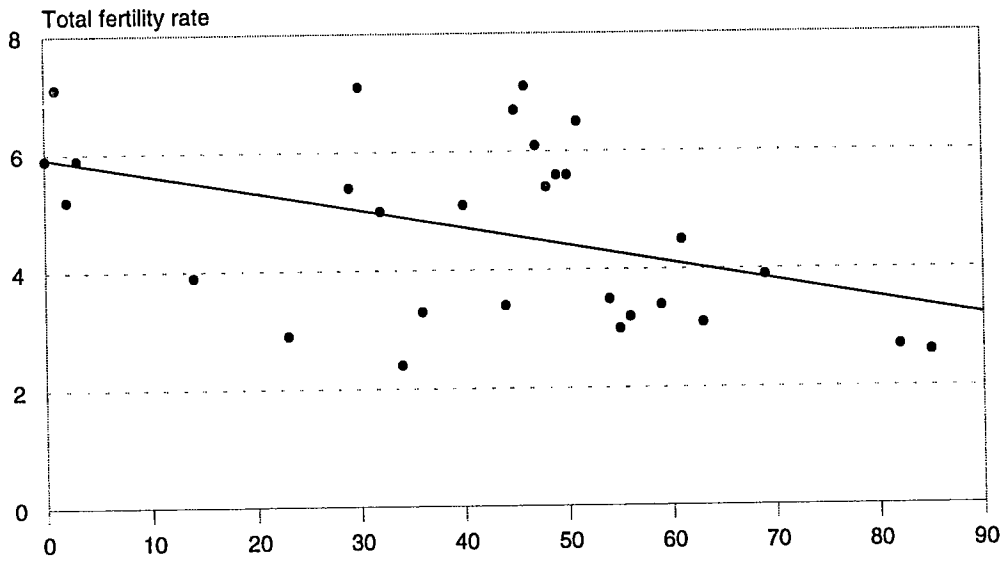
The correlations of the human development index and family planning effort scores with TFRs are presented in Figures 1 and 2, respectively. Bangladesh has demonstrated that with effective family planning efforts, fertility can be substantially reduced even when the human development index is low. Contrary examples can be found in West Asia, where Saudi Arabia, Syria, Jordan, and Oman, in spite of higher indexes of human development, have not achieved lower fertility levels, in the absence of any sizeable family planning program efforts. In the North African region, a combination of a higher human development index and higher scores on family planning program efforts have resulted in reduced fertility in all the countries with the exception of Libya and Sudan, where family planning program efforts have been negligible. It is important to note, however, that fertility rates in many Muslim countries had started declining even without proper family planning program efforts.

Figure 1
Relationship between human development index and total fertility rate, Muslim countries



UNDP 1995

Figure 2
Relationship between family planning program effort score and total fertility rate, Muslim countries



Ross and Mauldin 1996

Data Source

The Demographic and Health Surveys program (DHS) has conducted surveys in more than 50 countries, providing valuable information regarding women's reproductive behavior.[3] This report utilizes DHS data from nine countries to explain patterns and differentials in reproductive behavior. The nine countries have been included on the basis of the following criteria:

- Muslims constitute a majority of the population.
- Appropriate data have been recently collected.
- They represent several regions of the world.

Using the above mentioned criteria, the following countries are included:

Country	Region	Year of survey	Women interviewed	
			Age	Marital status
Egypt	North Africa	1992	15-49	Ever married
Morocco	North Africa	1992	15-49	All
Niger	West Africa	1992	15-49	All
Senegal	West Africa	1992-93	15-49	All
Jordan	West Asia	1990	15-49	Ever married
Turkey	West Asia	1993	<50	Ever married
Bangladesh	South Asia	1993-94	10-49	Ever married
Pakistan	South Asia	1990-91	15-49	Ever married
Indonesia	Southeast Asia	1991	15-49	Ever married

[3] For details regarding DHS see Curtis and Neitzel (1996) and individual country reports. Note that due to rounding, figures reported here may differ slightly from those reported in individual country reports.

From each country, information on socioeconomic characteristics of ever-married women (urban-rural residence and level of education), age at marriage, exposure to mass media (watching television regularly), knowledge of contraception, and past and current contraceptive use among currently married women is utilized. Two measures of fertility are employed: the mean number of children ever born to ever-married women and their total marital fertility rate, based on births during the five years prior to the survey.

Socioeconomic Profiles of Women

The socioeconomic profiles of women in the nine countries are diverse, as shown in Table 3. The majority of women in Jordan and Turkey live in urban areas (74 and 64 percent, respectively), while in Bangladesh and Niger not more than 15 percent are urban residents. In the other countries, between one-third and one-half of women are urban residents.

Due to the different policies adopted by each of these countries, a wide range of variation is also noted in educational attainment of women. While only about one-fifth of Indonesian women and about one-fourth of Jordanian and Turkish women have had no schooling, the majority of women in Morocco, Niger, Bangladesh, and Pakistan have had no schooling. Over half of Jordanian women (54 percent) have attained secondary or higher levels of education while only 20 percent or fewer have done so in other countries. Educational attainment is lowest among women in Niger, where only 8 percent of women have had any schooling.

Any potential fertility reducing effect of nonmarriage is minimal as nearly all women in Muslim societies marry. However, the rate at which women enter into marriage can have significant effects on reproductive behavior. Patterns of age at marriage differ substantially in the nine countries. Women in Niger and Bangladesh marry very early (more than three-quarters have married before the age of 17), followed by women in Senegal. On the other hand, delayed age at marriage (after age 21) is noted in Egypt, Morocco, Pakistan, Indonesia, Jordan, and Turkey; however, even in these countries, only about one-fourth or fewer of the women report an age at first marriage of 21 years or above.

Table 3 Socioeconomic profiles of ever-married women

Percent distribution of ever-married women 15-49 by their socioeconomic and demographic characteristics, Demographic and Health Surveys 1990-1993

	Residence		Education			Age at marriage				Watch television[1]		Number of women (weighted)
Region/country	Urban	Rural	None	Primary	Secondary+	<17	17-18	19-20	21+	No	Yes	
North Africa												
Egypt	46.6	53.4	48.3	32.2	19.5	32.8	21.5	17.3	28.3	17.7	82.3	9,864
Morocco	45.0	55.0	76.4	13.0	10.6	31.0	23.6	19.2	26.2	39.0	61.0	5,639
West Africa												
Niger	15.2	84.8	92.0	6.4	1.6	84.8	9.4	3.8	2.0	88.8	11.1	5,821
Senegal	34.4	65.6	72.4	17.7	9.9	62.7	17.7	9.9	9.6	70.6	29.3	4,732
South Asia												
Bangladesh	11.5	88.5	58.2	26.8	15.0	82.0	9.8	4.8	3.5	82.2	17.8	9,495
Pakistan	30.5	69.5	79.2	9.1	11.7	41.4	20.5	15.7	22.4	70.1	29.8	6,611
Southeast Asia												
Indonesia	29.2	70.1	19.1	60.9	20.0	44.8	22.8	15.0	17.4	60.7	39.2	22,909
West Asia												
Jordan	73.8	26.2	23.5	22.5	54.0	29.2	24.2	19.6	27.0	12.3	87.7	6,461
Turkey	64.1	35.9	27.1	55.4	17.5	29.7	26.1	20.1	24.1	11.0	89.0	6,519

[1] For Egypt, whether watch television daily
For Jordan, whether watch television rarely (no), occasionally/frequently (yes).
For all others, whether watch television once a week

Exposure to mass media is likely to have an important effect on reproductive behavior, especially in more traditional societies. While a fairly high percentage of women in North Africa and West Asia watch television regularly, a fairly low percentage in West Africa and South Asia report doing so. Since those who have access to television are likely to be economically better off, this is also a rough indicator of socioeconomic status.

The nine countries included in this study vary greatly in their levels of socioeconomic development; Niger is ranked the lowest and Turkey the highest. As we proceed further, these four indicators will be used to elucidate differentials in reproductive behavior.

Knowledge of Contraception

The striking decline in fertility in developing countries has been mainly due to increasing prevalence in contraceptive use. Robey et al. (1992) have referred to this as a "reproductive revolution," which they contend is likely to spread throughout the developing world. Tsui (1985) considered knowledge of contraception as the first stage in the diffusion of family planning.

As shown in Figure 3, knowledge of contraception among currently married women of reproductive age is universal in six of the nine Muslim countries. Although women in Pakistan, Senegal, and Niger are behind their counterparts in the other six countries, more than three-quarters of married women in these countries are aware of a method. Knowledge is lowest in the two West African countries and declines even further when only modern methods are considered.

Differentials in Knowledge

Table 4 presents the percentage of currently married women who know a contraceptive method, according to age. In Egypt, Morocco, Bangladesh, and Turkey, knowledge is universal among women of all ages. In the remaining countries, knowledge is generally somewhat lower among the youngest and oldest women. The same holds true when only modern methods of contraception are considered.

Knowledge of contraception is likely to be affected by the socioeconomic characteristics of women and their exposure to mass media. As shown in Tables 5 and 6, in Niger, Senegal, and Pakistan, knowledge of contraception among women who live in urban areas, women who have secondary or higher level of education, and women who are exposed to mass media is higher than the national average, approaching the high levels observed in other countries. In the remaining six countries knowledge of contraception is nearly universal across all socioeconomic characteristics of women.

Figure 3
Percentage of currently married women age 15-49 who know a contraceptive method and who know a modern method

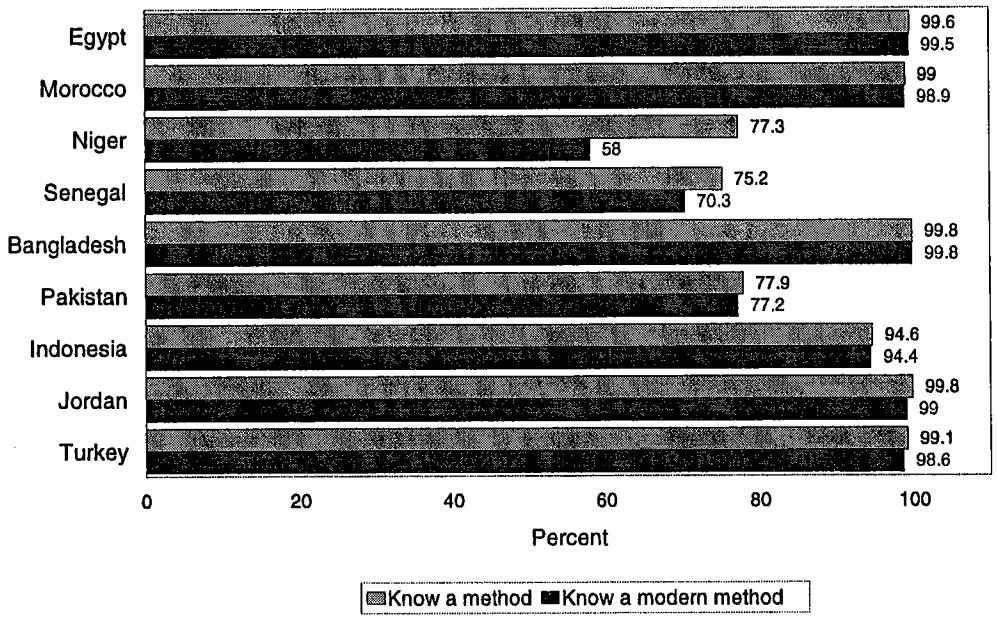


Table 4 Knowledge of any contraceptive method by age

Percentage of currently married women 15-49 who have knowledge of any method or any modern method of contraception by age, Demographic and Health Surveys 1990-1993

	Age group														Number of women (weighted)
	Any method							Any modern method							
Region/country	15-19	20-24	25-29	30-34	35-39	40-44	45-49	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
North Africa															
Egypt	98.2	99.6	99.7	100.0	99.6	99.4	99.4	99.7	99.6	99.7	99.9	99.6	99.4	99.3	9,153
Morocco	98.8	99.0	98.9	99.3	99.1	98.9	98.4	99.8	99.0	98.8	99.3	99.1	98.9	98.2	5,118
West Africa															
Niger	64.7	77.3	81.6	79.7	77.8	78.4	80.4	48.9	58.3	64.1	59.7	59.9	58.2	48.9	5,560
Senegal	62.7	73.5	79.4	77.3	78.1	74.9	72.2	59.5	69.3	75.4	72.9	73.6	68.8	63.5	4,450
South Asia															
Bangladesh	99.5	99.7	99.9	99.9	99.8	99.4	100.0	99.5	99.7	99.9	99.9	99.8	99.4	100.0	8,980
Pakistan	66.3	75.0	77.4	81.8	81.5	78.7	77.8	65.8	74.4	76.7	81.2	81.3	77.9	76.6	6,364
Southeast Asia															
Indonesia	89.5	97.1	96.1	96.5	96.2	92.9	86.7	88.9	97.0	95.9	96.3	96.0	92.7	86.2	21,109
West Asia															
Jordan	99.3	99.9	100.0	99.9	99.8	99.8	99.8	88.3	98.4	99.1	99.6	99.2	98.6	95.4	6,168
Turkey	98.5	98.8	99.3	99.7	99.5	99.3	97.6	97.8	99.1	99.8	99.4	98.9	98.5	97.8	6,270

Table 5 Knowledge of any contraceptive method by socioeconomic characteristics

Percentage of currently married women who have knowledge of any method of contraception, by selected socioeconomic characteristics, Demographic and Health Surveys 1990-1993

	Residence		Education			Watch television		Number of women (weighted)
Region/country	Urban	Rural	None	Primary	Secon-dary+	No	Yes	
North Africa								
Egypt	99.8	99.4	99.3	99.8	100.0	98.9	99.4	9,153
Morocco	99.8	98.3	98.7	100.0	100.0	98.4	99.4	5,118
West Africa								
Niger	93.0	74.6	76.4	84.9	96.7	75.1	92.7	5,560
Senegal	90.0	68.1	71.2	94.8	98.6	68.3	92.8	4,450
South Asia								
Bangladesh	99.9	99.7	99.6	100.0	100.0	99.7	100.0	8,980
Pakistan	91.3	72.0	73.8	91.7	94.9	71.6	92.9	6,364
Southeast Asia								
Indonesia	97.9	93.3	84.6	95.9	99.6	89.2	98.0	21,109
West Asia								
Jordan	99.9	99.7	99.7	99.8	99.8	99.8	99.8	6,168
Turkey	99.5	98.7	97.7	99.5	100.0	97.2	99.3	6,270

