Bangladesh

Demographic and Health Survey

1999-2000

World Summit for Children Indicators: Bangladesh 1999-2000

		Value
BASIC INDICATORS		
Infant mortality	Infant mortality rate	66 per 1,000
	Under-five mortality rate	94 per 1,000
Childhood undernutrition	Percent stunted	44.7
	Percent wasted	10.3
	Percent underweight	47.7
Clean water supply	Percent of households with a safe water supply[1]	97.3
Sanitary excreta disposal	Percent of households with flush toilets or VIP latrines	35.8
Basic education	Percent of women 15-49 with completed primary education	43.8
	Percent of men 15-49 with completed primary education	54.1
	Percent of girls 6-12 attending school	80.6
	Percent of boys 6-12 attending school	76.9
	Percent of women 15-49 who are literate	45.7
Children in especially difficult situations	Percent of children who live in single-adult households	3.0
SUPPORTING INDICATORS		
Women's Health		
Birth spacing	Percent of births within 24 months of a previous birth	16.3
Safe motherhood	Percent of last births with medical prenatal care	33.3
	Percent of births with prenatal care in first trimester	12.0
	Percent of births with medical assistance at delivery	12.1
	Percent of births in a medical facility	5.6
	Percent of births at high risk	53.2
Family planning	Contraceptive prevalence rate (any method, married women)	53.8
	Percent of currently married women with an unmet demand for family planning	15.3
	Percent of currently married women with an unmet need for family planning to avoid a high-risk birth	11.6
Nutrition		
Maternal nutrition	Percent of mothers with low BMI	45.4
Breastfeeding	Percent of children under 4 months who are exclusively breastfed	52.8
Child Health		
Vaccinations	Percent of children (last birth) whose mothers received tetanus toxoid vaccination during pregnancy	81.2
	Percent of children 12-23 months with measles vaccination	70.8
	Percent of children 12-23 months fully vaccinated	60.4
Diarrhea control	Percent of children with diarrhea in preceding 2 weeks who received oral rehydration therapy (sugar-salt-water solution)	73.6
Acute respiratory infection	Percent of children with acute respiratory infection in preceding 2 weeks who were seen by medical personnel	27.2

[1] Piped, well, and bottled water

Bangladesh Demographic and Health Survey 1999-2000

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May 2001

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Suggested citation:

National Institute of Population Research and Training (NIPORT), Mitra and Associates (MA), and ORC Macro (ORCM). 2001. *Bangladesh Demographic and Health Survey 1999-2000*. Dhaka, Bangladesh and Calverton, Maryland [USA]: National Institute of Population Research and Training, Mitra and Associates, and ORC Macro.

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Director General
National Institute of Population
Research and Training (NIPORT)

PREFACE

The 1999-2000 Bangladesh Demographic and Health Survey (BDHS) is a nationally representative survey that was implemented through a collaborative effort of the National Institute of Population Research and Training (NIPORT), Mitra and Associates, and ORC Macro (USA). The 1999-2000 BDHS provides updated estimates of the basic national demographic and health indicators.

The information collected in the 1999-2000 BDHS will be instrumental in identifying new directions for the national health and family planning program in Bangladesh. Data concerning fertility levels, contraceptive method mix, and infant mortality levels are crucial indicators in evaluating policies and programs and in making projections for the future. The survey report will hopefully contribute to an increased commitment to improving the lives of mothers and children.

The Technical Review Committee (TRC) was composed of members with professional expertise from government, non-government and international organizations as well as researchers and professionals working in the Health and Population Sector Program, who contributed their valuable comments in major phases of the study. In addition, a Technical Task Force (TTF) was formed with representatives from NIPORT, Mitra and Associates, USAID/Dhaka, ICCDR,B, Dhaka University and ORC Macro for designing and implementing the survey. I would like to extend my gratitude and appreciation to the members of the TRC and TTF for their valuable contributions at different phases of the survey.

The preliminary results of the 1999-2000 BDHS with its major findings were released in a dissemination seminar held in June 2000. The final report supplements the preliminary report released earlier. I hope the survey results will be useful for monitoring and implementation of the Health and Population Sector Program.

The contributors of the various chapters of this report deserve special thanks. I express also my heartfelt thanks to the professionals of the research unit of NIPORT, Mitra and Associates, ORC Macro, and USAID/Dhaka for their sincere efforts in successful completion of the survey.

(Anil Chandra Singha)

Secretary
Ministry of Health and Family Welfare
Government of the People's
Republic of Bangladesh

FOREWORD

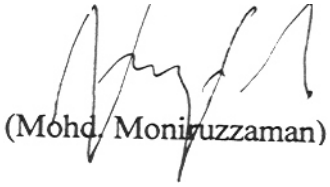
The 1999-2000 Bangladesh Demographic and Health Survey (BDHS) is a nationally representative sample survey designed to provide information on basic national indicators of social progress including fertility, contraceptive knowledge and use, fertility preference, childhood mortality, maternal and child health, nutritional status of mothers and children and awareness of AIDS.

The 1999-2000 BDHS provides a comprehensive look at levels and trends in key health and demographic parameters for policy makers and program managers. The fertility has declined from 6.3 children per women in 1975 to 3.3 in 1999-2000. The pace of fertility decline has slowed in the most recent period compared to the rapid decline during late 1980s and early 1990s. The BDHS 1999-2000 findings also show the increasing trend of contraceptive use, declining childhood mortality, and improving nutritional status.

The findings of this report together with other national surveys are very important in assessing the achievements of the Health and Population Sector Program. The 1999-2000 BDHS will furnish policy makers, planners and program managers with factual, reliable and up-to-date information in evaluating current programs and in designing new strategies for improving Health and Family Planning Services for the people of Bangladesh.

The need, however, for further detailed analysis of BDHS data remains. It is hoped that the academicians, researchers and program personnel will carry out such analysis to provide more in-depth knowledge for future direction and effective implementation of the National Health and Population Sector Program.

The success of the survey accrues to the dedicated support and involvement of a large number of institutions and individuals. In conclusion, I would like to extend my thanks to the National Institute of Population Research and Training (NIPORT), Mitra and Associates, and ORC Macro (USA) for their sincere efforts in conducting the 1999-2000, BDHS. The U.S. Agency for International Development (USAID), Dhaka deserves thanks for financial assistance that helped ensure the ultimate success of this important undertaking.



(Mohd. Moniruzzaman)

SUMMARY OF FINDINGS

The 1999-2000 Bangladesh Demographic and Health Survey (BDHS) is a nationally representative survey that was implemented by Mitra and Associates under the authority of National Institute for Population Research and Training (NIPORT) from November 1999 to March 2000. The 1999-2000 BDHS is a follow-on to the 1993-1994 and 1996-1997 BDHS surveys and provides updated estimates of the basic demographic and health indicators covered in the earlier surveys.

Like the 1993-1994 BDHS and the 1996-1997 BDHS, the 1999-2000 BDHS was designed to provide information on levels and trends of fertility, family planning knowledge and use, infant and child mortality, maternal and child health, and knowledge of AIDS. The BDHS data are intended for use by programme managers and policymakers to evaluate and improve family planning and health programmes in Bangladesh.

Survey data show the increasing trend of contraceptive use, declining childhood mortality, and improving nutritional status; however, many challenges still await.

Fertility: The 1993-1994, 1996-1997, and 1999-2000 BDHSs results show that Bangladesh continues to experience a fairly rapid decline in fertility. At current fertility levels, a Bangladeshi woman will have an average 3.3 children during her reproductive years. In general, urban women tend to have smaller families than rural women (2.5 and 3.5 children per woman, respectively). The low level of fertility is also found in Khulna (2.7) and Rajshahi (3.0) divisions. Fertility differentials by women's education status are notable; women who had no formal education have an average of 4.1 children, while women with at least some secondary education have 2.4 children.

Bangladeshi couples have accepted the small family norm. About 60 percent of women prefer a two-child family, and another more than 20 percent consider a three child family ideal. Overall, the mean ideal family size among married women is 2.5 children and has not changed since 1993-1994.

The desire for additional children declined noticeably in Bangladesh over the past decade. In 1991, 45 percent of married women with two children wanted to have another child in future; in the 1999-2000 survey the proportion is only 30 percent. More than half (52 percent) of currently married women in Bangladesh say they want no more children and an additional 7 percent have been sterilized. Twenty four percent say they would like to wait two or more years before having their next child. Thus, the majority of married women want either to space their next birth or to limit childbearing altogether. This represents the proportion of women who are potentially in need of family planning services.

Despite the relatively high and increasing level of contraceptive use, the data indicate that unplanned pregnancies are still common. Overall, one-third of births in Bangladesh can be considered as unplanned; 19 percent were mistimed (wanted later) and 14 percent were unwanted. If all unwanted births were avoided, the fertility rate in Bangladesh would fall from 3.3 to replacement level of 2.2 children per women.

Family Planning: Since 1989, knowledge of family planning in Bangladesh has been universal, and the pill, female sterilization, injectables, IUDs, and condoms are widely known. A major cause of declining fertility in Bangladesh has been the steady increase in contraceptive use over the last 25 years. In 1975, only 8 percent of currently married women reported using a family planning method, compared with 54 percent in 1999-2000. The prevalence of modern methods has increased even faster, more that eightfold, from 5 percent in 1975 to 43 percent in 1999-2000.

However, increases in modern methods appear to have slowed down in the three years since the 1996-97 BDHS.

The dominant change in contraceptive prevalence since the late 1980s has been a large increase in the number of couples using oral contraception. The level of contraceptive use is higher in urban areas (60 percent) than in rural areas (52 percent). Contraceptive use is highest in Khulna Division, closely followed by Rajshahi and Barisal divisions, while it is lowest in Sylhet Division. Contraceptive use varies by women's level of education. Fifty-one percent of married women with no formal education are currently using a method, compared with 59 percent of those with at least some secondary education.

Public sector is the predominant source of family planning methods supply. Almost two-thirds (64 percent) of current users of modern methods obtain their methods from a public sector source. Twenty-two percent of modern method users get their methods from private medical sources such as pharmacies and private doctors and clinics, while 7 percent use nonmedical private sources such as shops and friends or relatives. Only 5 percent of users rely on an NGO source.

One in five (21 percent) women reported having been visited by a fieldworker and almost all of them were visited by government workers (19 percent). Fieldworker's visits for family planning were highest for women residing in Khulna Division (33 percent) and lowest in Chittagong and Sylhet divisions (14 to 15 percent). Fieldworker visitations for health services were lower. Only 16 percent of women are visited for health services and almost all of the visits by government health workers. About two-thirds (68 percent) of women mentioned that there was a satellite clinic in their community, but only about one-third (35 percent) of those reporting a clinic said they had visited a clinic in the previous three months.

Fifteen percent of married women in Bangladesh have an unmet need for family planning services—8 percent for spacing purposes and 7 percent for limiting birth. Thus, if all married women who say they want to space or limit their births were to use family planning methods, the contraceptive prevalence rate would increase from 54 percent to 71 percent. Currently, 78 percent of the demand for family planning is being met.

One challenge for family planning program is to reduce the high levels of contraceptive discontinuations. BDHS data indicate that almost half of contraceptive users in Bangladesh stop using within 12 months of starting; one-fifth of those who stop do so as a result of side effects or health concerns with the methods.

Antenatal Care: Nearly two-thirds of mothers in Bangladesh do not receive antenatal care. Those who receive care tend to receive it from doctor (24 percent) or nurses, midwives, and family welfare visitors (10 percent). The median number of antenatal care visit is only 1.8 far fewer than the recommended 12 visits. Furthermore, about one in four women attended the first antenatal care visit before the sixth months of gestation and for another 9 percent of women did not receive antenatal care until the sixth or seventh month of pregnancy. Among all last births in the last five years, more than one-third mothers were weighed and received iron tablets or syrup. Mother of only 16 to 19 percent of births had their blood and urine tested during their pregnancy and received advice on the danger sign of pregnancy.

Delivery Characteristics: Almost all births (92 percent) in Bangladesh are delivered at home. Use of health facilities for delivery is much more common in urban areas (16 percent of births), among mothers with some secondary education (13 percent), and among mothers who received at least four antenatal care visits (7 percent). Sixty-four percent of births in Bangladesh are assisted by a traditional birth attendant and only 12 percent of births are assisted by a medically trained personnel.

Childhood Vaccination: Sixty percent of Bangladeshi children age 12-23 months have been vaccinated against six diseases (tuberculosis, diphtheria, pertussis, tetanus, polio, and measles). Fifty-three percent of children completed the vaccination schedule by the time they turned one year. The proportion fully immunized among children age 12-23 months has increased from 54 percent in 1996-1997 to 60 percent in 1999-2000 which is almost entirely due to an increase in the proportion receiving the third doze of polio vaccine (from 62 percent in 1996-97 to 71 percent in 1999-2000).

Childhood Diseases: In the 1999-2000 BDHS, mothers were asked whether their children under age of five years had been ill with a cough accompanied by rapid, difficult breathing in the two weeks preceding the survey. Based on mother's reports, 18 percent of the children had had the illness. Twenty-seven percent of children with respiratory illness were taken to a health facility for treatment. Overall, 6 percent of the children under age five had experienced diarrhea at some time in the two weeks preceding the survey. About one-quarter (24 percent) of children whose mothers reported that they had had diarrhea were taken to a health provider for treatment. More than 60 percent of children with diarrhea were given a solution made from ORS packets, while 25 percent were given a recommended homemade fluid.

Childhood Mortality: Data from surveys indicate the improvement in child survival since the early 1980s. Under-five mortality declined from 133 deaths per 1,000 births in 1989-1993 to 116 in 1992-1996 to 94 for the period 1995-1999. The infant mortality rate decline over the same period: from 87 in 1989-1993 to 82 in 1992-1996 and to 66 in 1995-1999. Despite overall decline in infant and child mortality, one in every 15 children born during the five years before 1999-2000 died within the first year of life and one in every 11 children died before reaching age five. Clearly, child survival programs in Bangladesh need to be intensified to achieve further reductions in infant and child mortality.

Nutrition: Breastfeeding is universal in Bangladesh; 97 percent of children born in the past five years were breastfed at some time. Although almost all babies are breastfed at some time, only 17 percent are put to the breast within one hour of birth and less than two-thirds (63 percent) of children are put to the breast within the first day of life. The mean duration of any breastfeeding, exclusive breastfeeding, and breastfeeding with water only are 30.1 months, 3.8 months and 5.5 months, respectively.

In the BDHS, all children under five and their mothers were both weighed and measured to obtain data for estimating the level of malnutrition. The results indicate that 45 percent children under five are *stunted* (i.e., short for their age), a condition reflecting chronic malnutrition; 10 percent are *wasted* (i.e., thin for their height), a problem indicating acute or short-term food deficit; and 48 percent are underweight, which may reflect stunting, wasting, or both. Malnutrition is substantially higher in rural areas than urban areas. Differences by divisions show that children in Sylhet and Barisal divisions are somewhat more likely and those in Khulna division somewhat less likely to be malnourished than in other divisions.

The nutritional status of women is represented by two indices: the height and body mass index (BMI). The BMI is computed as the ratio of weight in kilograms to the square height in centimeters (kg/cm^2). Women whose BMI falls below 18.5 and women whose height is below 145 cm are considered at nutritional risk. The BMI in the 1999-2000 BDHS is 19.3 and 45 percent of women have a BMI of less than 18.5. The average height of women is 150.4 cm, and 16 percent women are shorter than 145 cm.

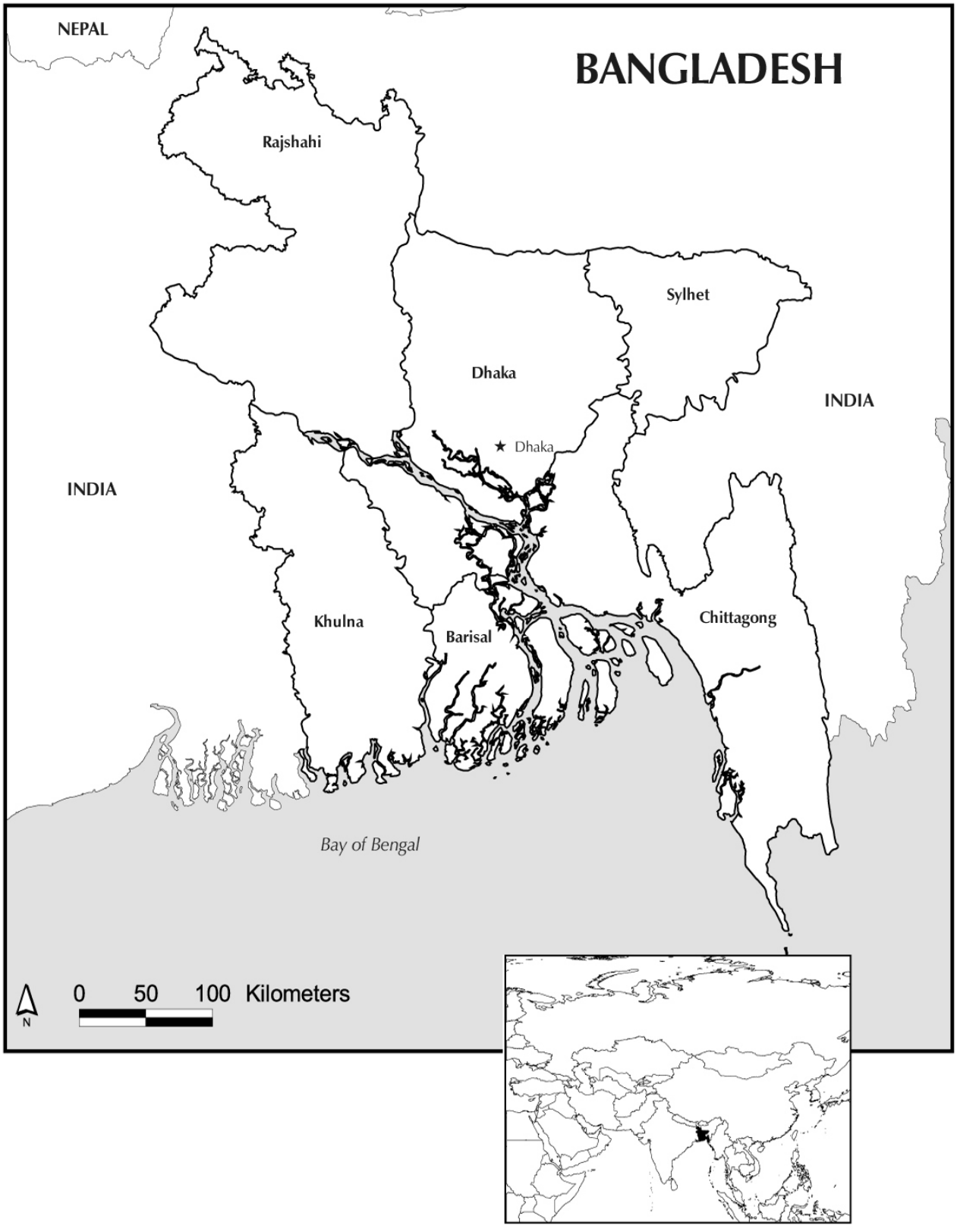
AIDS Related Knowledge and Behavior: Only 31 percent of women and half of men have heard of AIDS. Urban residence and education have a very strong positive association with AIDS knowledge. Sixty-four percent of urban women and 76 percent of urban men

have heard of AIDS compared with only 23 percent of rural women and 44 percent of rural men. Knowledge of AIDS increases from only 12 percent among illiterate women to 68 percent among women who have at least some secondary school. Similar patterns exist for men. Respondents from Sylhet and Rajshahi divisions are less likely to know of AIDS than other divisions. About one-tenth of respondents reported that there was no way to "avoid getting AIDS". It is encouraging to note that percentage who say there is no way to avoid AIDS has declined since 1996-1997 BDHS, from 41 to 12 percent of women and from 27 to 11 percent of men.

The BDHS collected information from women on their gynecological health problems in the past year and from men on the prevalence of some common symptoms of sexually transmitted diseases in the six months preceding the survey. Twenty-one percent of women reported having had either abdominal pain or a urinary problem in the 12 months preceding the survey. Seven percent of women report genital sores or ulcers, while 15 percent report problems with vaginal itching or irritation during menstruation and 10 percent fever with vaginal discharge. One in twenty men reported having had an STD in the six months preceding the survey and most of them reported having an ulcer or sores on their penis.

Community Characteristics: As a part of the 1999-2000 BDHS, a Service Provision Assessment (SPA) survey collected information on socioeconomic characteristics of the selected sample points (i.e. communities) as well as information on the accessibility and availability of health and family planning services. Ninety percent of women in Bangladesh live within 5 kilometers of a daily market, weekly market, post office, and primary school. Availability of income-generating activities in communities is also common. More than half of Bangladeshi women live in communities that have a mother's club, Grameen Bank member, or a cooperative society; 83 percent live in villages where an NGO is working.

Regarding family planning, more than half of women live in areas where shops sell temporary, non-clinical family planning methods. However, urban women have more access to these than rural women. Ninety percent of women live in areas covered by a satellite health clinic and most live within 1 kilometer of the clinic. Among women for whom a clinic is available, more than two-thirds of these clinics offer pills, condoms, and injectables as family planning methods. About 80 percent of women live in a community where child immunization is available and two-thirds of them can get an ORS packet in the village.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INTRODUCTION 1

1.1 GEOGRAPHY AND ECONOMY

Bangladesh, a small country of 147,570 square kilometers and more than 120 million people, gained independence on March 26, 1971 after a war of liberation from Pakistan. The country is almost entirely surrounded by India, except for a short southeastern frontier with Myanmar and a southern coastline on the Bay of Bengal.

The most significant feature of the landscape is the extensive network of large and small rivers that are of primary importance to the socioeconomic life of the nation. Chief among these, lying like a fan on the face of the land, are the Ganges-Padma, Brahmaputra-Jamuna, and Megna rivers.

The climate of Bangladesh is dominated by seasonal monsoons. The country experiences a hot summer season with high humidity from March to June; a somewhat cooler but still hot and humid monsoon season from July through early October; and a cool, dry winter from November to the end of February. The fertile delta is frequented by natural calamities such as floods, cyclones, tidal bores, and drought.

For administrative purposes, the country is divided into 6 divisions, 64 districts, and 490 *thanas* (subdistricts) (BBS, 1997a:3). Muslims constitute almost 90 percent of the population of Bangladesh, Hindus constitute about 10 percent, and others constitute less than 1 percent. The national language of Bangladesh is Bangla, which is spoken and understood by all.

Agriculture is the most important sector of the nation's economy. It accounts for 30 percent of the gross domestic product (GDP) and employs 64 percent of the workforce (BBS, 1997a:270,159). Jute is the main nonfood crop and the main cash crop of Bangladesh. Less than 20 percent of the cropped land area is used for crops other than jute and rice (BBS, 1997a:187,188). Industry, although small, is increasing in importance as a result of foreign investments. Prospects for mineral resources, gas, coal, and oil appear to be bright. However, the per capita income is only US$275 and half of Bangladesh's population entered the 1990s with an income below the poverty line (GOB, 1994:2; World Bank, 1995:xvii). Unemployment/underemployment is a serious problem, and pressure on the land in rural areas has led to movement of people from rural to urban areas.

1.2 POPULATION

The population of the area that now constitutes Bangladesh has grown from about 42 million in 1941 to about 120 million in 1995 (BBS, 1997a:149,140), making the nation the ninth most populous country in the world and one of the most densely populated. The intercensal population growth rate peaked in the early 1970s at about 2.5 percent per annum, followed by a decline to 2.2 percent during the 1981-1991 period (BBS, 1997a:149). The relatively young age structure of the population indicates continued rapid population growth in the future; according to the 1991 census, 45 percent of the population is under 15 years of age, 52 percent are between 15 and 64 years, and 3 percent are age 65 or over (BBS, 1997a:139). This young age structure

constitutes a built-in "population momentum," which will continue to generate population increases well into the future, even in the face of rapid fertility decline. For example, in 1992, Bangladesh had about 22 million married women of reproductive age; by the year 2001, this number is projected to rise to 31 million (GOB, 1994:8). Even if replacement-level fertility is achieved by the year 2005—as targeted by government policy—the population will continue to grow for 40 to 60 years. One projection suggests that the population of Bangladesh may stabilize at 211 million by the year 2056.

Bangladesh has undergone a remarkable demographic transition over the last two decades. The total fertility rate has declined from about 6.3 in the early 1970s (MOHPC, 1978:73) to 3.3 in the mid-1990s (Mitra et al., 1997:31). The crude death rate has also fallen dramatically, from about 19 per 1,000 population in 1975 to 8 in 1995 (GOB, 1994:4; BBS, 1997a:144). Although infant and under-five mortality rates are declining, they are still high. The infant mortality rate was 150 deaths per 1,000 live births in 1975 and fell to 87 in the 1989-1993 period (GOB, 1994:5; Mitra et al., 1994:92). Maternal mortality has declined from 6.2 deaths per 1,000 births in 1982 to 4.4 in 1995. This small but important decline is mainly attributed to increased availability of family planning and immunization services, improved antenatal and delivery care, and a reduction in the number of births to high-risk mothers (GOB, 1994:5; BBS, 1997a:144). Because of the mortality decline, there is evidence of modest improvement in life expectancy during the past decade. Life expectancy at birth was 46 years for males and 47 years for females in 1974 (UN, 1981:60). It increased to 59 years for men and 58 years for women in 1995 (BBS, 1997a:145).

Striking changes have also been observed in the fertility preferences of married Bangladeshi women. In 1975, when married women were asked how many children they would ideally like to have, the response was an average of 4.1 children (Huq and Cleland, 1990:53,54). By 1993-1994, the mean ideal family size had dropped to 2.5 (Mitra et al., 1994:88).

1.3 Population, Family Planning and Maternal and Child Health Policies and Programs

Family planning was introduced in the early 1950s through the voluntary efforts of social and medical workers. The government, recognizing the urgency of moderating population growth, adopted family planning as a government-sector program in 1965.

The policy to reduce fertility rates has been repeatedly reaffirmed since liberation in 1971. The First Five-Year Plan (1973-1978) of Bangladesh emphasized "the necessity of immediate adoption of drastic steps to slow down the population growth" and reiterated that "no civilized measure would be too drastic to keep the population of Bangladesh on the smaller side of 15 crore (i.e., 150 million) for sheer ecological viability of the nation" (GOB, 1994:7). From mid-1972, the family planning program received virtually unanimous, high-level political support. All subsequent governments that have come into power in Bangladesh have identified population control as the top priority for government action. This political commitment is crucial in understanding the fertility decline in Bangladesh. In 1976, the government declared the rapid growth of the population as the country's number one problem and adopted a broad-based, multisectoral family planning program along with an official population policy (GOB, 1994:9). Population planning was seen as an integral part of the total development process, and was incorporated into successive five-year plans. Policy guidelines and strategies for the population program are formulated by the National Population Council (NPC), which is chaired by the prime minister.

Bangladesh's population policy and programs have evolved through a series of developmental phases and have undergone changes in strategies, structure, contents, and goals. In the mid-1970s, the government instituted the deployment of full-time, local Family Welfare Assistants (FWAs)—community-based family planning motivators and distributors who numbered almost 24,000 at the height of the program a few years ago. A social marketing program to promote the sale of birth control pills and condoms was also initiated in the mid-1970s. Another characteristic of the population program is the involvement of more than 200 nongovernmental organizations.

Since 1980, the program has stressed functionally integrated health and family planning programs. The goal is to provide an essential package of high-quality, client-centered reproductive and child health care, family planning, communicable disease control, and limited curative services at a one-stop service point. The Fifth Five-Year Plan (FFYP) has been formulated keeping in view the principles of the Health and Population Sector Strategy (HPSS) with a single sector for both health and population. The main objective of the FFYP is to ensure universal access to essential health care services of acceptable quality and to further slow population growth. The most important basis of the FFYP will remain the reduction of infant mortality and morbidity, reduction of maternal mortality and morbidity, improvement of nutritional status, and reduction of fertility to reach replacement-level fertility by the year 2005 (GOB,1998:7).

The government's policy of providing health care is based on the principles of universal coverage and accessibility; optimum utilization and development of human resources for health; appropriate use of technology; gender equity; improvement of the quality of life; priority service for the most vulnerable groups including women, children, and the poor; and promotion of health as an integral part of overall socioeconomic development. Although no comprehensive health policy has been formulated since independence, development of such a policy is a high priority of the current administration. Private-sector involvement in both health and population services is being encouraged.

Numerous factors have contributed to the increase in contraceptive use over the past 20 years. The elements identified as having contributed to the success of the program are 1) strong political commitment to family planning programs by successive governments, 2) successful promotion of a small family norm through information and educational activities and other multisectoral programs, 3) establishment of a widespread infrastructure for delivering family planning and health services down to the village level, 4) increased involvement of nongovernmental organizations to supplement and complement the government's efforts, 5) flexibility to make policy and programmatic adjustments in response to emerging needs, and 6) strong support of the program by the international aid community (GOB, 1994:36).

The success achieved so far in the national family planning program is encouraging and has increased the confidence that it is possible to achieve further progress. But there remain several issues of concern, such as the tremendous growth potential built into the age structure as a consequence of past high fertility. Due to the increasing population entering childbearing age, the program will have to expand efforts substantially just to maintain the current level of contraceptive use. If demand for family planning also increases, that will put even more strain on the program. Other concerns are lack of a steady supply of contraceptives from external sources, which affects program performance; the need for further improvement in access to and quality of facilities and services; and the need for men to participate more actively in family planning acceptance.

1.4 Organization of the 1999-2000 Bangladesh Demographic and Health Survey

Survey Objectives and Implementing Organizations

The Bangladesh Demographic and Health Survey (BDHS) is intended to serve as a source of population and health data for policymakers and the research community. In general, the objectives of the BDHS survey are to—

- Assess the overall demographic situation in Bangladesh
- Assist in the evaluation of the population and health programs in Bangladesh
- Advance survey methodology.

More specifically, the objective of the BDHS survey is to provide up-to-date information on fertility and childhood mortality levels; nuptiality; fertility preferences; awareness, approval, and use of family planning methods; breastfeeding practices; nutrition levels; and maternal and child health. This information is intended to assist policymakers and administrators in evaluating and designing programs and strategies for improving health and family planning services in the country.

The 1999-2000 BDHS survey was conducted under the authority of the National Institute for Population Research and Training (NIPORT) of the Ministry of Health and Family Welfare. The survey was implemented by Mitra and Associates, a Bangladeshi research firm located in Dhaka. Macro International Inc. of Calverton, Maryland, provided technical assistance to the project as part of its international Demographic and Health Surveys program, and financial assistance was provided by the U.S. Agency for International Development (USAID)/Bangladesh.

Sample Design

Bangladesh is divided into 6 administrative divisions, 64 districts (*zillas*), and 490 *thanas*. In rural areas, thanas are divided into unions and then *mauzas,* a land administrative unit. Urban areas are divided into wards and then *mahallas*. The 1999-2000 BDHS survey employed a nationally representative, two-stage sample that was selected from the master sample maintained by the Bangladesh Bureau of Statistics for the implementation of surveys before the next census (2001). The master sample consists of 500 primary sampling units (PSUs) with enough PSUs in each stratum except for the urban strata of the Barisal and Sylhet divisions. In the rural areas, the primary sampling unit was the *mauza*, while in urban areas, it was the *mahalla*. Because the primary sampling units in the master sample were selected with probability proportional to size from the 1991 census frame, the units for the BDHS survey were subselected from the master sample with equal probability to make the BDHS selection equivalent to selection with probability proportional to size. A total of 341 primary sampling units were used for the BDHS survey (99 in urban areas and 242 in rural areas).[1]

Since one objective of the BDHS survey is to provide separate survey estimates for each division as well as for urban and rural areas separately, it was necessary to increase the sampling rate for the Barisal and Sylhet divisions and for urban areas relative to the other divisions. Thus,

[1] The proportion urban was 12 percent in the previous BDHS surveys (1993-1994 and 1996-1997). Both these surveys were based on the Integrated Multi Purpose Master Sample (IMPS) of the Bureau of Statistics, which categorized "other urban" areas (Thana headquarters, smaller town) as rural areas. So, comparison of rural-urban differentials with the 1993-1994 and 1996-1997 surveys is not possible).

the BDHS sample is not self-weighting and weighting factors have been applied to the data in this report.

Mitra and Associates conducted a household listing operation in all the sample points from September to December 1999. A systematic sample of 10,268 households was then selected from these lists. Every third household was selected for the men's survey, meaning that in addition to interviewing all ever-married women age 10-49, interviewers also interviewed all currently married men age 15-59 in those selected households. It was expected that the sample would yield interviews with approximately 10,000 ever-married women age 10-49 and 3,000 currently married men age 15-59.

QUESTIONNAIRES

Four types of questionnaires were used for the BDHS survey: a Household Questionnaire, a Women's Questionnaire, a Men's Questionnaire, and a set of questionnaires for the Service Provision Assessment (SPA) (community, health facilities, fieldworkers). The contents of these questionnaires were based on the MEASURE *DHS*+ Model A Questionnaire, which is designed for use in countries with relatively high levels of contraceptive use. These model questionnaires were adapted for use in Bangladesh during a series of meetings with a small Technical Task Force (TTF) that consisted of representatives from NIPORT; Mitra and Associates; USAID/Dhaka; the International Centre for Diarrheal Disease Research, Bangladesh (ICDDR,B); Dhaka University; and Macro International Inc. (see Appendix A for a list of members). Draft questionnaires were then circulated to other interested groups and were reviewed by the BDHS Technical Review Committee (see Appendix A). The questionnaires were developed in English and then translated into and printed in Bangla.

The Household Questionnaire was used to list all the usual members and visitors in the selected households. Some basic information was collected on the characteristics of each person listed, including his/her age, sex, education, and relationship to the head of the household. The main purpose of the Household Questionnaire was to identify women and men who were eligible for individual interview. In addition, information was collected about the dwelling itself, such as the source of water, type of toilet facilities, materials used to construct the house, and ownership of various consumer goods.

The Women's Questionnaire was used to collect information from ever-married women age 10-49. These women were asked questions on the following topics:

Background characteristics (age, education, religion, etc.)
Reproductive history
Knowledge and use of family planning methods
Antenatal and delivery care
Breastfeeding and weaning practices
Vaccinations and health of children under age five
Marriage
Fertility preferences
Husband's background and respondent's work
Height and weight of children under age five and of their mother
HIV and AIDS.

The Men's Questionnaire was similar to that for women except that it omitted the sections on reproductive history, antenatal and delivery care, breastfeeding, vaccinations, and height and weight. The questionnaire for the Service Provision Assessment was completed for each sample point and included questions about the existence in the community of income-generating activities and other development organizations and the availability and accessibility of health and family planning services. Detailed analysis of the SPA data will be presented in a separate report.

Training and Fieldwork

The BDHS Women's Questionnaire was pretested in May 1999, and the Men's Questionnaire was pretested in October 1999. For the pretest, male and female interviewers were trained at the office of Mitra and Associates. After training, the teams conducted interviews in various locations in the field under the observation of staff from Mitra and Associates and members of the Technical Task Force. Altogether, 309 Women's and 137 Men's Questionnaires were completed. Based on observations in the field and suggestions made by the pretest field teams, the TTF made revisions in the wording and translations of the questionnaires.

In October 1999, candidates for field staff positions for the main survey were recruited. Recruitment criteria included educational attainment, maturity, ability to spend one month in training and at least four months in the field, and experience in other surveys. Training for the main survey was conducted at a rented center for four weeks (from October 9 to November 9, 1999). Initially, training consisted of lectures on how to complete the questionnaires, with mock interviews between participants to gain practice in asking questions. Toward the end of the training course, the participants spent several days in practice interviewing in various places close to Dhaka. Trainees whose performance was considered superior were selected as supervisors and field editors.

Fieldwork for the BDHS survey was carried out by 12 interviewing teams. Each consisted of 1 male supervisor, 1 female field editor, 5 female interviewers, 1 male interviewer, 1 porter for the anthropometric equipment, and 1 cook, for a total of 120 field staff. Mitra and Associates also fielded four quality control teams of two people each to check on the field teams. In addition, NIPORT monitored fieldwork using their quality control team. Moreover, staff from USAID, Macro International Inc., and NIPORT monitored the fieldwork by visiting teams in the field. Fieldwork commenced on November 10, 1999 and was completed on March 15, 2000. Fieldwork was implemented in four phases.

Data Processing

All questionnaires for the BDHS survey were returned to Dhaka for data processing at Mitra and Associates. The processing operation consisted of office editing, coding of open-ended questions, data entry, and editing inconsistencies found by the computer programs. The data were processed on six microcomputers working in double shifts and carried out by ten data entry operators and two data entry supervisors. The BDHS data entry and editing programs were written in ISSA (Integrated System for Survey Analysis). Data processing commenced in mid-December 1999 and was completed by end of April 2000.

Response Rates

Table 1 shows response rates for the survey and reasons for nonresponse. A total of 10,268 households were selected for the sample, of which 9,854 were successfully interviewed. The shortfall is primarily due to dwellings that were vacant or in which the inhabitants had left for an

extended period at the time they were visited by the interviewing teams. Of the 9,922 households occupied, 99 percent were successfully interviewed. In these households, 10,885 women were identified as eligible for the individual interview (i.e., ever-married and age 10-49) and interviews were completed for 10,544 or 97 percent of them. In the one-third of the households that were selected for inclusion in the men's survey, 2,817 currently married men age 15-59 were identified, of which 2,556 or 91 percent were interviewed.

The principal reason for nonresponse among eligible women and men was the failure to find them at home despite repeated visits to the household. The nonresponse rate was low.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, Bangladesh 1999-2000

	Residence		
Result	Urban	Rural	Total
Household interviews			
Households sampled	2,997	7,271	10,268
Households occupied	2,891	7,031	9,922
Households interviewed	2,857	6,997	9,854
Household response rate	98.8	99.5	99.3
Individual interviews: women			
Eligible women	3,274	7,611	10,885
Eligible women interviewed	3,150	7,394	10,544
Eligible woman response rate	96.2	97.1	96.9
Individual interviews: men			
Eligible men	851	1,966	2,817
Eligible men interviewed	771	1,785	2,556
Eligible man response rate	90.6	90.8	90.7

CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS 2

This chapter presents information on social and economic characteristics of the household population and the individual survey respondents, such as age, sex, residence, and educational level. Also examined are environmental conditions such as housing facilities and household characteristics. This information on the characteristics of the households and the individual women and men interviewed is essential for the interpretation of survey findings and can provide an approximate indication of the representativeness of the survey.

2.1 HOUSEHOLD POPULATION

The BDHS Household Questionnaire was used to collect data on the demographic and social characteristics of all usual residents of the sampled household and visitors who had spent the previous night in the household. This approach makes it possible to distinguish between the *de jure* population (those usually resident in the household) and the *de facto* population (those who spent the night before the interview in the household). A household is defined as a person or group of people who live together and share food.

AGE AND SEX COMPOSITION

The distribution of the household population covered in the BDHS survey is shown in Table 2.1 by five-year age groups, according to sex and urban-rural residence. The BDHS households constitute a population of 50,446 people. The population is equally divided into females (50 percent) and males (50 percent). Because of relatively high levels of fertility in the past, there are more people in the younger age groups than in the older age groups of each sex (Figure 2.1). Thirty-nine percent of the population is below 15 years of age and 4 percent is age 65 or older. The proportion below age 15 is relatively higher in rural areas (40 percent) than in urban areas (35 percent).

Overall, the number of women slightly exceeds the number of men. This pattern is especially pronounced at age 15-29, which may be due in part to international migration of young men for work. However, some combination of overreporting of ages of men and/or underreporting of ages of women may account for the excess of men over women at age 65 and above.

Figure 2.2 presents the distribution of the male and female household population by single year of age (see also Appendix Table C.1). The data indicate that there is some misreporting of ages, including considerable preference for ages ending in particular digits, especially 0 and 5. One of the most commonly used measures of digit preference in age reporting is Myer's Index (United Nations, 1995). The theoretical range of Myer's Index is 0, representing no heaping, to 90, which would result if all ages were reported at a single digit, say 0 (Shryock et al., 1976). Values of Myer's Index computed for the age range 10-69 in the household sample population in Bangladesh are 5 for females and 27 for males. The index is often used as one indicator of survey quality. The lower estimate for females is probably due to the emphasis during the interviewer training on obtaining accurate age information for women to correctly determine the eligibility of women for the individual interview. Women also provided a detailed history of all their births, which is likely to have resulted in more accurate reporting of their own ages due to probing the dates of birth of their children.

Table 2.1 Household population by age, residence, and sex

Percent distribution of the de facto household population by five-year age groups, according to urban-rural residence and sex, Bangladesh 1999-2000

	Urban			Rural			Total		
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	11.5	10.4	10.9	13.7	13.1	13.4	13.3	12.6	12.9
5-9	11.1	10.9	11.0	13.7	12.7	13.2	13.2	12.4	12.8
10-14	12.5	13.5	13.0	13.6	13.7	13.6	13.4	13.6	13.5
15-19	10.9	13.4	12.2	10.3	12.4	11.3	10.4	12.6	11.5
20-24	9.3	10.7	10.0	7.1	9.3	8.2	7.6	9.6	8.6
25-29	8.3	9.8	9.1	7.1	8.1	7.6	7.3	8.4	7.9
30-34	7.1	8.2	7.7	5.9	6.3	6.1	6.2	6.7	6.4
35-39	7.5	5.8	6.6	6.5	5.4	5.9	6.7	5.4	6.1
40-44	6.6	5.0	5.8	4.8	4.5	4.6	5.2	4.6	4.9
45-49	4.4	3.1	3.8	4.0	3.6	3.8	4.1	3.5	3.8
50-54	3.4	2.3	2.9	3.1	2.8	2.9	3.2	2.7	2.9
55-59	1.9	2.0	1.9	2.3	2.5	2.4	2.3	2.4	2.3
60-64	1.9	1.3	1.6	2.3	2.2	2.2	2.2	2.0	2.1
65-69	1.2	1.3	1.2	1.6	1.2	1.4	1.6	1.2	1.4
70-74	1.2	0.9	1.0	1.8	1.0	1.4	1.7	1.0	1.4
75-79	0.4	0.4	0.4	0.7	0.3	0.5	0.7	0.3	0.5
80 +	0.8	1.0	0.9	1.2	1.0	1.1	1.1	1.0	1.1
Missing /Don't know	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,816	4,834	9,649	20,197	20,595	40,796	25,013	25,428	50,446

Figure 2.1 Population Pyramid, Bangladesh 1999-2000

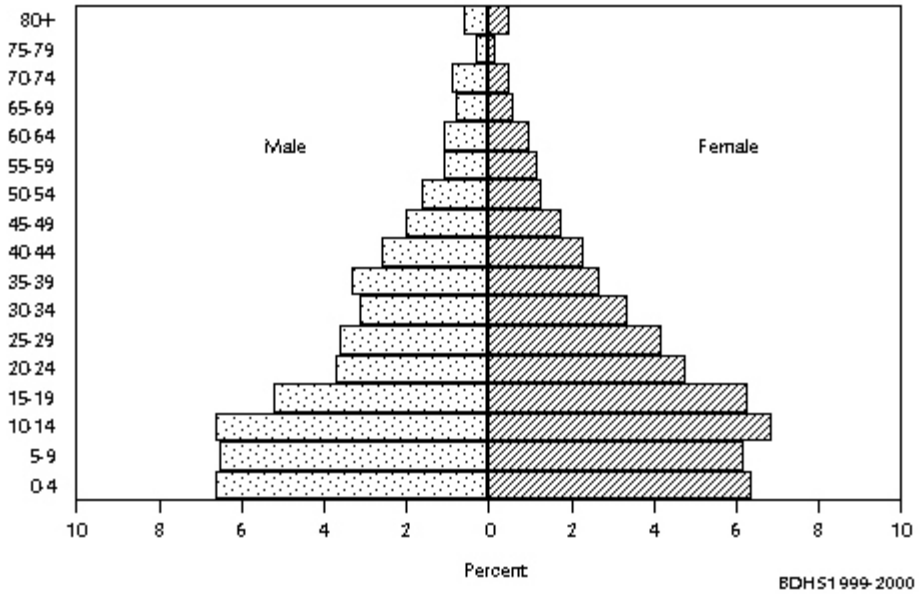


Figure 2.2 Distribution of De Facto Household Population by Single Year of Age and Sex

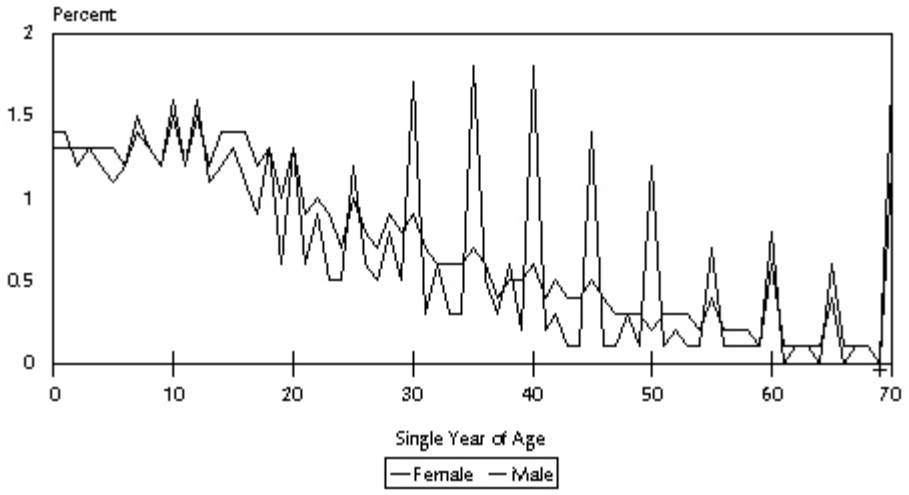


Table 2.2 compares the broad age structure of the population from the 1989 Bangladesh Fertility Survey (BFS); the 1989 and 1991 Contraceptive Prevalence Surveys (CPS); and the 1993-1994, 1996-1997, and 1999-2000 Bangladesh Demographic and Health Surveys. There has been a decline in the proportion of population less than 15 years of age and an increase in the proportion age 15-59. This pattern is consistent with a decline in fertility.

Table 2.2 Population by age from selected sources

Percent distribution of the de facto population by age group, selected sources,

Age group	1989 BFS	1989 CPS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS
<15	43.2	43.2	42.7	42.6	41.0	39.2
15-59	50.9	50.9	51.2	51.2	53.1	54.4
60+	5.9	5.9	6.0	6.2	5.9	6.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Median age	u	u	u	18.4	18.8	19.5

u = Unknown (not available)
Source: Huq and Cleland, 1990:28; Mitra et al., 1993:14; Mitra et al., 1997:9

HOUSEHOLD COMPOSITION

Table 2.3 shows that a small minority of households in Bangladesh are headed by females (9 percent), with more than 90 percent headed by males. Female-headed households are equally uncommon in rural and urban areas. The average household size in Bangladesh is 5.2 people, with no variation between rural and urban areas. Single-person households are rare in both rural and urban areas.

Table 2.3 Household composition

Percent distribution of households by sex of head of household and household size, according to urban-rural residence, Bangladesh 1999-2000

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	90.4	91.6	91.3
Female	9.6	8.4	8.7
Number of usual members			
1	1.1	1.6	1.5
2	6.9	6.3	6.4
3	14.8	13.8	14.0
4	21.2	20.5	20.6
5	19.7	20.5	20.3
6	14.4	15.7	15.4
7	8.9	9.0	9.0
8	5.3	5.3	5.3
9 +	7.7	7.4	7.4
Total	100.0	100.0	100.0
Mean size	5.2	5.2	5.2

Note: Table is based on de jure members, i.e., usual residents.

EDUCATION

Education is a key determinant of the lifestyle and status an individual enjoys in a society. It affects almost all aspects of human life, including demographic and health behavior. Studies have consistently shown that educational attainment has strong effects on reproductive behavior, contraceptive use, fertility, infant and child mortality, morbidity, and issues related to family health and hygiene. Table 2.4 provides data on educational attainment of the household population listed in the 1999-2000 BDHS survey.

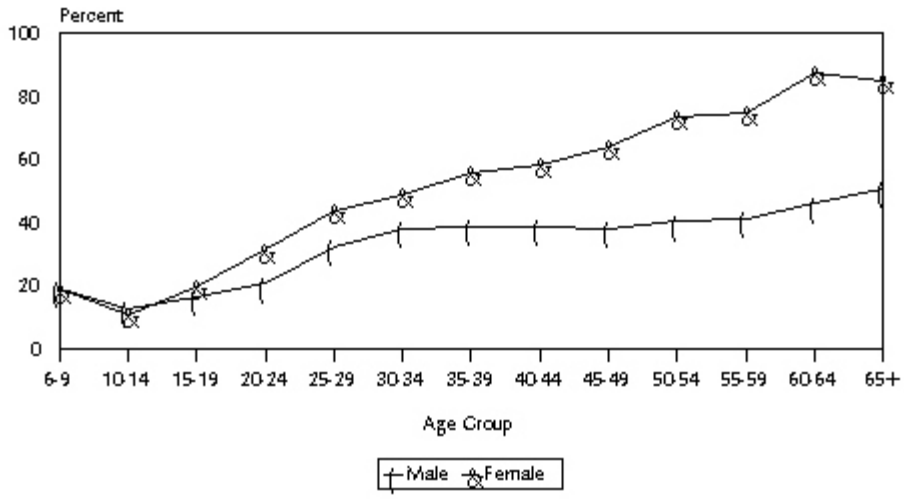
Education has become more widespread over time in Bangladesh. This is apparent from the differences in levels of educational attainment by age groups. A steadily decreasing percentage of both males and females have never attended school in each younger age group. For men, the proportion who have never attended school decreases from 51 percent in the oldest age group (65 years or more) to 13 percent among those age 10-14. For women, the decline is more striking: from 85 percent to 11 percent (see Figure 2.3).

Table 2.4 Educational level of the female and male household population

Percent distribution of the de facto female and male household population age six and over by highest level of education attended and median number of years of schooling, according to selected background characteristics, Bangladesh 1999-2000

Background characteristic	Level of education: No education	Primary incomplete	Primary complete	Secondary+	Don't know/ Missing	Total	Number	Median
			FEMALE					
Age								
6-9	18.8	80.1	0.5	0.5	0.1	100.0	2,586	0.0
10-14	10.9	49.9	6.8	32.4	0.0	100.0	3,464	3.3
15-19	19.7	17.4	10.6	52.2	0.1	100.0	3,193	5.0
20-24	31.5	17.3	10.0	41.1	0.1	100.0	2,437	4.1
25-29	43.7	16.8	10.2	29.3	0.0	100.0	2,140	1.4
30-34	48.7	17.3	8.8	25.3	0.0	100.0	1,700	0.0
35-39	55.7	17.0	8.6	18.7	0.1	100.0	1,383	0.0
40-44	58.5	16.3	9.0	16.3	0.0	100.0	1,161	0.0
45-49	64.0	14.8	9.2	11.8	0.1	100.0	890	0.0
50-54	73.9	12.9	5.5	7.5	0.1	100.0	680	0.0
55-59	74.9	14.6	4.5	5.1	0.9	100.0	603	0.0
60-64	82.5	11.8	1.6	3.6	0.5	100.0	510	0.0
65+	85.2	7.5	3.8	3.0	0.5	100.0	899	0.0
Residence								
Urban	28.7	23.7	7.6	39.8	0.2	100.0	4,233	3.6
Rural	40.1	30.3	7.4	22.1	0.1	100.0	17,431	0.7
Division								
Barisal	26.0	36.0	11.8	26.1	0.1	100.0	1,460	2.4
Chittagong	34.5	27.3	8.4	29.6	0.1	100.0	4,366	1.9
Dhaka	39.5	28.7	6.4	25.2	0.1	100.0	6,664	0.8
Khulna	34.0	31.1	6.8	28.0	0.1	100.0	2,482	1.8
Rajshahi	41.7	28.6	6.9	22.6	0.1	100.0	5,250	0.6
Sylhet	44.9	26.6	7.6	20.8	0.1	100.0	1,442	0.3
Total	37.8	29.0	7.4	25.6	0.1	100.0	21,664	1.2
			MALE					
Age								
6-9	19.0	79.9	0.5	0.5	0.1	100.0	2,644	0.0
10-14	12.5	53.0	7.5	26.7	0.3	100.0	3,341	2.5
15-19	16.7	18.1	9.0	55.8	0.4	100.0	2,602	5.4
20-24	20.6	15.9	9.1	53.8	0.6	100.0	1,889	5.7
25-29	32.2	14.3	8.5	44.4	0.7	100.0	1,822	4.3
30-34	38.0	14.7	7.2	39.6	0.4	100.0	1,539	3.3
35-39	38.7	16.5	8.1	36.0	0.7	100.0	1,684	2.7
40-44	38.6	14.6	9.0	36.8	1.0	100.0	1,296	3.1
45-49	38.1	13.3	8.0	40.1	0.5	100.0	1,023	3.5
50-54	40.4	13.9	8.3	37.1	0.3	100.0	793	2.6
55-59	41.2	15.1	9.8	31.8	2.0	100.0	566	1.9
60-64	46.1	14.0	9.6	28.8	1.6	100.0	560	0.5
65+	51.0	16.5	7.5	23.0	1.9	100.0	1,268	0.0
Residence								
Urban	18.0	22.6	6.8	51.8	0.7	100.0	4,162	5.1
Rural	30.6	31.3	7.5	30.0	0.6	100.0	16,873	2.0
Division								
Barisal	20.3	33.9	8.4	36.6	0.8	100.0	1,362	3.4
Chittagong	22.6	31.5	7.9	37.6	0.4	100.0	4,112	3.3
Dhaka	30.7	27.9	6.6	33.9	0.9	100.0	6,565	2.2
Khulna	25.3	28.6	5.6	39.7	0.7	100.0	2,406	3.3
Rajshahi	31.3	29.3	8.0	31.0	0.4	100.0	5,216	2.2
Sylhet	33.1	30.6	8.8	27.2	0.3	100.0	1,375	1.6
Total	28.1	29.6	7.3	34.3	0.6	100.0	21,035	2.6

Figure 2.3 Percentage of Males and Females with No Education by Age Group



BDHS 1999-2000

One way to assess more recent trends in educational attainment is to compare the 1996-1997 and 1999-2000 BDHS surveys with regard to the percentage of males and females age six and above who are uneducated. Between 1996-1997 and 1999-2000, the percentage of females age six and above who have no education declined from 44 percent to 38 percent. For males age six and above, the percentage with no education also declined from 33 percent to 28 percent.

Despite this improvement in the spread of education, levels of educational attainment still remain low in Bangladesh, with a strong differential persisting between males and females. Generally, educational attainment is higher for males than for females, although this varies substantially by age. Twenty-eight percent of men and 38 percent of women age six years and above have not received any formal education. The median number of years of schooling is 2.6 for men and a little more than 1 full year for women. In almost every age group, there are smaller proportions of men than women with no education and more men than women with secondary education. However, over time, the sex differential is narrowing. For example, at age group 6-19, differences in educational attainment between boys and girls are insignificant (see Figure 2.3).

Substantial urban-rural gaps in educational attainment persist. Thirty-one percent of rural men have never attended school, compared with less than one-fifth of urban men (18 percent). The differences are also striking for women—40 percent of rural women have never attended school, compared with only 29 percent of urban women. Conversely, the proportions of men and women with some secondary education are almost twice as high in urban areas as in rural areas.

As for differences by division, the proportion of the population with no education is lower in Barisal. Men and women in Sylhet Division are the most educationally disadvantaged.

Table 2.5 presents school attendance by age, sex, and residence of the population age 6-24 years. Of every ten children age 6-15 years, seven (74 percent) are attending school. But enrollment drops substantially after age 15; only one-third of older teenagers are still in school and only 17 percent of the population in their early twenties are still in school. The substantial decline after age 15 may be partly because many families need their grown children (age 16-24) for work or do not have the means to bear their educational expenses.

Table 2.5 School attendance

Percentage of the de facto household population age 6-24 years attending school by age, sex, and urban-rural residence, Bangladesh 1999-2000

	Male			Female			Total		
Age group	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10	80.9	77.9	78.4	78.7	80.6	80.3	79.8	79.2	79.3
11-15	65.4	66.8	66.5	64.5	69.6	68.6	64.9	68.2	67.6
6-15	72.9	72.6	72.6	71.2	75.2	74.5	72.0	73.9	73.5
16-20	48.4	37.6	39.8	33.7	25.7	27.4	40.4	31.1	33.0
21-24	36.9	22.7	26.4	19.6	7.9	10.4	27.5	13.7	17.0

It is encouraging that urban-rural gaps in school attendance of children have become virtually nonexistent. In fact, a slightly higher proportion of rural than urban children in age group 11-15 years are in school. However, rural attendance rates still lag far behind urban rates among children older than 15. At age 16-20, only 31 percent of rural adolescents are still in school, compared with 40 percent of urban youth. At age 21-24, only 14 percent of rural young adults are in school, compared with 28 percent in urban areas.

The sex differential in school enrollment also seems to be disappearing, at least among younger children. At age 6-15, the proportions of boys and girls attending school are indistinguishable. However, by age 16-20, men are much more likely than women to be enrolled (40 versus 27 percent), presumably due to early marriage or social seclusion, which cause young women to drop out of school.

Employment

The 1999-00 BDHS Household Questionnaire included questions on whether each person age five and above was working for cash. The resulting information is shown in Table 2.6 for males and females by age group according to urban-rural residence. Men are much more likely than women to be employed, regardless of age group or residence. Overall, 44 percent of male members in the household are employed, compared with only 10 percent of female members. As expected, employment rates are higher among both men and women in their twenties and thirties and decline among men and women in their late fifties and sixties. Paid employment begins early in Bangladesh; at age 10-14, 12 percent of boys and 3 percent of girls are working for cash. By age 15-19, more than one-third (36 percent) of boys and 7 percent of girls are engaged in paid employment. Since similar questions were asked in the 1993-1994 BDHS survey, it is possible to assess the recent trends in employment. Between 1993-1994 and 1999-2000, the percentage of school-age children engaged in paid employment declined. For example, paid employment for boys age 10-14 years declined from 17 to 12 percent, and for boys 15-19 years, it declined from 47 to 36 percent. Similar trends are also observed for girls.

Table 2.6 Employment status

Percentage of the male and female household population working for cash, by age group and urban-rural residence, Bangladesh 1999-2000

	Male			Female		
Age	Urban	Rural	Total	Urban	Rural	Total
5-7	0.0	0.3	0.2	0.0	0.0	0.0
8-9	3.0	0.8	1.1	2.3	0.2	0.5
10-14	15.1	11.2	11.9	8.9	2.1	3.4
15-19	35.7	35.7	35.7	13.7	5.9	7.4
20-24	54.8	53.6	53.9	17.5	11.9	13.1
25-29	78.1	65.1	67.8	19.7	15.3	16.3
30-34	90.4	72.6	76.4	25.6	19.5	20.9
35-39	94.0	73.9	78.1	24.9	18.5	19.8
40-44	93.8	70.6	76.2	24.1	18.4	19.5
45-49	93.9	70.0	74.9	20.3	10.8	12.4
50-54	91.3	68.1	72.9	13.8	7.1	8.2
55-59	80.1	59.2	62.6	13.6	7.7	8.7
60-64	70.5	46.8	50.6	2.3	5.2	4.8
65+	43.4	29.4	31.3	2.4	2.0	2.1
Total	55.5	41.5	44.2	14.5	8.5	9.7

2.2 HOUSING CHARACTERISTICS

Information on the characteristics of sampled households is shown in Table 2.7. The physical characteristics of the households have an important effect on environmental exposure to disease and reflect the household's economic conditions. About one-third (32 percent) of the households in Bangladesh have electricity, up from 18 percent in 1993-1994 and 22 percent in 1996-1997. There are significant differences in access to electricity between rural and urban areas; 81 percent of urban households have electricity compared with 21 percent of rural households.

Tube wells are the major source of drinking water in Bangladesh. Overall, nine in ten households obtain their drinking water from tube wells. Only 4 percent depend on surface water such as surface wells, ponds, and rivers/streams. Piped water is available mostly in urban areas. Among urban households, 24 percent have water piped into the residence, 6 percent obtain drinking water from taps outside the residence, and 69 percent get their drinking water from tube wells. In rural areas, tube wells are the only major source of drinking water; 95 percent of rural households obtain their drinking water from tube wells. There has been little change in sources of drinking water since 1996-1997.

About 80 percent of Bangladeshi households have some type of toilet facilities; however, only 54 percent have hygienic toilets (septic tank/modern toilets, water-sealed/slab latrines, and pit toilets). As expected, sanitation facilities vary between rural and urban areas. In rural areas, only 49 percent of households have hygienic toilets, compared with 75 percent of urban households. Moreover, 24 percent of rural households have no facility at all, compared with only 3 percent of urban households.

Table 2.7 Housing characteristics and level of food consumption

Percent distribution of households by housing characteristics and household food consumption, according to urban-rural residence, Bangladesh 1999-2000

Characteristic	Residence		
	Urban	Rural	Total
Electricity			
Yes	81.2	20.5	32.0
No	18.8	79.5	68.0
Total	100.0	100.0	100.0
Source of drinking water			
Piped into residence	24.2	0.1	4.6
Piped outside residence	6.4	0.3	1.5
Tube well	68.6	95.2	90.2
Surface well	0.3	1.1	1.0
Pond/lake	0.4	2.6	2.2
River/stream	0.0	0.6	0.5
Total	100.0	100.0	100.0
Sanitation facility			
Septic tank, modern	35.1	4.3	10.1
Water sealed/slab latrine	28.7	25.0	25.7
Traditional pit toilet	10.8	20.0	18.3
Open latrine	20.8	23.0	22.6
Hanging latrine	1.3	3.7	3.2
No facility/bush	3.0	23.8	19.9
Other	0.0	0.1	0.1
Missing	0.3	0.2	0.2
Total	100.0	100.0	100.0
Roof material			
Katcha (bamboo/thatch)	6.8	23.6	20.5
Tin	64.8	71.7	70.4
Cement/concrete	28.4	4.5	9.0
Other	0.0	0.1	0.1
Total	100.0	100.0	100.0
Wall material			
Jute/bamboo/mud	32.5	68.0	61.3
Wood	1.7	3.1	2.8
Brick/cement	54.1	8.3	16.9
Tin	11.7	20.2	18.6
Other	0.1	0.5	0.4
Total	100.0	100.0	100.0
Floor material			
Earth/bamboo	43.7	93.6	84.2
Wood	0.6	0.4	0.4
Cement/concrete	55.6	6.0	15.4
Total	100.0	100.0	100.0
Food consumption			
Deficit in whole year	12.8	18.9	17.7
Sometimes deficit	32.6	44.0	41.8
Neither deficit nor surplus	39.1	28.0	30.1
Surplus	15.3	9.0	10.1
Total	100.0	100.0	100.0

Tin is the most common roofing material in Bangladesh, accounting for 70 percent of both urban and rural households. However, urban and rural households vary widely in the use of other types of roofs. In urban areas, 28 percent of households live in dwellings with cement or concrete roofs, while in rural areas, bamboo or thatch (24 percent) is the most common roofing material after tin.

Six in ten households in Bangladesh live in structures with walls made of natural materials such as jute, bamboo, or mud. Seventeen percent live in houses with brick or cement walls, and 19 percent live in houses with tin walls. Urban households live in more solid dwellings than rural households. More than half of urban households live in structures with brick or cement walls, compared with only 8 percent of rural households.

The most commonly used floor material in Bangladesh is earth, followed by cement. Fifty-six percent of urban households have cement floors; earth flooring is almost universal in rural areas (94 percent).

Household Possessions and Availability of Food

The possession of durable goods is another indicator of a household's socioeconomic level, although these goods may also have other benefits. For example, having access to a radio or television may expose household members to innovative ideas or important information about health and family planning, a refrigerator prolongs the wholesomeness of food, and a means of transportation allows greater access to services outside the community in which the household is located.

Possession of household durable goods is not common in Bangladesh, since many families cannot afford them. Nationally, 84 percent of households own a cot or bed, 62 percent own a table or chair, 55 percent own a watch or clock, 26 percent own an *almirah* (wardrobe), and only 18 percent a bench. As for more valuable items, 32 percent of households own a radio, 20 percent own a bicycle, 18 percent own a television, 6 percent own a sewing machine, and only 2 percent own a motorcycle (Table 2.8). One in ten households owns none of the items asked about. More urban than rural households possess every durable good asked about except bicycles and benches, which reflects, among other things, the relatively better economic conditions in urban areas. There is also evidence that the socioeconomic status of Bangladeshi households has improved over time, since there has been an increase in the proportion of households owning almost all the durable goods asked about (Mitra et al., 1994:18; Mitra et al., 1997: 14) (Figure 2.4).

Almost 90 percent of Bangladeshi households own a homestead. Half of Bangladeshi households own land other than a homestead, and 11 percent are homeless. Ownership of a homestead or land is less common in urban areas than in rural areas.

In the 1999-2000 BDHS survey, respondents were asked whether they thought their household was a surplus or deficit household in terms of food consumption. Only 10 percent of Bangladeshi household respondents indicated that they have a surplus of food, while 30 percent of households mentioned that they have neither a deficit nor a surplus of food. Sixty percent of the households mentioned that they have a food deficit: 18 percent of households always have a deficit, and 42 percent sometimes have a deficit. Food deficits are more common in rural households (63 percent) than in urban households (45 percent).

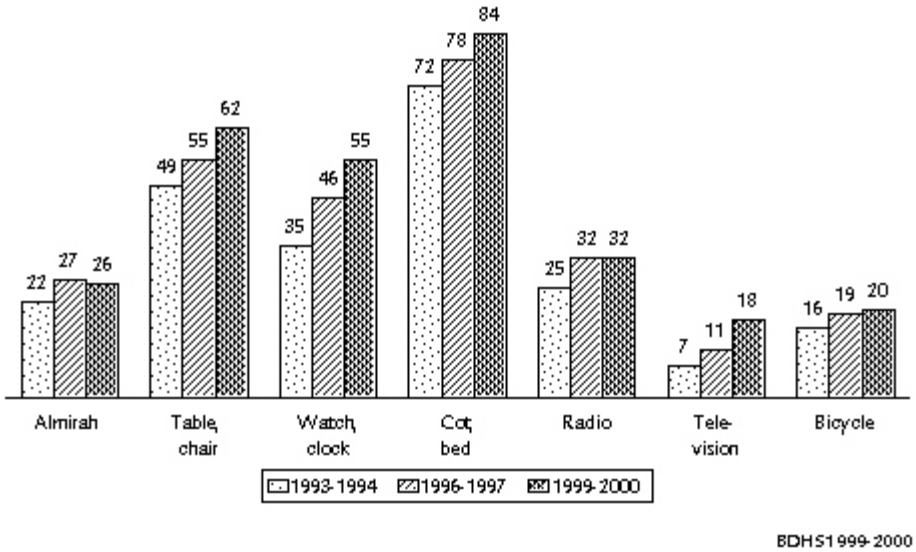
Table 2.8 Household durable goods and land ownership

Percentage of households possessing various durable consumer goods and ownership of land, according to urban-rural residence, Bangladesh 1999-2000

Ownership	Residence		Total
	Urban	Rural	
Durable good			
Almirah[1]	50.1	20.9	26.4
Table/chair	72.1	59.1	61.6
Bench	11.6	19.5	18.0
Watch/clock	77.8	49.9	55.2
Cot/bed	92.6	81.4	83.6
Radio	45.2	28.5	31.6
Television	49.0	10.1	17.5
Sewing machine	15.6	4.1	6.3
Bicycle	18.4	20.7	20.3
Motorcycle	4.0	1.3	1.8
None of the above	3.9	12.0	10.5
Land ownership			
Owns a homestead	80.9	88.2	86.8
Owns other land	37.4	53.7	50.6
None of the above	16.6	9.6	10.9
Number of households	1,861	7,993	9,854

[1] Wardrobe

Figure 2.4 Trends in Percentage of Households Owning Durable Goods



2.3 BACKGROUND CHARACTERISTICS OF WOMEN AND MEN RESPONDENTS

GENERAL CHARACTERISTICS

Table 2.9 shows the distribution of female and male respondents by selected background characteristics. To assess their age, respondents were asked two questions in the individual interview: "In what month and year were you born?" and "How old were you at your last birthday?" Interviewers were trained to probe in situations in which respondents did not know their age or date of birth, and they were instructed as a last resort to record their best estimate of the respondent's age.

Table 2.9 Background characteristics of respondents

Percent distribution of ever-married women and currently married women and men by background characteristics, Bangladesh 1999-2000

	Ever-married women			Currently married women			Currently married men		
		Number of women			Number of women			Number of men	
Background characteristics	Weighted percent	Weighted	Un-weighted	Weighted percent	Weighted	Un-weighted	Weighted percent	Weighted	Un-weighted
Age									
10-14	1.8	186	171	1.9	181	166	na	na	na
15-19	14.4	1,514	1,451	15.1	1,468	1,405	0.9	23	21
20-24	18.3	1,935	1,910	19.0	1,846	1,819	5.9	151	138
25-29	18.7	1,975	2,012	19.3	1,878	1,908	13.5	345	346
30-34	15.4	1,621	1,675	15.7	1,523	1,575	16.3	418	412
35-39	12.7	1,335	1,337	12.1	1,174	1,174	19.3	492	500
40-44	10.7	1,126	1,143	9.8	948	950	15.4	394	403
45-49	8.1	853	845	7.2	702	699	13.0	333	333
50-54	na	na	na	na	na	na	8.6	219	222
55-59	na	na	na	na	na	na	7.1	181	181
Marital status									
Married	92.2	9,720	9,696	100.0	9,720	9,696	100.0	2,556	2,556
Widowed	4.3	456	468	na	na	na	na	na	na
Divorced	1.1	121	120	na	na	na	na	na	na
Separated/deserted	2.3	247	260	na	na	na	na	na	na
Residence									
Urban	19.6	2,071	3,150	19.5	1,893	2,878	19.9	508	771
Rural	80.4	8,473	7,394	80.5	7,827	6,818	80.1	2,048	1,785
Division									
Barisal	6.5	688	981	6.6	638	914	6.2	159	230
Chittagong	18.6	1,965	1,950	18.5	1,795	1,781	16.7	426	448
Dhaka	30.9	3,257	2,539	31.0	3,009	2,340	32.7	835	670
Khulna	12.2	1,281	1,817	12.3	1,198	1,700	12.6	322	453
Rajshahi	25.9	2,728	2,118	26.0	2,527	1,959	26.7	682	515
Sylhet	5.9	624	1,139	5.7	552	1,002	5.2	133	240
Education									
No education	45.9	4,843	4,575	44.3	4,306	4,037	34.9	891	839
Primary incomplete	18.3	1,928	1,900	18.5	1,799	1,766	23.1	590	580
Primary complete	10.2	1,074	1,097	10.5	1,019	1,037	7.5	192	187
Secondary+	25.6	2,699	2,972	26.7	2,596	2,856	34.5	883	950
Religion									
Islam	87.7	9,251	9,135	87.9	8,540	8,418	86.1	2,202	2,187
Hinduism	11.0	1,165	1,293	10.9	1,056	1,167	12.1	308	326
Buddhism	0.9	96	86	1.0	93	83	1.4	35	33
Christianity	0.3	30	27	0.3	29	25	0.2	6	6
Other	0.0	1	1	0.0	1	1	0.0	0	0
Missing	0.0	1	2	0.0	1	2	0.1	4	3
Total	100.0	10,544	10,544	100.0	9,720	9,696	100.0	2,556	2,556

na = Not applicable

The age distribution of ever-married women is very similar to that found in the 1993-1994 and 1996-1997 BDHS surveys; a little more than half (51 percent) of ever-married women are age 15-29. The currently married men interviewed are older than the ever-married women, in large part because men marry at older ages than women.

Twenty percent of respondents live in urban areas, while 80 percent live in rural areas. The distribution of respondents by division of residence is similar to that of the 1996-1997 BDHS survey; almost one-third of female and male respondents live in Dhaka Division, while roughly one-fourth live in Rajshahi Division, and one in five live in Chittagong Division. About 12 percent of respondents live in Khulna Division, 7 percent in Barisal Division, and only 6 percent in Sylhet Division.

About half (46 percent) of ever-married women have never attended school, 28 percent have attended only primary school or completed primary education, and more than one-quarter (26 percent) have some secondary school. Although educational attainment of women in the sample is low, it is interesting to note that the proportion of women with some secondary education has increased from 18 percent of ever-married women in 1996-1997 to 26 percent in 1999-2000. In general, married men are better educated than women, with the majority having some education and 35 percent having some secondary school, compared with only 26 percent of ever-married women.

About nine in ten respondents are Muslim, with most of the remainder being Hindu. The composition by religion is similar to that reported in the 1993-1994 and 1996-1997 BDHS surveys (Mitra et al., 1994 and 1997).

Because the married men interviewed in the BDHS survey were selected from a subsample of households in which ever-married women were interviewed, it is possible to match male respondents with their wives to obtain a data set of matched couples. Table 2.10 shows husband-wife differentials in age and education for 2,280 couples. For almost all married couples, the husband is older than the wife—generally 5 to 14 years older. The mean age difference is nine years.

Regarding educational differences, in one-fourth of married couples, neither the husband nor the wife has any education, while in another 44 percent, both have some education. For the remaining one-third of couples, the proportion in which the husband has some education and the wife has none is twice that in which the wife is educated and the husband is not (21 versus 10 percent).

Table 2.10 Differentials in age and education

Percent distribution of couples by differences between spouses in age and level of education, Bangladesh 1999-2000

Characteristic	Percent	Number
Age (husband's age minus wife's age)		
Wife older	1.8	41
0-4 years	13.9	318
5-9 years	41.2	940
10-14 years	30.7	699
15 years +	12.4	282
Mean age difference (years)	9.3	2,280
Education		
Both husband and wife not educated	24.7	562
Wife educated, husband not	10.3	235
Husband educated, wife not	20.8	474
Both husband and wife educated	44.2	1,008
Total	100.0	2,280

Differential Education

Presented in Table 2.11 are the distribution of female and male respondents by highest level of education attended, according to selected characteristics. Among ever-married women, education is inversely related to age, that is, older women are less educated than younger women. For instance, 29 percent of ever-married women age 15-l9 years have never attended school, compared with 64 percent of those age 45-49. Among currently married men, except those 15-19 years old, the distribution by educational level is more uniform across age groups.

Among both women and men, urban residents have more education than rural residents. For example, 49 percent of rural women have had no education at all, compared with 32 percent of urban women. In contrast, while about four in ten urban women (43 percent) have attended secondary school, only 21 percent of rural women have done so.

Women and men in the Barisal, Chittagong, and Khulna divisions are better educated than those in the other divisions. Forty-two percent or fewer women and one-third or fewer men in these divisions have no education. Respondents in these divisions are also more likely than respondents in other divisions to complete primary school and to attend secondary school.

Table 2.11 Level of education by background characteristics

Percent distribution of ever-married women and currently married men by highest level of education attended, according to age, residence, and division, Bangladesh 1999-2000

Background characteristic	Level of education: No education	Primary incomplete	Primary complete	Secondary+	Total	Number
EVER-MARRIED WOMEN						
Age						
10-14	21.9	33.8	19.1	25.2	100.0	186
15-19	29.0	21.5	12.7	36.8	100.0	1,514
20-24	37.6	19.1	10.5	32.8	100.0	1,935
25-29	45.6	17.4	10.0	27.0	100.0	1,975
30-34	48.4	17.2	9.2	25.2	100.0	1,621
35-39	55.6	17.6	8.9	17.9	100.0	1,335
40-44	59.3	16.1	9.2	15.4	100.0	1,126
45-49	63.5	15.3	8.6	12.5	100.0	853
Residence						
Urban	32.3	14.4	9.9	43.4	100.0	2,071
Rural	49.3	19.2	10.3	21.2	100.0	8,473
Division						
Barisal	26.9	28.1	18.4	26.5	100.0	688
Chittagong	41.9	14.5	12.0	31.6	100.0	1,965
Dhaka	48.4	17.9	8.6	25.1	100.0	3,257
Khulna	39.1	22.1	8.6	30.3	100.0	1,281
Rajshahi	50.9	18.2	9.6	21.4	100.0	2,728
Sylhet	59.0	14.1	9.5	17.3	100.0	624
Total	45.9	18.3	10.2	25.6	100.0	10,544
CURRENTLY MARRIED MEN						
Age						
15-19	12.7	37.4	25.3	24.7	100.0	23
20-24	37.2	28.0	10.8	24.1	100.0	151
25-29	37.9	19.1	8.1	34.8	100.0	345
30-34	36.8	19.4	7.2	36.5	100.0	418
35-39	35.2	26.2	5.8	32.8	100.0	492
40-44	36.0	22.6	7.7	33.7	100.0	394
45-49	28.1	20.3	8.9	42.8	100.0	333
50-54	35.6	24.5	2.9	36.9	100.0	219
55-59	33.6	28.9	9.3	28.1	100.0	181
Residence						
Urban	24.1	15.9	7.1	52.9	100.0	508
Rural	37.5	24.9	7.6	30.0	100.0	2,048
Division						
Barisal	28.4	30.2	8.3	33.2	100.0	159
Chittagong	33.1	21.1	8.8	37.0	100.0	426
Dhaka	36.7	21.2	7.0	35.0	100.0	835
Khulna	28.8	23.8	5.4	42.1	100.0	322
Rajshahi	36.8	23.8	8.1	31.3	100.0	682
Sylhet	41.2	27.1	7.9	23.8	100.0	133
Total	34.9	23.1	7.5	34.5	100.0	2,556

Exposure to Mass Media

Female and male respondents were asked in the BDHS survey whether they usually read a newspaper, listen to the radio, or watch television at least once a week. Table 2.12 shows the percentage of respondents exposed to different types of mass communication media by age, urban-rural residence, division, and educational level. It is important to know which types of people are more likely to be reached by the media for purposes of planning programs intended to spread information about health and family planning. About 9 percent of women and 26 percent of men read a newspaper or magazine weekly, 35 percent of women and 53 percent of men watch television at least once a week, and 29 percent of women and 53 percent of men listen to the radio at least once a week. Four percent of women and 13 percent of men are exposed to all three of these media sources. Forty-four percent of women and 21 percent of men have no access to mass media.

Table 2.12 Exposure to mass media

Percentage of ever-married women who usually read a newspaper once a week, watch television once a week, or listen to a radio once a week, by selected background characteristics and percentage of men who carry out these activities, Bangladesh 1999-2000

		Mass media				
Background characteristic	No mass media	Read news-paper weekly	Watch tele-vision weekly	Listen to radio daily	All three media	Number
Age						
10-14	37.4	6.6	35.8	32.9	3.3	186
15-19	36.2	7.5	38.0	37.3	3.8	1,514
20-24	37.0	9.8	41.1	34.7	5.5	1,935
25-29	42.5	9.5	37.1	29.4	4.8	1,975
30-34	44.9	10.2	35.9	25.3	4.4	1,621
35-39	50.0	8.3	29.7	23.9	3.6	1,335
40-44	50.0	8.3	29.5	23.2	3.6	1,126
45-49	54.8	7.1	26.8	19.4	2.9	853
Residence						
Urban	16.9	23.4	70.4	33.3	11.1	2,071
Rural	50.2	5.3	26.5	27.7	2.6	8,473
Division						
Barisal	52.3	7.3	21.3	27.5	3.0	688
Chittagong	38.4	10.1	39.3	32.5	5.2	1,965
Dhaka	40.1	9.5	39.4	29.3	4.7	3,257
Khulna	39.9	10.1	41.0	31.4	5.1	1,281
Rajshahi	48.2	7.2	29.7	25.8	3.1	2,728
Sylhet	56.7	8.0	27.0	23.6	3.9	624
Education						
No education	62.3	0.0	19.5	17.4	0.0	4,843
Primary incomplete	45.0	0.9	32.2	27.2	0.3	1,928
Primary complete	33.9	6.2	38.6	34.2	2.5	1,074
Secondary+	13.1	31.4	64.0	48.1	15.4	2,699
All women	43.6	8.8	35.2	28.8	4.3	10,544
All men	20.9	25.8	53.3	52.5	13.4	2,556

Differentials in exposure to media are shown only for ever-married women. They indicate that younger women are somewhat more likely than older women to listen to the radio. Exposure to all three media is higher among urban and more educated women. For example, the proportion of women who watch television at least once a week ranges from 20 percent of those with no education to 64 percent of those with some secondary school. Differentials by division are not large, except that women in Sylhet Division have less exposure to all three media than women in other divisions.

Since the 1996-1997 BDHS survey, the percentage of women exposed to television has increased sharply (from 27 to 35 percent), while the percentage who listen to the radio has declined (from 39 to 29 percent).

Employment and Occupation

The BDHS survey collected information from women on their current employment status. Table 2.13 shows that 77 percent of ever-married women reported being unemployed and 22 percent reported being employed at the time of the survey. Most employed women work all year, with a minority working seasonally. The proportion unemployed is higher among younger and better educated women. Women in Rajshahi Division are more likely to be employed than women in the other divisions.

Table 2.13 Employment

Percent distribution of ever-married women by employment status and continuity of employment, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Not employed	Currently employed: Work all year	Currently employed: Work seasonally	Currently employed: Work occasionally	Missing	Total	Number
Age							
10-14	94.5	5.5	0.0	0.0	0.0	100.0	186
15-19	86.9	9.5	2.2	1.3	0.1	100.0	1,514
20-24	81.2	14.4	2.9	1.4	0.1	100.0	1,935
25-29	77.2	18.0	3.1	1.5	0.2	100.0	1,975
30-34	70.6	23.9	3.8	1.5	0.1	100.0	1,621
35-39	70.5	23.8	3.3	2.2	0.2	100.0	1,335
40-44	71.7	21.8	4.2	2.4	0.0	100.0	1,126
45-49	80.2	15.5	3.0	1.3	0.1	100.0	853
Residence							
Urban	76.3	19.9	1.8	1.9	0.2	100.0	2,071
Rural	77.7	17.2	3.4	1.5	0.1	100.0	8,473
Division							
Barisal	83.2	10.9	3.8	1.9	0.2	100.0	688
Chittagong	80.1	16.2	2.2	1.4	0.1	100.0	1,965
Dhaka	79.0	17.1	2.7	1.1	0.1	100.0	3,257
Khulna	80.7	14.5	3.2	1.5	0.1	100.0	1,281
Rajshahi	68.9	24.4	4.3	2.3	0.1	100.0	2,728
Sylhet	85.2	11.1	2.2	1.3	0.2	100.0	624
Education							
No education	71.6	21.2	4.7	2.4	0.1	100.0	4,843
Primary incomplete	79.6	16.6	2.6	1.0	0.2	100.0	1,928
Primary complete	85.3	12.3	1.5	1.0	0.0	100.0	1,074
Secondary+	83.2	14.6	1.3	0.8	0.1	100.0	2,699
Total	77.4	17.7	3.1	1.6	0.1	100.0	10,544

Women who reported themselves as employed at the time of the survey were asked whether they earned cash for their work (Table 2.14). Among those who are working, 71 percent earn cash only, 17 percent earn both cash and kind, and only 4 percent work for nothing. Eight percent are paid in kind only. Cash earnings are more common in urban areas and among women with higher education, women from Khulna Division, and women who work in the nonagriculture sector.

Table 2.14 Form of earnings

Percent distribution of currently employed women by type of earnings, (cash, in kind, no payment), according to background characteristics, Bangladesh 1999-2000

Background characteristic	Earns cash only	Earns kind only	Both cash and kind	Not paid	Don't know/ Missing	Total	Number
Age							
10-14	*	*	*	*	*	100.0	10
15-19	71.0	4.4	20.1	4.4	0.0	100.0	197
20-24	73.5	6.5	15.3	4.3	0.4	100.0	362
25-29	69.8	8.4	16.6	3.6	1.7	100.0	450
30-34	73.2	5.4	18.0	3.0	0.3	100.0	476
35-39	68.2	11.3	17.1	2.9	0.4	100.0	394
40-44	70.3	9.6	15.2	4.6	0.3	100.0	319
45-49	62.5	9.9	23.8	3.8	0.0	100.0	168
Residence							
Urban	80.3	2.5	14.4	2.1	0.7	100.0	490
Rural	67.9	9.3	18.1	4.2	0.5	100.0	1,887
Division							
Barisal	71.3	14.2	7.1	5.3	2.2	100.0	116
Chittagong	76.1	5.7	14.4	3.7	0.2	100.0	391
Dhaka	66.2	5.2	25.9	2.0	0.6	100.0	684
Khulna	80.7	5.5	10.7	2.8	0.3	100.0	247
Rajshahi	68.8	10.7	14.7	5.5	0.3	100.0	848
Sylhet	65.5	9.6	20.9	1.9	2.1	100.0	92
Education							
No education	64.2	11.1	20.1	4.1	0.6	100.0	1,373
Primary incomplete	68.3	5.2	20.6	5.6	0.4	100.0	393
Primary complete	79.0	3.3	14.9	2.9	0.0	100.0	158
Secondary+	88.6	2.1	7.0	1.6	0.7	100.0	453
Occupation							
Agricultural	62.2	6.2	28.2	2.7	0.7	100.0	774
Non-agricultural	74.6	8.8	12.2	4.2	0.2	100.0	1,495
Total	70.5	7.9	17.3	3.8	0.6	100.0	2,377

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes 108 cases with occupation not stated.

WOMEN'S AUTONOMY

Education, exposure to media, and work participation are some of the means by which women gain status and autonomy, both important aspects of their empowerment. To measure women's autonomy and empowerment more directly, the BDHS survey asked about women's participation in household decisionmaking (such as what items to cook, obtaining health care for herself and child, purchasing household items) and their freedom of movement.

As expected, women in Bangladesh are most likely to participate in the decision about what to cook: two-thirds of women make this decision on their own and another one-fifth make the decision jointly with their husband or someone else in the household (Table 2.15). Thirteen percent of women are not involved in the decision about what to cook. In addition, 46 percent of women are not involved at all in decisions about seeking health care for themselves, while 35 percent are not involved at all in decisions about seeking health care for their child, and 38 to 40 percent are not involved in deciding about purchasing large household items, purchasing daily household items, and visiting friends and relatives.

Table 2.15 Household decisionmaking

Percent distribution of currently married women by person who makes specific household decisions, according to type of decision, Bangladesh 1999-2000

	Person who has final say						
Household decision	Respondent only	Respondent & husband jointly	Respondent & someone else jointly	Husband only	Someone else only	Missing	Total
Her own health care	17.1	32.1	5.1	40.2	5.4	0.0	100.0
Child health care	15.8	39.1	5.9	29.2	6.2	3.8	100.0
Large household purchases	7.3	42.5	10.0	31.9	8.3	0.1	100.0
Daily household purchases	16.5	36.3	8.9	29.5	8.8	0.1	100.0
Visits to family or relatives	10.7	41.4	8.4	31.9	7.5	0.1	100.0
What food to cook each day	66.4	11.3	9.0	4.4	8.9	0.1	100.0

Note: Table is based on 9,720 currently married women.

Women's participation in household decisionmaking alone or jointly with others in the household increases with age (Table 2.16). Urban women are more likely to participate in decisions about seeking health care for themselves and their children, purchasing household items, or visiting friends and relatives, but decisionmaking about what to cook does not vary much by residence. Except in Sylhet Division, decisionmaking varies little by division. Women from Sylhet Division are less likely than women in other divisions to participate in decisionmaking alone or jointly with others.

Table 2.16 also gives information on another dimension of women's autonomy measured in the BDHS survey: women's freedom of movement. Women were asked whether they go alone or can go alone outside the village or to a health center or hospital. Only 14 percent of women say that they go alone or can go alone outside the village and 27 percent of women say that they go alone or can go alone to the hospital or health center. Freedom of movement increases with age. Urban women have more freedom to move than their rural counterparts.

Table 2.16 Final say in household decisions

Percentage of currently married women who say that they alone or jointly have the final say in specific household decisions, and percentage who say they go or can go alone outside the village or town or to a hospital or health center, according to background characteristics, Bangladesh 1999-2000

	Household decision							Women who go or who can go outside alone		
Background characteristic	Own health care	Child health care	Large household purchases	Daily household purchases	Visits to family or relatives	What food to cook each day	Number	Outside the village/ town/city	To health center or the hospital	Number
Age										
10-14	41.7	34.4	41.0	43.0	44.7	53.8	181	4.0	7.5	181
15-19	43.6	43.8	49.4	50.6	48.6	71.2	1,468	7.9	15.5	1,468
20-24	50.6	57.7	55.7	56.6	55.5	81.6	1,846	9.6	22.5	1,846
25-29	57.2	65.0	62.8	64.8	64.0	90.7	1,878	13.7	29.9	1,878
30-34	59.7	66.6	65.6	68.6	64.9	93.4	1,523	15.0	32.1	1,523
35-39	57.8	68.0	63.7	66.0	66.9	94.1	1,174	19.3	33.4	1,174
40-44	60.1	69.6	64.1	66.6	66.0	94.3	948	22.5	32.3	948
45-49	57.6	63.8	63.8	66.0	65.5	92.1	702	23.4	32.3	702
Number of living children										
0	47.7	32.5	49.5	51.3	51.9	68.5	1,159	10.6	15.8	1,159
1-2	54.2	64.3	59.9	60.9	60.6	85.1	4,123	14.0	27.4	4,123
3-4	57.4	66.1	63.7	66.6	63.5	92.6	2,908	15.9	31.1	2,908
5+	54.0	62.9	59.6	62.4	61.0	93.1	1,531	14.9	26.9	1,531
Residence										
Urban	59.5	66.2	65.5	66.5	66.7	87.5	1,893	17.2	36.1	1,893
Rural	53.1	59.5	58.4	60.5	59.0	86.4	7,828	13.6	24.9	7,827
Division										
Barisal	53.0	62.3	56.8	58.3	60.9	81.9	639	12.5	23.6	638
Chittagong	57.0	61.9	57.2	60.1	60.5	86.2	1,795	14.8	28.6	1,795
Dhaka	53.3	60.7	59.4	62.6	59.2	88.0	3,009	13.3	28.2	3,009
Khulna	52.2	60.4	61.6	63.5	62.6	85.7	1,198	18.4	30.4	1,198
Rajshahi	57.6	62.7	64.9	65.1	63.9	87.6	2,527	13.6	24.5	2,527
Sylhet	43.1	48.5	46.0	46.4	47.0	83.5	553	14.7	24.3	552
Education										
No education	53.6	59.0	57.7	59.6	58.0	89.8	4,307	15.1	25.9	4,306
Primary incomplete	51.6	60.1	57.7	61.5	59.4	87.1	1,799	13.1	24.4	1,799
Primary complete	54.9	62.2	62.3	64.1	62.6	86.9	1,019	10.9	22.3	1,019
Secondary+	57.4	63.8	63.7	64.3	64.7	80.9	2,596	15.2	32.8	2,596
Current employment										
Not employed	63.4	69.9	70.6	71.0	68.5	92.2	1,728	23.1	37.8	1,728
For cash	57.5	62.8	68.5	64.7	65.5	91.0	207	21.8	34.3	206
Not for cash	52.3	58.8	57.1	59.5	58.6	85.3	7,772	12.2	24.5	7,772
Total	54.4	60.8	59.8	61.7	60.5	86.6	9,720	14.3	27.1	9,720

Men were asked about their attitudes toward a wife's role in household decisionmaking. Table 2.17 presents the results. It is encouraging to note that almost 90 percent of currently married men mentioned that wives should have a say in decisions about large or daily household purchases. Eighty-four percent of men said that wives should have a say in when to visit family or relatives, and 76 percent support a wife's role in making decisions to spend her earnings. As expected, educated men and men from urban areas are more liberal in their views toward their wife's role in decision making. Men from Sylhet Division are somewhat more conservative than men in other divisions in their attitudes toward a wife's role in decisionmaking.