Table 6 Knowledge of any modern contraceptive method by socioeconomic characteristics

Percentage of currently married women who have knowledge of any modern method of contraception, by selected socioeconomic characteristics, Demographic and Health Surveys 1990-1993

	Residence		Education			Watch television		Number of women (weighted)
Region/country	Urban	Rural	None	Primary	Secon-dary+	No	Yes	
North Africa								
Egypt	99.8	99.3	99.1	99.8	100.0	98.7	99.8	9,153
Morocco	99.8	98.2	98.6	100.0	100.0	98.3	99.4	5,118
West Africa								
Niger	88.6	53.0	56.5	72.2	96.7	54.3	89.6	5,560
Senegal	88.5	61.8	65.6	94.2	98.6	62.2	91.4	4,450
South Asia								
Bangladesh	99.9	99.7	99.6	100.0	100.0	99.7	100.0	8,980
Pakistan	90.6	71.4	73.0	91.7	94.5	70.7	92.7	6,364
Southeast Asia								
Indonesia	97.8	93.0	84.0	95.7	99.5	88.2	97.9	21,109
West Asia								
Jordan	99.4	97.8	99.7	99.1	99.7	97.3	99.2	6,168
Turkey	99.2	97.6	96.6	99.2	100.0	94.8	99.3	6,270

Ever Use of Contraception

As illustrated in Figure 4, experience with ever having used a method of contraception varies greatly across countries. Levels of ever use are lowest in Niger, Senegal, and Pakistan, where only 4, 11, and 17 percent of women, respectively, have ever used a modern method. In contrast, more than half of the women in Jordan, about three-fifths in Morocco, Bangladesh, and Turkey, and about two-thirds in Egypt and Indonesia report ever use of a modern method. There is no association between ever use of a modern method and a traditional method. For example, among the countries that report high levels of use of a modern method, Turkey and Jordan also report fairly high levels of ever use of a traditional method, while ever use of a traditional method is fairly low in Egypt and Indonesia. Interestingly, in the two countries reporting the lowest ever use of a modern method (Niger and Senegal) ever use of a traditional method is equally popular. In the six countries where over half of the women have used a modern method, the pill is the most widely used method, and in Egypt, Jordan, and Turkey, the IUD is as widely used as the pill (Table 7). Other popular modern methods are injection and the IUD in Indonesia, and condoms in Bangladesh and Turkey. In the two countries where women reported the highest levels of ever use of a traditional method, an overwhelming majority in Turkey used withdrawal, while in Jordan about half used withdrawal and the other half used periodic abstinence. Although withdrawal is mentioned as an accepted form of birth control in Islamic scriptures, it does not seem to be widely used in the majority of Muslim countries.

Figure 4
Percentage of currently married women age 15-49 who have ever used a modern contraceptive method and who have used a traditional method

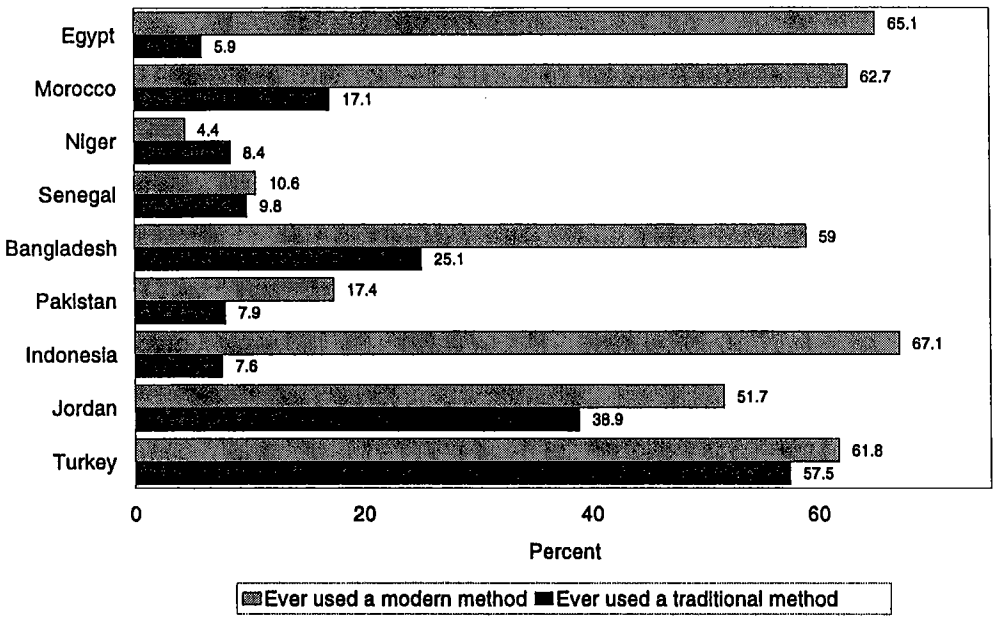


Table 7 Ever use of contraceptive methods

Percentage of currently married women 15-49 who have ever used a specific contraceptive method, Demographic and Health Surveys, 1990-1993

Region/country	Any method	Any modern method	Pill	IUD	Injection	Vaginal method	Condom	Sterilization		Norplant	Any traditional method	Periodic abstinence	Withdrawal	Other traditional method	Number of women (weighted)
								Female	Male						
North Africa															
Egypt	65.9	65.1	45.2	41.7	3.0	3.7	7.9	1.1	0.0	0.2	5.9	3.5	2.7	0.9	9,153
Morocco	66.2	62.7	59.5	9.4	1.6	2.1	5.6	3.0	0.1	NA	17.1	9.4	8.7	2.0	5,118
West Africa															
Niger	11.4	4.4	3.6	0.4	0.8	0.2	0.3	0.1	0.0	NA	8.4	0.7	0.4	7.6	5,560
Senegal	16.8	10.6	6.8	3.2	0.7	1.1	2.9	0.4	0.0	0.0	9.8	3.0	1.3	6.5	4,450
South Asia															
Bangladesh	65.7	59.0	44.1	7.7	11.6	NA	14.7	8.1	1.4	NA	25.1	17.1	10.6	3.6	8,980
Pakistan	20.7	17.4	4.5	3.3	3.3	0.5	7.2	3.5	0.1	1.3	7.9	5.0	3.8	0.6	6,364
Southeast Asia															
Indonesia	69.3	67.1	38.7	22.8	28.1	0.1	5.0	2.7	0.6	3.6	7.6	3.3	3.1	2.5	21,109
West Asia															
Jordan	64.9	51.7	33.2	30.8	1.4	7.1	6.8	5.6	0.0	NA	38.9	17.0	17.4	19.2	6,168
Turkey	80.1	61.8	34.1	34.6	2.1	10.1	23.7	2.9	0.1	NA	57.5	7.1	54.1	3.4	6,270

NA = Not applicable

Differentials in Ever Use

Use of contraception is likely to vary across the stage of a woman's reproductive career (her age and number of children), her socioeconomic status, and her exposure to mass media.

As shown in Table 8, in countries where the percentage of currently married women who have ever used contraceptives is high, about half or more of women in their twenties report ever having used a method, increasing to about three-quarters of women in their thirties. In fact, in Morocco, Bangladesh, Indonesia, and Turkey, about 4 out of 10 teenage women have used a method. A similar pattern is reported for ever use of a modern method. About six-tenths of women between ages 20-44 report ever use of a modern method in Morocco, Bangladesh, and Indonesia and about four-tenths of teens have used a modern method. In Pakistan, the highest percentage of ever use is reported by one-fourth of women in their late thirties, whereas in Niger and Senegal ever use remains very low at all ages.

As expected, the number of living children is positively associated with ever use (Table 9). In Egypt, Jordan, Niger, Pakistan, and Senegal very few women who have no children have ever used a method. In Egypt and Jordan ever use increases to more than 50 percent among women with 1-2 children and more than 60 percent among those with three or more children. On the other hand, in Niger, Senegal, and Pakistan, ever use among women with even five or more children remains low. In Bangladesh, Indonesia, Morocco, and Turkey ever use of a method is reported by between 20 to 30 percent of women without any children and reaches higher proportions as the number of living children increases. The same pattern is repeated for ever use of a modern method.

Table 8 Ever use of contraceptive methods by age

Percentage of currently married women 15-49 who have ever used any contraceptive method or any modern contraceptive method, by age, Demographic and Health Surveys 1990-1993

Region/country	Age group													Number of women (weighted)
	Any method							Any modern method						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
North Africa															
Egypt	20.2	44.8	66.7	78.0	77.9	75.4	68.7	18.8	42.6	64.8	76.1	76.4	73.8	67.5	9,153
Morocco	43.1	60.9	65.9	71.9	70.5	70.9	59.1	39.9	57.9	62.7	67.8	67.0	67.8	55.0	5,118
West Africa															
Niger	4.0	12.4	13.4	15.1	12.3	9.7	8.6	1.3	4.5	5.3	6.4	5.2	2.9	2.6	5,560
Senegal	4.6	13.0	20.6	21.4	20.5	18.1	12.9	1.0	6.8	13.2	14.8	14.1	11.0	7.0	4,450
South Asia															
Bangladesh	43.3	64.7	74.5	76.2	76.5	65.7	49.3	36.3	58.3	69.1	70.8	69.6	56.8	38.4	8,980
Pakistan	3.1	12.9	19.1	24.0	32.1	25.9	19.6	2.3	8.2	15.5	19.4	25.8	20.1	15.8	6,364
Southeast Asia															
Indonesia	39.1	66.9	75.7	78.4	76.4	67.8	50.3	38.2	65.1	73.6	76.5	74.0	65.2	46.8	21,109
West Asia															
Jordan	20.9	46.0	66.9	77.3	75.9	74.7	67.1	8.9	30.3	50.4	63.7	65.5	64.7	55.9	6,168
Turkey	37.4	70.7	84.7	88.4	87.9	83.1	78.0	16.6	47.2	65.7	72.1	71.7	66.2	59.3	6,270

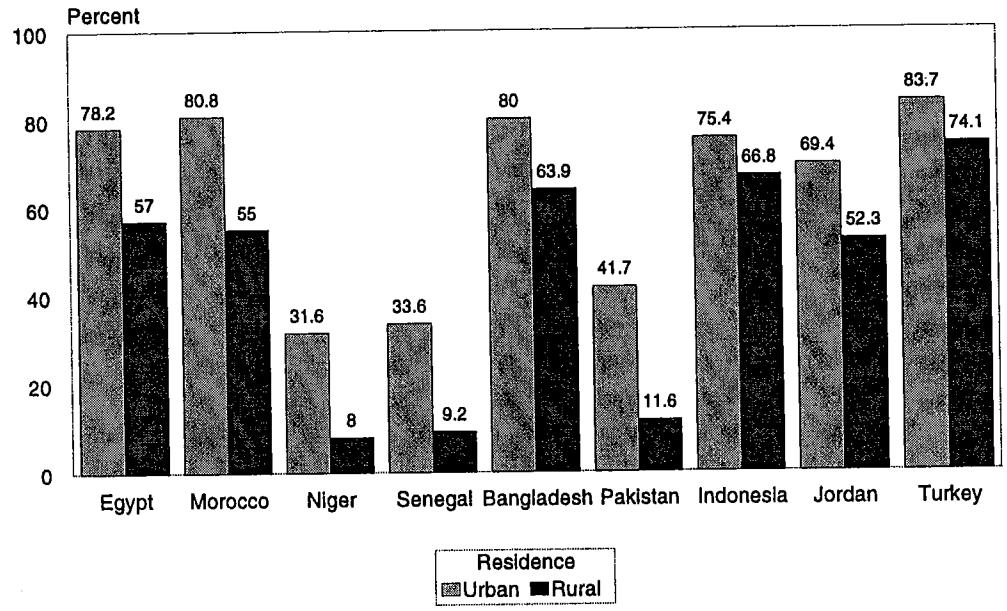
Table 9 Ever use of contraceptive methods by number of living children

Percentage of currently married women 15-49 who have ever used any method or any modern method of contraceptives, by number of living children, Demographic and Health Surveys 1990-1993

Region/country	Number of living children								Number of women (weighted)
	Any method				Any modern method				
	0	1-2	3-4	5+	0	1-2	3-4	5+	
North Africa									
Egypt	1.7	63.5	79.5	76.9	1.7	61.2	77.5	75.4	9,153
Morocco	24.0	68.3	74.5	72.3	20.1	64.8	71.3	68.7	5,118
West Africa									
Niger	1.9	10.8	13.6	15.3	0.6	3.7	5.5	6.3	5,560
Senegal	4.2	14.5	19.0	21.2	2.4	8.7	11.8	13.8	4,453
South Asia									
Bangladesh	29.8	67.4	76.2	70.1	22.8	61.2	70.2	61.7	8,980
Pakistan	1.3	12.7	26.0	29.9	0.8	9.4	19.5	24.7	6,364
Southeast Asia									
Indonesia	19.1	73.0	79.8	69.9	17.7	70.7	77.4	67.9	21,109
West Asia									
Jordan	3.1	52.9	75.1	77.2	1.0	33.4	60.9	64.7	6,168
Turkey	23.7	86.8	90.4	75.6	10.6	65.2	72.0	63.4	6,270

In each of the nine countries, urban residents report much higher levels of ever use of a method (Figure 5) than do rural residents. The differences between urban and rural residents are most pronounced in Niger, Senegal, and Pakistan, where urban residents report four times higher levels of ever use of a method than their counterparts in rural areas. The urban-rural differential is least pronounced in Indonesia and Turkey. Similar patterns (not shown) are reported for ever use of a modern method.