Table 2.17 Men's attitudes towards a wife's role in household decision making

Percentage of currently married men who say that a wife should have a say in specific household decisions, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Wife should have a say in decisions about: Large household expenses	Daily household expenses	When to visit family, relatives or friends	What to do with her earnings	In all specified decisions	In no specified decisions	Number
Age							
15-19	*	*	*	*	*	*	23
20-29	88.8	88.1	82.1	75.7	64.7	5.0	497
30-39	89.6	88.7	84.2	77.3	70.3	5.1	910
40-49	90.1	90.0	87.0	78.0	71.4	5.5	727
50-59	86.6	85.5	80.4	67.6	62.1	8.5	400
Residence							
Urban	90.3	90.2	86.0	78.6	70.6	4.0	508
Rural	88.8	88.1	83.5	74.9	67.5	6.1	2,048
Division							
Barisal	94.3	93.8	89.9	72.3	69.5	4.0	159
Chittagong	86.3	88.7	82.0	68.3	62.8	8.1	426
Dhaka	90.1	89.0	85.0	76.2	67.7	4.3	835
Khulna	88.3	86.3	79.1	64.7	54.3	6.0	322
Rajshahi	90.1	88.8	88.0	87.0	80.0	5.5	682
Sylhet	82.6	82.6	68.9	68.4	58.9	8.9	133
Education							
No education	85.6	84.9	78.4	70.6	62.9	8.2	891
Primary incomplete	88.2	87.7	83.9	74.1	66.0	5.3	590
Primary complete	90.5	89.3	89.4	77.4	69.6	3.7	192
Secondary+	93.0	92.6	88.6	81.4	74.5	3.9	883
Total	89.1	88.5	84.0	75.7	68.1	5.7	2,556

Note: An asterisk represents fewer than 25 cases and the numbers are suppressed.

Domestic violence is not uncommon in Bangladesh. Although questions on domestic violence were not asked of female respondents, currently married men were asked whether they thought it was justified for a husband to beat his wife in specific situations. Table 2.18 shows that about one-quarter of men agree with a husband beating his wife if the wife goes out without telling her husband or if she neglects the children or argues with her husband. Only 9 percent of men feel it is justifiable for a man to beat his wife if she fails to provide food on time. Urban and educated men agree less than their counterparts with a husband beating his wife.

Table 2.18 Men's agreement with reasons for wife beating

Percentage of currently married men who agree with specific reasons justifying a husband beating his wife and percentage who agree with at least one or with none of the reasons, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Reason justifying husband beating his wife						Number
	Goes out without telling him	Neglects the children	Argues with her husband	Fails to provide food on time	Agrees with at least one specified reason	Agrees with no specified reasons	
Age							
15-19	*	*	*	*	*	*	23
20-29	25.2	25.7	28.2	10.0	39.8	58.3	497
30-39	25.2	23.5	27.3	11.1	38.2	59.6	910
40-49	23.9	23.0	20.2	6.4	34.2	63.9	727
50-59	23.0	20.2	19.9	5.7	32.6	65.9	400
Residence							
Urban	18.2	14.7	15.3	4.7	26.4	71.3	508
Rural	26.2	25.5	26.5	9.6	39.1	59.0	2,048
Division							
Barisal	32.9	34.5	33.7	17.3	48.5	46.0	159
Chittagong	22.5	20.4	19.0	5.4	33.0	63.5	426
Dhaka	21.0	21.3	17.9	5.3	31.6	68.2	835
Khulna	32.2	26.0	29.9	9.4	45.4	50.3	322
Rajshahi	25.8	25.3	31.1	12.3	39.7	59.8	682
Sylhet	19.8	15.2	22.0	8.6	28.0	66.9	133
Education							
No education	31.3	29.6	34.6	13.3	47.0	51.7	891
Primary incomplete	27.9	25.6	26.7	8.4	40.4	58.0	590
Primary complete	23.2	23.8	25.2	7.9	39.0	59.1	192
Secondary +	16.0	15.4	12.2	4.2	23.0	74.2	883
Total	24.6	23.3	24.3	8.6	36.6	61.5	2,556

Note: An asterisk represents fewer than 25 cases and the numbers are suppressed.

FERTILITY 3

3.1 INTRODUCTION

The assessment of Bangladesh's fertility dynamics has been an important objective of the Bangladesh Demographic and Health Survey. The focus on fertility is due to its important role in determining Bangladesh's population growth rate. This chapter presents a description of current and past fertility, cumulative fertility and family size, birth intervals, age at first birth, and reproductive behavior of adolescents.

Most of the fertility measures presented in this chapter are based on reports provided by ever-married women age 15-49 regarding their reproductive histories. Each woman was asked to provide information on the number of sons and daughters to whom she had given birth who were living with her, the number living elsewhere, and the number who had died. The women were then asked for a history of all their live births, including such information as name, month and year of birth, sex, and survival status. For children who had died, information on age at death was solicited. Interviewers were given extensive training in probing techniques designed to help respondents report this information accurately.

Despite the measures to improve the data quality, BDHS information is subject to the same types of error that are inherent in all retrospective sample surveys, namely, the omission of some births (especially births of children who died at a very young age) and the difficulty of determining the date of birth of each child accurately. These difficulties can bias estimates of fertility trends. A brief discussion of the quality of the BDHS fertility data appears in Appendix C.2 and shows that such errors are minimal.

3.2 CURRENT FERTILITY LEVELS

The most widely used measures of current fertility are the total fertility rate (TFR) and its component age-specific fertility rates (ASFRs). The TFR is defined as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the currently observed age-specific rates.[1] The general fertility rate represents the annual number of births in a population per 1,000 women age 15-44. The crude birth rate is the annual number of births in a population per 1,000 people. Both these measures are calculated using the birth history data for the three-year period before the survey and the age and sex distribution of the household population.

[1] Numerators of the age-specific fertility rates are calculated by summing the number of live births that occurred in the period 1-36 months preceding the survey (determined by the date of interview and the date of birth of the child) and classifying them by the age (in five-year groups) of the mother at the time of birth (determined by the mother's date of birth). The denominators of the rates are the number of woman-years lived in each of the specified five-year age groups during the 1-36 months preceding the survey. Since only women who had ever-married were interviewed in the BDHS survey, the numbers of women in the denominators of the rates were inflated by factors calculated from information in the household questionnaire on proportions ever-married in order to produce a count of all women. Never-married women are presumed not to have given birth.

The results in Table 3.1 indicate that the total fertility rate for the three years before the survey (approximately 1997 through 1999) is 3.3 children per woman. The age-specific rates indicate a pattern of early childbearing, with a peak at age group 20-24. Three-quarters of childbearing occurs before age 30.

The total fertility rate is higher in rural areas (3.5 children per woman) than in urban areas (2.5 children per woman). The difference is especially large at younger ages, which probably reflects longer education and later marriage of women in urban areas (Figure 3.1).

Table 3.1 Current fertility rates

Age-specific and cumulative fertility rates and the crude birth rate for the three years preceding the survey, by urban-rural residence, Bangladesh 1999-2000

	Residence		
Age group	Urban	Rural	Total
15-19	101	155	144
20-24	142	201	188
25-29	140	172	165
30-34	78	104	99
35-39	23	50	44
40-44	6	21	18
45-49	0	3	3
TFR 15-49	2.45	3.54	3.31
TFR 15-44	2.45	3.52	3.29
GFR	97	135	127
CBR	25.3	31.3	30.2

Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation.
TFR: Total fertility rate, expressed per woman
GFR: General fertility rate (births divided by number of women 15-44), expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population

3.3 Fertility Differentials

Table 3.2 and Figure 3.2 show differentials in fertility by residence, administrative division, and education. Fertility is highest in Sylhet and Chittagong divisions, with total fertility rates of 4.1 and 4.0 children per woman, respectively. Fertility is lowest in Khulna (2.7) and Rajshahi (3.0) divisions. Barisal and Dhaka divisions have intermediate levels of fertility, with total fertility rates of 3.3 and 3.2 children per woman, respectively. This pattern is similar to that found in the 1996-1997 BDHS survey.

Figure 3.1 Age-Specific Fertility Rates by Residence

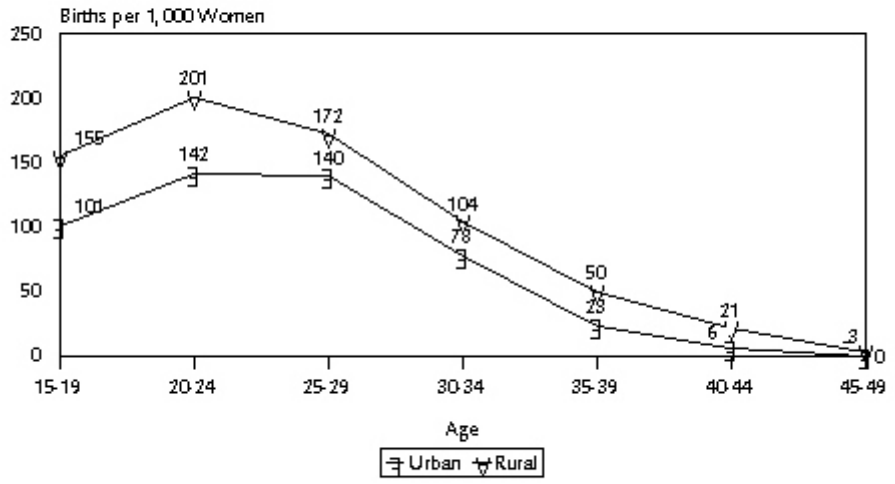


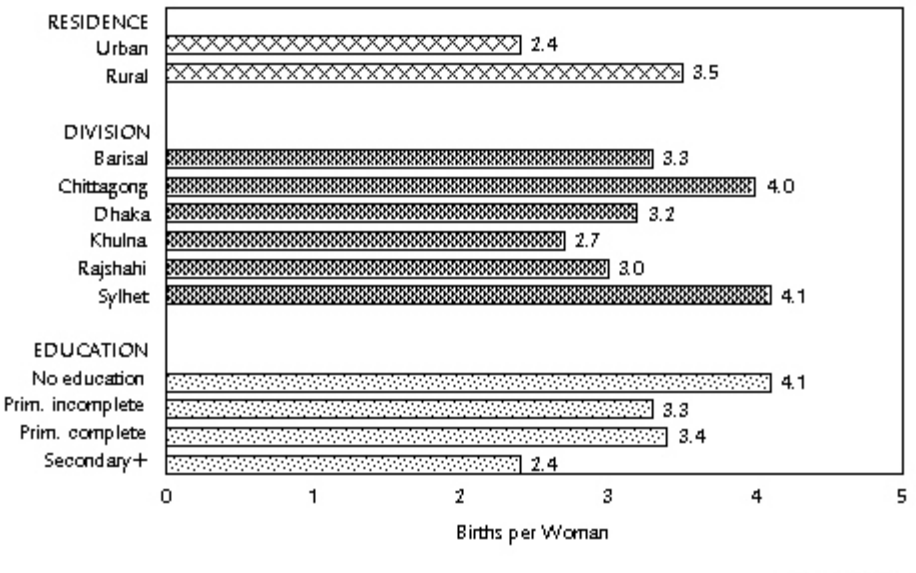
Table 3.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey and mean number of children ever born to women age 40-49, by selected background characteristics, Bangladesh 1999-2000

Background characteristic	Total fertility rate[1]	Mean number of children ever born to women age 40-49
Residence		
Urban	2.45	4.84
Rural	3.54	5.72
Division		
Barisal	3.26	5.65
Chittagong	3.96	5.65
Dhaka	3.21	5.71
Khulna	2.70	5.17
Rajshahi	3.02	5.42
Sylhet	4.08	5.31
Education		
No education	4.12	5.77
Primary incomplete	3.30	5.84
Primary complete	3.42	5.46
Secondary+	2.40	4.30
Total	3.31	5.55

[1]Women age 15-49 years

Figure 3.2 Total Fertility Rates by Selected Background Characteristics



Educational attainment of women is strongly related to fertility levels. At current rates, women with no formal education would give birth to an average of 4.1 children in their lifetime, compared with 2.4 for women with at least some secondary education, a difference of 42 percent. Women with either incomplete primary or complete primary education have intermediate fertility rates between these two extremes.

Table 3.2 also allows a crude assessment of trends in fertility over time among population subgroups. One way of examining trends in fertility over time is to compare the total fertility rates for the three years preceding the survey with the average number of children ever born to women who are now at the end of their childbearing period, age 40-49. The former is a measure of current fertility, while the latter is a measure of past or completed fertility. A comparison of current fertility with past fertility shows that there has been a substantial decline in urban and rural areas, in all divisions, and in the four education categories. Except in Chittagong and Sylhet divisions, the decline is more than two children per woman in all divisions. Overall, comparison of past and present fertility indicators suggests a decline of more than two children per woman, from 5.6 to 3.3 children per woman.

3.4 FERTILITY TRENDS

Trends in current fertility in Bangladesh can be examined by observing a time series of estimates produced from demographic surveys fielded over the last two and half decades, beginning with the 1975 Bangladesh Fertility Survey (BFS). The estimates shown in Table 3.3 describe the ongoing Bangladeshi fertility transition. The TFR has declined dramatically from 6.3 children per woman in 1971-1975 to 3.3 in 1997-1999 (Figure 3.3), a decline of 48 percent over a 25-year period. The pace of fertility decline has slowed in the most recent period compared to the exceptionally rapid decline during the late 1980s and early 1990s. The total fertility rate dropped almost imperceptibly from 3.4 for the period 1991-1993 to 3.3 in 1994-1996 and then remained constant in 1997-1999. Investigation of the age pattern of fertility shows no anomalies; the decline since the mid-1980s has been fairly uniform over all age groups of women except those age 25-29 (Figure 3.4).

Table 3.3 Trends in current fertility rates

Age-specific and total fertility rates (TFR) among women age 15-49, selected sources, Bangladesh, 1975 to 1999-2000

	Survey and approximate time period					
	1975 BFS	1989 BFS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS
Age group	1971-1975	1984-1988	1989-1991	1991-1993	1994-1996	1997-1999
15-19	109	182	179	140	147	144
20-24	289	260	230	196	192	188
25-29	291	225	188	158	150	165
30-34	250	169	129	105	96	99
35-39	185	114	78	56	44	44
40-44	107	56	36	19	18	18
45-49	35	18	13	14	6	3
TFR 15-49	6.3	5.1	4.3	3.4	3.3	3.3

Note: For the 1975 and 1989 BFS surveys, the rates refer to the 5-year period preceding the survey; for the other surveys, the rates refer to the 3-year period preceding the survey. The BFS and BDHS surveys utilized full birth histories, while the 1991 CPS used an 8-year truncated birth history.

Source: 1975 BFS (MHPC, 1978:73); 1989 BFS (Huq and Cleland, 1990:103); 1991 CPS (Mitra et al., 1993 :34); 1993-94 BDHS (Mitra et al., 1994: 24); 1996-97 BDHS (Mitra et al., :30)

Figure 3.3 Trends in Total Fertility Rates, 1971-1999

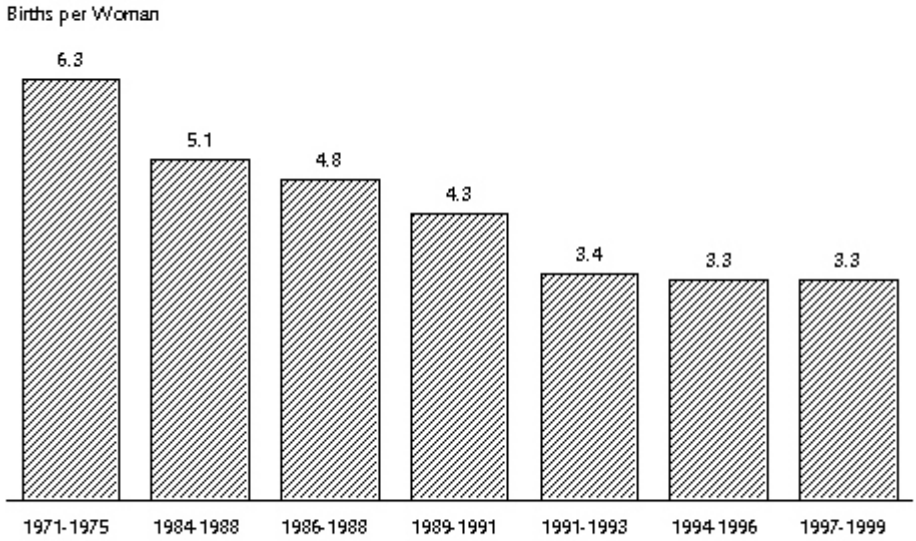
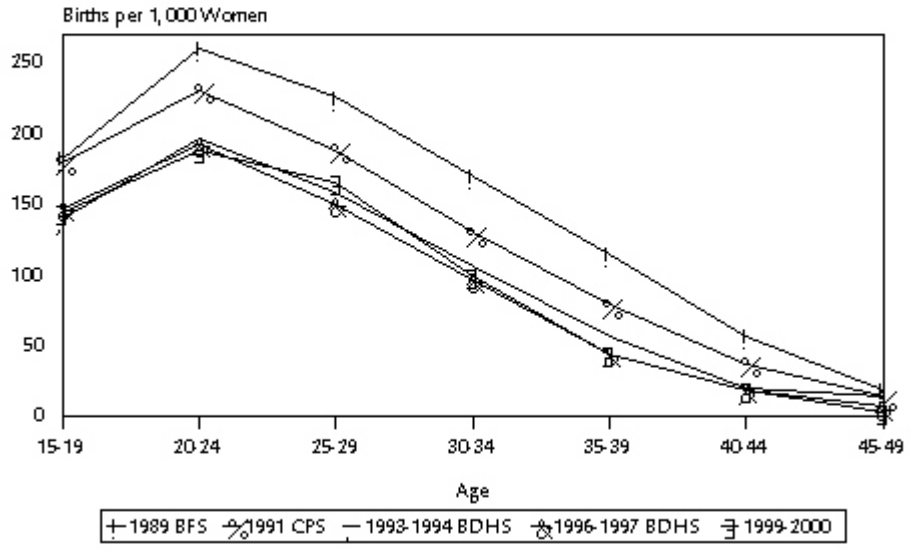


Figure 3.4 Age-Specific Fertility Rates 1989, 1991, 1993-1994, 1996-1997, and 1999-2000



Note: 1989 rates refer to the 5-year period preceding the survey; all others are 3-year rates.

BDHS 1999-2000

Table 3.4 shows trends in the proportion of currently married women who reported that they were pregnant at the time of the survey, according to age group. Reports on current pregnancy are almost surely underestimates, since many women may be pregnant but not yet aware of their status. However, the data are useful because, while fertility rates depend to some extent on accurate reporting of dates of events, the proportion pregnant is a "current status" indicator. Change over time in the percentage pregnant is an independent indicator of fertility change. In Bangladesh, the proportion pregnant has generally declined over time, although not in a steady fashion. In the 1975 BFS, 13 percent of currently married women reported themselves pregnant at the time of the survey. By 1989, this proportion had declined to 9 percent; it then increased to 11 percent in 1991, again declined to 9 percent in the 1993-1994 BDHS survey and then to 8 percent in 1996-1997 and 1999-2000. Although it is entirely possible that such fluctuations are real, misreporting may also be a factor.

Table 3.4 Percent pregnant

Percentage of currently married women who were pregnant at the time of interview, by age group, selected sources, Bangladesh, 1975-2000

Age group	1975 BFS	1989 BFS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS
15-19	15.2[a]	14.7[a]	19.6	17.1	14.7	15.9
20-24	15.5	13.3	16.2	13.0	10.3	11.8
25-29	14.9	10.4	11.2	9.0	8.9	8.5
30-34	11.2	8.3	7.1	7.0	5.1	4.8
35-39	10.7	4.8	4.2	2.7	3.4	2.4
40-44	u	u	1.5	0.8	1.3	1.0
45-49	u	u	0.2	0.0	0.0	0.4
Total	12.5	9.3	10.7	8.7	7.7	7.8

u = Unknown (not available)
[a] Currently married women less than 20 years
Source: 1975 BFS and 1989 BFS (Cleland et al., 1994:21); 1991 CPS (Mitra et al., 1993:39); 1993-1994 BDHS (Mitra et al., 1994: 31); 1996-1997 BDHS (Mitra et al., :34)

Table 3.5 provides further insight into the fertility decline discussed above. The table gives the age-specific fertility rates for five-year periods preceding the survey, using data from respondents' birth histories. Figures in brackets represent partial fertility rates due to truncation; women 50 years of age and older were not included in the survey, and the further back in time rates are calculated, the more severe the truncation. For example, rates cannot be calculated for women age 45-49 for the period 5-9 years before the survey because those women would have been over age 50 at the time of the survey and thus were not interviewed. The data show generally declining fertility experienced by women in most age groups during the last two decades. Trends in fertility rates calculated from retrospective birth histories must be viewed with caution since they may suffer from errors due to misreporting of age and date of birth.

Table 3.5 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by women's age at the time of birth, Bangladesh 1999-2000

Women's age at birth	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
15-19	147	181	207	212
20-24	193	232	272	276
25-29	163	189	227	248
30-34	103	131	173	[212]
35-39	50	82	[128]	-
40-44	20	[31]	-	-
45-49	[5]	-	-	-

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

Table 3.6 Trends in fertility by marital duration

Fertility rates for ever-married women by duration (years) since first marriage for five-year periods preceding the survey, Bangladesh 1999-2000

Marriage duration	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
0-4	261	257	268	244
5-9	214	245	284	285
10-14	156	186	229	254
15-19	102	135	179	[225]
20-24	56	93	[140]	-
25-29	22	[45]	-	-

Note: Duration-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

Table 3.6 presents fertility rates for ever-married women by duration (years) since first marriage for five-year periods preceding the survey. It is analogous to Table 3.5, but is confined to ever-married women and replaces age with duration since first marriage. The data show that the decline in fertility is apparent for all marriage durations in the two decades preceding the survey, with the exception of those married 0-4 years. This pattern implies that fertility control tends to be practiced later in marriage and that newly married couples continue to have children at more or less the same rate as before.

3.5 Children Ever Born and Living

The distribution of all women and currently married women by age and number of children ever born is presented in Table 3.7. The table also shows the mean number of children ever born to women in each five-year age group, an indicator of the momentum of childbearing. On average, women in their late twenties have given birth to almost three children, women in their late thirties have had more than four children, and women currently at the end of their childbearing years have had more than six children. Figures for currently married women do not differ greatly from those for all women at older ages; however, at younger ages, the percentage of currently married women who have had children is much higher than the percentage among all women.

Of the 6.1 children ever born to all women age 45-49, only 4.9 have survived. Among all women age 15-49, the average number of children who have died per woman is 0.40. Among currently married women it is 0.48, i.e., 15 percent of children born to currently married women had died. The proportion of children ever born who have died increases with women's age. Among currently married women, for example, the proportion of children ever born who have died increases from 9 percent for women age 20-24 to 20 percent for women age 45-49.

The percentage of women in their forties who have never had children provides an indicator of the level of *primary infertility*—the proportion of women who are unable to bear children at all. Since voluntary childlessness is rare in Bangladesh, it is likely that married women with no births are unable to bear children. The BDHS results suggest that primary infertility is low, about 2 percent. It should be noted that this estimate of primary infertility does not include women who may have had one or more births but who are unable to have more (*secondary infertility*).

Table 3.7 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born (CEB) and mean number ever born and living, according to five-year age groups, Bangladesh 1999-2000

Age Group	Number of children ever born (CEB)											Total	Number of women	Mean no. of CEB	Mean no. of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	70.2	23.2	5.9	0.7	0	0	0	0	0	0	0	100.0	3,149	0.37	0.33
20-24	27.3	26.7	29.6	13.1	2.7	0.6	0	0	0	0	0	100.0	2,373	1.39	1.26
25-29	8.6	13.2	29.0	26.1	13.4	6.5	2.4	0.8	0	0	0	100.0	2,062	2.56	2.26
30-34	3.3	7.0	17.6	23.6	19.9	14.3	7.2	4.7	1.7	0.7	0.3	100.0	1,622	3.62	3.11
35-39	2.5	5.4	11.9	16.8	19.4	17.3	12.7	7.3	3.5	1.9	1.2	100.0	1,338	4.29	3.53
40-44	2.3	3.0	8.6	12.4	15.9	14.7	15.0	10.6	8.9	5.1	3.5	100.0	1,126	5.13	4.12
45-49	1.7	2.5	3.3	6.7	11.8	14.8	16.2	15.2	10.6	7.9	9.3	100.0	853	6.09	4.87
Total	25.2	15.0	16.4	13.4	9.6	7.2	5.1	3.5	2.1	1.3	1.1	100.0	12,523	2.58	2.18
CURRENTLY MARRIED WOMEN															
15-19	37.2	48.6	12.6	1.5	0.1	0	0	0	0	0	0	100.0	1,468	0.79	0.70
20-24	10.0	31.9	37.2	16.7	3.5	0.7	0	0	0	0	0	100.0	1,846	1.74	1.58
25-29	3.5	13.0	30.4	27.9	14.5	7.2	2.7	0.8	0	0	0	100.0	1,878	2.73	2.41
30-34	2.4	5.6	17.6	24.4	20.1	14.7	7.5	5.0	1.8	0.7	0.3	100.0	1,523	3.71	3.19
35-39	1.0	4.0	11.3	17.6	19.7	18.0	13.4	7.6	4.0	2.0	1.3	100.0	1,174	4.46	3.68
40-44	1.7	2.3	7.2	11.8	15.4	14.9	16.2	11.8	9.6	5.4	3.7	100.0	948	5.32	4.32
45-49	1.2	1.9	2.9	5.6	11.9	15.1	16.5	16.0	10.8	8.0	10.1	100.0	702	6.24	5.00
Total	9.1	18	20.3	16.6	11.6	8.7	6.2	4.2	2.5	1.5	1.3	100.0	9,540	3.13	2.65

A comparison of the mean number of children ever born reported in the 1999-2000 BDHS survey and various other surveys is presented in Table 3.8. The comparison does not highlight recent changes in fertility, but rather is an indication of the cumulative changes in fertility over the decades prior to the surveys. Despite the fluctuations between surveys, the data generally show only modest declines until the late 1980s. Between 1985 and 1989, the decline in mean number of children ever born was substantial in all but the youngest and oldest age groups. Although there was then little change between 1989 and 1991, the rates again decline considerably between 1991 and 1993-1994, especially among women age 25 and above, and show further decline between 1993-1994 and 1999-2000 at all ages except 15-19.

3.6 BIRTH INTERVALS

A birth interval, defined as the length of time between two successive live births, indicates the pace of childbearing. Information on birth intervals provides insight into birth-spacing patterns which have far-reaching impact on both fertility and child mortality levels. Research has shown that children born too soon after a previous birth are at increased risk of dying at an early age. Table 3.9 shows the percent distribution of non-first births that occurred in the five years before the BDHS survey by the number of months since the previous birth.

The data show that birth intervals are generally long in Bangladesh. Nearly one in six children (16 percent) are born after a "too short" interval (less than 24 months). More than half (57 percent) of non-first births occur three or more years after the previous birth, while 27 percent of births take place 24-35 months after the previous birth. The median birth interval is 39 months.

Table 3.8 Trends in children ever born

Mean number of children ever born by age group, selected sources, Bangladesh, 1975-1999

Age group	1975 BFS	1981 CPS	1983 CPS	1985 CPS	1989 BFS	1989 CPS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS
15-19	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.3	0.4	0.4
20-24	2.3	2.0	2.2	2.0	1.7	1.8	1.7	1.6	1.5	1.4
25-29	4.2	3.7	3.8	3.6	3.1	3.3	3.2	2.9	2.8	2.6
30-34	5.7	5.4	5.5	5.1	4.7	4.7	4.5	4.1	3.9	3.6
35-39	6.7	6.4	6.5	6.5	5.9	5.9	5.7	5.2	4.8	4.3
40-44	7.1	7.3	7.4	7.4	6.6	7.0	6.7	6.4	5.6	5.1
45-49	6.7	7.6	7.5	7.2	7.3	7.5	7.4	6.9	6.4	6.1
Total	u	u	u	u	u	u	3.5	3.0	2.8	2.6

u = Unknown (not available)
Source: 1983 and 1985 CPSs (Kantner and Frankenberg, 1988:21); 1991 CPS (Mitra et al., 1993:31); 1993-1994 BDHS (Mitra et al., 1994:33); 1996-1997 BDHS (Mitra et al., 1997: 36); all others (Cleland et al., 1994:11).

Table 3.9 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since previous birth, according to demographic and socioeconomic characteristics, Bangladesh 1999-2000

Characteristic	Number of months since previous birth					Total	Median number of months since previous birth	Number
	7-17	18-23	24-35	36-47	48+			
Age of mother								
15-19	19.3	21.5	34.8	18.2	6.1	100.0	26.9	226
20-29	6.7	10.0	28.6	22.5	32.2	100.0	37.8	2,939
30-39	5.1	7.7	23.9	20.9	42.4	100.0	42.7	1,500
40+	3.1	7.9	17.2	21.5	50.3	100.0	48.1	222
Birth order								
2-3	6.6	9.4	24.7	21.1	38.1	100.0	40.6	2,900
4-6	6.8	9.3	29.2	22.6	32.2	100.0	37.7	1,513
7+	6.1	12.7	33.4	23.3	24.5	100.0	35.0	473
Sex of prior birth								
Male	7.1	9.0	26.2	21.6	36.0	100.0	39.4	2,468
Female	6.1	10.4	27.6	22.0	33.9	100.0	38.2	2,419
Survival of prior birth								
Living	4.4	8.9	26.9	22.8	36.9	100.0	40.4	4,279
Dead	22.0	15.0	27.3	14.7	21.0	100.0	28.0	608
Residence								
Urban	7.2	10.8	21.7	18.3	42.1	100.0	43.2	752
Rural	6.5	9.5	27.9	22.4	33.7	100.0	38.3	4,135
Division								
Barisal	7.1	5.7	27.4	22.6	37.2	100.0	40.6	314
Chittagong	6.7	10.7	31.6	23.0	28.0	100.0	36.3	1,139
Dhaka	7.1	9.6	26.1	20.4	36.8	100.0	39.6	1,466
Khulna	4.7	9.3	21.2	19.2	45.7	100.0	45.5	463
Rajshahi	6.3	9.4	22.9	24.0	37.4	100.0	41.4	1,113
Sylhet	7.4	11.6	34.2	19.8	27.1	100.0	34.8	392
Education								
No education	6.4	10.0	28.4	22.7	32.5	100.0	37.7	2,638
Primary incomplete	6.1	9.5	28.0	23.4	33.1	100.0	39.2	888
Primary complete	8.4	8.9	23.5	24.1	35.0	100.0	39.4	485
Secondary+	6.7	9.5	23.4	16.2	44.2	100.0	43.5	876
Total	6.6	9.7	26.9	21.8	35.0	100.0	38.8	4,887

Note: First births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

This is slightly longer than the median birth interval of 35 months reported in the 1993-1994 BDHS survey and 37 months in the 1996-1997 BDHS survey (Mitra et al., 1994:34; Mitra et al., 1997:38).

As expected, younger women have shorter birth intervals than older women, presumably because they are more fecund and want to build their families. The median birth interval for women age 15-19 is 27 months, compared with 48 months for women over age 40. The median birth interval is slightly shorter if the previous child was a girl than if it was a boy. Birth intervals are much shorter if the previous child died (28 months) than if the previous child survived (40 months). In part, this reflects the shortening of postpartum amenorrhea that occurs when the preceding child dies in infancy and breastfeeding stops prematurely. Women are also less likely to use contraception to postpone fertility if the previous child died and they want to "replace" the dead child.

Birth intervals are five months shorter among rural women than among urban women, perhaps because breastfeeding is shorter among urban women. The longest birth intervals are found among women in Khulna Division and the shortest are among women in Sylhet Division. There is a tendency for birth intervals to increase with education. Mothers with some secondary education have a median birth interval that is six months longer than the interval for uneducated mothers.

3.7 Age at First Birth

The age at which childbearing begins has important demographic consequences for society as a whole as well as for the health and welfare of mother and child. In many countries, postponement of first births—reflecting an increase in the age at marriage—has contributed greatly to overall fertility decline. Early initiation into childbearing is generally a major determinant of large family size and rapid population growth, particularly in countries where family planning is not widely practiced. Moreover, bearing children at a young age involves substantial risks to the health of both the mother and child. Early childbearing also tends to restrict educational and economic opportunities for women.

Table 3.10 presents the percent distribution of women by age at first birth according to current age.[2] For women age 20 and over, the median age at first birth is presented in the last column of the table. Childbearing begins early in Bangladesh, with the large majority of women becoming mothers before they reach the age of 20. The median age at first birth is between 17 and 19. The data show that the median age at first birth has increased slightly from about 17 for older women to about19 for women in their early twenties. This slight change to later age at first birth is reflected in the smaller proportion of younger women whose first birth occurred before age 15; about 18 percent of women in their forties report having had their first birth before age 15, compared with only 7 percent of women age 15-19.

Comparisons with data from other sources confirm that the age at which women in Bangladesh have their first child has increased steadily over time, in line with increases in age at marriage, with the exception of the past few years. For example, in 1975, the median age at first birth among women age 20-24 was 16.8; in 1989, it had risen to 18.0, in 1996-1997 to 18.4, and by 1999-2000, to 18.7.

[2] The data are based on all women, including those who have never married (see Footnote 1 for a description of the inflation factors used to estimate the total number of women).

Table 3.10 Age at first birth

Percent distribution of women by age at first birth, according to current age, Bangladesh 1999-2000

Current age	Women with no births	Age at first birth						Total	Number	Median age at first birth
		<15	15-17	18-19	20-21	22-24	25+			
15-19	70.2	6.5	20.3	3.0	na	na	na	100.0	3,149	a
20-24	27.3	10.1	33.5	17.7	8.3	3.0	na	100.0	2,373	18.7
25-29	8.6	10.1	37.6	18.7	12.4	9.4	3.2	100.0	2,062	18.2
30-34	3.3	11.3	39.1	21.4	12.3	8.0	4.6	100.0	1,622	18.0
35-39	2.5	11.1	38.1	20.6	12.1	9.0	6.5	100.0	1,338	18.1
40-44	2.3	16.6	41.9	17.6	8.3	8.1	5.2	100.0	1,126	17.2
45-49	1.7	17.8	48.3	16.7	7.1	5.1	3.2	100.0	853	16.9

na = Not applicable

[a] Omitted because less than 50 percent of the women in the age group 15-19 have had a birth by age 15.

Table 3.11 summarizes the median age at first birth for different age cohorts across urban-rural, division, and educational subgroups. Urban women start childbearing later than rural women; the median age at first birth is 19.0 for urban women and 17.8 for rural women age 20-49. Women in Sylhet Division consistently have higher median ages at first birth than women in the other divisions, while women in Rajshahi Division generally have the lowest median ages at first birth. Women with secondary education start childbearing later than those with less or no education. Among women age 25-49, the median age at first birth is 17.3 for women with no education and 19.7 for women with at least some secondary education.

Table 3.11 Median age at first birth

Median age at first birth among women age 20-49 years, by current age and selected background characteristics, Bangladesh 1999-2000

Background characteristic	Current age						Age 20-49	Age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Urban	20.9	19.4	19.0	18.5	17.5	17.2	19.0	18.6
Rural	18.3	17.9	17.8	18.0	17.0	16.8	17.8	17.6
Division								
Barisal	18.8	17.6	17.7	17.5	16.7	17.1	17.7	17.4
Chittagong	19.2	18.1	18.2	18.6	18.4	17.4	18.4	18.2
Dhaka	18.8	18.8	18.6	18.4	17.1	16.8	18.2	18.1
Khulna	18.4	18.4	17.4	18.0	16.8	16.4	17.8	17.6
Rajshahi	17.8	17.6	17.4	17.6	16.7	16.5	17.4	17.2
Sylhet	a	19.6	19.3	18.3	18.2	18.0	19.3	18.9
Education								
No education	17.1	17.4	17.7	17.9	16.7	16.6	17.3	17.3
Primary incomplete	17.4	17.3	17.5	17.6	17.2	17.3	17.4	17.4
Primary complete	18.0	18.0	17.6	18.0	17.2	17.0	17.8	17.7
Secondary+	a	20.7	19.4	19.2	19.2	18.3	a	19.7
Total	18.7	18.2	18	18.1	17.2	16.9	18.0	17.8

Note: The medians for cohort 15-19 could not be determined because half the women have not yet had a birth.

[a] Medians were not calculated for these cohorts because less than 50 percent of women in the age group 20-24 had a birth by age 20.

3.8 Teenage Fertility

Early childbearing, particularly among teenagers (those under 20 years of age) has negative demographic, socioeconomic, and sociocultural consequences. Teenage mothers are more likely to suffer from severe complications during delivery, which result in higher morbidity and mortality for both themselves and their children. In addition, the socioeconomic advancement of teenage mothers in the areas of educational attainment and accessibility to job opportunities may be curtailed.

Table 3.12 shows the percentage of teenagers age 15-19 who are mothers or pregnant with their first child, according to various background characteristics. Thirty percent of teenage women in Bangladesh are mothers, and another 5 percent are pregnant with their first child. Thus, 35 percent of teenage women have begun childbearing. There has been a slight decline in this proportion since the 1996-1997 BDHS survey, which indicated that 36 percent of women age 15-19 had begun childbearing (31 percent had delivered a child and 5 percent were pregnant with their first child) (Mitra et al., 1997).

As expected, the proportion of women who have begun childbearing rises rapidly with age, from 16 percent of those age 15 to 57 percent of those age 19 (see Table 3.12). Those residing in rural areas and especially those residing in the Rajshahi and Khulna divisions are also more likely than others to have begun childbearing, while girls in Sylhet Division are the least likely to have started childbearing. Education is strongly related to early childbearing. Girls with no education are far more likely to have begun childbearing than those with primary and especially those with some secondary education.

Table 3.12 Teenage pregnancy and motherhood

Percentage of women 15-19 who are mothers or pregnant with their first child, by selected background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage who are: Mothers	Pregnant with first child	Percentage who have begun child-bearing	Number
Age				
15	11.6	4.3	15.9	704
16	22.2	3.8	26.0	703
17	30.8	5.7	36.5	584
18	39.0	6.0	45.0	638
19	52.5	4.8	57.3	520
Residence				
Urban	22.0	3.6	25.5	627
Rural	31.8	5.2	37.0	2,522
Division				
Barisal	25.4	5.4	30.8	178
Chittagong	21.6	4.8	26.4	625
Dhaka	29.4	5.6	35.0	1,008
Khulna	37.2	4.4	41.6	344
Rajshahi	38.1	4.8	42.9	760
Sylhet	19.3	2.9	22.2	231
Education				
No education	50.6	5.1	55.7	635
Primary incomplete	40.2	5.1	45.3	554
Primary complete	36.0	7.3	43.3	331
Secondary+	16.7	4.2	20.9	1,652
Total	29.8	4.9	34.7	3,149

FERTILITY REGULATION 4

4.1 KNOWLEDGE OF FAMILY PLANNING METHODS

In the 1999-2000 BDHS survey, knowledge of family planning methods was assessed through a series of questions, as in the earlier two BDHS surveys. Respondents were first asked to name the ways or methods by which a couple could delay or avoid pregnancy. When a respondent did not mention a particular method spontaneously, the interviewer described the method and asked whether the respondent had heard of it. Knowledge of family planning methods thus assessed is presented in Table 4.1, separately for ever-married women, currently married women, and currently married men.

Table 4.1 Knowledge of contraceptive methods

Percentage of ever-married and currently married women and of currently married men who know any contraceptive methods, by specific methods, Bangladesh 1999-2000

Contraceptive method	Ever-married women	Currently married women	Currently married men
Any method	99.9	99.9	100.0
Any modern method	99.9	99.9	100.0
Pill	99.7	99.8	99.9
IUD	89.0	89.6	69.5
Injectable	97.8	98.1	92.6
Condom	89.0	89.8	97.2
Female sterilization	97.4	97.5	94.8
Male sterilization	76.6	77.0	87.4
Norplant	55.5	56.3	24.6
Any traditional method	79.0	79.9	82.4
Periodic abstinence	66.1	66.9	73.8
Withdrawal	55.7	56.8	47.2
Lactational amenorrhea	16.0	16.2	0.0
Other	7.6	7.8	8.0
Number of women/men	10,544	9,720	2,556
Mean number of method known	9.2	9.3	8.4

Information about knowledge was sought for seven modern methods: the pill, IUD, injection, condom, female and male sterilization, and Norplant, as well as three traditional methods: periodic abstinence (safe period or rhythm method), withdrawal, and lactational amenorrhea. Other methods, if mentioned by a respondent, were also recorded. It should be noted that information about lactational amenorrhea was not sought in the two earlier BDHS surveys.

Knowledge of family planning methods is high among Bangladeshi couples. Virtually all respondents know at least one modern method of family planning, and eight out of ten (79 to 82 percent) know at least one traditional method. There is practically no difference in knowledge between ever-married women and currently married women.

The most commonly known family planning methods among women in Bangladesh are the pill, injectables, and female sterilization, closely followed by condoms and the IUD. Nearly all currently married women say they have heard of the pill, injectables, and female sterilization, and about 90 percent have heard of the IUD and condoms. Other methods known to at least half of currently married women are male sterilization (77 percent), periodic abstinence (safe period or calendar rhythm—67 percent), withdrawal (57 percent), and Norplant (56 percent). Only sixteen percent of currently married women know of lactational amenorrhea as a method of family planning. Fewer than 10 percent of currently married women mentioned methods that were not on the list, mostly traditional methods like ayurvedic methods, plants, and herbs. For ever-married women, the data also show similar levels of knowledge of specific methods.

The pill is universally known among currently married men and married women. There is also little difference between currently married women and men in knowledge of female sterilization and injectables. However, the gaps in knowledge between men and women were pronounced for the remaining methods. Men are less likely to know about the IUD, Norplant, and withdrawal, while they are more likely to have heard about periodic abstinence and the two male modern methods, the condom and male sterilization. While men are generally more likely to know of methods used by men and less likely to know of methods used by women, it is interesting to note that a higher proportion of currently married men than women reported knowing of periodic abstinence (74 versus 67 percent) and a lesser proportion reported knowing of withdrawal (47 versus 57 percent).

Trends in Knowledge of Family Planning Methods

Trends in knowledge of family planning methods are shown in Table 4.2 in terms of the proportion of ever-married women who have heard of specific methods. Knowledge of at least one method reached universal proportions among ever-married women of reproductive age in Bangladesh in 1983. Thereafter, knowledge of specific methods has become more widespread, growing continuously with time to reach more than nine out of every ten women by 1996-1997 for almost every modern method. Knowledge of periodic abstinence and withdrawal, the two traditional methods, also grew significantly over the same period, reaching at least 50 percent of women by 1991. Since 1996-1997, there have been few changes in knowledge of family planning methods, remaining as high in the 1999-2000 BDHS survey as in the 1996-1997 BDHS survey.

With family planning methods being widely known, there are no variations in knowledge of at least one method by subgroups of the population, as noted in the earlier two BDHS surveys. Knowledge of at least one method, particularly a modern method, is universal among both women and men in all age groups, in both urban and rural areas, in all the divisions, and across all categories of educational attainment (data not shown). These findings are an indication of the success of program efforts in providing contraceptive information to all eligible couples across the country.

Table 4.2 Trends in knowledge of family planning methods

Percentage of ever-married women age 10-49 who know specific family planning methods, selected sources, Bangladesh 1975-1999

Method	1975 BFS	1983 CPS	1985 CPS	1989 CPS	1989 BFS[1]	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS
Any method	81.8	98.6	99.6	99.9	100.0	99.9	99.7	100.0	99.9
Any modern method	80.0	98.4	99.5	99.9	99.0	99.8	99.7	100.0	99.9
Pill	63.9	94.1	98.6	99.0	99.0	99.7	99.5	99.9	99.7
IUD	40.1	41.6	65.4	80.4	78.0	88.9	89.4	91.4	89.0
Injectables	u	61.8	74.1	87.5	81.0	95.2	96.3	98.0	97.8
Vaginal methods	10.0	19.4	26.3	25.8	24.0	u	u	u	u
Condom	21.1	59.0	75.5	76.9	83.0	85.6	86.6	91.0	89.0
Female sterilization	53.1	95.5	97.8	99.2	98.0	99.4	98.8	98.9	97.4
Male sterilization	51.4	72.9	84.3	84.0	87.0	87.4	82.9	83.4	76.6
Any traditional method	49.0	54.8	62.8	71.7	u	83.3	75.0	76.6	79.0
Periodic abstinence	28.0	26.4	41.2	40.1	46.0	68.0	64.0	68.2	66.1
Withdrawal	15.1	19.8	20.8	14.4	30.0	48.6	49.0	49.8	55.7
Number of women	6,515	8,523	8,541	10,293	11,907	10,573	9,640	9,127	10,544

u = Unknown (no information)

[1] Published data were presented in whole numbers; the decimal was added to balance the table.

Source: 1974 BFS (MHPC, 1978:A245 and Vaessen, 1980:16); 1983 CPS (Mitra and Kamal, 1985:85, 89); 1985 CPS (Mitra, 1987:67, 70); 1989 CPS (Mitra et al., 1990:81, 84); 1989 BFS (Huq and Cleland, 1990:60); 1991 CPS (Mitra et al., 1993:42); 1993-1994 BDHS (Mitra et al., 1994:40); 1996-1997 (Mitra et al., 1997:45)

Table 4.3 shows the distribution of couples interviewed in the 1999-2000 BDHS survey by contraceptive knowledge, according to specific methods. Generally, spouses have a high degree of correspondence in their knowledge of contraceptive methods; if one partner knows a method, the other is likely to know it as well. However, there is less consistency for such female methods as the IUD, Norplant, and periodic abstinence, and for such male methods as condoms, male sterilization, and withdrawal; wives are generally more likely to know the female methods than their husbands, while husbands are more likely to know the male methods than their wives. The only exceptions are periodic abstinence and withdrawal, the former being known to more husbands than wives and the latter to more wives than husbands.

4.2 Ever Use of Contraception

Both female and male respondents in the BDHS survey who said that they had heard of a method of a family planning were asked whether they had ever used the method, that is, whether they had used it at least once. Ever use of family planning methods in the BDHS survey thus refers to use of a method at any time without making a distinction between past and current use. Collection and analysis of ever use data has special significance for family planning programs. These data indicate the proportion of the population exposed to contraceptive use at least once. Therefore, data on ever use indicate the success of programs in promoting use of family planning methods among eligible couples. In addition, data on ever use—together with data on current use—are valuable for studying couples who discontinue use.

Table 4.3 Knowledge of contraceptive methods among couples

Percent distribution of couples by contraceptive knowledge, according to specific methods, Bangladesh 1999-2000

Contraceptive method	Both know method	Only husband knows method	Only wife knows method	Neither knows method	Total
Any method	99.9	0.0	0.0	0.0	100.0
Any modern method	99.9	0.0	0.0	0.0	100.0
Pill	99.7	0.2	0.1	0.0	100.0
IUD	65.9	4.9	24.8	4.4	100.0
Injectables	91.6	1.5	6.8	0.1	100.0
Condom	88.9	8.4	2.0	0.8	100.0
Female sterilization	92.6	2.1	4.8	0.4	100.0
Male sterilization	69.2	18.2	8.8	3.8	100.0
Norplant	17.1	7.9	41.6	33.5	100.0
Any traditional method	68.9	13.1	12.5	5.5	100.0
Periodic abstinence	53.8	20.7	14.9	10.6	100.0
Withdrawal	32.4	15.0	27.6	25.0	100.0

Note: Figures are based on 2,280 couples.

Table 4.4 shows the percentage of ever-married women, currently married women, and currently married men interviewed in the 1999-2000 BDHS survey who have ever used specific family planning methods. The data for women are given by age group. Among ever-married women, three-fourths (75 percent) have ever used a method and nearly seven in ten (68 percent) have used a modern method, while more than a quarter (29 percent) reported having ever used a traditional method. The pill is, as expected, by far the most commonly used method; more than half (55 percent) of ever-married women say they have ever used this method. The next most commonly ever used methods are injectables (20 percent), condoms (19 percent), periodic abstinence (19 percent), withdrawal (14 percent), female sterilization (7 percent), and the IUD (7 percent). Very few women report having ever used male sterilization, Norplant, and lactational amenorrhea. As expected, currently married women are more likely than ever-married women to have ever used a family planning method.

Men report higher ever use of contraception than women. Eighty-seven percent of currently married men, compared with 78 percent of currently married women, report having ever used a family planning method; 79 percent compared with 71 percent for a modern method and 43 percent compared with 30 percent for a traditional method. The differences are largely due to two methods, condoms and periodic abstinence. Thirty-two percent of currently married men, compared with only 20 percent of currently married women, report having ever used condoms, and 36 percent of currently married men, compared with only 20 percent of currently married women, report having ever used periodic abstinence. Men also report considerably higher ever use of the pill, compared with women—66 versus 58 percent among currently married men and women. Similar variations between men and women in reporting ever use for condoms, periodic abstinence, and the pill were also noted in the 1996-1997 BDHS survey.

Table 4.4 Ever use of contraception

Percentage of ever-married and currently married women and currently married men who have ever used any contraceptive method, by specific method and age, Bangladesh 1999-2000

		Modern method									Traditional method				
Age	Any method	Any modern method	Pill	IUD	Inject-ables	Condom	Female sterili-zation	Male sterili-zation	Nor-plant	Menstrual regu-lation	Any trad. method	Periodic absti-nence	With-drawal	Other method	Number
EVER-MARRIED WOMEN															
10-14	39.8	30.9	23.8	0.0	0.9	11.2	0.0	0.0	0.0	0.4	17.3	7.8	11.9	0.0	186
15-19	60.9	54.1	44.7	1.1	8.9	18.3	0.1	0.0	0.2	1.5	20.2	10.4	12.7	0.5	1,514
20-24	76.0	70.3	61.6	3.7	20.0	22.8	0.7	0.1	1.0	3.7	25.4	15.1	14.1	1.2	1,935
25-29	81.9	76.6	66.4	7.4	27.6	21.8	2.6	0.1	1.0	5.1	29.9	18.8	16.3	1.7	1,975
30-34	82.9	77.7	65.1	11.6	26.9	21.8	6.8	0.7	0.8	6.3	33.5	22.3	15.7	3.9	1,621
35-39	79.5	72.7	54.8	10.6	23.1	17.2	14.0	0.9	0.7	7.9	33.3	24.7	14.6	3.2	1,335
40-44	74.9	66.8	49.1	9.9	18.6	14.1	17.0	1.6	0.2	5.3	34.7	25.0	13.5	4.3	1,126
45-49	62.5	50.7	32.1	5.9	11.4	5.4	16.9	1.9	0.2	4.1	28.0	21.7	8.3	3.7	853
Total	74.6	67.9	55.4	6.9	20.1	18.6	6.6	0.6	0.6	4.7	28.8	18.9	14.0	2.4	10,544
CURRENTLY MARRIED WOMEN															
10-14	41.0	31.9	24.5	0.0	0.9	11.6	0.0	0.0	0.0	0.4	17.8	8.0	12.3	0.0	181
15-19	61.9	54.9	45.4	1.1	9.1	18.8	0.1	0.0	0.2	1.5	20.7	10.7	13.0	0.5	1,468
20-24	77.6	72.0	63.0	3.9	20.4	23.7	0.7	0.1	1.0	3.8	25.9	15.4	14.5	1.2	1,846
25-29	84.4	79.2	68.7	7.6	28.6	22.8	2.7	0.2	1.1	5.1	30.7	19.3	16.8	1.8	1,878
30-34	85.7	80.8	67.5	12.0	28.3	22.8	7.2	0.8	0.9	6.5	34.7	23.2	16.2	4.1	1,523
35-39	85.1	78.7	59.9	11.7	25.4	18.8	14.9	1.1	0.7	8.4	34.9	25.5	15.6	3.3	1,174
40-44	81.2	73.1	54.0	10.8	20.7	15.6	18.1	1.7	0.3	6.3	37.9	27.1	14.8	5.0	948
45-49	68.7	56.4	36.4	6.8	13.5	6.3	18.3	2.3	0.2	4.7	31.5	24.2	9.6	4.3	702
Total	77.8	71.2	58.2	7.2	21.3	19.7	6.7	0.6	0.7	4.9	29.9	19.5	14.7	2.5	9,720
CURRENTLY MARRIED MEN															
Total	86.5	78.5	65.6	6.8	18.9	32.2	7.4	0.8	0.4	5.5	42.7	36.0	10.6	2.6	2,556

Ever use varies with the age of women. It is lowest among the youngest women, rises with age to a high among women age 30-34, and then declines among older women. Among currently married women, only 41 percent report having ever used a method in the youngest age group and 69 percent report ever use in the oldest age group, compared with 86 percent of those in the 30-34 age group.

There has been a steady increase in the level of ever use of family planning over the past 25 years in Bangladesh. In 1975, only 14 percent of ever-married women of reproductive age had ever used a family planning method, compared with 78 percent in 1999-2000, more than a fivefold increase (Table 4.5). For modern methods, the increases have been even steeper, with ever use of the pill increasing the most rapidly from only 5 percent of ever-married women in 1975 to more than 55 percent in 1999-2000. Between 1996-1997 and 1999-2000, ever use of traditional methods has increased from 23 percent of ever-married women to 29 percent, compared with modern methods increasing from 63 percent to 68 percent over the same period. Use of both male and female sterilization has been declining since 1991. Use of the IUD also appears to have either reached a plateau or started to decline since 1993-1994.

Table 4.5 Trends in ever use of family planning methods

Percentage of ever-married women age 10-49 who have ever used specific family planning methods, selected sources, Bangladesh 1975-1999

Method	1975 BFS	1983 CPS	1985 CPS	1989 CPS	1989 BFS[1]	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS
Any method	13.6	33.4	32.5	44.2	45.0	59.0	63.1	69.2	74.6
Any modern method	u	23.8	25.9	37.5	u	49.2	56.4	63.0	67.9
Pill	5.0	14.1	14.3	23.3	22.0	34.1	42.0	48.9	55.4
IUD	0.9	2.2	2.7	4.6	4.0	6.2	7.3	6.9	6.9
Injectables	u	1.2	1.3	2.8	2.0	6.6	11.0	15.7	20.1
Vaginal methods	0.5	2.2	1.6	2.4	1.0	2.9	u	u	u
Condom	4.8	7.1	5.7	9.3	6.0	13.4	13.9	15.0	18.6
Female sterilization	0.3	5.8	7.4	8.7	9.0	8.0	7.9	7.6	6.6
Male sterilization	0.4	1.4	1.6	1.6	1.0	1.4	1.4	1.2	0.6
Any traditional method	u	17.3	11.9	15.3	u	29.6	24.0	23.0	28.8
Periodic abstinence	4.5	11.0	7.8	9.7	13.0	21.5	16.5	16.7	18.9
Withdrawal	2.6	5.3	2.9	3.6	7.0	11.1	10.1	9.5	14.0
Number of women	6,515	8,523	8,541	10,293	11,907	10,573	9,640	9,127	10,544

u = Unknown (no information)

[1] Published data were presented in whole numbers; the decimal was added to balance the table.

Source: 1975 BFS (MHPC, 1978:A275);1983 CPS (Mitra and Kamal, 1985:117,122);1985 CPS (Mitra, 1987:108-112); 1989 CPS (Mitra et al., 1990:88, 92); 1989 BFS (Huq and Cleland, 1990:61); 1991 CPS (Mitra et al., 1993:52); 1996-1997 BDHS (Mitra et al., 1997:47)

4.3 KNOWLEDGE AND EVER USE OF MENSTRUAL REGULATION

As in the 1996-1997 BDHS survey, respondents were also asked whether they knew about or had ever used menstrual regulation (MR). More than 80 percent of ever married and currently married women know about MR in contrast to only slightly more than half of currently married men (Table 4.6). Although ever use of MR has increased since 1996-1997, it is still negligible, with only about 5 percent of women and 6 percent of men saying they had ever used MR. Levels of ever use are highest among respondents who are currently in their thirties.

Table 4.6 Menstrual regulation

Percentage of ever-married and currently married women and of currently married men who know of menstrual regulation (MR) and the percentage who have ever used MR by age group, Bangladesh 1999-2000

Age group	Ever-married women	Currently married women	Currently married men
Know of MR	81.6	82.1	53.5
Ever used MR			
10-14	0.4	0.4	-
15-19	1.5	1.5	-
20-24	3.7	3.8	-
25-29	5.1	5.1	-
30-34	6.3	6.5	-
35-39	7.9	8.4	-
40-44	5.3	6.3	-
45-49	4.1	4.7	-
Total	4.7	4.9	5.5

Note: Data are not shown for men by age group due to small sample size.

4.4 CURRENT USE OF CONTRACEPTION

In the BDHS survey, current use of contraception is defined as the proportion of women and men who report they are using a family planning method at the time of interview. Although ever-married women age 10-49 were interviewed, only women who were currently married at the time of the survey were asked the questions on current use of family planning. Table 4.7 shows the percent distribution of currently married women and men interviewed in the 1999-2000 BDHS survey by their current contraceptive use status according to five-year age group.

Table 4.7 Current use of contraception

Percent distribution of currently married women and men by contraceptive method currently used, according to age, Bangladesh 1999-2000

		Modern method								Traditional method						
Age	Any method	Any modern method	Pill	IUD	Inject-ables	Condom	Female sterili-zation	Male sterili-zation	Nor-plant	Any trad. method	Periodic absti-nence	With-drawal	Other method	Not currently using	Total	Number
CURRENTLY MARRIED WOMEN																
10-14	25.7	16.1	11.5	0.0	0.9	3.8	0.0	0.0	0.0	9.6	3.1	6.5	0.0	74.3	100.0	181
15-19	38.1	31.2	21.0	0.7	4.9	4.3	0.1	0.0	0.1	6.9	3.2	3.5	0.3	61.9	100.0	1,468
20-24	47.1	40.1	26.6	0.8	7.2	4.0	0.7	0.1	0.6	7.0	3.2	3.5	0.4	52.9	100.0	1,846
25-29	58.1	49.0	29.5	1.4	10.2	4.3	2.7	0.2	0.8	9.0	4.3	4.1	0.6	41.9	100.0	1,878
30-34	64.2	53.0	27.8	1.9	8.8	6.1	7.2	0.6	0.5	11.1	5.8	4.1	1.1	35.8	100.0	1,523
35-39	67.7	53.8	22.1	1.7	9.3	4.2	14.9	0.9	0.6	13.9	7.8	4.7	1.4	32.3	100.0	1,174
40-44	61.9	43.5	13.4	1.8	5.1	3.6	18.1	1.4	0.1	18.3	10.7	5.6	2.0	38.1	100.0	948.
45-49	43.1	31.7	7.5	0.6	1.6	1.7	18.3	1.8	0.2	11.5	7.5	2.8	1.1	56.9	100.0	702
Total	53.8	43.4	23.0	1.2	7.2	4.3	6.7	0.5	0.5	10.3	5.4	4.0	0.9	46.2	100.0	9,720
CURRENTLY MARRIED MEN																
15-19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	100.0	23
20-24	56.9	47.4	32.1	1.0	5.4	8.4	0.0	0.0	0.4	9.5	7.1	2.4	0.0	43.1	100.0	151
25-29	52.9	441.2	28.3	0.4	5.3	7.2	0.0	0.0	0.0	11.7	9.8	1.1	0.6	47.1	100.0	345
30-34	60.2	49.9	32.9	0.5	6.2	7.2	2.3	0.6	0.2	10.2	7.6	1.7	0.9	39.8	100.0	418
35-39	69.0	58.2	34.7	2.3	11.2	4.4	4.2	0.3	1.1	10.8	7.8	1.4	0.8	31.0	100.0	492
40-44	68.3	57.6	33.0	1.5	10.4	4.1	8.2	0.4	0.0	10.7	8.0	1.7	0.9	31.7	100.0	394
45-49	74.8	58.2	25.0	1.3	6.5	8.3	15.7	1.0	0.3	16.6	10.0	5.4	1.2	25.2	100.0	333
50-54	68.2	53.0	16.9	1.8	3.7	6.1	20.8	3.7	0.0	15.2	12.6	2.7	0.0	31.8	100.0	219
55-59	45.0	28.7	9.1	1.7	3.7	1.0	11.5	1.7	0.0	16.3	14.1	1.8	0.4	55.0	100.0	181
Total	63.5	51.3	28.6	1.3	7.2	5.9	7.1	0.8	0.3	12.2	9.1	2.2	0.7	36.5	100.0	2,556

Note: an asterisk indicates fewer than 25 unweighted cases.

Overall, 54 percent of currently married women in Bangladesh are using a contraceptive method. Modern methods are much preferred (43 percent of married women) over traditional methods (10 percent). Although modern methods account for nearly 80 percent of overall use, traditional methods still remain a major means of contraception in Bangladesh, with as many as 10 percent of women reporting that they rely on them. The pill continues to be by far the most popular method of contraception, used by 23 percent of currently married women. Use of the pill accounts for 43 percent of all contraceptive use and 53 percent of modern method use in the country. Other commonly used methods are injectables and female sterilization (7 percent each), periodic abstinence (5 percent), and condoms and withdrawal (4 percent each). A negligible 1 percent of married women report the use of the IUD, and even fewer report the use of male sterilization and Norplant.

Men are more likely than women to report that they are currently using a family planning method—64 versus 54 percent among currently married men and women. Such a large discrepancy may be due to overreporting by men, either to appease the interviewer or because they were embarrassed to admit that they were not practicing family planning. It could also be due to underreporting by women who were using a family planning method but were too shy to report that they were. Although there is no clear basis to discard the information given by either women or men as unreliable, it seems that women are more likely to be reliable reporters of contraceptive use because they are the actual users in most cases. Although men report higher use than women for all methods except withdrawal and Norplant, the largest differences are for the pill and periodic abstinence. The latter has been found in other DHS surveys and may be due to men's misunderstanding of the difference between periodic abstinence and abstinence for other reasons.

Current use of contraception varies considerably by age. Contraceptive use is highest among married women in their thirties, more than two-thirds of whom are using some method of family planning. The drop in current use among older women may reflect declining fecundity—whether real or perceived—while lower levels of use among younger women probably are due to their desire to have more children. However, 38 percent of married women age 15-19 are using a method and most of them are using a modern method. This confirms the findings documented in the earlier BDHS surveys that younger women have begun to appreciate the advantages of deliberately controlling childbirth early in marriage. Since 1993-1994, over a period of six years, contraceptive use has increased among women 15-19 by nearly 50 percent, from 25 to 38 percent in the 1999-2000 BDHS survey.

There are also variations by age in the methods that women use. The pill is by far the most popular method among married women under age 20 as well as among women in their twenties and thirties. Among women in their twenties, injectables are the second most popular method after the pill. But with a gradual shift to long-term methods among older women, the popularity of female sterilization increases, becoming second to the pill by age 35-39 and the most widely used method among women in their forties.

Trends in Current Use of Family Planning

Contraceptive prevalence has steadily grown in Bangladesh since 1975 (Table 4.8 and Figure 4.1) In 1975, only 8 percent of currently married women reported using a family planning method, compared with 54 percent in the 1999-2000 BDHS survey—a sevenfold increase in the contraceptive prevalence rate for any method over the last 25 years. The prevalence of modern methods has increased even faster, more than eightfold, from 5 percent in 1975 to 43 percent in 1999-2000. However, increases in modern method use appear to have slowed in the three years since the 1996-1997 BDHS survey.

Between the 1996-1997 and 1999-2000 BDHS survey, overall contraceptive use increased by 9 percent, from 49 to 54 percent of currently married women, almost as much as it had increased between the 1993-1994 and 1996-1997 BDHS survey. But the increases since 1996-97 have been largely due to the use of traditional methods, which increased by 34 percent (7.7 to 10.3 percent) among married women. Modern method use has increased only marginally by 4 percent (41.6 to 43.4 percent).

Table 4.8 Trends in current use of contraceptive methods

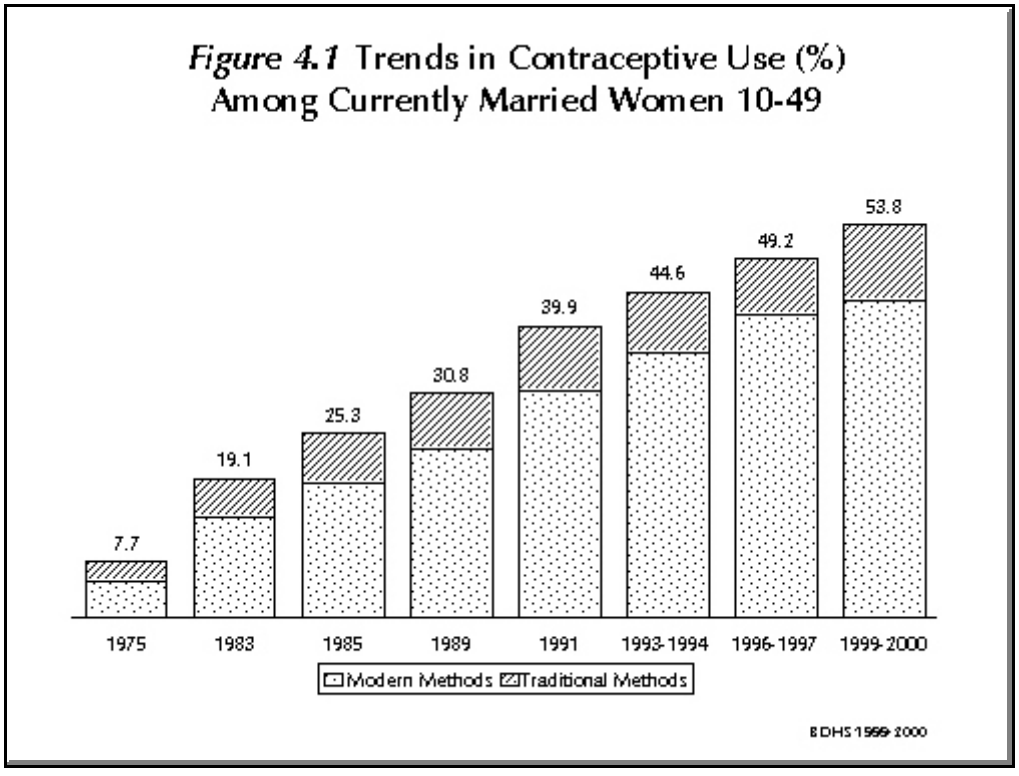
Percentage of currently married women age 10-49 who are currently using specific family planning methods, selected sources, Bangladesh 1975-1999

Method	1975 BFS	1983 CPS	1985 CPS	1989 BFS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS
Any method	7.7	19.1	25.3	30.8	39.9	44.6	49.2	53.8
Any modern method	5.0	13.8	18.4	23.2	31.2	36.2	41.6	43.4
Pill	2.7	3.3	5.1	9.6	13.9	17.4	20.8	23.0
IUD	0.5	1.0	1.4	1.4	1.8	2.2	1.8	1.2
Injectables	u	0.2	0.5	0.6	2.6	4.5	6.2	7.2
Vaginal methods	0.0	0.3	0.2	0.1	u	u	u	u
Condom	0.7	1.5	1.8	1.8	2.5	3.0	3.9	4.3
Female sterilization	0.6	6.2	7.9	8.5	9.1	8.1	7.6	6.7
Male sterilization	0.5	1.2	1.5	1.2	1.2	1.1	1.1	0.5
Any traditional method	2.7	5.4	6.9	7.6	8.7	8.4	7.7	10.3
Periodic abstinence	0.9	2.4	3.8	4.0	4.7	4.8	5.0	5.4
Withdrawal	0.5	1.3	0.9	1.8	2.0	2.5	1.9	4.0
Other traditional methods	1.3	1.8	2.2	1.8	2.0	1.1	0.8	0.9
Number of women	u	7,662	7,822	10,907	9,745	8,980	8,450	9,720

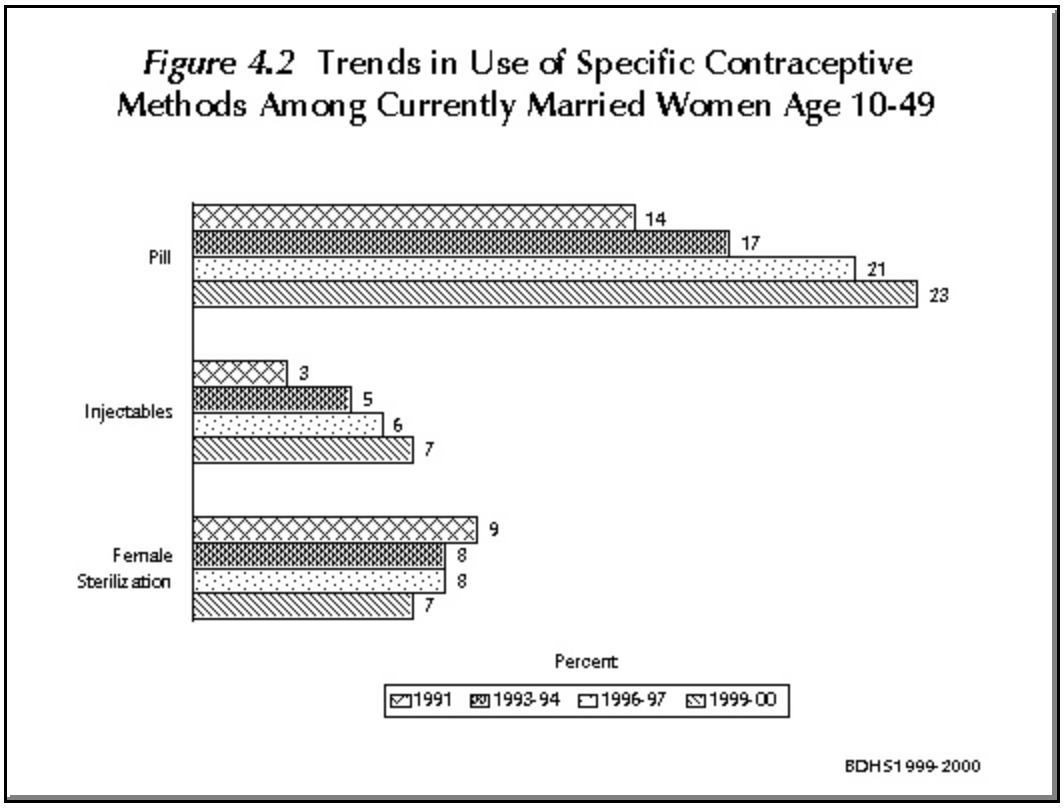
u = Unknown (no information)

[1] Published data were presented in whole numbers; the decimal was added to balance the table.

Source: 1975 BFS (Islam and Islam, 1993:43); 1983 CPS (Mitra and Kamal, 1985:159); 1985 CPS (Mitra, 1987:147); 1989 BFS (Huq and Cleland, 1990:64); 1991 CPS (Mitra et al., 1993:53); 1993-1994 BDHS (Mitra et al., 1994:45); 1996-1997 BDHS (Mitra et al., 1997:50)

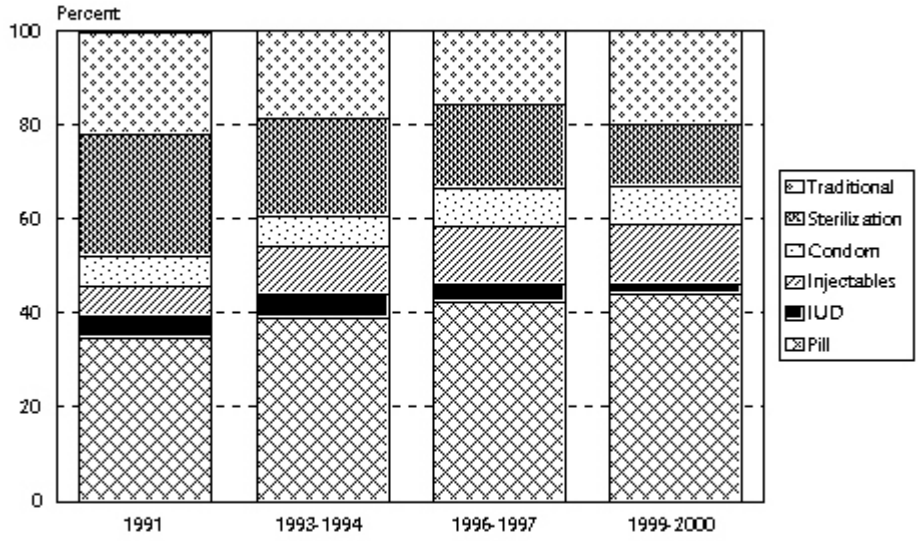


The dominant change in contraceptive prevalence in Bangladesh since the late 1980s has been a large increase in the number of couples using oral contraception. The proportion of married women using the pill increased by more than two percentage points in the last three years, from 21 percent in 1996-1997 to 23 percent in 1999-2000 (Figure 4.2). Use of short-term methods like injectables and condoms has also increased over the same period, although by smaller margins. But the use of long-term methods such as sterilization and the IUD has further declined in the 1999-2000 BDHS survey. Among traditional methods, use of withdrawal has increased considerably between the 1996-1997 and 1999-2000 BDHS surveys, while use of periodic abstinence has remained almost unchanged between the two surveys.



With the use of long-term methods declining and that of short-term methods, especially the pill, increasing, the proportional share that each method contributes to the overall use of contraception—known as the "method mix"—has changed over time. For example, the pill now accounts for 43 percent of all contraceptive use, compared with 35 percent in 1991 (Figure 4.3). However, the share contributed by female sterilization has dropped from 23 percent in 1991 to 12 percent in 1999-2000.

Figure 4.3 Trends in Contraceptive Method Mix



Note: Percent using specific methods among currently married women 10-49 who are using a method.

BDHS 1999-2000

Differentials in Current Use of Family Planning

Use of contraception varies by women's characteristics (See Table 4.9). The level of current contraceptive use is higher in urban areas (60 percent) than in rural areas (52 percent among women). The urban-rural gap has narrowed compared with the 1993-1994 and 1996-1997 BDHS surveys. This might have been due to changing the definition of urban areas in the 1999-2000 BDHS survey. The pill is the most popular method among both urban and rural women. The condom is the next most widely used method among urban couples, while injectables are the second most popular method for rural women. There is a sharp difference in condom use between urban (10 percent) and rural (3 percent) couples, probably reflecting easier access to the method in urban areas. There is, however, little variation between urban and rural areas in use of the remaining methods.

Differentials in current use of family planning by the six administrative divisions of the country are large. Contraceptive use is highest in Khulna Division, closely followed by the Rajshahi and Barisal divisions, while it is lowest in Sylhet Division. Sixty-four percent of married women in Khulna Division and 59 percent of those in the Rajshahi and Barisal divisions are using a family planning method, compared with only 34 percent of married women in Sylhet Division. Intermediate levels of use are reported for women in Dhaka Division (54 percent) and Chittagong Division (44 percent). Contraceptive use has increased in all divisions except Rajshahi Division since the 1996-1997 BDHS survey; however, it has increased relatively more rapidly (by 69 percent) in Sylhet Division.

Table 4.9 Current use of contraception by background characteristics

Percent distribution of currently married women and men by contraceptive method currently used, according to selected background characteristics, Bangladesh 1999-2000

Background characteristic	Any method	Modern method: Any modern method	Pill	IUD	Injectables	Condom	Female sterilization	Male sterilization	Norplant	Traditional method: Any trad. method	Periodic abstinence	Withdrawal	Other method	Not currently using	Total	Number
CURRENTLY MARRIED WOMEN																
Residence																
Urban	60.0	48.7	24.6	1.4	5.7	9.8	6.3	0.4	0.4	11.3	5.5	5.2	0.6	40.0	100.0	1,893
Rural	52.3	42.2	22.6	1.2	7.6	2.9	6.8	0.6	0.5	10.1	5.4	3.8	0.9	47.7	100.0	7,827
Division																
Barisal	59.2	45.7	20.0	1.7	10.6	2.9	8.2	1.7	0.5	13.5	6.9	6.0	0.7	40.8	100.0	638
Chittagong.	44.1	34.9	18.8	1.2	6.1	3.6	4.9	0.1	0.2	9.1	5.0	3.0	1.1	55.9	100.0	1,795
Dhaka	53.9	42.1	23.1	0.8	5.7	5.0	6.8	0.2	0.5	11.8	5.9	5.0	0.9	46.1	100.0	3,009
Khulna	64.0	50.8	25.8	2.1	9.7	6.6	5.0	1.0	0.6	13.2	6.8	6.0	0.4	36.0	100.0	1,198
Rajshahi	58.6	51.1	27.5	1.5	8.5	3.3	9.0	0.7	0.5	7.6	3.6	2.9	1.0	41.4	100.0	2,527
Sylhet	34.0	25.0	13.5	0.7	4.0	3.0	3.6	0.3	0.0	9.0	7.3	1.2	0.5	66.0	100.0	552
Education																
No education	51.0	41.5	20.0	1.2	8.3	1.0	9.6	0.8	0.7	9.5	5.4	2.9	1.1	49.0	100.0	4,306
Primary incomplete	53.3	44.0	24.1	0.9	8.5	3.4	6.2	0.5	0.4	9.3	5.4	3.4	0.5	46.7	100.0	1,799
Primary complete	52.7	41.5	23.4	1.0	8.1	4.3	4.2	0.2	0.2	11.2	5.7	4.2	1.2	47.3	100.0	1,019
Secondary+	59.1	47.0	27.2	1.7	4.2	10.2	3.2	0.1	0.3	12.2	5.2	6.4	0.5	40.9	100.0	2,596
Number of living children																
None	20.7	13.5	8.0	0.0	0.2	5.1	0.2	0.1	0.0	7.1	2.6	4.6	0.0	79.3	100.0	1,159
1	48.9	40.6	27.5	0.6	5.6	5.0	1.2	0.3	0.3	8.4	4.5	3.5	0.3	51.1	100.0	1,942
2	61.0	52.5	29.2	1.9	9.8	5.2	5.6	0.5	0.4	8.5	4.2	3.6	0.7	39.0	100.0	2,181
3	64.8	53.5	25.8	1.8	8.5	3.7	12.2	0.4	1.0	11.3	5.6	4.9	0.7	35.2	100.0	1,760
4+	58.5	44.5	19.5	1.4	8.5	2.9	10.8	0.9	0.5	14.0	8.1	4.0	1.9	41.5	100.0	2,679
Total	53.8	43.4	23.0	1.2	7.2	4.3	6.7	0.5	0.5	10.3	5.4	4.0	0.9	46.2	100.0	9,720
CURRENTLY MARRIED MEN																
Residence																
Urban	68.3	56.2	31.8	1.2	5.3	11.3	5.5	0.6	0.3	12.1	9.1	2.3	0.7	31.7	100.0	508
Rural	62.3	50.1	27.8	1.3	7.7	4.6	7.5	0.8	0.3	12.2	9.2	2.1	0.7	37.7	100.0	2,048
Division																
Barisal	66.6	49.4	21.0	2.7	13.3	3.2	8.0	1.2	0.0	17.2	12.2	3.5	1.0	33.4	100.0	159
Chittagong	57.3	46.9	27.9	1.1	5.9	5.1	6.5	0.0	0.4	10.4	7.7	2.3	0.4	42.7	100.0	426
Dhaka	59.7	46.6	26.5	0.9	6.5	6.5	5.3	0.7	0.3	13.1	9.8	2.3	0.6	40.3	100.0	835
Khulna	72.9	56.8	31.2	1.7	9.6	7.9	5.6	0.5	0.3	16.0	11.9	3.7	0.1	27.1	100.0	322
Rajshahi	71.2	61.5	34.2	1.6	7.4	5.2	11.0	1.5	0.4	9.8	7.2	1.3	1.3	28.8	100.0	682
Sylhet	40.6	30.7	18.4	0.5	2.5	6.6	2.7	0.0	0.0	9.9	9.2	0.2	0.5	59.4	100.0	133
Education																
No education	57.2	47.6	25.0	1.2	7.8	2.5	9.5	1.4	0.3	9.6	7.9	0.8	0.6	42.8	100.0	891
Primary incomplete	61.1	47.0	25.4	1.0	8.8	3.0	7.2	0.9	0.7	14.1	11.2	1.4	1.2	38.9	100.0	590
Primary complete	64.5	55.3	35.6	0.7	6.6	5.1	7.3	0.0	0.0	9.2	8.1	0.8	0.2	35.5	100.0	192
Secondary+	71.1	56.9	33.0	1.8	5.8	11.5	4.6	0.2	0.1	14.2	9.2	4.3	0.6	28.9	100.0	883
Number of living children																
None	30.9	22.4	12.5	0.0	0.3	9.3	0.3	0.0	0.0	8.6	7.7	0.9	0.0	69.1	100.0	254
1	59.3	47.5	33.5	0.9	5.4	6.2	0.9	0.3	0.2	11.8	9.0	2.0	0.6	40.7	100.0	473
2	73.2	62.4	38.2	1.3	8.2	7.7	5.6	1.1	0.4	10.8	8.4	1.9	0.4	26.8	100.0	565
3	73.1	61.7	30.6	1.9	9.9	4.6	12.9	1.1	0.8	11.4	8.8	2.3	0.3	26.9	100.0	452
4+	64.0	49.0	23.1	1.7	8.3	4.2	10.6	0.9	0.1	15.0	10.3	2.8	1.5	36.0	100.0	812
Total	63.5	51.3	28.6	1.3	7.2	5.9	7.1	0.8	0.3	12.2	9.1	2.2	0.7	36.5	100.0	2,556

Contraceptive use varies by women's level of education. A little more than half of married women with no formal education are currently using a method, compared with 53 percent of women with either incomplete or complete primary school and 59 percent of those with at least some secondary education. Among women in all educational categories, the pill is the most widely used method. The second most popular method among women who have no education is female sterilization, among those with incomplete or complete primary education it is injectables, and among those with at least some secondary education, the condom is the second most widely used method. It is interesting to note that more educated women are more likely to use traditional methods.

Contraceptive use rates also vary according to family size (number of living children). As expected, fewer women use contraception before having their first birth. After the first child, contraceptive use increases sharply, peaking at 65 percent among women with three children, after which it declines slightly.

Differentials in contraceptive use as reported by currently married men are more or less similar to those reported by women, except that the levels of use are generally higher among men. A more precise way to compare discrepancies in contraceptive use reporting between men and women is to compare husbands and wives (see discussion of Table 4.10 below).

Table 4.10 Comparison of reported contraceptive use by spouses

Percent distribution of couples according to wife's and husband's reported current contraceptive use status, Bangladesh 1999-2000

	Wife: current contraceptive method											
Husband: current contraceptive method	Pill	IUD	Inject-ables	Condom	Female sterili-zation	Male sterili-zation	Nor-plant	Periodic absti-nence	With-drawal	Other method	Not using	Total
Pill	**24.0**	0.2	0.5	0.3	0.2	0.0	0.0	0.5	0.5	0.2	3.3	29.7
IUD	0.0	**1.3**	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.4
Injectables	0.3	0.1	**6.3**	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.7	7.7
Condom	0.4	0.1	0.2	**3.4**	0.0	0.0	0.0	0.2	0.3	0.1	1.0	5.7
Female sterilization	0.0	0.0	0.0	0.0	**7.0**	0.0	0.0	0.0	0.0	0.0	0.2	7.3
Male sterilization	0.0	0.0	0.0	0.0	0.1	**0.5**	0.0	0.1	0.0	0.0	0.0	0.7
Norplant	0.0	0.0	0.0	0.0	0.0	0.0	**0.3**	0.0	0.0	0.0	0.0	0.3
Periodic abstinence	0.7	0.1	0.2	0.4	0.0	0.0	0.0	**2.5**	1.2	0.3	3.7	9.0
Withdrawal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	**1.4**	0.0	0.5	2.2
Other	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.4**	0.3	0.8
Not using	0.8	0.2	0.4	0.3	0.2	0.0	0.0	1.7	0.8	0.2	**30.4**	35.0
Total	26.4	1.9	7.6	4.3	7.6	0.5	0.4	5.6	4.3	1.1	40.3	100.0

CONTRACEPTIVE USE REPORTING AMONG MARRIED COUPLES

As shown earlier, there is a marked discrepancy in reporting of contraceptive prevalence between currently married men (64 percent) and currently married women (54 percent). Part of the discrepancy is assumed to be due to contraceptive use with nonmarital partners, which is presumably higher among men than women. Another explanation could be marriages in which the spouses are not currently cohabiting, thus reducing the need for contraceptive use. Such a situation is likely to be more common among women than men, for example, when men work overseas on a labor contract. However, misreporting and lack of communication between spouses is also a possible explanation. Fortunately, it is possible to link wives and husbands who were both interviewed and compare their individual responses about contraceptive use. Table 4.10 shows the extent of agreement (shown in the diagonal) in reporting of contraceptive use between husbands and wives interviewed in the 1999-2000 BDHS survey.

Among the matched couples, 65 percent of husbands report that they are using a family planning method, compared with only 60 percent of wives. The discrepancy is mostly observed in reporting of the use of periodic abstinence, the pill, and condoms. Again, most of the discrepancy for these methods is due to couples in which the husband says they are using these methods while the wife says they are not using any method at all. Whereas at least some of the discrepancies between husbands and wives in reporting of contraceptive use could be due to extramarital use, some may be due to misunderstanding of the method. For example, higher reporting of periodic abstinence use among men than women has been observed in many countries and may be due to confusion between periodic and long-term abstinence. Finally, underreporting of contraceptive use among women because of embarrassment or ignorance (e.g., condom use by husband without her knowledge) is also a possible explanation for the discrepancy.

4.5 NUMBER OF CHILDREN AT FIRST USE

The BDHS survey included a question for all women who had ever used a method as to how many living children they had when they first used a method. Table 4.11 shows the distribution of ever-married women in the 1999-2000 BDHS survey by the number of living children they had when they first used a method, according to five-year age group. These data enable the examination of both periodic and cohort changes in the timing of the initiation of contraceptive use during the family-building process.

Table 4.11 Number of children at first use of contraception

Percent distribution of ever-married women by number of living children at the time of first use of contraception and median number of children at first use, according to current age, Bangladesh 1999-2000

Current age	Never used contra-ception	Number of living children at time of first use of contraception						Total	Number	Median number of children at first use
		0	1	2	3	4+	Missing			
10-14	60.2	38.7	0.6	0.4	0.0	0.0	0.0	100.0	186	0.0
15-19	39.1	35.7	22.8	2.2	0.1	0.0	0.1	100.0	1,514	0.0
20-24	24.0	25.8	36.4	11.1	2.0	0.5	0.0	100.0	1,935	0.3
25-29	18.1	17.0	34.0	17.5	9.4	3.8	0.1	100.0	1,975	0.7
30-34	17.1	10.4	24.7	19.2	15.5	13.1	0.0	100.0	1,621	1.3
35-39	20.5	7.4	14.8	16.6	15.6	25.0	0.1	100.0	1,335	2.1
40-44	25.1	4.4	11.3	13.7	12.7	32.8	0.0	100.0	1,126	2.6
45-49	37.5	2.8	7.4	7.8	9.6	34.7	0.2	100.0	853	3.3
Total	25.4	17.0	23.8	12.8	8.6	12.3	0.1	100.0	10,544	0.9

Overall, 54 percent of women initiated contraceptive use when they had fewer than three living children, with 17 percent initiating use before having the first child. The results also indicate that Bangladeshis are adopting family planning methods at an earlier age than before. Younger cohorts of women show a tendency to initiate family planning use at lower parities. For example, although less than 22 percent of women age 35 and older initiated family planning use before having two children, the proportion rises with younger cohorts, reaching about 60 percent among women age 15-24. This trend toward initiating family planning use at lower parities can also be seen by comparing data from all three BDHS surveys. For example, whereas in 1993-1994, 39 percent of women reported initiating contraceptive use when they had fewer than three children, the proportion rose to 46 percent in 1996-1997 and to 54 percent in 1999-2000.

4.6 PROBLEMS WITH CURRENT METHOD

In the BDHS survey, women currently using modern family planning methods were asked whether they were experiencing any problems using their current method, and if so, what those problems were. Problems in using family planning methods may reduce the effectiveness with which they are used or even lead to termination of use. An understanding of the problems users experience is therefore important in efforts to improve family planning service delivery in Bangladesh. Table 4.12 presents information from the 1999-2000 BDHS survey on the problems reported by women who were currently using modern family planning methods.

Table 4.12 Problems with current method of contraception

Among women who are currently using a method of family planning, percentage who are having problems with their method, by specific method and type of problem, Bangladesh 1999-2000

	Contraceptive method						
Problem	Pill	IUD	Inject-ables	Con-dom	Female sterili-zation	Nor-plant	Total
Any problem	24.8	23.5	45.5	5.1	33.8	50.9	28.7
Weight gain	0.8	1.0	1.2	0.1	0.2	0.0	0.7
Weight loss	2.1	1.4	3.0	0.3	6.4	12.8	2.8
Excessive bleeding	1.0	7.8	3.2	0.4	4.0	11.7	2.1
Hypertension	0.3	2.2	1.2	0.0	1.0	0.0	0.6
Headache	14.0	3.1	12.3	0.1	8.3	13.7	11.1
Nausea	5.0	0.7	1.4	0.0	1.0	0.0	3.1
No menstruation	1.8	1.0	28.8	0.2	2.1	23.5	6.4
Weak/tired	12.0	10.9	16.6	2.3	20.7	21.0	13.2
Dizziness	5.1	1.2	5.7	0.8	4.5	10.5	4.7
Husband disapproves	0.1	0.0	0.2	0.0	0.1	0.0	0.1
Religion disapproves	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Costs too much	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Inconvenient to use	0.0	1.2	0.0	0.6	0.0	1.9	0.1
Abdominal pain	1.2	11.8	2.9	1.6	14.7	3.6	4.0
Other	2.6	6.6	7.0	2.5	10.0	3.7	4.6
Number of users	2,239	121	702	414	651	45	4,172

Note: Table excludes the 50 women who said their husband had been sterilized. These women reported no problems with the method.

A sizable proportion (29 percent) of women using modern methods reported having problems with their methods. Common complaints are feeling weak or tired and having headaches. For pill users the most commonly reported problem is headaches, followed by feeling weak or tired, while for sterilized women the most commonly reported problem is feeling weak or tired, followed by abdominal pain and headaches. For injectable users, it is amenorrhea, followed by feeling weak or tired and headaches. IUD users tend to complain of abdominal pain, feeling weak or tired, and excessive bleeding. Problems were rare among users of condoms, while there was no reporting of any complaints among users of male sterilization. However, among the few women using Norplant, half reported that they were experiencing some health problems including such complaints as feeling weak or tired, amenorrhea, headaches, excessive bleeding, and dizziness.

There have been slight increases between the 1996-1997 and 1999-2000 BDHS surveys in reported health problems with methods, especially with injectables. Differences may be due to improved reporting of problems in the 1999-2000 survey. The differences may also indicate that there has been some deterioration in the overall quality of care in the delivery of family planning services.

4.7 Use of Social Marketing Brands

Bangladesh has an active contraceptive social marketing program that distributes pills, condoms, and oral rehydration salts through a network of retail outlets (pharmacies, small shops, and kiosks) spread across the country. The Social Marketing Company carries several brands of oral contraceptives, namely *Maya, Ovacon, Norquest, Nordette, and Femicon.*[1] To obtain information on the number of users purchasing the social marketing brands, BDHS interviewers asked current pill users to show them a packet of the pill they are using. If the user had the packet available, the interviewer recorded the brand on the questionnaire. If not, the interviewer showed the woman a chart depicting all the major pill brands and asked the user to identify which brand she was currently using.

As shown in Table 4.13, overall, 29 percent of pill users are using social marketing brands. This compares with 64 percent using government-supplied brands, which are provided free of charge through government fieldworkers and clinics and at a nominal charge from the nongovernmental service providers. Urban pill users are far more likely than rural users to use one of the social marketing brands; 43 percent of urban women using pills are using one of the social marketing brands, compared with only 25 percent of rural pill users. The percentage of pill users using a social marketing brand has sharply increased from 14 percent in 1993-1994 to 19 percent in 1996-1997 and 29 percent in 1999-2000.

Table 4.13 Use of pill brands

Percent distribution of current pill users by brand of pill used, according to urban-rural residence, Bangladesh 1999-2000

	Residence		
Pill brand	Urban	Rural	Total
Government			
Combination-5	0.4	0.4	0.4
Shuki	43.9	68.3	63.2
Social marketing			
Maya	1.3	2.1	2.0
Ovacon	0.7	0.6	0.6
Norquest	0.0	0.2	0.2
Nordette	22.4	9.0	11.8
Femicon	18.1	13.5	14.5
Private			
Marvelon	3.2	1.4	1.8
Ovostat	8.7	3.2	4.3
Other			
Noriday	0.2	0.3	0.3
Lyndiol	0.5	0.1	0.2
Don't know	0.6	0.8	0.8
Total	100.0	100.0	100.0
Number of pill users	466	1,773	2,239

[1] The first three brands listed have been discontinued; however, it is possible that stocks still remain in retail outlets.

To measure the impact of the social marketing program on condom use in the BDHS survey, women who say that they and their husband are currently using condoms were shown a chart depicting all the major condom brands and asked which brand of condom they used. Men would presumably be a more reliable source of data on condom brands; however, due to the larger sample of women than men in the BDHS survey, the data shown in Table 4.14 are derived from women.

Table 4.14 Use of condom brands

Percent distribution of current condom users by brand of condom used, according to urban-rural residence, Bangladesh 1999-2000

	Residence		
Condom brand	Urban	Rural	Total
Raja[1]	20.4	30.2	25.8
Panther[1]	48.5	30.1	38.4
Sensation[1]	11.3	2.2	6.3
Majestic	0.3	0.7	0.5
Carex	1.5	0.7	1.1
Tahiti	0.0	0.4	0.2
Sultan	0.4	2.4	1.5
Gent	0.5	0.0	0.2
Durex	0.5	0.0	0.2
B.D.	4.2	11.1	8.0
Feeling	0.8	0.4	0.5
Don't know	11.6	21.9	17.3
Total	100.0	100.0	100.0
Number of users	185	229	414

Note: Table is based on women's reports.
[1] Social marketing brand

Condom brands sold by the Social Marketing Company have a high market share. Seven in ten condom users use a social marketing brand, with 38 percent using *Panther* and another 26 percent using *Raja*. The *Panther* brand of condoms appears to be more popular among urban users, while *Raja* predominates among rural users. The proportion of overall condom use that is supplied through the Social Marketing Company has increased substantially in the last three years, from 58 percent in 1996-1997 to 71 percent in 1999-2000.

4.8 Age at Sterilization and Sterilization Regret

Table 4.15 shows the distribution of sterilized women by the age at which they had the procedure, according to the number of years prior to the survey the procedure was done. The information is useful in understanding when a Bangladeshi woman is likely to accept sterilization. It should, however, be remembered that since data on age at sterilization are derived from a question on the month and year of the operation, it is possible that the data are distorted by some systematic error in reporting either the date of the operation or the date of birth and/or age of the woman.

Table 4.15 Timing of sterilization

Percent distribution of sterilized women by age at the time of sterilization, according to the number of years since the operation, Bangladesh 1999-2000

Years since operation	Age at time of sterilization					Total	Number	Median age[1]
	<25	25-29	30-34	35-39	40-44			
<2	(31.5)	(26.6)	(22.5)	(13.6)	(5.8)	100.0	48	(26.8)
2-3	(12.6)	(31.5)	(34.9)	(17.2)	(3.9)	100.0	34	(31.1)
4-5	(21.5)	(29.0)	(19.6)	(18.8)	(11.1)	100.0	41	(28.4)
6-7	33.6	27.8	26.0	8.3	4.4	100.0	81	28.1
8-9	22.3	43.3	15.8	15.9	2.6	100.0	77	28.1
10+	36.4	41.4	19.4	2.8	0.0	100.0	418	a
Total	32.2	37.8	20.8	7.3	2.0	100.0	700	27.1

Note: Figures in parentheses are based on 25 to 49 women.
[1]Median age was calculated only for women less than 40 years of age to avoid problems of censoring.
[a] Not calculated due to censoring

Women who decide to have female sterilization generally have the procedure early in their reproductive years. More than two-thirds of sterilized women had the operation before age 30, while nearly one-third of the women were sterilized before age 25. Few sterilized women had the procedure when they were in their forties. The median age at sterilization is 27. Although the median age at which women have the operation has remained almost unchanged since the earlier two BDHS surveys, relatively fewer sterilized women reported having had the operation before age 25 in the 1999-2000 BDHS survey than in the 1996-1997 BDHS survey.

As in the earlier BDHS surveys, women who had been sterilized or whose husband had been sterilized were asked whether they regretted having had the operation and, if so, why. The results are presented in Table 4.16. Although some level of regret is expected to occur with any permanent method of contraception, a high level could be viewed as an indication of poor quality of care in the sense that women and men who are sterilized at a young age and/or low parity or who are not adequately counseled are more likely to regret having the operation (Loaiza, 1995). Overall, 11 percent of women reported that they regretted that they or their husband had been sterilized. About the same level of regret was reported in the 1996-1997 BDHS survey, while a considerably higher proportion (16 percent) regretted being sterilized in the 1993-1994 BDHS survey. Changes in reporting may account for some of the decrease in regret of the procedure.

Desire to have another child is the most frequently given reason for regret. Almost 90 percent of women who regret sterilization say the reason is that they or their husband wanted another child. As expected, a woman is more likely to regret having had the procedure if she has fewer children. While only 6 percent of women with four or more living children regret having had the operation, the proportion rises to 19 percent among those having two living children. Of course, the number of living children refers to the current number and not the number at the time of sterilization. Thus, many of those who regret having been sterilized include the unfortunate cases in which couples decide on sterilization and subsequently suffer the loss of one or more of their children. There are also variations in sterilization regret by division (from 7 to 23 percent) and by education (6 to 12 percent). Sterilization regret is about as common among urban women as among rural women.

Table 4.16 Sterilization regret

Percentage of currently married women who are sterilized or whose husbands are sterilized who regret the operation, by reasons for regret and selected background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage who regret the operation	Reason for regretting sterilization					Number of women
		Respondent wants another child	Husband wants child	Side effects	Child died	Other reason	
Residence							
Urban	12.5	7.7	1.6	1.3	1.1	0.9	127
Rural	10.3	7.4	2.0	0.4	0.3	0.3	574
Division							
Barisal	9.5	7.6	1.9	0.0	0.0	0.0	64
Chittagong	7.4	5.4	1.3	0.0	0.0	0.7	90
Dhaka	10.0	6.5	1.9	1.2	0.4	0.0	209
Khulna	23.2	16.3	2.2	1.1	0.6	2.9	73
Rajshahi	9.5	6.5	2.1	0.3	0.6	0.0	245
Sylhet	*	*	*	*	*	*	21
Education							
No education	11.2	7.4	2.1	0.9	0.5	0.3	449
Primary incomplete	12.2	9.9	1.6	0.0	0.0	0.7	120
Primary complete	(6.4)	(6.4)	(0.0)	(0.0)	(0.0)	(0.0)	46
Secondary+	8.3	4.5	2.5	0.0	0.5	0.7	87
Number of living children							
<2	(48.4)	(37.1)	(4.0)	(0.0)	(7.4)	(0.0)	33
2	19.4	16.7	1.7	0.0	0.4	0.6	133
3	8.1	3.1	4.2	0.7	0.0	0.2	223
4+	6.1	5.1	0.0	0.6	0.0	0.4	157
Total	10.7	7.4	1.9	0.6	0.4	0.4	701

Note: Figures in parentheses are based on 25 to 49 women. An asterisk indicates fewer than 25 unweighted women. Total includes 90 women for whom the number of living children was not known.

4.9 SOURCE OF FAMILY PLANNING SERVICES

Sources of family planning methods play an important role in the promotion and maintenance of contraceptive use levels in the population. To ascertain the relative importance of different sources in Bangladesh, women who reported using a modern method of contraception at the time of the survey were asked where they obtained the method last time. Since women often do not know into which category the source they use falls (e.g., hospital, thana health complex, family welfare center, and private clinic.), interviewers were instructed to write the name of the source in the questionnaire. Team supervisors were instructed to verify that the name and the type of source coded were consistent.

Sources of family planning methods were classified into four major categories: public (government) facilities (including government hospitals, thana health complexes, family welfare centers, satellite/EPI clinics, Maternal Child Welfare Centres, and government fieldworkers), NGO sector sources (including static clinics, satellite clinics, depot holders, and fieldworkers), private medical sources (including private hospitals/clinics, doctors—qualified or traditional, and pharmacies), and other private sources (including shops and friends/relatives). Table 4.17 and Figure 4.4 show the percentage of current users of modern methods who obtained their method from a specific source.

Table 4.17 Source of supply of modern contraceptive methods

Percent distribution of currently married women who are current users of modern contraceptive methods by most recent source of supply, according to specific methods, Bangladesh 1999-2000

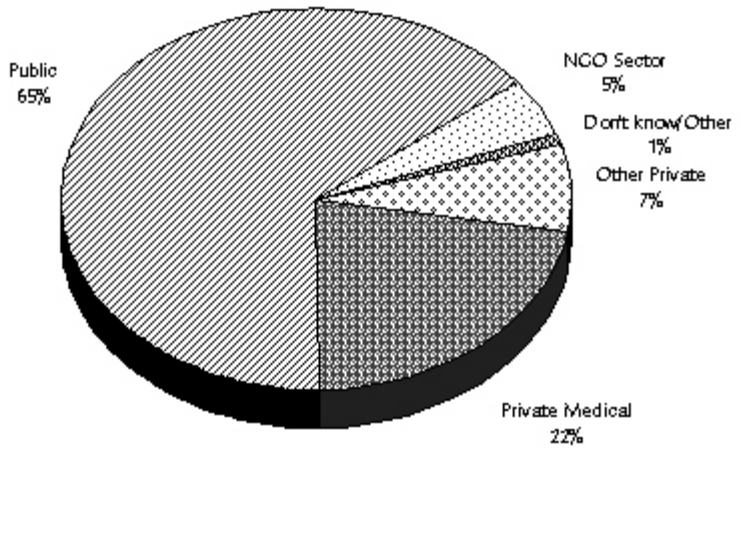
	Contraceptive method							
Source of supply	Pill	IUD	Inject-ables	Condom	Female sterili-zation	Male sterili-zation	Nor-plant	All modern methods
Public	56.2	89.8	85.2	19.7	89.9	86.2	(83.2)	64.3
Government hospital	0.8	7.4	2.0	0.9	31.1	26.1	(31.2)	6.5
Family welfare center	5.0	43.4	36.1	1.4	8.8	0.0	(0.0)	11.4
Thana health complex	2.7	25.6	11.3	0.5	41.4	53.5	(39.0)	11.5
Satellite/EPI clinic	2.0	1.5	18.7	0.2	1.2	3.0	(0.0)	4.5
Maternal Child Welfare Centre (MCWC)	0.6	7.6	3.7	0.2	7.4	3.7	(13.1)	2.5
Govt. fieldworker (FWA)	45.1	4.4	13.4	16.5	0.0	0.0	(0.0)	27.9
NGO sector	3.6	6.0	11.3	2.4	5.3	6.7	(11.6)	5.2
NGO static clinic	0.8	5.2	6.9	1.2	4.7	6.7	(11.6)	2.8
NGO satellite clinic	0.1	0.8	1.7	0.1	0.6	0.0	(0.0)	0.5
NGO depot holder	0.9	0.0	0.2	0.0	0.0	0.0	(0.0)	0.5
NGO fieldworker	1.8	0.0	2.5	1.1	0.0	0.0	(0.0)	1.5
Medical private	30.3	3.1	2.3	52.3	4.0	0.0	(1.8)	22.3
Private hospital/clinic	0.0	2.4	0.9	0.2	4.0	0.0	(1.8)	0.9
Qualified doctor	0.0	0.7	0.0	0.0	0.0	0.0	(0.0)	0.0
Traditional doctor	0.0	0.0	0.7	0.2	0.0	0.0	(0.0)	0.1
Pharmacy	30.3	0.0	0.7	52.0	0.0	0.0	(0.0)	21.3
Other private	8.8	0.7	0.0	23.6	0.0	2.5	(0.0)	7.0
Shop	5.3	0.0	0.0	22.6	0.0	0.0	(0.0)	5.0
Friends, relatives	3.5	0.7	0.0	1.0	0.0	0.0	(0.0)	2.0
Other	0.4	0.0	0.0	0.6	0.0	0.0	(0.0)	0.2
Don't know	0.4	0.0	0.0	1.3	0.0	2.5	(0.0)	0.4
Missing	0.3	0.4	1.3	0.2	0.9	4.6	(3.3)	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,239	121	702	414	651	50	45	4,223

Note: Figures in parentheses are based on 25 to 49 women.

The public sector is the predominant source of family planning methods. Almost two-thirds (64 percent) of current users of modern methods obtain their methods from a public-sector source, with 36 percent obtaining them from a public facility and 28 percent obtaining them from a government fieldworker. Twenty-two percent of modern method users get their methods from private medical sources such as pharmacies and private doctors and clinics, while 7 percent use nonmedical private sources such as shops and friends/relatives. Only five percent of users rely on an NGO source.

There has been a considerable decline in the proportion of users obtaining methods from fieldworkers, from 42 percent in the 1993-1994 BDHS survey and 39 percent in the 1996-1997 BDHS survey to 29 percent in the 1999-2000 BDHS survey. Conversely, more couples now seem to procure their methods from commercial sources, like pharmacies and shops. In the 1999-2000 BDHS survey, 26 percent of users reported buying their method from commercial sources (21 percent from pharmacies and 5 percent from shops), compared with 19 percent in the 1996-1997 BDHS survey.

Figure 4.4 Distribution of Current Users of Modern Contraception by Source of Supply



BDHS 1999-2000

The source a woman uses to obtain contraceptive methods is related to the type of method she is using. The vast majority (77 percent) of pill users receive their pills from either fieldworkers or pharmacies, while the vast majority (75 percent) of condom users receive their supplies from either pharmacies or shops. However, most IUD users (89 percent) obtain their method from government sources, such as family welfare centers and thana health complexes. Most users of injectables (85 percent) are served by government sources—especially family welfare centers—although fieldworkers and NGO clinics together supply the method to one in four users. As expected, both female and male sterilization procedures are mainly performed in government facilities.

4.10 Contraceptive Discontinuation

A key concern for family planning programs is the rate at which contraceptive users discontinue and the reasons for such discontinuation. Life table contraceptive discontinuation rates are presented in Table 4.18. These rates are based on information collected in the five-year, month-by-month calendar in the BDHS questionnaire. All episodes of contraceptive use between April 1994 (the first month of the Bengali year 1401) and the date of interview were recorded in the calendar, along with the main reason for any discontinuation of use during this period. Thus, the discontinuation rates presented here are based on all segments of use that started between April 1994 and three months prior to the date of interview. The month of interview and the two preceding months are ignored in order to avoid the bias that might be introduced by an unrecognized pregnancy.

The rates presented in Table 4.18 are cumulative one-year discontinuation rates and represent the proportion of users who discontinue using that method within 12 months after they start. The rates are calculated by dividing the number of discontinuations at each duration of use

in single months by the number of months of exposure at that duration. The single-month rates are then cumulated to produce a one-year rate. In calculating rates, the reasons for discontinuation are treated as competing risks (net rates). For purposes of the table, the reasons are classified into four main categories: method failure (pregnancy), desire to become pregnant, side effects/health reasons, and all other reasons. Switching from one method to another is included in the last category.

Table 4.18 Contraceptive discontinuation rates

First-year contraceptive discontinuation rates due to method failure, desire for pregnancy, health reasons, or other reasons, according to specific method, Bangladesh 1999-2000

Method	Reason for discontinuation				
	Method failure	To become pregnant	Side effects/ health	All other reasons	All reasons
Pill	3.0	7.7	22.1	13.8	46.7
IUD	0.0	2.0	29.4	2.8	34.2
Injectables	1.3	3.8	36.6	8.3	50.0
Condom	6.5	12.6	9.6	38.1	66.7
Periodic abstinence	8.6	9.0	2.1	23.2	42.9
Withdrawal	9.7	9.2	5.3	27.1	51.3
Total	4.3	7.7	19.2	17.4	48.6

The results indicate that nearly half of users in Bangladesh stop using within 12 months of starting use; 4 percent stop due to method failure, 8 percent because they want to become pregnant, 19 percent as a result of side effects or health concerns, and 17 percent because of other reasons. Discontinuation rates vary by method. Not surprisingly, rates for the condom (67 percent) and withdrawal (51 percent) are higher than for injectables (50 percent), the pill (47 percent), and the IUD (34 percent). Discontinuation rates for periodic abstinence are on the low side (43 percent).

Side effects of the method or other health reasons are by far the most commonly reported reasons for discontinuing the pill, the IUD, and injectables. Only a small proportion of users of these methods discontinue within one year because of method failure or to become pregnant. These two reasons account for a larger proportion of women who discontinue use of condoms, periodic abstinence and withdrawal; however, "other reasons" account for the largest share of discontinuers of these methods. There has been little change in discontinuation rates since 1996-1997.

Further information on reasons for contraceptive discontinuation is presented in Table 4.19. This table shows the percent distribution of all discontinuations occurring during the 5 years preceding the survey, regardless of whether they occurred during the first 12 months of use or not. As in the 1996-1997 BDHS survey, side effects (29 percent) stand out as the most common reason for discontinuation, followed by the desire to get pregnant (20 percent) and accidental pregnancies. For specific methods, side effects are the most common reason of discontinuation for the pill, IUD, and injectables. Although desire to become pregnant is an important reason of discontinuation for every reversible method, it accounts for more discontinuations among users of periodic abstinence, the pill, withdrawal, and condoms than for the IUD and injectables. Method failure and desire to use more effective methods are among the important reasons of discontinuation for periodic abstinence, withdrawal, and condoms. Husband's disapproval is also cited as a major reason of discontinuation among the users of condoms and withdrawal.

Table 4.19 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the last five years by main reason for discontinuation, according to specific methods, Bangladesh 1999-2000

Reason for discontinuation	Method							
	Pill	IUD	Inject-ables	Condom	Periodic absti-nence	With-drawal	Other	Total
Became pregnant	8.8	1.5	2.6	11.2	23.3	21.6	48.9	10.7
To become pregnant	22.2	10.8	11.5	21.3	25.9	21.2	14.9	20.4
Husband disapproved	1.9	3.6	1.4	22.0	6.8	16.1	0.0	6.1
Side effects	35.3	55.7	58.7	7.1	0.1	1.3	4.0	29.4
Health concerns	7.5	15.1	7.4	6.1	2.6	6.1	1.6	6.8
Access/availability	2.4	0.0	4.9	1.5	0.2	0.2	1.6	2.2
More effective method	2.8	0.8	0.7	8.9	16.3	9.8	5.5	5.1
Inconvenient to use	2.2	1.3	0.3	5.3	4.3	4.6	1.1	2.7
Infrequent sex	5.5	0.8	1.9	4.5	3.4	6.6	4.3	4.6
Cost	0.6	0.0	0.8	0.6	0.0	0.0	1.1	0.5
Fatalistic	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.1
Menopause	0.5	0.0	0.1	0.7	1.8	0.3	0.0	0.5
Marital dissolution	0.4	1.2	0.3	0.1	0.6	0.4	1.3	0.4
Other	6.2	7.8	6.2	7.4	8.8	6.5	10.7	6.8
Missing	3.5	1.4	2.9	3.3	5.9	5.4	5.1	3.7
Total	100.0	100.0	100.0	100.0	100	100.0	100.0	100.0
Number of discontinuations	3,587	179	995	966	640	468	75	6,930

Note: Total includes 5 lactational amenorrhea, 3 male sterilization, and 12 Norplant discontinuations.

4.11 NONUSE OF FAMILY PLANNING

FUTURE USE

An important indicator of the changing demand for family planning is the extent to which nonusers of contraception plan to use in the future. Intention to use contraception in the future provides an indication of potential demand for family planning services and acts as a convenient summary indicator of disposition toward contraception among current nonusers. However, intention not to use contraception in the future is useful in identifying groups that can be targeted by the family planning program. Thus, all currently married respondents in the BDHS survey who were not using contraception at the time of the survey were asked about their intention to use a family planning method at any time in the future. Table 4.20 shows the distribution of women and men by their intention to use family planning in the future. For women, the distribution is given according to the number of living children.

The overwhelming majority of currently married female nonusers say that they intend to use family planning in the future, 71 percent compared with 26 percent not intending to use. The proportion intending to use varies with number of living children. The proportion intending to use family planning peaks at 85 percent among female nonusers with one child, dropping among nonusers with more children. Intention to use family planning is less common among men than among women—62 versus 71 percent. There has been little change since 1996-1997 in intention to use in the future. The proportion of female nonusers intending to use in the future increased from 68 percent in 1996-1997 to 71 percent in 1999-2000 and decreased for male nonusers from 64 percent to 62 percent.

Table 4.20 Future use of contraception

Percent distribution of currently married women and men who are not currently using any contraceptive method by intention to use in the future, according to number of living children, Bangladesh 1999-2000

	Number of living children					Total for	Total for
Future intentions	0	1	2	3	4+	women	men
Intends to use	78.4	85.2	80.1	73.8	46.6	71.3	62.0
Unsure about use	6.7	2.0	2.0	2.7	1.8	2.7	4.3
Does not intend to use	14.7	12.6	17.5	23.1	51.2	25.7	32.9
Missing	0.1	0.3	0.3	0.4	0.4	0.3	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women/men	648	1,069	904	692	1,180	4,494	934

Reasons for Nonuse

Table 4.21 presents data on the main reasons for not using family planning. Infecundity appears to be the primary reason for nonuse of contraception among female nonusers not intending to use family planning in the future; 44 percent of female nonusers say they do not intend to use because of infecundity (either "being menopausal, " "having had hysterectomy," or "being subfecund"). Infrequent sex or not having sex is the next most commonly cited reason for nonuse (16 percent), followed by fatalistic attitudes (believing that having children depends on God's will) (9 percent). There are, however, significant differences in reasons for nonuse between women under age 30 and those 30 and above. Opposition to family planning (24 percent)—either by women themselves or by their husband, fatalistic attitudes (20 percent), and religion (9 percent)—are the major reasons for younger women not intending to use contraception in the future. In contrast, older women usually cite reasons such as either being menopausal or infecund or having no sex or infrequent sex (68 percent altogether). There are some marked variations in reasons for nonuse between women and men. Men are more likely than women to say that they oppose family planning (11 versus 4 percent), while they are much less likely to cite menopause or infrequent sex as reasons for not using family planning (only 50 percent compared with 60 percent of women).

Since 1996-1997, there have been increases in the proportion of women citing infecundity/subfecundity as their reason for not using family planning. In the 1996-1997 BDHS survey, 10 percent of female nonusers and 22 percent of male nonusers cited infecundity or subfecundity as a reason for not using family planning, compared with 15 and 21 percent, respectively, of those in the 1999-2000 BDHS survey. In contrast, there were relatively fewer women citing husband's opposition in the latter survey (4 percent) than in the former survey (9 percent). Mention of religion by women also dropped from 9 percent to 4 percent, but this could be due to coding some women as fatalistic in the 1999-2000 BDHS survey, which was not included as a separate category of reasons in the earlier BDHS surveys.

Table 4.21 Reason for not using contraception

Percent distribution of currently married women and men who are not using a contraceptive method and who do not intend to use in the future, by main reason for not intending to use, according to age, Bangladesh 1999-2000

Reason for not intending to use contraception	Women			Men		
	Age		Total	Age		Total
	10-29	30-49		15-29	30-54	
Not having sex	5.3	5.5	5.4	(0.0)	3.6	3.4
Infrequent sex	1.5	11.8	10.2	(0.0)	5.4	5.0
Menopausal/hysterectomy	1.8	34.8	29.7	(0.0)	22.5	20.8
Subfecund/infecund	5.8	16.2	14.5	(0.0)	22.2	20.6
Postpartum amenorrheic	0.4	0.2	0.2	(0.0)	0.6	0.6
Breastfeeding	0.8	0.0	0.1	(0.0)	0.2	0.2
Fatalistic	19.6	7.0	8.9	(8.0)	10.2	10.1
Respondent opposed	11.9	3.0	4.4	(42.9)	8.2	10.7
Partner opposed	12.4	2.6	4.1	(0.0)	0.5	0.5
Others opposed	0.7	0.2	0.2	(0.0)	0.0	0.0
Religious prohibition	9.4	3.0	4.0	(9.3)	3.8	4.2
Knows no method	0.4	0.0	0.1	(0.0)	0.2	0.2
Knows no source	0.0	0.0	0.0	(5.1)	1.0	1.3
Health concerns	6.3	2.5	3.1	(0.0)	1.8	1.6
Fear of side effects	5.9	1.8	2.4	(10.9)	1.7	2.4
Cost too much	0.0	0.0	0.0	(0.0)	0.5	0.5
Inconvenient to use	0.3	0.1	0.1	(0.0)	0.0	0.0
Interferes with body's normal processes	0.9	2.1	1.9	(6.7)	1.8	2.2
Other	14.4	8.7	9.6	(14.2)	10.8	11.1
Does not know	1.5	0.6	0.7	(2.9)	2.6	2.7
Missing	0.8	0.2	0.3	(0.0)	2.2	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women/men	179	974	1,153	22	285	307

Note: Figures in parentheses are based on 25 to 49 men.

PREFERRED METHOD

Nonusers who said they intended to use a family planning method in the future were asked which method they would prefer to use. As in the earlier two BDHS surveys, the pill emerges as the most preferred method among future users, followed by injectables as the distant second (data not shown). Among nonusers in the 1999-2000 BDHS survey, who intended to use in the future, 41 percent said that they would choose the pill and 17 percent would choose injectables. However, there were relatively more nonusers in the 1999-2000 BDHS survey saying that they were uncertain about which method they would prefer to use: 32 percent compared with 19 percent in the 1996-1997 BDHS survey.

4.12 Family Planning Outreach Services

Fieldworkers and satellite clinics are two crucial elements in the provision of family planning services in Bangladesh. To assess the extent of coverage of both fieldworkers and satellite clinics, the BDHS survey included questions about both services.

In the 1999-2000 BDHS survey, women were asked whether a fieldworker had visited them for family planning in the six months prior to the survey and results are presented in Table 4.22. One in five women (21 percent) reported having been visited by a fieldworker in the six months preceding the survey, and almost all of them were visited by a government fieldworker (19 percent). Women in their twenties are visited more by fieldworkers for family planning than women in other age groups. Fieldworkers' visits for family planning are higher among women in rural (23 percent) than urban (14 percent) areas, while among the divisions, they are highest for women residing in Khulna Division (33 percent) and lowest in the Chittagong (14 percent) and Sylhet (15 percent) divisions. There are no remarkable differentials in fieldworkers' visits by education of women.

Fieldworker visitation for health services are lower than for family planning. Only 16 percent of women are visited for health services (15 percent by government workers and only 1 percent by nongovernment workers). Differentials in visitation by fieldworkers for health services are similar to those of family planning services.

Although assessing changes in fieldworker's visits since the 1996-1997 BDHS survey is complicated by the use of slightly differing questions in the 1999-2000 BDHS survey, it is obvious that there have been significant declines in fieldworker visits since 1996-1997. Thirty-five percent of currently married women reported having been visited by a fieldworker for family planning in 1996-1997, compared with only 21 percent of all women in 1999-2000.

Although satellite clinics have a clear name in English, there is no easy term to use in Bangla and interviewers therefore tried to describe the clinic. Thus, the quality of the data depends on the ability of respondents to understand the definition. Table 4.23 presents data on the extent of recognition of satellite clinics and their coverage. About two-thirds (68 percent) of ever-married women interviewed in the 1999-2000 BDHS survey said that there was a satellite clinic in their community, but only about one-third (35 percent) of those reporting a clinic said that they had visited a clinic in the previous three months. More than eight in ten (83 percent) of these women were aware that the clinic provided immunization services for children, but only 11 percent said that the clinic provided family planning methods, and very few (2 percent) said it provided child growth monitoring. Except for the proportion knowing of a satellite clinic, the data are not comparable to the 1996-1997 BDHS survey. However, there has been little change in the proportion knowing of a clinic since 1996-1997.

Younger and older women are less likely than women in the middle age groups to know of a satellite clinic in the community and among those who do know, they are also less likely to have visited the facility. Knowledge of satellite clinics are more common in rural (71 percent) than urban (55 percent) areas; however, among those who know of a satellite clinic in their community, there is less of an urban-rural gap in the likelihood of women visiting the clinic. Among the divisions, satellite clinics are relatively more common in the Khulna and Rajshahi divisions than in the other divisions. However, there are no pronounced variations in the likelihood of women visiting a clinic when they know of it, among the divisions. It is a surprising finding that women with at least some secondary education are less likely than other women to know of a satellite clinic in the community.

Table 4.22 Contact with family planning and health worker

Percentage of currently married women who reported being visited by government or nongovernmental organization (NGO) fieldworkers or having contact with a family planning or health fieldworker in the six months prior to the survey, by selected background characteristics and contraceptive use status, Bangladesh 1999-2000

Background characteristic	Fieldworker visit for family planning services			Fieldworker visit for health services			Not visited by either type of field worker in last 6 months	Not visited but contacted				
	No one	Government worker	NGO worker	No one	Government worker	NGO worker		Any contact	Family planning	Health	Not visited and not contacted	Number
Age												
< 19	84.6	13.7	1.5	87.1	12.3	0.5	76.7	3.6	2.1	1.4	73.1	1,649
20-24	75.2	22.3	2.2	75.8	22.2	1.8	61.9	3.6	2.0	1.7	58.3	1,846
25-29	73.9	22.8	3.0	79.2	19.4	1.5	62.5	4.6	3.0	1.7	57.9	1,878
30-34	74.9	22.4	2.7	84.1	14.9	0.9	66.7	5.6	4.0	2.1	61.1	1,523
35-39	79.1	18.3	2.8	87.6	10.7	1.8	72.2	4.4	3.5	1.1	67.8	1,174
40-44	82.7	15.3	1.8	90.8	8.0	1.1	77.7	2.6	1.9	0.7	75.2	948
45-49	88.0	11.0	0.5	91.7	8.0	0.2	83.6	2.4	1.6	1.0	81.2	702
Residence												
Urban	85.8	9.4	4.6	92.3	5.8	1.8	81.3	3.5	2.3	1.4	77.8	1,893
Rural	76.9	21.3	1.6	81.6	17.3	1.1	66.8	4.1	2.8	1.5	62.7	7,827
Division												
Barisal	81.7	16.1	2.3	88.7	10.3	1.1	75.2	4.4	2.9	1.9	70.8	638
Chittagong	85.5	13.6	0.7	84.7	14.9	0.4	74.9	3.2	1.9	1.5	71.7	1,795
Dhaka	80.4	17.3	2.3	82.8	15.9	1.2	70.9	5.4	3.4	2.0	65.5	3,009
Khulna	66.8	28.0	5.1	74.6	23.7	1.7	55.0	3.5	2.6	1.0	51.5	1,198
Rajshahi	75.2	22.8	1.5	86.3	12.2	1.3	68.4	3.1	2.4	0.8	65.3	2,527
Sylhet	84.7	11.4	3.9	87.6	10.5	1.9	76.7	3.9	1.9	2.1	72.8	552
Education												
No education	80.0	17.7	2.1	83.6	15.1	1.3	70.6	4.5	3.1	1.5	66.1	4,306
Primary incomplete	75.7	21.9	2.2	82.4	16.1	1.4	65.9	4.1	2.7	1.5	61.8	1,799
Primary complete	76.8	20.7	2.4	85.9	12.6	1.3	69.7	2.7	1.6	1.2	67.0	1,019
Secondary+	79.2	18.3	2.3	83.9	15.2	0.9	70.6	3.7	2.4	1.6	66.9	2,596
Number of living children												
None	91.9	6.7	1.2	96.6	3.2	0.3	90.0	2.6	1.1	1.6	87.4	1,159
1	78.0	19.6	2.2	81.0	17.7	1.1	66.8	4.0	2.5	1.6	62.8	1,942
2	74.4	22.5	3.0	79.5	19.1	1.4	63.8	4.8	3.3	1.7	59.1	2,181
3	75.5	21.8	2.4	83.1	15.4	1.6	66.6	4.1	2.8	1.4	62.5	1,760
4+	78.9	19.0	2.0	84.0	14.7	1.3	69.6	4.0	2.9	1.3	65.6	2,679
Current contraceptive use status												
Pill	58.8	37.5	3.1	79.2	19.4	1.4	50.6	5.9	5.5	0.5	44.7	2,239
IUD	77.9	21.1	1.1	75.7	24.3	0.0	66.7	7.9	7.9	0.0	58.8	121
Injections	64.8	30.8	4.4	75.7	22.0	2.4	54.5	9.1	7.8	1.6	45.5	702
Condom	72.3	23.9	3.4	87.1	11.4	1.2	68.0	5.9	3.6	2.8	62.1	414
Female sterilization	96.5	2.9	0.8	94.2	5.7	0.1	91.7	2.9	0.9	2.0	88.8	651
Male sterilization	(93.5)	(6.5)	(0.0)	(88.0)	(10.3)	(1.7)	(88.0)	(1.7)	(0.0)	(1.7)	(86.4)	50
Norplant	(72.5)	(19.1)	(8.4)	(77.2)	(21.2)	(1.6)	(63.0)	(5.0)	(2.8)	(2.2)	(58.0)	45
Periodic abstinence	84.3	13.7	1.9	85.3	14.2	0.4	75.2	1.5	0.1	1.4	73.7	525
Withdrawal	85.5	12.1	2.1	83.8	14.8	1.4	74.2	2.3	1.3	1.0	71.9	394
Other methods	77.3	20.5	0.8	81.2	18.5	0.3	67.5	1.8	0.0	1.8	65.8	83
Not currently using	87.4	11.0	1.6	85.5	13.2	1.2	77.4	2.7	1.0	1.9	74.7	4,494
Total	78.6	19.0	2.2	83.7	15.0	1.2	69.6	4.0	2.7	1.5	65.6	9,720

Note: Figures in parentheses are based on 25 to 49 women

Table 4.23 Satellite clinics

Percentage of ever-married women who report a satellite clinic in their community in the last three months, the percentage who visited a clinic, and the percentage who reported various types of services provided at the clinic, by selected background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage reporting a clinic in community	Number of ever-married women	Of those reporting a clinic: Percentage who visited clinic	Number	Of those who visited a clinic, percentage reporting availability of various services: Family planning methods	Immunization	Child growth	Other	Don't know/ Missing	Number
Age										
10-14	49.4	186	22.9	92	*	*	*	*	*	21
15-19	63.6	1,514	39.2	962	8.2	84.1	1.1	19.7	0.2	377
20-24	70.5	1,935	47.7	1,363	6.3	86.2	2.3	17.2	0.5	650
25-29	70.4	1,975	46.7	1,389	9.8	83.8	2.4	15.3	0.9	649
30-34	68.4	1,621	33.4	1,108	15.6	82.8	1.0	19.8	0.2	371
35-39	67.4	1,335	26.9	900	18.6	76.2	1.3	16.3	2.7	242
40-44	68.5	1,126	17.7	771	13.9	82.2	2.7	11.0	0.9	137
45-49	64.9	853	14.6	553	11.6	78.3	0.3	21.0	1.8	81
Residence										
Urban	54.8	2,071	33.8	1,135	9.0	86.9	1.5	12.1	1.6	384
Rural	70.9	8,473	35.7	6,005	11.0	82.5	1.9	18.2	0.6	2,143
Division										
Barisal	61.8	688	38.5	426	12.9	86.2	0.5	17.3	1.0	164
Chittagong	65.9	1,965	35.8	1,295	4.9	90.9	0.7	10.6	1.0	463
Dhaka	64.0	3,257	32.3	2,086	12.2	83.2	2.6	13.8	1.4	674
Khulna	78.1	1,281	37.0	1,001	16.0	74.6	1.5	27.1	0.5	370
Rajshahi	72.0	2,728	36.8	1,964	10.3	82.6	2.1	18.6	0.2	722
Sylhet	59.1	624	36.1	369	7.9	78.9	2.6	24.0	0.0	133
Education										
No education	68.1	4,843	35.3	3,298	12.4	81.8	1.9	16.8	0.8	1,166
Primary incomplete	72.1	1,928	36.2	1,391	10.5	82.3	1.9	18.5	0.6	503
Primary complete	70.6	1,074	32.1	758	8.3	85.8	0.3	15.3	0.0	243
Secondary+	62.7	2,699	36.3	1,693	8.5	85.3	2.1	18.1	1.2	614
Total	67.7	10,544	35.4	7,139	10.7	83.2	1.8	17.3	0.8	2,527

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

4.13 Discussion about Family Planning between Spouses

While husband-wife communication about family planning and agreement to use contraception is not necessary for adoption of certain methods, its absence may be a serious impediment to use. Interspousal communication is therefore an important intermediate step along the path to eventual adoption and sustained use of contraception. Lack of discussion may reflect a lack of personal interest, hostility to the subject, or a customary reticence in talking about sex-related matters. To gain insight about spousal communication on family planning, currently married respondents in the 1999-2000 BDHS survey were asked how often they had talked to their spouse about family planning in the year prior to the survey. Table 4.24 provides information on the percentage of currently married, nonsterilized women who know about contraception, according to the number of times women reported having discussed family planning with their husband in the 12 months before the survey.

More than half (52 percent) of women said they had not talked to their husband over the past year about family planning, while two-fifths (40 percent) had discussed it once or twice, and only 8 percent had discussed it more than twice. Interspousal communication about family planning was less frequent among the youngest (age 10-14) and the older women (age 40-49).

Table 4.24 Discussion of family planning with husband

Percent distribution of currently married nonsterilized women who know a contraceptive method by the number of times they discussed family planning with their husband in the past year, according to current age, Bangladesh 1999-2000

	Number of times family planning discussed				
Age	Never	Once or twice	More than twice	Total	Number
10-14	57.3	34.7	8.1	100.0	178
15-19	48.5	42.3	9.2	100.0	1,466
20-24	45.0	45.2	9.8	100.0	1,831
25-29	44.5	45.6	9.9	100.0	1,822
30-34	50.8	41.9	7.4	100.0	1,403
35-39	56.4	36.2	7.4	100.0	989
40-44	65.9	28.7	5.5	100.0	763
45-49	82.7	15.0	2.2	100.0	560
Total	52.0	39.8	8.2	100.0	9,013

4.14 Attitudes of Male and Female Respondents Toward Family Planning

Use of effective contraceptive methods is facilitated when couples have a positive attitude toward family planning. Attitudinal data were collected by asking women whether they approved of couples using family planning and what they perceived as their husband's attitude toward family planning. This information is useful in the formulation of family planning policies, since it indicates the extent to which further education and publicity are needed to gain or increase acceptance of family planning. Widespread disapproval of contraception can act as a barrier to the adoption of family planning methods.

Eighty-two percent of women reported that both they and their husband approved of family planning; only 5 percent of women reported that both they and their husband disapproved (Table 4.25). When there is a perceived disagreement between spouses, it is more common that the wife reports her husband disapproves and she approves (7 percent) than the husband approves and she disapproves (less than 1 percent). The likelihood that a woman will report that both she and her husband approve of family planning is highest in the age groups 10-24 and 25-29. The level of approval varies only slightly between urban and rural areas. Approval by both husband and wife are higher in the Khulna and Rajshahi divisions (86 percent) and lowest in the Sylhet Division (60 percent). Less educated women are more likely to disapprove of family planning and are also more likely to say that their spouse disapproves or that they do not know their spouse's view

Table 4.25 Wives' perception of couple's attitude toward family planning

Percent distribution of currently married nonsterilized women who know of a contraceptive method by wife's attitude toward family planning and wife's perception of her husband's attitude toward family planning, according to selected background characteristics, Bangladesh 1999-2000

	Woman approves			Woman disapproves								
Background characteristic	Both approve	Husband disapproves	Husband's attitude unknown	Both disapprove	Husband approves	Husband's attitude unknown	Wife unsure	Missing	Total	Wife approves	Husband approves	Number
Age												
< 19	80.9	6.3	8.5	2.5	0.3	0.2	1.1	0.2	100.0	95.7	81.4	1,644
20-24	87.0	6.5	3.2	2.7	0.1	0.2	0.1	0.1	100.0	96.8	87.2	1,831
25-29	85.9	6.6	3.3	3.0	0.5	0.4	0.3	0.0	100.0	95.8	86.4	1,822
30-34	82.9	7.4	3.2	5.2	0.3	0.3	0.7	0.1	100.0	93.6	83.2	1,403
35-39	79.3	8.2	3.4	5.9	0.7	1.0	1.0	0.5	100.0	91.1	80.3	989
40-44	74.4	9.7	5.0	8.2	0.9	1.1	0.6	0.2	100.0	89.2	75.3	763
45-49	61.7	11.0	8.3	13.4	1.8	1.9	2.0	0.0	100.0	81.0	63.4	560
Residence												
Urban	86.9	5.9	3.6	2.7	0.2	0.3	0.3	0.2	100.0	96.5	87.2	1,766
Rural	80.2	7.7	4.9	5.1	0.6	0.6	0.8	0.1	100.0	93.0	80.9	7,247
Division												
Barisal	81.3	8.7	3.2	4.8	1.0	0.0	0.6	0.4	100.0	93.4	82.3	575
Chittagong	76.8	9.3	5.4	5.9	0.5	0.9	1.0	0.1	100.0	91.7	77.4	1,705
Dhaka	83.4	6.5	4.8	4.0	0.3	0.5	0.5	0.1	100.0	94.6	83.7	2,798
Khulna	85.9	5.3	4.4	2.7	0.6	0.6	0.3	0.2	100.0	95.7	86.5	1,126
Rajshahi	85.7	6.0	4.0	2.8	0.4	0.3	0.5	0.1	100.0	95.8	86.4	2,279
Sylhet	59.7	15.0	6.6	15.0	0.7	1.1	1.9	0.0	100.0	81.3	60.5	529
Education												
No education	74.3	10.0	5.9	7.3	0.6	0.8	1.0	0.2	100.0	90.2	74.9	3,853
Primary incomplete	82.4	7.0	5.3	3.9	0.4	0.4	0.5	0.1	100.0	94.8	82.8	1,677
Primary complete	83.8	7.3	3.5	3.8	0.3	0.5	0.8	0.0	100.0	94.6	84.1	973
Secondary+	91.2	3.7	2.9	1.1	0.5	0.2	0.3	0.2	100.0	97.8	91.8	2,509
Total	81.5	7.4	4.7	4.6	0.5	0.5	0.7	0.1	100.0	93.7	82.1	9,013

4.15 Family Planning Messages

As a measure of exposure to family planning information, women were asked whether they had seen or heard of the green umbrella, the logo that was recently adopted as the nationwide symbol for family planning information and services. Forty-three percent of women say they have seen or heard of the green umbrella logo (Table 4.26). This knowledge varies significantly by place of residence and education. Urban women are about twice as likely as rural residents to have seen or heard of the green umbrella logo. Similarly, residents of Khulna Division (51 percent) are most likely and residents of Sylhet and Barisal divisions are least likely (33-34 percent) to have been exposed to the family planning logo. Education is also related to knowledge of the logo; about three-fourths of women with some secondary education have seen or heard of the green umbrella logo, compared with only 25 percent of those with no education.

To gauge the extent of family planning information and educational activities, female respondents in the 1999-2000 BDHS survey were asked whether they had heard or seen a message about family planning on the radio, television, newspaper or magazine, or a billboard or poster in the month before the survey. Table 4.26 presents the proportion of ever-married women who had heard such a message, according to background characteristics.

Overall, 42 percent of women reported exposure to a message about family planning from at least one source in the month before the survey. Women age 15-29 have the greatest exposure to information on family planning and women with more education have greater exposure than their less educated counterparts. A similar advantage is observed for urban women. Overall, television is the most commonly reported source of family planning information (29 percent) followed by radio (25 percent), billboards (6 percent), and newspapers (5 percent).

Although high, family planning communication coverage appears to remain unchanged in recent years. In 1993-1994, 47 percent of ever-married women and in 1996-1997 and 1999-2000, 42 percent of ever-married women reported having received family planning messages through the media in the month before the interview. However, relatively fewer women reported having heard family planning messages on the radio in 1999-2000 than in 1996-1997 (25 versus 36 percent). Exposure to family planning messages through television increased substantially, from 20 percent in 1996-1997 to 29 percent in 1999-2000. Exposure to family planning messages through the other media has only changed slightly.

Table 4.26 Exposure to family planning messages

Percentage of ever-married women who have ever seen or heard of the green umbrella logo and who understand its meaning and percentage who have been exposed to family planning (FP) messages in the media during the month preceding the interview, according to selected background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage who know green umbrella logo	Percentage who understand meaning of green umbrella	Percentage exposed to family messages							
			Type of media							
			Radio	Television	Newspaper/ magazine	Poster/ billboard/ leaflet	Community event	At least one FP message	None	Number
Age										
10-14	39.0	25.4	26.1	25.6	3.7	4.9	4.1	40.5	59.5	186
15-19	46.8	34.3	30.4	30.5	4.4	5.9	5.4	54.5	54.5	1,514
20-24	48.3	36.9	28.8	32.6	5.2	6.2	6.2	46.0	54.0	1,935
25-29	46.3	36.6	27.0	31.8	5.7	7.5	6.0	45.0	55.0	1,975
30-34	42.3	32.9	22.3	29.7	5.9	7.9	7.3	42.0	58.0	1,621
35-39	36.1	26.8	21.6	25.7	5.1	6.3	5.5	36.8	63.2	1,335
40-44	35.8	27.1	20.2	23.0	4.8	5.6	5.6	35.3	64.7	1,126
45-49	32.3	23.4	18.0	21.1	4.3	3.8	4.4	31.3	68.7	853
Residence										
Urban	70.7	60.7	29.6	58.4	14.5	14.2	7.2	64.8	35.2	2,071
Rural	35.6	25.3	23.8	21.5	2.8	4.5	5.6	35.9	64.1	8,473
Division										
Barisal	34.2	24.5	31.4	20.8	6.5	7.8	7.3	42.4	57.6	688
Chittagong	47.1	37.0	25.4	32.4	4.8	4.6	3.4	43.1	56.9	1,965
Dhaka	44.0	35.2	24.0	32.1	5.3	6.5	7.1	43.5	56.5	3,257
Khulna	50.9	39.4	27.9	32.0	5.8	9.3	7.4	47.2	52.8	1,281
Rajshahi	37.5	25.4	24.4	24.2	4.4	6.0	5.5	38.1	61.9	2,728
Sylhet	33.2	25.1	17.3	21.5	5.7	5.4	4.3	28.7	71.3	624
Education										
No education	25.4	16.6	15.1	14.4	0.2	2.0	3.7	25.3	74.7	4,843
Primary incomplete	38.5	26.3	23.5	25.0	0.7	4.5	5.2	39.2	60.8	1,928
Primary complete	45.9	34.2	27.4	29.9	2.9	5.1	6.5	46.8	53.2	1,074
Secondary+	74.6	63.7	42.7	56.8	18.1	16.0	10.1	70.3	29.7	2,699
Total	42.5	32.2	24.9	28.7	5.1	6.4	5.9	41.5	58.5	10,544

OTHER PROXIMATE DETERMINANTS OF FERTILITY 5

5.1 INTRODUCTION

This chapter addresses the principal factors other than contraception that affect a woman's risk of becoming pregnant: nuptiality, postpartum amenorrhea, and abstinence from sexual relations. Marriage is a primary indicator of exposure of women to the risk of pregnancy and is therefore important for understanding fertility patterns. Populations in which age at marriage is low also tend to experience early childbearing and high fertility; hence, trends in age at marriage can help to explain trends in fertility levels. Measures of other proximate determinants of fertility are the duration of postpartum amenorrhea and postpartum abstinence, which can delay exposure to the risk of pregnancy during the early months after a birth.

In the BDHS survey, only women who had ever been married were interviewed with the individual questionnaire. However, a number of the tables presented in this chapter are based on all women, i.e., both ever-married and never-married women. In constructing these tables, the number of ever-married women interviewed in the survey is multiplied by an inflation factor that is equal to the ratio of all women to ever-married women as reported in the household questionnaire. This procedure expands the denominators in the tables so that they represent all women. The inflation factors are calculated by single years of age, and where the results are presented by background characteristics, single-year inflation factors are calculated separately for each category of the characteristic.

It is important to take note of the definition of marriage that was used in the BDHS survey. In Bangladesh, it is common for a woman to wait several months or even years after formal marriage before going to live with her husband. Since the researchers who designed the BDHS survey were interested in marriage mainly as it affects exposure to the risk of pregnancy, interviewers were instructed to ask the questions about marriage not in the sense of formal marriage, but as cohabitation.

5.2 CURRENT MARITAL STATUS

Data on the marital status of female respondents at the time of the survey are shown in Table 5.1. Overall, 30 percent of women age 10-49 have never-married, while 65 percent are currently married. At age 10-14, the proportion never married is 93 percent, and by age 25-29, marriage is nearly universal for females—only 4 percent have never married. The proportion divorced, separated, or deserted is small in Bangladesh, and widowhood is quite limited until older ages. Twelve percent of women age 40-44 and 16 percent of those 45-49 are widowed. The proportion divorced or deserted is relatively even across most age groups (2 to 4 percent).

Table 5.2 shows the trend in the proportion of women reported as never married by age group from previous surveys in Bangladesh. It is evident that the proportion of women under age 25 who have never married has increased. Since 1975, the proportion of women age 15-19 who have not yet married has increased from 30 to 52 percent (Figure 5.1). The proportion never married at age 20-24 also rose from 5 to 19 percent. In 1999-2000, the overall proportion never married (30 percent) is lower compared with 1996-1997 (34 percent), in spite of the fact that proportions never married are higher for age groups 15-19 and 20-24. The decline in the percentage never married among women 10-14 accounts for the decrease in percentage never married among women 10-49.

Table 5.1 Current marital status

Percent distribution of women by current marital status, according to age, Bangladesh 1999-2000

	Current martial status						
Age	Never married	Married	Widowed	Divorced	Separated/ Deserted	Total	Number
10-14	92.7	7.1	0.0	0.1	0.1	100.0	2,540
15-19	51.9	46.6	0.1	0.7	0.7	100.0	3,149
20-24	18.5	77.8	0.5	1.2	2.0	100.0	2,373
25-29	4.2	91.1	1.7	0.8	2.2	100.0	2,062
30-34	0.1	93.9	2.4	1.1	2.5	100.0	1,622
35-39	0.2	87.7	7.2	1.6	3.3	100.0	1,338
40-44	0.0	84.2	12.2	0.9	2.6	100.0	1,126
45-49	0.0	82.3	15.5	0.2	2.0	100.0	853
Total	30.0	64.5	3.0	0.8	1.6	100.0	15,063

Note: Figures may not add to 100.0 due to rounding.

Table 5.2 Trends in proportion never married

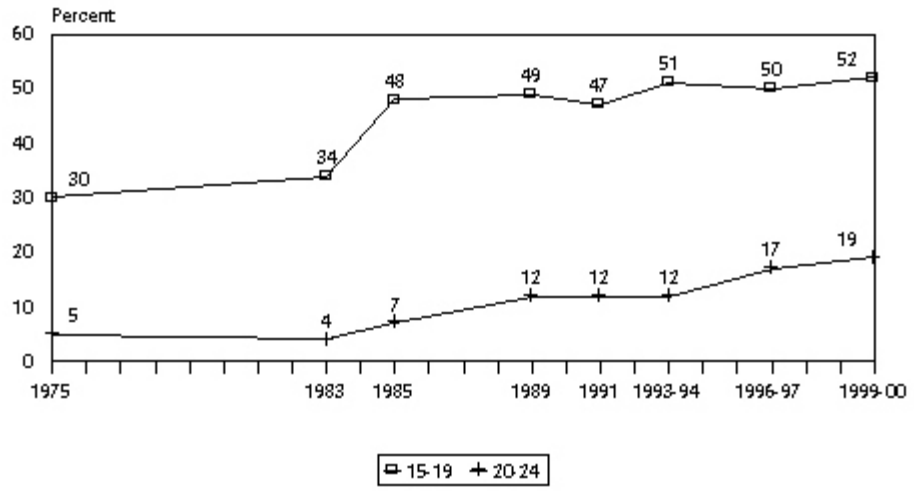
Percentage of women who have never married, by age group, as reported in various surveys, Bangladesh 1975-2000

Age	1975 BFS	1983 CPS	1985 CPS	1989 BFS	1989 CPS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS
10-14	91.2	98.0	98.7	96.2	96.4	98.5	95.2	95.2	92.7
15-19	29.8	34.2	47.5	49.0	45.8	46.7	50.5	49.8	51.9
20-24	4.6	4.0	7.1	12.0	9.3	12.3	12.4	17.2	18.5
25-29	1.0	0.7	1.0	2.3	1.6	2.8	2.2	3.4	4.2
30-34	0.2	0.4	0.1	0.3	0.5	0.5	0.3	0.5	0.1
35-39	0.4	-	-	0.1	0.5	0.1	0.3	0.0	0.2
40-44	0.1	0.1	-	0.2	0.2	0.3	0.7	0.0	0.0
45-49	0.0	0.1	-	0.1	0.1	-	0.2	0.0	0.0

- = Less than 0.1 percent

Sources: 1975 BFS (MHPC, 1978:49); 1983, 1985, 1989 and 1991 CPSs (Mitra et al., 1993:24); 1989 BFS (Huq and Cleland, 1990:43, 1993-1994 BDHS (Mitra et al., 1994:72); 1996-1997 BDHS (Mitra et al., 1997:82)

Figure 5.1 Trends in Proportion Never Married among Women 15-19 and 20-24



5.3 Age at First Marriage

Table 5.3 gives information on age at first marriage. The table shows the percentage of all women (ever-married and never-married) who first married by specified exact ages and the median age at first marriage, according to current age. Although the intention was to obtain information on the age at which the respondent started to live with her husband, it is likely that some women, especially older women, reported the age at which they were formally married, which in many cases is several years before cohabitation. To the extent that this occurred, it would lead to underestimates of the age at first cohabitation.

There is strong evidence of a rising age at first marriage in Bangladesh. Overall, about 50 percent of women married by the time they were age 15, down from 60 percent in the 1996-1997 BDHS survey. The proportion married by age 15 falls steadily from the oldest to youngest age group, but even more remarkable is the fact that the proportion falls from 38 percent for women age 20-24 to 27 percent for women age 15-19 who are only five years younger on average.

The trend in rising age at marriage is confirmed by data in the last column of Table 5.3. The median age at first marriage among women 20-49 is 15 years, an increase of one year since the 1996-1997 BDHS survey and a steady increase over the past 25 years in the age at which Bangladeshi women first marry. The median age at marriage has increased from 13.8 among women currently age 45-49 to 16.1 for those age 20-24. Data from the Bangladesh Bureau of Statistics also show a steady rise in the *mean* age at marriage over the past 15 years (BBS, 1997a: 143). However, 80 percent of Bangladeshi women marry when they are still teenagers, which increases the likelihood of their having high-risk births in the absence of contraceptive use before the first birth.

Table 5.3 Age at first marriage

Percentage of women who were first married by exact ages and median age at first marriage, by current age, Bangladesh 1999-2000

Current age	Percentage who were first married by exact age: 12	15	18	20	22	25	Percentage who have never married	Number	Median age at first marriage
15-19	1.2	27.3	na	na	na	na	51.9	3,149	a
20-24	2.5	38.2	65.3	75.4	na	na	18.5	2,373	16.1
25-29	3.1	45.4	74.8	84.7	90.2	94.1	4.2	2,062	15.4
30-34	4.9	50.8	80.8	90.2	95.9	98.1	0.1	1,622	14.9
35-39	7.8	56.4	85.6	92.2	96.1	98.0	0.2	1,338	14.5
40-44	8.5	65.1	89.4	95.1	97.5	98.4	0.0	1,126	14.0
45-49	13.3	69.2	90.4	95.4	97.6	98.4	0.0	853	13.8
20-49	5.5	50.6	78.2	86.6	91.0	93.1	5.7	9,373	15.0
25-49	6.5	54.8	82.5	90.4	94.7	97.0	1.3	7,000	14.7

na = Not applicable
[a] Omitted because less than 50 percent of the women in the age group 15-19 were first married by age 15.

Table 5.4 presents the median age at first marriage by selected background characteristics for women age 20-49. The table shows large differentials in marriage behavior patterns. It can be seen that in each age group, urban women marry later than their rural counterparts, with an overall difference of more than one year in the median age at marriage among women age 20-49 (16.2 versus 14.7, respectively). Women in the Rajshahi and Khulna divisions marry relatively early, while those in the Sylhet and Chittagong divisions marry later than other women. The median age at marriage increases with the level of education for all age groups of women in Bangladesh. For example, the median age at first marriage for women age 20-49 increases steadily from 14.1 among women with no education to 17.9 for women with some secondary education.

The increase in age at first marriage since 1996-1997 has happened for all characteristics shown in the table. Most notable is an increase of one year in the median age at marriage for women 20-49 in Dhaka Division. It is notable that the gap in median age at marriage between urban and rural women as well as educated and uneducated women is narrowing.

5.4 Postpartum Amenorrhea, Insusceptibility, and Menopause

The risk of pregnancy after a birth is largely influenced by two factors: breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by breastfeeding through its effect on the length of amenorrhea (the period prior to the return of menses). Delaying the resumption of sexual relations after a birth also prolongs the period of postpartum protection. Women are defined as insusceptible to pregnancy if they are not at risk of conception because they are amenorrhoeic after a birth, are abstaining from sexual relations, or both.

Table 5.4 Median age at first marriage

Median age at first marriage among women age 20-49, by current age and selected background characteristics, Bangladesh 1999-2000

Background characteristic	Current age						Women age 20-49	Women age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Urban	18.3	16.8	16.1	15.4	14.7	14.6	16.2	15.8
Rural	15.7	15.1	14.7	14.3	13.9	13.7	14.7	14.4
Division								
Barisal	16.4	14.9	14.6	14.8	14.3	14.1	14.9	14.6
Chittagong	16.9	15.9	15.7	15.4	14.9	14.2	15.8	15.4
Dhaka	16.3	15.8	15.3	14.7	14.0	13.9	15.1	14.8
Khulna	15.4	15.3	14.4	14.3	13.6	13.5	14.6	14.4
Rajshahi	15.1	14.5	14.3	13.9	13.7	13.5	14.2	14.0
Sylhet	18.4	16.3	15.9	15.5	14.8	14.6	16.0	15.5
Education								
No education	14.5	14.5	14.3	13.9	13.7	13.5	14.1	14.0
Primary incomplete	14.8	14.5	14.5	14.6	14.1	14.0	14.5	14.4
Primary complete	15.8	15.2	15.3	15.0	14.8	14.2	15.2	15.0
Secondary+	19.0	18.3	16.9	16.2	16.3	15.6	17.9	17.2
All women	16.1	15.4	14.9	14.5	14.0	13.8	15.0	14.7

Note: The median age for women 15-19 could not be determined because less than 50 percent had married by age 15 in most of the subgroups shown.

The percentage of births after which the mothers are postpartum amenorrheic, abstaining, and postpartum insusceptible is shown in Table 5.5 by the number of months since birth. These distributions are based on current status data, i.e., on the proportion of births occurring *x* months before the survey for which mothers are still amenorrheic, abstaining, or insusceptible. The estimates of the median and mean duration shown in Tables 5.5 and 5.6 are calculated from the current status proportions at each period. The data are grouped in two-month intervals to minimize fluctuations in the estimates.

The period of postpartum amenorrhea is considerably longer than the period of postpartum abstinence and is by far the major determinant of the length of postpartum insusceptibility to pregnancy. By six to seven months after birth, 57 percent of women are still amenorrheic, while only 6 percent are still abstaining. Similarly, at 12 to 13 months postpartum, 31 percent of women are amenorrheic, compared with 3 percent still abstaining. The mean duration of postpartum amenorrhea is 9.4 months; that of postpartum abstinence is 3.4 months. The combination of these two factors means that Bangladeshi women are insusceptible to the risk of pregnancy either due to amenorrhea or to abstinence for an average of 10 months after giving birth. There may have been a slight decline in the duration of amenorrhea over the last few years; the mean length of postpartum amenorrhea fell from 12 months as calculated from the 1989 BFS, the 1991 CPS, and the 1993-1994 BDHS data to 10 months in the 1999-2000 BDHS survey (Huq and Cleland, 1990:87; Mitra et al., 1993:97; Mitra et al., 1994:77).

Table 5.5 Postpartum amenorrhea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Bangladesh 1999-2000

Months since birth	Amenor-rheic	Abstaining	Insus-ceptible	Number
< 2	96.1	83.7	98.0	245
2-3	70.3	24.0	74.7	330
4-5	58.8	7.5	61.0	239
6-7	57.0	5.5	59.2	174
8-9	49.0	6.2	51.9	193
10-11	37.9	2.7	38.3	189
12-13	30.9	2.9	31.8	289
14-15	17.0	3.5	20.1	276
16-17	14.1	3.0	16.0	230
18-19	9.2	2.9	12.0	195
20-21	6.6	0.9	7.5	191
22-23	5.6	3.2	8.9	214
24-25	3.2	1.8	4.5	320
26-27	0.6	2.1	2.6	299
28-29	0.0	1.5	1.5	209
30-31	0.7	1.3	2.0	203
32-33	1.6	1.6	3.2	199
34-35	0.4	1.2	1.6	185
Total	26.4	9.4	28.4	4,180
Median	7.9	2.0	8.4	na
Mean	9.5	3.4	10.2	na
Prevalence/ incidence mean[1]	9.4	3.3	10.1	na

na = Not applicable

[1]The prevalence-incidence mean is borrowed from epidemiology and is defined as the number of children whose mothers are amenorrheic (prevalence) divided by the average number of births per month (incidence).

Table 5.6 shows median durations of postpartum amenorrhea, abstinence, and insusceptibility by various background characteristics. Differences are small, except that women with more education have shorter durations of postpartum amenorrhea and insusceptibility than women with no education, and women in Barisal Division have longer periods of postpartum amenorrhea and insusceptibility than other women. The median duration of postpartum abstinence is 2 months for all subgroups of women; this finding is compatible with the Muslim tradition of abstaining for 40 days after birth.

Menopause is a primary limiting factor of fertility. It is the culmination of a gradual decline in fecundity with increasing age. After age 30, the risk of pregnancy declines with age as an increasing proportion of women become infecund. In the 1999-2000 BDHS survey, menopause is defined as the absence of menstruation for six or more months preceding the survey among married women. Women who report that they have had a hysterectomy are also included in this category.

Women who are pregnant or postpartum amenorrheic are assumed not to be menopausal. Table 5.7 presents data on menopause for ever-married women age 30-49. In Bangladesh, 5 to 6 percent of women in their thirties and 11 to 13 percent of women age 40-43 are menopausal. The incidence of menopause increases rapidly after age 43. By age 44-45, three in ten and by age 46-47, four in ten are in menopause. The onset of menopause rises dramatically to 56 percent for women age 48-49.

Table 5.6 Median duration of postpartum insusceptibility by background characteristics

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility, by selected background characteristics, Bangladesh 1999-2000

Background characteristic	Postpartum amenorrheic	Postpartum abstinence	Postpartum insuscep-tibility	Number of births
Age				
<30	7.6	2.0	8.1	3,285
30+	9.0	2.0	9.6	894
Residence				
Urban	6.1	1.9	6.5	687
Rural	8.7	2.0	9.0	3,493
Division				
Barisal	9.0	2.4	9.0	258
Chittagong	8.3	1.9	8.7	930
Dhaka	8.1	1.9	8.4	1,270
Khulna	6.7	2.2	7.1	421
Rajshahi	7.4	2.2	7.8	988
Sylhet	5.8	1.9	9.6	313
Education				
No education	9.2	1.9	9.6	1,919
Primary incomplete	7.6	2.0	7.7	751
Primary complete	7.3	1.8	8.6	447
Secondary+	7.0	2.2	7.4	1,062
Total	7.9	2.0	8.4	4,180

Note: Medians are based on current status.

Table 5.7 Indicators of termination of exposure

Percentage of ever-married women age 30-49 who are menopausal, Bangladesh 1999-2000

Age	Percent menopausal[1]	Number
30-34	5.1	1,621
35-39	6.2	1,335
40-41	11.0	479
42-43	12.9	434
44-45	29.3	414
46-47	39.6	325
48-49	56.1	327
Total	14.3	4,935

[1] Refers to those whose last menstrual period occurred six or more months preceding the survey. Pregnant women and women who are postpartum amenorrheic are not considered menopausal.

FERTILITY PREFERENCES 6

Women and men were asked a series of questions to ascertain their fertility preferences. The aim of this part of the interview was to determine how many children respondents would prefer to have and to establish the extent of unmet need for contraception and the number of unwanted or mistimed births. The BDHS questionnaire included questions on the following:

1) Whether respondents wanted another child
2) If so, how long they would like to wait to have the next child
3) How many children they would want in total if they could start afresh.

The interpretation of survey data on fertility preferences is often difficult since it is understood that respondents' reported preferences are, in a sense, hypothetical and thus subject to change and rationalization. Still, data on fertility preferences can provide an indication of the direction of future fertility to the extent that individuals and couples will act to achieve their preferred family sizes.

6.1 Desire for More Children

In order to obtain information on fertility preferences, the BDHS survey asked nonsterilized, currently married, nonpregnant women: "Would you like to have (a/another) child or would you prefer not to have any (more) children?" Pregnant respondents were asked, "After the child you are expecting, would you like to have another child or would you prefer not to have any more children?" Women who expressed a desire for additional children were asked how long they would like to wait before the birth of their next child.

Table 6.1 and Figure 6.1 show the percent distribution of currently married women and men by desire for another child, according to the number of living children. More than half (52 percent) of currently married women age 10-49 in Bangladesh say they want no more children, and an additional 7 percent have been sterilized. Thirty-six percent of women want to have a child at some time in the future; only 12 percent want one within two years, 24 percent would prefer to wait two or more years, and 1 percent could not decide on the timing (see Table 6.1 and Figure 6.1). Thus, the vast majority of married women want either to space their next birth or to limit childbearing altogether. These women can be considered to be potentially in need of family planning services. Results for currently married men are similar to those for currently married women.

As expected, the desire to have a child within two years drops rapidly with the number of living children, from 61 percent for women without any living children to 7 percent or less for women with two or more living children. About two-thirds of women with one living child would like to wait at least two years before having the next child. The percentage of women who want no more children or who are sterilized rises from 1 percent for women with no children to 89 percent for those with six or more children. A similar pattern is observed for male respondents (Figure 6.2).

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women age 10-49 and currently married men age 15-59 by desire for more children, according to number of living children, Bangladesh 1999-2000

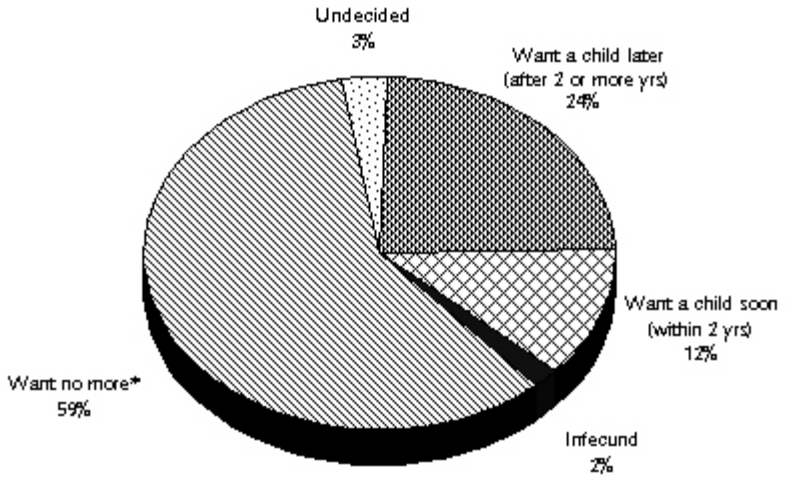
Desire for children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
WOMEN								
Have another soon[2]	60.9	17.5	6.8	3.6	1.8	1.3	0.9	11.8
Have another later[3]	30.6	66.1	21.8	8.5	2.6	1.2	0.3	23.6
Wants, unsure timing	1.8	1.9	1.1	0.9	0.5	0.2	0.7	1.1
Undecided	1.7	1.7	3.2	2.3	1.5	1.5	1.4	2.1
Wants no more	0.8	9.7	60.0	70.9	77.5	80.6	81.5	51.7
Sterilized	0.3	1.5	6.0	12.1	13.4	12.2	7.9	7.2
Declared infecund	3.6	1.6	1.1	1.7	2.6	3.1	7.3	2.4
Missing	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	888	2,020	2,234	1,832	1,177	744	826	9,720
MEN								
Have another soon[2]	44.4	15.0	4.1	2.9	1.4	0.3	0.3	8.8
Have another later[3]	47.0	59.6	17.9	7.3	2.9	1.9	0.7	21.6
Wants, unsure timing	2.9	3.1	1.3	1.1	1.5	0.4	0.0	1.6
Undecided	1.3	4.8	5.5	4.2	1.0	2.4	2.0	3.5
Wants no more	1.8	14.8	63.8	69.5	79.6	82.0	81.4	55.0
Sterilized	0.3	1.2	6.7	14.0	12.8	9.9	11.2	7.9
Declared infecund	2.3	1.5	0.4	0.9	0.4	3.1	4.4	1.5
Missing	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	254	473	565	452	333	227	252	2,556

[1] Includes current pregnancy
[2] Want next birth within two years
[3] Want to delay next birth for two or more years

The desire for additional children declined noticeably in Bangladesh over the past decade. In 1991, 45 percent of married women with two children wanted to have another child in the future (Mitra et al., 1993:84); in the 1999-2000 BDHS survey, the proportion is only 30 percent. Conversely, the percentage of women with two children who want no more children or are sterilized has risen from 48 percent in 1991 to 66 percent in 1999-2000. There has been little change in overall fertility preferences since 1996-1997, with the proportion of women who either want no more children or are sterilized rising from 58 to 59 percent.

Table 6.2 shows the percent distribution of currently married women by desire for children according to age. As expected, the proportion of women who want no more children increases with age. Ten percent of women age 15-19 want no more children or have been sterilized, compared with 83 percent of women age 45-49 years. In contrast, the proportion who want to delay their next birth declines with age, as does the proportion of women who want the next birth within two years. The proportions who report themselves to be unable to have more children (infecund) are 1 percent or less among women under 35, but the proportion rises to 16 percent of women age 45-49.

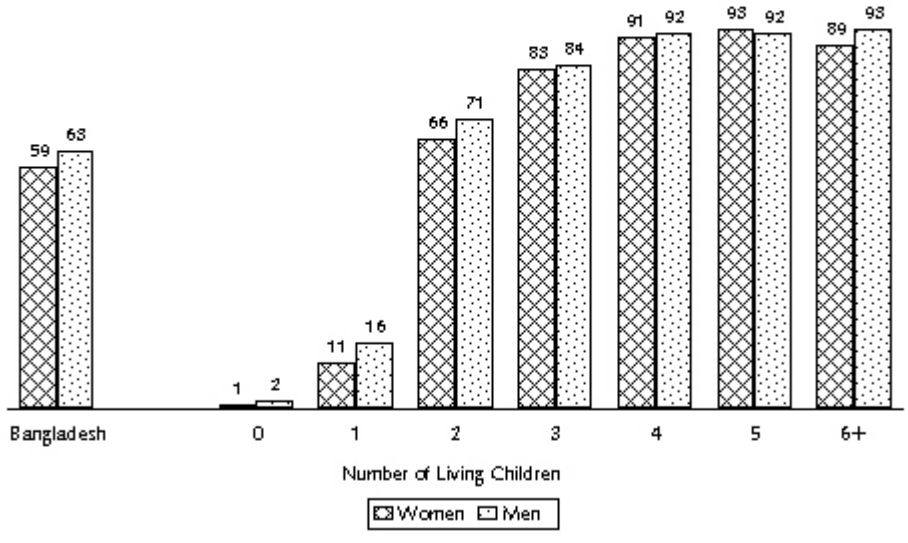
Figure 6.1 Fertility Preferences among Currently Married Women 10-49



* Includes sterilized women

BDHS 1999-2000

Figure 6.2 Percentage of Currently Married Women and Men Who Want No More Children by Number of Living Children



Note: Includes sterilized women and men

BDHS 1999-2000

Table 6.2 Fertility preference by age

Percent distribution of currently married women by desire for children, according to age, Bangladesh 1999-2000

Desire for children	Age of women								Total
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Have another soon[1]	29.6	22.1	16.1	12.2	9.7	5.8	2.4	1.0	11.8
Have another later[2]	63.1	63.1	42.2	18.6	6.4	2.0	0.2	0.0	23.6
Wants, unsure timing	1.6	1.8	1.2	1.4	1.4	0.6	0.3	0.2	1.1
Undecided	3.3	2.5	2.7	3.1	2.2	1.3	0.3	0.1	2.1
Wants no more	1.1	10.3	36.8	61.7	71.4	71.6	70.5	62.6	51.7
Sterilized	0.0	0.1	0.8	2.9	7.8	15.8	19.5	20.1	7.2
Declared infecund	0.0	0.1	0.0	0.2	1.2	2.8	6.7	16.0	2.4
Missing	1.3	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	181	1,468	1,846	1,878	1,523	1,174	948	702	9,720

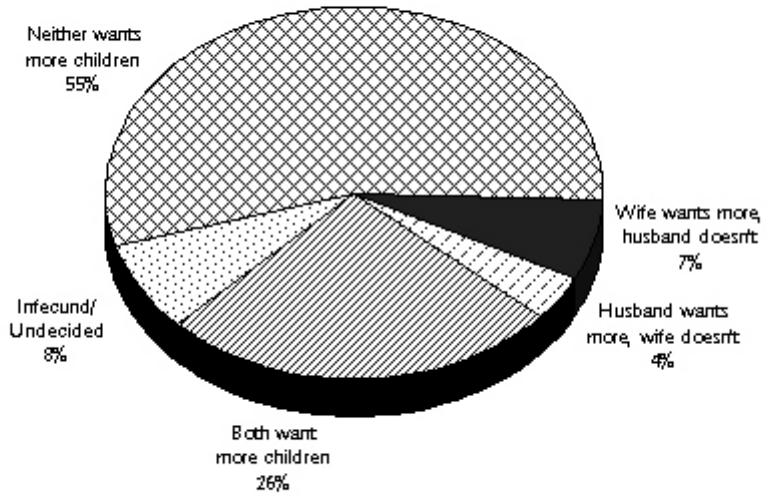
[1] Want next birth within two years
[2] Want to delay next birth for two or more years

It is possible to compare the fertility preferences of husbands and wives to assess the extent to which they agree. For the 2,280 matched couples in which both the wife and her husband were interviewed in the BDHS survey, the data show that the vast majority of married couples agree on whether they want to have more children. As shown in Figure 6.3, in more than half of the couples, both the wife and husband say they want no more children, while in 26 percent, they both say they do want more children. Among couples who disagree, in 4 percent, the husband wants more and his wife does not, while in 7 percent, the husband does not want more and his wife does.

Table 6.3 and Figure 6.4 show the percentage of currently married women who want no more children by number of living children, according to selected background characteristics. Urban women are slightly more likely than rural women to want to limit family size at lower parities. For example, 73 percent of urban women with two children say that they do not want another child, compared with 64 percent of rural women.

Regionally, respondents in Chittagong Division and especially those in Sylhet Division are more pronatalist than those in the other divisions. About half of women with two children in the Chittagong and Sylhet divisions want to stop childbearing, compared with three-fifths or more of those in the other divisions. The relationship between educational level and the proportion wanting no more children (Table 6.3) is erratic; at some parities, better educated women are more likely to want no more children than those with less education, while at other parities, the opposite is true.

Figure 6.3 Fertility Preferences among Married Couples



BDHS 1999-2000

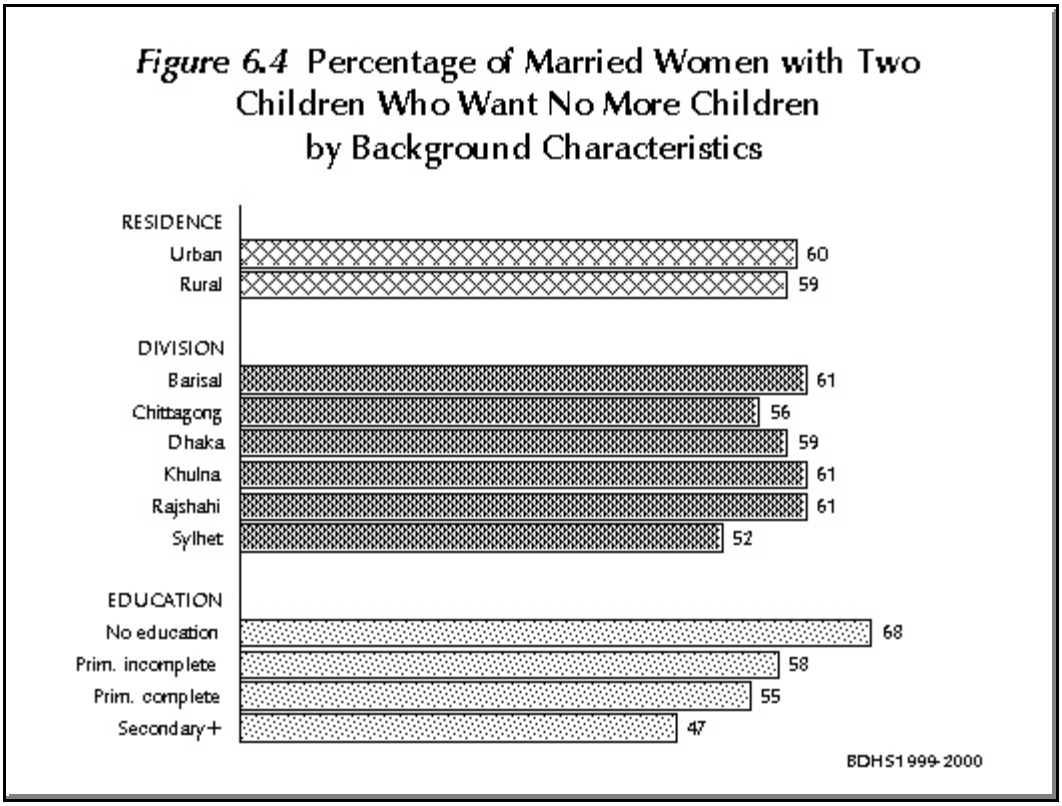
Table 6.3 Want no more children by background characteristics

Percentage of currently married women age 10-49 who want no more children, by number of living children and selected background characteristics, Bangladesh 1999-2000

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	1.5	16.5	73.4	86.2	92.2	95.8	95.5	59.5
Rural	1.0	9.6	63.9	82.4	90.5	92.2	88.5	58.8
Division								
Barisal	3.0	10.6	62.5	85.1	92.7	98.0	87.2	60.7
Chittagong	0.4	6.3	50.5	72.9	86.7	90.9	90.0	56.0
Dhaka	1.2	11.0	68.5	86.0	92.1	92.0	89.5	59.2
Khulna	3.3	16.9	74.6	90.6	96.2	95.0	91.0	60.9
Rajshahi	0.0	11.6	72.2	85.6	93.4	95.7	94.2	60.8
Sylhet	(1.3)	7.2	48.4	71.1	78.1	82.2	75.9	52.2
Education								
No education	2.0	17.0	62.9	82.0	90.7	91.9	88.8	67.8
Primary incomplete	1.9	7.5	64.9	81.1	90.0	95.1	91.2	57.6
Primary complete	0.0	5.6	60.6	82.4	90.3	93.1	87.5	54.6
Secondary+	0.6	9.7	72.5	87.7	92.8	92.8	92.8	46.9
Total	1.1	11.1	66.0	83.1	90.8	92.7	89.4	58.9

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes current pregnancy



6.2 NEED FOR FAMILY PLANNING SERVICES

One of the concerns of family planning programs is to estimate the number of women or couples who are in need of services as well as the potential demand for services. The concept of *unmet need* for family planning has evolved to define this indicator. Fecund women who are currently married and who say either they do not want any more children or that they want to wait two or more years before having another child, but are not using contraception, are considered to have an *unmet need* for family planning.[1] Women who are using family planning methods are said to have a *met need* for family planning. Women with unmet and met need constitute the *total demand* for family planning. Table 6.4 presents data on unmet need, met need, and total demand for family planning, according to whether the need is for spacing or limiting births.

Fifteen percent of married women in Bangladesh have an unmet need for family planning services—8 percent for spacing purposes and 7 percent for limiting births (see Table 6.4). Combined with the 54 percent of married women who are currently using a contraceptive method, the total demand for family planning comprises 71 percent of married women in Bangladesh. Therefore, if all women who say they want to space or limit their children were to use methods, the contraceptive prevalence rate would be increased from 54 to 71 percent of married women. Currently, 78 percent of the demand for family planning is being met (see Table 6.4).

[1] For an exact description of the calculation, see footnote 1, Table 6.4.

Table 6.4 Need for family planning services

Percentage of currently married women with unmet need, met need, and total demand for family planning services, by selected background characteristics, Bangladesh 1999-2000

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning[3]			Percentage of demand satisfied	Number
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
10-14	29.5	0.0	29.5	24.6	1.1	25.7	55.9	1.1	57.0	48.2	181
15-19	18.3	1.7	20.0	34.3	3.8	38.1	55.2	5.5	60.7	67.1	1,468
20-24	13.2	4.9	18.1	28.9	18.2	47.1	44.0	23.6	67.5	73.2	1,846
25-29	6.7	9.5	16.2	16.6	41.5	58.1	24.3	52.2	76.6	78.8	1,878
30-34	4.2	10.3	14.5	6.8	57.4	64.2	11.4	69.2	80.6	82.0	1,523
35-39	1.5	11.8	13.3	1.9	65.7	67.7	3.7	77.8	81.4	83.6	1,174
40-44	0.6	9.3	9.9	0.0	61.8	61.9	0.7	71.4	72.1	86.2	948
45-49	0.0	4.8	4.8	0.2	43.0	43.1	0.2	47.7	47.9	90.1	702
Residence											
Urban	6.3	6.1	12.4	19.4	40.7	60.0	26.7	47.5	74.2	83.3	1,893
Rural	8.4	7.6	16.0	14.7	37.5	52.3	24.3	45.7	70.0	77.1	7,827
Division											
Barisal	9.0	6.3	15.3	17.7	41.5	59.2	28.0	48.0	76.0	79.8	638
Chittagong	9.9	9.5	19.5	12.6	31.5	44.1	23.2	42.0	65.2	70.2	1,795
Dhaka	7.6	7.9	15.6	16.3	37.6	53.9	25.2	46.1	71.3	78.2	3,009
Khulna	5.9	4.8	10.7	19.6	44.4	64.0	26.6	49.8	76.4	86.0	1,198
Rajshahi	6.9	5.9	12.8	15.9	42.7	58.6	24.0	49.1	73.1	82.5	2,527
Sylhet	12.6	9.8	22.4	9.3	24.7	34.0	22.7	34.8	57.5	61.0	552
Education											
No education	6.9	9.7	16.6	9.6	41.4	51.0	17.1	51.8	69.0	75.9	4,306
Primary incomplete	8.7	7.1	15.9	14.7	38.6	53.3	24.6	46.2	70.8	77.6	1,799
Primary complete	10.2	6.3	16.4	16.8	35.9	52.7	28.7	42.6	71.4	77.0	1,019
Secondary+	8.5	3.9	12.4	25.8	33.3	59.1	35.9	37.7	73.6	83.1	2,596
Total	8.0	7.3	15.3	15.6	38.1	53.8	24.7	46.1	70.8	78.3	9,720

[1] Unmet need for *spacing* includes pregnant women whose pregnancy was mistimed, amenorrheic women whose last birth was mistimed, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning but say they want to wait two or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have their next birth. Unmet need for *limiting* refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning but want no more children. Excluded from the unmet need category are menopausal or infecund women and women who did not have sexual intercourse in the four weeks prior to the interview.

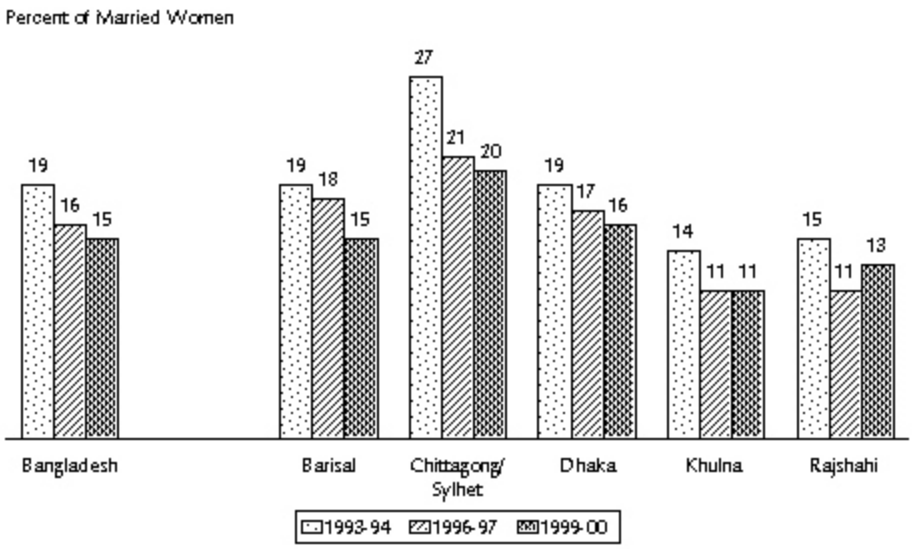
[2] Using for *spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for *limiting* is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

[3] Total demand includes pregnant or amenorrheic women who became pregnant while using a method (method failure); they account for 1.7 percent of currently married women.