Figure 5
Percentage of currently married women age 15-49 who have ever used any contraceptive method, by urban rural residence



A positive association between education and contraceptive use is clearly illustrated in Figure 6. In countries with overall low levels of ever use, use increases steadily across education groups. For example, the most dramatic effect of education is seen in Niger and Senegal, where nearly 7 out of 10 women with secondary or higher education have ever used a method, compared with only about 10 percent among those with no education. In Pakistan as well, the most educated women report substantially higher levels of ever use. In countries with high overall levels of ever use, the educational differentials are greater between women with no education and any education (primary or secondary). In Morocco and Turkey 9 out of 10 women, with secondary or higher level of education report ever use of any method, about one-third higher than women with no education. In Egypt, Bangladesh, Indonesia, and Jordan, the differences in ever use of any method between uneducated and more educated women are not as substantial as in Morocco and Turkey, but they do exist. Patterns of ever use of a modern method (not shown) generally repeat the patterns of ever use of any method. Women in Niger, Senegal, and Pakistan exhibit the greatest educational differentials.

Figure 6
Percentage of currently married women age15-49 who have ever used any contraceptive method, by education

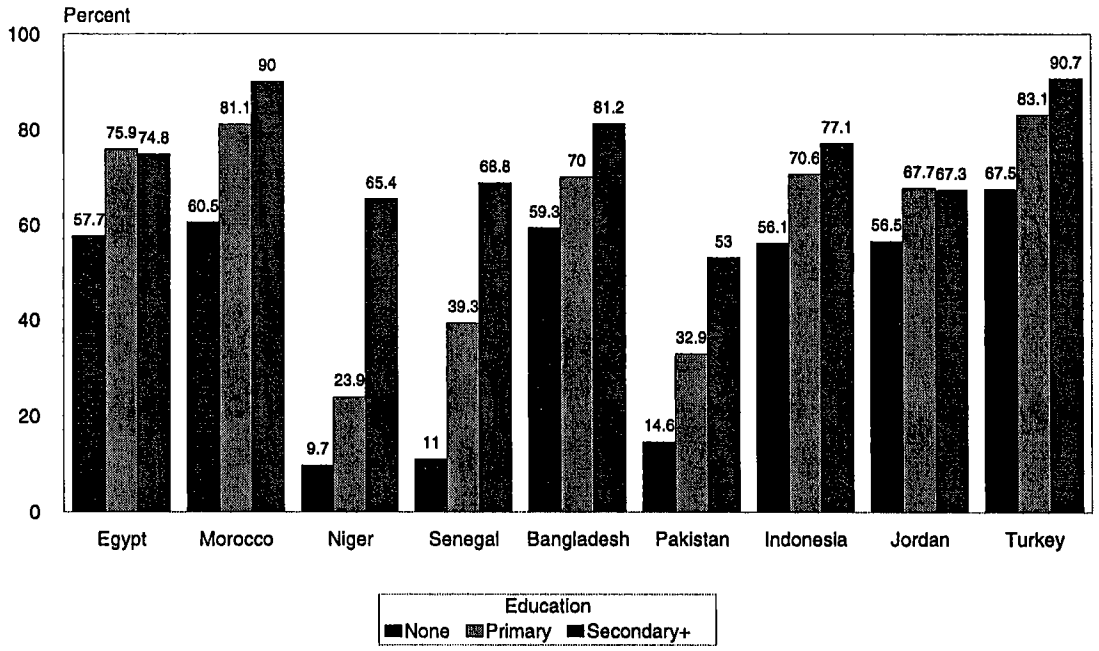
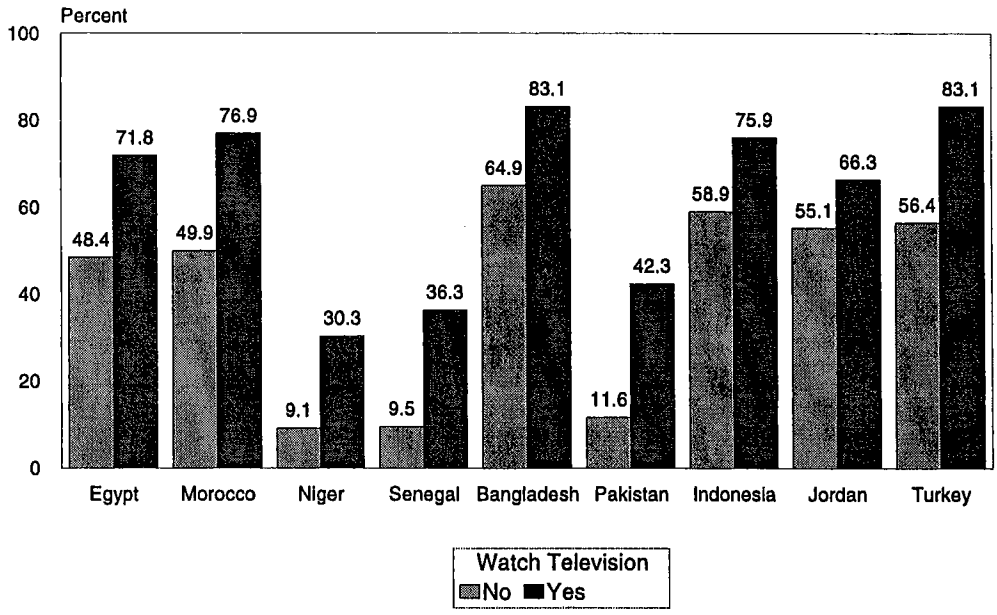


Figure 7
Percentage of currently married women age 15-49 who have ever used any contraceptive method, by whether or not they watch television



Watching television regularly seems to have a strong association with ever use of contraceptives, especially in countries where the overall percentage of ever use is low (Figure 7). Thus, 30 to 40 percent of those who watch television regularly in Niger, Senegal, and Pakistan report having ever used a method, whereas only 10 percent of those who do not watch regularly have done so. In these countries, ownership of television is probably also a powerful predictor of level of education and socioeconomic status. The smallest use differential is seen in Jordan.

Current Use of Contraception

During the past two decades, current use of contraceptives has shown an upward trend in all countries (Curtis and Neitzel, 1996). Many Muslim countries have followed the same trend, as shown in Table 10. Since the mid-1970s, current use of contraception has more than doubled in all countries, except Jordan. The increase in the prevalence of modern method use is more striking. The most dramatic increase is reported for Bangladesh where between the mid-1970s and the early 1990s, current use of any method increased fivefold, and modern method use sixfold. Jordan has made slow progress and Senegal and Pakistan have remained far behind in the level of current use of contraception. Levels of use of both modern and traditional methods are summarized in Figure 8.

As shown in Table 11, more than half of the current users of a modern method in Egypt, Jordan, and Turkey are IUD users. In Morocco and Bangladesh on the other hand, the pill is the more common method, especially in Morocco, where 8 out of 10 current users of a modern method use the pill. Method mix is greatest in Indonesia, where the IUD, pill, and injections are all used. Female sterilization is the most common method in Pakistan. In Niger and Senegal, about half of the few current users of a modern method are using the pill. In Turkey, men's role in current use of contraceptives appears substantial—as withdrawal is the most common of all methods, followed by the condom. One-half of all users in Turkey use withdrawal or the condom. While legal abortions are available in Turkey in cases of failure of a traditional method, they are not provided as part of the national family planning program (Jacobson, 1994).

Differentials in Current Use

Current use of contraceptives is expected to be higher in the later years of childbearing, as women have more children, and among those who are urban residents, more educated, and more exposed to mass media.

Table 12 shows levels of current use of contraception by age. In Morocco, Bangladesh, Indonesia, and Turkey, about one-fourth of women below age 20 report current use of any method. Current use in all countries follows the typical inverted U-shaped pattern, being highest in the middle aged groups. The same pattern for current use of modern methods is noted in the nine countries. The reliance on traditional methods in Jordan and Turkey exists in all age groups. In Niger and Senegal the prevalence rate of any method does not exceed 10 percent in any age group; in Pakistan prevalence peaks at 20 percent among women age 35-39.

The negative relationship between current use of contraceptives and fertility is well established (World Bank, 1993). In most countries, current use is negligible among women with no living children, as shown in Table 13. However, about 1 in 10 nulliparous women in Bangladesh, Indonesia, and Turkey report use of a method.

Significant urban-rural differentials in current use of contraceptive methods exist in all countries, especially in countries where overall prevalence is low (Figure 9). Thus, in urban areas of Niger, Senegal, and Pakistan, current use of any method is 4 to 5 times higher than in rural areas. The difference in current use of any method, between rural and urban residents, is also large in Egypt, Morocco, and Jordan. Use of modern methods exhibits the same patterns.

Educational differentials in current use vary across low and high prevalence countries. In countries where current use is low, the effect of female education on current use is more profound for those who have had secondary or higher schooling. Thus, in Niger and Senegal, current use of any method is 10 times higher (Figure 10) among women with secondary or higher schooling compared with those without any schooling. In Pakistan, the highest educated women report about four times higher use than uneducated women. In countries with higher overall levels of prevalence, the greatest educational differentials are found between women who have no schooling and women who have schooling (whether it is primary or secondary).

Contraceptive prevalence is higher in every country among women who watch television at least once a week (Figure 11 shows use of any method). Differentials are large in both high and low prevalence countries. Bangladesh and Jordan are notable for exhibiting the smallest use differentials with regard to media exposure.

Table 10 Trends in current use of contraception

Trends in current use of any contraceptive method and any modern contraceptive method, World Fertillity Surveys (WFS) and Demographic and Health Surveys (DHS)

Region/ country/ survey year	Source	Any method	Any modern method
North Africa			
Egypt			
1980	WFS	25	23
1991	DHS	48	46
Morocco			
1979/80	WFS	20	17
1992	DHS	42	36
West Africa			
Niger[1]			
1992	DHS	4	2
Senegal			
1978	WFS	4	1
1992	DHS	8	5
South Asia			
Bangladesh			
1975	WFS	8	5
1993/94	DHS	45	36
Pakistan			
1975	WFS	5	4
1990/91	DHS	12	9
Southeast Asia			
Indonesia			
1976	WFS	25	23
1991	DHS	50	47
West Asia			
Jordan			
1976	WFS	26	18
1990-91	DHS	41	27
Turkey			
1988	WFS	38	13
1993	DHS	63	35

[1] Information on earlier period not available for Niger.

Table 11 Current use of contraceptive methods

Percentage of currently married women 15-49 who are currently using specific contraceptive methods, Demographic and Health Surveys, 1990-1993

Region/country	Any method	Any modern method	Pill	IUD	Injection	Vaginal method	Condom	Sterilization		Norplant	Any traditional method	Periodic abstinence	Withdrawal	Other traditional method	Number of women (weighted)
								Female	Male						
North Africa															
Egypt	46.3	44.8	12.9	27.9	0.5	0.4	2.0	1.1	0.0	0.0	1.6	0.7	0.7	0.2	9,153
Morocco	41.5	35.5	28.1	3.2	0.1	0.2	0.9	3.0	0.0	NA	6.01	3.0	2.6	0.3	5,118
West Africa															
Niger	4.4	2.3	1.5	0.2	0.5	0.0	0.0	0.1	0.0	NA	2.2	0.1	0.0	2.1	5,560
Senegal	7.4	4.8	2.2	1.4	0.2	0.1	0.4	0.4	0.0	0.0	2.7	0.8	0.1	1.8	4,450
South Asia															
Bangladesh	44.6	36.2	17.4	2.2	4.5	0.0	3.0	8.17	1.1	0.0	8.4	4.8	2.51	1.1	8,980
Pakistan	11.8	9.04	0.7	1.3	0.8	0.0	2.7	3.5	0.0	0.0	2.8	1.3	1.2	0.3	6,364
Southeast Asia															
Indonesia	49.7	47.1	14.8	13.3	11.7	0.0	0.8	2.7	0.6	3.1	2.6	1.1	0.7	0.8	21,109
West Asia															
Jordan	39.9	26.9	4.6	15.3	0.0	0.6	0.8	5.6	0.0	NA	13.1	3.9	4.0	5.2	6,168
Turkey	62.6	35.5	4.9	18.8	NA	1.31	6.7	2.9	0.0	NA	28.1	1.0	26.2	0.9	6,270

NA = Not applicable

Table 12 Current use of contraceptive methods by age

Percentage of currently married women 15-49 who are currently using any method or any modern method of contraception, by age, Demographic and Health Surveys 1990-1993

Region/country	Age group														Number of women (weighted)
	Any method							Any modern method							
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
North Africa															
Egypt	13.3	29.7	46.0	58.8	59.6	55.5	34.5	12.7	28.5	44.2	56.4	57.0	52.4	30.3	9,153
Morocco	23.3	35.2	39.5	45.4	47.8	47.0	35.1	22.1	32.1	35.3	38.8	39.4	39.2	28.4	5,118
West Africa															
Niger	2.2	5.4	5.4	5.4	4.7	3.4	2.0	0.8	2.2	2.8	2.6	3.0	1.7	1.7	5,560
Senegal	2.2	4.9	8.4	9.0	9.4	9.9	5.8	0.5	2.2	4.9	6.3	6.8.	7.2	3.5	4,450
South Asia															
Bangladesh	24.7	37.6	50.6	57.2	58.5	51.9	29.3	19.6	32.0	43.5	46.1	46.7	38.2	21.3	8,980
Pakistan	2.6	6.3	9.3	13.4	20.4	15.8	11.8	1.9	3.8	7.4	9.6	15.8	12.8	10.3	6,364
Southeast Asia															
Indonesia	30.0	51.0	53.6	56.8	57.5	48.3	27.4	29.1	49.4	51.2	54.1	53.7	44.8	25.0	21,109
West Asia															
Jordan	12.3	28.1	37.2	48.5	52.3	51.6	33.7	3.9	16.4	25.3	33.3	37.8	37.1	24.2	6,168
Turkey	24.1	51.1	68.0	76.5	76.8	61.0	41.7	9.3	28.2	41.7	46.0	41.0	29.2	17.5	6,270