As expected, unmet need for spacing purposes is higher among younger women, while unmet need for limiting childbearing is higher among older women. The net result is that except among the oldest age groups, unmet need varies little by age. The level of unmet need among rural women (16 percent) is higher than that of urban women (12 percent). Unmet need is highest in

Sylhet (22 percent), intermediate in Chittagong (19 percent), Dhaka (16 percent), and Barisal (15 percent), and lowest in the Rajshahi and Khulna divisions (13 percent and 11 percent, respectively). Unmet need has declined slightly, from 16 percent of currently married women in 1996-1997 to 15 percent in 1999-2000. The decline has been largest in Barisal, where unmet need decreased from 18 percent of women in 1996-1997 to 15 percent in 1999-2000 (Figure 6.5).

Figure 6.5 Trends in Unmet Need for Family Planning by Division



In addition to the data on unmet need, one of the more striking findings in Table 6.4 is the variation in the percentage of the total demand that is being satisfied by current use. In Sylhet Division, only 61 percent of the potential total demand is currently being satisfied, compared with 86 percent in Khulna Division. Since only a little more than three-quarters of the demand for family planning is satisfied, there is need for the Family Planning Program to intensify efforts to address unmet need and the backlog in the demand for family planning services.

6.3 Ideal Family Size

Information on what women and men consider the ideal family size was elicited through two questions. Respondents who had no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" For respondents who had children, the question was rephrased as follows: "If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?" These questions on ideal family size had at two goals: first, among respondents who have not started childbearing, the data provide an idea of the total number of children they will have in the future (to the extent that they are able to realize their fertility desires), and second, among older, higher parity respondents, these data provide a measure of the level of unwanted fertility. It should be noted that some respondents, especially those for whom fertility control is an unfamiliar concept, may have had difficulty answering this hypothetical question.

The data in Table 6.5 indicate that the vast majority of respondents were able to give a numeric answer to this question. Only 3 percent of ever-married women and 8 percent of currently married men gave a nonnumeric answer such as "it is up to God," "any number," or "don't know." Those who gave numeric responses generally want to have small families. Among ever-married women, 59 percent prefer a two-child family and another 22 percent consider a three-child family ideal, while 1 percent said they would choose to have six or more children. Data are similar for married men. These results are evidence of how widespread the two-child norm has become in Bangladesh. Among women and men with two or fewer children, about 70 percent say they think two children are ideal.

Table 6.5 Ideal and actual number of children

Percent distribution of ever-married women and currently married men by ideal number of children, and mean ideal number of children for ever-married women and currently married women and men, according to number of living children, Bangladesh 1999-2000

Ideal number of children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
WOMEN								
0	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0
1	5.4	6.3	1.5	1.2	1.0	0.6	0.5	2.6
2	68.2	71.7	69.2	50.3	53.3	39.0	35.2	59.0
3	15.1	14.9	21.1	32.1	17.9	27.7	25.3	21.7
4	6.3	4.8	5.6	12.6	22.8	15.7	22.2	11.0
5	0.7	0.6	0.4	0.8	1.2	7.9	2.0	1.3
6+	0.4	0.3	0.3	0.5	0.8	3.3	7.3	1.2
Non-numeric response	3.7	1.5	1.9	2.6	3.0	5.7	7.4	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,042	2,208	2,377	1,948	1,262	800	906	10,544
Mean ideal number for:								
Ever-married women	2.3	2.2	2.3	2.6	2.7	3.0	3.2	2.5
Number of women	1,004	2,175	2,333	1,898	1,224	754	839	10,227
Currently married women	2.3	2.2	2.3	2.6	2.7	3.0	3.2	2.5
Number of women	862	1,989	2,198	1,787	1,139	702	768	9,445
MEN								
1	7.0	6.8	1.5	1.7	3.4	0.8	1.5	3.3
2	69.9	69.2	69.6	51.8	54.5	51.6	34.7	59.4
3	12.9	14.9	18.5	32.1	18.4	21.5	23.8	20.5
4	4.3	3.0	4.0	6.0	16.8	6.6	17.9	7.5
5	0.9	0.6	0.4	1.9	0.6	5.5	1.9	1.4
6+	0.4	0.0	0.3	0.1	0.2	1.2	2.3	0.5
Non-numeric response	4.5	5.2	5.6	6.4	6.1	12.7	18.0	7.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	254	473	565	452	333	227	252	2,556
Mean ideal number for:								
Currently married men	2.2	2.2	2.3	2.5	2.5	2.6	2.9	2.4
Number of men	242	449	533	423	313	198	207	2,365

Note: The means exclude respondents who gave non-numeric responses.
[1] Includes current pregnancy

Overall, the mean ideal family size is 2.5 children among women and 2.4 among men, another indication that men are not more pronatalist than women.

Although there was a distinct downward trend in the preferred family sizes during the late 1970s and 1980s, there has been little change in recent years. The mean ideal family size declined from 4.1 among currently married women in 1975, to 2.9 in 1989 (Huq and Cleland, 1990:53) and to 2.5 in 1993-94 (Mitra et al., 1994:88). However, it has remained constant at 2.5 between 1993-1994 and 1999-2000.

As expected, the ideal number of children increases with the number of living children, from 2.3 among childless women to 3.2 among women with six or more children and from 2.2 among childless men to 2.9 among those with six or more children. There are two possible explanations for the relationship between ideal and actual number of children. First, to the extent that they are able to implement their preferences, respondents who want larger families will tend to actually have them. Second, women and men may "adjust" their ideal number of children upward, as the actual number of children increases (i.e., rationalization).

Despite the likelihood that some rationalization of large families occurs, it is common for respondents to report ideal family sizes lower than their actual number of children. For example, 72 percent of women with four children report fewer than four children as their ideal number and 83 percent of those with five children state an ideal number of children less than five. These proportions are similar to those reported for 1996-1997.

Table 6.6 shows the mean ideal number of children for ever-married women interviewed in the 1996-1997 BDHS survey by age group and selected background characteristics. The mean ideal number of children increases with age from 2.3 among women age 10-19 to 3.0 among women age 45-49. Rural women have slightly higher family size norms than urban women; this differential is reflected in every age group. Regionally, the largest mean ideal family size is found among women in Sylhet Division (3.0 children); this is also true at almost every age group. Women in Chittagong Division have ideal family size desires only slightly lower than in Sylhet Division. Women in Khulna Division have the lowest mean ideal family size (2.3 children). Ideal family size is correlated with the level of education attained. Women with no education want the largest families (2.7 children), while women with some secondary education want the smallest (2.3 children); this is true for every age group, although the differences are small for some age groups. Differentials for men are similar to those for women.

6.4 Fertility Planning

There are two ways of estimating levels of unwanted fertility from the BDHS data. One is based on responses to a question as to whether each birth in the five years before the survey was planned (wanted then), mistimed (wanted but at a later time), or unwanted (wanted no more children). These data are likely to result in underestimates of unplanned childbearing since women may rationalize unplanned births and declare them as planned once they are born. Another way of measuring unwanted fertility uses the data on ideal family size to calculate what the total fertility rate would be if all unwanted births were avoided. This measure may also suffer from underestimation to the extent that women are unwilling to report an ideal family size lower than their actual family size. Data using these two approaches are presented below.

Table 6.6 Mean ideal number of children by background characteristics

Mean ideal number of children for ever-married women and currently married men, by age (women) and selected background characteristics, Bangladesh 1999-2000

Background characteristic	Age								All women	All men
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
Residence										
Urban	*	2.1	2.2	2.2	2.4	2.3	2.6	2.6	2.3	2.3
Rural	2.3	2.3	2.4	2.5	2.6	2.7	2.8	3.1	2.6	2.4
Division										
Barisal	*	2.2	2.4	2.4	2.4	2.6	2.8	3.3	2.5	2.4
Chittagong	(2.6)	2.6	2.6	2.8	2.8	2.8	3.0	3.1	2.8	2.6
Dhaka	(2.3)	2.3	2.3	2.4	2.4	2.6	2.7	2.8	2.4	2.3
Khulna	(2.1)	2.1	2.2	2.2	2.3	2.4	2.6	2.8	2.3	2.3
Rajshahi	2.2	2.2	2.3	2.4	2.5	2.5	2.6	3.0	2.5	2.4
Sylhet	*	2.8	3.0	2.8	3.2	3.2	2.9	(3.4)	3.0	2.7
Education										
No education	(2.4)	2.3	2.5	2.6	2.7	2.7	2.8	3.1	2.7	2.5
Primary incomplete	2.3	2.4	2.4	2.5	2.5	2.7	2.7	3.0	2.5	2.5
Primary complete	(2.3)	2.4	2.5	2.4	2.5	2.6	3.0	2.7	2.5	2.5
Secondary+	(2.2)	2.2	2.2	2.3	2.3	2.3	2.3	2.6	2.3	2.2
All women/men	2.3	2.3	2.4	2.5	2.6	2.6	2.7	3.0	2.5	2.4

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 6.7 shows the percent distribution of births in the five years before the survey by whether the birth was wanted by the mother then, wanted later, or not wanted. Overall, one-third of births in Bangladesh can be considered unplanned—19 percent mistimed (wanted later) and 14 percent unwanted (Figure 6.6). The proportion of unplanned births increases directly with the birth order of the child. Half of all fourth and higher order births were unplanned, with 38 percent being unwanted at the time of conception. Similarly, a much larger proportion of births to older women are found to be unplanned—many more than half of the births among women in their late thirties and forties.

Table 6.8 presents "wanted" fertility rates. The wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. For this purpose, unwanted births are defined as those which exceed the number considered ideal by the respondent.[2] This rate represents the level of fertility that would have prevailed in the three years preceding the survey if all unwanted births had been prevented. A comparison of the total wanted fertility rate and the actual fertility rate suggests the potential demographic impact of the elimination of unwanted births.

[2] Women who do not report a numeric ideal family size are assumed to want all their births.

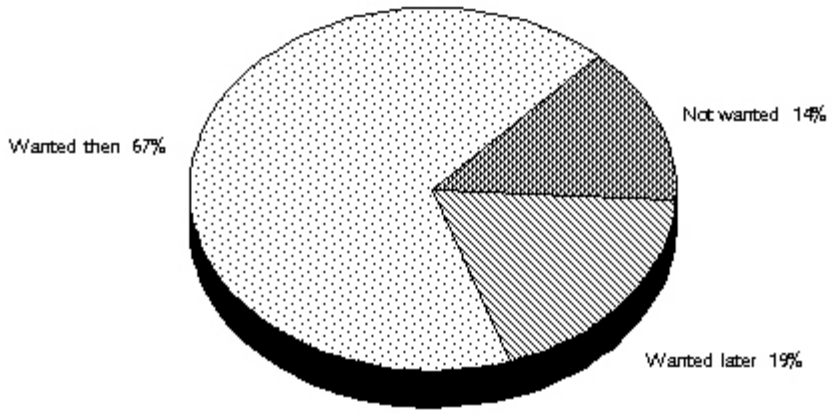
Table 6.7 Fertility planning status

Percent distribution of births in the five years preceding the survey and current pregnancies by fertility planning status, according to birth order and mother's age at birth, Bangladesh 1999-2000

Birth order and mother's age	Planning status of birth				Total	Number
	Wanted then	Wanted later	Not wanted	Missing		
Birth order						
1	81.6	17.5	0.4	0.5	100.0	2,282
2	71.1	27.1	1.6	0.2	100.0	1,926
3	64.6	22.2	13.2	0.0	100.0	1,297
4+	49.1	12.6	38.0	0.3	100.0	2,191
Age at birth						
<19	73.7	24.6	1.2	0.5	100.0	2,494
20-24	71.5	22.1	6.2	0.1	100.0	2,251
25-29	62.6	15.7	21.6	0.2	100.0	1,690
30-34	56.5	11.1	32.4	0.0	100.0	822
35-39	44.8	4.6	50.3	0.3	100.0	320
40-49	28.3	3.0	67.5	1.2	100.0	119
Total	66.9	19.3	13.5	0.3	100.0	7,696

Note: Birth order includes current pregnancy.

Figure 6.6 Percent Distribution of Births by Planning Status



Note: Refers to births in the 5 years before the survey

BDHS 1999-2000

Table 6.8 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by selected background characteristics, Bangladesh 1999-2000

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	1.7	2.5
Rural	2.4	3.5
Division		
Barisal	2.1	3.3
Chittagong	2.6	4.0
Dhaka	2.2	3.2
Khulna	1.9	2.7
Rajshahi	2.1	3.0
Sylhet	2.9	4.1
Education		
No education	2.8	4.1
Primary incomplete	2.1	3.3
Primary complete	2.3	3.4
Secondary+	1.8	2.4
Total	2.2	3.3

Note: Rates are based on births to women 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 3.2.

The wanted fertility rate in Bangladesh as a whole is 2.2 births per woman, 1.1 children less than the observed total fertility rate of 3.3. This implies that the total fertility rate is 50 percent higher than it would be if unwanted births were avoided. The gap between the wanted and observed total fertility rates is slightly larger among rural than among urban women. There is also a larger gap between the wanted and observed fertility rates for women with no education or only primary education than for those with secondary education. It is interesting to note that if women's fertility desires could be met, the total fertility rate in all divisions except Chittagong, Sylhet, and Dhaka would be below the replacement level of 2.1 children per woman.

INFANT AND CHILD MORTALITY 7

7.1 INTRODUCTION

Infant and child mortality rates reflect a country's level of socioeconomic development and quality of life and are used for monitoring and evaluating population and health programs and policies. This chapter examines the mortality of children under five in Bangladesh. Specifically, information is provided on levels, trends, and differentials in neonatal, postneonatal, infant, and child mortality. Information on patterns of fertility associated with high mortality is also provided. Mortality estimates are disaggregated by urban-rural residence, division, mother's education, and antenatal care received and also by selected demographic characteristics to identify segments of the population requiring special attention.

Estimates of childhood mortality are based on information from the birth history section of the Women's Questionnaire. In the BDHS survey, all ever-married women age 10-49 were asked to provide a complete history of their births including for each live birth, the sex, month and year of birth, survival status, and age at the time of the survey or age at death. Age at death was recorded in days for children dying in the first month of life, in months for other children dying before their second birthday, and in years for children dying at later ages. This information was used to calculate the following direct estimates of infant and child mortality.[1]

Neonatal mortality: The probability of dying in the first month of life
Postneonatal mortality: The probability of dying after the first month of life but before the first birthday
Infant mortality ($_1q_0$): The probability of dying before the first birthday
Child mortality ($_4q_1$): The probability of dying between the first and fifth birthdays
Under-five mortality ($_5q_0$): The probability of dying before the fifth birthday.

7.2 ASSESSMENT OF DATA QUALITY

The reliability of mortality estimates calculated from retrospective birth histories depends on the completeness with which deaths of children are reported and the extent to which birth dates and ages at death are accurately reported and recorded. Estimated rates of infant and child mortality are subject to both sampling and nonsampling errors. While sampling errors for various mortality estimates are provided in Appendix B, this section describes the results of various checks for nonsampling errors—in particular, underreporting of deaths in early childhood (which would result in an underestimate of mortality) and misreporting of the date of birth or age at death (which could distort the age pattern of

[1]A detailed description of the method for calculating the probabilities presented here is given in Rutstein (1984). The mortality estimates are not rates but are true probabilities calculated according to the conventional life-table approach. Deaths and exposure in any calendar period are first tabulated for the age intervals 0, 1-2, 3-5, 6-11, 12-23, 24-35, 36-47, and 48-59 months. Then age-interval-specific probabilities of survival are calculated. Finally, probabilities of mortality for larger age segments are produced by multiplying the relevant age-interval survival probabilities together and subtracting the product from one:

$$ {}_nq_x = 1 - \prod_{i=x}^{i=x+n} (1 - q_i) $$

under-five mortality). Both problems are likely to be more pronounced for children born further in the past than for children born recently. Underreporting of infant deaths is usually most serious for deaths that occur very early in infancy. If deaths in the early neonatal period are selectively underreported, there will be an abnormally low ratio of deaths under seven days to all neonatal deaths and an abnormally low ratio of neonatal to infant mortality. Changes in these ratios over time can be examined to test the hypothesis that underreporting of early infant deaths is more common for births that occurred further in the past than births that occurred more recently. Failure to report deaths will result in mortality figures that are low and if underreporting is more severe for children born longer ago than children born recently, any decline in mortality will tend to be understated.

Results from Table C.5 (Appendix C) suggest that early neonatal deaths have not been seriously underreported in the 1999-2000 BDHS survey since the ratios of deaths under seven days to all neonatal deaths are consistently high (between 57 and 71 percent) for the different periods preceding the survey (a ratio of less than 25 percent is often used as a guideline to indicate underreporting of early neonatal deaths). The ratios of neonatal to infant deaths (Appendix Table C.6) are also consistently high (between 61 and 66 percent) for the different periods preceding the survey.

Another problem inherent in most retrospective surveys is heaping of age at death on certain digits, e.g., 6, 12, and 18 months. If the net result of misreporting is the transference of deaths between age segments for which the rates are calculated, misreporting of the age at death will bias estimates of the age pattern of mortality. For instance, an overestimate of child mortality relative to infant mortality may result if children dying during the first year of life are reported as having died at age one or older. Thus, heaping at 12 months can bias the mortality estimates because a certain fraction of these deaths, which are reported to have occurred after infancy (i.e., at age 12-23 months), may have actually occurred during infancy (i.e., at age 0-11 months). In such cases, heaping would bias infant mortality ($_1q_0$) downward and child mortality ($_4q_1$) upward.

In the 1999-2000 BDHS survey, there appears to be a preference for reporting age at death at 3, 7, and 8 days (Table C.5 in Appendix C). An examination of the distribution of deaths under age 2 during the 15 years preceding the survey by month of death (Appendix Table C.6) indicates a slight heaping of deaths at 6, 12, and 18 months of age. Some heaping on 12 months is found in spite of the strong emphasis on this problem during the training of interviewers for BDHS fieldwork.[2] This brief assessment of the internal consistency of childhood mortality data suggests that even if there is digit preference, it will not substantially alter the rates.

It is seldom possible to establish mortality levels with confidence for a period of more than 15 years before a survey. Even within the recent 15-year period considered here, apparent trends in mortality rates should be interpreted with caution for several reasons. First, there may be differences in the completeness of death reporting related to the length of time before the survey. Second, the accuracy of reports of age at death and of date of birth may deteriorate with time. Third, sampling variability of mortality rates tends to be high, especially for groups with relatively few births. Fourth, mortality rates are truncated as they go back in time because women currently age 50 or above who were bearing children during earlier periods were not included in the survey. This truncation affects mortality trends, in particular. For example, for the period 10-14 years before the survey, the rates do not include any births for women age 40-49 since these women were over age 50 at the time of the survey and not eligible to be interviewed. Since these excluded births

[2]Interviewers were trained to probe for the exact number of months lived by the child if the age at death was reported as "one year."

to older women were likely to be at a somewhat greater risk of dying than births to younger women, the mortality rates for the period may be slightly underestimated. Estimates for more recent periods are less affected by truncation bias since fewer older women are excluded. The extent of this bias depends on the proportion of births omitted, however. Table 6.7 (Chapter 6) shows that very few of the children born in the five years before the survey were born to women age 35 and above. Given the small proportion of births excluded, selection bias for infant and child mortality statistics as far back as 15 years before the survey should be negligible.

7.3 Levels, Trends, and Differentials in Infant and Child Mortality

Table 7.1 presents various measures of infant and child mortality by residence for the three five-year periods preceding the survey. Infant mortality in Bangladesh declined from 105 deaths per 1,000 live births during the 1985-1989 period (10-14 years before the survey) to 66 deaths per 1,000 live births during the 1995-1999 period (0-4 years before the survey), an average rate of decline of nearly four infant deaths per 1,000 live births per year. A comparison of the infant mortality rate for the period 0-4 years before the 1999-2000 BDHS survey (66) with the infant mortality rate 0-4 years before the 1996-1997 BDHS survey (82) suggests a decrease of 16 infant deaths per 1,000 live births in the 3 years between the two surveys. All other measures of infant and child mortality presented in Table 7.1 have also declined during the past 15 years.

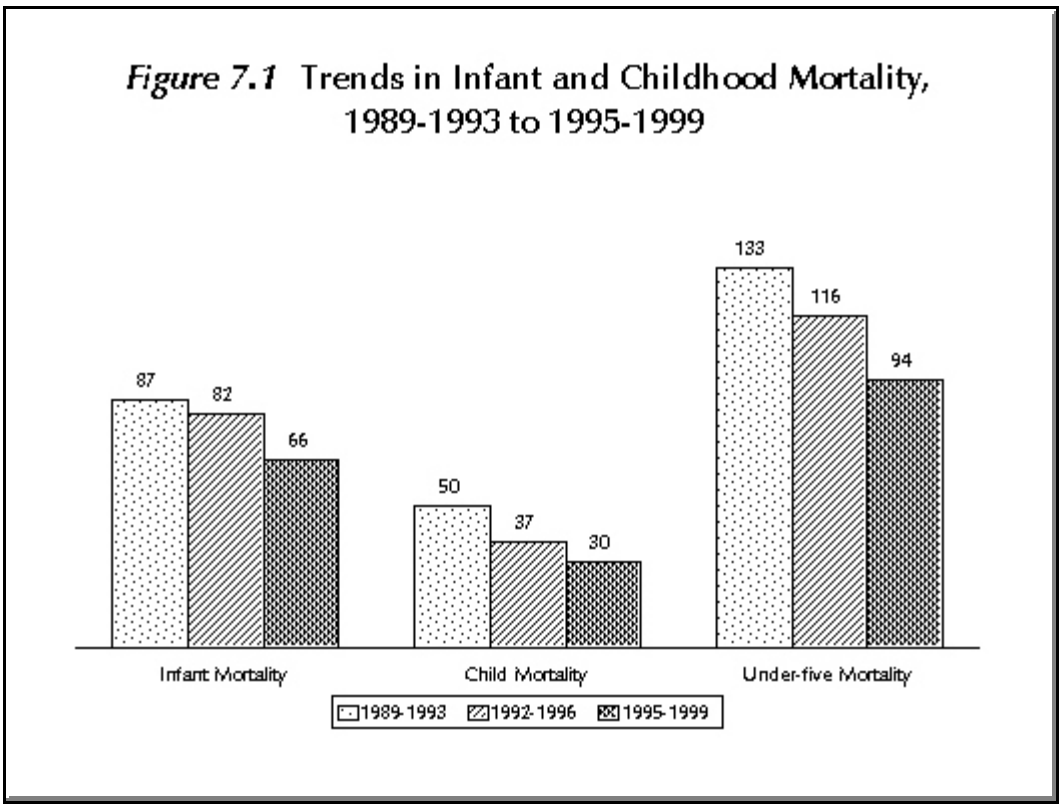
Table 7.1 Infant and child mortality

Neonatal, postneonatal, infant, child, and under-five mortality for five-year periods preceding the survey, Bangladesh 1999-2000

Years preceding survey	Approximate reference period	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality ($_1q_0$)**	Child mortality ($_4q1$)	**Under-five mortality ($_5q_0$)**
0-4	1995-1999	42	24.3	66.3	29.7	94
5-9	1990-1994	58.8	34.1	92.8	36.3	125.7
10-14	1985-1989	63.3	41.3	104.6	52.4	151.5

Despite the overall decline in infant and child mortality in the last 15 years, 1 in every 15 children born during the 5 years before 1999-2000 died within the first year of life, and 1 in every 11 children died before reaching age 5. Clearly, child survival programs in Bangladesh need to be intensified to achieve further reductions in infant and child mortality.

Further evidence of a steady decline in childhood mortality comes from a comparison of these data with rates from the two previous BDHS surveys (Figure 7.1). The comparison shows that infant, child, and under-five mortality rates for 1999-2000 uniformly declined by 18-19 percent since 1996-1997. However, the decline since 1992-1993 survey has been sharper in child mortality (41 percent) than in the other two mortality rates (24-29 percent).



7.4 SOCIOECONOMIC DIFFERENTIALS IN INFANT AND CHILD MORTALITY

The probability of dying in early childhood is higher in some population groups than in others. Table 7.2 and Figure 7.2 present differentials in infant and child mortality rates for the ten-year period preceding the survey by selected background characteristics. Almost all rural mortality rates are higher than urban mortality rates.

Differences in mortality by division are also marked. Khulna Division has the lowest rates for all indicators of childhood mortality except neonatal mortality. In contrast, Sylhet has extremely high mortality rates. Neonatal, postneonatal, infant, and under-five mortality is at least 50 percent higher in Sylhet than the national average.

The infant mortality rate declines sharply with increasing education of mothers, ranging from a high of 92 deaths per 1,000 live births for mothers with no education to 55 deaths per 1,000 live births for women with some secondary education. Other mortality indicators shown in the table also vary similarly with mothers' education, showing a sharp decline for children whose mother has some secondary education.

Antenatal and delivery care are usually associated with lower infant mortality. Table 7.2 shows that children of women who receive either one or both types of care have considerably lower risk of neonatal, postneonatal, and infant mortality than those with no care. However, mortality is slightly higher for children whose mother had both types of maternity care than for children whose mother had only one type of care.

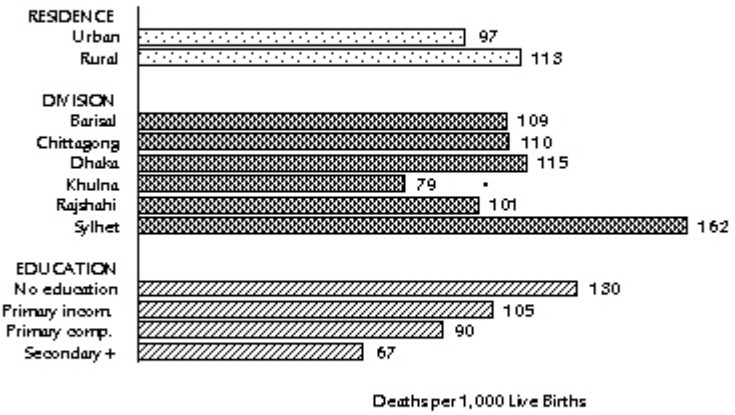
Table 7.2 Infant and child mortality by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality by selected socioeconomic characteristics for the ten-year period preceding the survey, Bangladesh 1999-2000

Characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality ($_1q_0$)**	Child mortality ($_4q_1$)	**Under-five mortality ($_5q_0$)**
Residence					
Urban	42.1	32.4	74.5	24.1	96.7
Rural	52.0	28.6	80.7	34.8	112.6
Division					
Barisal	47.5	28.2	75.7	35.7	108.7
Chittagong	40.8	28.6	69.4	43.6	109.9
Dhaka	51.8	32.1	83.9	34.1	115.1
Khulna	47.1	17.2	64.3	15.7	79.1
Rajshahi	49.7	26.6	76.2	26.7	100.9
Sylhet	81.7	45.2	126.9	40.1	161.9
Education					
No education	55.4	36.6	92.0	42.3	130.4
Primary incomplete	50.4	28.7	79.1	27.9	104.8
Primary complete	43.4	22.0	65.4	26.3	89.9
Secondary+	41.0	13.7	54.7	13.5	67.4
Medical maternity care[1]					
No antenatal or delivery care	45.6	27.6	73.2	-	-
Either antenatal or delivery	31.0	11.8	42.8	-	-
Both antenatal and delivery	33.8	19.4	53.2	-	-
Total	50.4	29.2	79.6	33.0	110.0

[1] Refers to births in the five years before the survey
- = Non-calculable

Figure 7.2 Under-Five Mortality by Background Characteristics



Note: Rates are for the 10-year period preceding survey

BDHS 1999-2000

7.5 DEMOGRAPHIC DIFFERENTIALS IN INFANT AND CHILD MORTALITY

This section examines differentials in early childhood mortality by demographic characteristics of the child and the mother. Table 7.3 and Figure 7.3 present various indicators of infant and child mortality for the ten years preceding the survey by sex of the child; mother's age at childbirth; birth order; length of the previous birth interval; and medical care received by the mother during pregnancy, delivery, and the early postpartum period.

Table 7.3 shows that the neonatal mortality rate during the ten-year period before the survey is higher for boys than for girls (55 and 46 deaths per 1,000 live births, respectively), but child mortality ($_1q_4$) is somewhat higher for girls (38 deaths per 1,000) than for boys (28 deaths per 1,000). This reversal of sex differentials in mortality with increasing age has been observed in other studies in South Asia and is thought to reflect the relative nutritional and medical neglect of female children (Das Gupta, 1987; Basu, 1989). The smaller gender difference in infant mortality in Bangladesh results from higher postneonatal mortality among girls (31 deaths per 1,000 live births) than among boys (28 deaths per 1,000 live births) and higher neonatal mortality among boys (55 deaths per 1,000 births) than among girls (46 deaths per 1,000 live births). This pattern of gender differentials in mortality during the first year of life is expected because neonatal mortality (which reflects largely congenital conditions) tends to be higher for boys than girls in most populations. Similarly, postneonatal mortality tends to be higher for girls than boys (which reflects largely behavioral conditions).

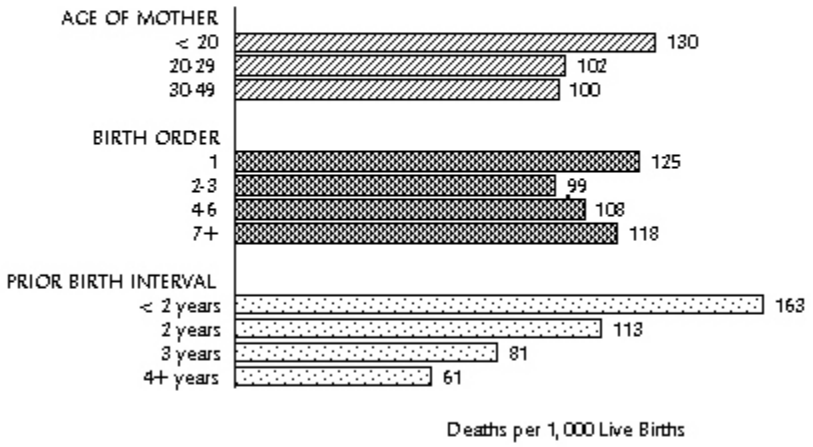
Table 7.3 Infant and child mortality by demographic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality by selected biodemographic characteristics for the ten-year period preceding the survey, Bangladesh 1999-2000

Characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality ($_1q_0$)**	Child mortality ($_4q_1$)	**Under-five mortality ($_5q_0$)**
Sex of child					
Male	54.7	27.5	82.2	28.4	108.3
Female	45.9	31.1	76.9	37.7	111.7
Mother's age at birth					
Less than 20	72.0	31.4	103.4	29.2	129.5
20-29	41.3	29.2	70.4	34.2	102.2
30-39	39.7	26.4	66.0	36.7	100.3
Birth order					
1	76.4	28.9	105.4	21.3	124.5
2-3	39.6	26.9	66.5	34.9	99.0
4-6	42.2	32.0	74.3	36.4	108.0
7+	38.7	33.5	72.3	49.2	117.9
Previous birth interval					
< 24 months	69.5	46.5	116.0	53.4	163.3
24-35 months	44.6	27.7	72.3	44.1	113.2
36-47 months	23.5	26.5	50.0	32.6	80.9
48 months or more	23.4	20.1	43.5	18.6	61.2
Size at birth					
Small or very small	53.9	34.1	88	-	-
Average or larger	36.9	20.9	57.8	-	-

[1] Refers to births in the five years before the survey
- = Non-calculable

Figure 7.3 Under-Five Mortality by Selected Demographic Characteristics



Note: Rates are for the 10-year period preceding survey

BDHS 1999-2000

For both social and biological reasons, infant mortality rates and child mortality rates often exhibit a U-shaped pattern with respect to the mother's age at childbirth, with children of the youngest and the oldest mothers experiencing higher mortality rates than children whose mothers are in the prime reproductive ages. Children born to young mothers are more likely to be of low birth weight, which is probably an important factor contributing to their higher neonatal mortality rate. Similarly, children born to mothers above age 30 are at a relatively high risk of experiencing congenital problems. Bangladesh, however, does not exhibit the expected U-shaped pattern of mortality by mother's age. The infant mortality rate among children of mothers under age 20 is 103 deaths per 1,000 live births, and it declines steadily with age to 66 deaths per 1,000 births for women age 30-39. Similar patterns of declining mortality with age of the mother are also observed for all other indicators of infant and child mortality.

Childhood death rates also tend to have a U-shaped relationship by birth order, with first births and very high order births having elevated mortality rates. In Table 7.3, birth order shows the expected U-shaped pattern for neonatal, postneonatal, infant, and under-five mortality rates, with rates being higher for first births and birth orders four to six than for birth orders two to three. Child mortality (age 1-4) tends to increase with birth order. The increase in the child mortality rate with birth order may reflect a more intense competition faced by higher birth order children for the caregiver's time, for medical resources, and for nutritious food once children are weaned. It is also likely that higher birth order children are disproportionately from lower socioeconomic groups, where mortality tends to be higher.

The timing of successive births has a powerful effect on the survival chances of children in Bangladesh. Infant and child mortality rates decrease as the length of the previous birth interval

increases, and both measures are especially high for children born less than 24 months after a previous birth. The infant mortality rate is nearly 3 times as high for children with a previous birth interval of less than 24 months as for children with a previous interval of 48 months or more (116 deaths compared with 44 deaths per 1,000 live births). The previous birth interval has similar effects on all other indicators of infant and child mortality as shown in Table 7.3. Although the length of the previous birth interval is likely to affect mortality risks directly, a substantial portion of the association between birth intervals and mortality risks may reflect the effect of factors that are correlated with birth intervals. For example, shorter birth intervals are likely to occur in large families, and large families tend to come from lower socioeconomic groups and are more likely than other families to live in rural areas where medical facilities and other survival-enhancing resources are less readily available. Nevertheless, multivariate analyses of birth-interval effects and child survival commonly find an association between short birth intervals (less than 24 months) and increased mortality even after controlling for other demographic and socioeconomic characteristics (Retherford et al., 1989).

Another important determinant of the survival chances of children is the baby's weight at the time of birth. Many studies have found that low birth weight babies (under 2,500 grams) have a substantially increased risk of mortality. Because most babies in Bangladesh are not weighed at the time of birth, mothers were asked whether babies born during the five years preceding the interview were "large, average, small, or very small" at birth. The last panel of Table 7.3 shows neonatal, postneonatal, and infant mortality rates by birth size. Children who are perceived by their mother to be small or very small experience about 50 percent higher mortality risk than children perceived to be average size or larger.

7.6 Perinatal Mortality

Table 7.4 presents the level of mortality at the earliest stage of life. The distinction between a stillbirth and an early neonatal death (deaths in the first week after birth) is a fine one. Furthermore, the causes of stillbirths and early neonatal deaths are closely linked, and examining one in isolation from the other can understate the true level of mortality around delivery. For this reason, deaths around delivery are combined into the perinatal mortality rate. Information on stillbirths is available for the five years preceding the survey and is collected using the calendar at the end of the Women's Questionnaire.

Table 7.4 indicates that the perinatal mortality rate for the country as a whole is 57 deaths per 1,000 pregnancies. Perinatal mortality is higher among very young mothers and decreases by pregnancy interval. There are no differences in perinatal mortality by residence, and perinatal mortality is lower for women with at least some secondary education than for less educated women. The differentials in perinatal mortality by division show higher levels in Sylhet (92 deaths per 1,000 pregnancies) and lower levels in Barisal (39 deaths per 1,000 pregnancies) than in any other division.

7.7 High-Risk Fertility Behavior

Previous research has shown the strong relationships between fertility patterns and children's survival chances. The results presented in the previous section bear this out. Typically, infants and young children have a greater risk of dying if they are born to a very young mother or an older mother, if they are born after a short interval, or if their mother has already had many children. In the following analysis, mothers are classified as too young if they are less than 18 years old at the time of birth and too old if they are age 35 or more at the time of birth. A short birth interval is defined as less than 24 months, and a high order birth is defined as occurring after or more previous births (i.e., birth order 4 or higher). Births are also cross-classified by combinations of these characteristics. Thus, a birth may have from zero to three potentially high-risk characteristics.

Table 7.4 Perinatal mortality

Number of stillbirths and early neonatal deaths and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Bangladesh 1999-2000

Background characteristic	Perinatal mortality			
	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months duration
Mother's age at birth				
Less than 20	66	99	71.6	2,310
20-29	92	90	50.0	3,649
30-39	38	22	56.2	1,072
40-49	1	1	*	106
Previous pregnancy interval				
1st pregnancy	63	94	81.7	1,922
<15 months	13	29	(108.7)	391
15-26 months	40	34	60.2	1,234
27-38 months	28	15	32.4	1,318
39+ months	54	39	40.9	2,272
Residence				
Urban	30	35	55.6	1,172
Rural	168	177	57.7	5,965
Division				
Barisal	7	11	(39.4)	441
Chittagong	39	34	46.9	1,561
Dhaka	49	70	55.0	2,177
Khulna	24	19	58.1	740
Rajshahi	55	52	63.5	1,682
Sylhet	24	26	92.3	536
Mother's education				
No education	106	104	62.0	3,392
Primary incomplete	32	40	54.6	1,322
Primary complete	27	20	63.4	748
Secondary+	33	47	47.7	1,675
Total	198	212	57.4	7,137

Note: Rates based on 250-499 pregnancies are in parentheses. Rates based on fewer than 250 pregnancies are not shown (*).

[1] Stillbirths are fetal deaths to pregnancies lasting seven or more months.

[2] Early neonatal deaths are deaths to live-born children at days 0 to 7 since birth.

[3] Perinatal mortality rate is the sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months of duration.

Table 7.5 shows the percentages of births in the five years preceding the interview that fall into different child survival risk categories, as well as the distribution of all currently married women across these categories. It also shows the relative risks of children dying across the different risk categories. The purpose of this table is to identify areas in which changed reproductive behavior would be likely to effect a reduction in infant and child mortality. Mortality risks are represented by the proportion of children born during the five years prior to the survey who had died by the time of the survey. The "risk ratio" is the ratio of the proportion of dead children in a given high-risk category to the proportion of dead children not in any high-risk category.

Table 7.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey by category of elevated risk of dying and risk ratio and the percent distribution of currently married women by risk of conceiving a child with an elevated risk of dying, according to category of increased risk, Bangladesh 1999-2000

Risk category	Births in 5 years preceding the survey		Percentage of currently married women[a]
	Percentage of births	Risk ratio	
Not in any high-risk category	33.0	1.00	29.1[b]
Unavoidable risk category: first birth	13.8	2.01	5.9
Single high-risk category			
Mother's age < 18	17.4	2.29	5.3
Mother's age > 34	0.5	(2.35)	3.5
Birth interval < 24 months	5.2	1.75	8.3
Birth order > 3	19.2	1.37	17.0
Subtotal	42.3	1.81	34.1
Multiple high-risk category			
Age<18 & birth interval<24 mo[c]	1.4	2.90	2.0
Age>34 & birth interval<24 mo	*	*	0.1
Age>34 & birth order>3	4.6	1.00	21.2
Age>34 & birth interval<24 mo &	0.5	(3.38)	1.2
birth interval<24 mo & birth order>3	4.3	2.51	6.5
Subtotal	10.9	1.95	31.0
In any risk category	53.2	1.84	65.1
Total	100.0	-	100.0
Number	6,939	-	9,720

Note: Risk ratio is the ratio of the proportion dead of births in a specific high-risk category to the proportion dead of births *not in any high-risk category*. Figures in parentheses are based on 25-49 births; an asterisk indicates that a figure is based on fewer than 25 women and has been suppressed.

[a] Women were assigned to risk categories according to the status they would have at the birth of a child, if the child were conceived at the time of the survey: age less than 17 years and 3 months, age older than 34 years and 2 months, latest birth less than 15 months ago, and latest birth of order 3 or higher.

[b] Includes sterilized women

[c] Includes the combined categories *Age <18 and birth order >3*

Among all children born in the five years preceding the survey, 14 percent are in the unavoidable risk category of first births to women 20-34 years old and 53 percent are in one or more elevated risk categories. Eleven percent of the births are of the multiple high-risk type. Under the multiple high-risk category, 5 percent of the births occurred to mothers who were not only too old but also had already had three births or more, and 4 percent of the births occurred within two years of a previous birth and to women with three or more births. Among births classified under the single-risk category, high birth order is identified as the most common high-risk factor accounting for 19 percent of births, while 17 percent fell into the young maternal age category (below 18 years), less than 1 percent fell into the old maternal age category, and 5 percent fell into the category birth interval less than two years.

The risk ratios in the second column of Table 7.5 are used to compare each risk category with the reference category; that is, the no high-risk category has a risk ratio of 1.00. The larger the risk ratio, the higher the level of mortality. Overall, children who fall into a single elevated risk category have a ratio of 1.8, whereas children who are in multiple high-risk categories have a risk ratio of 2.0. Relative to the reference in the single-risk category, children born after very short birth intervals are nearly twice (1.8) as likely to die as those in the reference category. Children born to older mothers (over 34 years) and to very young mothers (under 18 years) are more than twice as likely to die as those in the reference category. Regarding children in the multiple-high-risk categories, children whose mother is too old with too short a birth interval and with too high parity are more than three times (3.4) as likely to die as children in the reference category. Similarly, children born to a too young mother and born less than two years after a preceding birth are almost three times (2.9) as likely to die as those in the no high-risk category. Children of birth orders higher than third who are born less than 24 months after a previous birth are 2.5 times as likely to die as those in the reference category.

Currently married women were also classified by the category of potential risk they would fall into if they were to conceive at the time of the survey. The data reveal that 34 percent of currently married women had the potential for giving birth to a child in a single elevated risk category, while 31 percent of the women had the potential to produce children with multiple high-risk factors. However, since the category over age 34 and birth order higher than 3 had a risk ratio of 1.0 at the time of the survey, only 44 percent of currently married women were at risk of conceiving a child that would have an elevated risk of dying.[3]

[3] 65.1-21.2=43.9

REPRODUCTIVE AND CHILD HEALTH 8

This chapter presents findings from the 1999-2000 BDHS survey in various issues of importance to reproductive and child health services: antenatal care and delivery assistance, immunization, and childhood illnesses and their treatment. This information can be used to identify subgroups of women and children who are at risk because of nonuse of reproductive and child health services. The information will assist policymakers in the planning of appropriate strategies to improve reproductive and child health. The results in the following section are based on data obtained from mothers on all live births that occurred in the five years preceding the survey.

8.1 Antenatal Care

A well-designed and implemented antenatal care program facilitates detection and treatment of problems during pregnancy, such as anemia and infections, and provides an opportunity to disseminate health messages to women and their families. In addition, this early contact with the health care system can improve the timely and appropriate use of delivery care services.

Prevalence and Source of Antenatal Care

Antenatal care coverage from a trained provider is important to monitor the pregnancy and reduce the risks for the mother and child during pregnancy and at delivery. To be most effective, there should be regular antenatal care throughout pregnancy.

Table 8.1 shows the percent distribution of births in the five years preceding the survey by source of antenatal care received during pregnancy according to background characteristics. Although interviewers were instructed to record everyone a woman had consulted for care, in this report, only the provider with the highest qualifications is considered if more than one person was seen.

The data indicate that most mothers in Bangladesh do not receive antenatal care. For births that occurred in the five years before the survey, nearly two-thirds (63 percent) of mothers received no antenatal care during pregnancy. Those who do receive care tend to receive it from doctors (24 percent) or nurses, midwives, and family welfare visitors (10 percent). Less than 1 percent of pregnant mothers receive antenatal care from traditional birth attendants (*dai*) (See Figure 8.1).

The survey results show that there are sharp differences in antenatal care coverage among subgroups in Bangladesh. Antenatal care is much more common for births to younger women and those of lower birth order. The urban-rural differential in the percentage of births for which the mother had at least one antenatal care visit is quite large. Fifty-nine percent of urban births had received antenatal care from a medically trained person, compared with only 28 percent of rural births. Differences in antenatal care coverage by division are minimal. Mothers in Sylhet Division are the least likely to receive antenatal care; for only 27 percent of births did mothers in this division have at least one antenatal care visit. The use of antenatal care is strongly associated with level of education. Mothers with some secondary education are about three times as likely as mothers with no education to receive antenatal care.

Table 8.1 Antenatal care

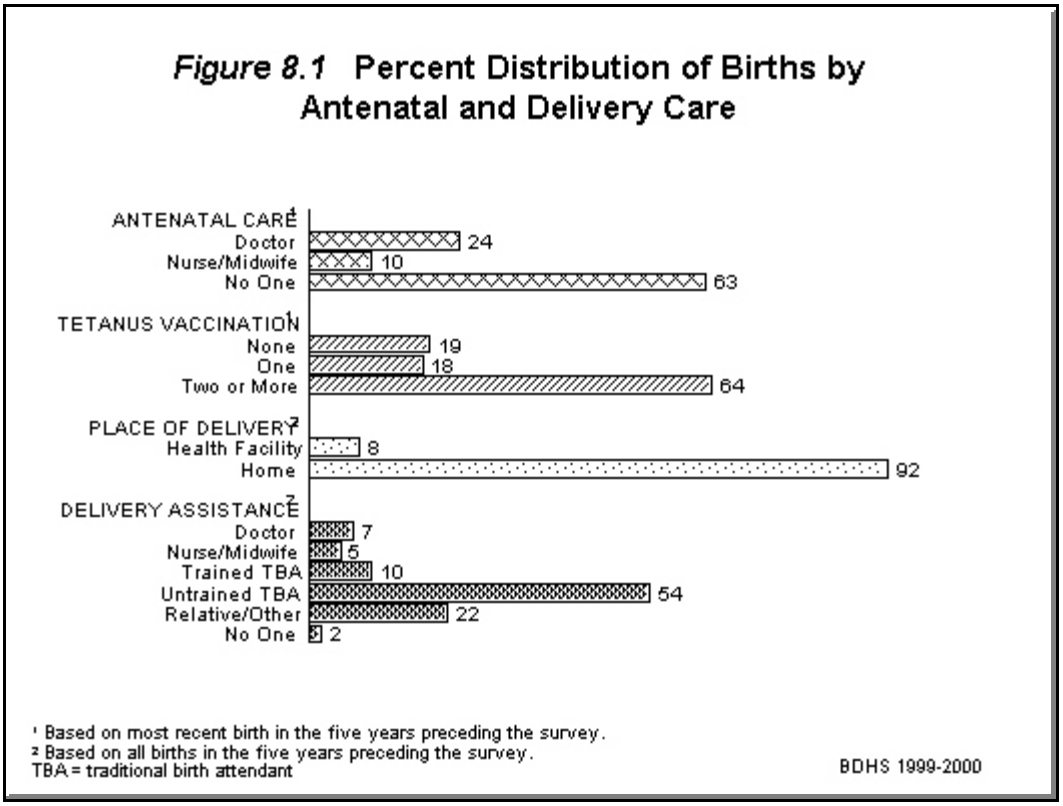
Percent distribution of last births in the five years preceding the survey by source of antenatal care during pregnancy, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Antenatal care provider[1]					Missing	Total	Number
	Doctor	Nurse/ midwife[2]	Birth attendant[3]	Other	No one			
Mother's age at birth								
< 20	23.6	12.3	0.7	3.3	60.1	0.0	100.0	1,579
20-34	24.9	8.7	0.2	3.4	62.6	0.1	100.0	3,337
35+	12.3	6.1	0.3	1.5	79.3	0.4	100.0	347
Birth order								
1	32.7	11.7	0.5	3.0	52.1	0.0	100.0	1,437
2-3	24.8	10.6	0.5	3.9	60.1	0.1	100.0	2,286
4-5	15.9	7.0	0.1	2.9	74.0	0.0	100.0	928
6+	10.6	4.8	0.2	1.6	82.1	0.6	100.0	612
Residence								
Urban	49.9	8.7	0.8	2.8	37.7	0.2	100.0	913
Rural	18.2	9.8	0.3	3.3	68.3	0.1	100.0	4,351
Division								
Barisal	25.2	8.6	0.4	2.8	63.1	0.0	100.0	334
Chittagong	24.9	5.7	0.2	1.2	67.9	0.0	100.0	1,074
Dhaka	25.0	7.5	0.3	3.0	64.2	0.0	100.0	1,646
Khulna	27.7	16.0	0.1	4.5	51.5	0.1	100.0	579
Rajshahi	20.0	13.5	0.8	5.1	60.2	0.4	100.0	1,271
Sylhet	19.5	7.5	0.4	2.1	70.5	0.1	100.0	358
Mother's education								
No education	11.5	8.5	0.2	2.7	76.9	0.1	100.0	2,389
Primary incomplete	18.7	10.4	0.2	3.8	66.8	0.1	100.0	990
Primary complete	22.9	10.7	0.6	4.0	61.5	0.3	100.0	543
Secondary +	49.5	10.5	0.7	3.4	35.9	0.0	100.0	1,342
Total	23.7	9.6	0.4	3.2	63.0	0.1	100.0	5,263

Note: Figures are for most recent birth in the period 0-59 months preceding the survey.
[1] If the respondent mentioned more than one provider, only the most qualified provider is considered.
[2] Includes family welfare visitors
[3] Traditional midwife (trained and untrained)

Although the level of antenatal care coverage from a medically trained provider is still relatively low in Bangladesh (33 percent), there is evidence that it has increased recently; in 1996-1997, women received antenatal care coverage from a medically trained provider for only 29 percent of births.[1]

[1] Reanalyzed for last live birth in the last five years preceding the survey.



Number and Timing of Antenatal Visits

The number of antenatal care visits and the timing of the first checkup are considered important in preventing an adverse pregnancy outcome. Care is most effective if the visits are started early during pregnancy and continue at regular intervals throughout the pregnancy. It is generally recommended that antenatal care visits be made monthly for the first seven months, fortnightly in the eighth month, and then weekly until birth. If the first visit is made at the third month of pregnancy, this schedule translates to a total of about 12 to 13 visits.

Information about the number and timing of visits made by pregnant women is presented in Table 8.2. As mentioned above, for a large majority of births, mothers do not obtain any antenatal care. Among those who do obtain care, the median number of visits is only 1.8, far fewer than the recommended 12 visits. For about one-fourth (23 percent) of births, women received antenatal care before the sixth month of gestation and for another 9 percent women did not receive antenatal care until the sixth or seventh month of pregnancy. Among women who received care, the median duration of pregnancy at first visit was 5.4 months.

Components of Antenatal Care Checkup

Complications during pregnancy are an important cause of maternal and child morbidity and mortality. Detecting and monitoring these complications is a crucial component of safe motherhood. To gauge the quality of care received during pregnancy, the 1999-2000 BDHS survey included a series of questions on the components of antenatal care. Respondents were asked whether they had received each service during at least one of their antenatal visits. For last births during the five years preceding the survey, Table 8.3 presents the percentage whose mother received specific components of antenatal care.

Table 8.2 Number of antenatal care visits and stage of pregnancy

Percent distribution of last births in the five years preceding the survey, by number of antenatal care visits, and by the stage of pregnancy at the time of the first visit, Bangladesh 1999-2000

Characteristic	Percent
Number of visits	
0	63.0
1	11.7
2-3	14.5
4+	10.5
Don't know/missing	0.3
Total	100.0
Median number of visits	1.8
Number of months pregnant at the time of first visit	
No antenatal care	63.0
<6 months	23.3
6-7 months	8.8
8+ months	4.8
Don't know/missing	0.1
Total	100.0
Median number of months pregnant at first visit	5.4
Number of births	5,263

Note: Figures are for most recent birth in the period 0-59 months preceding the survey.

Among all last births, more than one-third of mothers were weighed and received iron tablets or syrup. The mothers of only 16 to 19 percent of births had their blood and urine tested during their pregnancy and received advice on the danger signs of pregnancy. These antenatal care services are lower for births to older mothers, births of higher order, and births in rural areas.

Tetanus Toxoid Vaccinations

Tetanus toxoid injections are given during pregnancy for prevention of tetanus among newborns. Neonatal tetanus is a fatal disease caused by a pathogen transmitted under unhygienic conditions at childbirth. For full protection, it is recommended that pregnant women receive two doses of the toxoid. However, if a woman was vaccinated during a previous pregnancy, she may only require one booster dose during a subsequent pregnancy. Five doses are considered to provide lifetime protection. To estimate the extent of tetanus toxoid coverage during pregnancy, the BDHS survey collected data for the last birth in the five years before the survey as to whether the mother had received tetanus toxoid vaccinations during pregnancy and, if so, the number of injections. These results are presented in Table 8.4. The data may underestimate the actual extent of protection from tetanus, since women were asked about vaccinations received during specific pregnancies. Women who had received prior vaccinations may not have received additional injections because they were considered unnecessary.

The data indicate that tetanus toxoid coverage is relatively widespread in Bangladesh. Overall, 64 percent of births in the five years before the survey were to mothers who received two or more tetanus toxoid injections during pregnancy, while 18 percent were to mothers who received one injection. Mothers of about one-fifth of births did not have tetanus toxoid vaccination during pregnancy.

As was seen with the coverage of other antenatal care services, tetanus toxoid coverage is related to the age of the mother and birth order. Younger women and women with lower birth order are more likely to have received two or more tetanus vaccinations. Births occurring in rural areas and Sylhet Division are less likely not to be protected by a tetanus vaccination. Coverage with two or more doses ranges from a low of 55 percent of births to women with no education to more than 77 percent of births to women with some secondary education. Educated women may not only have greater access to medical services but may also have a better understanding of the benefits of vaccinations and thus may be better disposed to take advantage of the available services.

Table 8.3 Components of antenatal care

Percentage of last births in the five years preceding the survey for which mothers received specific antenatal care services, by selected background characteristics, Bangladesh 1999-2000

Background characteristic	Informed of signs of pregnancy complications	Weighed	Height measured	Eyes tested	Blood pressure measured	Urine sample given	Blood sample given	Received iron tablets	Number of births
Mother's age at birth									
< 20	14.6	35.7	30.2	18.9	28.8	18.0	15.1	36.7	1,579
20-34	17.0	36.6	27.5	16.4	30.2	20.7	17.1	37.6	3,337
35+	11.1	22.0	13.5	6.0	16.6	9.4	5.9	23.3	347
Birth order									
1	19.7	44.9	36.8	21.7	37.5	27.3	23.3	43.2	1,437
2-3	16.9	37.5	30.0	18.1	30.7	20.3	16.6	40.1	2,286
4-5	13.2	27.1	17.4	11.9	20.9	11.9	8.8	27.5	928
6+	7.6	17.5	10.2	4.9	13.8	6.8	5.1	20.1	612
Residence									
Urban	27.5	59.9	47.6	27.7	47.5	39.5	34.9	50.0	913
Rural	13.5	30.2	23.1	14.1	25.0	14.9	11.7	33.5	4,351
Division									
Barisal	13.4	33.5	25.9	17.0	26.5	16.2	9.9	33.6	334
Chittagong	15.2	30.5	20.7	11.4	26.4	18.3	15.6	32.9	1,074
Dhaka	16.9	34.4	26.4	15.3	28.1	19.8	16.9	36.2	1,646
Khulna	19.3	46.9	37.0	19.9	38.2	25.4	18.3	39.8	579
Rajshahi	15.2	38.1	32.8	21.7	29.3	17.9	15.8	41.4	1,271
Sylhet	12.7	27.6	17.8	11.7	25.4	16.0	11.7	26.8	358
Mother's education									
No education	8.5	22.3	16.8	10.4	17.5	9.5	7.3	23.4	2,389
Primary incomplete	15.2	31.6	24.7	14.6	23.1	14.0	10.6	31.2	990
Primary complete	16.4	35.7	25.6	14.7	30.8	17.4	11.2	40.0	543
Secondary +	29.4	61.2	48.8	29.2	52.6	40.9	36.3	61.8	1,342
Total	15.9	35.3	27.4	16.4	28.9	19.2	15.7	36.4	5,263

Note: Figures are for most recent birth in the period 0-59 months preceding the survey.

Although there has been only a modest increase in recent years in antenatal care coverage, the proportion of pregnant women receiving tetanus toxoid injections has risen substantially. For births occurring in roughly 1992-1996, 75 percent of the mothers received at least one tetanus toxoid injection during pregnancy (Mitra et al., 1997:113), while by 1995-1999, the proportion had increased to 81 percent. Besides, more mothers now have blood pressure and urine taken for analysis than in 1992-1996.

8.2 DELIVERY CARE

Another important component of efforts to reduce the health risks for mothers and children is to increase the proportion of babies that are delivered in health facilities under medical supervision. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause death or serious illness for either the mother or the newborn. In this section, two topics related to delivery are discussed: place of delivery and type of assistance during delivery.

Table 8.4 Tetanus toxoid vaccinations

Percent distribution of last births in the five years preceding the survey by number of tetanus toxoid injection received during pregnancy, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Number of tetanus toxoid injections				Total	Number
	None	One dose	Two does or more	Don't know/ missing		
Mother's age at birth						
< 20	14.5	13.7	71.8	0.1	100.0	1,579
20-34	19.0	19.7	61.1	0.2	100.0	3,337
35+	34.3	14.1	51.2	0.4	100.0	347
Birth order						
1	10.9	9.0	80.1	0.0	100.0	1,437
2-3	15.8	21.7	62.4	0.1	100.0	2,286
4-5	26.5	20.9	52.2	0.3	100.0	928
6+	35.7	16.9	47.0	0.4	100.0	612
Residence						
Urban	11.5	15.7	72.7	0.2	100.0	913
Rural	20.2	17.9	61.8	0.1	100.0	4,351
Division						
Barisal	19.5	15.2	65.3	0.0	100.0	334
Chittagong	17.4	19.8	62.8	0.0	100.0	1,074
Dhaka	20.3	17.3	62.3	0.0	100.0	1,646
Khulna	14.4	20.0	65.5	0.1	100.0	579
Rajshahi	15.5	15.3	68.8	0.4	100.0	1,271
Sylhet	32.3	17.5	49.6	0.6	100.0	358
Mother's education						
No education	26.7	18.1	54.9	0.2	100.0	2,389
Primary incomplete	17.0	16.7	66.0	0.2	100.0	990
Primary complete	15.8	19.1	65.1	0.0	100.0	543
Secondary+	6.7	16.4	76.9	0.0	100.0	1,342
Total	18.7	17.5	63.7	0.1	100.0	5,263

Note: Figures are for most recent birth in the period 0-59 months preceding the survey.

Place of Delivery

Table 8.5 presents the distribution of births in the five years prior to the survey by place of delivery. Almost all births (92 percent) in Bangladesh occur at home. Use of health facilities for delivery is much more common in urban areas (16 percent of births), among mothers with some secondary education (13 percent), and among mothers who had at least four antenatal care visits (27 percent). Differentials by age of the mother, birth order, and division are small.

Table 8.5 Place of delivery

Percent distribution of births in the five years preceding the survey by place of delivery, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Place of delivery: Health facility	At home	Don't know/ missing	Total	Number
Age at birth					
< 20	6.7	93.1	0.2	100.0	1,929
20-34	8.9	90.6	0.5	100.0	4,570
35+	3.2	96.5	0.3	100.0	441
Birth order					
1	14.4	85.4	0.2	100.0	1,437
2-3	8.4	91.1	0.4	100.0	3,252
4-5	4.1	95.5	0.4	100.0	1,348
6+	1.6	97.7	0.7	100.0	902
Type of place of residence					
Urban	25.1	74.2	0.7	100.0	1,142
Rural	4.6	95.1	0.4	100.0	5,797
Region					
Barisal	4.3	95.7	0.0	100.0	435
Chittagong	6.2	93.6	0.2	100.0	1,522
Dhaka	8.6	91.0	0.3	100.0	2,127
Khulna	14.4	85.1	0.5	100.0	716
Rajshahi	7.3	91.9	0.8	100.0	1,627
Sylhet	6.3	93.1	0.7	100.0	513
Highest education level					
No education	3.1	96.6	0.4	100.0	3,286
Primary incomplete	4.7	94.6	0.7	100.0	1,290
Primary complete	5.3	94.5	0.2	100.0	721
Secondary+	21.4	78.2	0.4	100.0	1,642
Antenatal visits for pregnancy					
None	1.6	98.2	0.2	100.0	4,482
1-3 visits	10.3	89.3	0.4	100.0	1,780
4+ visits	44.2	54.6	1.1	100.0	660
Total	7.9	91.6	0.4	100.0	6,939

Note: Figures are for all births in the period 0-59 months preceding the survey. Total includes 18 births for which antenatal care data are missing.

Assistance During Delivery

Children delivered at home are more likely to be delivered with assistance from nonmedical personnel, whereas children delivered at a health facility are more likely to be delivered by trained medical personnel. Table 8.6 shows the percent distribution of births in the five years before the survey by type of assistance during delivery, according to background characteristics. If the mother was assisted by more than one type of provider, only the most qualified person is recorded in the table. Sixty-four percent of births in Bangladesh are assisted by traditional birth attendants (*dai*),

with 10 percent being assisted by trained dais and 54 percent by untrained dais. Another 22 percent of births are assisted by relatives and friends.[2] Twelve percent of births are assisted by medically trained personnel, doctors (7 percent), or nurses, midwives, and family welfare visitors (5 percent).

Table 8.6 Assistance during delivery

Percent distribution of births in the five years preceding the survey by type of assistance during delivery, according to background characteristics, Bangladesh 1999-2000

	Assistance during delivery								
Background characteristic	Doctor	Nurse/ midwife[1]	Trained TBA[2]	Untrained TBA[2]	Relative/ other[3]	No one	Don't know/ missing	Total	Number
Mother's age at birth									
20-34	8.0	5.2	9.6	53.5	21.9	1.6	0.3	100.0	4,570
35+	2.0	4.3	8.1	59.5	21.5	4.3	0.3	100.0	441
Birth order									
1	13.6	6.6	11.4	49.5	18.2	0.6	0.1	100.0	1,437
2-3	7.5	5.2	9.9	52.4	23.9	1.1	0.2	100.0	3,252
4-5	3.0	4.5	9.0	57.9	22.7	2.5	0.3	100.0	1,348
6+	1.2	2.8	7.4	60.8	23.5	3.7	0.6	100.0	902
Residence									
Urban	21.2	11.8	9.4	42.1	14.2	0.9	0.4	100.0	1,142
Rural	4.3	3.7	9.7	56.3	24.0	1.7	0.2	100.0	5,797
Division									
Barisal	5.2	5.3	7.8	60.5	19.8	1.3	0.0	100.0	435
Chittagong	5.8	6.0	9.9	64.2	13.7	0.2	0.2	100.0	1,522
Dhaka	8.1	4.2	11.9	54.7	19.4	1.5	0.2	100.0	2,127
Khulna	11.3	7.9	8.5	43.6	26.1	2.2	0.4	100.0	716
Rajshahi	5.7	4.6	7.9	43.5	35.3	2.7	0.4	100.0	1,627
Sylhet	6.5	2.8	8.9	62.7	17.0	1.9	0.2	100.0	513
Mother's education									
No education	2.6	2.8	8.9	57.8	25.4	2.4	0.2	100.0	3,286
Primary incomplete	3.4	4.2	9.1	57.8	23.6	1.5	0.4	100.0	1,290
Primary complete	4.5	4.5	10.0	56.8	23.5	0.5	0.2	100.0	721
Secondary+	20.0	10.4	11.8	41.9	15.2	0.6	0.2	100.0	1,642
Antenatal care visits									
None	1.5	2.7	7.9	60.6	25.3	1.9	0.1	100.0	4,482
1-3 visits	8.5	7.5	13.8	48.5	20.3	1.2	0.2	100.0	1,780
4+ visits	40.3	14.4	11.0	24.1	9.0	0.6	0.7	100.0	660
Total	7.1	5.0	9.7	54.0	22.4	1.6	0.2	100.0	6,939

Note: Figures are for all births in the period 0-59 months preceding the survey. If the respondent mentioned more than one attendant, only the most qualified attendant was considered in this table. Total includes 16 births for which antenatal care data are missing.
[1]Includes family welfare visitor
[2]Traditional birth attendant
[3]Includes untrained doctors

[2] It is entirely possible that some women report traditional birth attendants as friends since the distinction may be slight.

Births to young women and lower order births are more likely than births to older, high-parity women to be assisted by doctors. A child born in an urban area is more likely to have been assisted by medical personnel (doctors, nurses, midwives, or family welfare visitors) than a rural child. Similarly, a higher proportion of births to women with at least some secondary school are assisted by medical personnel (30 percent) than births to women with no education (5 percent). Not surprisingly, the more antenatal visits a woman makes when pregnant, the greater the likelihood that her baby will be delivered with assistance from medically trained staff. For mothers who received no antenatal care, only 4 percent of their births were supervised by doctors, nurses, midwives, or family welfare visitors, compared with 55 percent of mothers who had four or more antenatal visits. Also of interest in Table 8.6 is the relatively high proportion of births in Khulna Division that are assisted by doctors, nurses, midwives, or family welfare visitors.

There has been an increase over time in the proportion of births assisted by medical personnel. The proportion of births with medical assistance during delivery has increased since 1996-1997 (from 8 percent to 12 percent).

8.3 Caesarean Section and Child Size at Birth

Only 2 percent of babies born in Bangladesh are delivered by caesarean section (Table 8.7). Caesarean sections (C-sections) are more common among urban births, first births, and births to women with some secondary education. Divisional estimates of the prevalence of C-sections vary from less than 1 percent in Barisal to 4 percent in Khulna.

Respondents (mothers) were asked for their own subjective assessment of whether the child was very small, smaller than average, or average or larger. Eighty-one percent of all children were reported by their mothers to be average or larger and 19 percent were reported to be either small (14 percent) or very small (5 percent).

8.4 Childhood Vaccination

The Expanded Program on Immunization (EPI) follows the international guidelines recommended by the World Health Organization (WHO). The guidelines recommend that all children receive a BCG vaccination against tuberculosis; three doses of DPT vaccine for the prevention of diphtheria, pertussis (whooping cough), and tetanus; three doses of polio vaccine; and a vaccination against measles. WHO recommends that children receive all of these vaccines before their first birthday and that the vaccinations be recorded on a health card given to the parents.

In the 1999-2000 BDHS survey, data on childhood immunizations were collected for all surviving children born during the five-year period before the survey. In Bangladesh, immunizations are routinely recorded on a child's health card. For each child, mothers were asked whether they had the health card for the child and, if so, to show the card to the interviewer. When the mother was able to show the health card, the dates of vaccinations were transferred from the card to the questionnaire. If the health card was not available (or a vaccination was not recorded), mothers were asked questions to determine whether the child had received each vaccine.

The estimates of immunization coverage among children 12-23 months in Table 8.8 are based on the information taken from the health card and, for those for whom a card was not seen (or a vaccination not recorded), from the information provided by the mother. Mothers were able to provide health cards for 44 percent of the children age 12-23 months.

Table 8.7 Delivery characteristics: caesarean section, birth weight, and size

Percentage of births in the five years preceding the survey delivered by caesarean section and percent distribution of births by the mother's estimate of baby's size at birth, by background characteristics, Bangladesh 1999-2000

Background characteristic	Delivery by caesarean section	Size of child at birth					
		Very small	Smaller than average	Average or larger	Does not know/ Missing	Total	Number
Mother's age at birth							
< 20	1.8	6.2	15.1	78.5	0.2	100.0	1,929
20-34	2.8	4.4	13.5	81.7	0.4	100.0	4,570
35+	1.1	4.8	18.9	76.0	0.3	100.0	441
Birth order							
1	5.2	6.9	15.0	78.0	0.2	100.0	1,437
2-3	2.4	4.2	14.6	80.8	0.4	100.0	3,252
4-5	0.9	4.5	13.0	82.3	0.2	100.0	1,348
6+	0.3	4.9	14.1	80.4	0.6	100.0	902
Residence							
Urban	8.0	4.7	14.6	80.0	0.7	100.0	1,142
Rural	1.3	5.0	14.2	80.6	0.3	100.0	5,797
Division							
Barisal	0.6	6.1	9.3	84.4	0.2	100.0	435
Chittagong	1.8	5.1	16.2	78.6	0.2	100.0	1,522
Dhaka	3.4	4.1	15.1	80.5	0.3	100.0	2,127
Khulna	4.1	5.5	13.8	79.9	0.8	100.0	716
Rajshahi	1.6	5.1	11.7	82.7	0.5	100.0	1,627
Sylhet	1.9	5.3	18.3	76.3	0.2	100.0	513
Mother's education							
No education	0.6	5.5	15.9	78.3	0.3	100.0	3,286
Primary incomplete	0.6	5.1	14.0	80.2	0.7	100.0	1,290
Primary complete	1.7	4.5	13.4	81.9	0.2	100.0	721
Secondary+	7.7	3.7	11.7	84.3	0.3	100.0	1,642
Total	2.4	4.9	14.3	80.5	0.3	100.0	6,939

VACCINATION COVERAGE

Information on vaccination coverage is presented in Table 8.8, according to the source of information used to determine coverage, i.e., the vaccination card or mother's report. Data are presented for children age 12-23 months, thereby including only those children who have reached the age by which they should be fully vaccinated. The first indicator shows the proportion of these children who had been vaccinated at any age up to the time of the survey. These results are presented according to the source of the information used to determine coverage, i.e., vaccination record or mother's report. The second indicator shows the proportion of children who had been vaccinated by age 12 months, the age at which vaccination coverage should be complete.

Table 8.8 Vaccinations by source of information

Percentage of children 12-23 months who had received specific vaccines at any time before the survey, by whether the information was from the vaccination card or from the mother, and the percentage vaccinated by 12 months of age, Bangladesh 1999-2000

Source of information	Percentage of children who received:										
		DPT			Polio						
	BCG	1	2	3+	1	2	3+	Measles	All[1]	None	Number
Vaccinated at any time before the survey											
Vaccination card	43.4	43.5	41.5	38.1	43.4	41.5	38.2	34.4	33.7	0.0	572
Mother's report	47.6	45.4	40.1	34.0	46.0	40.1	32.6	36.5	26.7	8.0	743
Either source	91.0	88.9	81.6	72.1	89.4	81.6	70.8	70.8	60.4	8.0	1,316
Vaccinated by 12 months of age	90.0	88.4	80.7	70.2	89.1	80.7	69.1	62.1	52.8	8.4	1,316

Note: For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.
[1] Children who are fully vaccinated (i.e., those who have received BCG, measles, and three doses of DPT and polio).

According to information from both the vaccination records and mother's recall, only 60 percent of Bangladeshi children 12-23 months can be considered to be fully immunized. Although the level of coverage for BCG and the first two doses of DPT and polio exceeds 80 percent, the proportion who go on to receive the third dose of these two vaccines falls off sharply, to 72 percent for the third dose of the DPT vaccine and to only 71 percent for the third dose of the polio vaccine (Figure 8.2); dropout rates[3] between the first and third doses of DPT and of polio are thus 19 and 21 percent, respectively. Seventy-one percent of children age 12-23 months have received the measles vaccine. Only 8 percent have received no vaccinations.

As mentioned earlier, it is recommended that children complete the schedule of immunizations during their first year of life, i.e., by 12 months of age. Table 8.8 shows that among children age 12-23 months at the time of interview, 53 percent had been fully vaccinated before their first birthday. Regarding specific vaccines, children were least likely to have received the third doses of the polio and the measles vaccines by age 12 months.

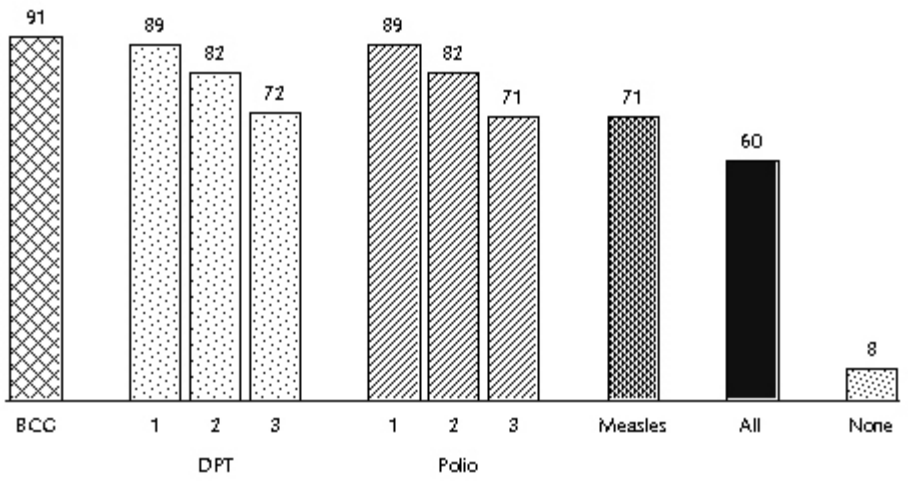
Differentials in Vaccination Coverage

Table 8.9 shows vaccination coverage rates among children age 12-23 months by selected background characteristics, including the child's sex and birth order, urban-rural residence, division, and the mother's educational level. The figures refer to the proportion of children receiving the vaccinations at any time up to the date of the survey, and they are based on information from both the vaccination records and mother's reports. The table includes information on the proportion of children for whom a vaccination record was shown to the interviewer.

The data indicate that boys are somewhat more likely than girls to receive basic immunizations. For most vaccinations, the difference is small, with about 2 to 5 percent more boys than girls receiving the immunization. Overall, 63 percent of boys receive all of the recommended immunizations, compared with 57 percent of girls (Figure 8.3).

[3] Dropout rate = (Dose 1 - Dose 3) * 100 / Dose 1

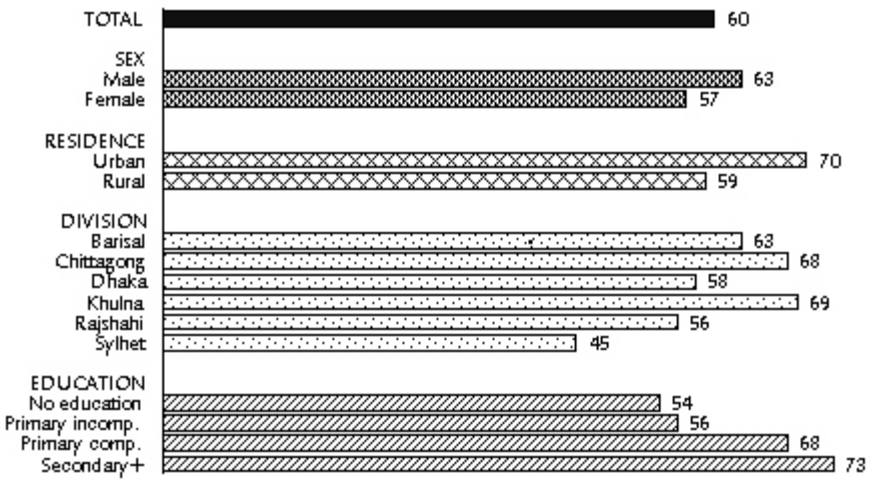
Figure 8.2 Percentage of Children 12-23 Months Who Have Received Specific Vaccinations



Note: Based on health card information and mothers' reports

BDHS 1999-2000

Figure 8.3 Percentage of Children Age 12-23 Months Who Have Received All Vaccinations by Background Characteristics



BDHS 1999-2000

Table 8.9 Vaccinations by background characteristics

Percentage of children 12-23 months who had received specific vaccines by the time of the survey (according to the vaccination card or the mother's report) and the percentage with a vaccination card, by background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage of children who received:										Percentage with a vaccination card	Number
		DPT			Polio							
	BCG	1	2	3+	1	2	3+	Measles	All[1]	None		
Child's sex												
Male	92.5	90.7	83.8	75.9	90.4	83.2	73.7	73.2	63.4	7.1	45.5	693
Female	89.3	87.0	79.2	67.8	88.4	79.8	67.6	68.2	57.0	9.1	41.2	623
Birth order												
1	95.9	93.6	89.4	78.3	95.0	89.5	75.1	75.7	64.3	3.7	50.8	383
2-3	92.6	91.3	83.0	74.6	91.1	83.4	74.2	73.6	64.4	6.6	42.0	572
4-5	86.7	81.9	74.0	63.9	83.6	74.0	63.6	63.1	52.8	10.8	41.6	236
6+	77.0	77.0	65.8	56.9	75.3	63.6	55.4	57.8	44.7	22.5	31.6	125
Residence												
Urban	95.2	95.0	90.3	82.0	95.3	90.7	79.6	80.7	69.7	3.7	52.9	220
Rural	90.2	87.7	79.9	70.0	88.2	79.7	69.0	68.9	58.5	8.9	41.6	1,095
Division												
Barisal	94.8	93.7	88.5	76.9	95.3	89.0	78.8	70.2	63.0	4.7	53.0	77
Chittagong	94.1	91.1	85.7	78.1	92.6	87.9	76.5	77.2	68.4	5.7	40.5	274
Dhaka	86.5	84.8	76.8	68.8	86.8	79.2	68.2	65.9	57.8	12.2	39.7	403
Khulna	95.1	93.9	90.3	80.8	95.6	91.0	78.5	81.0	68.6	3.6	55.2	160
Rajshahi	94.3	92.0	81.8	69.5	88.9	77.0	67.3	70.4	56.4	4.7	43.2	307
Sylhet	80.4	78.3	69.3	58.3	77.7	65.9	56.7	58.2	45.3	18.3	41.5	94
Mother's education												
No education	86.3	84.0	74.9	65.5	84.4	74.3	64.4	63.7	53.7	12.4	38.1	607
Primary incomplete	91.6	86.7	77.9	66.5	89.2	77.9	66.1	63.0	55.6	7.8	43.9	228
Primary complete	95.5	95.5	88.7	80.7	95.6	92.2	77.9	79.5	67.7	3.9	52.3	137
Secondary+	97.0	96.6	93.1	83.8	96.0	92.6	82.2	85.1	72.5	2.1	49.2	344
Total	91.0	88.9	81.6	72.1	89.4	81.6	70.8	70.8	60.4	8.0	43.5	1,316

Note: The DPT coverage rate for children without a written record is assumed to be the same as that for polio since mothers were specifically asked whether the child had received polio vaccine.

[1] Children who are fully vaccinated (i.e., those who have received BCG, measles, and three doses of DPT and polio).

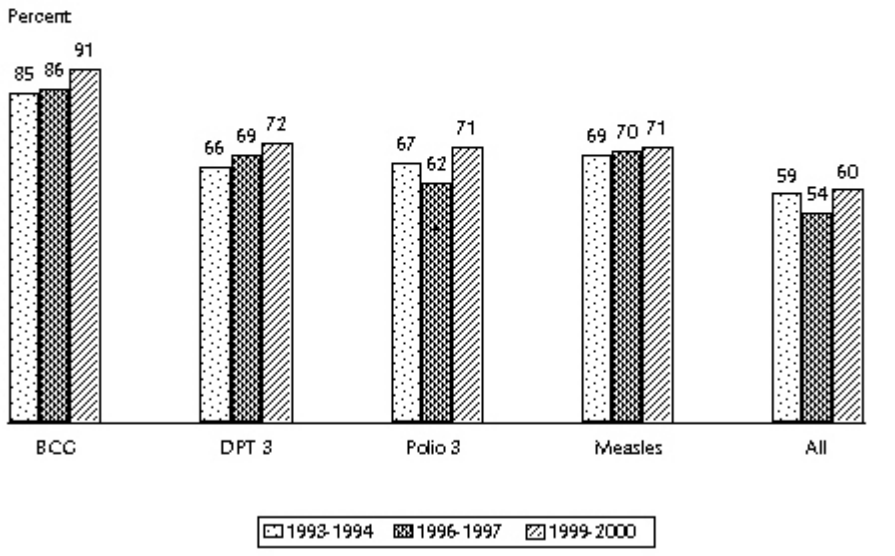
Children of birth order 6 and above are less likely than children of lower birth orders to receive the basic childhood immunizations. The difference is particularly wide for the third dose of DPT, which is given to about 57 percent of children of birth order 6 and above, compared with 78 percent of first-born children. The vaccination program has been more successful in urban areas, even though almost three-fifths of the children in rural areas have been fully immunized.

Children in Sylhet Division are less likely to be fully immunized than children in other divisions. Only 45 percent of the children in Sylhet Division are fully immunized, compared with 69 percent of those in Khulna Division. Much of the divisional difference is due to higher dropout rates between the first and third doses of DPT and polio and especially to lower proportions who receive the measles vaccine. As expected, the proportion of children who receive all the recommended vaccinations increases with the educational level of the mother, from 54 percent among children of mothers with no education to 73 percent among those whose mother has at least some secondary education.

TRENDS IN VACCINATION COVERAGE

The current survey collected vaccination data using the same methodology used in the 1996-1997 BDHS survey, providing an ideal opportunity to look at trends in coverage over the last five years. The proportion fully immunized among children age 12-23 months has increased from 54 percent in 1996-1997 to 60 percent in 1999-2000 (Figure 8.4). Closer examination of the data by vaccine indicates that this trend is almost entirely due to an increase in the proportion receiving the third dose of polio vaccine (from 62 percent in 1996-1997 to 71 percent in 1999-2000).

Figure 8.4 Trends in Vaccination Coverage among Children Age 12-23 Months



8.5 CHILDHOOD ILLNESS AND TREATMENT

Two illnesses that are major contributors to childhood mortality in Bangladesh are discussed in this section: acute respiratory infection and diarrhea. Estimates of the prevalence of these illnesses and fever, as well as data concerning types of treatment, are presented. Data are also presented on the extent of use of vitamin A supplementation capsules. Vitamin A deficiency is associated with increased rates of serious morbidities and early childhood mortality.

ACUTE RESPIRATORY INFECTION

Acute respiratory infection (ARI) is one of the major causes of morbidity and mortality among children in Bangladesh. Common symptoms associated with severe respiratory infection include fever, cough, and difficult or rapid breathing or chest indrawing. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths from respiratory infections.

The 1999-2000 BDHS survey defines respiratory illness as cough and rapid or difficult breathing or chest indrawing. Mothers of children under five were asked in the 1999-2000 BDHS survey whether their children had had a respiratory illness during the two weeks prior to the survey. Those who said yes were asked what treatment the children had been given. It bears mentioning that reports of disease prevalence are inherently imprecise, since they are based on a mother's subjective assessment. Information on the prevalence and treatment of ARI is presented in Table 8.10.

Table 8.10 Prevalence and treatment of acute respiratory infection

Percentage of children under five years who were ill with acute respiratory infection (ARI)[1] during the two weeks preceding the survey, and the percentage of those with a cough who were taken to a health facility, by background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage with ARI[1]	Percentage of those with ARI taken to a health facility	Number
Child's age			
Under 6 months	23.4	24.8	771
6-11 months	22.6	23.7	541
12-23 months	23.5	31.5	1,316
24-35 months	17.1	29.7	1,299
36-47 months	14.7	27.4	1,223
48-59 months	12.9	20.7	1,280
Child's sex			
Male	19.0	29.6	3,279
Female	17.7	24.6	3,151
Residence			
Urban	16.2	48.1	1,059
Rural	18.8	23.6	5,371
Division			
Barisal	19.9	23.3	404
Chittagong	20.7	29.0	1,432
Dhaka	15.3	28.1	1,956
Khulna	17.1	34.1	680
Rajshahi	18.8	21.0	1,503
Sylhet	23.0	31.7	455
Mother's education			
No education	19.3	23.4	3,007
Primary incomplete	18.8	22.1	1,199
Primary complete	18.1	30.0	677
Secondary+	16.3	39.3	1,547
Total	18.3	27.2	6,430

[1]Refers to cough with either rapid or difficult breathing or chest indrawing.

Altogether, 18 percent of children under five years were reported to have had respiratory illness in the two weeks before the survey. ARI is slightly less common among children over 24 months old than it is among those under two years. There are no significant differences in ARI prevalence by sex or mother's education, nor by urban-rural residence. ARI seems more prevalent in Sylhet Division and less common in Dhaka.

Overall, slightly more than one-quarter (27 percent) of children who have symptoms of ARI are taken to a health facility for treatment.[4] Boys are more likely than girls to be taken to a health facility when ill with ARI. Children of educated mothers are more likely to be taken to a health facility when sick with ARI than those whose mother had less education. Children in Khulna Division who have symptoms of ARI are more likely to be taken to a health facility than those in Rajshahi Division.

Using the same definition of ARI used for the 1996-1997 BDHS survey (cough and rapid breathing), the 1999-2000 BDHS survey shows an increase in the prevalence of respiratory illness from 13 percent in 1996-1997 (Mitra et al., 1997:121) to 17 percent in 1999-2000. The proportion taken to a health facility has slightly decreased from 33 percent in 1996-1997 to 27 percent in 1999-2000.

[4]Health facilities include government hospitals, family welfare centers, thana health complexes, satellite clinics, community health workers, private doctors, and private clinics.

The BDHS Survey results indicate that more than one-third of children under five were reported to have been ill with a fever during the two weeks preceding the survey, with those age 6-23 months more likely to have been ill. Differentials by background characteristics are small (Table 8.11). Only 13 percent of the children with fever were taken for treatment.

Table 8.11 Treatment for fever

Percentage of children under five years who were ill with a fever during the two weeks preceding the survey and among those children the percentage taken for treatment to a health facility or provider, by background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage of children with fever	Number	Among children with fever, percentage taken to: Private physician	Hospital	Health center	Health post	Shop	Traditional practitioner	Other	Number of children with fever
Child's age										
Under 6 months	34.4	771	3.1	0.5	0.4	0.2	2.5	2.9	3.5	265
6-11 months	49.6	541	3.6	0.5	0.3	0.7	4.5	3.6	2.8	268
12-23 months	44.4	1,316	4.8	0.7	0.5	0.6	3.7	3.5	1.9	584
24-35 months	39.0	1,299	4.6	0.5	0.5	0.3	2.9	3.2	1.3	507
36-47 months	31.4	1,223	2.6	0.6	0.5	0.2	2.7	2.6	1.4	384
48-59 months	30.0	1,280	3.4	0.3	0.4	0.2	2.1	3.2	1.2	384
Child's sex										
Male	38.5	3,279	4.1	0.6	0.4	0.4	3.2	3.4	1.7	1,262
Female	35.9	3,151	3.4	0.5	0.6	0.3	2.8	2.9	2.0	1,131
Residence										
Urban	37.5	1,059	6.3	1.6	0.2	0.2	2.9	1.9	1.7	397
Rural	37.1	5,371	3.3	0.3	0.5	0.4	3.0	3.4	1.9	1,995
Division										
Barisal	42.1	404	3.0	0.4	0.8	0.4	3.8	1.6	1.4	171
Chittagong	43.1	1,432	4.5	0.2	0.4	0.7	3.2	4.1	1.8	617
Dhaka	33.8	1,956	4.2	0.8	0.3	0.2	2.8	3.0	1.3	661
Khulna	27.7	680	4.2	0.7	0.2	0.2	1.6	1.9	1.8	188
Rajshahi	37.0	1,503	2.4	0.3	0.8	0.4	3.5	3.2	2.7	556
Sylhet	43.5	455	4.3	1.0	0.4	0.2	2.6	3.5	2.3	199
Education										
No education	37.2	3,007	2.8	0.3	0.6	0.3	2.8	3.0	1.8	1,120
Primary incomplete	37.9	1,199	3.2	0.4	0.5	0.2	3.2	3.4	2.0	454
Primary complete	38.2	677	3.7	0.5	0.4	0.8	3.9	3.5	1.4	259
Secondary or higher	36.1	1,547	6.2	1.1	0.3	0.4	2.8	3.2	2.0	559
Total	37.2	6,430	3.8	0.5	0.5	0.4	3.0	3.2	1.8	2,392

CHILDHOOD DIARRHEA

Dehydration caused by severe diarrhea is a major cause of morbidity and mortality among young children in Bangladesh. The administration of oral rehydration therapy (ORT) is a simple means of countering the effects of dehydration. ORT involves giving the child a solution prepared by mixing water with commercially prepared packets of oral rehydration salts (ORS, also called *khabar* saline or packet saline) or a homemade solution made from sugar, salt, and water (also called *labon gur*). Oral rehydration therapy was developed in Bangladesh more than 30 years ago

by what is now called the International Centre for Diarrhoeal Disease Research, Bangladesh. ORS packets are currently available through health facilities and at shops and pharmacies in Bangladesh, many of which are distributed by the Social Marketing Company.

In the BDHS survey, mothers of children under age five were asked whether their children had experienced an episode of diarrhea in the two weeks before the survey. If the child had had diarrhea, the mother was asked what she had done to treat the diarrhea. Since the prevalence of diarrhea varies seasonally, the results pertain only to the pattern during the period between November and March when the BDHS interviewing took place.

Table 8.12 presents information on recent episodes of diarrhea among young children and the actions that were taken to treat the illness. Overall, 6 percent of children under age five were reported to have had diarrhea in the two-week period before the survey. Diarrhea prevalence is highest among children age 6-23 months, a period during which solid, adult-type foods are being introduced. This pattern is believed to be associated with increased exposure to the illness as a result of both weaning and the greater mobility of the child as well as with the immature immune system of children in this age group. Differences in the prevalence of diarrhea according to other background characteristics are minimal.

Table 8.12 Prevalence of diarrhea

Percentage of children under five years of age who had diarrhea in the two weeks preceding the survey, by background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage with diarrhea	Number
Child's age		
<6 months	3.4	771
6-11 months	11.9	541
12-23 months	11.8	1,316
24-35 months	5.6	1,299
36-47 months	3.8	1,223
48-59 months	2.3	1,280
Child's sex		
Male	6.4	3,279
Female	5.8	3,151
Birth order		
1	6.1	1,830
2-3	6.0	2,753
4-5	6.9	1,128
6+	5.7	719
Residence		
Urban	7.1	1,059
Rural	5.9	5,371
Division		
Barisal	7.8	404
Chittagong	5.6	1,432
Dhaka	6.9	1,956
Khulna	5.5	680
Rajshahi	5.2	1,503
Sylhet	7.0	455
Mother's education		
No education	6.2	3,007
Primary incomplete	5.9	1,199
Primary complete	6.6	677
Secondary+	6.1	1,547
Total	6.1	6,430

Treatment of Diarrhea

About one-quarter (24 percent) of children under five whose mother reported that they had had diarrhea in the two weeks before the survey were taken to a health facility for consultation (Table 8.13). More than 60 percent of children with diarrhea were given a solution made from ORS packets, while 25 percent were given a recommended home fluid (RHF, or *labon gur*) made from sugar, salt, and water, and half were given more fluids than usual. If oral rehydration therapy is defined broadly to include ORS, *labon gur*, and increased fluids, then 81 percent of children with diarrhea received some sort of oral rehydration treatment, while 19 percent received neither ORS, *labon gur*, nor increased fluids. Forty-eight percent of children with diarrhea were given some kind of pill or syrup

to treat the disease, while 6 percent were given home remedies or herbs. About 1 in 18 children with diarrhea was given nothing to treat the diarrhea.

Younger children are more likely to be taken to a health facility when they have diarrhea than older children. Female children with diarrhea are slightly less likely than male children to be taken to a health facility but are as likely as boys to be treated with ORS or *labon gur*.

Table 8.13 Treatment of diarrhea

Among children under five years who had diarrhea in the two weeks preceding the survey, the percentage taken for treatment to a health facility or provider, the percentage who received oral rehydration therapy (either solution prepared from ORS packets or recommended home fluids (RHF I)), and increased fluids, the percentage who received neither oral rehydration therapy nor increased fluids, and the percentage receiving other treatments, by background characteristics, Bangladesh 1999-2000

		Oral rehydration therapy					Other treatment					
Background characteristic	Taken to a health facility	ORS packet	RHF at home	Either ORS or RHF	Increased fluids	No ORS/ RHF/ increased fluids	Pill or syrup	Injection	Home remedies/ herbs/ other	No treatment	Missing	Number of children with diarrhea
Child's age												
<6 months	*	*	*	*	*	*	*	*	*	*	*	26
6-11 months	29.1	60.1	20.1	69.0	55.3	22.2	48.1	1.0	14.6	6.3	8.1	64
12-23 months	27.7	63.4	22.4	75.8	48.2	16.0	54.7	1.0	4.8	5.1	2.0	155
24-35 months	21.9	69.6	31.7	84.0	60.0	6.4	38.9	0.0	7.7	0.0	4.0	73
36-47 months	(7.2)	(54.9)	(32.0)	(72.3)	(53.8)	(20.0)	(47.9)	(0.0)	(3.2)	(3.6)	(5.8)	46
48-59 months	(18.8)	(74.5)	(37.2)	(87.6)	(43.7)	(10.3)	(51.6)	(5.0)	(0.0)	(2.4)	(5.0)	29
Child's sex												
Male	25.7	60.9	24.3	71.0	47.0	23.3	49.1	1.5	4.1	4.7	8.3	211
Female	22.5	61.9	25.2	76.7	52.6	13.8	45.7	0.3	8.3	6.1	2.6	184
Birth order												
1	27.7	66.7	22.6	74.1	50.5	19.0	47.8	1.7	3.9	7.3	4.6	111
2-3	23.7	58.9	25.5	73.9	52.6	16.3	46.9	0.7	5.4	5.1	4.6	164
4-5	19.7	60.3	23.6	69.9	40.5	27.4	42.6	0.0	11.3	5.8.0	8.7	78
6+	(25.2)	(59.0)	(29.4)	(78.4)	(52.1)	(12.8)	(58.6)	(1.6)	(5.1)	(0.6)	(7.1)	41
Residence												
Urban	35.7	72.6	16.6	79.7	52.8	17.8	47.4	1.2	2.5	2.7	4.9	75
Rural	21.5	58.8	26.6	72.2	48.8	19.1	47.5	0.9	6.9	6.0	5.9	319
Division												
Barisal	(15.5)	(45.8)	(21.2)	(53.8)	(45.8)	(35.6)	(34.1)	(0.0)	(5.3)	(9.1)	(18.6)	31
Chittagong	21.9	67.9	14.1	79.0	39.9	18.0	52.7	0.0	1.5	3.0	6.0	80
Dhaka	25.2	65.2	30.5	77.9	48.2	17.7	50.4	0.0	7.3	5.5	1.4	135
Khulna	(22.4)	(46.0)	(16.5)	(59.1)	(49.6)	(24.7)	(50.4)	(2.5)	(13.1)	(6.4)	(7.6)	38
Rajshahi	26.1	63.5	33.8	76.6	63.5	14.0	42.1	1.9	5.6	7.5	5.6	78
Sylhet	(31.8)	(57.3)	(17.5)	(71.3)	(49.8)	(14.7)	(45.0)	(4.0)	(6.0)	(0.8)	(8.0)	32
Mother's education												
No education	17.6	57.8	25.1	71.6	46.5	19.2	40.7	0.7	7.9	4.6	7.0	185
Primary incomplete	24.4	59.2	22.7	71.4	48.4	21.6	52.2	0.0	2.0	6.2	5.4	71
Primary complete	(21.9)	(60.7)	(25.7)	(76.0)	(58.6)	(15.6)	(61.8)	(0.0)	(9.4)	(3.7)	(2.1)	45
Secondary+	38.1	70.6	24.8	78.2	52.3	17.8	50.6	2.5	3.9	6.9	4.9	94
Total	24.2	61.4	24.7	73.6	49.6	18.9	47.5	0.9	6.1	5.4	5.7	394

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates that the number is based on fewer than 25 children and has been suppressed.
ORS = Oral rehydration salts
RHF = Recommended home fluid *(labon gur)*

The data indicate important differences in the treatment of diarrhea cases by urban-rural residence. Not only are urban children with diarrhea more likely than rural children to be taken to a health facility, but they are also more likely to be treated with ORS packets and increased fluids of any kind. Recommended home fluid or *labon gur* is given to rural children (27 percent) more often than their urban counterparts (17 percent). Differences in the treatment of diarrhea by division are made difficult by the small number of children with diarrhea in many divisions.

Children of a mother with at least some secondary education are more likely to be taken to a health facility when they have diarrhea than children whose mother is less educated, and they are also more likely to be treated with ORS packets or by increased fluids in general.

The BDHS survey also directly investigated the extent to which mothers made changes in the amount of fluids that a child received during a diarrheal episode. To obtain these data, mothers who had a child under age five with diarrhea during the two-week period prior to the survey were asked whether they had changed the amount that the child was given to drink during the diarrheal episode. The data indicate that more than one-fourth (26 percent) of children with diarrhea were given the same amount of fluids as usual and half received more fluids than usual; nearly one-fourth (24 percent) received less fluids than usual (data not shown). These results suggest that, although the benefit of increasing fluid intake during a diarrheal episode is widely understood in Bangladesh, about one in four mothers still engages in the dangerous practice of curtailing fluid intake when their children have diarrhea.

Data shows a slight decline in the prevalence of diarrhea over time: from 8 percent of children under five in 1996-1997 to 6 percent in 1999-2000 and an increase in the use of ORS from 49 percent in 1996-1997 to 61 percent in 1999-2000.

Vitamin A Supplementation

Vitamin A deficiency is the leading cause of preventable childhood blindness, as well as a major contributing factor to the severity of several other causes of childhood morbidity and mortality. Deficiency in this crucial micronutrient can be avoided by giving children supplements of vitamin A by capsule, usually every six months. Bangladesh has instituted such a program of supplementation through its health care system. In the 1999-2000 BDHS survey, mothers of children under age five were asked whether their children had taken a vitamin A capsule in the past six months; in any case of confusion, interviewers showed mothers a sample of a vitamin A capsule.

The BDHS data indicate that 73 percent of children under five had received at least one capsule of vitamin A in the six months before the survey (Table 8.14). Differences by background characteristics are minimal, except that children living in Sylhet Division were less likely to have received a vitamin A supplement than children in other divisions. The data show an increase in coverage from 67 percent of children under five in 1996-1997 to 73 percent in 1999-2000.

Perceived Problems in Accessing Women's Health Care

The BDHS survey collected information from women about their perceived problems in accessing health care for themselves. The results show that 80 percent of women feel that not having a health care facility nearby is an obstacle in accessing health care (Table 8.15). Half of the women mentioned that lack of confidence in the services and going to the health center are problems in accessing women's health care. Seventy-one percent of women say that getting money for treatment and 44 percent say that getting permission to go are obstacles in access to health care. Almost two-thirds said that not knowing where to go is a major obstacle in accessing care.

Table 8.14 Treatment with vitamin A capsules

Percentage of children under five years who received a Vitamin A capsule in the six months preceding the survey, by background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage who received vitamin A capsule	Number
Child's age		
<6 months	29.6	771
6-11 months	69.5	541
12-23 months	79.6	1,316
24-35 months	82.0	1,299
36-47 months	79.6	1,223
48-59 months	80.0	1,280
Child's sex		
Male	74.4	3,279
Female	72.2	3,151
Birth order		
1	73.7	1,830
2-3	74.0	2,753
4-5	73.9	1,128
6+	69.1	719
Residence		
Urban	76.1	1,059
Rural	72.8	5,371
Division		
Barisal	69.9	404
Chittagong	68.9	1,432
Dhaka	75.3	1,956
Khulna	76.7	680
Rajshahi	77.3	1,503
Sylhet	63.7	455
Mother's education		
No education	70.4	3,007
Primary incomplete	75.6	1,199
Primary complete	71.9	677
Secondary+	78.0	1,547
All children	73.3	6,430

Table 8.15 Perceived problems in accessing women's health care

Percentage of women who report specific big problems in accessing health care for themselves, by type of problem and selected background characteristics, Bangladesh 1999-2000

Background characteristic	Type of problem in accessing health care								
	Knowing where to go	Not having a health facility nearby	Going to health center	Lack of confidence in source of services	Getting permission to go	Getting money needed for treatment	Getting someone to accompany	Any problem	Number
Number of living children									
None	17.2	21.7	13.9	16.2	13.8	18.6	14.4	23.8	1,313
1	66.9	86.5	51.5	59.4	47.9	73.4	52.7	96.0	2,131
2-3	69.7	87.0	54.2	58.8	47.6	78.6	53.5	96.5	4,201
4-5	70.7	87.6	56.6	60.9	48.2	83.0	55.5	96.9	2,019
6+	74.7	87.9	60.6	61.0	52.2	84.9	57.5	98.0	880
Residence									
Urban	54.4	73.4	35.6	46.6	30.4	59.3	40.1	84.0	2,071
Rural	65.3	80.3	53.0	56.1	47.3	74.4	51.4	88.4	8,473
Division									
Barisal	64.6	79.3	53.3	62.9	49.6	72.2	57.0	87.5	688
Chittagong	58.1	74.6	36.5	45.9	34.8	70.0	40.4	87.3	1,965
Dhaka	60.3	81.0	49.9	51.5	36.8	68.6	44.5	88.1	3,257
Khulna	60.7	77.1	46.7	52.8	48.1	67.7	49.1	85.0	1,281
Rajshahi	71.0	80.0	57.5	60.5	55.2	76.6	57.1	88.2	2,728
Sylhet	63.9	81.0	56.8	60.2	46.1	75.2	58.4	87.2	624
Education									
No education	70.0	84.0	58.3	59.6	49.8	84.2	56.5	92.5	4,843
Primary incomplete	64.6	80.6	53.7	54.8	46.4	74.9	50.9	88.1	1,928
Primary complete	60.8	78.2	46.9	51.8	44.8	69.1	51.5	87.5	1,074
Secondary or higher	51.0	69.0	32.3	45.0	31.4	47.1	33.8	78.2	2,699
Current employment									
Not employed	62.6	78.6	49.3	53.9	44.9	69.6	48.6	87.1	8,167
Employed for cash	64.6	80.0	50.2	54.6	40.3	77.1	50.2	89.0	2,087
Employed for kind	69.1	81.0	54.4	59.8	43.4	82.0	57.9	89.3	277
Total	63.2	79.0	49.6	54.2	44.0	71.4	49.2	87.5	10,544

Note: Employment data for 13 women are missing.

INFANT FEEDING AND CHILDHOOD AND MATERNAL NUTRITION 9

This chapter covers two related topics: infant feeding (including initiation of breastfeeding, patterns and duration of breastfeeding, and introduction of complementary weaning foods) and nutritional status of young children and their mothers. Height and weight measurements of mothers and their children under the age of five years were taken to determine their nutritional status.

9.1 INFANT FEEDING PRACTICES

Infant feeding practices have significant effects on both mothers and children. Mothers are affected through the influence of breastfeeding on the period of postpartum infertility and hence on fertility levels and the length of birth intervals. These effects vary by both the duration and intensity of breastfeeding. Proper infant feeding, starting from the time of birth, is important for the physical and mental development of the child. Breastfeeding improves the nutritional status of young children and reduces morbidity and mortality. Breast milk not only provides important nutrients but also protects the child against infection. The timing and type of supplementary foods introduced in an infant's diet also have significant effects on the child's nutritional status.

WHO has suggested several indicators of breastfeeding practices to guide countries in gathering information for measuring and evaluating infant feeding practices. These indicators include the ever breastfed rate, the exclusive breastfeeding rate, the timely complementary feeding rate, the continued breastfeeding rate, and the bottle-feeding rate. The *exclusive breastfeeding rate* is defined as the proportion of infants under age four months who receive only breast milk. The *timely complementary feeding rate* is the proportion of infants age 6-9 months who receive both breast milk and solid or semisolid food. The *continued breastfeeding rate through one year of age* is the proportion of children age 12-15 months who are still breastfed. The *continued breastfeeding rate until two years of age* is the proportion of children age 20-23 months who are still breastfed. The *bottle-feeding rate* is the proportion of infants who are fed using a bottle with a nipple. These indicators of breastfeeding and other feeding practices are presented in this section.

PREVALENCE OF BREASTFEEDING

Table 9.1 shows the proportion of children born during the five years before the survey who were ever breastfed and the percentage who started breastfeeding within one hour and within one day of birth. Almost all Bangladeshi children (97 percent) are breastfed for some period of time, regardless of background characteristics of the child or the mother. Previous research confirms the universality of breastfeeding in Bangladesh (Mitra et al., 1997:129).

Initiation of breastfeeding immediately after childbirth is important because it benefits both the mother and the infant. As soon as the infant starts suckling at the breast, the hormone oxytocin is released, resulting in uterine contractions that facilitate expulsion of the placenta and reduce the risk of postpartum hemorrhage. It is also recommended that the first breast milk (colostrum) be given to the child, rather than squeezed from the breast and discarded, because it provides natural immunity for the child.

Table 9.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed and who started breastfeeding within one hour and within one day of birth, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding: Within 1 hour of birth	Within 1 day of birth	Number
Sex				
Male	97.1	16.8	63.0	3,554
Female	97.1	16.2	62.6	3,385
Residence				
Urban	97.0	22.8	66.3	1,142
Rural	97.1	15.3	62.1	5,797
Division				
Barisal	96.6	19.5	67.3	435
Chittagong	98.0	16.1	73.0	1,522
Dhaka	97.1	17.0	59.2	2,127
Khulna	96.7	15.7	55.4	716
Rajshahi	96.4	14.9	55.1	1,627
Sylhet	97.3	19.2	78.0	513
Mother's education				
No education	96.9	12.0	59.1	3,286
Primary incomplete	97.9	16.1	59.6	1,290
Primary complete	97.3	19.9	65.5	721
Secondary +	96.9	24.3	71.6	1,642
Assistance at delivery				
Medically trained	95.7	28.6	72.0	839
Traditional midwife	97.6	15.9	64.3	4,417
Other or none	96.3	12.4	54.6	1,667
Place of delivery				
Health facility	94.6	30.0	71.4	391
At home	97.3	15.6	62.2	6,358
Other	95.9	23.7	71.3	160
Total	97.1	16.5	62.8	6,939

Note: Total includes 17 children for whom information on assistance at delivery and 60 children for whom information on place of delivery is missing.

In Bangladesh, although almost all babies are breastfed at some time, only 17 percent are put to the breast within one hour of birth and less than two-thirds (63 percent) are put to the breast within the first day of life. Infants born to an urban mother, those in the Chittagong and Sylhet divisions, children born to a mother with some secondary education, those not born at home, and those whose birth was attended by a health professional have a slightly greater chance of receiving breast milk within the first day of life.

Timing of the Introduction of Supplementary Foods

The timing of the introduction of complementary foods in addition to breast milk has important implications for the child and the mother. Breast milk is uncontaminated and contains all the nutrients needed by children in the first few months of life. Early supplementation, especially under unhygienic conditions, can result in infection with foreign organisms and lower immunity to disease. The timing of the introduction of food supplements also has an impact on the length of the mother's postpartum amenorrhea. Early initiation of supplementation results in earlier resumption of the mother's menstrual periods since supplementation reduces the infant's dependence on breast milk and the frequency of suckling.

Mothers of children born in the five years before the survey were asked whether the child had been given plain water, other liquids, or solid or mushy (semisolid) food at any time during the day or night before the interview. The introduction of supplementary foods before four months of age puts infants at risk of malnutrition because other liquids and solid foods are nutritionally inferior to breast milk. Consumption of liquids and solid or mushy foods at an early age also increases children's exposure to pathogens and consequently puts them at a greater risk of getting diarrhea.

The results shown in Table 9.2 indicate that babies are breastfed for a long time; even among children 12-15 months old (continued breastfeeding rate through one year of age), 95 percent are still being breastfed, and among children 20-23 months old (continued breastfeeding rate through two years), at least 87 percent are still receiving breast milk. However, the data indicate that supplementation of breast milk with other liquids and foods begins early in Bangladesh. Among newborns less than two months of age, most are either exclusively breastfed (64 percent) or fully breastfed (8 percent); however, 28 percent of these very young babies are already receiving supplementary foods or liquids. Among those age 0-3 months, 38 percent are being given supplements. The corresponding figure for supplementary foods in the 1996-1997 BDHS survey was 32 percent, indicating that an increased proportion of babies is receiving supplementation before they should.

Among older children, lack of complementary feeding is a problem. From about six months of age, the introduction of complementary food is critical to meeting the protein, energy, and micronutrient needs of children. Among children age 7-9 months, when supplements other than breast milk are generally considered necessary for adequate nutrition, the data show that 16 percent of children are given only breast milk or breast milk and water. The corresponding figure for exclusive breastfeeding or breastfeeding plus water only in the 1996-1997 BDHS survey is 28 percent (Mitra et al., 1997:131). These results indicate that there has been some improvement in the timely complementary feeding rate in Bangladesh.

Duration of Breastfeeding

Table 9.3 shows three statistics that describe the duration of breastfeeding. Estimates of both means and medians are based on the current proportions of children breastfeeding among children born in the four years before the survey. The current status data are used as opposed to retrospective data on the length of breastfeeding of older children who are no longer breastfed because information on current status is usually more accurate than information based on mother's recall.

Table 9.2 Breastfeeding status by child's age

Percent distribution of children by breastfeeding status, according to child's age in months, Bangladesh 1999-2000

Age in months	Not breast-feeding	Breastfeeding and:			Total	Number
		Exclusively breastfed	Plain water only	Supplements		
0-1	0.8	63.5	7.8	28.0	100.0	236
2-3	0.6	44.6	8.7	46.1	100.0	310
4-5	0.8	30.0	13.5	55.7	100.0	225
6-7	3.8	11.2	12.6	72.3	100.0	165
8-9	3.3	4.3	9.7	82.6	100.0	189
10-11	2.8	2.9	13.0	81.2	100.0	187
12-13	5.2	2.2	6.1	86.5	100.0	272
14-15	4.5	3.7	5.3	86.6	100.0	266
16-17	5.9	0.0	3.7	90.4	100.0	212
18-19	6.9	2.3	2.7	88.1	100.0	180
20-21	13.6	0.8	2.1	83.4	100.0	179
22-23	12.0	0.2	2.4	85.4	100.0	206
24-25	21.4	0.0	0.9	77.7	100.0	299
26-27	28.9	0.3	1.0	69.8	100.0	273
28-29	39.1	0.0	0.8	60.1	100.0	193
30-31	43.8	0.0	0.8	55.4	100.0	183
32-33	51.1	0.0	0.0	48.9	100.0	182
34-35	50.1	0.0	2.1	47.8	100.0	170
36-37	67.2	0.0	0.0	32.8	100.0	288
38-39	63.6	0.0	0.0	36.4	100.0	211
40-41	74.0	0.0	0.0	26.0	100.0	210
0-3 months	0.7	52.8	8.3	38.3	100.0	546
4-6 months	2.1	25.1	13.4	59.4	100.0	314
7-9 months	2.9	5.8	10.4	80.9	100.0	265

Note: Breastfeeding status refers to preceding 24 hours. Children classified as *breastfeeding and plain water only* receive no supplements.

The median length of any breastfeeding in Bangladesh is 30.5 months or slightly more than two and half years, with some variations by background characteristics. The only exception is that babies in the Sylhet and Chittagong divisions are breastfed for shorter durations (median of 24.9 and 26.2 months, respectively) than those in the Rajshahi and Khulna divisions (33.2 and 37.2 months, respectively). The mean and median duration of any breastfeeding are almost the same. The mean durations of any breastfeeding, exclusive breastfeeding, and exclusive breastfeeding or breastfeeding with water only are 30.1 months, 3.8 months, and 5.5 months, respectively.

There has been a trend toward shorter duration of breastfeeding since 1993-1994. The median duration of breastfeeding has declined from 36 months in 1993-1994 to 33 months in 1996-1997 and to 31 months in 1999-2000 (Mitra et al., 1997: 132; 1994:120). It should be noted that although the medians are calculated from smoothed data, they are still dependent on the point at which the proportion breastfeeding dips below 50 percent and are therefore somewhat volatile. Thus, although some decline in breastfeeding duration is undoubtedly real, it may not be as rapid as it appears.

Table 9.3 Median duration and frequency of breastfeeding by background variables

Median durations of any, exclusive, and full breastfeeding among children under four years of age, and the percentage of children under six months of age who were breastfed six or more times in the 24 hours preceding the interview, according to background characteristics, Bangladesh 1999-2000

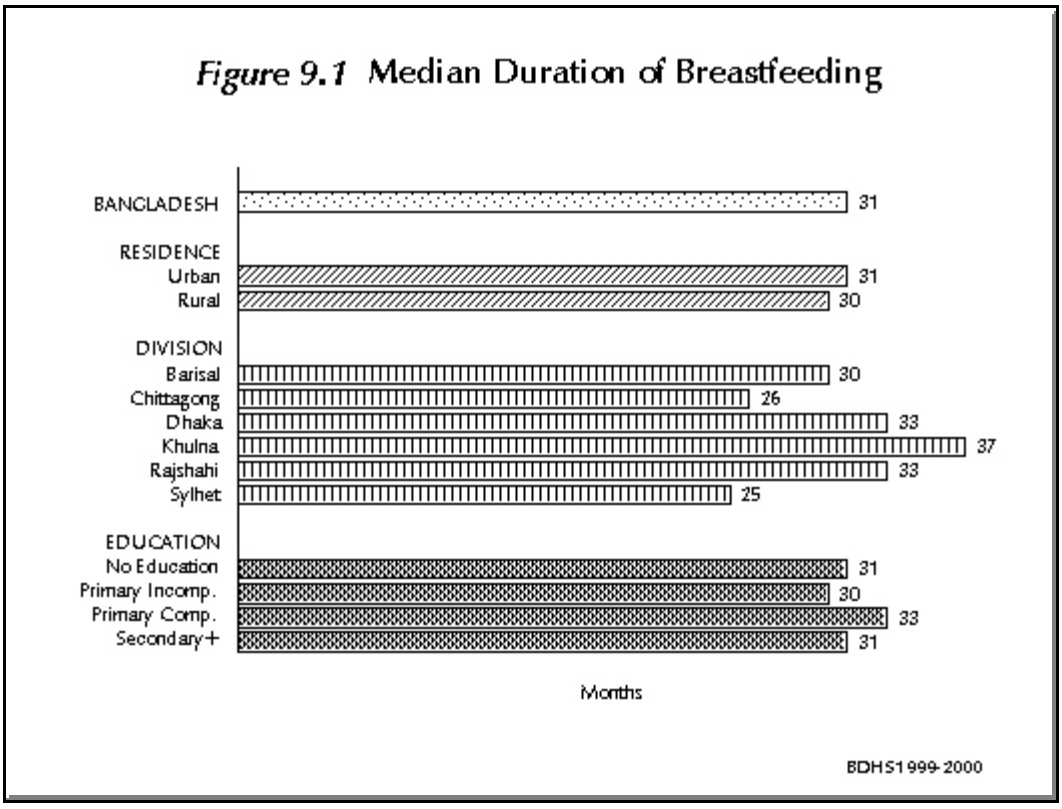
	Median duration (months) of breastfeeding among children under four				Children under six months	
Background characteristic	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding	Number	Breastfed 6+ times in preceding 24	Number
Sex						
Male	32.6	1.3	2.4	2,543	96.5	395
Female	30.0	2.2	3.4	2,452	96.0	375
Residence						
Urban	31.4	1.5	2.2	813	93.8	120
Rural	30.4	1.9	3.1	4,181	96.7	651
Division						
Barisal	29.8	2.9	4.7	300	100.0	42
Chittagong	26.2	3.0	4.6	1,105	94.7	182
Dhaka	32.5	1.5	2.2	1,524	96.2	239
Khulna	37.2	0.6	2.6	511	96.8	78
Rajshahi	33.2	2.0	2.9	1,178	98.3	170
Sylhet	24.9	1.1	1.4	376	91.8	60
Mother's education						
No education	31.2	2.0	3.1	2,328	96.4	305
Primary incomplete	29.5	1.6	3.2	916	98.0	150
Primary complete	32.7	1.3	3.3	523	92.0	88
Secondary +	30.6	1.8	2.6	1,228	96.5	227
Assistance at delivery						
Medically trained	29.1	0.7	1.3	633	94.9	103
Traditional midwife	32.3	2.1	3.3	3,163	96.1	494
Other or none	29.5	1.8	3.1	1,190	97.4	174
Total	30.5	1.8	2.9	4,995	96.2	771
Mean	30.1	3.8	5.5	na	na	na
Prevalence/incidence mean	25.3	2.9	4.4	na	na	na

Note: Total for median duration of breastfeeding includes 8 children for whom information on assistance at delivery is missing.
na = Not applicable

An alternative measure of the duration of breastfeeding is the prevalence-incidence mean, which is calculated as the "prevalence" of breastfeeding divided by its "incidence." In this case, prevalence is defined as the number of children who were breastfeeding at the time of the survey, and incidence is defined as the average number of births per month (averaged over a 48-month period to overcome problems of seasonality of births and possible reference-period errors). For each measure of breastfeeding, the prevalence-incidence mean is lower than the mean calculated in the conventional manner.

The early introduction of supplements is reflected in the short duration of exclusive breastfeeding (median duration of 1.8 months). Few children who receive supplements receive only plain water in addition to breast milk, and thus, the median duration of full breastfeeding is also short (2.9 months).

The median duration of any breastfeeding is two and half months shorter for girls than for boys. This pattern is often observed in societies where there is a strong preference for sons since the parents may stop breastfeeding a girl at a younger age to increase their chances of having another child earlier (with the hope that the next child will be a boy). The median length of any breastfeeding is one month longer in urban areas than in rural areas (Figure 9.1).



The duration of postpartum amenorrhea is affected by both the length of time spent breastfeeding and the frequency of breastfeeding. The child's health and nutritional status are also affected by the frequency of breastfeeding. Almost all children under the age of six months (96 percent) were reported to have been breastfed at least 6 times in the 24 hours preceding the survey. Differences among subgroups are minor.

Table 9.4 shows in more detail the types of food consumed by children under age three during the 24 hours before the interview. Because of the small number of nonbreastfeeding children under age two, all 2-month age categories before age 15 months have been combined into a broader age group (0-15 months). In Bangladesh, baby formula is not common among breastfeeding children, but it is common among nonbreastfeeding children. Almost half of nonbreastfeeding children age 0-15 months were given other types of milk the day before the interview, and this percentage steadily decreases to 25 percent among older children. Breastfeeding

children in various age groups who received nonpowdered milk increased from 8 percent among children under four months to about one-quarter of children for most age groups but peaked at 33 percent for children age 8-9 months. Liquids other than baby formula and fresh milk are commonly given to almost all children especially after age 8-9 months. More than half of breastfeeding children age 4-5 months and three-quarters of nonbreastfeeding children age 0-15 months were given these liquids the day before the interview. The consumption of green leafy vegetables steadily increases with age from 9 percent at age 6-7 months to 66 percent at age 32-35 months for breastfeeding children and is even higher for nonbreastfeeding children. Fruit (banana, papaya, or mango) consumption ranges from 22 to 36 percent among children over 15 months. Among children over 15 months, 21 to 29 percent of breastfeeding children and 16 to 36 percent of nonbreastfeeding children were given *dal*[1] in the 24 hours before the survey. Meat, fish, or eggs are more commonly given than *dal*, fruits, or other milk. The consumption of meat, fish, or eggs is more prevalent among nonbreastfeeding children. Grains and grain products such as rice, wheat, or porridge are the most common foods given. Among breastfeeding children, one-third of those age 6-7 months were given these grain products, and this proportion rises to more than 90 percent among older children. The proportion of nonbreastfeeding children receiving grains is similar.

Table 9.4 Foods received by children in preceding 24 hours

Percentage of children under three years of age who received specific foods in the 24 hours preceding the interview, by breastfeeding status and child's age, Bangladesh 1999-2000

	Foods received										
Child's age in months	Baby formula	Animal milk	Other liquids	Banana/ mango/ papaya	Green leafy vegetables	Rice/ wheat/ porridge	Meat/ fish/ eggs	Dal	Other solid, semisolid foods	Using bottle with nipple	Number
BREASTFEEDING CHILDREN											
< 2	2.1	7.8	23.9	1.1	0.0	0.5	0.0	0.0	8.0	10.3	234
2-3	8.5	8.3	39.8	3.3	0.0	4.8	0.0	0.0	15.9	21.9	308
4-5	7.0	22.1	54.7	3.7	1.0	12.3	0.6	0.3	12.3	28.0	223
6-7	8.6	23.8	79.7	10.1	8.5	32.8	7.2	2.7	12.6	25.2	159
8-9	11.9	33.1	92.3	18.4	18.8	59.2	14.0	9.0	18.3	17.3	183
10-11	8.6	26.8	95.4	13.6	25.6	65.0	15.9	10.7	14.4	11.1	182
12-15	5.6	25.5	94.2	18.9	44.7	80.5	37.7	16.5	14.1	12.9	512
16-19	5.1	26.1	97.2	21.7	54.7	86.7	47.3	24.3	11.9	7.8	367
20-23	4.1	24.6	99.4	31.8	62.0	90.5	59.4	27.5	16.5	5.4	336
24-27	4.3	23.7	99.5	22.4	61.3	93.7	64.5	24.0	14.3	5.5	429
28-31	3.2	30.5	98.9	27.5	59.8	96.3	68.8	28.7	19.4	5.9	220
32-35	4.0	24.0	100.0	23.4	65.9	93.8	66.0	20.6	16.3	3.4	174
< 4 months	5.7	8.1	32.9	2.4	0.0	2.9	0.0	0.0	12.4	16.9	542
4-5 months	7.0	22.1	54.7	3.7	1.0	12.3	0.6	0.3	12.3	28.0	223
6-9 months	10.4	28.7	86.4	14.6	14.0	46.9	10.8	6.1	15.7	21.0	342
Total	5.8	22.8	83.0	17.3	37.4	64.1	35.4	15.3	14.4	12.0	3,327
NONBREASTFEEDING CHILDREN											
0-15	36.0	49.8	76.5	28.2	37.1	69.9	37.2	27.6	12.2	66.9	50
16-19	21.3	46.5	91.6	16.9	43.3	82.0	54.5	24.8	3.2	63.1	25
20-23	8.7	33.2	97.0	26.9	57.5	89.5	61.0	16.3	19.7	27.7	49
24-27	4.7	27.5	95.8	22.2	62.0	94.0	73.3	25.0	13.2	8.7	143
28-31	5.2	27.9	100.0	26.0	74.3	99.2	70.3	28.5	11.2	9.9	155
32-35	5.6	25.0	97.9	25.5	75.9	94.8	74.4	36.4	15.5	5.3	178

[1] Liquid mixture of lentils and water.

Bottle-feeding has a direct effect on the mother's exposure to the risk of pregnancy because the period of amenorrhea may be shortened when breastfeeding is reduced or replaced by bottle-feeding. Because it is often difficult to sterilize the nipple properly, the use of a bottle with a nipple also exposes children to an increased risk of developing diarrhea and other diseases. The use of a bottle with a nipple is very common among young (under 20 months), nonbreastfeeding children in Bangladesh. About two-thirds of nonbreastfeeding children under age 20 months drank something from a bottle with a nipple during the day before the interview (Table 9.4). The use of a bottle with a nipple is much less common for breastfeeding children under 20 months and all children after two years of age.

9.2 CHILDREN'S NUTRITIONAL STATUS

In addition to questions about breastfeeding and weaning foods, the 1999-2000 BDHS survey included an anthropometric component in which all children under five and their mothers were both weighed and measured. Children younger than 24 months were measured lying down on the board (recumbent length), while standing height was measured for older children.

Evaluation of nutritional status is based on the rationale that in a well-nourished population, there is a statistically predictable distribution of children of a given age with respect to height and weight. In any large population, there is variation in height and weight; this variation approximates a normal distribution. Use of a standard reference population as a point of comparison facilitates the examination of differences in the anthropometric status of subgroups in a population and of changes in nutritional status over time. One of the most commonly used reference populations, and the one used in this report, is the U.S. National Center for Health Statistics (NCHS) standard, which is recommended for use by the World Health Organization.

Three standard indices of physical growth that describe the nutritional status of children are presented:

- Height-for-age (stunting)
- Weight-for-height (wasting)
- Weight-for-age (underweight)

Each of these indices provides somewhat different information about the nutritional status of children.

The height-for-age index measures linear growth retardation. Children who are below minus two standard deviations (-2 SD) from the median of the NCHS reference population in terms of height-for-age are considered short for their age, or *stunted*, a condition reflecting the cumulative effect of chronic malnutrition. Children below minus three standard deviations (-3 SD) from the reference median are considered severely stunted. A child between -2 SD and -3 SD is considered moderately stunted. Stunting reflects failure to receive adequate nutrition over a long period and may also be caused by recurrent and chronic illness. Height-for-age therefore represents a measure of the long-term effects of malnutrition in a population and does not vary appreciably according to the season of data collection. Stunted children are not immediately obvious in a population; a stunted three-year-old child could look like a well-fed two-year-old.

The weight-for-height index examines body mass in relation to body length and describes current nutritional status. Children who are below minus two standard deviations from the reference median for weight-for-height are considered too thin for their height, or *wasted*, a

condition reflecting acute malnutrition. Wasting is associated with failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or recent episodes of illness causing loss of weight and the onset of malnutrition. As with stunting, wasting is considered severe if the child is more than three standard deviations below the reference mean. Severe wasting is closely linked to an elevated risk of mortality. Prevalence of wasting may vary considerably by season; data from Helen Keller International indicate that acute malnutrition is most pronounced between August and October in Bangladesh and least severe between December and February, just after the main harvest (HKI, n.d.).

Weight-for-age is a composite index of height-for-age and weight-for-height and thus takes into account both acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for his/her age because he/she is stunted, wasted, or both. Weight-for-age is a useful tool in clinical settings for continuous assessment of nutritional progress and growth. Children whose weight-for-age is below minus two standard deviations from the median of the reference population are classified as *underweight*. In the reference population, only 2.3 percent of children fall below minus two standard deviations for each of these three indices.

The validity of these indices is determined by many factors, including the coverage of the population of children and the accuracy of the anthropometric measurements. In the survey, all children born since April 1994 were eligible for height and weight measurement. The survey was not able to measure the height and weight of all eligible children, usually because the child was not at home at the time of the health investigator's visit or because the mother refused to allow the child to be weighed and measured. The 1999-2000 BDHS survey failed to measure the height or weight of 12 percent of children under five (see Table C.3 in Appendix C). Also excluded from the analysis are children (4 percent) whose month or year of birth was not known and those with grossly improbable height or weight measurements. In addition, two of the three indices (weight-for-age and height-for-age) are sensitive to misreporting of children's age, including heaping on preferred digits.

Of the 6,430 children eligible for measurement (age 0-59 months at the time of the survey), 84 percent were weighed and measured. The following analysis focuses on the 5,421 children age 0-59 months for whom complete and plausible anthropometric data were collected. Table 9.5 shows the percentage of children who are classified as malnourished according to height-for-age, weight-for-height, and weight-for-age indices, by the child's age and selected demographic background characteristics.

Slightly less than half (45 percent) of children under five are considered short for their age, or stunted, while 18 percent are severely stunted (below -3 SD). Although these figures are lower than those in the 1996-1997 BDHS survey, they are still high and suggest chronic food insecurity and/or repeated illnesses. Stunting is evident even among children under age six months (14 percent) (Figure 9.2). The prevalence of stunting increases as children get older, up to a high of 53 percent among three-year-old children. Prevalence of stunting varies little by sex of the child; however, it rises with birth order. Stunting is also related to the length of the preceding birth interval; children born less than 24 months after a prior birth are considerably more likely to be stunted (53 percent) than those born after an interval of 48 months or more (38 percent).

Ten percent of children under five are underweight for their height, or wasted, and 1 percent are severely wasted. Wasting is highest for children age 12-23 months (20 percent). Variations in the level of wasting by other demographic characteristics of the child are minimal.

Table 9.5 Nutritional status by demographic characteristics

Among children under five years, the percentage classified as undernourished according to three indices of anthropometric status: height-for-age, weight-for-height, and weight-for-age by child's age group and other demographic characteristics, Bangladesh 1999-2000

Demographic characteristic	Height -for-age (stunting)		Weight-for-height (wasting)		Weight-for-age (underweight)		Number
	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	
Child's age							
6 months	3.3	13.9	0.4	3.1	1.1	8.1	627
6-11 months	7.7	25.3	0.2	7.4	10.0	39.3	487
12-23 months	19.8	52.3	2.8	20.2	18.3	59.9	1,145
24-35 months	20.4	49.7	0.5	8.7	16.9	55.6	1,047
36-47 months	23.3	53.1	1.1	8.3	12.3	52.1	1,010
48-59 months	23.1	50.3	0.6	9.0	12.0	49.6	1,105
Sex of child							
Male	16.9	43.6	1.0	10.6	11.4	45.8	2,751
Female	19.6	45.8	1.1	10.1	14.4	49.6	2,670
Birth order							
1	14.7	43.6	1.1	9.1	10.6	47.4	1,525
2-3	16.1	41.2	1.0	10.1	11.8	44.2	2,300
4-5	24.3	50.1	1.1	12.2	16.8	51.9	961
6+	25.6	51.5	1.4	11.3	16.2	54.6	634
Birth interval							
First birth	14.9	43.7	1.1	9.3	10.8	47.6	1,533
24 months	26.0	52.8	0.9	9.3	17.4	54.2	615
24-47 months	20.8	48.0	1.2	11.3	14.9	49.5	1,887
48+ months	15.0	37.6	1.0	10.7	10.3	42.5	1,387
Total	18.3	44.7	1.1	10.3	12.9	47.7	5,421

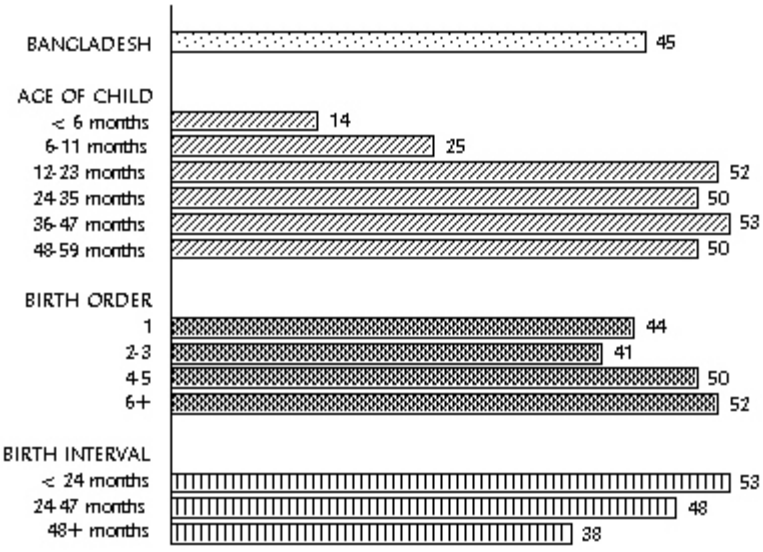
Note: Figures are for children born in the period 0-59 months preceding the survey. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population. Children are classified as malnourished if their Z-scores are below minus two or minus three standard deviations (-2 SD or -3 SD) from the median of the reference population.

[1]Includes children who are below -3 SD

Forty-eight percent of the children are considered underweight (low weight-for-age), and 13 percent are classified as severely underweight. As with the other two nutrition indicators, children under six months are least likely to be underweight, probably due to the positive effects of breastfeeding. After six months of age, the proportion of children who are underweight rises substantially to 60 percent among those 12-23 months and then drops steadily to 50 percent among children age 48-59 months. Girls are slightly more likely than boys to be underweight. The likelihood of being underweight generally rises with birth order and diminishes with length of the previous birth interval.

Table 9.6 shows the nutritional status of children by selected background characteristics. Malnutrition is substantially higher in rural areas than in urban areas. For example, 47 percent of rural children are stunted, compared with 35 percent of urban children (Figure 9.3). Differences by division show that children in Sylhet Division are somewhat more likely and those in Khulna Division somewhat less likely to be malnourished than children in other divisions. As expected, malnutrition decreases with increase in the mother's education.

Figure 9.2 Percentage of Children under Five Who Are Stunted, According to Demographic Characteristics



Note: Stunted children are those whose height-for-age Z-score is below -2 standard deviations from the median of the reference population.

BDHS 1999-2000

Although malnutrition is high in Bangladesh, overall, the levels of malnutrition are far lower than in 1996-1997 (Mitra et al., 1997:135). Stunting has declined from 55 to 45 percent of children under five, while wasting has declined from 18 to 10 percent.

9.3 Nutritional Status of Mothers

All mothers of children born since April 1994 were also weighed and measured. The objective was to determine the nutritional status of women of reproductive age. However, since weighing and measuring all women would add considerably to the length and cost of the fieldwork, it was decided to limit the anthropometric section to women with young children who would be measured anyway.[2] Women were weighed and measured using the same scales and measuring boards used for the children. The information was used to construct the following indicators of mothers' nutritional status:

- Mean height (in centimeters)
- Body mass index.

Women who were pregnant at the time of the survey and those who had delivered a baby in the two months before the interview were excluded from the tables on weight and body mass index.

[2] Interviewers were instructed to weigh and measure all women who had had a birth since April 1994, regardless of whether the child was living.

Table 9.6 Nutritional status of children by background characteristics

Among children under five years, the percentage classified as undernourished according to the three indices of anthropometric status: height-for-age, weight-for-height, and weight-for-age by background characteristics, Bangladesh 1999-2000

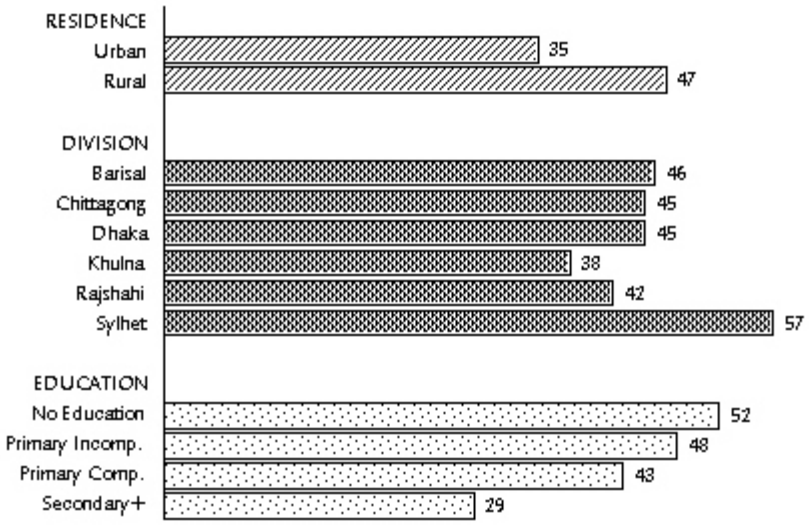
Background characteristic	Height-for-age (stunting)		Weight-for-height (wasting)		Weight-for-age (underweight)		Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	
Residence							
Urban	13.0	35.0	1.2	9.3	9.0	39.8	894
Rural	19.3	46.6	1.0	10.6	13.6	49.2	4,527
Division							
Barisal	23.0	46.0	2.3	13.0	16.3	50.7	335
Chittagong	19.3	45.2	1.0	9.7	13.1	46.1	1,202
Dhaka	18.3	45.4	1.1	10.0	11.8	47.4	1,698
Khulna	11.3	37.8	0.8	9.3	9.5	41.8	559
Rajshahi	16.9	42.0	1.0	11.0	13.1	48.5	1,232
Sylhet	24.7	56.8	0.7	11.1	18.2	56.8	395
Mother's education							
No education	23.9	52.4	1.4	12.0	17.3	55.5	2,527
Primary incomplete	20.3	47.7	0.9	10.9	13.9	51.1	983
Primary complete	14.1	42.6	0.9	8.6	8.5	43.6	586
Secondary +	7.8	28.5	0.5	7.6	5.6	32.1	1,324
Mother's height							
<145 cm	31.5	63.9	0.8	12.1	20.5	61.7	862
>145 cm	15.7	41.0	1.1	10.0	11.4	45.0	4,547
Mother's body index							
<18.5 kg/m^2	21.6	49.6	1.6	13.9	17.9	57.9	2,384
>18.5 kg/m^2	15.6	40.7	6.6	7.6	9.0	39.6	3,024
Total	18.3	44.7	1.1	10.3	12.9	47.7	5,421

Note: Figures are for children born in the period 0-59 months preceding the survey. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population. Children are classified as malnourished if their Z-scores are below minus two or minus three standard deviations (-2 SD or -3SD) from the median of the reference population.

[1] Includes children who are below -3 SD

Height is used to identify mothers at nutritional risk. Height of women can be used to predict the risk of difficulty in delivering children, given the association between height and size of the pelvis. The risk of giving birth to low-weight newborns is also higher among women of small stature. Although the cutoff point at which the mother can be considered at risk varies between populations, it probably falls in the range of 140 to 150 centimeters.

Figure 9.3 Percentage of Children under Five Who Are Stunted, According to Socioeconomic Characteristics



Note: Stunted children are those whose height-for-age Z-score is below -2 standard deviations from the median of the reference population.

BDHS 1999-2000

Indices of body mass are used to assess thinness or obesity. The most commonly used index is the body mass index or BMI (also referred to as the Quetelet index), which is defined as weight in kilograms divided by the square of height in meters (kg/m^2). The main advantage of the BMI is that it does not require a reference table from a well-nourished population. For the BMI, a cutoff point of 18.5 has been recommended for defining thinness, or acute malnutrition. Obesity has not been defined clearly in terms of the scale, although a BMI of 25.0 or above is usually considered obese.

Table 9.7 presents the mean height, body mass index, and Z-score for mothers by background characteristics. For each indicator, the proportion falling below the cutoff points is also presented. The average height of mothers in Bangladesh, 150 centimeters, is above the cutoff point of 145 centimeters; however, 16 percent of mothers are shorter than the cutoff point. Fewer than half (45 percent) of mothers are acutely malnourished (BMI < 18.5). There are few notable differences in these indicators by background characteristics. A higher proportion of rural than urban mothers fall below the 18.5 cutoff for BMI. More-educated mothers tend to be slightly taller and heavier than less educated mothers.

The proportions of Bangladeshi mothers who are shorter than 145 centimeters and of those who have a BMI below 18.5 are almost the same as among ever-married women age 15-49 in West Bengal according to a recent survey (IIPS and ORC Macro, 2000:246). Nineteen percent of ever-married women in West Bengal age 15-49 are short, and 44 percent have a BMI below 18.5.

Table 9.7 Maternal nutritional status by background characteristics

Among mothers of children under five years, mean height and percentage under 145 cm, mean body mass index (BMI) and percentage <18.5, and mean DHS Z-score and percentage wasted, by background characteristics, Bangladesh 1999-2000

Background characteristic	Height			BMI			Z-score		
	Mean	Percentage <145 cm	Number	Mean	Percentage <18.5	Number	Mean	Percentage below -2 SD	Number
Age									
15-19	149.8	18.4	912	18.7	50.5	763	-1.5	21.4	758
20-24	150.5	14.7	1,544	19.2	44.4	1,314	-1.3	20.8	1,310
25-29	150.7	14.6	1,326	19.7	40.6	1,184	-1.5	33.7	1,180
30-34	150.7	14.3	791	19.5	43.1	706	-1.8	44.7	701
35-49	150.1	19.2	561	18.9	53.9	530	-2.2	65.8	521
Residence									
Urban	150.5	15.7	893	20.8	29.9	810	-1.1	22.9	805
Rural	150.4	15.9	4,261	18.9	48.7	3,700	-1.7	35.6	3,678
Division									
Barisal	150.1	16.2	327	19.0	45.8	289	-1.7	36.5	289
Chittagong	150.8	13.3	1,038	19.5	40.3	911	-1.5	30.3	905
Dhaka	150.3	17.3	1,617	19.4	46.5	1,402	-1.5	35.9	1,391
Khulna	151.1	13.0	572	19.6	38.9	513	-1.4	25.5	513
Rajshahi	150.1	17.2	1,253	18.9	48.4	1,109	-1.6	32.0	1,104
Sylhet	150.2	16.6	349	18.6	55.4	285	-1.9	46.2	282
Education									
No education	149.8	18.2	2,327	18.7	52.1	2,021	-1.8	43.0	1,999
Primary incomplete	150.2	17.3	977	19.0	48.8	854	-1.6	32.7	852
Primary complete	150.1	15.5	528	19.1	48.3	461	-1.6	30.1	459
Secondary/higher	151.7	10.9	1,322	20.5	30.1	1,174	-1.1	18.5	1,173
Total	150.4	15.9	5,154	19.3	45.4	4,510	-1.6	33.3	4,483

KNOWLEDGE OF AIDS AND SEXUALLY TRANSMITTED INFECTIONS

10

Acquired Immune Deficiency Syndrome (AIDS) is an illness caused by the Human Immunodeficiency Virus (HIV), which weakens the immune system and leads to death. The virus is generally transmitted through sexual contact, through HIV-infected women to their unborn children, or through contaminated needles (injections) or blood. HIV and AIDS prevalence in Bangladesh have been on the rise. There have been various efforts to prevent HIV transmission, such as public health education through the media and the activities of both government and nongovernment organizations.

The 1999-2000 BDHS survey included a section of questions on AIDS in order to assess knowledge about the transmission mechanisms and prevention of infection with the AIDS virus. Female and male respondents were asked whether they had heard of AIDS and, if so, from which source did they receive the most information. The BDHS survey also included a set of questions on sexually transmitted infections (STIs) to assess the level of knowledge about STIs and the proportion of respondents who reported having an STI or a symptom of an STI.

10.1 KNOWLEDGE OF AIDS

Table 10.1 and Figure 10.1 show the percentage of ever-married women and currently married men who have heard of AIDS by background characteristics. Only 31 percent of women and half of men in Bangladesh have heard of AIDS. Knowledge of AIDS is somewhat higher among the younger respondents. Urban residence and education have a very strong positive association with knowledge about AIDS. Sixty-four percent of urban women and 76 percent of urban men have heard of AIDS compared with only 23 percent of rural women and 44 percent of rural men. Knowledge of AIDS increases from only 12 percent among illiterate women to 68 percent among women who have at least some secondary school. Similar patterns exist for men (Figure 10.1). Respondents from the Sylhet and Rajshahi divisions are less likely to know about AIDS than respondents from other divisions.

The level of knowledge has changed significantly since 1996. Knowledge of AIDS has increased from 19 percent to 31 percent among ever-married women and from 33 percent to 50 percent among currently married men.

As part of the AIDS prevention program, the mass media are playing a greater role to create awareness among the general public. Table 10.1 also shows the percentage of respondents who have heard of AIDS from specific sources. Television is the most important source of information about AIDS. About one-fifth of women and one-third of men report television as a source of their information about AIDS, a significant rise since the 1996-1997 BDHS survey when only 13 percent of women and 22 percent of men reported the same. Other important sources are radio (10 percent for women, 23 percent for men) and friends and relatives (12 percent for women and 19 percent for men). Eighteen percent of men receive information about AIDS from newspapers and magazines, compared with only 5 percent of women.

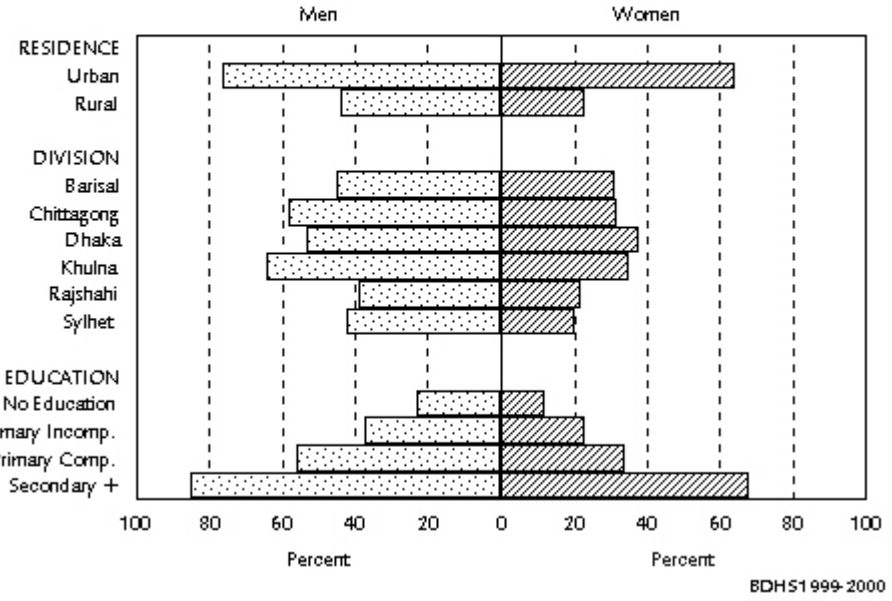
Table 10.1 Knowledge of HIV/AIDS and sources of AIDS information

Percentage of ever-married women and currently married men who have ever heard of AIDS, percentage who have received information about AIDS from specific sources, and mean number of sources of information about AIDS, by background characteristics, Bangladesh 1999-2000

Background characteristic	Ever heard of HIV/AIDS	Sources of HIV/AIDS information											Number	Mean number of sources[1]
		Radio	TV	News-papers	Pam-phlets	Health workers	Mosques/ churches	School	Com-munity meetings	Friend/ Relative	Work place	Other source		
EVER-MARRIED WOMEN														
Age														
< 20	30.2	11.7	20.1	1.6	2.0	2.3	0.0	0.5	0.2	11.5	0.2	0.3	1,514	1.7
20-24	35.9	13.5	24.6	4.8	2.3	3.7	0.0	0.0	0.5	13.2	0.2	1.0	1,935	1.8
25-29	33.7	11.1	24.6	5.8	1.9	3.6	0.0	0.2	0.4	12.5	0.3	0.3	1,975	1.8
30-34	32.7	10.1	23.2	6.1	1.7	1.7	0.0	0.1	1.2	13.7	0.6	0.6	1,621	1.8
35-39	27.3	7.6	19.0	4.7	1.3	1.9	0.0	0.1	0.5	9.9	0.8	0.7	1,335	1.7
40-44	25.3	7.4	18.0	4.5	1.1	1.6	0.0	0.1	0.3	9.0	0.8	0.5	1,126	1.7
45-49	24.4	7.3	16.7	4.2	1.0	2.1	0.0	0.2	0.0	8.3	0.6	0.4	853	1.7
Residence														
Urban	64.3	18.5	56.0	15.2	4.1	3.1	0.0	0.1	0.6	22.5	0.9	0.7	2,071	1.9
Rural	22.6	8.2	13.1	2.0	1.1	2.5	0.0	0.2	0.4	8.9	0.3	0.5	8,473	1.6
Division														
Barisal	31.0	12.7	15.3	4.1	1.8	3.0	0.0	0.4	0.1	10.5	0.5	1.3	688	1.6
Chittagong	32.1	10.2	24.1	5.6	1.2	1.8	0.0	0.1	0.1	11.0	0.7	0.5	1,965	1.7
Dhaka	37.9	12.3	28.0	5.8	2.4	3.4	0.0	0.2	0.9	14.6	0.4	0.6	3,257	1.8
Khulna	34.8	13.4	24.2	4.3	1.4	2.0	0.0	0.1	0.4	13.8	0.4	0.4	1,281	1.7
Rajshahi	21.9	6.6	13.7	2.5	1.3	2.6	0.0	0.2	0.4	8.6	0.4	0.5	2,729	1.7
Sylhet	20.0	6.1	14.7	5.4	2.0	2.0	0.0	0.2	0.1	7.1	0.6	0.3	624	1.9
Education														
No education	12.4	2.5	6.8	0.0	0.1	1.5	0.0	0.0	0.3	4.4	0.1	0.3	4,843	1.3
Primary incomplete	23.2	6.4	13.3	0.6	0.3	2.2	0.0	0.2	0.2	9.9	0.1	0.2	1,928	1.4
Primary complete	33.7	10.6	21.3	2.0	0.5	1.9	0.0	0.0	0.4	14.0	0.1	0.5	1,074	1.5
Secondary+	68.0	26.8	53.8	16.6	6.2	5.1	0.0	0.5	1.0	24.5	1.4	1.3	2,699	2.0
Total	30.8	10.2	21.5	4.6	1.7	2.6	0.0	0.2	0.5	11.6	0.5	0.6	10,544	1.7
CURRENTLY MARRIED MEN														
Age														
15-19	*	*	*	*	*	*	*	*	*	*	*	*	23	*
20-24	48.3	18.0	31.6	6.2	5.1	7.8	0.5	0.0	1.2	24.0	2.8	1.1	151	2.0
25-29	56.2	26.5	38.5	15.8	4.9	8.0	0.0	0.3	1.6	21.9	3.4	2.5	345	2.2
30-34	54.6	24.0	39.2	17.9	9.0	6.2	0.2	1.0	1.2	20.3	6.4	3.6	418	2.4
35-39	48.1	21.3	31.3	18.9	3.5	7.2	0.6	0.3	0.9	20.5	3.1	4.6	492	2.3
40-44	48.3	22.3	29.6	20.4	3.3	5.7	0.0	0.0	2.0	19.6	3.7	2.4	394	2.3
45-49	56.9	25.7	37.6	23.1	7.2	11.2	0.0	0.3	1.2	19.3	2.7	2.2	333	2.3
50-54	41.9	22.7	26.7	21.7	7.8	4.0	0.0	1.0	1.4	11.7	3.5	2.0	219	2.4
55-59	37.9	15.9	20.7	13.6	3.2	6.7	0.4	0.0	2.7	12.7	1.7	1.1	181	2.1
Residence														
Urban	76.4	27.4	61.3	38.2	11.7	5.8	0.0	1.0	1.7	24.7	7.4	6.2	507	2.4
Rural	43.8	21.6	26.0	13.2	4.0	7.5	0.3	0.2	1.4	18.0	2.7	2.0	2,049	2.2
Division														
Barisal	44.6	29.3	26.3	12.9	5.9	10.4	0.5	0.2	4.0	18.6	3.7	1.5	159	2.5
Chittagong	58.0	21.3	39.0	21.9	6.5	8.5	0.5	0.6	0.1	25.6	7.1	4.0	426	2.3
Dhaka	52.7	22.0	37.0	17.3	6.4	6.5	0.0	0.3	1.6	17.4	3.6	3.3	835	2.2
Khulna	63.6	31.6	38.2	22.9	6.2	9.6	0.8	0.4	4.2	28.4	3.7	5.3	322	2.4
Rajshahi	39.1	19.9	25.0	16.5	3.3	5.3	0.0	0.4	0.4	13.5	2.0	1.1	682	2.2
Sylhet	41.6	17.7	24.6	14.5	5.5	6.4	0.0	0.0	0.0	20.6	1.2	1.4	132	2.2
Education														
No education	23.3	7.8	10.6	1.1	0.2	1.5	0.1	0.1	1.0	10.5	1.3	0.2	891	1.5
Primary incomplete	37.1	13.7	20.4	2.2	0.4	5.3	0.0	0.0	1.8	18.6	2.0	1.6	590	1.8
Primary complete	55.8	20.4	36.7	8.0	5.2	11.1	0.0	0.0	0.4	26.8	2.2	2.2	192	2.0
Secondary +	85.1	44.4	63.2	48.2	14.3	13.2	0.5	1.0	1.9	27.1	7.4	6.6	883	2.7
Total	50.2	22.7	33.0	18.1	5.5	7.1	0.2	0.4	1.4	19.3	3.6	2.9	2,556	2.3

Note: An asterisk indicates that a figure is based on fewer than 25 cases and has been suppressed.
[1] Mean number of sources is based on respondents who have heard of AIDS.

Figure 10.1 Percentage of Ever-married Women and Currently Married Men Who Have Heard of AIDS, By Background Characteristics



10.2 KNOWLEDGE OF WAYS TO AVOID AIDS

Table 10.2 presents the percent distribution of women and men by knowledge of ways to avoid getting AIDS. About one-tenth of respondents reported that there was no way to "avoid getting AIDS or the virus that causes AIDS." It is encouraging to note that the percentage who say there is no way to avoid AIDS has declined since the 1996-1997 BDHS survey, from 41 to 12 percent among women and from 27 to 11 percent among men. The most frequently cited way to avoid getting AIDS was avoiding sex with prostitutes, cited by 18 percent women and more than 40 percent of men. As a means of AIDS prevention, 16 percent of women and 18 percent of men mentioned condom use. This represents an increase in women's knowledge since the 1996-1997 BDHS when only 7 percent of women cited condom use as a way to avoid AIDS. More than 10 percent of women and men say that limiting the number of sexual partners can prevent AIDS, and 6 percent of women and 9 percent of men report that having only one partner can help prevent the spread of the disease. The data on knowledge of avoidance of many sexual partners as a means of AIDS prevention are not sufficiently comparable in the 1996-1997 BDHS survey and the 1999-2000 BDHS survey to allow evaluation of change.

The percentage reporting each way to of avoid contracting AIDS is lower among rural than among urban respondents. The level of education is positively associated with respondents' mentioning each of these ways of avoiding AIDS. Seven percent of women and 18 percent of men know two or more valid ways to avoid AIDS (Table 10.3).

Table 10.2 Knowledge of ways to avoid HIV/AIDS

Among women and men who know of HIV/AIDS, percentage who know of ways to avoid HIV/AIDS, by background characteristics, Bangladesh 1999-2000

Background characteristic	Ways to avoid AIDS														Does not know if AIDS can be avoided	Believes no way to avoid AIDS	Number who know AIDS
	Abstain from sexual relations	Use condom	Avoid multiple partners	Have only one sexual partner	Avoid sex with prosti-tutes	Avoid sex with homo-sexuals	Avoid trans-fusions	Avoid injection	Avoid sharing razors/ blades	Avoid kissing	Avoid mosquito bites	Seek protection from traditional healer	Other	Does not know specific way			
EVER-MARRIED WOMEN																	
Age																	
< 20	5.2	15.8	9.1	5.1	10.5	0.0	1.0	4.0	0.5	0.2	0.3	0.0	12.1	9.8	39.1	14.1	457
20-24	8.3	21.3	9.7	5.6	17.6	1.1	2.5	8.8	0.4	0.7	0.7	0.3	18.1	8.0	30.0	10.8	695
25-29	7.3	18.3	12.2	6.1	21.4	0.7	3.8	11.3	1.2	0.5	0.2	0.7	19.6	6.6	30.0	11.1	665
30-34	9.2	13.5	11.3	7.3	22.1	1.3	4.9	11.7	1.3	0.8	0.9	0.9	21.2	6.5	31.3	10.8	530
35-39	9.1	10.4	10.3	5.8	16.9	0.1	2.2	8.6	1.3	0.0	0.0	1.4	19.4	7.0	32.5	15.3	364
40-44	7.6	9.5	12.0	8.1	18.5	0.3	1.2	11.9	1.1	0.8	0.4	1.0	18.4	9.9	34.6	13.4	285
45-49	5.3	7.9	11.0	5.6	13.3	0.5	1.3	6.0	0.5	0.0	1.0	2.6	18.8	9.1	43.9	9.6	208
Residence																	
Urban	10.4	19.5	14.6	9.3	24.6	0.8	3.7	15.8	1.3	0.7	0.6	0.5	24.7	7.6	25.0	8.2	1,332
Rural	5.5	12.7	7.9	3.8	12.8	0.6	2.0	4.4	0.6	0.3	0.4	0.9	13.8	8.0	38.6	15.1	1,913
Division																	
Barisal	6.4	11.8	17.0	10.0	20.1	1.8	2.1	8.8	0.2	1.7	0.9	0.4	18.8	8.3	31.0	14.2	213
Chittagong	7.0	12.8	9.7	5.5	17.1	0.1	2.5	6.3	0.5	0.1	0.2	1.0	16.6	6.9	35.9	12.5	631
Dhaka	8.1	16.3	11.6	6.3	19.8	0.6	2.9	10.9	1.5	0.5	0.4	0.2	22.0	9.4	32.8	7.4	1,233
Khulna	6.8	20.8	9.4	5.7	14.6	0.1	2.4	8.8	0.4	0.4	0.5	0.7	13.2	5.9	33.8	14.1	446
Rajshahi	8.2	14.5	7.7	4.5	14.7	1.2	2.8	8.1	0.7	0.5	0.8	1.9	14.9	7.7	31.7	17.2	597
Sylhet.	6.2	13.7	13.4	8.9	19.4	1.6	2.9	11.1	0.0	0.5	0.5	0.2	22.2	4.1	25.6	25.2	125
Education																	
No education	3.7	6.3	5.3	2.3	9.2	0.6	1.0	2.7	0.9	0.2	0.0	0.6	13.6	9.9	25.0	16.3	600
Primary incomplete	4.5	8.6	4.2	2.2	11.3	0.3	1.1	3.7	0.4	0.9	0.4	1.3	14.6	7.6	47.8	11.7	448
Primary complete	3.9	8.7	7.7	5.7	12.2	0.4	1.7	4.8	0.7	0.0	1.0	0.3	11.5	6.8	44.3	18.2	362
Secondary+	10.3	21.5	14.6	8.3	23.0	0.8	3.8	13.4	1.0	0.5	0.6	0.8	22.0	7.5	23.2	9.9	1,834
Total	7.5	15.5	10.6	6.1	17.6	0.7	2.7	9.1	0.9	0.5	0.5	0.8	18.2	7.9	33.0	12.3	3,245
CURRENTLY MARRIED MEN																	
Age																	
15-19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12
20-24	3.3	20.8	7.7	4.4	28.7	2.4	0.0	3.7	1.3	0.0	0.0	0.0	15.3	17.7	27.3	7.4	73
25-29	1.2	20.7	16.2	9.6	44.0	2.4	2.0	7.6	0.5	1.1	0.1	1.0	23.5	3.1	21.2	14.3	194
30-34	1.8	19.6	12.3	10.5	43.4	2.1	3.2	11.7	3.1	1.2	0.6	2.5	23.2	5.0	23.9	11.6	228
35-39	1.9	20.7	11.0	8.2	44.9	2.1	2.6	13.9	2.3	1.5	0.6	1.0	26.3	6.9	23.2	8.5	237
40-44	2.8	16.5	11.9	10.5	40.2	2.6	1.8	7.5	3.3	0.4	0.0	1.0	25.3	9.6	24.8	8.9	190
45-49	3.9	11.5	9.9	7.5	44.9	2.2	1.4	13.3	2.6	1.0	0.0	0.6	25.9	4.5	28.5	10.1	189
50-54	5.0	20.6	16.8	16.8	34.5	1.2	0.0	14.3	4.5	0.8	1.6	0.9	29.1	9.4	21.6	12.5	92
55-59	0.7	8.7	7.8	6.6	22.5	1.2	1.5	11.9	1.4	1.2	1.2	3.0	17.0	10.1	46.5	9.3	69
Residence																	
Urban	3.1	22.4	16.1	12.2	52.2	2.9	3.6	16.0	3.5	1.2	0.1	1.5	33.2	2.8	18.6	7.3	388
Rural	2.1	16.0	10.4	8.1	35.8	1.8	1.1	8.6	1.9	0.9	0.6	1.2	20.2	9.2	28.0	11.9	896
Division																	
Barisal	13.5	23.5	24.8	20.9	38.4	3.3	2.1	7.7	3.9	1.5	0.0	3.4	29.2	7.0	22.5	8.0	71
Chittagong	0.7	13.0	8.7	7.6	44.1	2.6	1.6	11.5	1.6	1.4	0.0	2.6	33.3	8.4	27.9	7.0	247
Dhaka	1.1	20.6	14.1	10.7	39.9	1.2	1.7	10.9	1.3	0.2	0.6	0.2	22.1	7.4	23.5	10.6	440
Khulna	3.5	22.2	10.5	6.7	40.6	3.5	2.7	11.0	4.2	2.8	0.4	2.0	18.6	8.8	22.5	12.2	205
Rajshahi	2.8	15.8	10.2	8.0	41.0	1.1	0.6	7.8	3.0	0.3	0.6	0.0	22.6	5.0	27.5	11.9	267
Sylhet	1.2	5.9	10.2	8.6	35.8	5.7	7.6	24.9	2.8	1.2	0.4	3.7	22.0	5.9	29.0	16.0	55
Education																	
No education	0.6	7.3	3.0	1.0	20.8	0.0	0.0	0.3	0.0	0.4	0.0	1.8	11.1	6.7	40.8	20.4	207
Primary incomplete	1.1	7.8	2.5	2.5	21.8	0.2	0.6	3.3	0.4	0.0	0.0	2.2	14.6	13.0	38.6	14.2	219
Primary complete	0.0	10.8	4.4	3.0	35.5	0.9	0.2	5.7	1.1	0.0	0.0	1.4	16.0	5.7	35.3	12.1	107
Secondary+	3.7	24.8	18.5	14.6	52.6	3.4	3.0	16.6	3.8	1.6	0.7	0.8	31.7	5.9	15.6	6.5	751
Total	2.4	17.9	12.1	9.4	40.8	2.1	1.9	10.8	2.4	1.0	0.4	1.2	24.2	7.2	25.2	10.5	1,284

Note: An asterisk indicates that a figure is based on fewer than 25 cases and has been suppressed.

Table 10.3 Knowledge of specific ways to avoid HIV/AIDS

Percent distribution of women and men by knowledge of valid ways to avoid HIV/AIDS, and percentage of women and men who know one or more specific ways to avoid HIV/AIDS, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Knows no way to avoid HIV/AIDS: Does not know of HIV/AIDS	Knows no way to avoid HIV/AIDS: Knows HIV/AIDS but does not know of valid way	Knows valid way(s) to avoid HIV/AIDS: One way	Knows valid way(s) to avoid HIV/AIDS: Two or more ways	Total	Number
EVER-MARRIED WOMEN						
Age						
<20	69.8	19.3	6.1	4.7	100.0	1,514
20-24	64.1	18.4	8.7	8.8	100.0	1,935
25-29	66.3	16.9	7.5	9.3	100.0	1,975
30-34	67.3	17.1	6.4	9.2	100.0	1,621
35-39	72.7	15.7	5.3	6.2	100.0	1,335
40-44	74.7	15.2	4.5	5.6	100.0	1,125
45-49	75.6	17.0	3.1	4.3	100.0	853
Residence						
Urban	35.7	27.8	13.9	22.6	100.0	2,071
Rural	77.4	14.7	4.5	3.4	100.0	8,473
Division						
Barisal	69.0	17.0	5.5	8.5	100.0	688
Chittagong	67.9	18.7	7.2	6.2	100.0	1,965
Dhaka	62.1	20.0	7.7	10.1	100.0	3,257
Khulna	65.2	19.5	7.9	7.4	100.0	1,281
Rajshahi	78.1	13.2	4.3	4.4	100.0	2,729
Sylhet	80.0	11.5	3.2	5.3	100.0	624
Education						
No education	87.6	9.3	1.8	1.2	100.0	4,843
Primary incomplete	76.8	16.5	4.3	2.4	100.0	1,928
Primary complete	66.3	23.9	4.9	5.0	100.0	1,074
Secondary+	32.0	29.4	16.4	22.1	100.0	2,699
Total	69.2	17.3	6.3	7.2	100.0	10,544
CURRENTLY MARRIED MEN						
Age						
15-19	*	*	*	*	100.0	23
20-24	51.7	25.3	11.3	11.7	100.0	151
25-29	43.8	23.1	12.6	20.5	100.0	345
30-34	45.4	23.4	10.7	20.5	100.0	418
35-39	51.9	20.1	8.0	20.0	100.0	492
40-44	51.7	22.8	9.9	15.6	100.0	394
45-49	43.1	26.8	9.5	20.7	100.0	333
50-54	58.1	19.3	6.2	16.4	100.0	219
55-59	62.1	26.4	2.1	9.4	100.0	181
Residence						
Urban	23.6	23.9	16.1	36.5	100.0	508
Rural	56.2	22.9	7.5	13.4	100.0	2,048
Division						
Barisal	55.4	18.7	7.0	18.8	100.0	159
Chittagong	42.0	26.6	8.7	22.7	100.0	426
Dhaka	47.3	23.5	10.3	18.8	100.0	835
Khulna	36.4	30.0	11.2	22.4	100.0	322
Rajshahi	60.9	18.2	8.7	12.3	100.0	682
Sylhet	58.4	22.5	3.5	15.6	100.0	132
Education						
No education	76.7	16.5	4.1	2.7	100.0	891
Primary incomplete	62.9	26.1	5.4	5.6	100.0	590
Primary complete	44.2	30.4	11.7	13.7	100.0	192
Secondary +	14.9	26.1	16.3	42.7	100.0	883
Total	49.8	23.1	9.2	18.0	100.0	2,556

Note: An asterisk indicates that a figure is based on fewer than 25 cases and has been suppressed.

10.3 Perception of AIDS and Communication with Spouses

Tables 10.4.1 and 10.4.2 present data on whether women and men are aware that a healthy-looking person can have the AIDS virus. About two-thirds of respondents who have heard of AIDS that a healthy-looking person can have AIDS. The women and men least likely to respond correctly to this question tended to be rural and less educated. Twenty four percent of women and 22 percent of men talked to their spouse about the prevention of AIDS. Spousal communication is positively related with education and urban residence.

Table 10.4.1 Perception of AIDS and communication with spouses: women

Percent distribution of currently married women who have heard of AIDS by perception of AIDS and communication with spouse about AIDS, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Can a healthy person have AIDS?			Talked to spouse about preventing AIDS			Total	Number
	Yes	No	Don't know/ missing	Yes	No	Don't know/ missing		
Age								
15-19	66.4	13.5	20.1	18.4	80.9	0.7	100.0	447
20-24	67.5	15.2	17.2	24.4	75.5	0.1	100.0	670
25-29	71.4	13.2	15.3	29.0	70.5	0.5	100.0	639
30-34	69.1	11.1	19.8	27.9	72.1	0.0	100.0	497
35-39	72.1	12.1	15.8	23.8	75.3	0.9	100.0	332
40-44	62.3	19.3	18.4	23.0	76.3	0.7	100.0	254
45-49	66.8	10.7	22.5	18.2	81.3	0.5	100.0	177
Residence								
Urban	69.2	12.7	18.0	28.1	71.6	0.3	100.0	1,253
Rural	67.7	14.2	18.1	21.8	77.7	0.5	100.0	1,805
Division								
Barisal	77.3	9.9	12.9	22.5	77.5	0.0	100.0	204
Chittagong	64.3	16.5	19.2	20.2	79.8	0.0	100.0	587
Dhaka	69.5	10.4	20.1	26.5	73.2	0.2	100.0	1,154
Khulna	73.7	10.0	16.3	22.0	77.0	1.0	100.0	428
Rajshahi	63.8	21.0	15.2	25.3	73.7	1.0	100.0	569
Sylhet	62.4	14.4	23.2	31.5	68.5	0.0	100.0	117
Education								
No education	62.9	14.8	22.3	15.5	83.6	1.0	100.0	535
Primary incomplete	62.8	15.8	21.4	19.2	80.2	0.5	100.0	412
Primary complete	64.1	14.7	21.1	18.5	80.8	0.7	100.0	342
Secondary +	72.0	12.5	15.4	29.4	70.4	0.2	100.0	1,768
Total	68.3	13.6	18.1	24.4	75.2	0.4	100.0	3,058

Table 10.4.2 Perception of AIDS and communication with spouses: men

Percent distribution of currently married men who have heard of AIDS by perception of AIDS and communication with spouse about AIDS, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Can a healthy person have AIDS?			Talked to spouse about preventing AIDS			Total	Number
	Yes	No	Don't know/ missing	Yes	No	Don't know/ missing		
Age								
15-19	*	*	*	*	*	*	*	22
20-24	54.4	23.5	22.1	22.0	77.4	0.6	100.0	135
25-29	66.7	15.4	17.9	18.5	81.5	0.0	100.0	324
30-34	71.8	14.4	13.8	20.9	78.8	0.4	100.0	398
35-39	66.4	18.6	14.9	21.5	77.8	0.6	100.0	483
40-44	66.3	19.3	14.4	22.5	77.1	0.4	100.0	385
45-49	63.8	18.2	18.0	22.0	77.8	0.3	100.0	320
50-54	66.3	15.7	18.0	23.2	75.4	1.4	100.0	210
55-59	66.6	16.3	17.2	25.0	75.0	0.0	100.0	176
Residence								
Urban	70.0	12.7	17.3	27.1	72.9	0.0	100.0	477
Rural	65.3	18.5	16.1	20.2	79.2	0.5	100.0	1,976
Division								
Barisal	74.0	11.0	15.0	25.5	74.5	0.0	100.0	153
Chittagong	69.6	15.1	15.3	19.7	80.3	0.0	100.0	406
Dhaka	65.5	15.0	19.4	23.4	76.6	0.0	100.0	801
Khulna	72.9	13.0	14.1	20.8	78.7	0.5	100.0	308
Rajshahi	60.6	26.0	13.4	18.6	80.0	1.4	100.0	658
Sylhet	63.6	13.4	23.0	28.5	71.5	0.0	100.0	127
Education								
No education	64.5	19.7	15.8	20.2	79.1	0.7	100.0	861
Primary incomplete	64.0	18.5	17.5	20.4	79.3	0.3	100.0	569
Primary complete	69.6	15.0	15.5	21.9	78.1	0.0	100.0	183
Secondary+	68.8	14.9	16.3	23.7	75.9	0.4	100.0	840
Total	66.2	17.4	16.4	21.6	78.0	0.4	100.0	2,453

Note: An asterisk indicates that a figure is based on fewer that 25 cases and has been suppressed.

10.4 Awareness and Prevalence of Sexually Transmitted Infections (STIs)

Tables 10.5.1 and 10.5.2 show the percent distribution of all interviewed women and men by their knowledge of STIs (other than HIV/AIDS), according to background characteristics. Eighty-nine percent of women and 81 percent of men do not know of any STI other than AIDS. Although about 6 percent of respondents know about STIs, they are not aware of any symptoms of STIs. Nine percent of men and 2 percent of women were able to cite two or more symptoms of STIs. Educated respondents and respondents from urban areas are more likely to be informed about STIs than their uneducated and rural counterparts.

Table 10.5.1 Knowledge of signs and symptoms of STIs: women

Percent distribution of ever-married women by knowledge of signs and symptoms associated with sexually transmitted infections (STIs) other than HIV/AIDS, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Knowledge of specific signs or symptoms of STIs of women				Total	Number
	No knowledge of STIs	Does not know any symptoms	Knows one symptom only	Knows two or more symptoms		
Age						
< 20	91.5	6.3	1.8	0.3	100.0	1,514
20-24	89.8	7.0	2.5	0.7	100.0	1,935
25-29	88.9	6.7	3.0	1.4	100.0	1,975
30-34	85.5	8.6	3.0	2.9	100.0	1,621
35-39	88.1	6.7	2.9	2.3	100.0	1,335
40-44	88.8	6.2	3.2	1.7	100.0	1,125
45-49	91.0	4.8	2.5	1.7	100.0	853
Residence						
Urban	82.8	10.5	4.0	2.6	100.0	2,071
Rural	90.7	5.8	2.3	1.2	100.0	8,473
Division						
Barisal	88.2	8.4	1.9	1.5	100.0	688
Chittagong	91.6	5.7	1.9	0.7	100.0	1,965
Dhaka	85.1	8.8	3.7	2.4	100.0	3,257
Khulna	87.4	8.1	2.6	1.9	100.0	1,281
Rajshahi	92.7	4.1	2.3	0.9	100.0	2,729
Sylhet	91.6	5.3	1.7	1.4	100.0	624
Education						
No education	92.8	4.2	2.2	0.8	100.0	4,843
Primary incomplete	90.0	5.9	2.3	1.8	100.0	1,928
Primary complete	90.0	5.5	3.0	1.5	100.0	1,074
Secondary +	81.5	12.4	3.6	2.5	100.0	2,699
Total	89.1	6.7	2.7	1.5	100.0	10,544

Table 10.5.2 Knowledge of signs and symptoms of STIs: men

Percent distribution of currently married men by knowledge of signs and symptoms associated with sexually transmitted infections (STIs), other than HIV/AIDS, according to background characteristics, Bangladesh 1999-2000

Background characteristic	Knowledge of specific signs or symptoms of STIs of men				Total	Number
	No knowledge of STIs	Does not know any symptoms	Knows one symptom only	Knows two or more symptoms		
Age						
15-19	*	*	*	*	100.0	23
20-24	88.3	4.4	3.8	3.5	100.0	151
25-29	85.3	6.2	2.9	5.5	100.0	345
30-34	79.2	8.4	3.7	8.7	100.0	418
35-39	80.8	6.6	4.1	8.5	100.0	492
40-44	81.8	6.9	3.5	7.7	100.0	394
45-49	77.9	5.8	3.8	12.5	100.0	333
50-54	75.4	4.4	5.3	14.9	100.0	219
55-59	83.9	3.9	3.3	8.9	100.0	181
Residence						
Urban	73.4	9.1	3.9	13.5	100.0	508
Rural	83.1	5.6	3.8	7.6	100.0	2,048
Division						
Barisal	85.1	4.2	1.5	9.2	100.0	159
Chittagong	79.5	3.0	3.2	14.3	100.0	426
Dhaka	77.1	8.1	5.7	9.0	100.0	835
Khulna	78.9	6.3	4.1	10.7	100.0	322
Rajshahi	85.6	7.1	2.6	4.7	100.0	682
Sylhet	90.1	3.2	1.5	5.2	100.0	132
Education						
No education	91.0	3.3	2.8	2.9	100.0	891
Primary incomplete	90.1	3.3	2.4	4.2	100.0	590
Primary complete	87.0	3.7	2.0	7.4	100.0	192
Secondary +	64.0	11.9	6.1	18.0	100.0	883
Total	81.2	6.3	3.8	8.7	100.0	2,556

Note: An asterisk indicates that a number is based on fewer than 25 cases and has been suppressed.

The BDHS survey collected information from women on their gynecological health problems and from men on the prevalence of some common symptoms of sexually transmitted diseases in the six months preceding the survey. Prevalence of gynecological health problems among currently married women is estimated from self-reported experience with each of the following problems in the last six months: genital ulcer, vaginal discharge accompanied by fever, itching or irritation during menstruation, painful intercourse or bleeding after intercourse, and pain and burning while urinating or frequent or difficult urination. The prevalence of STIs for men is determined from self-reported experience of discharge from the penis and a sore or ulcer on the penis during the 12 months preceding the survey. Since information on health problems is based on self-reports rather than clinical tests or examinations, the results should be interpreted with caution.

Table 10.6 shows the prevalence of different symptoms of gynecological health problems among women by background characteristics. Twenty-one percent of women report having had either abdominal pain or a urinary problem in the six months preceding the survey. Seven percent of women report genital sores or ulcers, while 15 percent report problems with vaginal itching or irritation during menstruation, and 10 percent report fever with vaginal discharge. One in twenty men report of having had an STI in the 12 months preceding the survey, and most of them report having had an ulcer or sore on their penis. Only 3 percent report having had a discharge from the penis (Table 10.7).

Table 10.6 Gynecological health problems

Percentage of currently married women who reported having gynecological health problems during the six months preceding the survey, by specific problem and background characteristics, Bangladesh 1999-2000

Background characteristic	Type of gynecological health problem									Number
	Itching/ irritation during menstruation	Genital sore	Bad odor with discharge	Abdominal pain	Vaginal discharge with fever	Urinating problem	Pain during intercourse	Bleeding after intercourse	Other problem	
Age										
15-19	13.3	5.0	8.0	18.8	8.6	18.3	18.3	1.8	2.4	1,468
20-24	13.8	6.1	6.2	19.4	8.6	19.2	15.7	1.5	2.6	1,846
25-29	15.7	7.9	7.3	21.6	10.0	22.1	15.7	1.6	3.6	1,878
30-34	17.1	7.2	8.7	22.8	12.7	23.0	13.9	1.0	3.1	1,523
35-39	17.6	7.8	9.1	24.2	14.0	22.8	11.6	1.0	3.9	1,174
40-44	15.1	6.3	8.7	21.9	11.1	22.8	9.7	1.5	2.8	948
45-49	9.1	5.0	6.9	16.3	7.2	17.3	7.7	0.7	2.5	702
Residence										
Urban	13.7	5.2	6.1	19.7	7.5	15.9	12.7	0.9	3.1	1,893
Rural	15.1	6.9	8.2	21.2	10.9	22.0	14.5	1.5	3.0	7,827
Division										
Barisal	27.6	16.9	13.3	33.2	16.6	30.1	24.4	1.6	6.7	639
Chittagong	14.0	5.6	4.9	18.9	9.1	20.7	12.2	1.1	4.8	1,795
Dhaka	12.6	5.4	6.4	18.8	8.3	17.7	11.3	0.9	2.0	3,009
Khulna	15.7	6.1	8.8	19.8	9.6	18.7	17.2	1.2	1.9	1,198
Rajshahi	14.1	5.8	9.1	21.8	11.7	23.6	14.6	1.8	2.7	2,527
Sylhet	16.6	9.2	10.2	22.2	12.4	19.6	15.6	2.8	2.2	553
Education										
No education	13.8	6.7	8.3	19.6	11.1	21.2	13.3	1.5	2.8	4,307
Primary incomplete	17.8	7.8	9.6	24.4	12.1	25.2	17.0	1.6	2.5	1,799
Primary complete	17.0	6.1	7.1	22.6	9.9	20.5	14.4	0.9	4.3	1,019
Secondary +	13.6	5.8	6.0	19.9	7.8	17.4	13.4	1.1	3.2	2,595
Total	14.8	6.6	7.8	20.9	10.2	20.8	14.1	1.4	3.0	9,720

Table 10.7 Symptoms of sexually transmitted disease in men

Percentage of currently married men who reported having a sexually transmitted disease (STD) or symptoms of STD during the twelve months preceding the survey, by specific problem and background characteristics, Bangladesh 1999-2000

Background characteristic	Had STD	Had discharge from penis	Had sore or ulcer on penis	Number
Age				
15-19	*	*	*	23
20-24	5.6	3.1	3.0	135
25-29	5.2	1.9	5.2	324
30-34	5.0	2.3	5.3	398
35-39	7.0	3.5	6.7	483
40-44	6.7	4.3	6.7	385
45-49	4.0	3.8	3.8	320
50-54	3.1	0.7	5.2	210
55-59	4.2	3.4	1.1	176
Residence				
Urban	3.7	2.0	2.6	477
Rural	5.8	3.2	5.8	1,976
Division				
Barisal	7.2	4.4	7.3	153
Chittagong	5.6	2.7	5.1	406
Dhaka	5.0	3.3	4.7	801
Khulna	8.6	3.7	7.7	308
Rajshahi	3.6	1.8	4.0	658
Sylhet	6.0	3.6	5.9	127
Education				
No education	5.9	3.3	6.3	861
Primary incomplete	6.3	4.1	6.4	569
Primary complete	5.9	2.2	3.3	183
Secondary+	4.1	2.0	3.6	840
Total	5.4	2.9	5.2	2,453

Note: An asterisk represents fewer than 25 cases and the numbers are suppressed.

COMMUNITY CHARACTERISTICS 11

As part of the Bangladesh DHS survey, a separate team of interviewers conducted a Service Provision Assessment (SPA) survey in each of the sample points selected for the larger survey. The Service Provision Assessment survey was designed to elicit data on background characteristics of the selected sample points (i.e., distance to thana headquarters, school, post office, etc.) as well as information on the accessibility and availability of health and family planning services. The SPA survey used five different questionnaires: one to collect general information about the village where the BDHS sample points were located, one for information on health and family planning facilities, one for health care providers, one for the thana family planning officer, and one for information from health and family planning fieldworkers. Interviewers first gathered a group of residents from the selected sample point and conducted a group interview in order to complete the first questionnaire on the general description of the sampled area. Then they made a list of facilities available in that area and a list of health and family planning workers who covered the area.

This chapter includes the results from the information collected about the sample points i.e. communities. A separate report will be published using the results from other aspects of the Service Provision Assessment survey.

Some community characteristics can be expected to have an effect on family planning and health service utilization. Such factors as distance to school, markets, and post offices and availability of income-generating activities are ways of measuring the development of this area.

Table 11.1 presents the distribution of ever-married women by distance to various services. Ninety percent of women in Bangladesh live within 5 kilometers of a daily market, weekly market, and post office. One-third of women live within 5 kilometers of a thana headquarters, while more than half of women live within 5 kilometers of a cinema hall. Urban women live closer to these services than rural women.

About 90 percent of women in Bangladesh live in a village where a primary school is located. Religious schools are also widespread in Bangladesh. About two-thirds of women live in a village where a madrasha (religious school) is located (Table 11.2).

Table 11.3 shows the availability of various income-generating organizations such as mothers' clubs, the Grameen Bank, and cottage industries. The availability of these income-generating programs may influence women's reproductive behavior. The data indicate that more than half (56 percent) of ever-married women in Bangladesh live in places that have mothers' clubs and Grameen Bank members, and 60 percent of women live in areas where a cooperative society is functioning. Nongovernment organizations are widespread in Bangladesh. More than 80 percent of women live in villages where an NGO is working. Mothers' clubs and Grameen Banks are less available to urban women than to rural women; cooperatives, cottage industries, and NGOs, however, are more accessible to urban women.