Figure 8
Percentage of currently married women age 15-49 currently using a modern or traditional contraceptive method

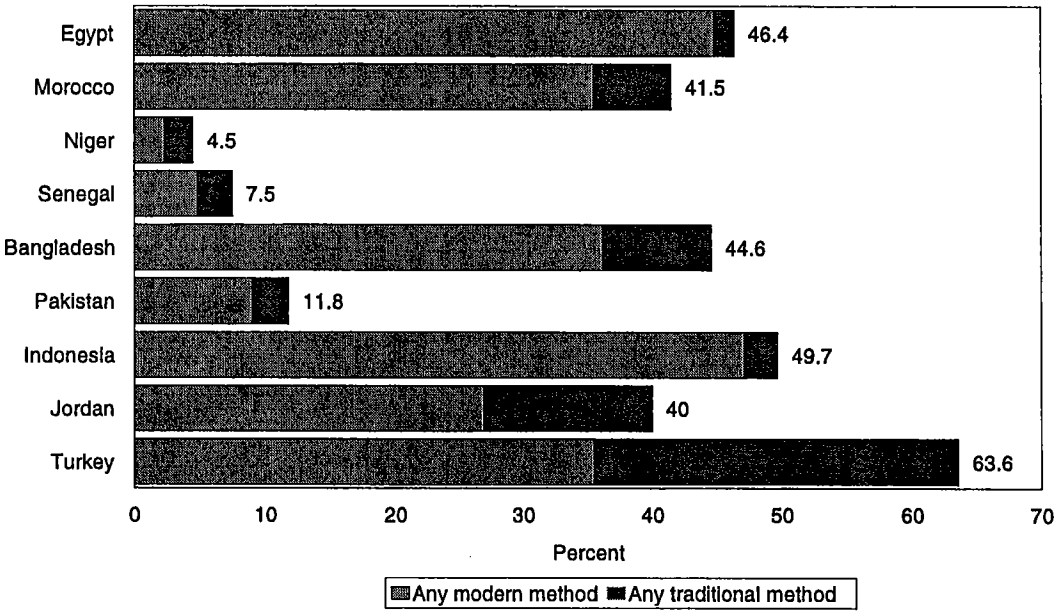


Table 13 Current use of contraceptive methods by number of living children

Percentage of currently married women 15-49 who are currently using any method or any modern method of contraception, by number of living children, Demographic and Health Surveys 1990-1993

	Number of living children								Number of women (weighted)
	Any method				Any modern method				
Region/country	0	1-2	3-4	5+	0	1-2	3-4	5+	
North Africa									
Egypt	0.5	43.6	58.6	52.3	0.5	41.3	56.1	49.4	9,153
Morocco	5.6	43.1	49.1	46.5	3.6	38.4	42.1	39.0	5,118
West Africa									
Niger	0.2	4.3	5.6	5.7	0.1	1.8	3.0	3.3	5,560
Senegal	1.7	5.5	7.5	10.9	1.2	3.0	4.6	7.4	4,450
South Asia									
Bangladesh	13.3	42.9	57.2	49.0	9.0	36.2	48.0	36.8	8,980
Pakistan	0.1	6.9	14.0	18.3	0.1	4.9	10.2	14.6	6,364
Southeast Asia									
Indonesia	7.7	54.0	59.1	46.5	7.2	51.4	55.9	43.4	21,109
West Asia									
Jordan	0.9	30.6	46.8	48.3	0.3	16.4	31.9	34.0	6,168
Turkey	8.6	70.6	71.3	54.7	2.9	40.3	37.9	30.2	6,270

Figure 9
Percentage of currently married women age 15-49 who are currently using any contraceptive method, by urban-rural residence

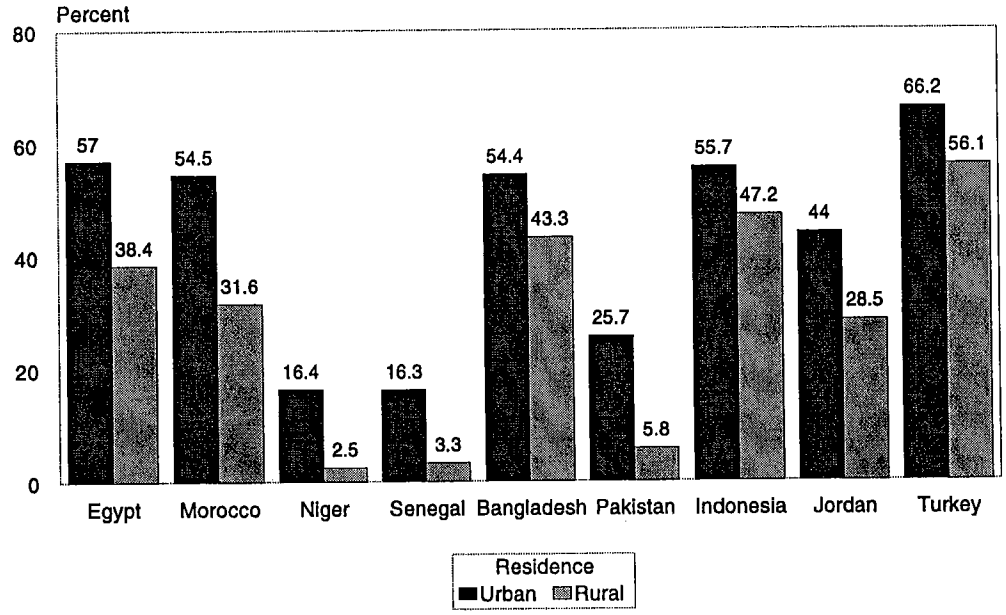


Figure 10
Percentage of currently married women age 15-49 who are currently using any contraceptive method, by education

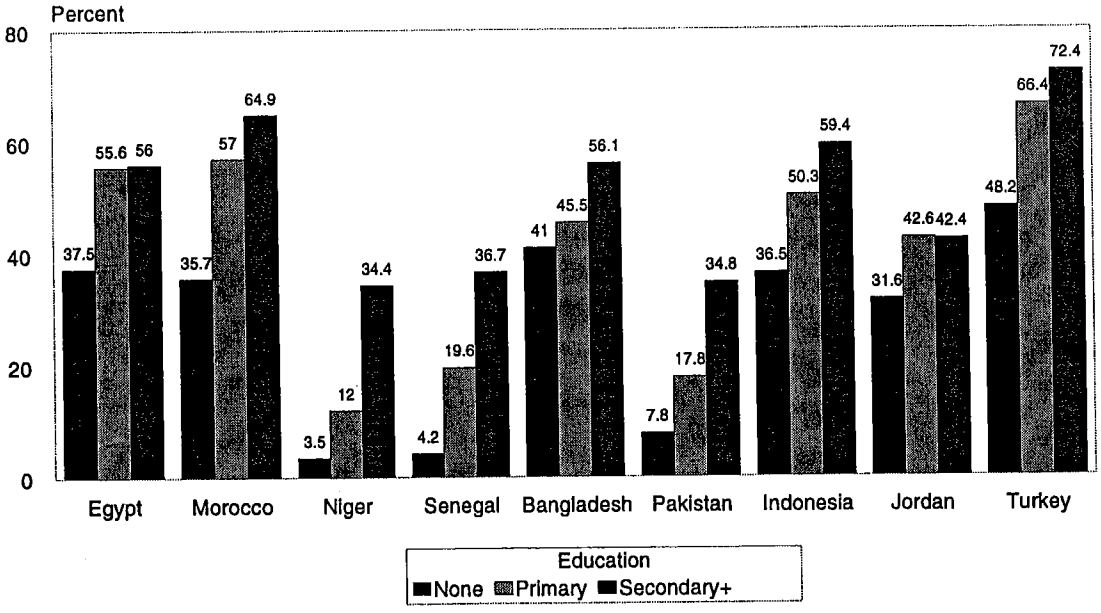
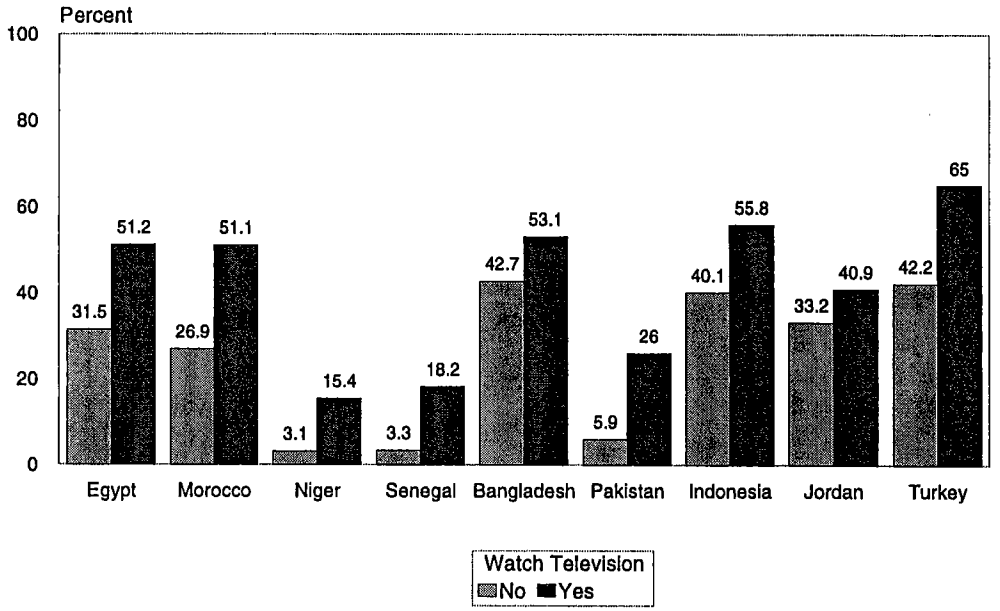


Figure 11
Percentage of currently married women age 15-49 who are currently using any contraceptive method, by whether or not they watch television



Marital Fertility

As shown earlier, Muslim countries are at varying levels of fertility transition. In this section, marital fertility levels and differentials are examined. Two fertility measures are used here. The first is based on the number of births to ever-married women over their reproductive life span and the second is duration-specific fertility in the five years preceding the surveys. The mean number of children ever born to women who are now 40-49 years of age (mean CEB) is a measure of completed fertility and the total marital fertility rate (TMFR) measures current fertility.

Figure 12 presents the mean number of children ever born to women age 40-49 for the nine countries. The lowest completed fertility is observed in Turkey (4.7) and Indonesia (5.0). The highest fertility is observed in Jordan (8.3); Senegal and Niger also show high completed fertility, each with more than seven children. Three of the remaining countries have means of about 6.5.

Current fertility, as measured by the TMFR, is shown in Figure 13 for women who have been married for less than 20 years and for less than 30 years. If marital duration-specific fertility were to remain the same, a married Turkish woman would bear, on average, just over three children by the end of her reproductive period. Thus, if the schedule of duration-specific marital fertility of women who have been married for less than 20 years were maintained, an average Indonesian woman would have only slightly higher TMFR than her Turkish counterpart (3.4). However, married women in Bangladesh and Egypt are likely to have an average of 1.5 to 2 more children, in Pakistan and Morocco about an average of 2.5 more children, and in Jordan, Niger and Senegal an average of 4 more children, than married women in Turkey. Childbearing continues into longer marriage durations in all countries other than Turkey; thus, TMFRs among women married for up to 29 years show a difference between Turkey and the rest of the countries that is even wider. However, since the number of women who have been married for more than 20 years is rather small, subsequent analyses will only consider TMFRs based on fewer than 20 years of marriage.

Figure 12
Mean number of children ever born to women age 40-49

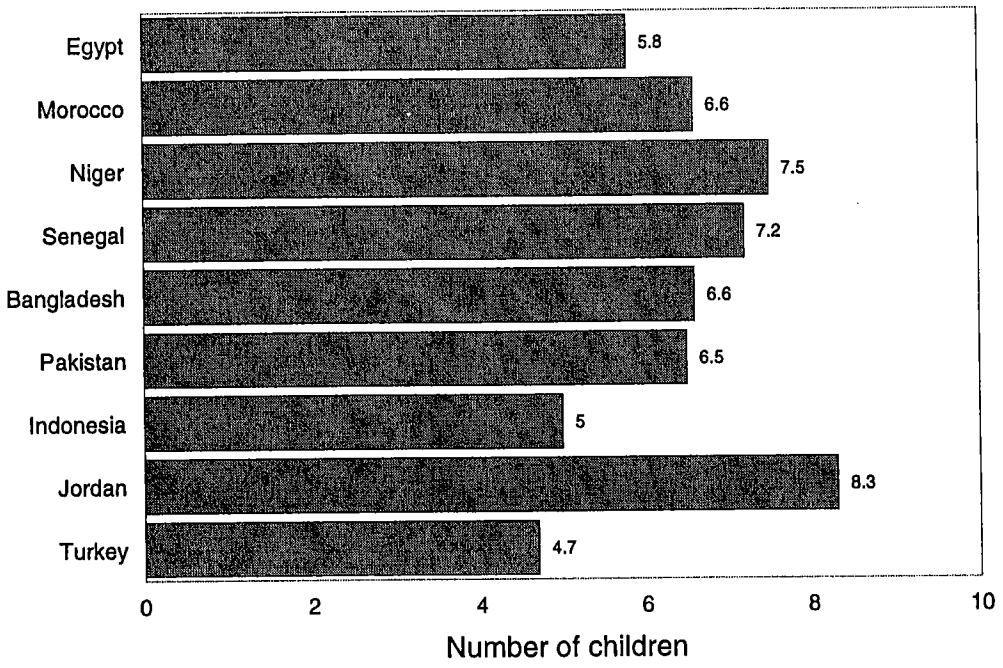
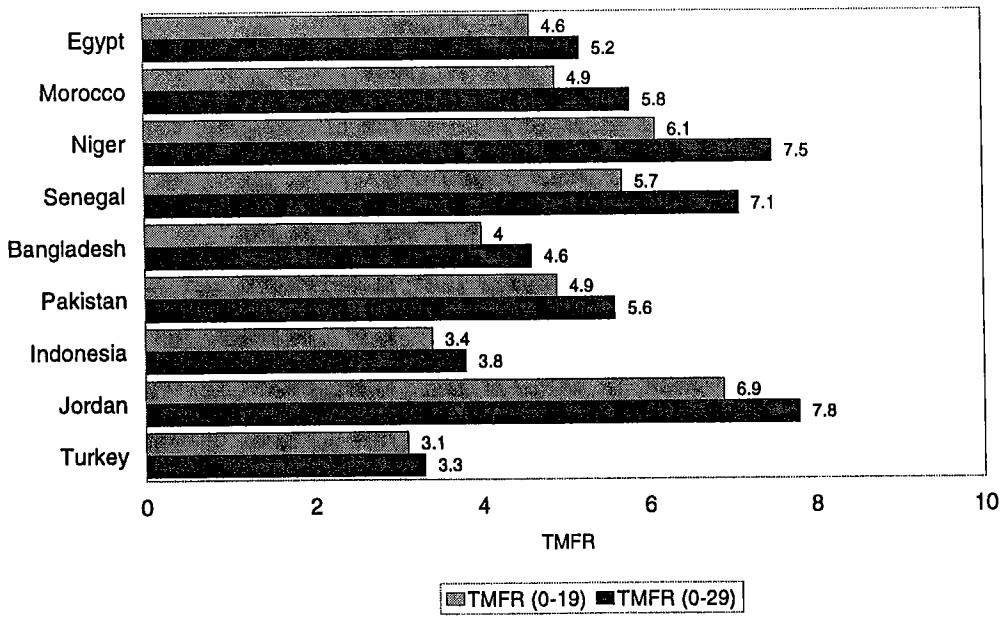