Table 11.4 provides information on the presence of family planning depot holders and the presence of satellite clinics based on reports from village informants. Only 9 percent of women live in villages where a depot holder sells family planning methods. More than half of women live in areas where shops sell family planning methods (mainly pills and condoms). Urban women have more access to shops that sell family planning methods than rural women (83 percent versus 50 percent).

Table 11.1 Availability of general services

Percent distribution of women by distance to nearest selected services, according to type of service, Bangladesh 1999-2000

Distance to service	Type of service						
	Thana headquarters	District headquarters	Daily market	Weekly market	Telephone service	Post office	Cinema hall
Urban							
Within mahallah	23.0	14.4	77.1	54.1	91.0	59.2	40.4
< 5 km	64.0	50.7	22.9	42.1	7.5	39.9	52.4
5-9 km	10.9	14.2	0.0	2.6	1.5	1.0	7.2
≥10 km	2.1	19.3	0.0	1.2	0.0	0.0	0.0
Don't know/missing	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,071	2,071	2,071	2,071	2,071	2,071	2,071
Median distance	2.4	2.8	u	u	u	u	1.6
Rural							
Within village	5.9	0.7	34.9	36.8	23.6	32.9	11.5
< 5 km	17.3	4.7	52.2	55.3	37.1	59.8	30.2
5-9 km	34.3	8.0	10.7	7.7	21.9	5.6	28.3
≥ 10 km	42.5	86.6	2.2	0.2	17.4	1.7	29.8
Don't know/missing	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8,473	8,473	8,473	8,473	8,473	8,473	8,473
Median distance	8.4	25.0	1.8	1.6	3.7	2.0	6.3
Total							
Within village/mahallah	9.3	3.4	43.2	40.2	36.9	38.0	17.1
< 5 km	26.4	13.7	46.4	52.7	31.3	55.9	34.5
5-9 km	29.7	9.3	8.6	6.7	17.9	4.7	24.2
≥ 10 km	34.6	73.3	1.8	0.4	14.0	1.3	24.0
Don't know/missing	0.0	0.3	0.0	0.0	0.0	0.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	10,544	10,544	10,544	10,544	10,544	10,544	10,544
Median distance	6.8	20.8	1.4	1.5	3.1	1.7	4.7

u = Unknown

Ninety percent of women live in areas covered by a satellite clinic. Among women who live in communities with satellite clinics, most live within 1 mile of the clinic. Among women for whom a clinic is available, 78 percent live in villages with clinics that provide the pill, 72 percent have access to clinics that distribute condoms, about two-thirds of women have access to clinics that provide injectables as a family planning method, and only 23 percent live near clinics that provide IUDs. More than 90 percent of women live in villages with clinics that provide child immunizations.

Table 11.5 shows that about 80 percent of women live in a community where child immunization is available and two-thirds of them can get an ORS packet in the village. Tabulations on the distance to the nearest source of specific modern methods show that although availability of family planning methods are widespread, not all methods are equally accessible (Table 11.5). As might be expected, the supply of methods such as the pill and condoms are generally more readily available to women than clinical methods such as injectables, IUDs, and sterilization are.

Table 11.2 Distance to nearest education facility

Percent distribution of women by distance to the nearest education facility, according to type of facility, Bangladesh 1999-2000

Distance to facility	Education facility				
	Madrasha[1]	Primary school	Boys' high school	Girls' high school	Coeducational high school
Urban					
Within mahallah	81.0	92.0	53.7	59.5	43.4
< 5 km	18.3	7.4	35.7	36.0	48.8
5-9 km	0.0	0.0	2.1	1.0	1.2
≥ 10 km	0.7	0.5	6.7	3.5	5.2
Don't know/missing	0.0	0.0	1.8	0.0	1.4
Total	100.0	100.0	100.0	100.0	100.0
Number of women	2,071	2,071	2,071	2,071	2,071
Median distance	u	u	u	u	1.3
Rural					
Within village	58.4	88.2	7.1	15.1	39.1
< 5 km	37.6	9.1	18.6	34.9	53.4
5-9 km	2.6	0.0	15.1	22.8	4.7
≥ 10 km	1.4	2.0	50.8	26.7	2.3
Don't know/missing	0.0	0.7	8.4	0.5	0.5
Total	100.0	100.0	100.0	100.0	100.0
Number of women	8,473	8,473	8,473	8,473	8,473
Median distance	u	u	10.6	4.9	1.6
Total					
Within village/mahallah	62.8	88.9	16.2	23.9	40.0
< 5 km	33.8	8.8	21.9	35.1	52.5
5-9 km	2.1	0.0	12.6	18.5	4.0
≥ 10 km	1.2	1.7	42.1	22.1	2.9
Don't know/missing	0.0	0.6	7.1	0.4	0.7
Total	100.0	100.0	100.0	100.0	100.0
Number of women	10,544	10,544	10,544	10,544	10,544
Median distance	u	u	6.9	3.6	1.5

[1] Religious school
u = Unknown (not available)

Table 11.3 Availability of income-generating organizations

Percentage of women who have access to selected income-generating organizations, by residence, Bangladesh 1999-2000

Income-generating organization	Urban	Rural	Total
Mothers' club or ladies' association	54.3	56.0	55.7
Grameen Bank member	19.5	64.8	55.9
BSIC cottage industries	8.8	7.7	7.9
Cooperative society	62.2	59.9	60.3
NGOs	73.9	85.0	82.8
Number of women	2,071	8,473	10,544

Table 11.4 Availability of family planning and health services

Percentage of women who have access to selected family planning (FP) and health services, by residence, Bangladesh 1999-2000

Family planning or health service	Urban	Rural	Total
Depot holder who sells FP methods	4.6	10.4	9.2
Shop that sells FP methods	82.6	49.5	56.0
Satellite clinic	78.3	92.8	89.9
Number of women	2,071	8,473	10,544
Of those with satellite clinic, percentage with clinic supplying :			
Pills	66.1	81.0	78.4
IUD Insertion	14.1	25.2	23.3
Injectables	46.8	69.1	65.3
Condoms	64.4	73.3	71.8
Child immunization	90.3	93.3	92.8
Delivery care	10.3	18.9	17.5
Vitamin A	92.1	93.1	92.9
Growth monitoring	41.6	31.2	33.0
Clinic 0-1 miles away	96.5	94.9	95.2
Clinic >2 miles away	2.0	3.9	3.5
Number women with access to satellite clinic	1,623	7,860	9,482

Table 11.5 Distance to nearest selected health and family planning services

Percent distribution of women by distance to nearest health service and family planning service providing selected services and supplies, Bangladesh 1999-2000

Distance to nearest service	Health services		Family planning services and supplies					
	Child immun-ization	ORS Packets	Condoms	Pills	Inject-ables	IUD	Vasec-tomy	Tubec-tomy
Urban								
Within mahallah	82.9	74.1	74.6	73.4	62.4	46.0	30.8	30.8
< 5 km	14.9	22.7	20.9	21.5	29.9	42.3	55.5	54.0
5-9 km	0.0	0.0	1.9	2.9	2.9	4.2	7.0	7.0
≥ 10 km	2.2	3.2	2.5	2.2	2.2	3.7	5.5	7.0
Don't know/missing	0.0	0.0	0.0	0.0	2.6	3.8	1.2	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,071	2,071	2,071	2,071	2,071	2,071	2,071	2,071
Median distance	u	u	u	u	u	1.1	1.8	1.8
Rural								
Within village	77.8	63.1	68.8	72.6	54.2	31.6	11.0	9.3
< 5 km	13.7	26.4	25.3	21.9	34.0	43.3	23.7	22.2
5-9 km	6.2	8.5	3.9	3.6	8.7	18.2	34.4	34.5
≥ 10 km	2.2	2.0	1.9	1.9	3.1	6.7	30.2	32.4
Don't know/missing	0.0	0.0	0.0	0.0	0.0	0.2	0.6	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8,473	8,473	8,473	8,473	8,473	8,473	8,473	8,473
Median distance	u	u	u	u	u	2.5	6.4	6.7
Total								
Within village/mahallah	78.8	65.3	70.0	72.7	55.8	34.4	14.9	13.5
< 5 km	14.0	25.7	24.4	21.9	33.2	43.1	30.0	28.4
5-9 km	5.0	6.8	3.5	3.4	7.6	15.4	29.0	29.1
≥ 10 km	2.2	2.2	2.1	2.0	2.9	6.1	25.4	27.4
Don't know/missing	0.0	0.0	0.0	0.0	0.5	0.9	0.7	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	10,544	10,544	10,544	10,544	10,544	10,544	10,544	10,544
Median distance	u	u	u	u	u	2.1	5.5	5.8

u = Unknown (not available)

IMPLICATIONS FOR POLICY 12

Kim Streatfield, Ahmed Al-Sabir and Shams Arefin

12.1 FERTILITY

THE FERTILITY DECLINE AND FUTURE POPULATION GROWTH

The key issue emerging from the 1999-2000 BDHS is that the impressive 50 percent fertility decline that characterized the 1980s has stalled at a little above three children per woman. Three successive DHS surveys, covering the period from 1991 to the present, have shown virtually identical total fertility rates (TFR) of 3.4 in 1993-1994, 3.3 in 1996-1997 and 3.3 in 1999-2000.

The Government of Bangladesh has a target of achieving replacement fertility (a TFR of about 2.2 to 2.3) by 2005, so an important question is whether the fertility decline is likely to remain stalled at this plateau or whether it is likely to resume in the near future.[1] The follow-on questions include what are the consequences if the decline remains stalled and what can be done to overcome this situation. Are there approaches that have not yet been utilized to minimize the negative impact of fertility persisting at a level above replacement?

The potential consequences must be viewed in the context of the likely projections. The World Bank has projected the Bangladesh population out to a stationary state. Assuming Bangladesh attains replacement fertility in 2010, the World Bank projects that the population will stop growing at 263 million in the mid-twenty-second century. This equates to a doubling of the year 2000 population and has major implications for resources, particularly in urban areas, where most of this population increase will have to be absorbed. In the nearer future, the World Bank projections indicate by the mid-twenty-first century, the population will reach 217.8 million. This is virtually identical to the United Nations Population Division medium-variant projection of 218.2 million for the same year.[2]

In summary, even the standard or medium (i.e., not the pessimistic) projections imply a doubling of the population. On the positive side, if fertility could be decreased slightly below replacement fertility early this century—say to a TFR of 1.8, then later to 1.7 as mortality levels decline further[3]—the population could stop growing at about 205 million within 30 to 40 years. This lower level of fertility is certainly attainable; it matches the current level of Thailand. It is only slightly below Sri Lanka's level, and a little above present levels in Singapore, Taiwan, and Korea. The point of this example is that any attained fertility level between replacement and 80 percent of replacement level has the potential to reduce future growth by up to 50 percent and thus has major implications for future resource needs.

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[1] Every five years' delay in achieving replacement fertility results in a 3 percent larger final population size, equivalent to an additional 8 million or so people.

[2] The United Nations Population Division medium-variant projection assumes attaining replacement fertility in 2015. These projections do not go beyond 2050.

[3] These fertility levels, as measured by TFR, would be equivalent to a net reproduction rate of 0.8, or 80 percent of replacement level.

Population Momentum

It is sometimes assumed that when a population attains replacement-level fertility, it stops growing. It should be clear from the projections described above that this is not the case in Bangladesh. The reason is that Bangladesh has a very young population, with 24 million females under age 15 years, compared with 21 million in the early reproductive age range of 15-30 years. Even at replacement levels of fertility, these young women and their offspring will, as they age, produce more than 3 million births per year for many decades.

Future population growth will be determined by three components: (1) unwanted fertility, (2) high desired family size, and (3) population momentum. The contribution of population momentum to the future growth of the Bangladesh population completely dominates the other two components such that more than four-fifths of the 85 million to be added by middle of this century will be due to momentum. Only 15 percent of that growth will be due to unwanted fertility, and 3 to 4 percent will be due to high desired family size (Streatfield, 1998:8). This has implications for what kinds of interventions need to be initiated or strengthened to minimize future growth.

Expressed simply, the usual approach to minimizing unwanted fertility is to provide effective family planning use, with some backup (e.g., menstrual regulation) in cases of contraceptive failure. The approach to reducing high desired family size includes, but cannot be limited to, providing motivation, information, etc., to low parity couples. Largely though, it requires social changes that minimize gender preference for sons. This requires economic changes that ensure non-familial security for elderly parents and usually alternative roles for women so that childbearing is not the only option for them. It also requires levels of child health whereby parents can be reasonably certain that their children will survive to adulthood.

The options for minimizing the impact of population momentum are generally focused on increasing average age at childbearing. This involves strategies to increase age at marriage and to delay births, especially first births. In the following section the feasibility of implementing these options will be discussed in detail.

12.2 Unwanted Fertility

As mentioned, the usual approach to limiting unwanted fertility involves the promotion and use of contraception primarily offered through the family planning program. The family planning program has long been a core element of Bangladesh population and reproductive health policies. The majority of women and men favor use of family planning, and more than two-thirds of ever-married women have used a contraceptive method at some time.

Contraceptive Prevalence

In 1999-2000 the contraceptive prevalence rate exceeded half of all married women (54 percent) for the first time. This level of contraceptive prevalence is approximately consistent with the TFR of 3.3, compared with international experience.[4] The rapid rise in family planning use since 1983 has primarily been due to the adoption of modern temporary methods. Pills (currently used by 23 percent of couples) and injectables (7 percent) have experienced the most rapid gains in use.

[4] Actually a CPR of 53.8 percent equates to a TFR of 3.48 using the formula CPR=97.7 - 12.6 x TFR (Ross et al., 1999:31), or 3.53 using an earlier (1993) Ross et al., formula (TFR=7.2931 - 0.07 x prevalence).

Sterilization has registered a decline during the 1990s (to 7 percent for female sterilization and less than 1 percent for male sterilization), partly due to the large cohort of women sterilized in the mid-1980s reaching the end of their reproductive lives. This shift away from permanent methods to reversible methods has implications for commodity costs, supply logistics, and method effectiveness. The reluctance of users to adopt clinical methods appears to be associated with a general caution about any clinical or surgical procedures. Traditional methods continue to account for about one in five users, or one in ten couples, even as overall prevalence has risen substantially. This is unusually high for Asia (Ross et al., 1993:7).

Although fertility has not fallen during the 1990s, the CPR has continued to increase at 1.5 percentage points per year, largely due to rising pill use. If this rate of increase continues, Bangladesh will reach a CPR consistent with replacement fertility (70 to 75 percent) in about a decade from now. Experience from other culturally similar countries suggests that injectables may become more popular in Bangladesh as in Indonesia (22 percent of couples in 1997 versus 7 percent in Bangladesh), and IUDs could also increase as in Egypt (35 percent of couples in 1997 versus 1 percent in Bangladesh), if confidence could be boosted in clinical services.

In this region, India has long relied on female sterilization (30 percent of couples in 1992), but there seems little prospect of that method gaining such popularity in Bangladesh. Like Egypt, Vietnam is dominated by IUD use (38 percent in 1997), but interestingly, IUD is combined with high levels of traditional methods (20 percent) as in the Philippines (main method at 18 percent in 1998). Like Bangladesh, Thailand relies heavily on pills (23 percent of couples in 1996) but combined with widespread use of other methods (female sterilization at 22 percent) and rapidly increasing injectable use (17 percent in 1996).

The majority of countries, including Bangladesh, still rely primarily on a single method, although this goes against most recommendations. Greater efforts must be made in Bangladesh to achieve more of a balance of methods, increasing especially the longer-term, cost-effective methods like injectables and IUDs through improved clinical service standards.

Contraceptive Discontinuation

One of the major areas of concern in family planning is the persistently high levels of contraceptive discontinuation. Half of couples adopting a contraceptive method stop use of that method within 12 months. Almost one in three of those who stop do so because of perceived side effects or health concerns with the method. It is possible that many who discontinue one method, may switch to another method. Further analysis is needed in this area.

Historically, these discontinuation rates are reasonably standard for national family planning programs, except for IUDs, for which normally only 25 percent discontinue per year (Ross et al., 1993:48). However, if such high levels of discontinuation are not reduced, it is difficult to see how the government of Bangladesh's objective of contraceptive prevalence necessary to achieve replacement fertility (about 68 percent) can be attained.

Sources of Supply

Fieldworkers have long been the most important source of supplies for family planning users in Bangladesh. In recent years this has been declining and is expected to continue to decline with the change in Family Welfare Assistant (FWA) work patterns. More couples are now procuring supplies, especially pills, from commercial sources like pharmacies (30 percent) and shops

(9 percent). Indeed the private sector is the source for almost 30 percent of contraceptives, compared with slightly more than 5 percent through the non-governmental organizations (NGOs). The NGO sector is currently the second largest provider of injectables, but that may change if the social marketing sector picks up injectables. The public sector is still the main source for two out of three (64 percent) users overall and almost all users of IUD, injectables, and sterilization. A number of high contraceptive prevalence countries, particularly in Latin America, rely heavily on the private sector for contraceptive supplies. The concern with all family planning sources, however, is that mechanisms are needed to promote effective and timely management of side effects, particularly through focused counseling and improved referral mechanisms.

Another important challenge is to reduce the differentials in contraceptive use between urban and rural areas, between administrative divisions, and between subgroups defined by level of education. For example, Sylhet Division has a lower level of contraceptive use than any other division in Bangladesh—about half that in Khulna—although it has been increasing recently. Educational programs and motivational activities can be targeted to reduce these differentials.

12.3 High Desired Family Size

In minimizing the potential impact of population momentum, reducing high desired family size in Bangladesh is not expected to contribute greatly—only 3 to 4 percent (see above). This is partly because the current stated ideal number of children (2.5 children) is close to the replacement fertility level of 2.3 children. The difference of 0.8 children between ideal number of children and total fertility rate is about average. The global average is 0.86 for 55 countries, and 0.75 for Asia according to Ross et al. (1999:79).

The attempt to measure ideal family size is somewhat hazardous and includes concepts of "wantedness" of the most recently born child; of whether or not the couple wants an additional child either sooner, later, or never; and of ideal family size at the time of marriage—theoretically not considering how many children the couple already has.

Although fertility levels have stopped falling, the proportion of married women wanting no more children continued to increase in the 1999-2000 BDHS; the proportion exceeded half of couples for the first time. Among women with two children, the proportion wanting more children is now less than one in three. Although further analysis of BDHS data is needed, evidence from other sources indicates that a substantial decline has occurred in the proportion of couples who want another child when they already have one son and one daughter (from 63 percent in 1983 down to 43 percent in 1995 in Matlab (van Mels, personal communication). Whereas these levels of higher desired family size have clearly been decreasing, there remains an element of gender preference. It seems that two sons and one daughter is the preferred combination among couples wanting three children.

There is another measure gaining popularity—the concept of "wanted fertility", based on whether or not women say they wanted their last child: at the time it was born (67 percent), later (19 percent), or not at all (14 percent). In Bangladesh the total wanted fertility rate (TWFR) of 2.2 children is identical with the replacement level. Although this measure is controversial, it is consistent in showing a growing proportion of parents with high parity saying that they did not want their last child. The gap of 1.2 children between TFR and TWFR is about average for 15 countries studied in Asia, Africa, and Latin America. The lowest TWFR was Thailand at 1.8 in 1987, slightly lower than the actual TFR of 2.2 at that time.

Whichever of these measures of fertility preference is chosen, it is clear that desired family size is still substantially (25 percent) lower than current fertility. This Bangladesh pattern of actual fertility exceeding wanted fertility is true in almost all countries. The policies for closing the gap are much the same as for addressing unmet need. They revolve around a wide range of effective and affordable contraceptives readily available to the public, together with comprehensive family planning information.

Unmet Need for Family Planning

The unmet need tends to change in size during the transition from very low prevalence of contraception to very high prevalence. Unmet need "starts small, since the desired family size is large, and ends small, since nearly everyone is using a method. In between, unmet need tends to be rather large" (Ross et al., 1999:71).

About one in seven women want to space (8 percent) or limit their children (7 percent) but are not currently using a contraceptive method. This level is about double that in high CPR countries like Colombia and Brazil, but about half that in low prevalence countries like Pakistan and Kenya. It is below the global average of 24 percent, although it still amounts to some five million Bangladeshi couples (ibid:73-4).

If this unmet need could be met, as directed in the 1994 International Conference on Population and Development (ICPD), then achievement of replacement fertility is feasible. Interestingly, analysis of trends in unmet need, together with contraceptive prevalence, shows that combined they tend to range from 65 percent to 75 percent in most surveys. This is the level required for replacement fertility in most societies. However, intentions do not always match actions. Only 71 percent of women currently not using family planning state that they plan to use it in the future, although some may not need (or may believe they do not need) protection against pregnancy.

In summary, CPR levels, unmet need levels, and intentions to use family planning, are all useful in gauging the interest of the public in managing their fertility. The policies regarding meeting unmet need are basically the same as for the family planning program as a whole, apart from more emphasis on identifying specific subgroups that may need particular approaches.

12.4 Minimizing Population Momentum

Minimizing population momentum is the major challenge in limiting future population growth. More than 40 percent of the population is below 15 years of age and will pass through the reproductive years in the near future. As the young age structure of the population cannot normally be modified in the short term, the only option is to encourage changes that effectively modify or reduce the proportion of the population who are married. This can best be done by increasing the average age of childbearing. To do this, average age at marriage and age at first birth must be increased.

Marriage and Initiation of Childbearing

Bangladesh has always exhibited an unusually low female age at marriage. The impact of the minimum legal marriage age of 18 years for females has been minimal. In the early 1990s, three-quarters of young women age 20-24 had married before the legal age of 18, by the end of the decade, this proportion had fallen to two-thirds, still a substantial proportion.

This modest decline has had virtually no effect on overall proportions of teenage women never married (slightly more than half) because they marry closer to age 20. It has only increased the median age at first marriage for women 20-24 at the end of the decade by less than one year to 16.1 (from 15.3 in 1993-1994). Overall, for women age 20-49, median age at marriage is still 15.0 years in 1999-2000. Marriage still remains universal with more than 99 percent of women married by age 30.

The median age at marriage of 15.0 years is markedly different in meaning from the widely quoted singulate mean age at marriage (SMAM) of 19 years, as quoted by the Bangladesh Bureau of Statistics.[5] In terms of potential impact, a decline of 10 percentage points in proportions married in both the 15-19 (from 50 to 40 percent) and the 20-24 (from 90 to 80 percent) age groups would result in a rise of one year in SMAM. This would produce a consequent decline of about 9 percent in the TFR, if all else remained equal. Therefore, a change in marriage patterns such that the SMAM rises to 22 years would theoretically produce replacement fertility. This level is feasible and reflects a much more modest change than took place in Sri Lanka, for example.

Just as age at marriage is resistant to change, age at first birth has not changed noticeably—still less than 19 years average overall and about 18 years for all women except those with secondary schooling. With the fertility decline resulting primarily from a reduction in higher parity births, the overall average age at childbearing has actually been falling dramatically, from 29.8 years in 1975 to 25.8 years in 1996-1997.

The main approaches and policies that will result in increasing age at marriage revolve around education and employment for young women. In the education sector, female enrollment in secondary school has increased from a low level of one in seven in 1991 to one in three in 1996. Of these 2.8 million women, one-quarter were covered by the Female Secondary School Assistance Project, which is expected to support double that number at present (equivalent to one in seven school-age girls).

The number of women in formal-sector employment has risen steeply in the past two decades, from 3.2 million in 1985 to more than 8 million in the late 1990s. There is some evidence that young women are less likely to be married if working than if not working—65 percent of women age 15-19 in the garment sector were never married, compared with 50 percent nationally (Amin et al., 1997). It is not clear whether employment opportunities for young women are still expanding or whether they have stabilized. At present levels, such employment accounts for about one in ten young women age 15-24 years, so the potential impact on overall fertility behavior may be minimal in the short term, although eventually the possibility of new roles should influence the aspirations of many more young Bangladeshi women.

Birth Intervals

Another mechanism through which the negative impact of population momentum can be minimized besides delaying births is extending intervals between births. However, there is an expectation that modernization brings an increase in opportunities for young women to work outside the home, with a consequent reduction in duration of breastfeeding of young babies. This

[5] The first measure is median age only of women who marry, while the SMAM takes into account proportions who do not marry. So SMAM can increase simply because fewer women in an age group marry, even though those who do marry still have the same median marriage age as earlier cohorts.

would reduce the duration of postpartum amenorrhea and leads to the suggestion that contraceptive practice should commence sooner after delivery to ensure protection against subsequent pregnancy.

There has indeed been a steady, although small, decline in duration of postpartum amenorrhea during the 1990s, from a median of 10.3 months in 1993-1994 to 8.4 months in 1996-1997 to 7.9 months in 1999-2000. This 23 percent decline might be expected to reflect a decline in duration of exclusive or full breastfeeding[6], but there is no evidence that breastfeeding patterns have changed during the latter part of the 1990s. Although more mothers appear to be following the recommendation that they should supplement breastfeeding after 5 or 6 months, two-thirds are still beginning supplementation too early, well before 5 months. Further efforts are needed to reinforce the importance of exclusive breastfeeding.

In Bangladesh, birth intervals have always been long, but recently the median has increased from 35 months (1993-1994) to 37 months (1996-1997) to 39 months in 1999-2000. This 12 percent increase in six years presumably reflects an increasing use of contraception for birth spacing, although information on when contraceptive use starts after delivery is not analyzed. Unless longer birth intervals coincide with a delayed commencement of childbearing, there may not be a substantial impact on reducing population momentum.

Policies to Reduce Fertility and Minimize Population Momentum

Since the 1960s, the developing world as a whole, has moved 77 percent toward achieving replacement fertility, although some of the least developed countries still have a long way to go (Ross et al., 1999:83). The most immediate determinants of further fertility decline are contraceptive practice, abortion use, breastfeeding, and marriage or cohabitation patterns. Regarding contraceptive practice, a greater variety of methods is needed in Bangladesh, ideally with at least one long-term method and one short-term method being provided to at least half of the population. Injectables are a likely candidate to be increased. Furthermore, a better understanding of the reasons for reluctance of clients to use any clinical methods is needed.

In determining where their efforts should be focused, planners should make more use of information on unmet need for and intention to use family planning. This should be seen not only in relation to the clients but also as a reflection of coverage and quality of family planning services. This is a productive approach to bridging the gap between desired family size and actual fertility.

Breastfeeding patterns are unlikely to change in the short-term, but for child health reasons, greater efforts are needed to ensure exclusive breastfeeding to the recommended age.

Increase of average age at female marriage is likely to be the most productive intervention to reduce the future impact of population momentum. Any social or economic policies that increase opportunities to retain young women in secondary school, to provide employment opportunities, and to increase the power of young women to negotiate their own marriages, can be expected to lead to delays in early marriage. The government of Bangladesh is already taking a lead in this area with the Female Secondary Stipend Assistance Program, as are some NGOs like the Bangladesh Rural Advancement Committee (BRAC) with minimum targets for female primary school students. These approaches have great potential and should be expanded. The textile sector has generated

[6] Full breastfeeding is exclusive breastfeeding or breastfeeding plus plain water.

substantial formal-sector employment opportunities for young women, and there must be many other avenues to expand such employment. This approach must be pursued, not only for the financial well-being of the individuals but also for the future welfare of the nation.

12.5 Reproductive Health

One of the highest priorities under the Health and Population Sector Program (HPSP) is improving safe motherhood. Bangladesh has traditionally exhibited low rates of antenatal care and extremely low rates of institutional delivery with skilled attendants. During the 1990s, however, there have been efforts to expand emergency obstetrical care (EOC) facilities with the aim of increasing access to safe delivery services. The BDHS gives an opportunity to see whether these efforts are resulting in increased use of services.

12.5.1 Antenatal care

The latest survey shows an increase in the proportion of pregnant women making at least one antenatal visit. Whereas this figure of 37 percent is an improvement on 28 percent or so in the earlier surveys, it is still far below the desirable level, with up to 2.5 million pregnancies annually lacking any antenatal care. On the other hand, it is encouraging that these visits are taking place earlier during pregnancy, and more women are making multiple visits.

This survey includes, for the first time, considerable detail on the components of antenatal care. This shows encouraging evidence that checks such as measurement of blood pressure, weight, and protein in urine are being undertaken, and information on the pregnancy complication is being provided to a moderate proportion of antenatal care clients.

More than four out of five women have one or more tetanus toxoid (TT) vaccinations during pregnancy, which reflects a high level of contact with the health services. With this high level, it is therefore puzzling that only one in three makes any antenatal care visits. This gap between TT vaccinations and antenatal care can only be seen as "missed opportunities" to bring pregnant women in for preventive checks and to encourage them to deliver in a supervised environment. In the changing service delivery system (from home visits to static clinics), the arrangement should be that antenatal care can be offered in the same visit and clinic as TT is given.

Delivery

As mentioned, major inputs have been made during the 1990s to upgrade and expand facilities for basic and comprehensive essential obstetric care. Thirty-nine district hospitals, 55 maternal child welfare centers (MCWCs), and about 35 Upazila health centers (UHCs) now offer emergency obstetrical care services. Nevertheless, only one in twenty births takes place in a health facility (6 percent). This equates to about 200,000 births. From other sources, it is believed that about half of these institutional births (100,000) are complicated deliveries, equivalent to a met need for obstetric complications of about one in five. As expected, the majority of the births occurring in health facilities are to younger, well-educated, urban women in their first pregnancy. The urban bias is most pronounced with more advanced procedures like caesarean sections, which account for 8 percent of urban births, compared with 1 percent of rural births.

With a general acceptance that training traditional birth attendants has not produced the safer deliveries that were hoped for, the current emphasis is on deliveries by doctors or nurse/midwives. This proportion has increased slightly to 12 percent, still far lower than desirable.

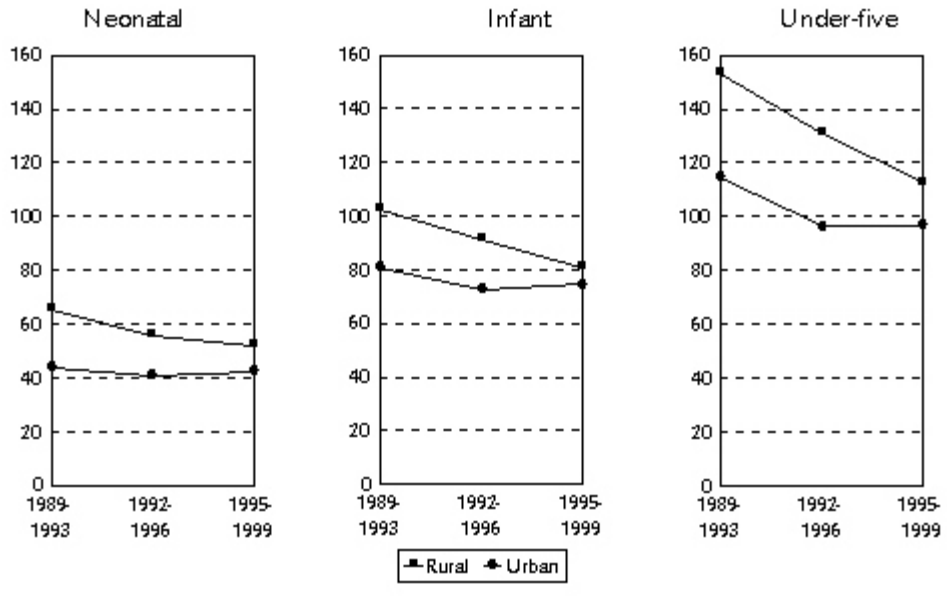
In terms of the "three delays" model of emergency obstetrical care, it can be said that with the efforts to expand emergency obstetrical care facilities, considerable improvement has resulted in the third delay, namely, management of complications in an institution. The focus must now be on the first and second delays, the identification of complications in the household and the effective decision to transfer (or refer) the pregnant women to an appropriate facility. Both of these potential delays are at risk of becoming more pronounced if contacts between health workers and household members are reduced by the changing service delivery system. Attention must be given to the tasks of the family welfare visitor (FWV) in particular to ensure that she has the opportunity to contact and advise clients so that timely decisions for referral of complicated cases are made.

12.6 Child Health

Bangladesh has been experiencing a significant decline in infant and child mortality. Although we would like to attribute much of this mortality decline to successful public health interventions, the available evidence suggests that such public health interventions had only a limited role.

Until the 1993-1994 BDHS survey, most of the decline in childhood mortality had been in the neonatal period (1993-1994 BDHS survey report). From that survey to the 1996-1997 survey, neonatal mortality declined by about 6 percent while overall under-five mortality declined by 13 percent. By the 1999-2000 survey, these mortality rates had declined by 13 and 19 percent respectively, a remarkable achievement by any measure. During the same period covered by these three DHS surveys, rural areas saw a much sharper decline in mortality rates than urban areas (Figure 12.1). Consequently rural to urban mortality ratios have declined from as high as 1.3-1.5 to 1.1-1.2. How can we explain this? The 1999-2000 sample incorporated a high proportion of

Figure 12.1 Changes in Neonatal, Infant, and Under-five Mortality by Urban-rural Residence, 1989-1993 to 1995-1999



Upazila towns, which in previous surveys had been included in the rural samples. This partially explains the lack of decline in any of the mortality rates in the urban areas between the 1996-1997 and 1999-2000 surveys, but does not explain it fully. If the decline in the urban areas had been at the same rate as the rural areas, then the flat curve after the 1996-1997 survey can only be explained if at least half of the urban sample had been from the Upazila townships, which is clearly not the case. Thus, the slowdown in the rate of urban mortality reduction appears to be real and needs to be further investigated.

Since the 1993-1994 survey, the use of antenatal care and TT vaccinations has increased in both urban and rural areas, but especially in rural areas. Care seeking for acute respiratory infection (ARI) has improved only in urban areas and ORS use for diarrhea has increased more in rural areas. On the other hand, the prevalence of diarrhea has almost halved in both urban and rural areas. Vitamin A coverage has increased by more than a third, but we do not see any urban-rural differentials. There has been virtually no change in childhood immunization coverage as well as no change in rates of exclusive breastfeeding at 0-3 months of age. Although most of these indicators show improvements, they do not explain the preferential improvement in mortality in rural areas.

Rates of wasting (low weight-for-height) have declined by 27 percent in the urban areas and 42 percent in the rural areas since the 1996-1997 survey. Reductions in rates of stunting (low height-for-age) are similarly high in rural areas. We hypothesize that improvements in nutritional status may have contributed to the recent rapid declines in child mortality. Secondary analysis of the BDHS survey data is recommended to further investigate these relationships. However, it would seem that the recent massive investments in nutritional interventions by the Bangladesh government are efforts in the right direction.

As stated at the beginning of this section, we have not seen adequate evidence that health service improvements may have contributed to the mortality reductions. That should not be a surprise to anyone who is familiar with the inferior quality and poor utilization of health services in Bangladesh (Amin, 1997; Ahmed, 2001; Cockcroft et al., 1999). The worry here is that the declining rural mortality will soon start leveling off, as is already occurring in the urban areas, with additional reductions harder to achieve.

This pattern is likely to manifest itself first in neonatal mortality. Unlike infant and under-five mortality rates, reductions in neonatal mortality have been less. This is similar to experiences in other developing countries (Darmstadt, 2000). These challenges can be met by increased investments in strategies for improving newborn survival and strengthening child health services. Although examples of community-based intervention models are not common, they do indicate the need to have a package of services including pregnancy, delivery and newborn care, and management of neonatal infections (Darmstadt, 2000).

A critical problem obvious from the survey data relates to the low rates of care seeking from health facilities for childhood illness. The survey attempted to capture the prevalence of serious respiratory infections in children, i.e., pneumonia. The survey appears to have overestimated the prevalence of respiratory illness, compared with other studies (HPSP Baseline Survey, 1999; Zaman, 1997). Nevertheless, the rates of care seeking from health facilities are comparable with other sources of information and are consistently low (Ahmed, 2001; Cockcroft et al., 1999). The infrastructure development in the public health sector has been impressive. Nevertheless, there are problems with actual availability of services (related to personnel, drugs, distance, and transportation), which, together with the overall poor quality of services, contribute to the low use of health facilities. However, it also seems obvious that investments in designing and implementing

community-based interventions for promoting appropriate home care and care seeking should yield good returns.

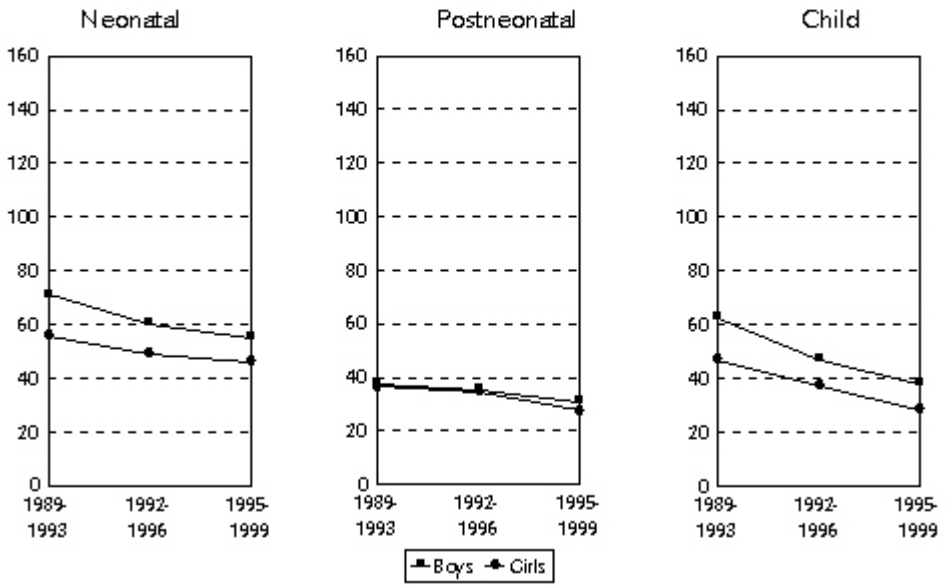
The strategy for the Integrated Management of Childhood Illness (IMCI), with its emphasis on improving health worker skills, strengthening the health system, and improving practices in the home and community can assist in providing the missing link between the health services and child health. IMCI is a key strategy of the Health and Population Sector Programme as articulated in the Programme Implementation Plan (MOHFW, 1998). Although significant advances have been made in the implementation of IMCI, progress has been slow in general in Bangladesh. It seems essential that IMCI implementation be accelerated with phased implementation if the gains in child survival are to be sustained.

The overall advances in child survival mask regional variations. Mortality rates in areas like Sylhet are still almost 50 percent higher than the national average and more than twice that of Khulna Division. The remaining four divisions have mortality rates close to the national average. Historically, Khulna and Rajshahi divisions have better health indicators than the rest of the country. However, we do not see any analysis of why these two divisions perform better in health and how that knowledge can be useful in improving the health status in other divisions, especially Sylhet. In the absence of countrywide vital statistics, it seems reasonable to assume that other sub-populations with high child mortality levels also exist and that they do not show up in the average statistics and are almost impossible to identify through surveys. As the country's overall mortality declines, these pockets of high mortality will become increasingly important for targeting special programmatic efforts. This implies that Bangladesh will need some form of a functioning vital statistics system to identify these sub-populations. Efforts for developing and evaluating innovative systems for vital statistics will be useful.

Secondary analysis of the 1996-1997 BDHS data demonstrated that gender discrimination in health care utilization is present, with levels of discrimination depending on the specific health service (Jamil et al., 2000). The effect of gender discrimination also shows up in mortality differences (Figure 12.2). In most of the world, females generally have lower mortality and higher life expectancy. Thus, the lower neonatal mortality among girls in Bangladesh is expected since gender discrimination is less likely to influence these deaths. With increasing age, there is a reversal of this pattern to an extent that in the 1-4 age group, female mortality is about one-third higher than male mortality and the difference has remained constant in the three surveys. This is very different from patterns seen in Matlab thana where previously observed gender differences in under-five mortality have virtually disappeared in recent years (Streatfield, personal communication), an achievement largely attributed to the good quality and effective child health care services provided by ICDDR,B. It seems that it should be possible to eliminate much of the excess mortality among Bangladeshi girls through well-targeted health interventions, even when existing social and cultural factors leading to such discrimination remain not directly addressed.

The leveling of vaccination coverage and rates of exclusive breastfeeding in the last 10 years is of concern given the efforts expended on these issues over this period. Innovative ideas are needed to climb out of this hole. It is unfortunate that although the health service is able to reach almost every newborn baby with the first vaccine doses, it fails to provide many of them with subsequent doses. Innovative pilot projects have demonstrated it is possible to achieve and sustain high rates of exclusive breastfeeding (Haider, 2000). We now need to translate this experience and evidence into practice. Thanks to the national immunization days (NIDs), Bangladesh can now boast of very high rates of vitamin A supplementation. We need plans for sustaining this after the NIDs are discontinued.

Figure 12.2 Changes in Neonatal, Postneonatal, and Child (1-4 yrs.) Mortality by Gender, 1989-1995 to 1995-1999



REFERENCES

Amin, S., C. Tunon, S.E. Arifeen, A.H. Baqui, R. Khanam, and S. Manaf. 1997. *Implementation of the essential services package (esp) in urban clinics through standardized service delivery protocols: Preliminary findings from an intervention in Dhaka.* ICDDR,B Working Paper No. 97 (Urban FP/MCH Working Paper No. 35). Dhaka: ICDDR,B.

Ahmed, S., F. Sobhan, A. Islam, and Barkat-e-Khuda. 2001. Neonatal morbidity and care-seeking behaviour in rural Bangladesh. *Journal of Tropical Pediatrics* 47:98-105.

Bangladesh Bureau of Statistics (BBS). 1997. *Statistical pocketbook of Bangladesh 1996*. Dhaka: BBS.

Basu, Alaka Malwade. 1989. Is discrimination in food really necessary for explaining sex differentials in childhood mortality? *Population Studies* 43 (2): 193-210.

Cleland, John, James F. Phillips, Sajeda Amin, and G.M. Kamal. 1994. *The determinants of reproductive change in Bangladesh: Success in a challenging environment*. Washington, D.C.: The World Bank.

Cleland, John, G. Edward Ebanks, Lokky Wai, M. Nawab Ali, and M.A. Rashid, eds. 1993. *Bangladesh Fertility Survey, 1989; Secondary analysis*. Dhaka: National Institute of Population Research and Training (NIPORT).

Cockcroft A, L. Monasta, J. Onishi, E. Karim, and N. Andersson. 1999. *Health and Population Sector Programme 1998-2003: Baseline Service Delivery Survey: Final report.* Dhaka: CIET Canada and Ministry of Health and Family Welfare.

Darmstadt G.L., R.E. Black, M. Santosham. 2000. Research priorities and postpartum care strategies for the prevention and optimal management of neonatal infections in less developed countries. *Pediatric Infectious Diseases Journal* 19:739-50.

Das Gupta, Monica. 1987. Selective discrimination against female children in rural Punjab, India. *Population and Development Review* 13(1): 77-101

Government of Bangladesh (GOB). 1994. *Country report: Bangladesh*. International Conference on Population and Development, Cairo, September 5-13, 1994. Dhaka: Government of Bangladesh.

Government of Bangladesh (GOB). 1998. Health and population sector programme 1998-2003: Programme implementation plan. Dhaka: Ministry health and family welfare. Government of Bangladesh.

Haider R., A. Ashworth, I. Kabir, S.R. Huttly. 2000. Effect of community-based peer counselors on exclusive breastfeeding practices in Dhaka, Bangladesh: A randomized controlled trial. *Lancet* 356: 1643-7.

Huq, Md. Najmul and John Cleland. 1990. *Bangladesh Fertility Survey 1989: Main report*. Dhaka: National Institute of Population Research and Training (NIPORT).

Islam, M. Nurul and M. Mazharul Islam. 1993. Biological and behavioral determinants of fertility in Bangladesh: 1975-1989. In *Bangladesh Fertility Survey, 1989: Secondary analysis,* 29-72. Dhaka: National Institute of Population Research and Training (NIPORT).

Jamil, K., A. Bhuiya, and S.E. Arifeen. 2000. Gender preference in health care for children in rural Bangladesh. In: *Bangladesh Demographic and Health Survey 1996-97: Special analysis*. National Institute of Population Research and Training, Ministry of Health and Family Welfare, Dhaka, Bangladesh, and ORC Macro. 2000. Calverton, Maryland, USA.

Kantner, Andrew and Elizabeth Frankenberg. 1988. Levels and trends in fertility and mortality in Bangladesh. In *Bangladesh Contraceptive Prevalence Survey-1985: Secondary analysis,* ed. A. Kantner, E. Frankenberg, M.A. Islam, and S.N. Mitra, 3-32, i, ii. Dhaka: Mitra and Associates.

Loaiza, Edilberto. 1995. Sterilization regret in the Dominican Republic: Looking for quality-of-care issues. *Studies in Family Planning* 26(1):39-48.

Ministry of Health and Family Welfare (MOHFW) [Bangladesh]. 1998. *Health and Population Sector Programme 1998-2003: Programme Implementation Plan, Part I.* Dhaka, Bangladesh: MOHFW.

Ministry of Health and Population Control (MOHPC) [Bangladesh]. 1978. *Bangladesh Fertility Survey, 1975-1976: First report*. Dhaka: Government of the People's Republic of Bangladesh and the World Fertility Survey.

Ministry of Health and Population Control (MOHPC) [Bangladesh]. 1983. *Bangladesh Contraceptive Prevalence Survey-1981*. Dhaka: MOHPC.

Mitra, S.N. 1987. *Bangladesh Contraceptive Prevalence Survey - 1985: Final report*. Dhaka: Mitra and Associates.

Mitra, S.N. and Shahidul Islam. 1996. *Diarrheal Morbidity and Treatment Survey 1994/95*. Dhaka: Mitra and Associates and Social Marketing Company.

Mitra, S.N. and G.M. Kamal. 1985. *Bangladesh Contraceptive Prevalence Survey - 1983: Final report*. Dhaka: Mitra and Associates.

Mitra, S.N., Ann Larson, Gillian Foo, and Shahidul Islam. 1990. *Bangladesh Contraceptive Prevalence Survey - 1989: Final report*. Dhaka: Mitra and Associates.

Mitra, S.N., Charles Lerman, and Shahidul Islam. 1993. *Bangladesh Contraceptive Prevalence Survey - 1991: Final report*. Dhaka: Mitra and Associates.

Mitra, S.N., M. Nawab Ali, Shahidul Islam, Anne R. Cross, and Tulshi Saha. 1994. *Bangladesh Demographic and Health Survey, 1993-1994*. Calverton, Maryland and Dhaka, Bangladesh: National Institute of Population Research and Training (NIPORT), Mitra and Associates, and Macro International Inc.

Mitra, S.N., Ahmed Al-Sabir, Anne R. Cross, and Kanta Jamil. 1997. *Bangladesh Demographic and Health Survey, 1996-1997*. Calverton, Maryland and Dhaka, Bangladesh: National Institute of Population Research and Training (NIPORT), Mitra and Associates, and Macro International Inc.

Retherford, Robert D., Minja Kim Choe, Shyam Thapa, and Bhakta B. Gubhaju. 1989. To what extent does breastfeeding explain birth-interval effects of early childhood mortality? *Demography* 26: 439-40.

Ross, J., W. Parker Mauldin, S.R. Green and E.R. Cooke. 1992. *Family planning and child survival programs as assessed in 1991.* New York: The Population Council.

Ross, J., W. Parker Mauldin, V.C. Miller. 1993. *Family planning and population: A compendium of international statistics.* New York: The Population Council.

Ross, J., J. Stover and A. Willard. 1999. *Profiles for family planning and reproductive health programs (116 countries).* New York: The Futures Group International.

Rutstein, Shea O.1984. Infant and child mortality: Levels, trends, and demographic differentials. Revised edition. *WFS Comparative Studies* No. 43. Voorburg. Netherland.

Streatfield, L. 1998. Population momentum in Bangladesh: Magnitude and policy options. Dhaka.

Shryock, Henry S., Jacob S. Siegel and associates. 1976. *The methods and materials of demography*. New York: Academic Press.

United Nations (UN). 1955. *Methods of appraisal of quality of basic data for population estimate.* New York: United Nations.

United Nations (UN). 1981. *Population of Bangladesh*. Economic and Social Commission for Asia and the Pacific, Country Monograph Series No. 8. New York: United Nations.

World Bank. 1993. *Effective family planning programs.* Washington, DC: World Bank.

World Bank. 1995. *Bangladesh: From stabilization to growth.* Washington, D.C.: The World Bank.

Zaman, K., A.H. Baqui, M. Yunus, R.B. Sack, O.M. Bateman, H.R. Chowdhury, and R.E. Black. 1997. Acute respiratory infections in children: A community-based longitudinal study in rural Bangladesh. *Journal of Tropical Pediatrics* 43:133-7.

SAMPLE IMPLEMENTATION

APPENDIX A

Table A.1.1 Sample implementation: women

Percent distribution of households and eligible women in the BDHS sample by result of the interviews and household, eligible women, and overall response rates, according to division and residence, Bangladesh 1999-2000

	Division						Residence		
Result	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Urban	Rural	Total
Selected households									
Completed (C)	93.3	96.3	96.2	95.8	97.3	95.1	95.3	96.2	96.0
No competent respondent (HP)	0.5	0.2	0.1	0.5	0.4	0.6	0.4	0.3	0.3
Refused (R)	0.0	0.1	0.3	0.3	0.0	0.4	0.5	0.1	0.2
Dwelling not found (DNF)	0.1	0.3	0.2	0.0	0.0	0.0	0.3	0.1	0.1
Household absent (HA)	1.2	1.1	1.2	1.4	0.9	1.6	1.2	1.2	1.2
Dwelling vacant (DV)	4.5	1.7	1.5	2.0	1.1	1.9	2.1	1.8	1.9
Dwelling destroyed (DD)	0.5	0.4	0.5	0.1	0.1	0.3	0.2	0.4	0.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,031	1,861	2,505	1,727	2,032	1,112	2,997	7,271	10,268
Household response rate (HRR)[1]	99.4	99.4	99.3	99.2	99.5	98.9	98.8	99.5	99.3
Eligible women									
Completed (EWC)	95.3	97.9	97.2	97.1	96.7	95.8	96.2	97.1	96.9
Not at home (EWNH)	3.1	1.4	2.0	2.0	2.1	2.6	2.5	1.9	2.1
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Refused (EWR)	0.7	0.3	0.4	0.6	0.1	0.8	0.7	0.3	0.4
Partly completed (EWPC)	0.3	0.1	0.2	0.0	0.1	0.0	0.2	0.0	0.1
Incapacitated (EWI)	0.6	0.4	0.3	0.3	1.0	0.8	0.3	0.6	0.5
Other (EWO)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,029	1,991	2,613	1,872	2,191	1,189	3,274	7,611	10,885
Eligible woman response rate (EWRR)[2]	95.3	97.9	97.2	97.1	96.7	95.8	96.2	97.1	96.9
Overall response rate (ORR)[3]	94.7	97.4	96.5	96.2	96.2	94.7	95.1	96.7	96.2

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and eligible woman response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF} * 100$$

[2] Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{EWC}{EWC + EWNH + EWP + EWR + EWPC + EWI + EWO} * 100$$

[3] The overall response rate (ORR) is calculated as: $ORR = (HRR * EWRR) \div 100$

Table A.1.2 Sample implementation

Percent distribution of households and eligible men in the BDHS sample by result of the interviews and household, eligible men and overall response rates, according to division and residence, Bangladesh 1999-2000

	Division						Residence		
Result	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Urban	Rural	Total
Selected households									
Completed (C)	93.5	97.1	97.1	97.0	97.6	94.6	95.6	96.9	96.6
Household present but no competent respondent at home (HP)	0.3	0.2	0.0	0.5	0.3	0.3	0.3	0.2	0.2
Refused (R)	0.0	0.0	0.2	0.5	0.0	0.8	0.6	0.1	0.2
Dwelling not found (DNF)	0.0	0.3	0.4	0.0	0.0	0.0	0.4	0.0	0.1
Household absent (HA)	0.6	0.6	0.4	1.0	0.6	1.4	0.9	0.6	0.7
Dwelling vacant (DV)	5.0	1.5	1.3	0.9	1.3	2.5	1.9	1.7	1.8
Dwelling destroyed (DD)	0.6	0.3	0.6	0.0	0.1	0.3	0.2	0.4	0.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	340	620	829	573	668	367	988	2,409	3,397
Household response rate (HRR)[1]	99.7	99.5	99.4	98.9	99.7	98.6	98.6	99.6	99.3
Eligible men									
Completed (EMC)	90.2	95.1	92.5	89.5	87.6	87.9	90.6	90.8	90.7
Not at home (EMNH)	8.6	4.7	6.9	10.1	11.6	12.1	8.6	8.8	8.7
Refused (EMR)	0.4	0.2	0.3	0.2	0.2	0.0	0.4	0.2	0.2
Partly completed (EMPC)	0.4	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.1
Incapacitated (EMI)	0.4	0.0	0.0	0.2	0.7	0.0	0.1	0.3	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	255	471	724	506	588	273	851	1,966	2,817
Eligible man response rate (EMRR)[2]	90.2	95.1	92.5	89.5	87.6	87.9	90.6	90.8	90.7
Overall response rate (ORR)[3]	89.9	94.6	92.0	88.6	87.3	86.7	89.4	90.4	90.1

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and eligible woman response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF} * 100$$

[2] Using the number of eligible women falling into specific response categories, the eligible woman response rate (EMRR) is calculated as:

$$\frac{EMC}{EMC + EMNH + EMP + EMR + EMPC + EMI + EMO} * 100$$

[3] The overall response rate (ORR) is calculated as: $ORR = (HRR * EMRR) \div 100$

Figure A.1 Urban Sampling Points, Bangladesh

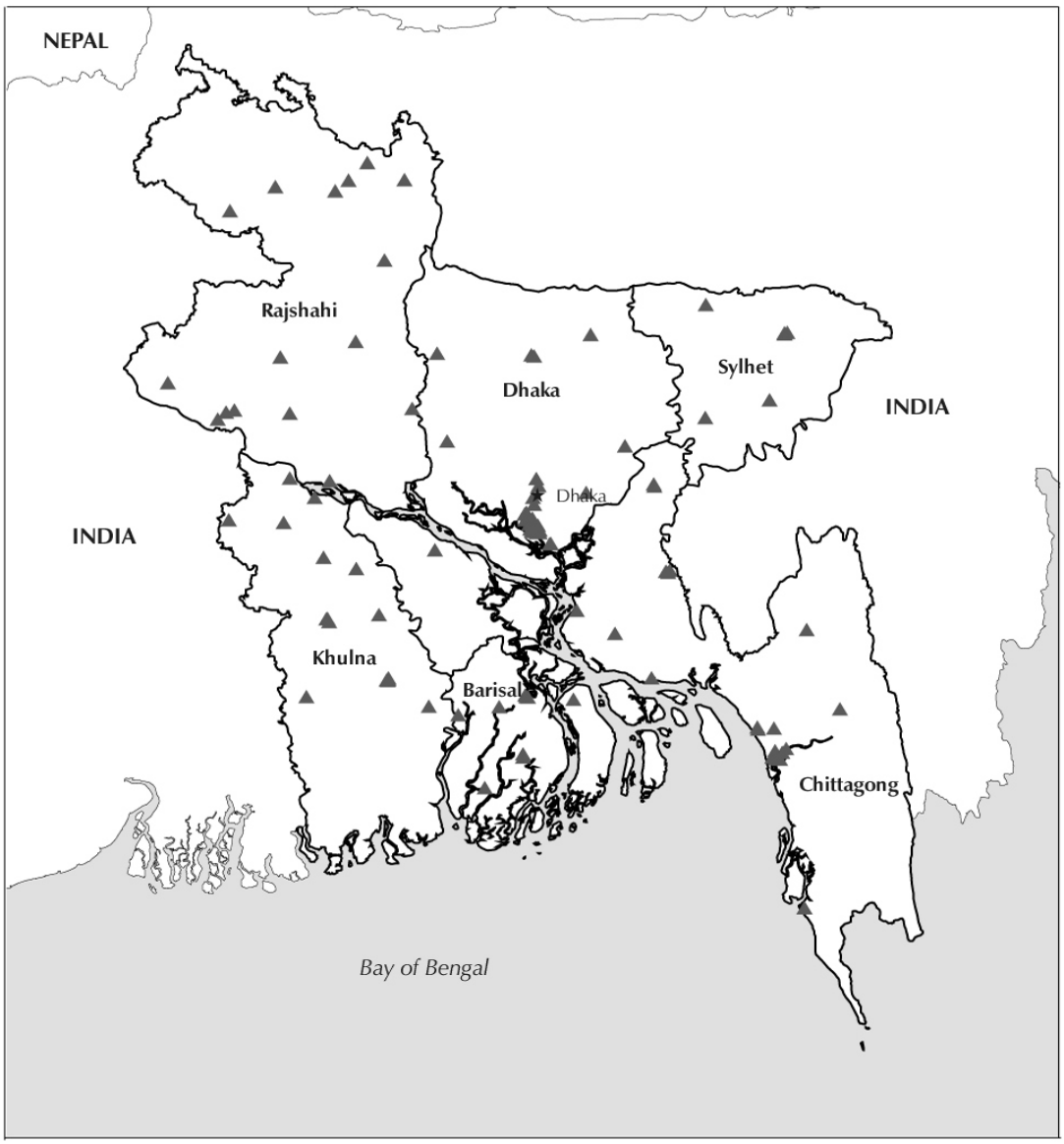
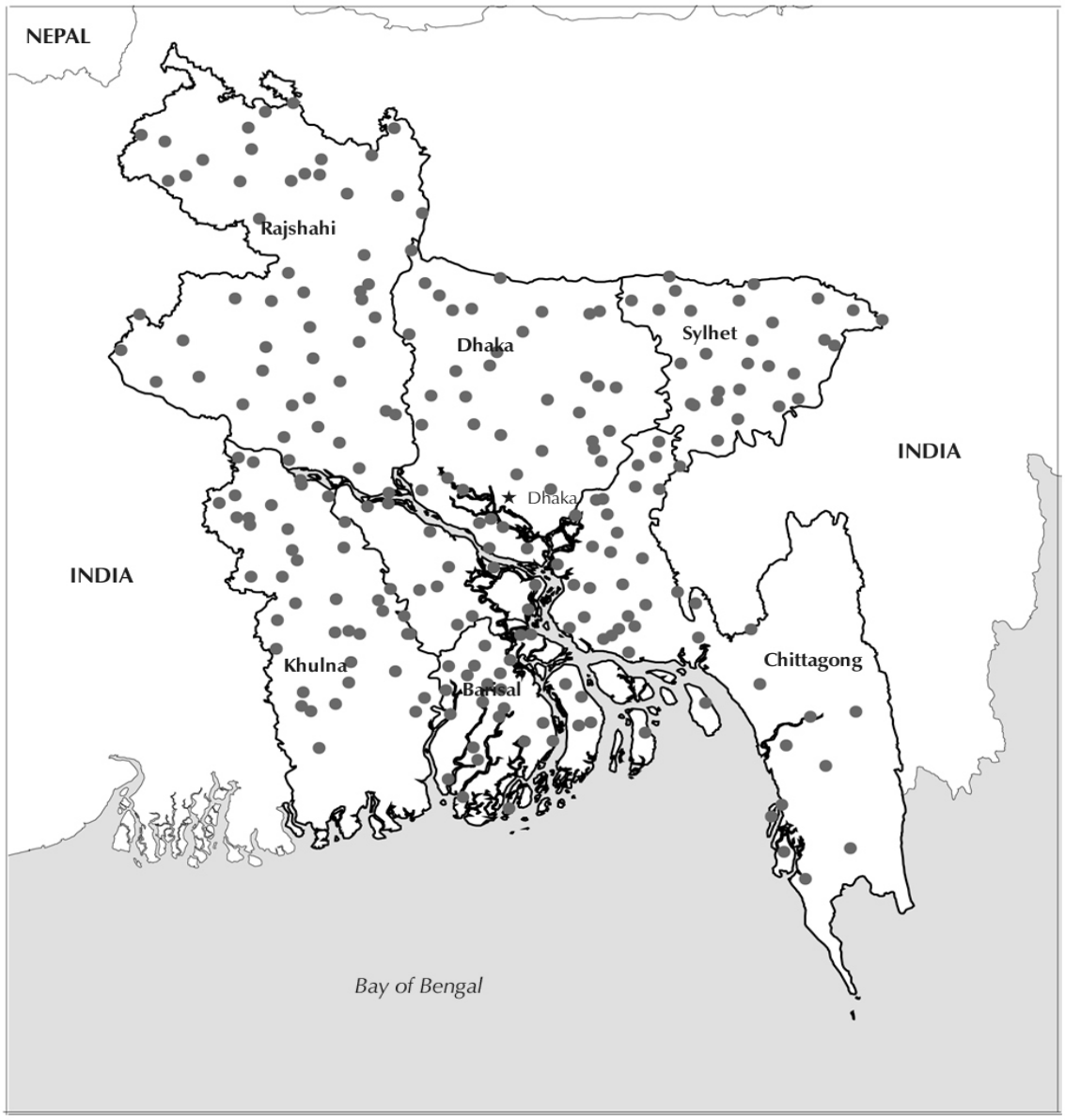


Figure A.2 Rural Sampling Points, Bangladesh



ESTIMATES OF SAMPLING ERRORS

APPENDIX B

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 1999-2000 Bangladesh Demographic and Health Survey (BDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the BDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the BDHS sample is the result of a two-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the BDHS is the ISSA Sampling Error Module (SAMPERR). This module used the Taylor linearisation method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearisation method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$var(r) = \frac{1-f}{x^2} \sum_{h=1}^{H} \left[\frac{m_h}{m_h - 1} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - r \cdot x_{hi} \text{ , and } z_h = y_h - r \cdot x_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of clusters selected in the h^{th} stratum,
y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,
x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the BDHS, there were 341 non-empty clusters. Hence, 341 replications were created. The variance of a rate r is calculated as follows:

$$se^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = k\,r - (k-1)\,r_{(i)}$$

where r is the estimate computed from the full sample of 341 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 340 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, SAMPERR computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. SAMPERR also computes the relative error and confidence limits for the estimates.

Sampling errors for the BDHS are calculated for selected variables considered to be of primary interest. Two set of results, one for women and for men, are presented in this appendix for the country as a whole, for urban and rural areas, for each of the six domains (divisions): Barisal, Chittagong, Dhaka, Khulna, Rajshahi, and Sylhet. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.10

present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1).

In general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. There are some differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *using any contraceptive method*, the relative standard errors as a percent of the estimated mean for the whole country, for urban areas, and for rural areas are 1.3 percent, 2.0 percent, and 1.7 percent, respectively.

The confidence interval (e.g., as calculated for the variable *using any method* can be interpreted as follows: the overall national sample proportion is 0.538 and its standard error is .007. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, ie. 0.538±2×.007. There is a high probability (95 percent) that the *true* proportion of all women 10-49 using a contraceptive method is between 52.3 and 55.2 percent.

Table B.1 List of selected variables for sampling errors, Bangladesh 1999-2000

Variable	Description	Base population
WOMEN		
No education	Proportion	Ever-married women 10-49
With secondary education or higher	Proportion	Ever-married women 10-49
Currently married	Proportion	Ever-married women 10-49
Children ever born	Mean	Currently married women 15-49
Children ever born to women over 40	Mean	Currently married women 40-49
Children surviving	Mean	Currently married women 15-49
Knowing any contraceptive method	Proportion	Currently married women 10-49
Knowing any modern contraceptive method	Proportion	Currently married women 10-49
Ever used any contraceptive method	Proportion	Currently married women 10-49
Currently using any method	Proportion	Currently married women 10-49
Currently using a modern method	Proportion	Currently married women 10-49
Currently using pill	Proportion	Currently married women 10-49
Currently using IUD	Proportion	Currently married women 10-49
Currently using injections	Proportion	Currently married women 10-49
Currently using condom	Proportion	Currently married women 10-49
Currently using female sterilization	Proportion	Currently married women 10-49
Currently using male sterilization	Proportion	Currently married women 10-49
Currently using rhythm	Proportion	Currently married women 10-49
Currently using withdrawal	Proportion	Currently married women 10-49
Using public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 10-49
Want to delay at least 2 years	Proportion	Currently married women 10-49
Ideal number of children	Mean	Ever-married women 10-49
Mothers received tetanus injection	Proportion	Last births in last 5 years
Mothers received medical care at birth	Proportion	Births in last 5 years
Had diarrhea in the last 2 weeks	Proportion	Children under 5
Treated with ORS packets	Proportion	Children under 5 with diarrhea in last 2 weeks
Sought medical treatment	Proportion	Children under 5 with diarrhea in last 2 weeks
Having health card, seen	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT vaccination (3 doses)	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received measles vaccination	Proportion	Children 12-23 months
Fully immunized	Proportion	Children 12-23 months
Weight-for-height (< -2 SD)	Proportion	Children 1-47 months
Height-for-age (< -2 SD)	Proportion	Children 1-47 months
Weight-for-age (< -2 SD)	Proportion	Children 1-47 months
Total fertility rate (3 years)	Rate	Women-years of exposure to child-bearing
Neonatal mortality rate	Rate	Number of births exposed to death
Postneonatal mortality rate	Rate	Number of births exposed to death
Infant mortality rate	Rate	Number of births exposed to death
Child mortality rate	Rate	Number of births exposed to death
Under-five mortality rate	Rate	Number of births exposed to death
MEN		
No education	Proportion	Currently married men 15-59
With secondary education or higher	Proportion	Currently married men 15-59
Knowing any contraceptive method	Proportion	Currently married men 15-59
Knowing any modern contraceptive method	Proportion	Currently married men 15-59
Ever used any contraceptive method	Proportion	Currently married men 15-59
Currently using any method	Proportion	Currently married men 15-59
Currently using a modern method	Proportion	Currently married men 15-59
Currently using pill	Proportion	Currently married men 15-59
Currently using IUD	Proportion	Currently married men 15-59
Currently using injections	Proportion	Currently married men 15-59
Currently using condom	Proportion	Currently married men 15-59
Currently using female sterilization	Proportion	Currently married men 15-59
Currently using male sterilization	Proportion	Currently married men 15-59
Currently using rhythm	Proportion	Currently married men 15-59
Currently using withdrawal	Proportion	Currently married men 15-59
Want no more children	Proportion	Currently married men 15-59
Want to delay at least 2 years	Proportion	Currently married men 15-59
Ideal number of children	Mean	Currently married men 15-59

Table B.2 Sampling errors - National sample, Bangladesh 1999-2000

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
No education	0.459	0.008	10544	10544	1.622	0.017	0.444	0.475
With secondary education or higher	0.256	0.008	10544	10544	1.775	0.029	0.241	0.271
Currently married	0.922	0.003	10544	10544	1.115	0.003	0.916	0.928
Children ever born	3.070	0.029	9696	9720	1.226	0.009	3.011	3.128
Children ever born to women over 40	5.708	0.066	1784	1781	1.160	0.012	5.575	5.840
Children surviving	2.600	0.023	9696	9720	1.207	0.009	2.554	2.647
Knowing any contraceptive method	0.999	0.000	9696	9720	1.041	0.000	0.999	1.000
Knowing any modern contraceptive	0.999	0.000	9696	9720	1.049	0.000	0.999	1.000
Ever used any contraceptive method	0.778	0.006	9696	9720	1.451	0.008	0.765	0.790
Currently using any method	0.538	0.007	9696	9720	1.456	0.014	0.523	0.552
Current using a modern method	0.434	0.007	9696	9720	1.460	0.017	0.420	0.449
Currently using pill	0.230	0.006	9696	9720	1.339	0.025	0.219	0.242
Currently using IUD	0.012	0.001	9696	9720	1.251	0.113	0.010	0.015
Currently using injections	0.072	0.004	9696	9720	1.564	0.057	0.064	0.080
Currently using norplant	0.005	0.001	9696	9720	1.148	0.171	0.003	0.006
Currently using condom	0.043	0.003	9696	9720	1.351	0.065	0.037	0.048
Currently using female sterilization	0.067	0.004	9696	9720	1.411	0.053	0.060	0.074
Currently using male sterilization	0.005	0.001	9696	9720	1.015	0.143	0.004	0.007
Currently using rhythm	0.054	0.003	9696	9720	1.234	0.052	0.048	0.060
Currently using withdrawal	0.040	0.003	9696	9720	1.259	0.062	0.035	0.046
Using public sector source	0.647	0.011	4271	4271	1.467	0.017	0.625	0.668
Want no more children	0.517	0.006	9696	9720	1.117	0.011	0.506	0.528
Want to delay at least 2 years	0.236	0.005	9696	9720	1.086	0.020	0.226	0.245
Ideal number of children	2.526	0.016	10221	10227	1.700	0.006	2.495	2.558
Mothers received tetanus injection	0.812	0.009	5194	5263	1.758	0.012	0.793	0.831
Mothers received medical care at birth	0.215	0.014	6832	6939	1.427	0.064	0.188	0.243
Had diarrhea in the last 2 weeks	0.061	0.003	6326	6430	1.119	0.056	0.054	0.068
Treated diarrhea with ORS packets	0.614	0.024	395	394	0.951	0.039	0.566	0.662
Sought medical treatment	0.348	0.028	395	394	1.155	0.081	0.292	0.404
Having health card, seen	0.435	0.020	1303	1316	1.434	0.045	0.395	0.474
Received BCG vaccination	0.910	0.013	1303	1316	1.701	0.015	0.883	0.937
Received DPT vaccination (3 doses)	0.721	0.018	1303	1316	1.433	0.025	0.685	0.756
Received polio vaccination (3 doses)	0.708	0.017	1303	1316	1.383	0.025	0.673	0.743
Received measles vaccination	0.708	0.019	1303	1316	1.529	0.027	0.670	0.747
Fully immunized	0.604	0.019	1303	1316	1.412	0.032	0.566	0.643
Weight-for-Height	0.103	0.005	5335	5421	1.139	0.046	0.094	0.113
Height-for-Age	0.447	0.008	5335	5421	1.139	0.018	0.431	0.462
Weight-for-Age	0.477	0.008	5335	5421	1.199	0.018	0.460	0.494
Total fertility rate (3 years)	3.308	0.074	na	34512	1.502	0.023	3.159	3.457
Neonatal mortality rate (0-4 years)	41.982	2.781	7038	7153	1.105	0.066	36.421	47.544
Postneonatal mortality rate (0-4 years)	24.276	1.946	7044	7160	1.056	0.080	20.385	28.167
Infant mortality rate (0-4 years)	66.258	3.394	7049	7165	1.086	0.051	59.470	73.047
Child mortality rate (0-4 years)	29.720	2.403	7122	7239	1.132	0.081	24.913	34.526
Under-five mortality rate (0-4 years)	94.009	3.856	7138	7256	1.066	0.041	86.296	101.721
MEN								
No education	0.349	0.012	2556	2556	1.230	0.033	0.325	0.372
With secondary education or higher	0.345	0.011	2556	2556	1.212	0.033	0.323	0.368
Knowing any contraceptive method	1.000	0.000	2556	2556	0.808	0.000	0.999	1.000
Knowing any modern contraceptive	1.000	0.000	2556	2556	0.808	0.000	0.999	1.000
Ever used any contraceptive method	0.865	0.008	2556	2556	1.197	0.009	0.849	0.881
Currently using any method	0.635	0.012	2556	2556	1.249	0.019	0.611	0.658
Currently using a modern method	0.513	0.011	2556	2556	1.115	0.022	0.491	0.535
Currently using pill	0.286	0.009	2556	2556	1.047	0.033	0.268	0.305
Currently using IUD	0.013	0.002	2556	2556	1.098	0.188	0.008	0.018
Currently using injections	0.072	0.006	2556	2556	1.252	0.089	0.060	0.085
Currently using Norplant	0.003	0.001	2556	2556	1.112	0.395	0.001	0.006
Currently using condom	0.059	0.005	2556	2556	1.080	0.085	0.049	0.069
Currently using female sterilization	0.071	0.007	2556	2556	1.307	0.094	0.058	0.084
Currently using male sterilization	0.008	0.002	2556	2556	1.033	0.232	0.004	0.011
Currently using rhythm	0.091	0.006	2556	2556	1.041	0.065	0.079	0.103
Currently using withdrawal	0.022	0.004	2556	2556	1.229	0.164	0.015	0.029
Want no more children	0.550	0.010	2556	2556	1.027	0.018	0.530	0.570
Want to delay at least 2 years	0.216	0.008	2556	2556	0.993	0.037	0.200	0.232
Ideal number of children	2.415	0.021	2373	2365	1.258	0.009	2.374	2.457

na = Not applicable

Table B.3 Sampling errors - Urban sample, Bangladesh 1999-2000

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
No education	0.323	0.016	3150	2072	1.933	0.050	0.291	0.355
With secondary education or higher	0.434	0.023	3150	2072	2.636	0.054	0.387	0.481
Currently married	0.914	0.006	3150	2072	1.261	0.007	0.901	0.926
Children ever born	2.682	0.056	2878	1893	1.419	0.021	2.571	2.793
Children ever born to women over 40	5.010	0.124	526	341	1.178	0.025	4.761	5.258
Children surviving	2.340	0.044	2878	1893	1.364	0.019	2.251	2.429
Knowing any contraceptive method	1.000	0.000	2878	1893	na	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	2878	1893	na	0.000	1.000	1.000
Ever used any contraceptive method	0.855	0.010	2878	1893	1.497	0.011	0.836	0.875
Currently using any method	0.600	0.012	2878	1893	1.327	0.020	0.576	0.625
Current using a modern method	0.487	0.011	2878	1893	1.175	0.022	0.465	0.509
Currently using pill	0.246	0.011	2878	1893	1.358	0.044	0.225	0.268
Currently using IUD	0.014	0.003	2878	1893	1.145	0.177	0.009	0.019
Currently using injections	0.057	0.006	2878	1893	1.368	0.104	0.045	0.069
Currently using norplant	0.004	0.001	2878	1893	1.113	0.309	0.002	0.007
Currently using condom	0.098	0.009	2878	1893	1.673	0.095	0.079	0.116
Currently using female sterilization	0.063	0.006	2878	1893	1.284	0.092	0.052	0.075
Currently using male sterilization	0.004	0.001	2878	1893	1.007	0.311	0.001	0.006
Currently using rhythm	0.054	0.005	2878	1893	1.108	0.086	0.045	0.064
Currently using withdrawal	0.052	0.005	2878	1893	1.187	0.094	0.042	0.062
Using public sector source	0.373	0.020	1416	934	1.574	0.054	0.332	0.413
Want no more children	0.528	0.011	2878	1893	1.169	0.021	0.506	0.549
Want to delay at least 2 years	0.232	0.009	2878	1893	1.086	0.037	0.215	0.249
Ideal number of children	2.320	0.022	3116	2050	1.557	0.009	2.276	2.364
Mothers received tetanus injection	0.883	0.011	1386	913	1.317	0.013	0.860	0.906
Mothers received medical care at birth	0.597	0.053	1737	1143	1.839	0.088	0.492	0.702
Had diarrhea in the last 2 weeks	0.071	0.006	1611	1059	0.981	0.089	0.058	0.083
Treated diarrhea with ORS packets	0.726	0.039	109	75	0.937	0.054	0.647	0.804
Sought medical treatment	0.430	0.054	109	75	1.140	0.125	0.322	0.538
Having health card, seen	0.528	0.031	334	221	1.120	0.058	0.467	0.589
Received BCG vaccination	0.952	0.012	334	221	1.011	0.012	0.928	0.976
Received DPT vaccination (3 doses)	0.821	0.024	334	221	1.147	0.029	0.773	0.869
Received polio vaccination (3 doses)	0.796	0.029	334	221	1.289	0.036	0.739	0.853
Received measles vaccination	0.807	0.027	334	221	1.247	0.033	0.753	0.861
Fully immunized	0.698	0.027	334	221	1.060	0.038	0.644	0.751
Weight-for-Height	0.093	0.008	1365	894	1.000	0.087	0.077	0.109
Height-for-Age	0.350	0.017	1365	894	1.277	0.048	0.317	0.384
Weight-for-Age	0.398	0.015	1365	894	1.128	0.039	0.367	0.428
Total fertility rate (3 years)	2.454	0.102	na	7329	1.427	0.041	2.251	2.658
Neonatal mortality rate (0-9 years)	42.039	4.793	3536	2343	1.341	0.114	32.453	51.624
Postneonatal mortality rate (0-9 years)	32.394	3.644	3545	2350	1.163	0.113	25.105	39.683
Infant mortality rate (0-9 years)	74.433	5.954	3547	2351	1.235	0.080	62.525	86.340
Child mortality rate (0-9 years)	24.080	3.388	3548	2352	1.269	0.141	17.304	30.856
Under-five mortality rate (0-9 years)	96.720	7.227	3561	2360	1.333	0.075	82.265	111.175
MEN								
No education	0.241	0.021	771	507	1.359	0.087	0.199	0.283
With secondary education or higher	0.529	0.030	771	507	1.674	0.057	0.469	0.589
Knowing any contraceptive method	1.000	0.000	771	507	na	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	771	507	na	0.000	1.000	1.000
Ever used any contraceptive method	0.901	0.014	771	507	1.307	0.016	0.873	0.929
Currently using any method	0.683	0.023	771	507	1.375	0.034	0.637	0.729
Currently using a modern method	0.562	0.023	771	507	1.271	0.040	0.517	0.607
Currently using pill	0.318	0.019	771	507	1.109	0.058	0.281	0.356
Currently using IUD	0.012	0.004	771	507	1.010	0.326	0.004	0.020
Currently using injections	0.053	0.009	771	507	1.101	0.167	0.036	0.071
Currently using Norplant	0.003	0.002	771	507	1.117	0.726	0.000	0.008
Currently using condom	0.113	0.013	771	507	1.152	0.116	0.087	0.140
Currently using female sterilization	0.055	0.010	771	507	1.201	0.179	0.035	0.075
Currently using male sterilization	0.006	0.003	771	507	1.148	0.520	0.000	0.013
Currently using rhythm	0.091	0.012	771	507	1.122	0.128	0.067	0.114
Currently using withdrawal	0.023	0.006	771	507	1.143	0.266	0.011	0.036
Want no more children	0.552	0.020	771	507	1.108	0.036	0.512	0.592
Want to delay at least 2 years	0.207	0.017	771	507	1.144	0.081	0.173	0.240
Ideal number of children	2.347	0.038	771	487	1.250	0.016	2.271	2.423

na = Not applicable

Table B.4 Sampling errors - Rural sample, Bangladesh 1999-2000

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
WOMEN								
No education	0.493	0.009	7394	8472	1.540	0.018	0.475	0.511
With secondary education or higher	0.212	0.007	7394	8472	1.570	0.035	0.198	0.227
Currently married	0.924	0.003	7394	8472	1.063	0.004	0.917	0.930
Children ever born	3.163	0.033	6818	7827	1.158	0.011	3.097	3.230
Children ever born to women over 40	5.873	0.075	1258	1441	1.118	0.013	5.722	6.023
Children surviving	2.663	0.027	6818	7827	1.144	0.010	2.609	2.717
Knowing any contraceptive method	0.999	0.000	6818	7827	0.972	0.000	0.999	1.000
Knowing any modern contraceptive method	0.999	0.000	6818	7827	0.980	0.000	0.998	1.000
Ever used any contraceptive method	0.759	0.007	6818	7827	1.404	0.000	0.744	0.773
Currently using any method	0.523	0.009	6818	7827	1.431	0.017	0.505	0.540
Current using a modern method	0.422	0.009	6818	7827	1.461	0.021	0.404	0.439
Currently using pill	0.226	0.007	6818	7827	1.303	0.029	0.213	0.240
Currently using IUD	0.012	0.002	6818	7827	1.243	0.137	0.009	0.015
Currently using injections	0.076	0.005	6818	7827	1.528	0.065	0.066	0.086
Currently using norplant	0.005	0.001	6818	7827	1.120	0.198	0.003	0.006
Currently using condom	0.029	0.003	6818	7827	1.270	0.089	0.024	0.034
Currently using female sterilization	0.068	0.004	6818	7827	1.385	0.062	0.059	0.076
Currently using male sterilization	0.006	0.001	6818	7827	0.976	0.158	0.004	0.007
Currently using rhythm	0.054	0.003	6818	7827	1.218	0.062	0.047	0.061
Currently using withdrawal	0.038	0.003	6818	7827	1.255	0.077	0.032	0.043
Using public sector source	0.723	0.012	2855	3337	1.452	0.013	0.699	0.748
Want no more children	0.515	0.007	6818	7827	1.078	0.023	0.502	0.528
Want to delay at least 2 years	0.237	0.005	6818	7827	1.055	0.007	0.226	0.247
Ideal number of children	2.578	0.019	7105	8177	1.647	0.014	2.540	2.616
Mothers received tetanus injection	0.797	0.011	3808	4350	1.705	0.088	0.755	0.819
Mothers received medical care at birth	0.140	0.012	5095	5797	1.298	0.065	0.115	0.165
Had diarrhea in the last 2 weeks	0.059	0.004	4715	5371	1.101	0.048	0.052	0.067
Treated diarrhea with ORS packets	0.588	0.028	286	319	0.919	0.099	0.532	0.644
Sought medical treatment	0.329	0.032	286	319	1.137	0.055	0.264	0.394
Having health card, seen	0.416	0.023	969	1095	1.414	0.018	0.371	0.461
Received BCG vaccination	0.902	0.016	969	1095	1.644	0.029	0.870	0.933
Received DPT vaccination (3 doses)	0.700	0.021	969	1095	1.372	0.029	0.659	0.742
Received polio vaccination (3 doses)	0.690	0.020	969	1095	1.321	0.029	0.650	0.730
Received measles vaccination	0.689	0.022	969	1095	1.475	0.032	0.644	0.733
Fully immunized	0.585	0.022	969	1095	1.380	0.038	0.541	0.630
Weight-for-Height	0.106	0.006	3970	1095	1.112	0.052	0.095	0.117
Height-for-Age	0.466	0.009	3970	4527	1.073	0.019	0.448	0.483
Weight-for-Age	0.492	0.010	3970	4527	1.172	0.020	0.473	0.512
Total fertility rate (3 years)	3.538	0.088	na	4527	1.435	0.025	3.361	3.714
Neonatal mortality rate (0-9 years)	52.036	2.666	10399	27208	1.133	0.051	46.705	57.368
Postneonatal mortality rate (0-9 years)	28.617	1.847	10407	11835	1.116	0.065	24.923	32.312
Infant mortality rate (0-9 years)	80.654	3.155	10410	11847	1.088	0.039	74.343	86.965
Child mortality rate (0-9 years)	34.796	2.273	10476	11921	1.136	0.065	30.251	39.342
Under-five mortality rate (0-9 years)	112.644	3.762	10490	11937	1.107	0.033	105.120	120.167
MEN								
No education	0.375	0.014	1785	2049	1.183	0.036	0.348	0.402
With secondary education or higher	0.300	0.012	1785	2049	1.101	0.040	0.276	0.324
Knowing any contraceptive method	1.000	0.000	1785	2049	0.754	0.000	0.999	1.000
Knowing any modern contraceptive method	1.000	0.000	1785	2049	0.754	0.000	0.999	1.000
Ever used any contraceptive method	0.856	0.009	1785	2049	1.141	0.011	0.837	0.875
Currently using any method	0.623	0.014	1785	2049	1.195	0.022	0.595	0.650
Currently using a modern method	0.501	0.013	1785	2049	1.064	0.025	0.475	0.526
Currently using pill	0.278	0.011	1785	2049	1.011	0.039	0.257	0.300
Currently using IUD	0.013	0.003	1785	2049	1.075	0.218	0.008	0.019
Currently using injections	0.077	0.008	1785	2049	1.218	0.100	0.062	0.092
Currently using Norplant	0.003	0.001	1785	2049	1.080	0.458	0.000	0.006
Currently using condom	0.046	0.005	1785	2049	1.081	0.117	0.035	0.056
Currently using female sterilization	0.075	0.008	1785	2049	1.266	0.105	0.059	0.090
Currently using male sterilization	0.008	0.002	1785	2049	0.982	0.258	0.004	0.012
Currently using rhythm	0.092	0.007	1785	2049	1.000	0.075	0.078	0.105
Currently using withdrawal	0.021	0.004	1785	2049	1.213	0.195	0.013	0.029
Want no more children	0.550	0.012	1785	2049	0.985	0.021	0.526	0.573
Want to delay at least 2 years	0.218	0.009	1785	2049	0.940	0.042	0.200	0.236
Ideal number of children	2.433	0.024	1630	1878	1.223	0.010	2.385	2.482

na = Not applicable

Table B.5 Sampling errors - Barisal, Bangladesh 1999-2000

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
No education	0.269	0.021	981	688	1.460	0.077	0.228	0.311
With secondary education or higher	0.265	0.025	981	688	1.741	0.093	0.216	0.315
Currently married	0.927	0.006	981	688	0.769	0.007	0.915	0.940
Children ever born	3.242	0.095	914	638	1.190	0.029	3.053	3.432
Children ever born to women over 40	5.859	0.166	180	131	0.956	0.028	5.527	6.192
Children surviving	2.699	0.072	914	638	1.140	0.027	2.555	2.842
Knowing any contraceptive method	1.000	0.000	914	638	na	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	914	638	na	0.000	1.000	1.000
Ever used any contraceptive method	0.848	0.013	914	638	1.075	0.015	0.822	0.873
Currently using any method	0.592	0.017	914	638	1.036	0.028	0.558	0.626
Current using a modern method	0.457	0.025	914	638	1.518	0.055	0.407	0.507
Currently using pill	0.200	0.014	914	638	1.089	0.072	0.171	0.229
Currently using IUD	0.017	0.003	914	638	0.747	0.189	0.010	0.023
Currently using injections	0.106	0.013	914	638	1.313	0.126	0.079	0.133
Currently using norplant	0.005	0.002	914	638	1.054	0.492	0.000	0.010
Currently using condom	0.029	0.006	914	638	1.050	0.200	0.018	0.041
Currently using female sterilization	0.082	0.013	914	638	1.447	0.160	0.056	0.109
Currently using male sterilization	0.017	0.003	914	638	0.806	0.201	0.010	0.024
Currently using rhythm	0.069	0.010	914	638	1.142	0.139	0.049	0.088
Currently using withdrawal	0.060	0.012	914	638	1.481	0.194	0.037	0.083
Using public sector source	0.685	0.034	431	296	1.506	0.049	0.617	0.752
Want no more children	0.508	0.017	914	638	1.034	0.034	0.474	0.542
Want to delay at least 2 years	0.246	0.014	914	638	0.956	0.055	0.219	0.273
Ideal number of children	2.536	0.051	955	668	1.650	0.020	2.435	2.637
Mothers received tetanus injection	0.805	0.023	473	334	1.279	0.029	0.758	0.851
Mothers received medical care at birth	0.215	0.044	610	435	1.228	0.206	0.126	0.303
Had diarrhea in the last 2 weeks	0.078	0.015	566	404	1.362	0.197	0.047	0.108
Treated diarrhea with ORS packets	0.458	0.110	40	31	1.425	0.239	0.239	0.677
Sought medical treatment	0.261	0.081	40	31	1.217	0.309	0.100	0.423
Having health card, seen	0.530	0.062	110	77	1.293	0.118	0.405	0.654
Received BCG vaccination	0.948	0.026	110	77	1.237	0.028	0.896	1.000
Received DPT vaccination (3 doses)	0.769	0.040	110	77	0.983	0.052	0.690	0.848
Received polio vaccination (3 doses)	0.788	0.039	110	77	0.976	0.049	0.710	0.865
Received measles vaccination	0.702	0.036	110	77	0.827	0.052	0.629	0.774
Fully immunized	0.630	0.053	110	77	1.138	0.084	0.524	0.736
Weight-for-Height	0.130	0.026	470	335	1.692	0.203	0.077	0.183
Height-for-Age	0.460	0.023	470	335	0.991	0.050	0.414	0.505
Weight-for-Age	0.507	0.024	470	335	1.039	0.047	0.459	0.554
Total fertility rate (3 years)	3.253	0.228	na	2243	1.511	0.070	2.797	3.70
Neonatal mortality rate (0-9 years)	47.473	7.918	1241	893	1.312	0.167	31.636	63.309
Postneonatal mortality rate (0-9 years)	28.226	5.659	1244	895	1.255	0.200	16.908	39.544
Infant mortality rate (0-9 years)	75.699	9.862	1244	895	1.262	0.130	55.974	95.423
Child mortality rate (0-9 years)	35.697	5.950	1248	899	0.967	0.167	23.797	47.597
Under-five mortality rate (0-9 years)	108.693	10.571	1251	901	1.125	0.097	87.551	129.835
MEN								
No education	0.284	0.030	230	159	1.008	0.106	0.224	0.344
With secondary education or higher	0.332	0.037	230	159	1.202	0.113	0.257	0.406
Knowing any contraceptive method	1.000	0.000	230	159	na	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	230	159	na	0.000	1.000	1.000
Ever used any contraceptive method	0.909	0.024	230	159	1.243	0.026	0.862	0.956
Currently using any method	0.666	0.030	230	159	0.969	0.045	0.605	0.726
Currently using a modern method	0.494	0.032	230	159	0.968	0.065	0.430	0.557
Currently using pill	0.210	0.026	230	159	0.983	0.126	0.157	0.263
Currently using IUD	0.027	0.011	230	159	1.034	0.411	0.005	0.049
Currently using injections	0.133	0.022	230	159	0.966	0.163	0.089	0.176
Currently using Norplant	0.000	0.000	230	159	na	na	0.000	0.000
Currently using condom	0.032	0.014	230	159	1.218	0.443	0.004	0.060
Currently using female sterilization	0.080	0.023	230	159	1.311	0.294	0.033	0.127
Currently using male sterilization	0.012	0.007	230	159	1.004	0.594	0.000	0.027
Currently using rhythm	0.122	0.020	230	159	0.915	0.162	0.082	0.161
Currently using withdrawal	0.035	0.011	230	159	0.926	0.322	0.012	0.057
Want no more children	0.568	0.027	230	159	0.819	0.047	0.515	0.622
Want to delay at least 2 years	0.229	0.031	230	159	1.104	0.134	0.168	0.291
Ideal number of children	2.436	0.070	215	148	1.222	0.029	2.296	2.575

na = Not applicable

Table B.6 Sampling errors - Chittagong, Bangladesh 1999-2000

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.419	0.020	1950	1965	1.806	0.048	0.379	0.460
With secondary education or higher	0.316	0.022	1950	1965	2.043	0.068	0.273	0.359
Currently married	0.914	0.009	1950	1965	1.426	0.010	0.895	0.932
Children ever born	3.307	0.068	1781	1795	1.190	0.021	3.170	3.444
Children ever born to women over 40	5.722	0.172	326	334	1.183	0.030	5.379	6.065
Children surviving	2.847	0.053	1781	1795	1.111	0.019	2.741	2.953
Knowing any contraceptive method	1.000	0.000	1781	1795	na	0.000	1.000	1.000
Knowing any modern contraceptive method	0.999	0.001	1781	1795	1.091	0.001	0.998	1.001
Ever used any contraceptive method	0.696	0.016	1781	1795	1.492	0.023	0.664	0.729
Currently using any method	0.441	0.018	1781	1795	1.519	0.041	0.405	0.476
Current using a modern method	0.349	0.017	1781	1795	1.524	0.049	0.315	0.384
Currently using pill	0.188	0.012	1781	1795	1.338	0.066	0.163	0.213
Currently using IUD	0.012	0.003	1781	1795	1.045	0.229	0.006	0.017
Currently using injections	0.061	0.006	1781	1795	1.131	0.105	0.048	0.074
Currently using norplant	0.002	0.001	1781	1795	1.066	0.515	0.000	0.005
Currently using condom	0.036	0.007	1781	1795	1.601	0.196	0.022	0.050
Currently using female sterilization	0.049	0.005	1781	1795	1.047	0.109	0.038	0.060
Currently using male sterilization	0.001	0.001	1781	1795	0.993	0.736	0.000	0.003
Currently using rhythm	0.050	0.006	1781	1795	1.156	0.119	0.038	0.062
Currently using withdrawal	0.030	0.006	1781	1795	1.375	0.185	0.019	0.041
Using public sector source	0.581	0.029	662	635	1.498	0.050	0.523	0.638
Want no more children	0.510	0.013	1781	1795	1.072	0.025	0.485	0.536
Want to delay at least 2 years	0.230	0.010	1781	1795	0.973	0.042	0.211	0.250
Ideal number of children	2.760	0.039	1877	1883	1.624	0.014	2.682	2.839
Mothers received tetanus injection	0.826	0.019	1058	1074	1.596	0.022	0.789	0.863
Mothers received medical care at birth	0.219	0.036	1481	1522	1.627	0.163	0.148	0.291
Had diarrhea in the last 2 weeks	0.056	0.007	1392	1432	1.180	0.130	0.041	0.071
Treated diarrhea with ORS packets	0.679	0.055	79	80	1.041	0.081	0.568	0.789
Sought medical treatment	0.362	0.061	79	80	1.092	0.169	0.239	0.484
Having health card, seen	0.405	0.043	263	274	1.452	0.107	0.318	0.492
Received BCG vaccination	0.941	0.020	263	274	1.418	0.022	0.900	0.981
Received DPT vaccination (3 doses)	0.781	0.034	263	274	1.352	0.044	0.712	0.849
Received polio vaccination (3 doses)	0.765	0.036	263	274	1.383	0.047	0.694	0.836
Received measles vaccination	0.772	0.039	263	274	1.522	0.050	0.695	0.850
Fully immunized	0.684	0.043	263	274	1.507	0.062	0.599	0.770
Weight-for-Height	0.097	0.008	1163	1202	0.938	0.085	0.081	0.114
Height-for-Age	0.452	0.018	1163	1202	1.217	0.040	0.416	0.487
Weight-for-Age	0.461	0.016	1163	1202	1.052	0.034	0.429	0.492
Total fertility rate (3 years)	3.964	0.167	na	6685	1.420	0.042	3.631	4.298
Neonatal mortality rate (0-9 years)	40.808	4.245	2983	3061	1.104	0.104	32.318	49.298
Postneonatal mortality rate (0-9 years)	28.549	3.416	2988	3066	1.120	0.120	21.718	35.380
Infant mortality rate (0-9 years)	69.357	5.012	2989	3066	1.036	0.072	59.333	79.382
Child mortality rate (0-9 years)	43.564	5.179	3014	3094	1.244	0.119	33.205	53.922
Under-five mortality rate (0-9 years)	109.899	7.259	3021	3100	1.163	0.066	95.382	124.416
MEN								
No education	0.331	0.028	448	426	1.268	0.085	0.274	0.387
With secondary education or higher	0.370	0.033	448	426	1.443	0.089	0.304	0.436
Knowing any contraceptive method	1.000	0.000	448	426	na	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	448	426	na	0.000	1.000	1.000
Ever used any contraceptive method	0.787	0.028	448	426	1.447	0.036	0.731	0.843
Currently using any method	0.573	0.035	448	426	1.484	0.061	0.504	0.642
Currently using a modern method	0.469	0.032	448	426	1.353	0.068	0.405	0.533
Currently using pill	0.279	0.018	448	426	0.872	0.066	0.242	0.316
Currently using IUD	0.011	0.005	448	426	1.041	0.469	0.001	0.021
Currently using injections	0.059	0.011	448	426	0.965	0.183	0.037	0.080
Currently using Norplant	0.004	0.003	448	426	0.994	0.733	0.000	0.010
Currently using condom	0.051	0.012	448	426	1.187	0.242	0.026	0.076
Currently using female sterilization	0.065	0.015	448	426	1.306	0.234	0.035	0.096
Currently using male sterilization	0.000	0.000	448	426	na	na	0.000	0.000
Currently using rhythm	0.077	0.013	448	426	1.022	0.167	0.051	0.103
Currently using withdrawal	0.023	0.009	448	426	1.280	0.396	0.005	0.041
Want no more children	0.555	0.024	448	426	1.012	0.043	0.507	0.603
Want to delay at least 2 years	0.205	0.020	448	426	1.034	0.096	0.165	0.244
Ideal number of children	2.607	0.054	406	382	1.106	0.021	2.500	2.714

na = Not applicable

Table B.7 Sampling errors - Dhaka, Bangladesh 1999-2000

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
No education	0.484	0.013	2539	3257	1.295	0.027	0.459	0.510
With secondary education or higher	0.251	0.013	2539	3257	1.496	0.051	0.225	0.276
Currently married	0.924	0.005	2539	3257	0.965	0.005	0.914	0.934
Children ever born	3.035	0.059	2340	3009	1.211	0.019	2.917	3.153
Children ever born to women over 40	5.863	0.129	437	566	1.104	0.022	5.605	6.122
Children surviving	2.536	0.046	2340	3009	1.160	0.018	2.445	2.627
Knowing any contraceptive method	1.000	0.000	2340	3009	1.073	0.000	0.999	1.000
Knowing any modern contraceptive method	1.000	0.000	2340	3009	1.073	0.000	0.999	1.000
Ever used any contraceptive method	0.801	0.012	2340	3009	1.426	0.015	0.777	0.824
Currently using any method	0.539	0.014	2340	3009	1.362	0.026	0.511	0.567
Current using a modern method	0.421	0.014	2340	3009	1.329	0.032	0.394	0.448
Currently using pill	0.231	0.011	2340	3009	1.222	0.046	0.210	0.252
Currently using IUD	0.008	0.002	2340	3009	1.003	0.237	0.004	0.011
Currently using injections	0.057	0.006	2340	3009	1.317	0.110	0.045	0.070
Currently using norplant	0.005	0.002	2340	3009	1.145	0.321	0.002	0.009
Currently using condom	0.050	0.005	2340	3009	1.123	0.101	0.040	0.060
Currently using female sterilization	0.068	0.007	2340	3009	1.340	0.103	0.054	0.082
Currently using male sterilization	0.002	0.001	2340	3009	1.059	0.515	0.000	0.004
Currently using rhythm	0.059	0.006	2340	3009	1.292	0.106	0.047	0.072
Currently using withdrawal	0.050	0.006	2340	3009	1.279	0.115	0.039	0.062
Using public sector source	0.626	0.022	1024	1288	1.443	0.035	0.583	0.670
Want no more children	0.522	0.010	2340	3009	0.972	0.019	0.502	0.542
Want to delay at least 2 years	0.242	0.010	2340	3009	1.083	0.040	0.223	0.261
Ideal number of children	2.445	0.029	2472	3162	1.725	0.012	2.387	2.504
Mothers received tetanus injection	0.797	0.022	1254	1646	1.966	0.028	0.752	0.841
Mothers received medical care at birth	0.223	0.027	1614	2127	1.343	0.121	0.169	0.277
Had diarrhea in the last 2 weeks	0.069	0.007	1484	1956	0.975	0.095	0.056	0.082
Treated diarrhea with ORS packets	0.652	0.040	104	135	0.807	0.061	0.572	0.732
Sought medical treatment	0.361	0.055	104	135	1.174	0.154	0.250	0.471
Having health card, seen	0.397	0.041	307	403	1.456	0.102	0.316	0.478
Received BCG vaccination	0.865	0.035	307	403	1.820	0.041	0.794	0.935
Received DPT vaccination (3 doses)	0.688	0.039	307	403	1.459	0.056	0.610	0.765
Received polio vaccination (3 doses)	0.682	0.036	307	403	1.333	0.052	0.611	0.753
Received measles vaccination	0.659	0.042	307	403	1.567	0.064	0.574	0.744
Fully immunized	0.578	0.041	307	403	1.442	0.070	0.496	0.659
Weight-for-Height	0.100	0.009	1284	1698	1.110	0.093	0.081	0.118
Height-for-Age	0.454	0.016	1284	1698	1.160	0.036	0.422	0.487
Weight-for-Age	0.474	0.019	1284	1698	1.330	0.040	0.436	0.512
Total fertility rate (3 years)	3.210	0.135	na	10737	1.313	0.042	2.941	3.479
Neonatal mortality rate (0-9 years)	51.774	5.227	3293	4323	1.255	0.101	41.321	62.228
Postneonatal mortality rate (0-9 years)	32.142	3.278	3293	4322	1.096	0.102	25.585	38.699
Infant mortality rate (0-9 years)	83.916	5.811	3295	4325	1.119	0.069	72.295	95.538
Child mortality rate (0-9 years)	34.088	3.504	3312	4349	1.023	0.103	27.080	41.096
Under-five mortality rate (0-9 years)	115.144	6.760	3316	4354	1.119	0.059	101.624	128.664
MEN								
No education	0.367	0.021	670	835	1.131	0.057	0.325	0.409
With secondary education or higher	0.350	0.022	670	835	1.201	0.063	0.306	0.394
Knowing any contraceptive method	1.000	0.000	670	835	na	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	670	835	na	0.000	1.000	1.000
Ever used any contraceptive method	0.864	0.014	670	835	1.067	0.016	0.836	0.893
Currently using any method	0.597	0.022	670	835	1.140	0.036	0.554	0.640
Currently using a modern method	0.466	0.019	670	835	1.001	0.041	0.428	0.505
Currently using pill	0.265	0.017	670	835	0.999	0.064	0.231	0.299
Currently using IUD	0.009	0.004	670	835	1.014	0.409	0.002	0.017
Currently using injections	0.065	0.009	670	835	0.924	0.136	0.047	0.082
Currently using Norplant	0.003	0.002	670	835	0.996	0.722	0.000	0.007
Currently using condom	0.065	0.010	670	835	1.046	0.153	0.045	0.085
Currently using female sterilization	0.053	0.009	670	835	1.046	0.171	0.035	0.071
Currently using male sterilization	0.007	0.003	670	835	0.971	0.454	0.001	0.013
Currently using rhythm	0.098	0.011	670	835	0.978	0.115	0.076	0.121
Currently using withdrawal	0.023	0.008	670	835	1.328	0.337	0.007	0.038
Want no more children	0.549	0.017	670	835	0.889	0.031	0.515	0.583
Want to delay at least 2 years	0.216	0.014	670	835	0.854	0.063	0.189	0.243
Ideal number of children	2.344	0.032	608	754	1.133	0.014	2.281	2.408

na = Not applicable

Table B.8 Sampling errors - Khulna, Bangladesh 1999-2000

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
WOMEN								
No education	0.391	0.019	1817	1281	1.681	0.049	0.352	0.429
With secondary education or higher	0.303	0.017	1817	1281	1.610	0.057	0.268	0.338
Never married	0.000	0.000	1817	1281	na	na	0.000	0.000
Currently married	0.935	0.006	1817	1281	1.115	0.007	0.922	0.948
Married before age 20	0.944	0.006	1499	1051	1.003	0.006	0.932	0.956
Sex before 18	0.000	0.000	1499	1051	na	na	0.000	0.000
Children ever born	2.679	0.050	1700	1198	0.988	0.019	2.579	2.778
Children ever born to women over 40	5.464	0.134	278	192	0.997	0.025	5.195	5.732
Children surviving	2.336	0.043	1700	1198	1.027	0.019	2.250	2.423
Knowing any contraceptive method	1.000	0.000	1700	1198	na	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	1700	1198	na	0.000	1.000	1.000
Ever used any contraceptive method	0.863	0.009	1700	1198	1.133	0.011	0.844	0.882
Currently using any method	0.640	0.014	1700	1198	1.176	0.021	0.613	0.667
Current using a modern method	0.508	0.014	1700	1198	1.167	0.028	0.480	0.537
Currently using pill	0.258	0.013	1700	1198	1.197	0.049	0.233	0.284
Currently using IUD	0.021	0.005	1700	1198	1.319	0.220	0.012	0.030
Currently using injections	0.097	0.008	1700	1198	1.140	0.084	0.080	0.113
Currently using norplant	0.006	0.002	1700	1198	1.045	0.322	0.002	0.010
Currently using condom	0.066	0.008	1700	1198	1.325	0.121	0.050	0.082
Currently using female sterilization	0.050	0.008	1700	1198	1.472	0.155	0.035	0.066
Currently using male sterilization	0.010	0.002	1700	1198	1.012	0.241	0.005	0.015
Currently using rhythm	0.067	0.008	1700	1198	1.361	0.123	0.051	0.084
Currently using withdrawal	0.060	0.007	1700	1198	1.142	0.110	0.047	0.073
Using public sector source	0.593	0.025	866	613	1.489	0.042	0.543	0.643
Want no more children	0.548	0.012	1700	1198	1.030	0.023	0.523	0.573
Want to delay at least 2 years	0.246	0.012	1700	1198	1.170	0.050	0.222	0.271
Ideal number of children	2.285	0.027	1779	1254	1.524	0.012	2.231	2.339
Mothers received tetanus injection	0.855	0.015	815	579	1.192	0.017	0.826	0.884
Mothers received medical care at birth	0.302	0.033	1003	716	1.271	0.111	0.235	0.369
Had diarrhea in the last 2 weeks	0.055	0.008	954	680	1.086	0.146	0.039	0.072
Treated diarrhea with ORS packets	0.460	0.062	54	38	0.893	0.135	0.336	0.584
Sought medical treatment	0.300	0.067	54	38	1.060	0.223	0.166	0.434
Having health card, seen	0.552	0.041	224	160	1.204	0.073	0.471	0.633
Received BCG vaccination	0.951	0.019	224	160	1.296	0.020	0.914	0.988
Received DPT vaccination (3 doses)	0.808	0.034	224	160	1.268	0.042	0.740	0.876
Received polio vaccination (3 doses)	0.785	0.039	224	160	1.398	0.050	0.707	0.863
Received measles vaccination	0.810	0.032	224	160	1.176	0.039	0.746	0.874
Fully immunized	0.686	0.035	224	160	1.098	0.051	0.617	0.755
Weight-for-Height	0.093	0.012	792	559	1.139	0.131	0.069	0.118
Height-for-Age	0.378	0.018	792	559	0.998	0.047	0.342	0.413
Weight-for-Age	0.418	0.020	792	559	1.110	0.049	0.377	0.459
Total fertility rate (3 years)	2.706	0.128	na	4038	1.321	0.047	2.449	2.963
Neonatal mortality rate (0-9 years)	47.146	5.341	1992	1428	1.126	0.113	36.463	57.828
Postneonatal mortality rate (0-9 years)	17.198	3.451	1993	1429	1.114	0.201	10.295	24.100
Infant mortality rate (0-9 years)	64.343	6.857	1993	1429	1.225	0.107	50.630	78.057
Child mortality rate (0-9 years)	15.732	3.727	2000	1434	1.328	0.237	8.277	23.186
Under-five mortality rate (0-9 years)	79.063	6.686	2001	1435	1.090	0.085	65.691	92.435
MEN								
No education	0.288	0.030	453	322	1.398	0.104	0.228	0.347
With secondary education or higher	0.421	0.032	453	322	1.376	0.076	0.357	0.484
Knowing any contraceptive method	1.000	0.000	453	322	na	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	453	322	na	0.000	1.000	1.000
Ever used any contraceptive method	0.936	0.014	453	322	1.208	0.015	0.909	0.964
Currently using any method	0.728	0.027	453	322	1.280	0.037	0.675	0.782
Currently using a modern method	0.568	0.027	453	322	1.163	0.048	0.514	0.623
Currently using pill	0.313	0.033	453	322	1.513	0.106	0.247	0.378
Currently using IUD	0.017	0.005	453	322	0.832	0.298	0.007	0.027
Currently using injections	0.096	0.017	453	322	1.200	0.173	0.063	0.130
Currently using Norplant	0.003	0.003	453	322	1.071	0.998	0.000	0.008
Currently using condom	0.079	0.015	453	322	1.165	0.187	0.050	0.109
Currently using female sterilization	0.056	0.013	453	322	1.213	0.235	0.030	0.082
Currently using male sterilization	0.005	0.004	453	322	1.087	0.715	0.000	0.012
Currently using rhythm	0.119	0.016	453	322	1.048	0.134	0.087	0.151
Currently using withdrawal	0.037	0.010	453	322	1.069	0.255	0.018	0.056
Want no more children	0.595	0.029	453	322	1.252	0.049	0.537	0.653
Want to delay at least 2 years	0.185	0.020	453	322	1.088	0.107	0.145	0.225
Ideal number of children	2.303	0.051	445	315	1.367	0.022	2.201	2.406

na = Not applicable

Table B.9 Sampling errors - Rajshahi, Bangladesh 1999-2000

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
No education	0.509	0.017	2118	2728	1.596	0.034	0.474	0.543
With secondary education or higher	0.214	0.015	2118	2728	1.667	0.069	0.184	0.244
Currently married	0.926	0.006	2118	2728	0.994	0.006	0.915	0.937
Children ever born	2.967	0.061	1959	2527	1.205	0.020	2.846	3.088
Children ever born to women over 40	5.570	0.135	346	442	1.107	0.024	5.300	5.840
Children surviving	2.534	0.051	1959	2527	1.223	0.020	2.431	2.636
Knowing any contraceptive method	0.999	0.001	1959	2527	1.064	0.001	0.997	1.000
Knowing any modern contraceptive method	0.999	0.001	1959	2527	1.064	0.001	0.997	1.000
Ever used any contraceptive method	0.800	0.013	1959	2527	1.414	0.016	0.775	0.826
Currently using any method	0.586	0.017	1959	2527	1.556	0.030	0.552	0.621
Current using a modern method	0.511	0.017	1959	2527	1.543	0.034	0.476	0.545
Currently using pill	0.275	0.014	1959	2527	1.376	0.050	0.247	0.303
Currently using IUD	0.015	0.004	1959	2527	1.424	0.261	0.007	0.023
Currently using injections	0.085	0.012	1959	2527	1.907	0.142	0.061	0.109
Currently using norplant	0.005	0.002	1959	2527	1.030	0.314	0.002	0.009
Currently using condom	0.033	0.006	1959	2527	1.425	0.173	0.022	0.045
Currently using female sterilization	0.090	0.009	1959	2527	1.371	0.099	0.072	0.107
Currently using male sterilization	0.007	0.002	1959	2527	1.089	0.289	0.003	0.011
Currently using rhythm	0.036	0.004	1959	2527	1.037	0.121	0.027	0.045
Currently using withdrawal	0.029	0.004	1959	2527	0.958	0.126	0.021	0.036
Using public sector source	0.725	0.020	1006	1299	1.428	0.028	0.685	0.765
Want no more children	0.511	0.014	1959	2527	1.235	0.027	0.483	0.539
Want to delay at least 2 years	0.232	0.010	1959	2527	1.002	0.041	0.213	0.251
Ideal number of children	2.467	0.030	2095	2696	1.599	0.012	2.407	2.527
Mothers received tetanus injection	0.841	0.018	973	1271	1.553	0.021	0.805	0.877
Mothers received medical care at birth	0.178	0.025	1238	1627	1.250	0.142	0.127	0.228
Had diarrhea in the last 2 weeks	0.052	0.007	1144	1503	1.131	0.141	0.037	0.066
Treated diarrhea with ORS packets	0.635	0.059	63	78	0.956	0.093	0.516	0.754
Sought medical treatment	0.355	0.064	63	78	1.043	0.181	0.227	0.484
Having health card, seen	0.432	0.039	238	307	1.202	0.089	0.355	0.509
Received BCG vaccination	0.943	0.022	238	307	1.435	0.023	0.900	0.986
Received DPT vaccination (3 doses)	0.695	0.039	238	307	1.312	0.056	0.616	0.773
Received polio vaccination (3 doses)	0.673	0.038	238	307	1.250	0.056	0.597	0.749
Received measles vaccination	0.704	0.044	238	307	1.472	0.062	0.617	0.791
Fully immunized	0.564	0.039	238	307	1.224	0.070	0.486	0.643
Weight-for-Height	0.110	0.011	942	1232	1.034	0.096	0.089	0.131
Height-for-Age	0.420	0.016	942	1232	0.957	0.038	0.388	0.452
Weight-for-Age	0.485	0.016	942	1232	0.992	0.034	0.453	0.518
Total fertility rate (3 years)	3.024	0.140	na	8529	1.389	0.046	2.745	3.304
Neonatal mortality rate (0-9 years)	49.660	4.284	2598	3418	0.937	0.086	41.092	58.227
Postneonatal mortality rate (0-9 years)	26.561	3.659	2605	3425	1.147	0.138	19.242	33.879
Infant mortality rate (0-9 years)	76.221	5.336	2606	3426	0.935	0.070	65.549	86.892
Child mortality rate (0-9 years)	26.686	4.054	2608	3432	1.281	0.152	18.578	34.795
Under-five mortality rate (0-9 years)	100.873	6.532	2617	3442	1.052	0.065	87.808	113.937
MEN								
No education	0.368	0.024	515	682	1.118	0.065	0.321	0.416
With secondary education or higher	0.313	0.017	515	682	0.839	0.055	0.279	0.347
Knowing any contraceptive method	1.000	0.000	515	682	na	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	515	682	na	0.000	1.000	1.000
Ever used any contraceptive method	0.908	0.015	515	682	1.143	0.016	0.879	0.937
Currently using any method	0.712	0.024	515	682	1.190	0.033	0.665	0.760
Currently using a modern method	0.615	0.021	515	682	0.993	0.035	0.572	0.657
Currently using pill	0.342	0.018	515	682	0.843	0.052	0.307	0.378
Currently using IUD	0.016	0.006	515	682	1.159	0.396	0.003	0.029
Currently using injections	0.074	0.018	515	682	1.570	0.245	0.038	0.110
Currently using Norplant	0.004	0.003	515	682	1.077	0.716	0.000	0.011
Currently using condom	0.052	0.009	515	682	0.880	0.166	0.035	0.069
Currently using female sterilization	0.110	0.018	515	682	1.283	0.161	0.075	0.146
Currently using male sterilization	0.015	0.005	515	682	0.931	0.329	0.005	0.025
Currently using rhythm	0.072	0.012	515	682	1.094	0.174	0.047	0.097
Currently using withdrawal	0.013	0.005	515	682	1.037	0.401	0.003	0.023
Want no more children	0.532	0.023	515	682	1.050	0.043	0.486	0.578
Want to delay at least 2 years	0.241	0.019	515	682	0.984	0.077	0.204	0.278
Ideal number of children	2.385	0.049	499	659	1.396	0.020	2.288	2.483

na = Not applicable

Table B.10 Sampling errors - Sylhet, Bangladesh 1999-2000

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
No education	0.591	0.032	1139	624	2.169	0.054	0.527	0.654
With secondary education or higher	0.173	0.019	1139	624	1.724	0.112	0.135	0.212
Currently married	0.886	0.009	1139	624	0.916	0.010	0.869	0.903
Children ever born	3.600	0.086	1002	553	1.071	0.024	3.428	3.773
Children ever born to women over 40	5.660	0.214	217	116	1.279	0.038	5.232	6.087
Children surviving	2.911	0.069	1002	553	1.060	0.024	2.774	3.048
Knowing any contraceptive method	0.997	0.001	1002	553	0.593	0.001	0.994	0.999
Knowing any modern contraceptive method	0.997	0.001	1002	553	0.593	0.001	0.994	0.999
Ever used any contraceptive method	0.548	0.034	1002	553	2.168	0.062	0.480	0.616
Currently using any method	0.340	0.028	1002	553	1.887	0.083	0.283	0.396
Current using a modern method	0.249	0.023	1002	553	1.695	0.093	0.203	0.296
Currently using pill	0.135	0.015	1002	553	1.371	0.110	0.105	0.164
Currently using IUD	0.007	0.003	1002	553	1.221	0.471	0.000	0.013
Currently using injections	0.040	0.007	1002	553	1.089	0.169	0.026	0.053
Currently using norplant	0.000	0.000	1002	553	na	na	0.000	0.000
Currently using condom	0.030	0.007	1002	553	1.383	0.251	0.015	0.044
Currently using female sterilization	0.036	0.007	1002	553	1.130	0.185	0.022	0.049
Currently using male sterilization	0.003	0.000	1002	553	0.275	0.166	0.002	0.004
Currently using rhythm	0.073	0.010	1002	553	1.157	0.130	0.054	0.092
Currently using withdrawal	0.012	0.004	1002	553	1.134	0.321	0.004	0.020
Using public sector source	0.565	0.044	282	141	1.497	0.078	0.477	0.654
Want no more children	0.484	0.012	1002	553	0.742	0.024	0.460	0.507
Want to delay at least 2 years	0.199	0.013	1002	553	1.040	0.066	0.173	0.226
Ideal number of children	3.008	0.085	1043	564	1.987	0.028	2.839	3.178
Mothers received tetanus injection	0.671	0.027	621	358	1.458	0.040	0.617	0.724
Mothers received medical care at birth	0.168	0.031	886	513	1.290	0.184	0.106	0.229
Had diarrhea in the last 2 weeks	0.070	0.007	786	455	0.824	0.106	0.055	0.085
Treated diarrhea with ORS packets	0.573	0.039	55	32	0.577	0.067	0.496	0.651
Sought medical treatment	0.386	0.072	55	32	1.103	0.187	0.242	0.530
Having health card, seen	0.414	0.069	161	94	1.834	0.167	0.276	0.551
Received BCG vaccination	0.804	0.040	161	94	1.319	0.050	0.725	0.884
Received DPT vaccination (3 doses)	0.585	0.055	161	94	1.473	0.095	0.474	0.695
Received polio vaccination (3 doses)	0.569	0.059	161	94	1.562	0.104	0.451	0.687
Received measles vaccination	0.583	0.043	161	94	1.139	0.073	0.498	0.669
Fully immunized	0.455	0.054	161	94	1.429	0.119	0.347	0.564
Weight-for-Height	0.110	0.013	684	395	1.139	0.121	0.084	0.137
Height-for-Age	0.567	0.020	684	395	1.078	0.036	0.527	0.608
Weight-for-Age	0.568	0.019	684	395	0.999	0.033	0.530	0.606
Total fertility rate (3 years)	4.077	0.233	na	2317	1.553	0.057	3.612	4.542
Neonatal mortality rate (0-9 years)	81.707	8.283	1828	1055	1.230	0.101	65.140	98.274
Postneonatal mortality rate (0-9 years)	45.237	5.197	1829	1056	1.021	0.115	34.842	55.632
Infant mortality rate (0-9 years)	126.944	10.325	1830	1056	1.244	0.081	106.294	147.594
Child mortality rate (0-9 years)	40.063	6.292	1842	1064	1.136	0.157	27.480	52.647
Under-five mortality rate (0-9 years)	161.922	10.941	1845	1065	1.164	0.068	140.039	183.804
MEN								
No education	0.412	0.049	240	133	1.531	0.118	0.315	0.510
With secondary education or higher	0.238	0.037	240	133	1.334	0.155	0.164	0.311
Knowing any contraceptive method	0.995	0.005	240	133	1.079	0.005	0.985	1.005
Knowing any modern contraceptive method	0.995	0.005	240	133	1.079	0.005	0.985	1.005
Ever used any contraceptive method	0.671	0.039	240	133	1.290	0.058	0.593	0.750
Currently using any method	0.406	0.039	240	133	1.220	0.095	0.329	0.484
Currently using a modern method	0.307	0.034	240	133	1.148	0.111	0.239	0.376
Currently using pill	0.184	0.032	240	133	1.262	0.172	0.121	0.248
Currently using IUD	0.005	0.005	240	133	1.063	0.977	0.000	0.015
Currently using injections	0.025	0.011	240	133	1.062	0.432	0.003	0.046
Currently using Norplant	0.000	0.000	240	133	na	na	0.000	0.000
Currently using condom	0.066	0.018	240	133	1.140	0.276	0.030	0.103
Currently using female sterilization	0.027	0.009	240	133	0.848	0.329	0.009	0.045
Currently using male sterilization	0.000	0.000	240	133	na	na	0.000	0.000
Currently using rhythm	0.092	0.015	240	133	0.808	0.164	0.062	0.122
Currently using withdrawal	0.002	0.002	240	133	0.670	1.014	0.000	0.006
Want no more children	0.506	0.028	240	133	0.857	0.055	0.450	0.561
Want to delay at least 2 years	0.179	0.027	240	133	1.079	0.150	0.125	0.232
Ideal number of children	2.723	0.066	200	107	1.013	0.024	2.590	2.855

na = Not applicable

DATA QUALITY TABLES

APPENDIX C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Bangladesh 1999-2000

	Males		Females			Males		Females	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
<1	693	2.8	640	2.5	37	140	0.6	217	0.9
1	701	2.8	640	2.5	38	297	1.2	268	1.1
2	626	2.5	659	2.6	39	80	0.3	242	1.0
3.	633	2.5	640	2.5	40	917	3.7	299	1.2
4	673	2.7	625	2.5	41	82	0.3	227	0.9
5	651	2.6	560	2.2	42	167	0.7	233	0.9
6	617	2.5	599	2.4	43	70	0.3	191	0.8
7	770	3.1	703	2.8	44	61	0.2	212	0.8
8	677	2.7	671	2.6	45	709	2.8	253	1.0
9	581	2.3	612	2.4	46	70	0.3	179	0.7
10	757	3.0	803	3.2	47	72	0.3	146	0.6
11	622	2.5	584	2.3	48	136	0.5	160	0.6
12	822	3.3	772	3.0	49	36	0.1	152	0.6
13	548	2.2	608	2.4	50	588	2.4	101	0.4
14	593	2.4	696	2.7	51	37	0.1	146	0.6
15	639	2.6	715	2.8	52	102	0.4	142	0.6
16	567	2.3	722	2.8	53	36	0.1	165	0.6
17	446	1.8	585	2.3	54	30	0.1	126	0.5
18	652	2.6	673	2.6	55	377	1.5	188	0.7
19	297	1.2	498	2.0	56	49	0.2	116	0.5
20	642	2.6	637	2.5	57	51	0.2	113	0.4
21	280	1.1	460	1.8	58	61	0.2	111	0.4
22	448	1.8	528	2.1	59	28	0.1	75	0.3
23	260	1.0	437	1.7	60	411	1.6	303	1.2
24	260	1.0	375	1.5	61	24	0.1	73	0.3
25	616	2.5	484	1.9	62	69	0.3	58	0.2
26	298	1.2	396	1.6	63	34	0.1	42	0.2
27	261	1.0	376	1.5	64	23	0.1	34	0.1
28	398	1.6	473	1.9	65	282	1.1	199	0.8
29	248	1.0	412	1.6	66	29	0.1	21	0.1
30	835	3.3	446	1.8	67	28	0.1	35	0.1
31	138	0.6	352	1.4	68	42	0.2	33	0.1
32	298	1.2	322	1.3	69	10	0.0	19	0.1
33	136	0.5	293	1.2	70+	878	3.5	593	2.3
34	134	0.5	287	1.1	DK/				
35	932	3.7	357	1.4	missing	9	0.0	17	0.1
36	235	0.9	298	1.2	Total	25,013	100.0	25,428	100.0

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.

Table C.2 Age distribution of eligible and interviewed women

Percent distribution of the de facto household population of women age 5-54, and of interviewed women age 10-49, and the percentage of eligible women who were interviewed (weighted) by five-year age groups, Bangladesh 1999-2000

	Household population of women				Women interviewed		Percent interviewed (weighted)
	Total		Ever-married				
Age	Number	Percent	Number	Percent	Number	Percent	
5-9	3,145	-	-	-	-	-	-
10-14	3,464	21.2	230	8.0	163	1.6	70.6
15-19	3,193	19.5	362	12.5	1,470	14.0	406.3
20-24	2,437	14.9	435	15.1	1,929	18.4	443.2
25-29	2,140	13.1	478	16.5	1,997	19.0	417.8
30-34	1,700	10.4	498	17.2	1,627	15.5	326.5
25-39	1,383	8.4	397	13.7	1,340	12.8	337.2
40-44	1,161	7.1	317	11.0	1,111	10.6	350.3
45-49	890	5.4	173	6.0	849	8.1	491.4
50-54	680	-	-	-	-	-	-
15-49	16,369	-	2,891	-	10,487	-	362.7

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Bangladesh 1999-2000

Subject	Reference group	Percentage missing information	Number
Birth date	Births in last 15 years		
Month only		1.81	20,668
Month and year		0.01	20,668
Age at death	Deaths to births in last 15 years	0.21	2,452
Age/date at first union[1]	Ever-married women	0.41	10,544
Respondent's education	Ever-married women	0.21	10,544
Anthropometry[2]	Living children age 0-59 months		
Height missing		11.90	6,430
Weight missing		5.94	6,430
Height or weight missing		12.13	6,430
Diarrhea in last 2 weeks	Living children age 0-59 months	0.49	6,430

[1] Both year and age missing
[2] Child not measured

Table C.4 Births by calendar year since birth

Distribution of births by calendar years since birth for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year, Bangladesh 1999-2000

	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar ratio[3]			Male			Female		
Year	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T
2000	94	8	101	100.0	100.0	100.0	87.8	406.0	97.0	na	na	na	44	6	50	50	1	51
1999	1,307	68	1,376	100.0	100.0	100.0	108.5	133.5	109.6	180.4	135.9	177.5	680	39	719	627	29	656
1998	1,356	93	1,449	100.0	98.4	99.9	106.4	87.0	105.1	104.5	97.2	104.0	699	43	742	657	50	707
1997	1,288	123	1,411	100.0	100.0	100.0	101.2	91.1	100.3	100.0	109.3	100.7	648	59	707	640	65	705
1996	1,221	133	1,354	100.0	100.0	100.0	98.4	157.8	102.9	95.2	117.0	97.0	605	81	687	616	51	667
1995	1,277	103	1,381	100.0	100.0	100.0	106.4	127.3	107.8	107.3	86.1	105.4	658	58	716	619	45	664
1994	1,160	107	1,267	99.8	100.0	99.9	114.8	72.6	110.4	92.1	71.2	89.9	620	45	665	540	62	602
1993	1,240	199	1,438	98.5	97.3	98.3	101.1	90.1	99.5	98.1	139.7	102.3	623	94	717	617	104	721
1992	1,369	177	1,545	98.4	93.4	97.8	105.4	96.0	104.3	113.1	87.8	109.5	702	87	789	666	90	756
1991	1,180	204	1,384	98.5	94.7	97.9	105.7	103.6	105.4	na	na	na	606	104	710	573	100	674
1996-2000	5,266	425	5,691	100.0	99.7	100.0	103.4	116.2	104.3	na	na	na	2,676	228	2,905	2,589	197	2,786
1991-95	6,225	790	7,016	99.0	96.5	98.7	106.5	96.3	105.3	na	na	na	3,210	388	3,598	3,015	403	3,418
1986-90	5,813	1,046	6,859	97.4	92.5	96.6	104.3	98.9	103.5	na	na	na	2,968	520	3,488	2,845	526	3,371
1981-85	4,404	1,028	5,432	96.3	92.1	95.5	102.7	101.4	102.4	na	na	na	2,231	517	2,748	2,173	510	2,683
< 81	5,551	1,797	7,348	94.9	89.3	93.5	104.3	105.4	104.6	na	na	na	2,834	922	3,757	2,716	875	3,592
All	27,259	5,087	32,346	97.6	92.5	96.8	104.4	102.6	104.1	na	na	na	13,920	2,576	16,496	13,339	2,511	15,850

na = Not applicable

[1] Both year and month of birth given

[2] $(B_m/B_f)*100$ where B_m and B_f are the numbers of male and female births, respectively

[3] $[2B_x/(B_{x-1}+B_{x+1})]*100$, where B_x is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey, Bangladesh 1999-2000

Age at death (in days)	Number of years preceding the survey				Total
	0–4	5-9	10-14	15-19	0-19
<1	78	82	84	79	323
1	49	68	48	54	219
2	11	18	12	22	63
3	30	49	44	29	153
4	13	19	13	14	60
5	13	20	24	19	76
6	8	14	18	28	67
7	10	28	45	47	130
8	10	19	15	17	60
9	3	9	17	18	46
10	4	8	6	14	32
11	6	4	10	6	26
12	9	4	4	13	29
13	3	9	9	7	27
14	7	3	9	4	22
15	8	10	7	13	38
16	4	6	6	3	19
17	5	2	5	5	18
18	5	3	10	3	22
19	3	1	4	3	11
20	2	5	5	8	21
21	1	6	8	14	29
22	0	6	8	4	18
23	1	1	2	1	6
24	0	0	2	1	3
25	2	6	4	4	15
26	1	1	0	1	2
27	0	1	4	0	5
28	2	1	2	0	5
29	0	3	1	3	8
30	1	0	0	0	1
31+	1	0	0	0	2
Missing	0	0	1	1	1
Percent early neonatal[1]	70.6	66.5	56.8	56.6	61.8
Total 0-30	286	406	430	433	1,555

[1](0-6 days /0-30 days) * 100

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods of birth preceding the survey, Bangladesh 1999-2000

Age at death	Number of years preceding the survey				Total
(in months)	0-4	5-9	10-14	15-19	0-19
<1[a]	286	406	430	434	1,556
1	53	46	48	41	188
2	22	38	22	15	97
3	19	28	54	58	159
4	10	23	20	22	74
5	7	24	25	13	70
6	10	21	32	24	87
7	11	15	20	13	60
8	7	16	16	8	46
9	2	8	14	16	41
10	3	3	12	11	29
11	3	10	9	8	30
12	11	23	28	23	84
13	5	2	6	4	17
14	1	4	3	3	10
15	2	2	6	1	11
16	0	1	2	2	4
17	0	2	1	3	6
18	18	37	37	42	133
19	1	5	1	1	9
20	3	0	1	0	3
21	1	3	1	0	5
22	0	0	1	2	3
23	1	0	1	0	2
24+	0	2	0	1	3
1 Year	2	5	3	11	22
Percent neonatal[b]	65.9	63.7	61.2	65.4	63.9
Total 0-11	433	637	703	663	2,436

[a] Includes deaths under 1 month reported in days
[b](Under 1 month/under 1 year) * 100

PERSONS INVOLVED IN THE 1999-2000 BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY

APPENDIX D

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Mr. Mohidul Islam
Mr. Ariful Hoque
Mr. Mostafa Hossain
Mr. Moksadul Hoque Khan
Mr. Aminul Hoque

LISTERS

Mr. Moniruzzaman
Mr. Moniruddin
Mr. Julhas Sikder
Mr. Shorfaraz Hossain
Mr. Armanur Reza
Mr. Mazedul Hoque
Mr. Aminul Islam
Mr. Ataur Rahman
Mr. Billal Hossain
Mr. Karar Humayun Kabir
Mr. Amiya Kumar Sarker
Mr. Nazrul Islam
Mr. Harunoor Rashid
Mr. Firoz Kabir
Mr. Abu Bellal
Mr. Almas Sikder
Mr. Anamul Hoque
Mr. Toufiqur Rahman
Mr. Ruhul Amin Gazi
Mr. Iliash Khan
Mr. Mozzafar Hossain
Mr. Ashok Kumar Dash
Mr. Sujit Bhowmik

INTERVIEWERS FOR SERVICE PROVISION ASSESSMENT SURVEY

Mr. Moazzem Hossain
Mr. Abu Yusuf Mozumder
Mr. Abul Basar
Mr. Mahmudur Rahman Sarker
Mr. Golam Kabir
Mr. Ziaul Hoque
Mr. Iqbal Hossain
Mr. Nazmul Haque
Mr. Biplob Bandhu Roy
Mr. Hamidul Islam
Mr. Yeasir Arafat
Mr. Ayub
Mr. Zamil Ashraf
Mr. Rezaul Azad Bhuiyan
Mr. Ashraful Islam Khan
Mr. H. M. Mahmudul Islam
Mr. S. K. Abdullah-Al-Mamun
Mr. Prodip Biswas
Mr. Aktaruzzaman Bhuiyan
Mr. Abdul Wahab Khan
Mr. Abdur Rahman
Mr. Shafiqul Islam Khan
Mr. Uzzal Kanti Dash
Mr. Saleh Md. Sharif
Mr. Chowdhury Abdur Rahman

HOUSEHOLD SURVEY/WOMEN'S SURVEY/MEN'S SURVEY

MALE SUPERVISORS

Mr. Abu Md. Hossain Manik
Mr. Delwar Hossain
Mr. Abdullah Bhuiyan
Mr. Saiful Hossain Chowdhury
Mr. Golam Rabbani
Mr. Nazmul Hoque Sarker
Mr. Golam Ahemed Siddique
Mr. Azharul Islam
Mr. Dilip Kumer Halder
Mr. Nabo Kumar Biswas
Mr. Kamruzzaman Kajal
Mr. Monirul Islam

FEMALE SUPERVISORS

Ms. Shirin Sultana
Ms. Tahmina Begum
Ms. Selina Farzana (Keya)
Ms. Sanjida Akter
Ms. Jesmin Akter
Ms. Asma Khanam
Ms. Khairun Nahar
Ms. Thouhida Sultana
Ms. Ulfatunnessa
Ms. China Khatun
Ms. Yeasmin Begum
Ms. Habeba Hawa

Male Interviewers

Mr. A.K.M. Sawaruzzaman
Mr. Midul Kumer Paul
Mr. Zahangir Alam
Mr. Golam Anis Chowdhury
Mr. Chyon Chandra Mozumder
Mr. Amjad Ali
Mr. Tariqul Islam
Mr. Ashraf Ali
Mr. Tosharaf Hossain
Mr. Jamal Uddin
Mr. Mohbubur Rahman
Mr. Khandaker Monjurul
Mr. Zakir Hossain Chowdhury
Mr. Harun-or-Rashid
Mr. Salam Miah

Female Interviewers

Ms. Ayesha Begum
Ms. Nasima Khatun
Ms. Nasrin Ara Shirin
Ms. Shahana Tasmin
Ms. Taznahar Kkhanom Amily
Ms. Selina Akter
Ms. Shellyna Akter
Ms. Afroza Khatun (Sheully)
Ms. Karar Shanaz Pervin
Ms. Dali Nandi
Ms. Hasna Hena Khanam
Ms. Noorun Nahar Lipi
Ms. Kazi Ismat Ara
Ms. Hamida Monjur-E-Khuda
Ms. Morufa Pervin
Ms. Rezina Bulbul
Ms. Nasrin Akter
Ms. Kulsum Khanom Kabita
Ms. Kohinoor Begum
Ms. Shirin Akter
Ms. Khadiza Akter
Ms. Gazi Lutfunnahar
Ms. Mahmuda Jahan
Ms. Anowara Begum
Ms. Salma Pervin Joly
Ms. Rokeya Begum
Ms. Shahinoor Pervin
Ms. Shikha Rani Dey Sarker
Ms. Sayda Khatun
Ms. Rebeka Halder
Ms. Afroza Akter Mona
Ms. Kazi Taslima
Ms. Masuma Begum
Ms. Rinu Talukder
Ms. Joly Hoque
Ms. Nazia Akter
Ms. Pervin Akter
Ms. Shefali Begum
Ms. Ziaonnessa Begum
Ms. Kamrunnessa Happy
Ms. Rubena Akter
Ms. Ayesha Nasrin
Ms. Rabeya Khanoom Eva
Ms. Tahmina Shormin
Ms. Rowshon Ara Akter
Ms. Kohinoor Akter
Ms. Tahreema Khanom
Ms. Ayesha Khan Majlish
Ms. Touhida Akter
Ms. Monjuma Akter
Ms. Shahena Sultana
Ms. Fahmida Nuary
Ms. Mina Rani Ojha
Ms. Sharmin Sultana
Ms. Firoza Khatun
Ms. Kamrunnahar
Ms. Nazma Khanom
Ms. Lovely Yeasmin
Ms. Rahana Begum
Ms. Asha Majid Rosy
Ms. Asmat Ara (Asma)
Ms. Taslima Begum
Ms. Chhanda Raj
Ms. Joytsna Akter
Ms. Sabina Easmin
Ms. Minara Mahbub
Ms. Sanjina Ali
Ms. Maksuda Khatun
Ms. Hamida Khatun

Computer Programmers

Mr. Shishir Paul
Mr. Haradhan Sen

Data Entry Operators

Mr. Suyeb Hossain
Mr. Eskandar Ali
Mr. Chandan Kumer Sen
Mr. Khyrul Islam Bhuiyan
Mr. Ovizit Kumer Roy
Mr. Syed Anwar Hossain

Validators/Office Editors

Mr. Nazmul Haque
Mr. Monoz Kumar Edbor
Mr. Mukter Hossain
Mr. Chancal Samadder

ADMINISTRATIVE STAFF

Mr. S. Fuad Pasha (Administration)
Mr. Bimal Chandra Datta, Accounts Officer
Mr. Akram Hossain, Accounts Officer
Mr. Jaynal Abdin, Typist
Mr. Shah Alam, Typist
Mr. Chunnu Mia, Messenger
Mr. Jahangir Alam, Messenger
Mr. Nurun Nabbi, Driver

QUESTIONNAIRES

APPENDIX E

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 1999-2000
HOUSEHOLD QUESTIONNAIRE

IDENTIFICATION

DIVISION _____

DISTRICT _____

THANA _____

UNION/WARD _____

VILLAGE/MOHALLA/BLOCK _____

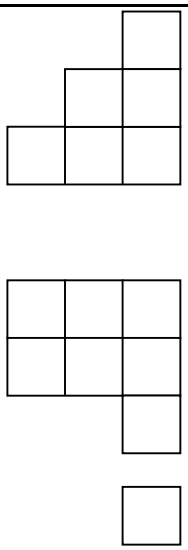
CLUSTER NUMBER .....

HOUSEHOLD NUMBER .....

REGION .....

DHAKA/CHITTAGONG=1, SMALL CITY=2, TOWN=3, VILLAGE=4.....

NAME OF THE HOUSEHOLD HEAD _____
IS HOUSEHOLD SELECTED FOR MEN'S SURVEY (YES=1, NO=2).....



INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY ☐☐ MONTH ☐☐ YEAR ☐☐☐☐
INTERVIEWER'S NAME	_____	_____	_____	INTV. CODE ☐☐ RESULT* ☐☐
RESULT*	_____	_____	_____	
NEXT VISIT: DATE	_____	_____		TOTAL NO. OF VISITS ☐☐
TIME	_____	_____		

*RESULT CODES:

1	COMPLETED
2	NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3	ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4	POSTPONED
5	REFUSED
6	DWELLING VACANT OR ADDRESS NOT A DWELLING
7	DWELLING DESTROYED
8	DWELLING NOT FOUND
9	OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD ☐☐☐

TOTAL ELIGIBLE WOMEN ☐☐☐

TOTAL ELIGIBLE MEN ☐☐☐

LINE NO. OF RESP. TO HOUSEHOLD SCHEDULE ☐☐☐

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ ☐☐☐	NAME _____ ☐☐☐	☐☐☐	☐☐☐
DATE _____ ☐☐☐	DATE _____ ☐☐☐	☐☐☐	☐☐☐

HOUSEHOLD SCHEDULE

Now we would like some information about the people who usually live in your household or who are staying with you now.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	WOMAN ELIGI-BILITY	MAN'S ELIGI-BILITY	EDUCATION IF AGE 5 YEARS OR OLDER			EMPLOYMENT IF AGE 5 YEARS OR OLDER	
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) sleep here last night?	How old is (NAME)?	FOR ALL AGED 10 OR ABOVE What is the current marital status of (NAME)?**	CIRCLE LINE NUMBER OF ALL EVER MARRIED WOMEN (Q8=1 OR 2) AGE 10-49	IF HOUSE-HOLD CHOSEN FOR MEN'S SURVEY, CIRCLE LINE NUMBER OF ALL CURR-ENTLY MARRIED MEN (Q8 =1) AGE 15-59	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?*** What is the highest class (NAME) completed at that level?***	IF AGED LESS THAN 25 YEARS Is (NAME) currently attending school?	Is (NAME) currently working?	Does (NAME) receive wages/income in cash or kind?
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
			M F	YES NO	YES NO	IN YEARS	CM FM NM			YES NO	LEVEL CLASS	YES NO	YES NO	CASH KIND BOTH NONE
01			1 2	1 2	1 2		1 2 3	01	01	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
02			1 2	1 2	1 2		1 2 3	02	02	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
03			1 2	1 2	1 2		1 2 3	03	03	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
04			1 2	1 2	1 2		1 2 3	04	04	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
05			1 2	1 2	1 2		1 2 3	05	05	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
06			1 2	1 2	1 2		1 2 3	06	06	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
07			1 2	1 2	1 2		1 2 3	07	07	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
08			1 2	1 2	1 2		1 2 3	08	08	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
09			1 2	1 2	1 2		1 2 3	09	09	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
10			1 2	1 2	1 2		1 2 3	10	10	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4

HOUSEHOLD SCHEDULE CONTINUED

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
			M F	YES NO	YES NO	IN YEARS	CM FM NM			YES NO	LEVEL CLASS	YES NO	YES NO	CASH KIND BOTH NONE
11			1 2	1 2	1 2		1 2 3	01	01	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
12			1 2	1 2	1 2		1 2 3	02	02	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
13			1 2	1 2	1 2		1 2 3	03	03	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
14			1 2	1 2	1 2		1 2 3	04	04	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
15			1 2	1 2	1 2		1 2 3	05	05	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
16			1 2	1 2	1 2		1 2 3	06	06	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
17			1 2	1 2	1 2		1 2 3	07	07	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
18			1 2	1 2	1 2		1 2 3	08	08	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
19			1 2	1 2	1 2		1 2 3	09	09	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4
20			1 2	1 2	1 2		1 2 3	10	10	1 2 GO TO=Ð 14		1 2	1 2 NEXT =Ð LINE	1 2 3 4

TICK HERE IF CONTINUATION SHEET USED

Just to make sure that I have a complete listing:

1) Are there any other persons such as small children or infants that we have not listed? YES NO — ENTER EACH IN TABLE

2) In addition, are there any other people who may not be members of your family, such as domestic servants, lodgers or friends who usually live here? YES NO — ENTER EACH IN TABLE

3) Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed? YES NO — ENTER EACH IN TABLE

* CODES FOR Q.3
RELATIONSHIP TO HEAD OF HOUSEHOLD:
01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06=PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
10 = OTHER RELATIVE
11 = ADOPTED/FOSTER/ STEPCHILD
12 = NOT RELATED
98 = DON'T KNOW

** CODE FOR Q.8
MARITAL STATUS:

1 = CURRENTLY MARRIED
2 = FORMERLY MARRIED (DIVORCED/WIDOWED/SEPARATED/ DESERTED)
3 = NEVER MARRIED

***CODES FOR Q12
EDUCATION LEVEL:
1 = PRIMARY
2 = SECONDARY
3 = COLLEGE/UNIVERSITY
8 = DON'T KNOW

EDUCATION CLASS:
00 = LESS THAN 1 YEAR COMPLETED
98 = DON'T KNOW

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
18	What is the main source of water your household uses for dishwashing?	PIPED WATER PIPED INSIDE DWELLING....11 PIPED OUTSIDE DWELLING....12 WELL WATER TUBEWELL/DEEP TUBEWELL....21 SURFACE WELL/OTHER WELL ....22 SURFACE WATER POND/TANK/LAKE ....31 RIVER/STREAM ....32 RAINWATER....41 OTHER _____ 96 (SPECIFY)	
19	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INSIDE DWELLING....11 PIPED OUTSIDE DWELLING....12 WELL WATER TUBEWELL/DEEP TUBEWELL....21 SURFACE WELL/OTHER WELL ....22 SURFACE WATER POND/TANK/LAKE ....31 RIVER/STREAM ....32 RAINWATER....41 BOTTLED WATER....51 OTHER _____ 96 (SPECIFY)	
19A	Do you boil drinking water?	YES ....1 NO 2	
20	What kind of toilet facility does your household have?	SEPTIC TANK/MODERN TOILET ....11 PIT TOILET/LATRINE WATER SEALED/SLAB LATRINE....21 PIT LATRINE....22 OPEN LATRINE ....23 HANGING LATRINE....24 NO FACILITY/BUSH/FIELD ....31 OTHER _____ 96 (SPECIFY)	ьь< 22
21	Do you share this facility with other households?	YES ....1 NO 2	
22	Does your household (or any member of your household) have: Electricity? Almirah (wardrobe)? A table or chair? A bench? A watch or clock? A cot or bed? A radio that is working? A television that is working? A bicycle? A Motorcycle? A Sewing machine? Telephone?	YES NO ELECTRICITY....1 2 ALMIRAH....1 2 TABLE/CHAIR....1 2 BENCH....1 2 WATCH/CLOCK....1 2 COT/BED....1 2 RADIO....1 2 TELEVISION....1 2 BICYCLE....1 2 MOTORCYCLE....1 2 SEWING MACHINE....1 2 TELEPHONE....1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
24	MAIN MATERIAL OF THE ROOF. RECORD OBSERVATION.	NATURAL ROOF KATCHA (BAMBOO/THATCH) .....11 RUDIMENTARY ROOF TIN .....21 FINISHED ROOF (PUKKA) CEMENT/CONCRETE/TILED .....31 OTHER _____ 96 (SPECIFY)	
25	MAIN MATERIAL OF THE WALLS. RECORD OBSERVATION.	NATURAL WALLS JUTE/BAMBOO/MUD (KATCHA).....11 RUDIMENTARY WALLS WOOD .....21 FINISHED WALLS BRICK/CEMENT .....31 TIN .....32 OTHER _____ 96 (SPECIFY)	
26	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION.	NATURAL FLOOR EARTH/BAMBOO (KATCHA).....11 RUDIMENTARY FLOOR WOOD .....21 FINISHED FLOOR (PUKKA) CEMENT/CONCRETE .....31 OTHER _____ 96 (SPECIFY)	
27	Does your household own any homestead? IF 'NO', PROBE: Does your household own homestead any other places?	YES .....1 NO 2	
27A	Does your household own any land (other than the homestead land)?	YES .....1 NO 2	ЬЬ< 29
28	How much land does your household own (other than the homestead land)? AMOUNT _____ SPECIFY UNIT_____	AMOUNT ☐☐ ☐☐ ACRES DECIMALS NONE 0000	
29	In terms of household food consumption, how do you classify your household: deficit in whole year; sometimes deficit; neither deficit nor surplus; surplus.	DEFICIT IN WHOLE YEAR .....1 SOMETIMES DEFICIT .....2 NEITHER DEFICIT NOT SURPLUS .....3 SURPLUS.....4	
30	Does your family have vulnerable group feeding (VGF) card?	YES .....1 NO 2	
31	Do you have any male/female member in this household who are receiving old age pension/widow or destitute benefit?	YES .....1 NO 2	

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 1999-2000

WOMAN'S QUESTIONNAIRE

IDENTIFICATION

DIVISION _____

DISTRICT _____

THANA _____

UNION/WARD _____

VILLAGE/MOHALLA/BLOCK _____

CLUSTER NUMBER .....

HOUSEHOLD NUMBER .....

DHAKA/CHITTAGONG=1, SMALL CITY=2, TOWN=3, VILLAGE=4 .....

NAME OF HOUSEHOLD HEAD _____

NAME AND LINE NUMBER OF ELIGIBLE WOMAN _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH* / YEAR
INTERVIEWER'S NAME				CODE
RESULT*				RESULT**
NEXT VISIT: DATE				TOTAL NO. OF VISITS
TIME				

**RESULT CODES :

1	COMPLETED	4	REFUSED	7	OTHER _____ (SPECIFY)
2	NOT AT HOME	5	PARTLY COMPLETED		
3	POSTPONED	6	RESPONDENT INCAPACITATED		

*MONTH CODES

01	JANUARY	04	APRIL	07	JULY	10	OCTOBER
02	FEBRUARY	05	MAY	08	AUGUST	11	NOVEMBER
03	MARCH	06	JUNE	09	SEPTEMBER	12	DECEMBER

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is_______________________________________. We came from the Mitra and Associates, a private research organization, is located at Dhaka. To assist in the implementation of socio-development programs in the country, we conduct different types of surveys. We are now conducting a national survey about the health of women and children under the authority of NIPORT of Ministry of Health and Family Welfare. We would very much appreciate your participation in this survey. I would like to ask you about your health (and the health of your children). This information will help the government to plan health services. The survey usually takes between 20 and 45 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?

Signature of interviewer: ____________________________________Date: ______________________

RESPONDENT AGREES TO BE INTERVIEWED .... 1 ?

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED..2 ѢѢ<END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME STARTED.	HOUR........................ [ ][ ] MINUTES........................ [ ][ ]	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a town, or in the countryside?	CITY...1 TOWN...2 COUNTRYSIDE.......................................3	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	NUMBER OF YEARS......... [ ][ ] ALWAYS..............................95 VISITOR..............................96	→ 105
104	Just before you moved here, did you live in a city, a town, or in the country side?	CITY.......................................1 TOWN.......................................2 COUNTRYSIDE.......................3	
105	In what month and year were you born?	MONTH .... [ ][ ] DON'T KNOW MONTH .... 98 YEAR .... [ ][ ][ ][ ] DON'T KNOW YEAR........................... 9998	
106	How old are you at your last birthday? COMPARE AND CORRECT 105 AND /OR 106 IF INCONSISTENT	AGE IN COMPLETED YEARS [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106A	Are you now married, widowed, or divorced?	CURRENTLY MARRIED ..... 1 SEPARATED ..... 2 DESERTED ..... 3 DIVORCED ..... 4 WIDOWED ..... 5 NEVER MARRIED ..... 6 →	END
107	Have you ever attended school?	YES ..... 1 NO ..... 2 →	111
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY ..... 1 SECONDARY ..... 2 COLLEGE/UNIVERSITY 3	
109	What is the highest class you completed?	CLASS..... ☐☐	
110	CHECK 108: PRIMARY ☐ ↓ SECONDARY OR HIGHER ☐ →		112
111	Can you read and write a letter in any language easily, with difficulty, or not at all?	EASILY ..... 1 WITH DIFFICULTY ..... 2 NOT AT ALL ..... 3 →	113
112	Do you usually read a newspaper or magazine?	YES ..... 1 NO ..... 2 →	113
112A	How often do you read newspaper or magazine: every day, at least once a week, or less than once a week?	EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK 3	
113	Do you listen to the radio?	YES ..... 1 NO ..... 2 →	114
113A	How often do you listen to the radio: every day, at least once a week, less than once a week?	EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK 3	
114	Do you watch televison?	YES ..... 1 NO ..... 2 →	115
114A	How often do you watch television: every day, at least once a week, less than once a week?	EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK 3	
115	What is your religion?	ISLAM ..... 1 HINDUISM ..... 2 BUDDHISM ..... 3 CHRISTIANITY ..... 4 OTHER_____ 6	
118	Do you belong to any of the following organizations?	YES NO	
	Grameen Bank?	GRAMEEN BANK 1 2	
	BRAC?	BRAC 1 2	
	BRDB?	BRDB 1 2	
	Mother's Club?	MOTHER'S CLUB 1 2	
	Any other organization (such as micro credit)?	OTHER_____ 1 2 (SPECIFY)	
119	CHECK Q. 5 IN THE HOUSEHOLD SECTION: THE WOMAN INTERVIEWED IS NOT A USUAL RESIDENT ☐ ↓ THE WOMAN INTERVIEWED IS A USUSAL RESIDENT ☐ →		201

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
120	Now I would like to ask about the place in which you usually live. Do you usually live in a city, in a town, or in a village? IF CITY: In which city do you live?	DHAKA/CHITTAGONG/ KHULNA/RAJSHAHI ..... 1 SMALL CITY ..... 2 TOWN ..... 3 VILLAGE 4	
121	In which division is that located?	RAJSHAHI ..... 1 DHAKA ..... 2 CHITTAGONG ..... 3 KHULNA ..... 3 BARISAL ..... 3 SYLHET 3	
122	Now I would like to ask you some questions about your household where you usually live. What is the main source of water your household uses for dishwashing?	PIPED WATER PIPED INSIDE DWELLING ..... 11 PIPED OUTSIDE DWELLING ..... 12 WELL WATER TUBEWELL/DEEP TUBEWELL ..... 21 SURFACE WELL/OTHER WELL ..... 22 SURFACE WATER POND/TANK/LAKE ..... 31 RIVER/STREAM ..... 32 RAINWATER ..... 41 OTHER _____ 96 (SPECIFY)	
123	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INSIDE DWELLING ..... 11 PIPED OUTSIDE DWELLING ..... 12 WELL WATER TUBEWELL/DEEP TUBEWELL ..... 21 SURFACE WELL/OTHER WELL ..... 22 SURFACE WATER POND/TANK/LAKE ..... 31 RIVER/STREAM ..... 32 RAINWATER ..... 41 BOTTLED WATER ..... 51 OTHER _____ 96 (SPECIFY)	
123A	Do you boil drinking water?	YES ..... 1 NO 2	
124	What kind of toilet facility does your household have?	SEPTIC TANK/MODERN TOILET ..... 11 PIT TOILET/LATRINE WATER SEALED/SLAB LATRINE ..... 21 PIT LATRINE ..... 22 OPEN LATRINE ..... 23 HANGING LATRINE ..... 24 NO FACILITY/BUSH/FIELD ..... 31 OTHER _____ 96 (SPECIFY)	৮৮< 126
125	Do you share this facility with other households?	YES ..... 1 NO 2	
126	Does your household (or any member of your household) have:	YES NO	
	Electricity?	ELECTRICITY 1 2	
	Almirah (wardrobe)?	ALMIRAH 1 2	
	A table or chair?	TABLE/CHAIR 1 2	
	A bench?	BENCH 1 2	
	A watch or clock?	WATCH/CLOCK 1 2	
	A cot or bed?	COT/BED 1 2	
	A radio that is working?	RADIO 1 2	
	A television that is working?	TELEVISION 1 2	
	A bicycle?	BICYCLE 1 2	
	A Motorcycle?	MOTORCYCLE 1 2	
	A Sewing machine?	SEWING MACHINE 1 2	
	Telephone?	TELEPHONE 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
127	What is the material of the roof of your house?	NATURAL ROOF KATCHA (BAMBOO/THATCH) .....11 RUDIMENTARY ROOF TIN.....21 FINISHED ROOF (PUKKA) CEMENT/CONCRETE/TILED.....31 OTHER _____ 96 (SPECIFY)	
128	What is the material of the walls of your house?	NATURAL WALLS JUTE/BAMBOO/MUD (KATCHA) .....11 RUDIMENTARY WALLS WOOD.....21 FINISHED WALLS BRICK/CEMENT .....31 TIN.....32 OTHER _____ 96 (SPECIFY)	
129	What is the material of the floor of your house?	NATURAL FLOOR EARTH/BAMBOO (KATCHA) .....11 RUDIMENTARY FLOOR WOOD.....21 FINISHED FLOOR (PUKKA) CEMENT/CONCRETE .....31 OTHER _____ 96 (SPECIFY)	
130	Does your household own any homestead? IF 'NO', PROBE: Does your household own homestead any other places?	YES .....1 NO 2	
130A	Does your household own any land (other than the homestead land)?	YES .....1 NO 2	ЬЬ< 132
131	How much land does your household own (other than the homestead land)? AMOUNT _____ SPECIFY UNIT_____	AMOUNT ☐☐ ☐☐ ACRES DECIMALS NONE 0000	
132	In terms of household food consumption, how do you classify your household: deficit in whole year; sometimes deficit; neither deficit nor surplus; surplus.	DEFICIT IN WHOLE YEAR.....1 SOMETIMES DEFICIT.....2 NEITHER DEFICIT NOT SURPLUS .....3 SURPLUS 4	
133	Does your family have vulnerable group feeding (VGF) card?	YES .....1 NO 2	
134	Do you have any male/female member in this household who are receiving old age pension/widow or destitute benefit?	YES .....1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES ..... 1 NO ..... 2 → 206	
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES ..... 1 NO ..... 2 → 204	
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD "00".	SONS AT HOME ..... [ ][ ] DAUGHTERS AT HOME ..... [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES ..... 1 NO ..... 2 → 206	
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD "00".	SONS ELSEWHERE ..... [ ][ ] DAUGHTERS ELSEWHERE ..... [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but survived only a few hours or days?	YES ..... 1 NO ..... 2 → 208	
207	In all, how many boys have died? And how many girls have died? IF NONE, RECORD "00".	BOYS DEAD ..... [ ][ ] GIRLS DEAD ..... [ ][ ]	
208	SUM ANSWERS TO 203, 205 AND 207, AND ENTER TOTAL. IF NONE, RECORD "00".	TOTAL ..... [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES [ ] ↓ NO [ ] → PROBE AND CORRECT 201-208 AS NECESSARY		
210	CHECK 208: ONE OR MORE BIRTHS [ ] ↓ NO BIRTHS [ ] →		226

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212 . IF NO NAME WAS GIVEN, RECORD 'NO NAME' IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.

212 What name was given to your (first /next) baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girls?	215 In what month and year was (NAME) born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLE-TED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD)	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR.', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01	SING .....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 → 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ → (NEXT BIRTH)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	
02	SING .....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 → 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2
03	SING .....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 → 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2
04	SING .....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 → 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2
05	SING .....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 → 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2
06	SING .....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 → 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2
07	SING .....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 → 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2
08	SING .....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 → 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ → (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2

212 What name was given to your next baby? NAME	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLE-TED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD)	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
09	SING.....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 ↓ 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ ↓ (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2
10	SING.....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 ↓ 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ ↓ (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2
11	SING.....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 ↓ 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ ↓ (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2
12	SING.....1 MULT.... 2	BOY. .. 1 GIRL.... 2	MONTH ☐☐ YEAR ☐☐☐☐	YES. 1 NO..... 2 ↓ 220	AGE IN YEARS ☐☐	YES. .. 1 NO..... 2	LINE NUMBER ☐☐ ↓ (GO TO 221)	DAYS.....1 ☐☐ MONTHS...2 ☐☐ YEARS.....3 ☐☐	YES. .. 1 NO..... 2

222	Have you had any pregnancy outcome since the birth of (NAME OF LAST BIRTH)?	YES..... 1 NO 2	
223	COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK: NUMBERS ARE SAME ☐↓ NUMBERS ARE DIFFERENT ☐→ (PROBE AND RECONCILE) CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED. ☐ FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED. ☐ FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED. ☐ FOR AGE AT DEATH 12 MONTHS OR 1 YR.: PROBE TO DETERMINE EXACT NUMBER OF MONTHS ☐		
224	CHECK 215 AND ENTER THE NUMBER OF BIRTHS SINCE APRIL 1994 (BAISHAK 1401). IF NONE, RECORD '0'. ☐☐		
225	FOR EACH BIRTH SINCE APRIL 1994 OR BAISHAK 1401, ENTER 'B' IN THE MONTH OF BIRTH IN COLUMN 1 OF THE CALENDAR. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.) WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
226	Are you pregnant now?	YES....................1 NO....................2 UNSURE....................8	 <229
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. ENTER 'P's IN COLUMN 1 OF CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS.................... [ ][ ]	
228	At the time you became pregnant did you want to become pregnant <u>then</u>, did you want to wait until <u>later</u>, or did you <u>not want</u> to have any (more) children at all?	THEN....................1 LATER....................2 NOT AT ALL....................3	
229	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth or had a menstrual regulation?	YES....................1 NO....................2	 <236
230	When did the last such pregnancy end?	MONTH.................... [ ][ ] YEAR.................... [ ][ ][ ][ ]	
231	CHECK 230: LAST PREGNANCY ENDED SINCE APRIL 1994 (BAISHAK 1401) [ ] ? LAST PREGNANCY ENDED BEFORE APRIL 1994 (BAISHAK 1401) [ ]		<235
231A	Was that a stillbirth, a miscarriage, a menstrual regulation, or an abortion?	STILLBIRTH....................1 MISCARRIAGE....................2 MENSTRUAL REGULATION....................3 ABORTION....................4	
232	How many months pregnant were you when the last such pregnancy ended? RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN COLUMN 1 OF CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.	MONTHS.................... [ ][ ]	
233	Have you ever had any other pregnancies which did not result in a live birth?	YES....................1 NO....................2	 <235
234	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO APRIL 1994 (BAISHAK 1401). ENTER 'T' IN COLUMN 1 OF CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
235	IN THE BOXES AT THE BOTTOM OF THE CALENDAR, FILL IN THE MONTH AND YEAR OF TERMINATION OF THE LAST NON-LIVE BIRTH PREGNANCY PRIOR TO APRIL 1994 (BAISHAK 1401).		
236	When did your last menstrual period start? ____________________ (DATE, IF GIVEN)	DAYS AGO.................... 1 [ ][ ] WEEKS AGO.................... 2 [ ][ ] MONTHS AGO.................... 3 [ ][ ] YEARS AGO.................... 4 [ ][ ] IN MENOPAUSE/ HAS HAD HYSTERECTOMY....................994 BEFORE LAST BIRTH....................995 NEVER MENSTRUATED....................996	

SECTION 3. CONTRACEPTION

Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy.

CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 302, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED IN 302. THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 301 OR 302, ASK 303.

301	Which ways or methods have you heard about?	SPONTANEOUS YES	302 Have you ever heard of (METHOD)? PROBED YES	NO	303 Have you ever used (METHOD)?
01	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	1	2	3 ↓	Have you ever had an operation to avoid having any more children? YES .... 1 NO 2
02	MALE STERILIZATION, VASECTOMY Men can have an operation to avoid having any more children.	1	2	3 ↓	Has your husband ever had an operation to avoid having any more children? YES .... 1 NO 2
03	PILL, MAYA Women can take a pill every day	1	2	3 ↓	YES .... 1 NO 2
04	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	1	2	3 ↓	YES .... 1 NO 2
05	INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	1	2	3 ↓	YES .... 1 NO 2
06	IMPLANTS, NORPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for several years.	1	2	3 ↓	YES .... 1 NO 2
07	CONDOM, RAJA Men can put a rubber sheath on their penis before sexual intercourse.	1	2	3 ↓	YES .... 1 NO 2
08	MENSTRUAL REGULATION, MR When a woman's menstrual period does not come on time, she can go to a health centre or to the FWV and have a tube put in her for a short while to bring her period.	1	2	3 ↓	YES .... 1 NO 2
09	SAFE PERIOD, COUNTING DAYS, CALENDAR, RHYTHM METHOD Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to get pregnant.	1	2	3 ↓	YES .... 1 NO 2
10	WITHDRAWAL Men can be careful and pull out before climax.	1	2	3 ↓	YES .... 1 NO 2
11	LACTATIONAL AMENORRHEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds frequently, day and night, and that her menstrual period has not returned.	1	2	3 ↓	YES .... 1 NO 2
12	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	1 ____________ (SPECIFY) ____________ (SPECIFY)	2	3	YES .... 1 NO .... 2 YES .... 1 NO 2
303A	CHECK 303: NOT A SINGLE 'YES' (NEVER USED) ? AT LEAST ONE 'YES' (EVER USED) → 306A				

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES .....1 NO 2	<306
305	ENTER '0' IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH.		<328
306	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
306A	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. What was the first method that you ever used?	FEMALE STERILIZATION .....01 MALE STERILIZATION .....02 PILL .....03 IUD .....04 INJECTIONS .....05 IMPLANTS .....06 CONDOM .....07 PERIODIC ABSTINENCE .....09 WITHDRAWAL .....10 LACTATIONAL AMEN. METHOD .....11 OTHER METHOD__________96 (SPECIFY)	
307	How many living children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN ..... ☐☐	
308	CHECK 303 (01): WOMAN NOT STERILIZED ☐ ? WOMAN STERILIZED ☐		<311A
308A	CHECK 106A: CURRENTLY MARRIED ☐ ? WIDOWED/ DIVORCED ☐		<319
309	CHECK 226: NOT PREGNANT OR UNSURE ☐ ? PREGNANT ☐		<319
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES .....1 NO 2	 <319
311	Which method are you using?	FEMALE STERILIZATION .....01 MALE STERILIZATION .....02 PILL .....03 IUD .....04 INJECTIONS .....05 IMPLANTS .....06 CONDOM .....07 PERIODIC ABSTINENCE .....09 WITHDRAWAL .....10 LACT. AMEN. METHOD .....11 OTHER__________96 (SPECIFY)	01–02 <313 04 <318 05 <318 06 <318 07 <312C 09–96 <318
311A	CIRCLE '01' FOR FEMALE STERILIZATION.		
312A	May I see the package of pills that you are using now? RECORD NAME OF BRAND IF PACKAGE IS SEEN	PACKAGE SEEN .....1 BRAND NAME__________ ☐☐☐ PACKAGE NOT SEEN 2	< 318

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312B	SHOW BRAND CHART FOR PILLS Please tell me which of these is the brand of pills that you are using.	BRAND NAME_____ b b b DOES NOT KNOW 98	
312C	May I see the package of condoms that you are using now? RECORD NAME OF BRAND IF PACKAGE IS SEEN	PACKAGE SEEN .....1 BRAND NAME_____ b b b PACKAGE NOT SEEN 2	
312D	SHOW BRAND CHART FOR CONDOMS Please tell me which of these is the brand of condoms that you are using.	BRAND NAME_____ b b b DOES NOT KNOW 98	
313	Where did the sterilization take place? _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE .....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE CLINIC/ EPI OUTREACH SITE .....14 MATERNAL AND CHILD WELFARE CENTER (MCWC) .....15 NGO SECTOR NGO STATIC CLINIC .....21 NGO SATELLITE CLINIC .....22 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC .....31 QUALIFIED DOCTOR.....32 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
314	CHECK 311: CODE '1' CIRCLED ☐ Ď Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation? CODE '2' CIRCLED ☐ Ď Before the sterilization operation, was your husband told that he would not be able to have any (more) children because of the operation?	YES .....1 NO .....2 CANNOT REMEMBER/DON'T KNOW 8	
315A	Do you regret that (you/your husband) had the operation not to have any more children?	YES .....1 NO 2	
315B	Why do you regret it?	RESPONDENT WANTS ANOTHER CHILD.....1 PARTNER WANTS ANOTHER CHILD.....2 SIDE EFFECTS .....3 CHILD DIED.....4 OTHER REASON_____ 6	
316	In what month and year was the sterilization operation performed?	MONTH ..... b b b YEAR..... b b b b b	
317	CHECK 316: STERILIZED BEFORE APRIL 1994 (BAISHAK 1401) STERILIZED AFTER APRIL 1994 (BAISHAK 1401)		

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	? ENTER CODE FOR STERILIZATION IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND EACH MONTH BACK TO APRIL 1994 (BAISHAK 1401) THEN SKIP TO ЬЬЬЬЬЬЬЬЬ<320	? ENTER CODE FOR STERILIZATION IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE OF THE OPERATION. ENTER METHOD SOURCE CODE IN COLUMN 2 OF CALENDAR IN MONTH OF DATE OF OPERATION. THEN SKIP TO ЬЬЬЬЬЬЬЬЬ<319	
318	CHECK 311: IN CURRENT MONTH IN COLUMN 1 OF CALENDAR, ENTER CALENDAR METHOD CODE SHOWN TO THE LEFT OF THE CALENDAR FOR THE HIGHEST METHOD CIRCLED IN 311. THEN DETERMINE WHEN SHE STARTED USING METHOD THIS TIME. ENTER METHOD CODE IN EACH MONTH OF USE. IF CURRENT METHOD STARTED IN APRIL 1994 (BAISHAK 1401) OR LATER, ENTER METHOD SOURCE CODE IN COLUMN 2 OF CALENDAR IN THE SAME MONTH THAT USE OF CURRENT METHOD BEGAN. ILLUSTRATIVE QUESTIONS: • When did you start using this method continuously? • How long have you been using this method continuously? • When you started using this method, where did you obtain it?		
319	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO APRIL 1994 (BAISHAK 1401). USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. **IN COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS: COLUMN 1: • When was the last time you used a method? Which method was that? • When did you start using that method? How long after the birth of (NAME)? • How long did you use the method then? **IN COLUMN 2**, ENTER METHOD SOURCE CODE IN FIRST MONTH OF EACH USE. ILLUSTRATIVE QUESTIONS: COLUMN 2: • Where did you obtain the method when you started using it? • Where did you get advice on how to use the method [for LAM, rhythm, or withdrawal]? **IN COLUMN 3**, ENTER CODES FOR DISCONTINUATION NEXT TO LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 3 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1. ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT. ILLUSTRATIVE QUESTIONS: COLUMN 3: • Why did you stop using the (METHOD)? • Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason? IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: • How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.		
320	CHECK 311/311A: CIRCLE METHOD CODE:	NO CODE CIRCLED.....00 FEMALE STERILIZATION.....01 MALE STERILIZATION.....02 PILL.....03 IUD.....04 INJECTIONS.....05 IMPLANTS.....06 CONDOM.....07 PERIODIC ABSTINENCE.....09 WITHDRAWAL.....10 LACTATIONAL AMEN. METHOD.....11 OTHER METHOD.....96	ЬЬ<328 ЬЬ<325A ЬЬ<325A ЬЬ<325A ЬЬ<325A ЬЬ<324 ЬЬ<325A

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
321	CHECK COLUMN 1 OF CALENDAR FOR MONTH STARTED USING CURRENT METHOD: STARTED USING AFTER APRIL 1994 (BAISHAK 1401) ƆЬЬЬƇ ƉЬЬЬƉ ? STARTED USING BEFORE APRIL 1994 (BAISHAK 1401) ƆЬЬЬƇ ƇЬЬЬϱЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬ		ЬЬ<326
322	You first obtained (CURRENT METHOD) from (SOURCE OF METHOD FROM CALENDAR) in (DATE). At that time, were you told about side effects or problems you might have with the method?	YES .....1 NO .....2 DON'T KNOW 8	 ЬЬ<325 ЬЬ<325
323	Were you told what to do if you experienced side effects or problems?	YES .....1 NO 2	ЬƋ<325 ЬƉ
324	CHECK COLUMN 1 OF CALENDAR FOR MONTH STARTED USING CURRENT METHOD: STARTED USING AFTER APRIL 1994 (BAISHAK 1401) ƆЬЬЬƇ ƉЬЬЬƉ ? STARTED USING BEFORE APRIL 1994 (BAISHAK 1401) ƆЬЬЬƇ ƇЬЬЬϱЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬ		ЬЬ<326
325	CHECK 320: ANY CODE '01'-'06' CIRCLED ƆЬЬЬƇ ƉЬЬЬƉ b ? At that time, were you told about other methods of family planning which you could use? CODE '11' CIRCLED ƆЬЬЬƇ ƉЬЬЬƉ b ? You first obtained advice for (CURRENT METHOD) from (SOURCE OF METHOD FROM CALENDAR) in (DATE). At that time, were you told about other methods of family planning which you could use?	YES .....1 NO 2	
325A	You had told me that you are currently using family planning. Would you say that using family planning is mainly your decision, mainly your husband's decision or did you both decide together?	MAINLY RESPONDENT .....1 MAINLY HUSBAND .....2 JOINT DECISION .....3 OTHER _____ 6 (SPECIFY)	
326	CHECK 311/311A: CIRCLE METHOD CODE:	FEMALE STERILIZATION .....01 MALE STERILIZATION .....02 PILL .....03 IUD .....04 INJECTIONS .....05 IMPLANTS .....06 CONDOM .....07 PERIODIC ABSTINENCE .....09 WITHDRAWAL .....10 LACTATIONAL AMEN. METHOD .....11 OTHER METHOD 96	ЬЬ<327C ЬЬ<330 ЬЬ<328 ЬЬ<328 ЬЬ<328 ЬЬ<328
327	Where did you obtain (CURRENT METHOD) the last time? _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE .....11 FAMILY WELFARE CENTRE .....12 THANA HEALTH COMPLEX .....13 SATELLITE CLINIC/ EPI OUTREACH SITE .....14 MATERNAL CHILD WELFARE CENTER (MCWC) .....15 GOVT. FIELD WORKER (FWA) .....16 NGO SECTOR NGO STATIC CLINIC .....21 NGO SATELLITE CLINIC .....22 NGO DEPOT HOLDER .....23 NGO FIELDWORKER .....24 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC .....31 QUALIFIED DOCTOR .....32 TRADITIONAL DOCTOR 33	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		PHARMACY ....34 OTHER PRIVATE SECTOR SHOP ....41 FRIEND/RELATIVES ....42 OTHER ______________________ 96 (SPECIFY) DON'T KNOW 98	
327A	CHECK 311/311A: USING PILL OR CONDOMS ЭьььϹ ƊьььƉ ? USING ANOTHER METHOD ЭьььϹ Ͼьььϙьььььььььььььььь		ьь<327C
327B	Who obtained the (pills/condoms) the last time you got them?	RESPONDENT ....1 HUSBAND..2 SON/DAUGHTER ....3 OTHER RELATIVE ....4 OTHER____________________________6 (SPECIFY)	
327C	Are you having any problems in using (CURRENT METHOD)?	YES ....1 NO 2	ьь<330
327D	What problems are you having with using (CURRENT METHOD)?	WEIGHT GAIN .... A WEIGHT LOSS .... B TOO MUCH BLEEDING........................... C HYPERTENSION .... D HEADACHE .... E NAUSEA .... F NO MENSTRUATION ....G WEAK/TIRED ....H DIZZINESS ....I HUSBAND DISAPPROVES......................J OTHER RELATIVE DISAPPROVES .... K RELIGION DISAPPROVES ....L ACCESS/AVAILABILITY.........................M COSTS TOO MUCH ....N INCONVENIENT TO USE.......................O STERILIZED, WANTS CHILDREN .... P ABDOMINAL PAIN..................................Q OTHER_________________________ X (SPECIFY) DOES NOT KNOW .... Z	Ɗ<330
328	Do you know of a place where you can obtain a method of family planning?	YES ....1 NO 2	ьь<330
329	Where is that? ______________________________ (NAME OF PLACE) IF WOMAN SAYS MORE THAN ONE PLACE, ASK FOR THE PLACE SHE WOULD MOST LIKELY USE.	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE ....11 FAMILY WELFARE CENTRE..............12 THANA HEALTH COMPLEX ....13 SATELLITE CLINIC/ EPI OUTREACH SITE ....14 MATERNAL CHILD WELFARE CENTER (MCWC) ....15 GOVT. FIELD WORKER (FWA)..........16 NGO SECTOR NGO STATIC CLINIC ....21 NGO SATELLITE CLINIC ....22 NGO DEPOT HOLDER........................23 NGO FIELDWORKER ....24 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ....31 QUALIFIED DOCTOR..........................32 TRADITIONAL DOCTOR.....................33 PHARMACY..34 OTHER PRIVATE SECTOR SHOP 41	

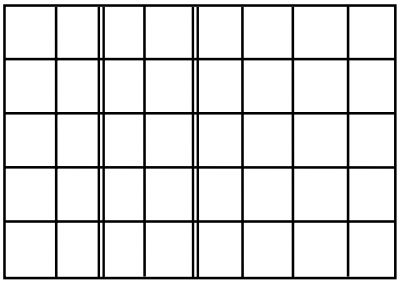
NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		FRIEND/RELATIVES .....42 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
330	CHECK 327 AND 329: SATELLITE/EPI OUTREACH ƆЬЬЬƇ NOT MENTIONED ƉЬЬЬƉ ? SATELLITE /EPI OUTREACH ƆЬЬЬƇ MENTIONED ƇЬЬЬϘЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬ		ЬЬ<332
331	In some places, there is a clinic set up for a day or part of a day in someone's house or in a school. During the past 3 months, was there any such clinic in this village/mohalla?	YES .....1 NO .....2 DOES NOT KNOW 8	 ЬЬ<334A ЬЬ<334A
332	Did you visit such a temporary health clinic in the last 3 months?	YES .....1 NO 2	 ЬЬ<334A
333	What services did you receive? CIRCLED ALL MENTIONED	FAMILY PLANNING METHODS ..... A IMMUNIZATION ..... B CHILD GROWTH MONITORING ..... C T.T. FOR PREGNANT WOMEN ..... D ANTENATAL CARE ..... E OTHER_____X (SPECIFY) DOES NOT KNOW ..... Z	
334A	During the last six months has anyone visited you in your house to talk to you about family planning or to give you any family planning method? IF YES: Who came? _____ NAME _____ IDENTIFICATION NUMBER Anyone else? _____ NAME _____ IDENTIFICATION NUMBER WRITE THE NAME AND WORKER IDENFICATION NUMBER OF THE FIELD WORKER.	GOVT. FP WORKER ..... A GOVT. HEALTH WORKER..... B NGO WORKER..... C NO ONE ..... Y	ЬЬ<335A
334B	How many times did a worker /workers visit you for the family planning in the last six months?	TIMES ..... ƆЬЬЬƉЬЬЬƇ b b b ƇЬЬЬϘЬЬЬƉ DOES NOT KNOW 98	
334C	When was the last visit? IF MORE THAN ONE WORKER VISITED: When did the last worker visit you? IF LESS THAN ONE MONTH AGO, WRITE '0'.	MONTHS AGO_____ ƆЬЬЬƇ b b ƇЬЬЬƉ DOES NOT KNOW 8	
335A	During the last six months has anyone visited you in your house to talk to you about your health or your child health or to give you any medicine such as vitamin A, ORS? IF YES: Who came? _____ NAME _____ IDENTIFICATION NUMBER Anyone else? _____ NAME _____ IDENTIFICATION NUMBER WRITE THE NAME AND WORKER IDENFICATION NUMBER OF THE FIELD WORKER.	GOVT. FP WORKER ..... A GOVT. HEALTH WORKER..... B NGO WORKER..... C NO ONE ..... Y	ЬЬ<336
335B	How many times did a worker visit you for the health services in the last six months?	TIMES ..... ƆЬЬЬƉЬЬЬƇ b b b ƇЬЬЬϘЬЬЬƉ	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		DOES NOT KNOW 98	
335C	When was the last visit? IF MORE THAN ONE WORKER VISITED: When did the last worker visit you? IF LESS THAN ONE MONTH AGO, WRITE '0'.	MONTHS AGO_____.b b DOES NOT KNOW 8	
336	CHECK 334A AND 335A: BOTH FP AND HEALTH WORKER i.e., 'Y's ARE NOT CIRCLED. NEITHER HEALTH NOR FP WORKER i.e., 'Y's ARE CIRCLED IN BOTH EITHER HEALTH OR FP WORKER i.e., 'Y' IS CIRCLED EITHER IN Q334A OR IN Q335A		338 401
337	Is he/she is the same person who talked to you about family planning or gave you family planning method and talked to you about health or provided health services?	SAME .....1 DIFFERENT .....2 DOES NOT KNOW 8	401
338	Did you discuss about family planning or health with a fieldworker in the last 6 months?	YES .....1 NO 2	401
338A	What did you discuss?	FAMILY PLANNING ..... A HEALTH ..... B	
339	When was the last time in the last 6 months you had contact with the fieldworker? IF LESS THAN ONE MONTH AGO, WRITE '0'.	MONTHS AGO_____.b b DOES NOT KNOW 8	

SECTION 4A. PREGNANCY, POSTNATAL CARE AND BREASTFEEDING

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
401	Now we talk about possible problems that women might face when she is going to have a child. Please tell me what are the complications during pregnancy, childbirth and after delivery that needs medical treatment.	SPONTANEOUS YES	401A: Have you ever heard of (PROBLEMS)? PROBED YES	NO	
	1. SEVERE HEADACHE / BLURRY VISION / SWOLLEN ARMS AND LEGS	1	2	3	
	2. VAGINAL BLEEDING DURING PREGNANCY	1	2	3	
	3. LABOR FOR MORE THAN 18 HOURS	1	2	3	
	4. EXCESSIVE BLEEDING DURING/AFTER DELIVERY	1	2	3	
	5. CONVULSION	1	2	3	
	6. FEVER FOR MORE THAN 3 DAYS DURING PREGNANCY OR AFTER DELIVERY	1	2	3	
	7. BAD SMELLING VAGINAL DISCHARGE	1	2	3	
	8. OTHERS:_____ (SPECIFY)	1	2	3	
401B	CHECK 401 AND 401A: ATLEAST ONE '1' OR '2' CIRCLED ☐ NOT A SINGLE '1' OR '2' CIRCLED ☐ → 402A				
401C	Where can someone go to seek medical services for this (these) problem(s)? Any other place? RECORD ALL MENTIONED.	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE ..... A FAMILY WELFARE CENTRE/FWV ..... B THANA HEALTH COMPLEX ..... C SATELLITE CLINIC/ EPI OUTREACH SITE ..... D MATERNAL AND CHILD WELFARE CENTER (MCWC) ..... E GOVT. FIELD WORKER (FWA) ..... F NGO SECTOR NGO STATIC CLINIC..... G NGO SATELLITE CLINIC ..... H NGO FIELDWORKER..... I PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... J QUALIFIED DOCTOR..... K TRADITIONAL DOCTOR..... L PHARMACY..... M OTHER _____ X (SPECIFY)				