Figure 13
Total marital fertility rates (TMFR) for marriage durations 0-19 and 0-29 years, births in the five years preceding the survey



The mean number of children ever born to ever-married women by age, as illustrated in Figures 14 and 15, suggest that by age 25-29, women in Niger, Senegal, and Jordan have had an average of nearly four children. The pace of childbearing prior to age 30 is somewhat slower in Indonesia and Turkey, where women have had an average of two children by age 25-29. In Egypt, Morocco, Bangladesh, and Pakistan, the mean number of CEB by age 25-29 is between 2.5 and 3. By age 35-39, the differences in childbearing have widened further. In Turkey and Indonesia, the mean number of CEB is about 4; in Egypt, Morocco, and Bangladesh the mean is about 5 children. The highest means at age 35-39 are observed in Pakistan (over 5.5), Niger and Senegal (about 6), and approaching 7 in Jordan.

Similarly, the duration-specific pace of childbearing in the nine countries differs substantially (Figures 16 and 17). For example, women in Egypt and Turkey have high early marital fertility compared with other countries and lower fertility at the longer durations of marriage. Women in Niger and Senegal tend to spread their childbearing over a longer period. This is probably due to early marriage and the relative absence of contraception.

Figure 14
Mean number of children ever born (CEB) to ever-married women, by age, African countries

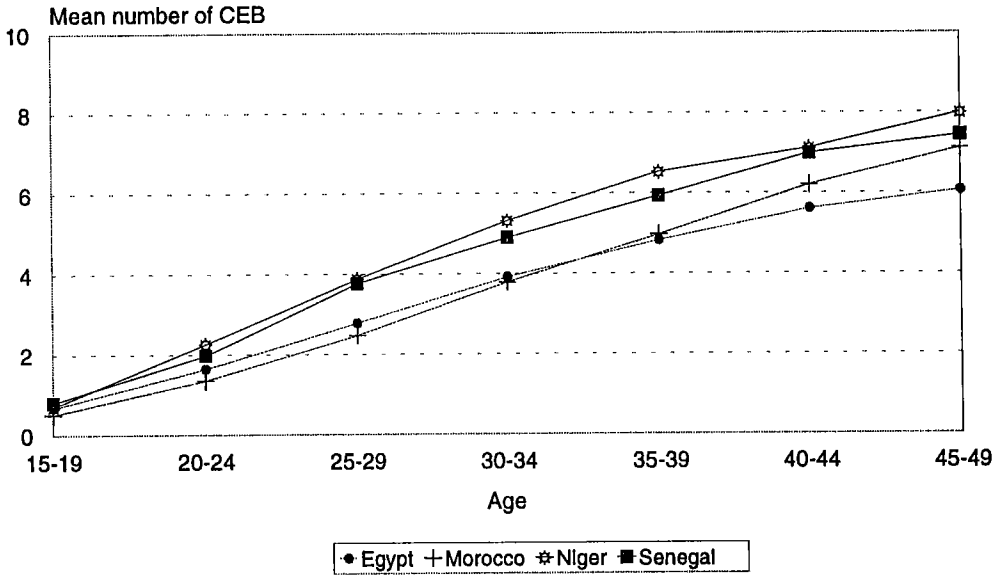


Figure 15
Mean number of children ever born (CEB) to ever-married women, by age, Asian countries

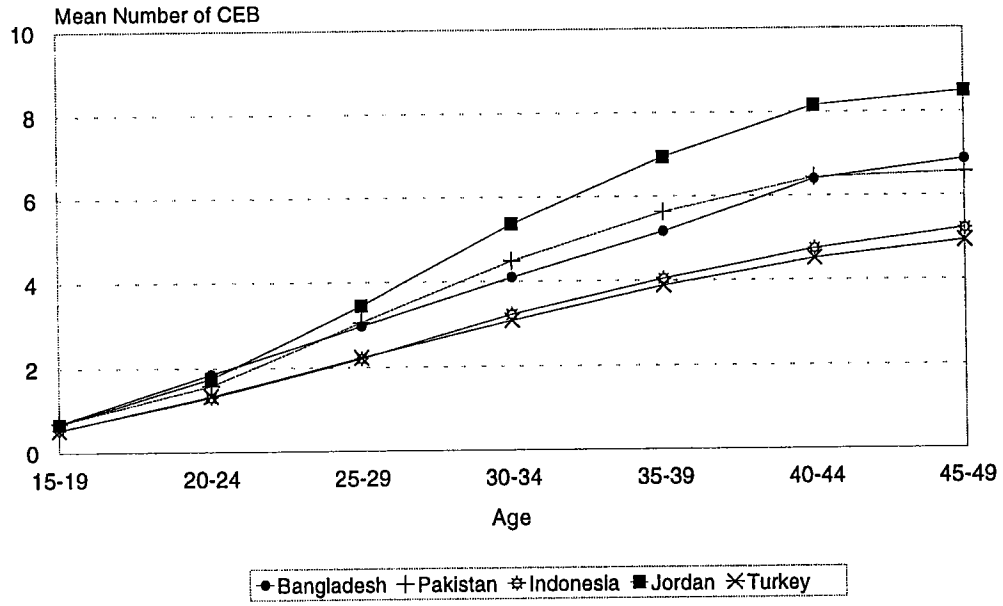


Figure 16
Marital duration-specific fertility rates, based on births in the five years preceding the survey, ever-married women age15-49, African countries

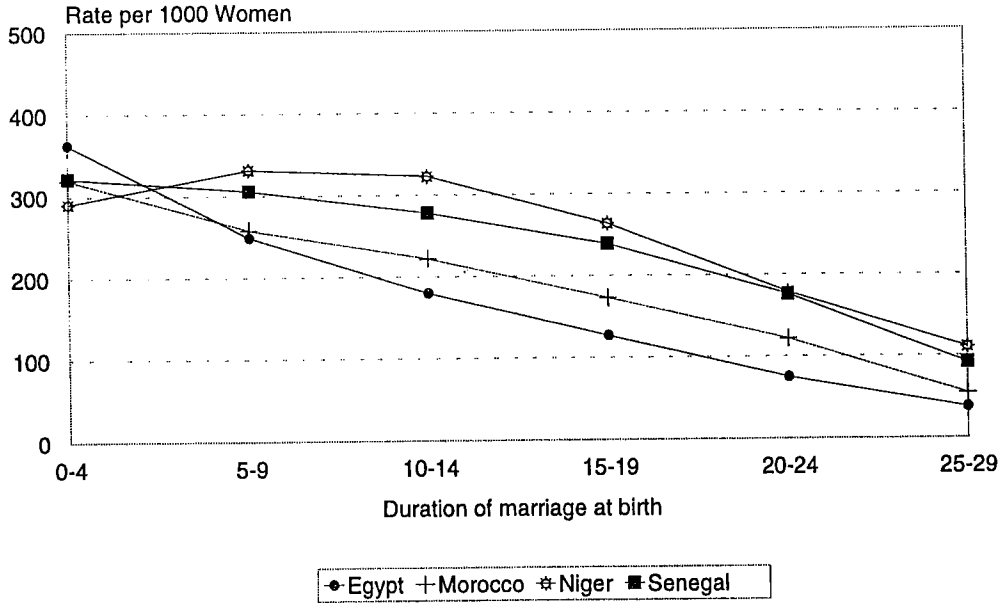
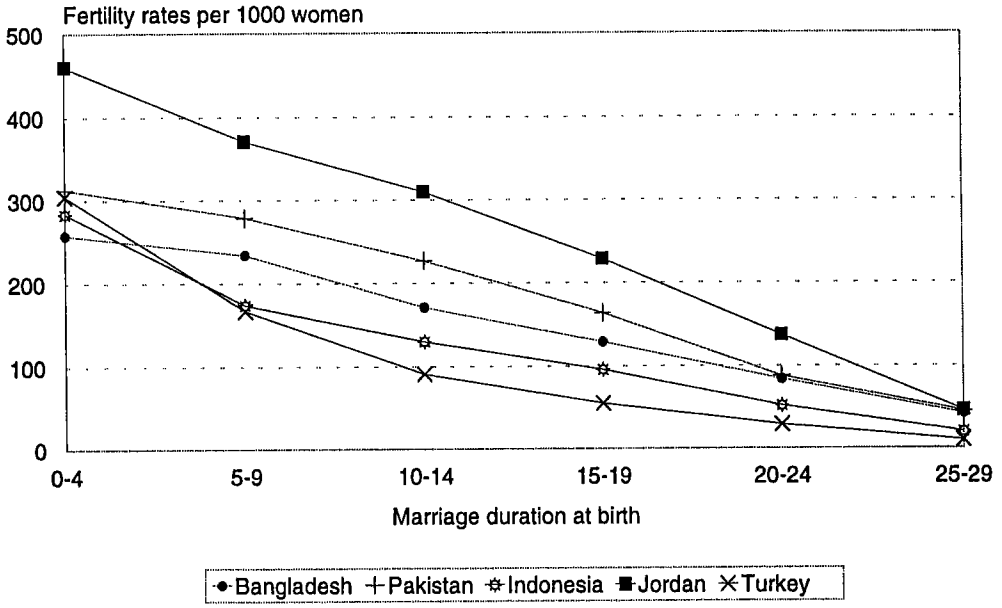


Figure 17
Marital duration-specific fertility rates, based on births in the five years preceding the survey, ever-married women age 15-49, Asian countries



Differentials in Marital Fertility

As shown in Figure 18, urban-rural differentials in children ever born are most pronounced in Egypt and Morocco. By age 40-49, urban women in these countries have had on average two fewer births than their rural counterparts. In Bangladesh, Jordan, and Turkey, urban women have had between 1 and 1.5 fewer births than rural women. On the other hand, in Niger, Senegal, Pakistan, and Indonesia, differences in urban-rural fertility are negligible. Current fertility in these countries, as measured by the TMFR and shown in Figure 19, exhibit the same urban-rural differentials as completed fertility.

As illustrated in Figure 20, education has a clear negative relationship with fertility. Completed fertility is as much as one-half lower among women with secondary schooling in Egypt, Morocco, Jordan, and Turkey, compared with women with no education. In Egypt, Morocco, and Turkey, women with primary education also have much lower completed fertility than women with no education. Fertility differences between those with primary and those with no education are minimal in Niger, Senegal, Bangladesh, and Pakistan. Indonesia's experience is unique; women with no education have only slightly higher completed fertility compared with women who have secondary or higher education, and women with primary education have the highest completed fertility. The absence of significant fertility differentials by education is perhaps due to a very effective family planning program in the country which has reached all strata of the population. Similar patterns of differentials can be seen in the TMFRs of most countries (Figure 21); however, women with primary schooling actually have the highest fertility in Senegal, Bangladesh, and Pakistan.

Women who married later achieved lower completed fertility levels in all countries (Figure 22). By the end of their childbearing years, women in Morocco, Senegal, Pakistan, and Indonesia who had married at age 21 or later had about 1.5 fewer births than those who had married before age 17. A similar pattern is seen for TMFRs, which are lower for women who married at later ages (Figure 23).