402A	CHECK 215: ONE OR MORE BIRTHS SINCE APRIL 1994 (BAISHAK 1401) ☐ ↓ NO BIRTHS SINCE APRIL 1994 (BAISHAK 1401) ☐ → 480A		
402B	ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE APRIL 1994 OR BAISHAK 1401. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRES). Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about one child at a time.)		
403	LINE NUMBER FROM 212	LAST BIRTH LINE NUMBER ..... ☐☐	NEXT-TO-LAST BIRTH LINE NUMBER ..... ☐☐
404	FROM 212 AND 216	NAME _____ ALIVE ☐ ↓ DEAD ☐ ↓	NAME _____ ALIVE ☐ ↓ DEAD ☐ ↓
405	At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, did you want not want to have any (more) children at all?	THEN ..... 1 (SKIP TO 406A) ← LATER ..... 2 NO/NO MORE ..... 3 (SKIP TO 406A) ←	THEN ..... 1 (SKIP TO 420) ← LATER ..... 2 NO/NO MORE ..... 3 (SKIP TO 420) ←
406	How much longer would you like to have waited?	MONTHS ..... 1 ☐☐ YEARS ..... 2 ☐☐ DON'T KNOW 998	MONTHS ..... 1 ☐☐ YEARS ..... 2 ☐☐ DON'T KNOW 998
406A	During the time you were pregnant with (NAME) did you receive any TT injection?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8 (SKIP TO 406C) ←	
406B	How many TT injections did you receive during the pregnancy with (NAME OF LAST CHILD)	NUMBER ..... ☐	
406C	Before the pregnancy with (NAME OF LAST CHILD) did you receive any TT injection?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8 (SKIP TO 406E) ←	
406D	How many TT injections did you have before this pregnancy?	NUMBER ..... ☐	
406E	CHECK 406A AND 406C 'YES' IN EITHER 406A OR 406C ☐ ↓ 'YES' NEITHER IN 406A NOR 406C ☐ ↓ (SKIP TO 407)		
406F	Do you have an immunization card where TT injections are recorded? IF YES:May I see it, please?	YES, SEEN ..... 1 YES, NOT SEEN ..... 2 NO CARD ..... 3 (SKIP TO 406H) ←	

		LAST BIRTH LINE NUMBER	NEXT-TO-LAST BIRTH LINE NUMBER .....
406G	I) COPY TT INJECTIONS DATE FOR EACH INJECTION FROM THE CARD. a. First TT Injection? b. Second TT Injection? c. Third TT Injection? d. Four TT Injection? e. Fifth TT Injection? II) SUM ANSWER TO 406B AND 406D AND COMPARE WITH NUMBER OF TT INJECTION IN CARD. IF NUMBER ARE DIFFERENT, PROBE AND RECONCILE. (SKIP TO 407)	DAY MONTH YEAR 	
406H	You have mentioned that you received (NUMBER OF TT INJECTION IN Q406B) TT injection during pregnancy with (NAME OT LAST CHILD). In what month(s) of pregnancy did you receive this (these) injections? CODE 1 TO 9 FOR EACH INJECTION GIVEN, '0' FOR MONTH NOT KNOWN.	MONTH OF PREGNANCY IST INJECTION ..... ☐ 2ND INJECTION ..... ☐ NOT APPLICABLE 98	
407	When you were pregnant with (NAME), Did you see anyone for a medical checkup i.e., antenatal care for this pregnancy? IF YES: Whom did you see? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL QUALIFIED DOCTOR ..... A NURSE/MIDWIFE ..... B FAMILY WELFARE VISITOR ..... C OTHER PERSON TRAINED TRADITIONAL BIRTH ATTENDANT (TTBA) ..... D UNTRAINED TBA ..... E UNQUALIFIED DOCTOR ..... F OTHER _____ X (SPECIFY) (SKIP TO 408) NO ONE ..... Y	
407A	Why did you not see anyone? Any other reason? RECORD ALL MENTIONED.	TOO FAR ..... A INCONVENIENT SERVICE HOUR ... B UNPLEASANT STAFF BEHAVIOUR C LACK OF PROVIDER EXPERTISE .. D LACK OF PRIVACY ..... E INADEQUATE DRUG SUPPLY ..... F LONG WAITING TIME ..... G SERVICE TOO EXPENSIVE ..... H RELIGIOUS REASONS ..... I NOT BENEFICIAL/NEEDED ..... J DID NOT KNOW OF NEED FOR SERVICE ..... K WAS UNABLE /NOT PERMITTED TO GO OUT OF THE HOUSE ..... L DID NOT KNOW OF EXISTENCE ... M OTHER _____ X (SPECIFY) (SKIP TO 412A)	

		LAST BIRTH LINE NUMBER	NEXT-TO-LAST BIRTH LINE NUMBER .....
408	How many months pregnant were you when you first received medical checkup i.e., antenatal care for this pregnancy?	MONTHS ..... [ ] DON'T KNOW 8	
409	How many times did you receive medical checkup during this pregnancy?	NO. OF TIMES ..... [ ] DON'T KNOW 98	
410	CHECK 409: NUMBER OF TIMES RECEIVED MEDICAL CHECKUP (ANTENATAL CARE)	ONCE [ ] → (SKIP TO 412A) MORE THAN ONCE OR DK [ ] →	
411	How many months pregnant were you the last time your received medical checkup i.e., antenatal care?	MONTHS ..... [ ] DON'T KNOW 8	
412A	During this pregnancy, were you weighed at least once?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
412B	During this pregnancy, was your height measured?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
412C	During this pregnancy, did anyone take your blood pressure (put a cuff on your arm and pump air into it)?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
412D	When you were pregnant with (NAME), did anyone take your urine for testing?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
412E	When you were pregnant with (NAME), did anyone take your blood for testing?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
412F	When you were pregnant with (NAME), did anyone check/exam your eye for anemia?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
413	When you were pregnant with (NAME) were you told about the signs of pregnancy complications?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8 → (SKIP TO 416)	
414	Were you told where to go if you had these complications?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
416	Did you take any iron tablet or iron syrup during this pregnancy? SHOW TABLET/SYRUP.	YES ..... 1 NO ..... 2 DON'T KNOW 8	
420	Around the time of the birth (NAME), did you have any of the following problems:	YES NO DK	YES NO DK
	Long labor, that is, did your regular contractions last more than 18 hours?	LONG LABOR 1 2 8	LONG LABOR 1 2 8
	Excessive bleeding that was so much that you feared it was life threatening?	EXCESSIVE BLEEDING 1 2 8	EXCESSIVE BLEEDING 1 2 8
	A high fever with bad smelling vaginal discharge?	HIGH FEVER 1 2 8	HIGH FEVER 1 2 8
	Convulsions?	CONVULSIONS 1 2 8	CONVULSIONS 1 2 8
	Baby's hands and feet came first during delivery?	HANDS AND FEET 1 2 8	HANDS AND FEET 1 2 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
420A	CHECK 420:	ATLEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐ (SKIP TO 422)	ATLEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐ (SKIP TO 422)
421	Did you see seek any assistance for this complication? IF YES: Whom did you see? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL QUALIFIED DOCTOR ..... A NURSE/MIDWIFE ..... B FAMILY WELFARE VISITOR ..... C OTHER PERSON TRAINED TRADITIONAL BIRTH ATTENDANT (TTBA) ..... D UNTRAINED TBA ..... E UNQUALIFIED DOCTOR ..... F OTHER _____ X (SPECIFY) NO ONE ..... Y	HEALTH PROFESSIONAL QUALIFIED DOCTOR ..... A NURSE/MIDWIFE ..... B FAMILY WELFARE VISITOR ..... C OTHER PERSON TRAINED TRADITIONAL BIRTH ATTENDANT (TTBA) ..... D UNTRAINED TBA ..... E UNQUALIFIED DOCTOR ..... F OTHER _____ X (SPECIFY) NO ONE ..... Y
421A	When you had this complication, did your husband become concerned?	YES ..... 1 NO 2	YES ..... 1 NO 2
421B	When you had this complication, did your mother-in-law become concerned?	YES ..... 1 NO ..... 2 NOT APPLICABLE 8	YES ..... 1 NO ..... 2 NOT APPLICABLE 8
422	When (NAME) was born, was he/she: very large, larger than average, average, smaller than average, or very small?	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW 8	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW 8
423	When (NAME) was born, was your husband around?	YES ..... 1 NO 2	YES ..... 1 NO 2
425	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.	HEALTH PROFESSIONAL QUALIFIED DOCTOR ..... A NURSE/MIDWIFE ..... B FAMILY WELFARE VISITOR ..... C OTHER PERSON TRAINED TRADITIONAL BIRTH ATTENDANT (TTBA) ..... D UNTRAINED TBA (DAI) ..... E UNQUALIFIED DOCTOR ..... F RELATIVES ..... G OTHER _____ X (SPECIFY) NO ONE ..... Z	HEALTH PROFESSIONAL QUALIFIED DOCTOR ..... A NURSE/MIDWIFE ..... B FAMILY WELFARE VISITOR ..... C OTHER PERSON TRAINED TRADITIONAL BIRTH ATTENDANT (TTBA) ..... D UNTRAINED TBA (DAI) ..... E UNQUALIFIED DOCTOR ..... F RELATIVES ..... G OTHER _____ X (SPECIFY) NO ONE ..... Z
426	Where did you give birth to (NAME)?	HOME OWN HOME ..... 11 OTHER HOME ..... 12 (SKIP TO 428) PUBLIC SECTOR GOVT. HOSPITAL ..... 21 THANA HEALTH COMPLEX ..... 22 MATERNAL AND CHILD WELFARE CENTER (MCWC) ..... 23 NGO SECTOR NGO STATIC CLINIC ..... 31 PRIVATE SECTOR PVT. HOSPITAL/CLINIC ..... 41 OTHER _____ 96 (SPECIFY) (SKIP TO 428)	HOME OWN HOME ..... 11 OTHER HOME ..... 12 (SKIP TO 428) PUBLIC SECTOR GOVT. HOSPITAL ..... 21 THANA HEALTH COMPLEX ..... 22 MATERNAL AND CHILD WELFARE CENTER (MCWC) ..... 23 NGO SECTOR NGO STATIC CLINIC ..... 31 PRIVATE SECTOR PVT. HOSPITAL/CLINIC ..... 41 OTHER _____ 96 (SPECIFY) (SKIP TO 434)

		LAST BIRTH	NEXT-TO-LAST BIRTH

		NAME _____	NAME _____
427	Was (NAME) delivered by caesarian section?	YES ..... 1 NO ..... 2 (SKIP TO 432)	YES ..... 1 NO ..... 2 (SKIP TO 434)
428	After (NAME) was born, did any medical persons check on your health?	YES ..... 1 NO ..... 2 (SKIP TO 432)	
429	How many days or weeks after the delivery did the first check take place? RECORD '00' DAYS IF SAME DAY	DAYS AFTER DEL ..... 1 ☐☐ WEEKS AFTER DEL ..... 2 ☐☐ DON'T KNOW 998	
430	Who checked on your health at that time? PROBE FOR THE MOST QUALIFIED PERSON.	HEALTH PROFESSIONAL QUALIFIED DOCTOR ..... A NURSE/MIDWIFE ..... B FAMILY WELFARE VISITOR ..... C OTHER PERSON TRAINED TRADITIONAL BIRTH ATTENDANT (TTBA) ..... D UNTRAINED TBA (DAI) ..... E UNQUALIFIED DOCTOR ..... F OTHER _____ X (SPECIFY)	
431	Where did this first check take place?	HOME OWN HOME ..... 01 OTHER HOME ..... 02 PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE ..... 11 FAMILY WELFARE CENTRE ..... 12 THANA HEALTH COMPLEX ..... 13 SATELLITE CLINIC/ EPI OUTREACH SITE ..... 14 MATERNAL AND CHILD WELFARE CENTER (MCWC) ..... 15 NGO SECTOR NGO STATIC CLINIC ..... 21 NGO SATELLITE CLINIC ..... 22 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL /CLINIC ..... 31 QUALIFIED DOCTOR ..... 32 TRADITIONAL DOCTOR ..... 33 PHARMACY ..... 34 OTHER _____ 96 (SPECIFY)	
432	In the first two months after delivery, did you take a Vitamin A capsule like this? SHOW CAPSULE	YES ..... 1 NO 2	
433	Has your period returned since the birth of (NAME)?	YES ..... 1 (SKIP to 435) NO ..... 2 (SKIP TO 436)	
434	Did your period return between the birth of (NAME) and your next pregnancy?		YES ..... 1 NO ..... 2 (SKIP TO 438)
435	For how many months after the birth of (NAME) did you <u>not</u> have your period?	MONTHS ..... ☐☐ DON'T KNOW 98	MONTHS ..... ☐☐ DON'T KNOW 98

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
436	CHECK 226: RESPONDENT PREGNANT?	NOT PREG-NANT OR UNSURE ☐ → PREGNANT ☐ (SKIP TO 438)	
437	Have you resumed sexual relations since the birth of (NAME)?	YES ..... 1 NO ..... 2 (SKIP TO 439)	
438	For how many months after the birth of (NAME) did you not have sexual relations?	MONTHS ..... ☐☐ DON'T KNOW 98	MONTHS ..... ☐☐ DON'T KNOW 98
439	Did you ever breastfeed (NAME)?	YES ..... 1 NO ..... 2 (SKIP TO 444)	YES ..... 1 NO ..... 2 (SKIP TO 444)
440	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD "00" HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY ..... 000 HOURS ..... 1 ☐☐ DAYS 2	IMMEDIATELY ..... 000 HOURS ..... 1 ☐☐ DAYS 2
441	CHECK 404: CHILD ALIVE?	ALIVE ☐ → DEAD ☐ (SKIP TO 443)	ALIVE ☐ DEAD ☐ (SKIP TO 443)
442	Are you still breastfeeding (NAME)?	YES ..... 1 (SKIP TO 445) NO 2	YES ..... 1 (SKIP TO 445) NO 2
443	For how many months did you breastfeed (NAME)?	MONTHS ..... ☐☐ DON'T KNOW 98	MONTHS ..... ☐☐ DON'T KNOW 98
444	CHECK 404:	ALIVE ☐ → (SKIP TO 447) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 451)	ALIVE ☐ → (SKIP TO 447) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 451)
445	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTTIME FEEDINGS ..... ☐☐	
446	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYTIME FEEDINGS ..... ☐☐	
447	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES ..... 1 NO ..... 2 DON'T KNOW 8	YES ..... 1 NO ..... 2 DON'T KNOW 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
448	At any time yesterday or last night was (NAME) given any of the following: Plain water? Sugar water/ honey/juice? Baby or infant formula? Cow's or goat's milk? Other liquids? Banana/papaya/mango? Green leafy vegetables? Rice, wheat, porridge? Meat/fish/eggs? Dal? Other _____? (SPECIFY)	YES NO PLAIN WATER 1 2 SUGAR WATER, HONEY 1 2 BABY FORMULA 1 2 ANIMAL MILK 1 2 OTHER LIQUID 1 2 BANANA/MANGO/PAPAYA 1 2 GREEN VEGETABLES 1 2 RICE/WHEAT 1 2 MEAT/FISH/EGGS 1 2 DAL 1 2 OTHER 1 2	YES NO PLAIN WATER 1 2 SUGAR WATER, HONEY 1 2 BABY FORMULA 1 2 ANIMAL MILK 1 2 OTHER LIQUID 1 2 BANANA/MANGO/PAPAYA 1 2 GREEN VEGETABLES 1 2 RICE/WHEAT 1 2 MEAT/FISH/EGGS 1 2 DAL 1 2 OTHER 1 2
450		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 451.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 451.

SECTION 4B. IMMUNIZATION AND HEALTH

451	ENTER THE NAME, LINE NUMBER, AND SURVIVAL STATUS OF EACH BIRTH SINCE APRIL 1994 (BAISHAK 1401) IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 2 BIRTHS, USE ADDITIONAL QUESTIONNAIRE).		
452	LINE NUMBER FROM 212	LAST BIRTH LINE NUMBER ..... ☐☐	NEXT-TO-LAST BIRTH LINE NUMBER ..... ☐☐
453	FROM 212 AND 216	NAME _____ ALIVE ☐ DEAD ☐ (GO TO 453 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 480)	NAME _____ ALIVE ☐ DEAD ☐ (GO TO 453 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 480)
454	Did (NAME) receive a Vitamin A dose like this during the last 6 months? SHOW CAPSULE	YES ..... 1 NO ..... 2 DON'T KNOW 8	YES ..... 1 NO ..... 2 DON'T KNOW 8
455	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it please?	YES, SEEN ..... 1 (SKIP TO 457) YES, NOT SEEN ..... 2 (SKIP TO 459) NO CARD 3	YES, SEEN ..... 1 (SKIP TO 457) YES, NOT SEEN ..... 2 (SKIP TO 459) NO CARD 3
456	Did you ever have a vaccination card for (NAME)?	YES ..... 1 (SKIP TO 459) NO 2	YES ..... 1 (SKIP TO 459) NO 2
457	(1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD. (2) WRITE "44" IN "DAY" COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED BCG POLIO1 POLIO 2 POLIO 3 DPT 1 DPT 2 DPT 3 MEASLES VITAMIN A (MOST RECENT)	DAY MON YEAR BCG ☐☐ ☐☐ ☐☐☐☐ P1 ☐☐ ☐☐ ☐☐☐☐ P2 ☐☐ ☐☐ ☐☐☐☐ P3 ☐☐ ☐☐ ☐☐☐☐ D1 ☐☐ ☐☐ ☐☐☐☐ D2 ☐☐ ☐☐ ☐☐☐☐ D3 ☐☐ ☐☐ ☐☐☐☐ MEASLES ☐☐ ☐☐ ☐☐☐☐ VIT. A ☐☐ ☐☐ ☐☐☐☐	DAY MON YEAR BCG ☐☐ ☐☐ ☐☐☐☐ P1 ☐☐ ☐☐ ☐☐☐☐ P2 ☐☐ ☐☐ ☐☐☐☐ P3 ☐☐ ☐☐ ☐☐☐☐ D1 ☐☐ ☐☐ ☐☐☐☐ D2 ☐☐ ☐☐ ☐☐☐☐ D3 ☐☐ ☐☐ ☐☐☐☐ MEASLES ☐☐ ☐☐ ☐☐☐☐ VIT. A ☐☐ ☐☐ ☐☐☐☐
457A	Did your child (NAME) receive any polio vaccine from National Immunization Day (NID)? IF YES, How many times did you receive from NID campaign? RECORD '0' IF NOT RECEIVED	TIMES ..... ☐	TIMES ..... ☐

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
458	Has (NAME) received any vaccinations that were not recorded on this card? RECORD "YES" ONLY IF RESPONDENT MENTIONS BCG, POLIO 1-3, DPT 1-3, AND/OR MEASLES VACCINE(S)	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE "66" IN THE CORRESPONDING DAY COLUMN IN 457) NO ..... 2 DON'T KNOW ..... 8 (SKIP TO 463)	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE "66" IN THE CORRESPONDING DAY COLUMN IN 457) NO ..... 2 DON'T KNOW ..... 8 (SKIP TO 463)
459	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases?	YES ..... 1 NO ..... 2 (SKIP TO 463) DON'T KNOW 8	YES ..... 1 NO ..... 2 (SKIP TO 463) DON'T KNOW 8
460	Please tell me if (NAME) received any of the following vaccinations:		
460A	A BCG vaccination against tuberculosis, that is, an injection in the left shoulder that caused a scar?	YES ..... 1 NO 2	YES ..... 1 NO 2
460B	Polio vaccine that is, drops in the mouth?	YES ..... 1 NO ..... 2 (SKIP TO 460E) DON'T KNOW 8	YES ..... 1 NO ..... 2 (SKIP TO 460E) DON'T KNOW 8
460C	How many times did (NAME) receive polio vaccine: From clinic? From NID?	TIMES FROM CLINIC ..... ☐ TIMES FROM NID ..... ☐	TIMES FROM CLINIC ..... ☐ TIMES FROM NID ..... ☐
460D	When was the first polio vaccine received, just after birth or later?	JUST AFTER BIRTH ..... 1 LATER 2	JUST AFTER BIRTH ..... 1 LATER 2
460E	DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops?	YES ..... 1 NO ..... 2 (SKIP TO 460G) DON'T KNOW 8	YES ..... 1 NO ..... 2 (SKIP TO 460G) DON'T KNOW 8
460F	How many times?	NUMBER OF TIMES ..... ☐	NUMBER OF TIMES ..... ☐
460G	An injection to prevent measles?	YES ..... 1 NO ..... 2 DON'T KNOW 8	YES ..... 1 NO ..... 2 DON'T KNOW 8
463	Has (NAME) been ill with a fever at any time in the last two weeks?	YES ..... 1 NO ..... 2 DON'T KNOW 8	YES ..... 1 NO ..... 2 DON'T KNOW 8
464	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES ..... 1 NO ..... 2 (SKIP TO 466) DON'T KNOW 8	YES ..... 1 NO ..... 2 (SKIP TO 466) DON'T KNOW 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
465	In the last 2 weeks, did (NAME) had: Cough? Rapid breathing? Difficulty in breathing? Chest in drawing? Fever?	YES NO COUGH 1 2 RAPID BREATHING 1 2 DIFFICULTY IN BREATHING 1 2 CHEST IN DRAWING 1 2 FEVER 1 2	YES NO COUGH 1 2 RAPID BREATHING 1 2 DIFFICULTY IN BREATHING 1 2 CHEST IN DRAWING 1 2 FEVER 1 2
466	CHECK 463 AND 464: FEVER OR COUGHS?	"YES" IN 463 OR 464 ☐ → OTHER ☐ → (SKIP TO 472)	"YES" IN 463 OR 464 ☐ → OTHER ☐ → (SKIP TO 472)
467	Did you seek advice or treatment for (NAME) for the illness?	YES 1 NO 2 → (SKIP TO 472)	YES 1 NO 2 → (SKIP TO 472)
468	Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE ..... A FAMILY WELFARE CENTRE/FWV ..... B THANA HEALTH COMPLEX ..... C SATELLITE CLINIC/ EPI OUTREACH SITE ..... D MATERNAL AND CHILD WELFARE CENTER (MCWC) ..... E GOVT. FIELD WORKER (FWA) ..... F NGO SECTOR NGO STATIC CLINIC ..... G NGO SATELLITE CLINIC ..... H NGO FIELDWORKER ..... I PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... J QUALIFIED DOCTOR ..... K TRADITIONAL DOCTOR ..... L PHARMACY ..... M OTHER _____ X (SPECIFY)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE ..... A FAMILY WELFARE CENTRE/FWV ..... B THANA HEALTH COMPLEX ..... C SATELLITE CLINIC/ EPI OUTREACH SITE ..... D MATERNAL AND CHILD WELFARE CENTER (MCWC) ..... E GOVT. FIELD WORKER (FWA) ..... F NGO SECTOR NGO STATIC CLINIC ..... G NGO SATELLITE CLINIC ..... H NGO FIELDWORKER ..... I PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... J QUALIFIED DOCTOR ..... K TRADITIONAL DOCTOR ..... L PHARMACY ..... M OTHER _____ X (SPECIFY)
472	Has (NAME) had diarrhea in the last 2 weeks?	YES 1 NO 2 → (SKIP TO 480) DON'T KNOW 8	YES 1 NO 2 → (SKIP TO 480) DON'T KNOW 8
473	When (NAME) had diarrhea, was he/she offered the same amount to drink, more than usual to drink, or less than usual to drink?	SAME 1 MORE 2 LESS 3 DON'T KNOW 8	SAME 1 MORE 2 LESS 3 DON'T KNOW 8
474	Was he/she offered the same amount to eat, more than usual to eat or less than usual to eat?	SAME 1 MORE 2 LESS 3 DON'T KNOW 8	SAME 1 MORE 2 LESS 3 DON'T KNOW 8
475	When (NAME) had diarrhea, was he/she given any of the following to drink: A fluid made from a special saline packet? Home-made sugar-salt-water solution (laban gur)? Water? Any other liquids?	YES NO DK FLUID FROM PACKET 1 2 8 LABON GUR 1 2 8 WATER 1 2 8 OTHER LIQUID 1 2 8	YES NO DK FLUID FROM PACKET 1 2 8 LABON GUR 1 2 8 WATER 1 2 8 OTHER LIQUID 1 2 8
		LAST BIRTH	NEXT-TO-LAST BIRTH

		NAME _____	NAME _____
476	Was anything (else) given to treat the diarrhea?	YES ..... 1 NO ..... 2 (SKIP TO 478) ← DON'T KNOW 8	YES ..... 1 NO ..... 2 (SKIP TO 478) ← DON'T KNOW 8
477	What was given to treat the diarrhea? Anything else? RECORD ALL MENTIONED.	PILL /CAPSULE OR SYRUP ..... A INJECTION ..... B (I.V.) INTRAVENOUS ..... C HOME REMEDIES/ HERBAL MEDICINES ..... D OTHER _____ X (SPECIFY)	PILL/CAPSULE OR SYRUP ..... A INJECTION ..... B (I.V.) INTRAVENOUS ..... C HOME REMEDIES/ HERBAL MEDICINES ..... D OTHER _____ X (SPECIFY)
478	Did you seek advice or treatment for the diarrhea?	YES ..... 1 NO ..... 2 (SKIP TO 480) ←	YES ..... 1 NO ..... 2 (SKIP TO 480) ←
479	Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE ..... A FAMILY WELFARE CENTRE/FWV ..... B THANA HEALTH COMPLEX ..... C SATELLITE CLINIC/ EPI OUTREACH SITE ..... D MATERNAL AND CHILD WELFARE CENTER (MCWC) ..... E GOVT. FIELD WORKER (FWA) ..... F NGO SECTOR NGO STATIC CLINIC ..... G NGO SATELLITE CLINIC ..... H NGO FIELDWORKER ..... I PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... J QUALIFIED DOCTOR ..... K TRADITIONAL DOCTOR ..... L PHARMACY ..... M OTHER _____ X (SPECIFY)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE ..... A FAMILY WELFARE CENTRE/FWV ..... B THANA HEALTH COMPLEX ..... C SATELLITE CLINIC/ EPI OUTREACH SITE ..... D MATERNAL AND CHILD WELFARE CENTER (MCWC) ..... E GOVT. FIELD WORKER (FWA) ..... F NGO SECTOR NGO STATIC CLINIC ..... G NGO SATELLITE CLINIC ..... H NGO FIELDWORKER ..... I PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... J QUALIFIED DOCTOR ..... K TRADITIONAL DOCTOR ..... L PHARMACY ..... M OTHER _____ X (SPECIFY)
480		GO BACK TO 453 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 480A	GO BACK TO 453 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 480A

480A	CHECK 208 AND 226: HAS ONE OR MORE CHILDREN AND /OR CURRENTLY PREGNANT ☐ ↓	NEITHER HAS ANY LIVING CHILDREN NOR CURRENTLY PREGNANT ☐ →	501

480B	Many different factors can prevent women getting medical attention during the pregnancy and child birth. Sometimes women might have life threatening or serious situation during the pregnancy and childbirth. When you need medical advice or treatment for such situation, is each of the following a problem or no problem for you?	PROBLEM	NO PROBLEM
	Knowing where to go.	1	2
	Not having a health facility nearby.	1	2
	Going to health center.	1	2
	Lack of confidence on source of services.	1	2
	Getting permission to go.	1	2
	Getting money needed for treatment.	1	2
	Getting someone to accompany.	1	2

SECTION 5. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	PRESENCE OF OTHERS AT THIS POINT.	YES NO CHILDREN UNDER 10 ..... 1 2 HUSBAND ..... 1 2 OTHER MALES ..... 1 2 OTHER FEMALES 1 2	
501A	CHECK 106A: CURRENTLY MARRIED ☐ (↓) NOT CURRENTLY MARRIED ☐ →		507
505	Is your husband staying with you now or is he staying elsewhere?	STAYING WITH HER ..... 1 STAYING ELSEWHERE 2	
506	RECORD THE HUSBAND'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'	NAME _____ LINE NO. ..... ☐☐	
507	Have you been married or lived with a man only once, or more than once?	ONCE ..... 1 MORE THAN ONCE 2	
508	CHECK 507: MARRIED ONLY ONCE → In what month and year did you start living with your husband? MARRIED MORE THAN ONCE → Now we will talk about your first husband. In what month and year did you start living with him?	MONTH ..... b b DON'T KNOW MONTH ..... 98 YEAR ..... b b b b DON'T KNOW YEAR 9998	bb<510
509	How old were you when you started living with him?	AGE ..... ☐☐	
510	DETERMINE MONTHS MARRIED SINCE APRIL 1994 OR BAISHAK 1401. ENTER "X" IN COLUMN 4 OF CALENDAR FOR EACH MONTH MARRIED AND ENTER "0" FOR EACH MONTH NOT MARRIED, SINCE APRIL 1994 (BAISHAK 1401). FOR WOMEN WITH MORE THAN ONE MARRIAGE: PROBE FOR STARTING AND TERMINATION DATES OF ANY PREVIOUS UNIONS. FOR WOMEN NOT CURRENTLY MARRIED: PROBE FOR DATE WHEN LAST MARRIAGE STARTED AND FOR TERMINATION DATE AND, IF APPROPRIATE, FOR THE STARTING AND TERMINATION DATES OF ANY PREVIOUS MARRIAGES.		

SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601A	CHECK 106A: CURRENTLY MARRIED ☐ ↓ NOT CURRENTLY MARRIED ☐ →		614
601B	CHECK 311/311A: NEITHER STERILIZED ☐ ↓ HE OR SHE STERILIZED ☐ →		614
602	CHECK 226: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐ ↓ Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children? Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE (A/ANOTHER) CHILD ..... 1 NO MORE/NONE ..... 2 → SAYS SHE CAN'T GET PREGNANT ..... 3 → UNDECIDED/DON'T KNOW ..... 8 →	604 609 609
603	CHECK 226: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐ ↓ How long would you like to wait from now before the birth of (a/another) child? After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS ..... 1 ☐☐ YEARS ..... 2 ☐☐ SOON/NOW ..... 993 SAYS SHE CAN'T GET PREGNANT .. 994 OTHER _____ 996 (SPECIFY) DON'T KNOW ..... 998 →	609
604	CHECK 226: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐ →		610
605	CHECK 310: USING A METHOD? NOT ASKED ☐ ↓ NOT CURRENTLY USING ☐ ↓ CURRENTLY USING ☐ →		614
606	CHECK 603: NOT ASKED ☐ ↓ 24 OR MORE MONTHS OR 02 OR MORE YEARS ☐ ↓ 00-23 MONTHS OR 00-01 YEAR ☐ →		610

NO.	QUESTIONS AND FILTERS		CODING CATEGORIES	SKIP
607	CHECK 602: WANTS A/ANOTHER CHILDREN ☐	CHECK 602: WANTS NO MORE CHILDREN ☐	FERTILITY-RELATED REASONS NOT HAVING SEX ..... A INFREQUENT SEX ..... B MENOPAUSAL/HYSTERECTOMY ... C SUBFECUND/INFECUND ..... D POSTPARTUM AMENORRHEIC .... E BREASTFEEDING ..... F FATALISTIC ..... G	
	You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why?	You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why?	OPPOSITION TO USE RESPONDENT OPPOSED ..... H HUSBAND OPPOSED ..... I OTHERS OPPOSED ..... J RELIGIOUS PROHIBITION ..... K	
	RECORD ALL MENTIONED	RECORD ALL MENTIONED	LACK OF KNOWLEDGE KNOWS NO METHOD ..... L KNOWS NO SOURCE ..... M	
			METHOD-RELATED REASONS HEALTH CONCERNS ..... N FEAR OF SIDE EFFECTS ..... O LACK OF ACCESS/TOO FAR ..... P COST TOO MUCH ..... Q INCONVENIENT TO USE ..... R INTERFERES WITH BODY'S NORMAL PROCESSES ..... S	
			OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	
609	CHECK 310: USING A METHOD? NOT ASKED ☐ NOT CURRENTLY USING ☐ CURRENTLY USING ☐ → 614			
610	Do you think you will use a method to delay or avoid pregnancy at any time in the future?		YES ..... 1 NO ..... 2 DON'T KNOW 8	612
611	Which method would you prefer to use?		FEMALE STERILIZATION ..... 01 MALE STERILIZATION ..... 02 PILL ..... 03 IUD ..... 04 INJECTIONS ..... 05 IMPLANTS ..... 06 CONDOM ..... 07 LACTATIONAL AMEN. METHOD ..... 09 PERIODIC ABSTINENCE ..... 10 WITHDRAWAL ..... 11 OTHER METHOD _____ 96 (SPECIFY) UNSURE 98	614

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	What is the main reason that you think you will not use a method at any time in the future?	FERTILITY-RELATED REASONS NOT HAVING SEX 11 INFREQUENT SEX 12 MENOPAUSAL/HYSTERECTOMY 13 SUBFECUND/INFECUND 14 POSTPARTUM AMENORRHEIC 15 BREASTFEEDING 16 FATALISTIC 17 OPPOSITION TO USE RESPONDENT OPPOSED 21 HUSBAND OPPOSED 22 OTHERS OPPOSED 23 RELIGIOUS PROHIBITION 24 LACK OF KNOWLEDGE KNOWS NO METHOD 31 KNOWS NO SOURCE 32 METHOD-RELATED REASONS HEALTH CONCERNS 41 FEAR OF SIDE EFFECTS 42 LACK OF ACCESS/TOO FAR 43 COST TOO MUCH 45 INCONVENIENT TO USE 46 INTERFERES WITH BODY'S NORMAL PROCESSES 47 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
614	CHECK 216: HAS LIVING CHILDREN ☐ → If you could go back to the time you you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ → If you could choose exactly the the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NUMBER ☐☐ OTHER _____ 96 (SPECIFY)	→ 616
615	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter?	BOYS GIRLS EITHER NUMBER .... ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	
616	Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE 1 DISAPPROVE 2 DON'T KNOW/UNSURE 8	
617	Have you ever seen or heard of the Green Umbrella logo?	YES 1 NO 2 DON'T KNOW 8	→ 619

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
618	What does the Green Umbrella logo mean to you? CIRCLE ALL MENTIONED	FAMILY PLANNING RELATED ..... A NOT FAMILY PLANNING RELATED .... B HEALTH SERVICE RELATED ..... C DON'T KNOW/UNSURE ..... D	
619	In the last month have you heard about family planning:	OFTEN / SOME-TIMES / NEVER	
	On the radio?	RADIO 1 2 3	
	On the television?	TELEVISION 1 2 3	
	In a newspaper or magazine?	NEWSPAPER 1 2 3	
	From a poster or billboard?	POSTER 1 2 3	
	From a leaflet?	LEAFLET 1 2 3	
	From a community event?	COMMUNITY EVENT .. 1 2 3	
619A	CHECK 106A: CURRENTLY MARRIED ☐ (↓) NOT CURRENTLY MARRIED ☐ → 701		
620	Now I want to ask you about your husband's views on family planning. Do you think that your husband approves or disapproves of couples using a method to avoid pregnancy?	APPROVES ..... 1 DISAPPROVES ..... 2 DON'T KNOW 8	
621	How often have you talked to your husband about family planning in the past year?	NEVER ..... 1 ONCE OR TWICE ..... 2 MORE OFTEN 8	
622	Do you think your husband wants the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER ..... 1 MORE CHILDREN ..... 2 FEWER CHILDREN ..... 3 DON'T KNOW 8	

SECTION 7: AIDS AND OTHER SEXUALLY TRANSMITTED DISEASES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES....................1 NO....................2	 ьь<718
701A	From which sources of information have you learned most about AIDS? Any other sources? RECORD ALL MENTIONED.	RADIO....................A TV....................B NEWSPAPER/MAGAZINES....................C PAMPHLETS/POSTERS....................D HEALTH WORKERS....................E MOSQUES/TEMPLES/CHURCES....................F SCHOOLS/TEACHERS....................G COMMUNITY MEETINGS....................H FRIENDS/RELATIVES....................I WORK PLACE....................J OTHER________________X (SPECIFY)	
702	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES....................1 NO....................2 DON'T KNOW....................8	 ьϹ ьǫ<710
703	What can a person do? Anything else? RECORD ALL MENTIONED.	ABSTAIN FROM SEX....................A USE CONDOMS....................B LIMIT SEX WITHIN MARRIAGE....................C LIMIT SEX WITH TRUSTED PARTNER..D AVOID SEX WITH PROSTITUTES....................E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS....................F AVOID SEX WITH HOMOSEXUALS....................G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY....H AVOID UNSAFE BLOOD TRANSFUSIONS....................I AVOIDUNSTERILIZED INJECTIONS/ USE DISPOSABLE INJECTIONS....................J AVOID KISSING....................K AVOID MOSQUITO BITES....................L SEEK PROTECTION FROM TRADITIONAL HEALER....................M AVOID SHARING RAZORS/BLADES....................N OTHER________________W (SPECIFY) OTHER________________X (SPECIFY) DON'T KNOW....................Z	
704	CHECK 703: NEITHER CODE 'C' NOR CODE 'D' CIRCLED ƆьььϹ ƊьььƉ ?	CODE 'C' AND/OR CODE 'D' CIRCLED ƆьььϹ Ϲьььǫьььььььььььььььььььььь	ьь<707
705	In your opinion, is there any chance of getting AIDS for a person with multiple sexual partners?	YES....................1 NO....................2 DON'T KNOW....................8	 707
706	If a person has sex with only one partner, does this person have a greater or a lesser chance of getting AIDS than a person who has sex with many partners?	GREATER CHANCE OF AIDS....................1 LESSER CHANCE OF AIDS....................2 DON'T KNOW....................8	
707	CHECK 703: DID NOT MENTION USE OF CONDOMS DURING SEX (CODE 'B' NOT CIRCLED) ƆьььϹ ƊьььƉ ?	MENTIONED USE OF CONDOMS DURING SEX (CODE 'B' CIRCLED) ƆьььϹ ϹьььǫьььььььььььььььььььььЬ	ьь<710
709	If a person uses a condom every time he or she has sexual intercourse, does this person have a greater or a lesser chance of getting AIDS than someone who does not use a condom?	GREATER CHANCE OF AIDS....................1 LESSER CHANCE OF AIDS....................2 DON'T KNOW....................8	
710	Is it possible for a healthy-looking person to have the AIDS virus?	YES....................1 NO....................2 DON'T KNOW....................8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
714	CHECK 106A: YES, CURRENTLY MARRIED ƆƅƅƅƇ ƉƅƅƅƋ ? NOT CURRENTLY MARRIED ƆƅƅƅƇ ƇƅƅƅǪƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅ		ƅƅ<718
715	Have you ever talked about ways to prevent getting the virus that causes AIDS with your husband?	YES ....1 NO 2	
718	(Apart from AIDS), have you heard about (other) infections that can be transmitted through sexual contact?	YES ....1 NO 2	ƅƅ<721
719	In a man, what signs and symptoms would lead you to think that he has such an infection? Any others? RECORD ALL MENTIONED.	LOWER ABDOMINAL PAIN .... A DISCHARGE FROM PENIS/DRIPPING .. B FOUL SMELLING DISCHARGE .... C BURNING PAIN ON URINATION .... D REDNESS/INFLAMMATION IN GENITAL AREA .... E SWELLING IN GENITAL AREA ....F GENITAL SORES/ULCERS .... G GENITAL WARTS .... H BLOOD IN URINE ....I LOSS OF WEIGHT ....J IMPOTENCE .... K NO SYMPTOMS..L OTHER____________________________ W (SPECIFY) OTHER ____________________________ X (SPECIFY) DON'T KNOW ....Z	
720	In a woman, what signs and symptoms would lead you to think that she has such an infection? Any others? RECORD ALL MENTIONED.	LOWER ABDOMINAL PAIN .... A GENITAL DISCHARGE .... B FOUL SMELLING DISCHARGE .... C BURNING PAIN ON URINATION .... D REDNESS/INFLAMMATION IN GENITAL AREA .... E SWELLING IN GENITAL AREA ....F GENITAL SORES/ULCERS .... G GENITAL WARTS .... H BLOOD IN URINE ....I LOSS OF WEIGHT ....J INABILITY TO GIVE BIRTH .... K NO SYMPTOMS..L OTHER____________________________ W (SPECIFY) OTHER____________________________ X (SPECIFY) DON'T KNOW ....Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	YES	NO	SKIP
721	Now I would like to ask you about some health symptoms you yourself may have. During the past 6 months, have you had any of the following problems:		YES	NO	
	1. Any itching or irritation in vaginal area with a discharge?	ITCHING/IRRITATION	1	2	
	2. A genital sore or ulcer?	GENITAL SORE.................	1	2	
	3. A bad odour along with a discharge?	BAD ODOUR.....................	1	2	
	4. Severe lower abdominal pain with a discharge, not related with menstruation?	ABDOMINAL PAIN.............	1	2	
	5. A fever along with a discharge?	FEVER	1	2	
	6. Problem with pain or burning while urinating or more frequent or difficult urination?	URINATING PROBLEM	1	2	
	FOR CURRENTLY MARRIED: 7. Pain in abdomen or vagina during intercourse?	PAIN INTERCOURSE........	1	2	
	FOR CURRENTLY MARRIED: 8. Blood after having sex when you are not menstruating?	BLOOD AFTER SEX..........	1	2	
	9. Any other problem with a discharge?	OTHER PROBLEM	1	2	
726	CHECK 721:				

AT LEAST ONE "YES" ↓

NOT A SINGLE "YES" ☐ → 801

727	Have you seen anyone for advice or treatment to help you with (this/these) problem (s)? IF YES, ASK: Whom did you see? Anyone else? RECORD ALL MENTIONED	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....A FAMILY WELFARE CENTRE/FWV .....B THANA HEALTH COMPLEX .....C SATELLITE CLINIC/ EPI OUTREACH SITE .....D MATERNAL AND CHILD WELFARE CENTER (MCWC).....E GOVT. FIELD WORKER (FWA) .....F NGO SECTOR NGO STATIC CLINIC..... G NGO SATELLITE CLINIC .....H NGO FIELDWORKER..... I PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... J QUALIFIED DOCTOR.....K TRADITIONAL DOCTOR ..... L PHARMACY ..... M OTHER _____ X (SPECIFY) NO ONE ..... Z	

SECTION 8. HUSBAND'S BACKGROUND, WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 106A: CURRENTLY MARRIED ☐ → WIDOWED/ DIVORCED/ SEPARATED ☐		→ 803
802	How old was your husband/partner on his last birthday?	AGE ..... ☐☐	
803	Did your (last) husband ever attend school?	YES ..... 1 NO ..... 2 → 806 DON'T KNOW ..... 8 → 806	
804	What was the highest level of school he attended: primary, secondary or higher?	PRIMARY ..... 1 SECONDARY ..... 2 HIGHER ..... 3 DON'T KNOW ..... 8 → 806	
805	What was the highest (grade/form/year) he completed at that level?	GRADE ..... ☐☐ DON'T KNOW 98	
806	What kind of work does did) your (last) husband mainly do?	☐☐ _____ _____ _____	
807	Now I would like to ask you some questions about your work. Aside from your own housework, are you currently working?	YES ..... 1 → 809 NO 2	
808	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. Are you currently doing any of these things or any other work?	YES ..... 1 NO ..... 2 → 812	
809	What is your occupation, that is, what kind of work do (did) you mainly do?	☐☐ _____ _____ _____	
810	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR ..... 1 SEASONALLY/PART OF THE YEAR ..... 2 ONCE IN A WHILE 3	
811	Are you paid in cash or kind for this work or are you not paid?	CASH ONLY ..... 1 KIND ONLY ..... 2 CASH AND KIND ..... 3 NOT PAID 4	
812	Who in you family usually has the final say on the following decisions:	RESPONDENT=1, HUSBAND=2, RESPONDENT & HUSBAND JOINTLY=3, SOMEONE ELSE=4, RESPONDENT & SOMEONE ELSE JOINTLY =5	
	Your own health care?	1 2 3 4 5	
	Child health care?	1 2 3 4 5	
	Making large household purchases?	1 2 3 4 5	
	Making household purchases for daily needs?	1 2 3 4 5	
	Visits to family, friends, or relatives?	1 2 3 4 5	
	What food should be cooked each day?	1 2 3 4 5	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
812A	Do you think, if a woman faces complications during pregnancy, does her husband become concerned?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
813	How frequently do you go shopping/marketing?	ONCE A MONTH OR MORE ..... 1 SEVERAL TIMES A YEAR ..... 2 ONCE A YEAR OR LESS ..... 3 NEVER 4	→ 815
814	Do you usually go by yourself or do you go with children or your husband or other relatives?	BY HERSELF ..... 1 WITH CHILDREN ..... 2 WITH HUSBAND ..... 3 WITH RELATIVES 4	
815	Do you go outside the village/town/city alone (or with your young children)?	YES, ALONE ..... 1 YES, WITH CHILDREN ..... 2 NO ..... 3 OTHER _____ 6 (SPECIFY)	→ 817 → 817 → 817
816	Can you go outside the village/town/city alone (or with your young children)?	YES, ALONE ..... 1 YES, WITH CHILDREN ..... 2 NO ..... 3 OTHER _____ 6 (SPECIFY)	 → 818
817	How frequently do you go outside this village/town/city?	ONCE A MONTH OR MORE ..... 1 SEVERAL TIMES A YEAR ..... 2 ONCE A YEAR OR LESS ..... 3 NEVER 4	
818	Do you go to a health center or hospital alone (or with your young children)?	YES, ALONE ..... 1 YES, WITH CHILDREN ..... 2 YES, WITH HUSBAND ..... 3 NO ..... 4 OTHER _____ 6 (SPECIFY)	 → 820 → 820
819	Can you go to a health center or hospital alone (or with your young children)?	YES, ALONE ..... 1 YES, WITH CHILDREN ..... 2 YES, WITH HUSBAND ..... 3 NO ..... 4 OTHER _____ 6 (SPECIFY)	
820	RECORD THE TIME.	HOUR ..... ↓↓ MINUTES ..... ↓↓	

SECTION 9. HEIGHT AND WEIGHT

901	CHECK 215:	
	ONE OR MORE BIRTHS SINCE APRIL 1994 (BAISHAK 1401) ☐ ↓	NO BIRTH SINCE APRIL 1994 (BAISHAK 1401) ☐ → END

IN 902 (COLUMNS 2 AND 3) RECORD THE LINE NUMBER FOR EACH CHILD BORN SINCE APRIL 1994 OR BAISHAK 1401 AND STILL ALIVE. IN 903 AND 904 RECORD THE NAME AND BIRTH DATE FOR THE RESPONDENT AND FOR ALL LIVING CHILDREN BORN SINCE APRIL 1994 (BAISHAK 1401). IN 906 AND 908 RECORD HEIGHT AND WEIGHT OF THE RESPONDENT AND THE LIVING CHILDREN.

(NOTE: ALL RESPONDENTS WITH ONE OR MORE BIRTHS SINCE APRIL 1994 OR BAISHAK 1401 SHOULD BE WEIGHED AND MEASURED. IF THERE ARE MORE THAN 2 LIVING CHILDREN BORN SINCE APRIL 1994 OR BAISHAK 1401, USE ADDITIONAL QUESTIONNAIRES).

		1) RESPONDENT	2) YOUNGEST LIVING CHILD	3) NEXT-TO-YOUNGEST LIVING CHILD
902	LINE NO. FROM Q212			
903	NAME FROM Q212 FOR CHILDREN	(NAME)	(NAME)	(NAME)
904	DATE OF BIRTH FROM Q215, AND ASK FOR DAY OF BIRTH		DAY..... MONTH..... YR	DAY..... MONTH..... YR
905	BCG SCAR ON TOP OF LEFT SHOULDER[2]		SCAR SEEN.....1 NO SCAR.....2	SCAR SEEN.....1 NO SCAR.....2
906	HEIGHT (In centimeters)			
907	WAS LENGTH/HEIGHT OF CHILD MEASURED LYING DOWN OR STANDING UP?		LYING.....1 STANDING.....2	LYING.....1 STANDING.....2
908	WEIGHT (In kilograms)			
909	DATE WEIGHED AND MEASURED	DAY..... MONTH..... YR	DAY..... MONTH..... YR	DAY..... MONTH..... YR
910	RESULT	MEASURED.....1 NOT PRESENT.....3 REFUSED.....4 OTHER_____6 (SPECIFY)	MEASURED.....1 CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED.....4 MOTHER REFUSED...5 OTHER_____6 (SPECIFY)	MEASURED.....1 CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED.....4 MOTHER REFUSED.....5 OTHER_____6 (SPECIFY)
911	NAME OF MEASURER:		NAME OF ASSISTANT:	

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
FOR COLUMNS 1, 3, AND 4, ALL MONTHS SHOULD BE FILLED IN.

INFORMATION TO BE CODED FOR EACH COLUMN

COL.1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS
- P PREGNANCIES
- H HYSTERECTOMY
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERLIZATION
- 3 PILL
- 4 IUD
- 5 INJECTIONS
- 6 IMPLANTS
- 7 CONDOM
- 9 LACTATIONAL AMENORRAHEA METHOD
- A PERIODIC ABSTINENCE
- W WITHDRAWAL
- X OTHER _____
  (SPECIFY)

COL 2: SOURCE OF CONTRACEPTION

- 1 HOSPITAL/MEDICAL COLLEGE
- 2 FAMILY WELFARE CENTER
- 3 THANA HEALTH COMPLEX
- 4 SATELLITE/EPI CLINIC
- 5 PVT. CLINIC/DOCTOR
- 6 TRADITIONAL DOCTOR
- 7 PHARMACY
- 8 SHOP
- 9 FRIENDS/RELATIVES
- A FIELDWORKER/FWA
- B SHOP
- C NGO CLINIC
- X OTHER_____
  (SPECIFY)

COL.3: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 HEALTH CONCERNS
- 6 SIDE EFFECTS
- 7 LACK OF ACCESS/TOO FAR
- 8 COST TOO MUCH
- 9 INCONVENIENT TO USE
- F FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSE
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER _____
  (SPECIFY)
- Z DON'T KNOW

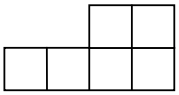
COL.4: MARRIAGE/UNION

- X IN UNION (MARRIED OR LIVING TOGETHER)
- 0 NOT IN UNION

TERMINATION OF LAST PREGNANCY PRIOR TO APRIL 1994

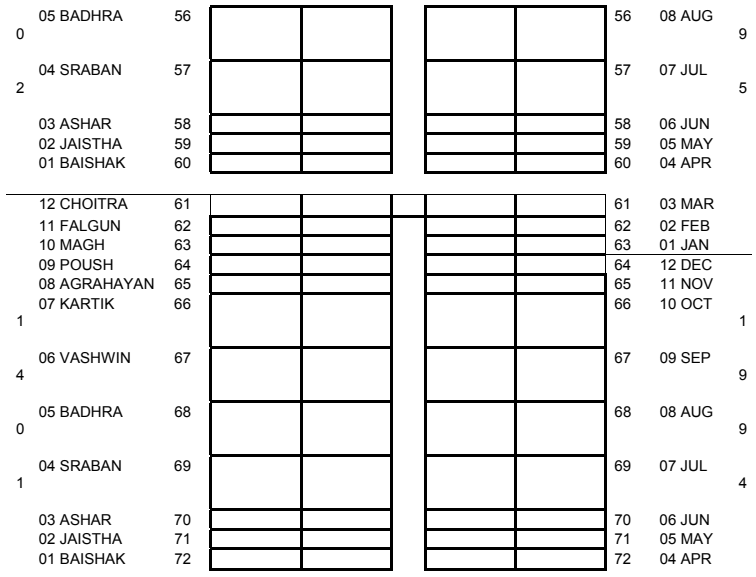
IF NO PREVIOUS PREGNANCY, RECORD '00' FOR MONTH AND '0000' FOR YEAR
MONTH .....

YEAR.....



.

	01 BAISHAK	00						00	04 APR	
	12 CHOITRA	01						01	03 MAR	
	11 FALGUN	02						02	02 FEB	
	10 MAGH	03						03	01 JAN	
	09 POUSH	04						04	12 DEC	
	08 AGRAHAYAN	05						05	11 NOV	
	07 KARTIK	06						06	10 OCT	
1										1
	06 VASHWIN	07						07	09 SEP	
4										9
	05 BADHRA	08						08	08 AUG	
0										9
	04 SRABAN	09						09	07 JUL	
6										9
	03 ASHAR	10						10	06 JUN	
	02 JAISTHA	11						11	05 MAY	
	01 BAISHAK	12						12	04 APR	
	12 CHOITRA	13						13	03 MAR	
	11 FALGUN	14						14	02 FEB	
	10 MAGH	15						15	01 JAN	
	09 POUSH	16						16	12 DEC	
	08 AGRAHAYAN	17						17	11 NOV	
	07 KARTIK	18						18	10 OCT	
1										1
	06 VASHWIN	19						19	09 SEP	
4										9
	05 BADHRA	20						20	08 AUG	
0										9
	04 SRABAN	21						21	07 JUL	
5										8
	03 ASHAR	22						22	06 JUN	
	02 JAISTHA	23						23	05 MAY	
	01 BAISHAK	24						24	04 APR	
	12 CHOITRA	25						25	03 MAR	
	11 FALGUN	26						26	02 FEB	
	10 MAGH	27						27	01 JAN	
	09 POUSH	28						28	12 DEC	
	08 AGRAHAYAN	29						29	11 NOV	
	07 KARTIK	30						30	10 OCT	
1										1
	06 VASHWIN	31						31	09 SEP	
4										9
	05 BADHRA	32						32	08 AUG	
0										9
	04 SRABAN	33						33	07 JUL	
4										7
	03 ASHAR	34						34	06 JUN	
	02 JAISTHA	35						35	05 MAY	
	01 BAISHAK	36						36	04 APR	
	12 CHOITRA	37						37	03 MAR	
	11 FALGUN	38						38	02 FEB	
	10 MAGH	39						39	01 JAN	
	09 POUSH	40						40	12 DEC	
	08 AGRAHAYAN	41						41	11 NOV	
	07 KARTIK	42						42	10 OCT	
1										1
	06 VASHWIN	43						43	09 SEP	
4										9
	05 BADHRA	44						44	08 AUG	
0										9
	04 SRABAN	45						45	07 JUL	
3										6
	03 ASHAR	46						46	06 JUN	
	02 JAISTHA	47						47	05 MAY	
	01 BAISHAK	48						48	04 APR	
	12 CHOITRA	49						49	03 MAR	
	11 FALGUN	50						50	02 FEB	
	10 MAGH	51						51	01 JAN	
	09 POUSH	52						52	12 DEC	
	08 AGRAHAYAN	53						53	11 NOV	
	07 KARTIK	54						54	10 OCT	
1										1
	06 VASHWIN	55						55	09 SEP	
4										9


05 BADHRA 56
04 SRABAN 57
03 ASHAR 58
02 JAISTHA 59
01 BAISHAK 60
12 CHOITRA 61
11 FALGUN 62
10 MAGH 63
09 POUSH 64
08 AGRAHAYAN 65
07 KARTIK 66
06 VASHWIN 67
05 BADHRA 68
04 SRABAN 69
03 ASHAR 70
02 JAISTHA 71
01 BAISHAK 72
56 08 AUG
57 07 JUL
58 06 JUN
59 05 MAY
60 04 APR
61 03 MAR
62 02 FEB
63 01 JAN
64 12 DEC
65 11 NOV
66 10 OCT
67 09 SEP
68 08 AUG
69 07 JUL
70 06 JUN
71 05 MAY
72 04 APR

INTERVIEWER'S OBSERVATIONS
(To be filled in after completing interview)

Comments About Respondent:

_____

_____

_____

_____

_____

_____

Comments on Specific Questions:

_____

_____

_____

_____

_____

Any Other Comments:

_____

_____

____

SUPERVISOR'S OBSERVATIONS

_____

_____

_____

_____

NAME OF SUPERVISOR:_____
DATE:_____

EDITOR'S OBSERVATIONS

_____

_____

_____

_____

NAME OF EDITOR:_____
DATE:_____

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 1999-2000

MAN'S QUESTIONNAIRE

IDENTIFICATION

DIVISION _____ □□

DISTRICT _____ □□

THANA _____

UNION/WARD _____

VILLAGE/MOHALLA/BLOCK _____

CLUSTER NUMBER ..... □□□

HOUSEHOLD NUMBER ..... □□□

DHAKA/CHITTAGONG=1, SMALL CITY=2, TOWN=3, VILLAGE=4 ..... □

NAME OF HOUSEHOLD HEAD _____

NAME AND LINE NUMBER OF MAN _____ □□

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY □□
				MONTH** □□
				YEAR □□□□
INTERVIEWER'S NAME				CODE □□□
RESULT*				RESULT* □
NEXT VISIT: DATE				TOTAL NO. OF VISITS □
TIME				

*RESULT CODES :

1	COMPLETED	4	REFUSED	7	OTHER _____ (SPECIFY)
2	NOT AT HOME	5	PARTLY COMPLETED		
3	POSTPONED	6	RESPONDENT INCAPACITATED		

**MONTH CODES

01	JANUARY	04	APRIL	07	JULY	10	OCTOBER
02	FEBRUARY	05	MAY	08	AUGUST	11	NOVEMBER
03	MARCH	06	JUNE	09	SEPTEMBER	12	DECEMBER

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ □□	NAME _____ □□	□□	□□
DATE _____	DATE _____		

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is_____ . We came from the Mitra and Associates, a private research organization, is located at Dhaka. To assist in the implementation of socio-development programs in the country, we conduct different types of surveys. We are now conducting a national survey about man and the health of women and children under the authority of NIPORT of Ministry of Health and Family Welfare. We would very much appreciate your participation in this survey. This information will help the government to plan health services. The survey usually takes between 20 and 45 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?

Signature of interviewer: _____Date: _____

RESPONDENT AGREES TO BE INTERVIEWED 1
? RESPONDENT DOES NOT AGREE TO BE INTERVIEWED ..... 2 ЬЬ<END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME STARTED.	HOUR ..... ☐☐ MINUTES ..... ☐☐	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a town, or in the countryside?	CITY ..... 1 TOWN ..... 2 COUNTRYSIDE 3	
103	In the last 12 months, have you been away from your home community for more than 1 month at a time?	YES ..... 1 NO 2	→ 105
104	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away?	NUMBER OF TRIPS AWAY ☐☐	
105	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	NUMBER OF YEARS ..... ☐☐ ALWAYS ..... 95 VISITOR 96	→ 107
106	Just before you moved here, did you live in a city, a town, or in the countryside?	CITY ..... 1 TOWN ..... 2 COUNTRYSIDE 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	In what month and year were you born?	MONTH ..... b b b DON'T KNOW MONTH ..... 98 YEAR ..... b b b b b DON'T KNOW YEAR 9998	
108	How old are you at your last birthday? COMPARE AND CORRECT 107 AND /OR 108 IF INCONSISTENT	AGE IN COMPLETED YEARS ☐☐ IF AGE IN NOT BETWEEN A5 AND 49 →	END
108A	Are you now married, widowed, or divorced?	CURRENTLY MARRIED ..... 1 SEPARATED ..... 2 DESERTED ..... 3 DIVORCED ..... 4 WIDOWED ..... 5 NEVER MARRIED ..... 6 →	END
109	Have you ever attended school?	YES ..... 1 NO ..... 2 →	113
110	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY ..... 1 SECONDARY ..... 2 COLLEGE/UNIVERSITY 3	
111	What is the highest class you completed?	CLASS ..... ☐☐	
112	CHECK 110: PRIMARY ☐ ↓ SECONDARY OR HIGHER ☐ →		114
113	Can you read and write a letter in any language easily, with difficulty, or not at all?	EASILY ..... 1 WITH DIFFICULTY ..... 2 NOT AT ALL ..... 3 →	115
114	Do you usually read a newspaper or magazine?	YES ..... 1 NO ..... 2 →	115
114A	How often do you read newspaper or magazine: every day, at least once a week, or less than once a week?	EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK 3	
115	Do you listen to the radio?	YES ..... 1 NO ..... 2 →	116
115A	How often do you listen to the radio: every day, at least once a week, less than once a week?	EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK 3	
116	Do you watch televison?	YES ..... 1 NO ..... 2 →	117
116A	How often do you watch television: every day, at least once a week, less than once a week?	EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
117	What is your religion?	ISLAM ..... 1 HINDUISM ..... 2 BUDDHISM ..... 3 CHRISTIANITY ..... 4 OTHER_____ 6	
118	Do you belong to any of the following organizations? Grameen Bank? BRAC? BRDB? Any other organization (Such as micro credit)?	YES NO GRAMEEN BANK..... 1 2 BRAC..... 1 2 BRDB..... 1 2 OTHER_____1 2 (SPECIFY)	
119	Are you currently working?	YES.....1 NO.....2	ЬЬ<128
120	What is you occupation, that is, what kind of work do you mainly do?	ЭЬЬЬdЬЬЬC' bUUUbUUUb _____ CЬЬЬqЬЬЬÐ _____	
121	CHECK 120: WORKS IN AGRICULTURE ☐ WORKS IN OTHER SECTOR ☐ → 123		
122	Do you work mainly on your own land or on family land, or do you rent land or work on someone else's land?	OWN LAND .....1 FAMILY LAND .....2 RENTED LAND..... 3 SOMEONE ELSE'S LAND..... 4	
123	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER..... 1 FOR SOMEONE ELSE..... 2 SELF-EMPLOYED..... 3	
124	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR .....1 SEASONALLY/PART OF THE YEAR.....2 ONCE IN A WHILE 3	ЬЬ<126
125	During the last 12 months, how many months did you work?	NUMBER OF MONTHS..... ☐☐	
126	Do you think that what you earn is sufficient to provide for your family's basic needs?	YES.....1 NO.....2	
127	On average, how much of your family's expenditures do your earnings pay for: almost none, less than half, about half, more than half, or all?	ALMOST NONE.....1 LESS THAN HALF.....2 ABOUT HALF .....3 MORE THAN HALF .....4 ALL .....5 CANNOT ESTIMATE.....8	ЬC' b b b D<201 b ЬÐ
128	Have you done any work in the last 12 months	YES..... 1 NO.....2	ЬЬ<201
129	What have you been doing over the last 12 months?	GOING TO SCHOOL/STUDYING .....1 LOOKING FOR WORK.....2 INACTIVE .....3 COULD NOT WORK/HANDICAPPED.....4 OTHER_____6 (SPECIFY)	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about your children. I am interested only in the children that are biologically yours. Have you ever had children?	YES ..... 1 NO 2	ЬЬ<206
202	Do you have any sons or daughters who are now living with you?	YES ..... 1 NO 2	ЬЬ<204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME ..... bUUUbUUUb DAUGHTERS AT HOME ..... bUUUbUUUb	
204	Do you have any sons or daughters who are alive but do not live with you?	YES ..... 1 NO 2	ЬЬ<206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE ..... bUUUbUUUb DAUGHTERS ELSEWHERE ..... bUUUbUUUb	
206	Have you ever had a son or a daughter who was born alive but later died? IF NO PROBE: Any baby who cried or showed signs of life but survived only a few hours or days?	YES ..... 1 NO 2	ЬЬ<208
207	In all, how many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD ..... bUUUbUUUb GIRLS DEAD ..... bUUUbUUUb	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL ..... bUUUbUUUb	
209	CHECK 208: Just to make sure that I have this right: you have had in **total** _____ children during your life. Is that correct? **IF HE HAS NOT HAVE CHILDREN (208 IS "00")** Just to make sure that I have this right: you have not had any children during your life. Is that correct? YES ↓ NO → PROBE AND CORRECT 201-208 AS NECESSARY		
210	CHECK 208: HAS HAD CHILDREN ЬЬЬЬ / ЬЬЬЬ? HAS NOT HAD ANY CHILDREN ЬЬЬЬ		ЬЬ<301
211	In what month and year your last child born?	MONTH ..... b b DON'T KNOW MONTH ..... 98 YEAR ..... b b b b DON'T KNOW YEAR 9998	
211A	Is your last child alive or dead?	ALIVE ..... 1 DEAD 2	ЬЬ<301
211B	How old is your last child (in completed years)?	AGE ..... bUUUbUUUb	

SECTION 3: CONTRACEPTION

Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy.
CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED IN 302. THEN, FOR EACH METHOD WITH CODE 1 OR CIRCLED IN 301 OR 302, ASK 303.

301	Which ways or methods have you heard about?	SPONTANEOUS YES	302 Have you ever heard of (METHOD)? PROBED YES	NO	303Have you ever used (METHOD)?
01	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	1	2	3	Have you ever had a wife who had an operation to avoid having any more children? YES .....1 NO 2
02	MALE STERILIZATION, VASECTOMY Men can have an operation to avoid having any more children.	1	2	3	Has your ever had an operation to avoid having any more children? YES .....1 NO 2
03	PILL, MAYA Women can take a pill every day	1	2	3	YES .....1 NO 2
04	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	1	2	3	YES .....1 NO 2
05	INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	1	2	3	YES .....1 NO 2
06	IMPLANTS, NORPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for several years.	1	2	3	YES .....1 NO 2
07	CONDOM, RAJA Men can put a rubber sheath on their penis before sexual intercourse.	1	2	3	YES .....1 NO 2
08	MENSTRUAL REGULATION, MR When a woman's menstrual period does not come on time, she can go to a health centre or to the FWV and have a tube put in her for a short while to bring her period.	1	2	3	YES .....1 NO 2
09	SAFE PERIOD, COUNTING DAYS, CALENDAR, RHYTHM METHOD Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to get pregnant.	1	2	3	YES .....1 NO 2
10	WITHDRAWAL Men can be careful and pull out before climax.	1	2	3	YES .....1 NO 2
11	LACTATIONAL AMENORRHEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds frequently, day and night, and that her menstrual period has not returned.	1	2	3	YES .....1 NO 2
12	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	1 _____ (SPECIFY) _____ (SPECIFY)	2	3	YES .....1 NO .....2 YES .....1 NO 2

303A	CHECK 303			
	NOT A SINGLE 'YES' (NEVER USED)	↓	AT LEAST ONE 'YES' (EVER USED)	↓

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

304	Have you or your wife ever used anything or tried in any way to delay or avoid a pregnancy?	YES ....1 NO 2	ƅƅ<401
306	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
306A	Now I would like to ask you about the first time that you or your wife did something or used a method to avoid getting pregnant. What was the first method that you ever used?	FEMALE STERILIZATION ....01 MALE STERILIZATION..........02 PILL..........03 IUD..........04 INJECTIONS..........05 IMPLANTS..........06 CONDOM..........07 PERIODIC ABSTINENCE..........09 WITHDRAWAL..........10 LACTATIONAL AMEN. METHOD..........11 OTHER METHOD_________ .96 (SPECIFY)	
307	How many living children did you have at that time, if any? IF NONE, RECORD '00'.	ƆƅƅƅƋƅƅƅƇ NUMBER OF CHILDREN .... b b b ƇƅƅƅǫƅƅƅƉ	
308	CHECK 302 (02): MAN NOT STERILIZED ƆƅƅƅƇ ƉƅƅƅƉ ? MAN STERILIZED ƆƅƅƅƇ Ƈƅƅƅǫƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅƅ		ƅ<311A
310	Are you or your wife currently doing something or using any method to delay or avoid a pregnancy?	YES ....1 NO..........2	ƅƅ<401
311 311A	Which method are you using? CIRCLE '2' FOR MALE STERILIZATION.	FEMALE STERILIZATION ....01 MALE STERILIZATION..........02 PILL..........03 IUD..........04 INJECTIONS..........05 IMPLANTS..........06 CONDOM..........07 PERIODIC ABSTINENCE..........09 WITHDRAWAL..........10 LACT. AMEN. METHOD..........11 OTHER_________ 96 (SPECIFY)	ƅƇ ƅǫ<313 ƅƅ<314 ƅƅ<314 ƅƅ<314 ƅƅ<314 314
312	May I see the package of condoms that you are using now? RECORD NAME OF BRAND IF PACKAGE IS SEEN	PACKAGE SEEN ....1 ƆƅƅƅƋƅƅƅƇ BRAND NAME_________ b b b ƇƅƅƅǫƅƅƅƉ PACKAGE NOT SEEN 2	ƅƇ b b ƅǫ<314
312A	SHOW BRAND CHART FOR CONDOMS Please tell me which of these is the brand of condoms that you are using.	ƆƅƅƅƋƅƅƅƇ BRAND NAME_________ b b b ƇƅƅƅǫƅƅƅƉ DOES NOT KNOW 98	314

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313	Where did the sterilization take place? _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE .....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE CLINIC/ EPI OUTREACH SITE.....14 MATERNAL AND CHILD WELFARE CENTER (MCWC).....15 NGO SECTOR NGO STATIC CLINIC .....21 NGO SATELLITE CLINIC.....22 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC.....31 QUALIFIED DOCTOR .....32 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
314	CHECK 311/311A: CIRCLE METHOD CODE:	NO CODE CIRCLED.....00 FEMALE STERILIZATION .....01 MALE STERILIZATION.....02 PILL.....03 IUD.....04 INJECTIONS.....05 IMPLANTS .....06 CONDOM.....07 PERIODIC ABSTINENCE.....09 WITHDRAWAL.....10 LACTATIONAL AMEN. METHOD.....11 OTHER METHOD 96	ЬЬ<401 ЬЬ<401 ЬЬ<401 ЬЬ<401 ЬЬ<401 ЬЬ<401 ЬЬ<401
315	Where did you obtain (CURRENT METHOD) the last time? _____ NAME OF PLACE	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE .....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE CLINIC/ EPI OUTREACH SITE.....14 MATERNAL CHILD WELFARE CENTER (MCWC).....15 GOVT. FIELD WORKER (FWA).....16 NGO SECTOR NGO STATIC CLINIC .....21 NGO SATELLITE CLINIC.....22 NGO DEPOT HOLDER .....23 NGO FIELDWORKER .....24 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC.....31 QUALIFIED DOCTOR .....32 TRADITIONAL DOCTOR.....33 PHARMACY.....34 OTHER PRIVATE SECTOR SHOP .....41 FRIEND/RELATIVES .....42 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

SECTION 4. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	WRITE THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR HIS WIFE. IF SHE DOES NOT LIVE IN THE HOUSEHOLD, RECORD '00'	LINE NO. ..... ☐☐	
402	Have you been married only once, or more than once?	ONCE ..... 1 MORE THAN ONCE 2	
403	In what month and year did you start living with your (first) wife?	MONTH ..... b b b DON'T KNOW MONTH ..... 98 YEAR ..... b b b b b → 405 DON'T KNOW YEAR 9998	
404	How old were you when you started living with her?	AGE ..... ☐☐	
405	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. How old were you when you first had sexual intercourse (if ever)?	NEVER ..... 00 AGE IN YEARS ..... b b b FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE 96	Ь<501

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 311/311A: NEITHER STERILIZED ☐ SHE OR HE STERILIZED ☐ →		515
502	Is your wife are currently pregnant?	YES ..... 1 NO ..... 2 DOES NOT KNOW/UNSURE ..... 3 →	504A
503	When she become pregnant, did you want her to become pregnant then, did you want her to have a child but wanted to wait or did you not want her to have a child at all?	THEN ..... 1 WANTED TO WAIT ..... 2 NOT AT ALL ..... 3 →	504B
504	CHECK 502: **A** WIFE NOT PREGNANT OR UNSURE ☐ **B** WIFE IS PREGNANT ☐ Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children? Now I have some questions about the future. After the child your wife is expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE (A/ANOTHER) CHILD ..... 1 NO MORE/NONE ..... 2 → 506 SAYS SHE CAN'T GET PREGNANT ..... 3 → 511 SAYS HE CAN'T HAVE ANY MORE ..... 4 → 511 UNDECIDED/DON'T KNOW ..... 8 → 511	
505	CHECK 502: WIFE IS NOT PREGNANT OR UNSURE ☐ WIFE IS PREGNANT ☐ How long would you like to wait from now before the birth of (a/another) child? After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS ..... 1 ☐☐ YEARS ..... 2 ☐☐ SOON/NOW ..... 993 SAYS WIFE CAN'T GET PREGNANT 994 OTHER _____ 996 (SPECIFY) DON'T KNOW ..... 998 →	511
506	CHECK 502: WIFE NOT PREGNANT OR UNSURE ☐ WIFE IS PREGNANT ☐ →		512
507	CHECK 310: USING A METHOD? NOT ASKED ☐ NOT CURRENTLY USING ☐ CURRENTLY USING ☐ →		515
508	CHECK 505: NOT ASKED ☐ 24 OR MORE MONTHS OR 02 OR MORE YEARS ☐ 00-23 MONTHS OR 00-01 YEAR ☐ →		512

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
509	CHECK 504: WANTS A/ANOTHER CHILDREN ☐ You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why? RECORD ALL MENTIONED CHECK 504: WANTS A/ANOTHER CHILDREN ☐ You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why?	FERTILITY-RELATED REASONS NOT HAVING SEX ..... A INFREQUENT SEX ..... B MENOPAUSAL/HYSTERECTOMY ... C SUBFECUND/INFECUND ..... D POSTPARTUM AMENORRHEIC .... E BREASTFEEDING ..... F FATALISTIC ..... G OPPOSITION TO USE RESPONDENT OPPOSED ..... H WIFE OPPOSED ..... I OTHERS OPPOSED ..... J RELIGIOUS PROHIBITION ..... K LACK OF KNOWLEDGE KNOWS NO METHOD ..... L KNOWS NO SOURCE ..... M METHOD-RELATED REASONS HEALTH CONCERNS ..... N FEAR OF SIDE EFFECTS ..... O LACK OF ACCESS/TOO FAR ..... P COST TOO MUCH ..... Q INCONVENIENT TO USE ..... R INTERFERES WITH BODY'S NORMAL PROCESSES ..... S OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	
511	CHECK 310: USING A METHOD? NOT ASKED ☐ NOT CURRENTLY USING ☐ CURRENTLY USING ☐ → 515		
512	Do you think you will use a method to delay or avoid a pregnancy at any time in the future?	YES ..... 1 NO ..... 2 DON'T KNOW 8	514
513	Which method would you prefer to use?	FEMALE STERILIZATION ..... 01 MALE STERILIZATION ..... 02 PILL ..... 03 IUD ..... 04 INJECTIONS ..... 05 IMPLANTS ..... 06 CONDOM ..... 07 PERIODIC ABSTINENCE ..... 09 WITHDRAWAL ..... 10 LACTATIONAL AMEN. METHOD ..... 11 OTHER METHOD _____ 96 (SPECIFY) UNSURE 98	515

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
514	What is the main reason that you think you will not use a method at any time in the future?	FERTILITY-RELATED REASONS NOT HAVING SEX ..... 11 INFREQUENT SEX ..... 12 MENOPAUSAL/HYSTERECTOMY .. 13 SUBFECUND/INFECUND ..... 14 POSTPARTUM AMENORRHEIC .... 15 BREASTFEEDING ..... 16 FATALISTIC ..... 17 OPPOSITION TO USE RESPONDENT OPPOSES ..... 21 WIFE OPPOSES ..... 22 OTHERS OPPOSES ..... 23 RELIGIOUS PROHIBITION ..... 24 LACK OF KNOWLEDGE KNOWS NO METHOD ..... 31 KNOWS NO SOURCE ..... 32 METHOD-RELATED REASONS HEALTH CONCERNS ..... 41 FEAR OF SIDE EFFECTS ..... 42 LACK OF ACCESS/TOO FAR ..... 43 COST TOO MUCH ..... 45 INCONVENIENT TO USE ..... 46 INTERFERES WITH BODY'S NORMAL PROCESSES ..... 47 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
515	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ ↓ — If you could go back to the time you you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ ↓ — If you could choose exactly the the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NUMBER ..... ☐☐ OTHER _____ 96 (SPECIFY)	→ 601
516	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter?	BOYS GIRLS EITHER NUMBER .... b b b b b b b b b OTHER _____ 96 (SPECIFY)	

SECTION 6. PARTICIPATION IN HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601A	Now we talk about possible problems that women might face when she is going to have a child. Do you know any complications during pregnancy, childbirth and after delivery that need medical attention? PROBE: Any other complication? RECORD ALL MENTIONED.	SEVERE HEADACHE/BLURRY VISION/SWOLLEN ARMS AND LEGS .... A VAGINAL BLEEDING DURING PREGNANCY .... B LABOR MORE THAN 18 HOURS .... C EXCESSIVE BLEEDING DURING/ AFTER DELIVERY .... D CONVULSIONS .... E FEVER MORE THAN 3 DAYS DURING PREGNANCY OR AFTER DELIVERY .... F BAD SMELLING VAGINAL DISCHARGE .... G OTHER________________ . X (SPECIFY)	
601B	Do you think that women should have a medical checkup when they are pregnant even they are not sick?	YES .... 1 NO .... 2 DON'T KNOW 8	 2, 8 → 601D
601C	At what months of pregnancy do you think that women should have first check up for pregnancy?	MONTH .... [ ][ ] DON'T KNOW 98	
601D	During the pregnancy do you think women should eat more, same or less?	MORE .... 1 SAME .... 2 LESS .... 3 DON'T KNOW 8	
601E	CHECK 211: LAST CHILD BORN SINCE APRIL 1994 ϽЬЬЬϹ ÐЬЬЬÐ ? HAS NO CHILDREN OR THE LAST CHILD WAS BORN BEFORE APRIL 1994 ϽЬЬЬϹ ϹЬЬЬϘЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬ		ЬЬ<616
602	What is the name of your last child, that is the one who was born in (DATE AS INDICATED IN 211)?	________________ (NAME OF LAST CHILD)	
603	Did your wife go to a health facility to receive antenatal care when she was pregnant with (NAME OF LAST BORN CHILD)?	YES .... 1 NO .... 2 DON'T KNOW 8	1 → 604
603A	Did any health professional such as doctor, nurse, FWV or others come for your wife's antenatal care when she was pregnant with (NAME OF LAST BORN CHILD)?	YES .... 1 NO 2	 2 → 607
604	Were you present anytime duing the antenatal care visit?	YES .... 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
605	At any time while she was pregnant with (NAME OF LAST BORN CHILD), did any health professional such as doctor, nurse, or FWV talk to you about this particular pregnancy?	YES....1 NO....2	
606	During this pregnancy, did you ever talked with your wife about what the health professional such as doctor, nurse, or FWV told her about her own health and the baby's health?	YES....1 NO....2	
607	Where did your wife give birth to (NAME OF LAST BORN CHILD)?	HOME OWN HOME....11 OTHER HOME....12 PUBLIC SECTOR GOVT. HOSPITAL....21 THANA HEALTH COMPLEX....22 MATERNAL AND CHILD WELFARE CENTER (MCWC)....23 NGO SECTOR NGO STATIC CLINIC....31 PRIVATE SECTOR PVT. HOSPITAL/CLINIC....41 OTHER ____ 96 (SPECIFY)	
608	When she gave birth to (NAME OF LAST BORN CHILD), were you present (NAME OF THE PLACE IN 607) at that time?	YES....1 NO....2	
609	In the first two months after (NAME OF LAST BORN CHILD) was born, did your wife visit a health facility to have her own health or the child's health checked or did someone such as doctor, nurse or FWV from the health facility come to your place to check your wife's or or child's health?	YES, VISITED....1 YES, CAME....2 NO....8	NO → 611
610	Were you present at that time?	YES....1 NO....2	
601	CHECK 211A: LAST CHILD IS ALIVE ? LAST CHILD IS DEAD		→ 616
612	Did (NAME OF LAST BORN CHILD) ever receive any vaccinations to prevent him/her from getting diseases?	YES....1 NO....2 DON'T KNOW....8	NO, DON'T KNOW → 614
613	When (NAME OF LAST BORN CHILD) was vaccinated in a health facility, did you take him/her anytime to the health facility?	YES....1 NO....2	
614	Was (NAME OF LAST BORN CHILD) suffered from any health problem in the last four weeks that a health professional (such as doctor, nurse, FWV) visit was needed?	YES....1 NO....2	NO → 616
615	Was you present when (NAME OF LAST BORN CHILD) was seen by the health professional such as doctor, nurse, or FWV for such health problem?	YES....1 NO....2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
616	Now tell me about your health. Have you ever, at any time in your life, had any of the following health problems? Tuberculosis? Asthma? Diabetes? High blood pressure? Heart problem? Malaria? Hepatitis/Jaundice?	YES NO TUBERCULOSIS ..... 1 2 ASTHMA ..... 1 2 DIABETES ..... 1 2 HIGH BLOOD PRESSURE ..... 1 2 HEART PROBLEM ..... 1 2 MALARIA ..... 1 2 HEPATITIS/JAUNDICE 1 2	
617	CHECK 616 (ALL HEALTH PROBLEMS): AT LEAST ONE 'YES' ☐	NOT A SINGLE 'YES' ☐ →	701
618	Did you receive any treatment for this (these) disease(s)?	YES ..... 1 NO 2	
619	At any time during the last 3 months, did (this/these) health problem(s) prevent you from doing your work?	YES ..... 1 NO ..... 2 →	701
620	For how many days in the last 3 months were you unable to do your work due to this (these) health problem(s)?	DAYS ..... ☐☐	

SECTION 7: AIDS AND OTHER SEXUALLY TRANSMITTED DISEASES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES....1 NO....2	 ЪЬ<718
701A	From which sources of information have you learned most about AIDS? Any other sources? RECORD ALL MENTIONED.	RADIO....A TV....B NEWSPAPER/MAGAZINES....C PAMPHLETS/POSTERS....D HEALTH WORKERS....E MOSQUES/TEMPLES/CHURCES....F SCHOOLS/TEACHERS....G COMMUNITY MEETINGS....H FRIENDS/RELATIVES....I WORK PLACE....J BILL BOARD/SIGN BOARD....K OTHER______X (SPECIFY)	
702	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES....1 NO....2 DON'T KNOW....8	 ЪƇ ЪǪ<710
703	What can a person do? Anything else? RECORD ALL MENTIONED.	ABSTAIN FROM SEX....A USE CONDOMS....B LIMIT SEX WITHIN MARRIAGE....C LIMIT SEX WITH TRUSTED PARTNER..D AVOID SEX WITH PROSTITUTES....E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS....F AVOID SEX WITH HOMOSEXUALS....G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY....H AVOID UNSAFE BLOOD TRANSFUSIONS....I AVOID UNSTERILIZED NEEDLE/SYRING....J AVOID KISSING....K AVOID MOSQUITO BITES....L SEEK PROTECTION FROM TRADITIONAL HEALER....M AVOID SHARING RAZORS/BLADES....N OTHER______W (SPECIFY) OTHER______X (SPECIFY) DON'T KNOW....Z	
704	CHECK 703: NEITHER CODE 'C' NOR CODE 'D' CIRCLED ƆЬЬЬƇ ƊЬЬЬƉ ? CODE 'C' AND/OR CODE 'D' CIRCLED ƆЬЬЬƇ ƇЪЬЬǪЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬ		ЪЬ<707
705	In your opinion, is there any chance of getting AIDS for a person with multiple sexual partners?	YES....1 NO....2 DON'T KNOW....8	 707
706	If a person has sex with only one partner, does this person have a greater or a lesser chance of getting AIDS than a person who has sex with many partners?	GREATER CHANCE OF AIDS....1 LESSER CHANCE OF AIDS....2 DON'T KNOW....8	
707	CHECK 703: DID NOT MENTION USE OF CONDOMS DURING SEX (CODE 'B' NOT CIRCLED) ƆЬЬЬƇ ƊЬЬЬƉ ? MENTIONED USE OF CONDOMS DURING SEX (CODE 'B' CIRCLED) ƆЬЬЬƇ ƇЪЬЬǪЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬ		ЪЬ<710

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
709	If a person uses a condom every time he or she has sexual intercourse, does this person have a greater or a lesser chance of getting AIDS than someone who doesn't use a condom?	GREATER CHANCE OF AIDS.................. 1 LESSER CHANCE OF AIDS..................... 2 DON'T KNOW 8	
710	Is it possible for a healthy-looking person to have the AIDS virus?	YES .... 1 NO .... 2 DON'T KNOW 8	
715	Have you ever talked with your wife about ways to prevent getting the virus that causes AIDS?	YES .... 1 NO 2	
718	(Apart from AIDS), have you heard about (other) disease that can be transmitted through sexual contact?	YES .... 1 NO 2	 ЬЬ<721
719	In a man, what signs and symptoms would lead you to think that he has such a disease? Any others? RECORD ALL MENTIONED.	LOWER ABDOMINAL PAIN......................A DISCHARGE FROM PENIS/DRIPPING ...B FOUL SMELLING DISCHARGE .... C BURNING PAIN ON URINATION .... D REDNESS/INFLAMMATION IN GENITAL AREA ....E SWELLING IN GENITAL AREA ....F GENITAL SORES/ULCERS..................... G GENITAL WARTS .... H BLOOD IN URINE ....I LOSS OF WEIGHT .... J IMPOTENCE ....K NO SYMPTOMS...L OTHER__________________ W (SPECIFY) OTHER __________________ X (SPECIFY) DON'T KNOW ....Z	
720	In a woman, what signs and symptoms would lead you to think that she has such a disease? Any others? RECORD ALL MENTIONED.	LOWER ABDOMINAL PAIN......................A GENITAL DISCHARGE.............................B FOUL SMELLING DISCHARGE .... C BURNING PAIN ON URINATION .... D REDNESS/INFLAMMATION IN GENITAL AREA ....E SWELLING IN GENITAL AREA ....F GENITAL SORES/ULCERS..................... G GENITAL WARTS .... H BLOOD IN URINE ....I LOSS OF WEIGHT .... J INABILITY TO GIVE BIRTH ....K NO SYMPTOMS...L OTHER__________________ W (SPECIFY) OTHER__________________ X (SPECIFY) DON'T KNOW ....Z	
721	CHECK 405: HAS HAD SEXUAL INTERCOURSE ЊЬЋ ЂЬĐ ? HAS NOT HAD SEXUAL INTERCOURSE ЊЬЋ ЋЬϘЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬ		 ЬЬ<801
722	During the last 12 months, have you had a sexually-transmitted disease?	YES .... 1 NO .... 2 DON'T KNOW 8	
723	Now I would like to ask you some questions about your health in the last 12 months. Sometimes, men experience a discharge from their penis. During the last 12 months, have you had a discharge from your penis?	YES .... 1 NO .... 2 DON'T KNOW 8	
724	Sometimes, men experience a sore or ulcer on or near their penis? During the last 12 months, have you had a sore or ulcer on or near your penis?	YES .... 1 NO .... 2 DON'T KNOW 8	
724A	During the last 12 months, have you had pain/burning sensation during urination?	YES .... 1 NO .... 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
725	CHECK 722, 723, 724, 724A: AT LEAST ONE 'YES' ϽЬϹ NOT A SINGLE 'YES' ϽЬϹ ƉЬƉ ϹЬϘЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬЬ ?		Ь<801
726	The last time you had (INFECTION/DISEASE FROM 722/723/724/724A), did you seek any kind of advice or treatment?	YES...1 NO 2	 Ь<728
727	The last time you had (INFECTION FROM 722/723/724/724A) did you do any of the following? Did you.... Seek advice from a health professional such as doctor, nurse in a clinic or hospital? Seek advice or medicine from a traditional healer? Seek advice or buy medicines in a shop or pharmacy? Seek treatment from a homeopath doctor? Ask for advice from friends or relatives?	YES NO HEALTH WORKER .... 1 2 TRADITIONAL HEALER............. 1 2 PHARMACY .... 1 2 HOMEOPATH............................. 1 2 FRIENDS/RELATIVES 1 2	
728	When you had (INFECTION/DISEASE FROM 722/723/724/724A), did you inform your wife?	YES...1 NO ....2 SOME/ NOT ALL 3	

SECTION 8. ATTITUDES TOWARDS WOMEN

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	Now I would like to ask you a few questions regarding men and women in couples. People have many different opinions on this subject and we would like to know what it is that you think about it.		
801	If the husband can provide enough money, do you believe that it is acceptable for married women to work outside the home to earn an income or do you think they should stay home and take care of the household?	WORK OUTSIDE THE HOUSE ....1 STAY HOME ....2 NO OPINION 8	
802	If for some reason the husband cannot provide enough money for the family, do you believe that it is acceptable for married women to work outside the home to earn an income or do you think they should stay home and take care of the household?	WORK OUTSIDE THE HOUSE ....1 STAY HOME ....2 NO OPINION 8	
803	In a couple, do you think the woman should have a say about	YES / NO / NO OPINION	
	• large household expenses, that require a lot of money?	1 / 2 / 8	
	• minor daily household expenses?	1 / 2 / 8	
	• when to visit family, friends or relatives?	1 / 2 / 8	
	• what to do with the money she earns with her work?	1 / 2 / 8	
804	It is normal for couples to have quarrels and disagreements. During those quarrels some husbands occasionally severely reprimand or even beat their wives. In your opinion, do you think a man would be justified to beat his wife:	YES / NO / NO OPINION	
	• If she goes out without telling him?	1 / 2 / 8	
	• If she neglects the children?	1 / 2 / 8	
	• If she argues with her husband?	1 / 2 / 8	
	• If she fails to provide food on time?	1 / 2 / 8	
805	In a couple, who do you think should have the main responsibility to maintain the discipline among the children, the husband, the wife or both?	HUSBAND ....1 WIFE ....2 BOTH..3 ANY RELATIVE..4 OTHER______________________________5 (SPECIFY) NO OPINION 8	
806	In a couple, who do you think has the main responsibility to take care of the children, the husband, the wife or both?	HUSBAND ....1 WIFE ....2 BOTH..3 NO OPINION 8	
807	In a couple, who do you think has the main responsibility to take care of the house, the husband, the wife or both?	HUSBAND ....1 WIFE ....2 BOTH..3 NO OPINION 8	
808	RECORD THE TIME.	HOUR .... ƀƀ MINUTES .... ƀƀ	