Figure 18
Mean number of children ever born (CEB) to women age 40-49
by urban-rural residence

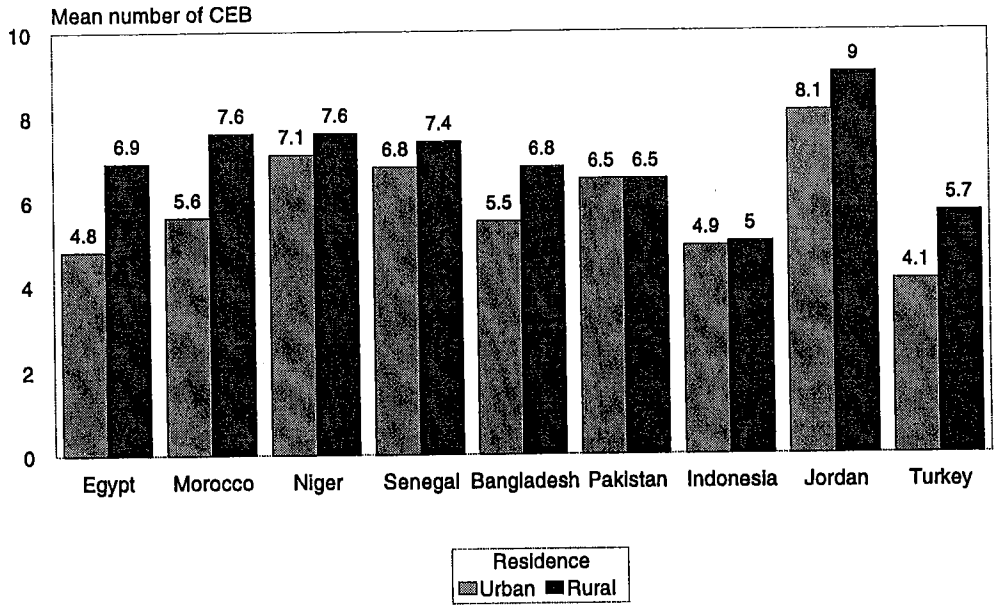


Figure 19
Total marital fertility rates (TMFR) for marriage durations
0-19 years, by urban-rural residence,
births in the five years preceding the survey

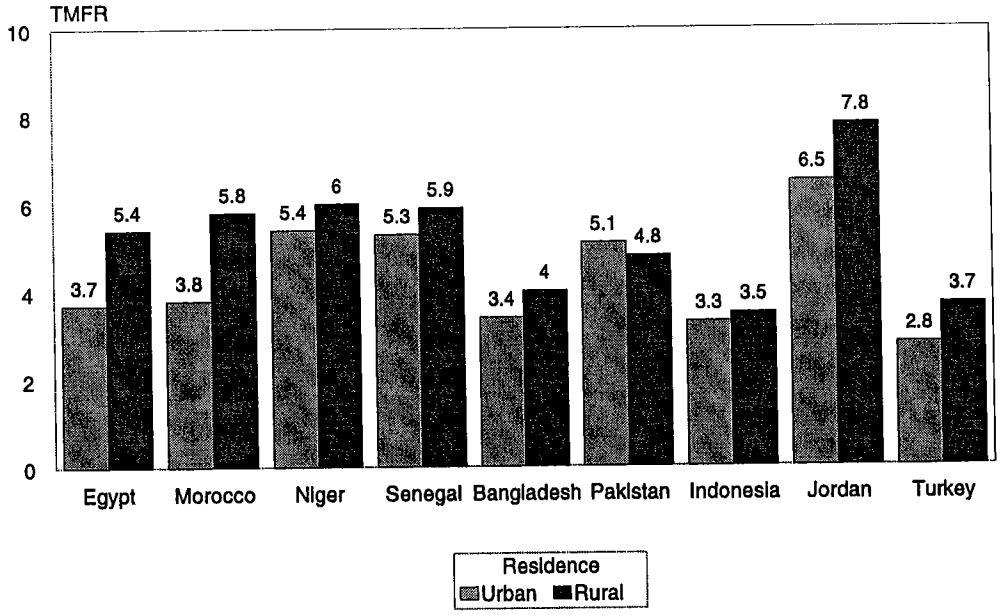


Figure 20
Mean number of children ever born (CEB) to women age 40-49 by education

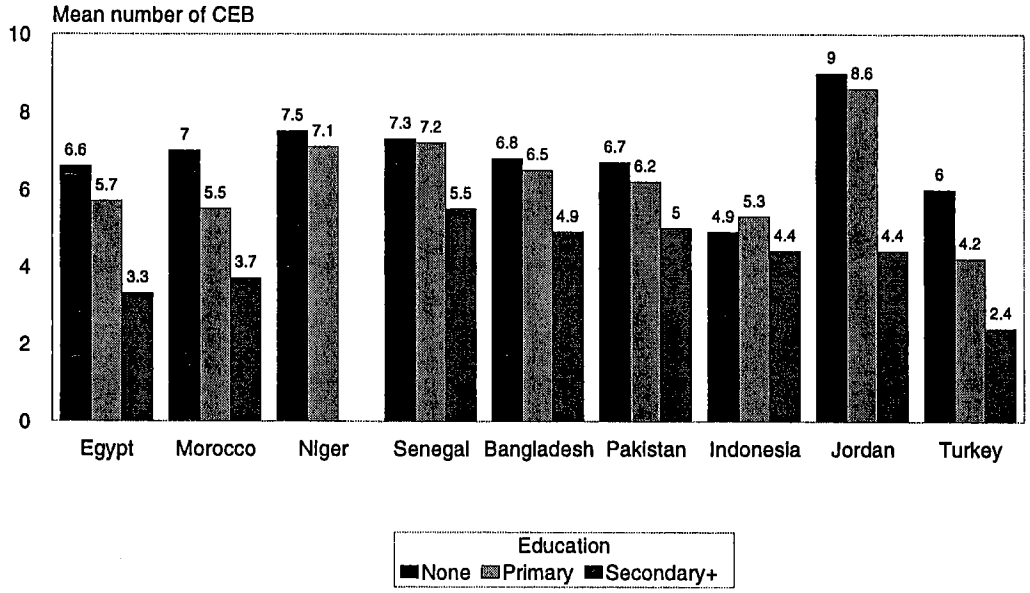


Figure 21
Total marital fertility rates (TMFR) for marriage durations 0-19 years, by education, births in the five years preceding the survey

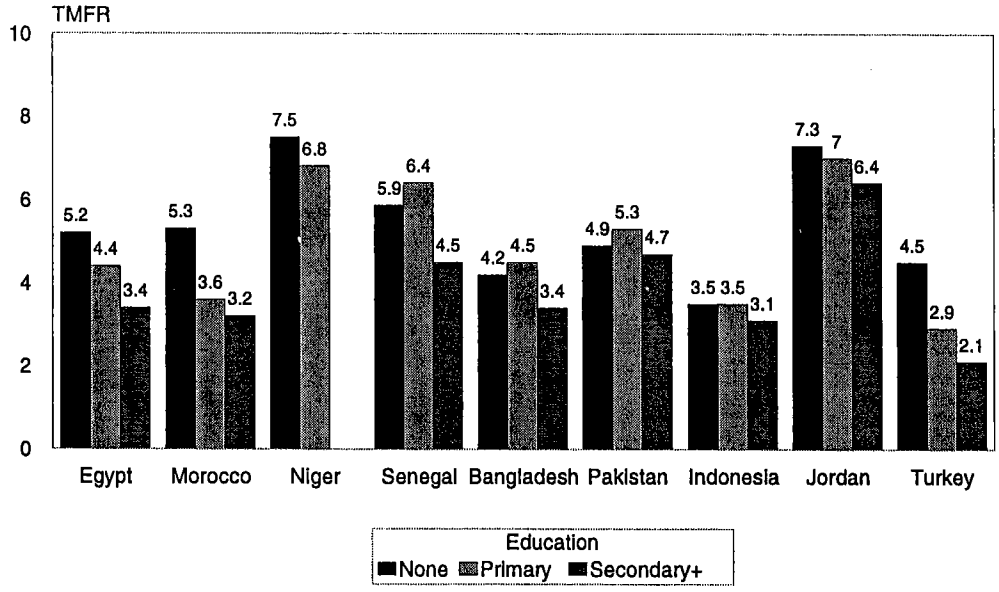


Figure 22
Mean number of children ever born (CEB) to women age 40-49 by age at marriage

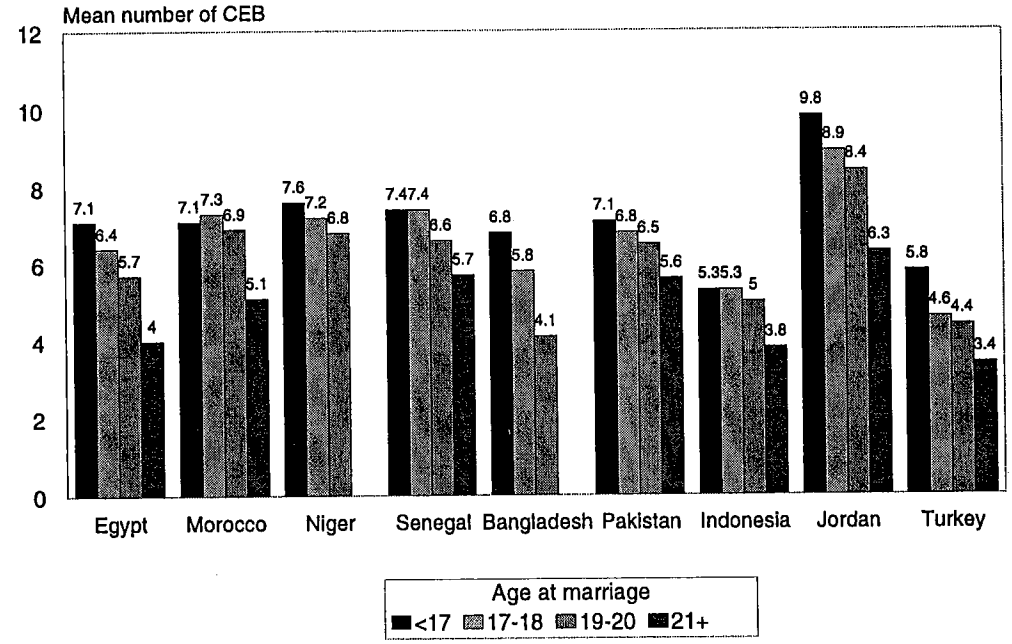
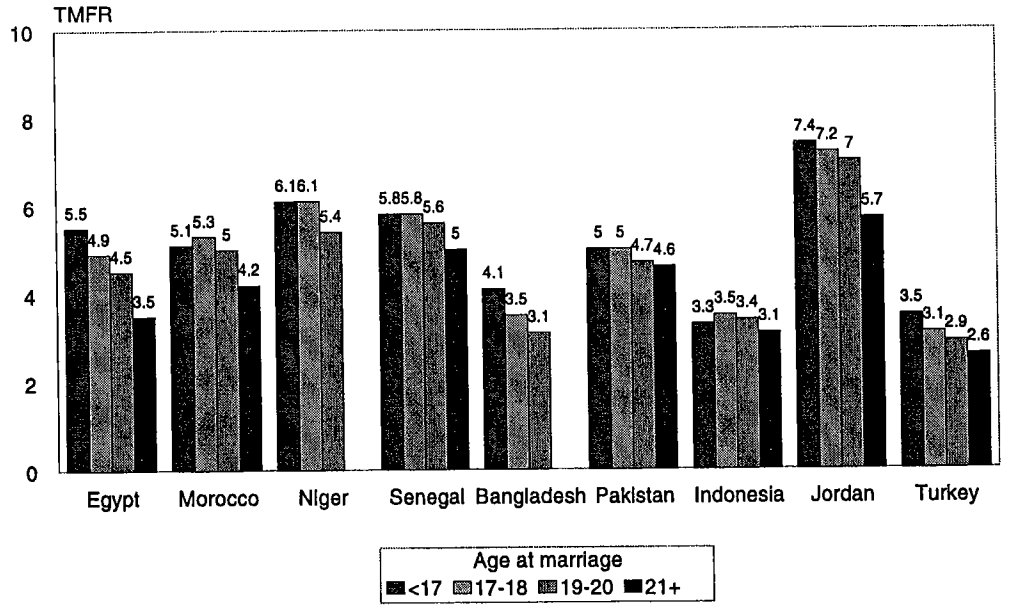


Figure 23
Total marital fertility rates (TMFR) for marriage durations 0-19 years, by age at marriage, births in the five years preceding the survey



Family planning programs often utilize the mass media to advocate the adoption of smaller family size norms. However, the mass media may also have a more indirect effect on fertility, simply by exposing women to modernizing influences. In Egypt, Morocco, Bangladesh, and Turkey, women who watch television regularly have lower fertility than women who are not exposed to television (Figures 24 and 25). No such fertility differential exists in Pakistan or Indonesia. In Indonesia, it is perhaps due to an effective family planning program which has reached all segments of the population, that the effects of watching television on fertility are not noticed. It appears that in Pakistan, even women who are exposed to the process of modernization, remain at high fertility levels.

Conclusions

Reproductive behavior in selected Muslim countries shows no clear pattern in either contraceptive use or fertility. While the countries in this report may not be representative of the entire spectrum of the Muslim world, together they constitute about two-thirds of the population of the Muslim world, and span all regions in which Muslims live. Countries at various levels of socioeconomic development are included, and represent family planning efforts which are both weak and strong.

While socioeconomic factors may have played an important role in early fertility reductions in Muslim countries, effective family planning programs seem to have become the more important factor in achieving fertility transition. Indonesia and Turkey are at an advanced stage of transition and also have high contraceptive prevalence rates. Bangladesh, Egypt and Morocco are approaching the transition with more moderate contraceptive prevalence rates. The considerable level of contraceptive prevalence in Bangladesh, in the context of low socioeconomic development, attests to the important role of family planning programs in lowering fertility. Jordan appears to be a special case; the population is highly urbanized, women are highly educated, age at marriage is relatively high, and yet, fertility has remained relatively high. One may note, however, that the total fertility rate of 8 per woman in Jordan in the early 1960s has declined considerably to about 5 by the mid-1990s, with simultaneous increased use of contraception during the past two decades. However, due to weak family planning program efforts, Jordan and Pakistan are still at an early stage of fertility transition. Niger and Senegal are still at a pretransitional stage with high fertility and low contraceptive use.

While Islam is common to all nine countries included in this report, their levels of socioeconomic development, contraceptive prevalence, and family planning program efforts are too dissimilar to result in common fertility levels. There appears to be no typical pattern of reproductive behavior which could be described as "Islamic." Islam as such seems to be neither a hindrance nor a stimulating factor in fertility decline, at the global level.

Figure 24
Mean number of children ever born (CEB) to women age 40-49 by whether or not they watch television

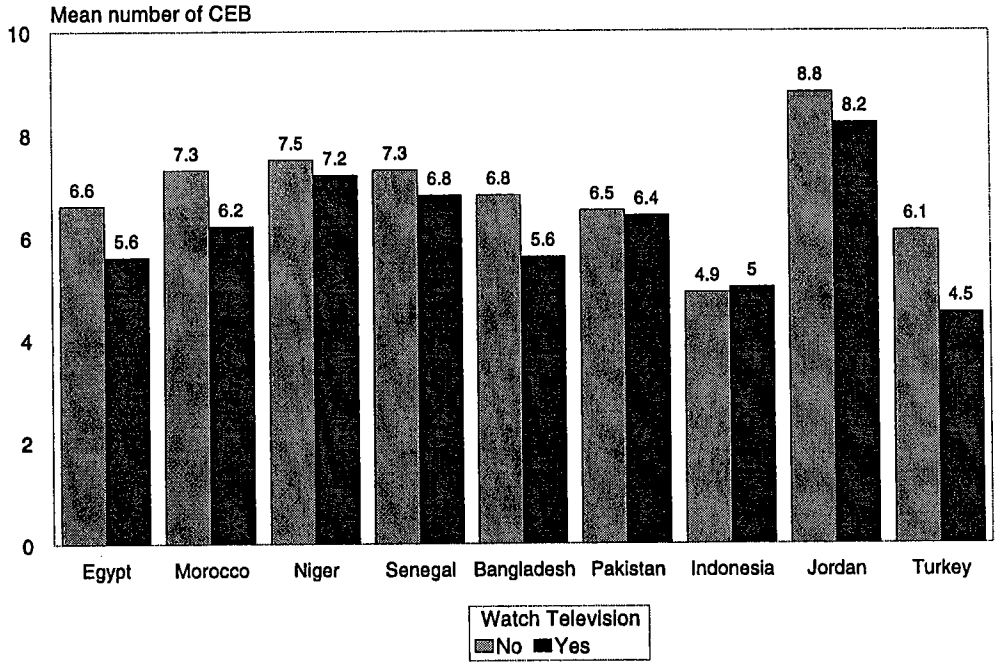
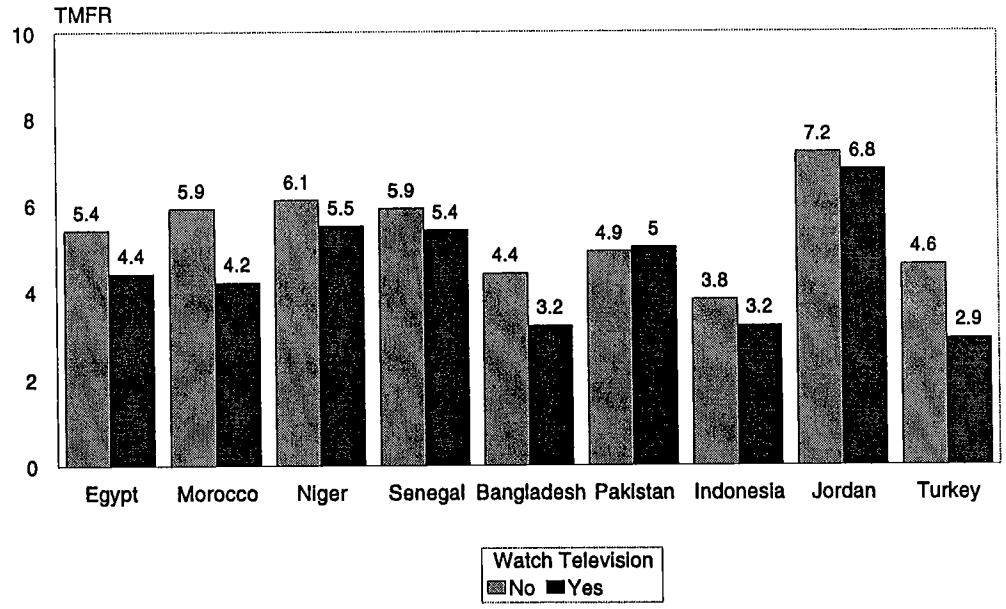


Figure 25
Total marital fertility rates (TMFR) for marriage durations 0-19 years, by whether or not they watch television, births in the five years preceding the survey



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Appendix A

Mean Number of Children Ever Born, by Country

Table A.1 Mean number of children ever born: Egypt

Mean number of children ever born to ever-married women, by current age and background characteristics, Egypt Demographic and Health Survey 1992

Background characteristic	Current age							Women age 40-49	Number of women (weighted)
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
Residence									
Urban	0.74	1.27	2.24	3.18	4.05	4.54	5.06	4.77	4,596
Rural	0.66	1.85	3.21	4.67	5.68	6.76	7.14	6.93	5,268
Level of education									
None	0.67	1.97	3.38	4.76	5.61	6.46	6.69	6.57	4,771
Primary	0.68	1.97	2.91	4.14	4.92	5.41	5.99	5.65	2,540
Secondary+	0.69	1.03	1.90	2.46	3.04	3.18	3.45	3.28	2,553
Age at marriage									
<17	0.86	2.62	4.05	5.40	6.18	7.16	7.09	7.13	3,238
17-18	0.45	1.60	3.18	4.41	5.57	6.22	6.68	6.42	2,123
19-20	a	0.97	2.62	3.69	5.08	5.51	5.95	5.70	1,710
21+	a	0.55	1.44	2.33	3.15	3.76	4.29	3.97	2,793
Watch television daily									
No	0.70	1.62	3.19	4.66	5.52	6.40	6.89	6.63	1,746
Yes	0.67	1.65	2.65	3.74	4.67	5.46	5.89	5.65	8,118
All women	0.68	1.64	2.78	3.92	4.83	5.61	6.06	5.81	9,864

[a] Zero observations

Table A.2 Mean number of children ever born: Morrocco

Mean number of children ever born to ever-married women, by current age and background characteristics, Morocco Demographic and Health Survey 1992

Background characteristic	Current age							Women age	Number of women (weighted)
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	40-49	
Residence									
Urban	0.51	1.13	1.86	2.99	4.05	5.20	6.00	5.58	2,539
Rural	0.50	1.50	2.94	4.53	5.86	7.09	8.03	7.55	3,100
Level of education									
None	0.48	1.47	2.79	4.28	5.49	6.60	7.33	6.97	4,310
Primary	0.55	1.11	1.81	2.87	4.01	5.36	5.78	5.51	734
Secondary+	(0.64)	0.98	1.21	1.87	2.69	3.45	(4.46)	3.74	595
Age at marriage									
<17	0.73	2.13	3.56	4.92	6.20	6.83	7.26	7.06	1,746
17-18	0.29	1.47	3.30	4.58	5.86	6.81	7.98	7.32	1,334
19-20	a	0.93	2.37	3.90	5.01	6.48	7.39	6.88	1,081
21+	a	0.42	1.23	2.32	3.21	4.56	5.72	5.06	1,478
Watch television once a week									
No	0.47	1.52	3.01	4.52	5.80	6.93	7.71	7.31	2,200
Yes	0.54	1.23	2.13	3.35	4.46	5.75	6.70	6.20	3,435
All women	0.51	1.35	2.47	3.79	4.97	6.20	7.11	6.64	5,639

( ) Based on 25-49 unweighted women
[a] Zero observations

Table A.3 Mean number of children ever born: Niger

Mean number of children ever born to ever-married women, by current age and background characteristics, Niger Demographic and Health Survey 1992

Background characteristic	Current age							Women age	Number of women (weighted)
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	40-49	
Residence									
Urban	0.83	2.08	3.51	5.01	6.24	6.93	7.42	7.13	885
Rural	0.69	2.30	3.94	5.39	6.60	7.15	8.08	7.56	4,936
Level of education									
None	0.70	2.30	3.96	5.35	6.57	7.12	8.00	7.51	5,359
Primary+	0.71	2.08	3.01	5.04	(5.85)	*	*	(7.01)	462
Age at marriage									
<17	0.73	2.48	4.11	5.55	6.64	7.17	8.16	7.59	4,937
17-18	0.27	1.36	3.15	4.66	6.60	(7.43)	(6.92)	7.23	546
19+	*	0.95	2.14	3.32	5.20	(6.00)	(7.50)	6.78	337
Watch television once a week									
No	0.71	2.32	3.94	5.44	6.56	7.12	8.04	7.52	5,170
Yes	0.64	1.96	3.42	4.51	(6.24)	(7.11)	7.40	7.22	648
All women	0.70	2.26	3.88	5.32	6.53	7.12	7.99	7.50	5,821

( ) Based on 25-49 unweighted women
* Fewer than 25 unweighted women
[a] Zero observations

Table A.4 Mean number of children ever born: Senegal

Mean number of children ever born to ever-married women, by current age and background characteristics, Senegal Demographic and Health Survey 1992-1993

Background characteristic	Current age							Women age 40-49	Number of women (weighted)
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
Residence									
Urban	0.82	1.82	2.83	4.57	5.42	6.63	6.93	6.75	1,627
Rural	0.79	2.04	3.54	5.11	6.23	7.18	7.71	7.38	3,105
Level of Education									
None	0.80	2.02	3.42	5.09	6.11	7.10	7.47	7.25	3,911
Primary	0.76	1.89	2.86	4.78	5.62	(6.92)	*	7.22	552
Secondary+	*	(1.34)	2.30	3.30	4.20	(5.47)	*	(5.49)	269
Age at marriage									
<17	0.92	2.39	3.80	5.35	6.44	7.25	7.70	7.42	2,968
17-18	0.40	1.69	2.97	4.95	5.59	6.99	8.00	7.38	838
19-20	*	1.15	2.62	4.35	5.71	6.75	6.39	6.60	470
21+	a	(0.66)	1.83	2.92	3.98	5.57	(5.86)	5.67	456
Watch television once a week									
No	0.82	2.03	3.50	5.08	6.09	7.08	7.55	7.26	3,342
Yes	0.75	1.82	2.85	4.52	5.47	6.72	7.08	6.86	1,386
All women	0.80	1.97	3.27	4.90	5.93	6.99	7.44	7.16	4,732

( ) Based on 25-49 unweighted women
* Fewer than 25 unweighted women
[a] Zero observations

Table A.5 Mean number of children ever born: Bangladesh

Mean number of children ever born to ever-married women, by current age and background characteristics, Bangladesh Demographic and Health Survey 1993-1994

Background characteristic	Current age							Women age	Number of women
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	40-49	(weighted)
Residence									
Urban	0.61	1.61	2.66	3.41	4.38	5.31	5.77	5.51	1,096
Rural	0.70	1.88	3.02	4.19	5.28	6.56	7.03	6.76	8,399
Level of education									
None	0.74	2.03	3.16	4.22	5.31	6.59	7.04	6.80	5,529
Primary	0.70	1.85	3.01	4.34	5.39	6.34	6.84	6.53	2,541
Secondary+	0.55	1.32	2.35	3.08	3.87	5.20	4.58	(5.01)	1,424
Age at marriage									
<17	0.76	2.14	3.31	4.40	5.33	6.59	7.03	6.78	7,783
17-18	0.22	1.19	2.45	3.42	4.36	5.51	(6.24)	5.79	930
19+	*	0.60	1.47	2.25	3.65	(3.79)	(4.52)	(4.10)	782
Watch television once a week									
No	0.73	1.91	3.12	4.25	5.39	6.59	7.03	6.78	7,804
Yes	0.54	1.54	2.42	3.37	4.12	5.34	5.91	5.58	1,691
All women	0.69	1.85	2.97	4.10	5.17	6.40	6.87	6.60	9,495

( ) Based on 25-49 unweighted women
* Fewer than 25 unweighted women

Table A.6 Mean number of children ever born: Pakistan

Mean number of children ever born to ever-married women, by current age and background characteristics, Pakistan Demographic and Health Survey 1990/1991

Background characteristic	Current age							Women age 40-49	Number of women (weighted)
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
Residence									
Urban	0.71	1.54	3.03	4.37	5.60	6.49	6.43	6.46	2,019
Rural	0.64	1.59	3.07	4.55	5.65	6.42	6.63	6.51	4,592
Level of education									
None	0.68	1.61	3.11	4.69	5.83	6.61	6.72	6.65	5,237
Primary	0.61	1.75	3.29	3.95	5.41	6.16	6.33	(6.22)	601
Secondary+	0.45	1.21	2.66	3.72	4.38	5.11	4.55	(4.93)	733
Age at marriage									
<17	0.82	2.34	4.11	5.57	6.56	7.14	7.05	7.11	2,737
17-18	0.27	1.40	3.48	5.00	6.13	7.02	6.46	6.77	1,355
19-20	*	0.76	2.44	4.09	5.12	6.27	6.99	6.52	1,038
21+	a	0.49	1.34	2.71	4.39	5.17	5.99	5.57	1,481
Watch television once a week									
No	0.67	1.54	3.06	4.63	5.69	6.49	6.58	6.53	4,632
Yes	0.60	1.08	3.06	4.18	5.50	6.35	6.50	6.41	1,972
All women	0.66	1.58	3.06	4.49	5.63	6.44	6.56	6.49	6,611

( ) Based on 25-49 unweighted women
* Fewer than 25 unweighted women
[a] Zero observations

Table A.7 Mean number of children ever born: Indonesia

Mean number of children ever born to ever-married women, by current age and background characteristics, Indonesia Demographic and Health Survey 1991

Background characteristic	Current age							Women age	Number of women (weighted)
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	40-49	
Residence									
Urban	0.56	1.27	2.09	3.13	3.80	4.42	5.32	4.88	6,691
Rural	0.54	1.31	2.27	3.29	4.16	4.89	5.17	5.04	16,218
Level of education									
None	0.78	1.51	2.49	3.39	4.16	4.70	4.95	4.85	4,385
Primary	0.53	1.40	2.33	3.38	4.22	4.94	5.60	5.25	13,942
Secondary+	0.51	1.00	1.76	2.59	3.35	4.21	4.66	4.41	4,581
Age at marriage									
<17	0.71	1.73	2.73	3.74	4.51	5.02	5.51	5.27	10,258
17-18	0.32	1.30	2.45	3.40	4.20	5.05	5.43	5.25	5,229
19-20	0.03	0.93	1.96	3.06	3.97	4.69	5.34	5.04	13,424
21+	a	0.60	1.27	2.18	2.89	3.59	3.96	3.79	3,997
Watch television once a week									
No	0.58	1.42	2.40	3.39	4.24	4.74	5.10	4.94	8,975
Yes	0.51	1.23	2.11	3.15	3.93	4.76	5.32	5.04	13,925
All women	0.54	1.30	2.21	3.23	4.05	4.75	5.22	4.99	22,909

[a] Zero observations

Table A.8 Mean number of children ever born: Jordan

Mean number of children ever born to ever-married women, by current age and background characteristics, Jordan Demographic and Health Survey 1990

Background characteristic	Current age							Women age	Number of women (weighted)
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	40-49	
Residence									
Urban	0.70	1.70	3.34	5.20	6.84	7.83	8.35	8.07	4,768
Rural	0.57	1.90	3.74	5.87	7.23	9.09	8.90	9.00	1,693
Level of education									
None	*	2.36	4.23	5.84	7.47	9.10	8.88	8.98	1,516
Primary	(0.69)	2.02	4.17	6.10	7.56	8.31	8.94	8.57	1,456
Secondary+	0.66	1.67	3.18	4.92	6.05	6.27	5.90	6.15	3,489
Age at marriage									
<17	0.94	2.96	5.08	6.93	8.41	9.63	10.02	9.81	1,885
17-18	0.37	2.19	4.23	6.38	7.70	8.84	8.94	8.89	1,566
19-20	a	1.18	3.22	5.05	6.90	8.40	8.30	8.35	1,269
21+	a	0.53	1.90	3.38	4.79	6.00	6.61	6.27	1,741
Watch television once a week									
Rarely	(0.64)	1.64	3.56	5.20	6.63	8.85	8.73	8.79	794
Sometimes/ frequently	0.67	1.77	3.44	5.39	6.99	8.04	8.45	8.23	5,665
All women	0.67	1.75	3.45	5.37	6.94	8.16	8.49	8.31	6,461

( ) Based on 25-49 unweighted women
* Fewer than 25 unweighted women
[a] Zero observations

Appendix B

Marital Duration-Specific Fertility Rates, by Country

Table B.1 Fertility rates: Egypt

Fertility rates for ever-married women by background characteristics, for durations since first marriage at the time of giving birth, Egypt Demographic and Health Survey 1992

Background characteristic	Duration of marriage at the time of giving birth							TMFR for durations of marriage		Number of women (weighted)
	0-5	5-9	10-14	15-19	20-24	25-29	30+	0-19 yrs	0-29 yrs	
Residence										
Urban	342	193	122	85	43	23	5	3.71	4.04	4,596
Rural	382	297	234	162	103	49	16	5.38	6.14	5,268
Level of education										
None	370	296	223	153	90	45	9	5.21	5.89	4,771
Primary	358	248	163	118	65	(29)	*	4.44	4.91	2,540
Secondary+	360	181	99	(38)	(11)	*	*	3.38	3.44	2,553
Age at marriage										
<17	353	319	236	182	106	52	*	5.45	6.24	3,238
17-18	377	268	208	129	80	17	a	4.92	5.40	2,122
19-20	382	241	171	108	(48)	(11)	a	4.50	4.80	1,710
21+	353	180	101	55	(19)	a	b	3.45	3.53	2,793
Watch television daily										
No	356	298	248	188	109	54	14	5.44	6.25	1,746
Yes	356	236	162	111	68	34	(10)	4.37	4.88	8,118
All women	363	249	180	127	75	38	11	4.60	5.16	9,864

Note: Figures are for live births in the five years prior to survey.
( ) Based on 50-199 unweighted woman-years of exposure
* Based on <50 unweighted woman-years of exposure
[a] Zero births
[b] No observations

Table B.2 Fertility rates: Morocco

Fertility rates for ever-married women by background characteristics, for durations since first marriage at the time of giving birth, Morocco Demographic and Health Survey 1992

Background characteristic	Duration of marriage at the time of giving birth							TMFR for durations of marriage		Number of women (weighted)
	0-5	5-9	10-14	15-19	20-24	25-29	30+	0-19 yrs	0-29 yrs	
Residence										
Urban	288	190	161	117	69	24	2	3.81	4.25	2,539
Rural	349	316	268	217	161	82	9	5.76	6.97	3,100
Level of education										
None	336	285	247	191	133	61	6	5.30	6.27	4,310
Primary	285	197	120	109	(78)	*	a	3.55	3.99	734
Secondary+	296	163	123	60	14	a	a	3.21	3.28	595
Age at marriage										
<17	322	278	243	173	137	51	6	5.09	6.03	1,746
17-18	340	275	238	199	122	60	a	5.25	6.17	1,334
19-20	330	270	223	179	104	63	a	5.00	5.84	1,081
21+	303	231	182	126	96	57	b	4.21	4.98	1,478
Watch television once a week										
No	352	326	277	221	163	86	9	5.88	7.13	2,200
Yes	302	216	183	141	93	35	3	4.21	4.85	3,435
All women	320	259	222	173	122	55	6	4.87	5.75	5,639

Note: Figures are for live births in the five years prior to survey.
( ) Based on 50-199 unweighted woman-years of exposure
* Based on <50 unweighted woman-years of exposure
[a] Zero births
[b] No observations

Table B.3 Fertility rates: Niger

Fertility rates for ever-married women by background characteristics, for durations since first marriage at the time of giving birth, Niger Demographic and Health Survey 1992

Background characteristic	Duration of marriage at the time of giving birth							TMFR for durations of marriage		Number of women (weighted)
	0-5	5-9	10-14	15-19	224	25-29	30+	0-19 yrs	0-29 yrs	
Residence										
Urban	334	310	296	237	184	114	48	5.39	7.38	885
Rural	282	336	328	269	178	110	59	6.03	7.52	4,936
Level of education										
None	284	333	324	264	180	110	62	7.50	7.49	5,359
Primary+	329	318	319	241	(145)	(148)	*	6.80	7.50	462
Age at marriage										
<17	279	331	331	268	186	115	60	6.05	7.55	4,937
17-18	316	360	268	267	139	(67)	*	6.05	7.08	546
19+	350	288	268	180	(110)	(67)	a	5.43	6.31	337
Watch television once a week										
No	289	337	329	267	178	111	61	6.11	7.56	5,170
Yes	301	295	270	224	190	114	(68)	5.51	7.02	648
All women	291	332	323	264	179	111	61	6.05	7.50	5,821

Note: Figures are for live births in the five years prior to survey.
( ) Based on 50-199 unweighted woman-years of exposure
* Based on <50 unweighted woman-years of exposure
[a] No observactions

Table B.4 Fertility rates: Senegal

Fertility rates for ever-married women by background characteristics, for durations since first marriage at the time of giving birth, Senegal Demographic and Health Survey 1992/1993

Background characteristic	Duration of marriage at the time of giving birth							TMFR for durations of marriage		Number of women (weighted)
	0-5	5-9	10-14	15-19	20-24	25-29	30+	0-19 yrs	0-29 yrs	
Residence										
Urban	331	276	248	212	152	83	18	5.34	6.51	1,627
Rural	318	323	296	252	188	95	52	5.94	7.36	3,105
Level of education										
None	316	318	285	250	181	90	42	5.85	7.20	3,911
Primary	346	274	275	189	165	(153)	a	6.42	7.01	552
Secondary+	334	231	196	146	95	(65)	a	4.54	5.34	269
Age at marriage										
<17	308	313	287	254	194	94	(42)	5.81	7.25	2,968
17-18	340	312	294	215	134	78	b	5.81	6.86	838
19-20	323	320	255	217	136	77	b	5.57	6.64	470
21+	347	244	219	171	75	97	b	5.00	5.77	456
Watch television once a week										
No	320	320	285	249	185	93	51	5.87	7.27	3,342
Yes	326	278	264	206	145	85	(9)	5.37	6.52	1,386
All women	322	306	278	239	176	92	41	5.73	7.07	4,732

Note: Figures are for live births in the five years prior to survey.
( ) Based on 50-199 unweighted woman-years of exposure
[a] Zero births
[b] No observations

Table B.5 Fertility rates: Bangladesh

Fertility rates for ever-married women by background characteristics, for durations since first marriage at the time of giving birth, Bangladesh Demographic and Health Survey 1993-1994

Background characteristic	Duration of marriage at the time of giving birth							TMFR for durations of marriage		Number of women (weighted)
	0-5	5-9	10-14	15-19	20-24	25-29	30+	0-19 yrs	0-29 yrs	
Residence										
Urban	244	204	141	96	46	24	10	3.42	3.77	1,095
Rural	259	238	175	134	90	45	18	4.04	4.71	8,399
Level of education										
None	25	248	183	143	94	47	20	4.15	4.85	5,529
Primary	265	228	168	126	79	38	6	3.93	4.51	2,541
Secondary or higher	252	195	123	74	30	5	a	3.22	3.40	1,424
Age at marriage										
<17	262	238	176	136	88	43	17	4.06	4.71	7,783
17-18	261	228	144	59	35	(27)	*	3.46	3.77	930
19+	238	208	136	86	(47)	*	b	3.14	3.75	782
Watch television once a week										
No	262	242	181	143	94	44	19	4.41	4.83	7,804
Yes	241	201	124	67	36	30	a	3.16	3.49	1,691
All Women	258	234	171	130	84	42	17	3.96	4.60	9,495

Note: Figures are for live births in the five years prior to survey.
( ) Based on 50-199 unweighted woman-years of exposure
* Based on <5 unweighted woman-years of exposure
[a] Zero births
[b] No observations

Table B.6 Fertility rates: Pakistan

Fertility rates for ever-married women by background characteristics, for durations since first marriage at the time of giving birth, Pakistan Demographic and Health Survey 1990-1991

Background characteristic	Duration of marriage at the time of giving birth							TMFR for durations of marriage		Number of women (weighted)
	0-5	5-9	10-14	15-19	20-24	25-29	30+	0-19 yrs	0-29 yrs	
Residence										
Urban	360	299	221	143	56	30	10	5.11	5.55	2,019
Rural	293	270	229	174	102	45	20	4.83	5.57	4,592
Level of education										
None	290	273	231	176	95	45	18	4.85	5.57	5,237
Primary	364	309	238	141	52	(10)	(9)	5.26	5.58	601
Secondary or higher	386	293	183	69	40	a	a	4.66	4.85	773
Age at marriage										
<17	277	283	238	211	109	44	*	5.04	5.81	2,737
17-18	340	287	230	145	84	(39)	b	5.00	5.62	1,355
19-20	306	279	238	108	53	(17)	b	4.66	5.01	1,038
21+	334	265	193	126	63	(2)	b	4.59	4.90	1,481
Watch television once a week										
No	292	271	233	179	102	40	22	4.87	5.58	4,632
Yes	363	297	212	130	55	43	4	5.01	5.50	1,972
All Women	313	279	227	164	88	41	17	4.91	5.64	6,611

Note: Figures are for live births in the five years prior to survey.
( ) Based on 50-199 unweighted woman-years of exposure
* Based on <5 unweighted woman-years of exposure
[a] Zero births
[b] No observations

Table B.7 Fertility rates: Indonesia

Fertility rates for ever-married women by background characteristics, for durations since first marriage at the time of giving birth, Indonesia Demographic and Health Survey 1991

Background characteristic	Duration of marriage at the time of giving birth							TMFR for durations of marriage		Number of women (weighted)
	0-5	5-9	10-14	15-19	20-24	25-29	30+	0-19 yrs	0-29 yrs	
Residence										
Urban	301	166	111	86	38	19	2	3.32	3.61	6,691
Rural	277	177	139	100	58	20	5	3.46	3.85	16,218
Level of education										
None	278	180	141	101	51	20	6	3.50	3.85	4,385
Primary	271	178	136	104	61	21	4	3.45	3.86	13,942
Secondary+	311	156	93	54	18	8	a	3.08	3.21	4,581
Age at marriage										
<17	248	172	144	105	66	21	5	3.34	3.78	10,258
17-18	284	186	131	106	46	21	4	3.54	3.88	5,229
19-20	301	171	122	85	30	7	a	3.40	3.36	3,424
21+	307	163	95	50	16	8	b	3.08	3.20	3,997
Watch television once a week										
No	287	197	157	114	56	20	5	3.77	4.15	8,975
Yes	282	160	114	84	50	20	4	3.20	3.55	13,925
All women	284	174	130	96	53	20	5	3.42	3.78	29,909

Figures are for live births in the five years prior to survey.
[a] Zero births
[b] No observations

Table B.8 Fertility rates: Jordan

Fertility rates for ever-married women by background characteristics, for durations since first marriage at the time of giving birth, Jordan Demographic and Health Survey 1990

Background characteristic	Duration of marriage at the time of giving birth							TMFR for durations of marriage		Number of women (weighted)
	0-5	5-9	10-14	15-19	20-24	25-29	30+	0-19 yrs	0-29 yrs	
Residence										
Urban	458	347	286	209	117	43	(9)	6.50	7.29	4,768
Rural	466	435	374	286	190	55	(12)	7.80	9.03	1,693
Level of education										
None	440	392	346	276	166	54	14	7.27	8.37	1,516
Primary	446	381	322	243	123	33	b	6.96	7.74	1,456
Secondary+	464	364	288	172	85	23	a	6.44	6.98	3,489
Age at marriage										
<17	438	416	355	276	191	54	10	7.42	8.65	1,885
17-18	482	386	333	234	135	49	*	7.17	8.09	1,566
19-20	462	375	318	240	127	(20)	b	6.98	7.71	1,269
21+	456	316	223	148	49	(7)	b	5.72	6.00	1,741
Watch television										
Rarely	462	380	341	252	158	59	(18)	7.18	8.35	794
Sometimes/ frequently	460	370	306	226	134	43	9	6.81	7.74	5,665
All women	460	371	310	230	137	(46)	*	6.90	7.81	6,461

Note: Figures are for live births in the five years prior to survey.
( ) Based on 50-199 unweighted woman-years of exposure
* Based on <50 unweighted woman-years of exposure
[a] Zero births
[b] No observations

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