Bangladesh

Demographic and Health Survey

2004

Bangladesh Demographic and Health Survey 2004

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PREFACE

The Bangladesh Demographic and Health Survey 2004 is the fourth survey of this type conducted in Bangladesh. The main objective of this survey is to provide policy-makers and program managers in health and family planning with detailed information on fertility and family planning, childhood mortality, maternal and child health, nutritional status of children and mothers, and awareness of HIV/AIDS. The survey consisted of two parts: a household-level survey of women and men and a community survey around the sample points from which the households were selected. Preparations for the survey started in mid-2003 and the fieldwork was carried out between January and May 2004. Financial support for the BDHS survey was provided by the United States Agency for International Development (USAID)/Dhaka. It was implemented through a collaborative effort of NIPORT, Mitra and Associates, and ORC Macro.

The findings of this report will be instrumental in assessing the achievements of family planning, nutrition, and health programs. The report provides estimates of key indicators by socioeconomic and demographic differentials. The preliminary results of the 2004 BDHS, with its major findings, were officially announced through a national seminar in September 2004. The final report supplements the preliminary report, which was released earlier. I believe that the information obtained from this survey will help the policymakers and program managers in the formulation of new programs and monitoring the ongoing programs.

The Technical Review Committee (TRC) consisted of experts from government, non-government, and international organizations, as well as researchers and professionals working in the health and population areas. The TRC contributed their valuable opinions in major phases of the survey. In addition, the Technical Task Force (TTF) was formed with representatives from NIPORT, Mitra and Associates, USAID/Dhaka, ICDDR,B, the NGO Service Delivery Program, and ORC Macro to design and implement the survey. I would like to extend my thanks and appreciation to the members of the TRC and TTF for their contributions at different phases of the survey.

I express my sincere thanks to the professionals of the Research Unit of NIPORT, ORC Macro, and Mitra and Associates for their sincere efforts in timely completion of the survey. USAID/Dhaka deserves special thanks for providing financial support for the survey.

(Lokman Hakim)

Secretary
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FOREWORD

The Bangladesh Demographic and Health Survey (BDHS) is a nationally representative survey designed to obtain and provide information on the basic indicators of social progress including fertility, childhood mortality, reproductive and child health, nutritional status of mothers and children and awareness of HIV/AIDS. Previously, BDHS surveys were carried out in 1993-1994, 1996-1997, and 1999-2000.

The findings of the 2004 BDHS presented in this report provide up-to-date, and reliable information on a number of key health and demographic topics of interest to planners, policymakers, program managers, and researchers that will guide the planning, implementation, monitoring and evaluation of the Health, Nutrition and Population Sector Program (HNPSP) in Bangladesh. The data indicate there has been a decline in the total fertility rate and a steady increase in contraceptive use. After an almost decade-long stagnation, fertility declined to 3.0 children per woman in 2004. The 2004 BDHS findings also show a trend toward increasing utilization of health services for mothers and children. While the survey results are encouraging, there is still a long way to go to achieve the national health and demographic goals.

The findings of this report together with other national surveys will enhance the understanding of important issues related to the HNPSP in Bangladesh. Information obtained from the 2004 BDHS can be used to review the progress of programs and to improve future policies and strategies.

Further analysis of the BDHS data is necessary. It is hoped that academicians, researchers and program personnel will carry out such analysis and provide in-depth knowledge to guide the future direction and effective implementation of the HNPSP.

The successful completion of the 2004 BDHS was made possible by the contributions of a number of organizations and individuals. I deeply appreciate the United States Agency for International Development (USAID), Dhaka for providing financial support. I would like to thank NIPORT, Mitra and Associates, and ORC Macro for the effort they put into implementing the 2004 BDHS.

(A. F. M. Sarwar Kamal)

SUMMARY OF FINDINGS

The 2004 Bangladesh Demographic and Health Survey (2004 BDHS) is a nationally representative survey of 11,440 women age 10-49 and 4,297 men age 15-54 from 10,500 households covering 361 sample points (clusters) throughout Bangladesh, 122 in urban areas and 239 in the rural areas. This survey is the fourth in a series of national-level population and health surveys conducted as part of the global Demographic and Health Surveys (DHS) program. It is designed to provide data to monitor the population and health situation in Bangladesh as a followup to the 1993-1994, 1996-1997 and 1999-2000 BDHS surveys. The survey utilized a multistage cluster sample based on the 2001 Bangladesh Census and was designed to produce separate estimates for key indicators for each of the six divisions of the country—Barisal, Chittagong, Dhaka, Khulna, Rajshahi and Sylhet. Data collection took place over a five-month period from 1 January to 25 May 2004. Previous surveys included only ever-married women and currently married men; this is first DHS survey in Bangladesh to also include never-married and formerly married men, i.e., the sample for the survey was ever-married women age 10-49 and all men age 15-54.

The survey obtained detailed information on fertility levels, marriage, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutritional status of women and young children, childhood mortality and causes of death of children under five, maternal and child health, awareness and behavior regarding HIV/AIDS, and other sexually transmitted infections (STIs). In the previous surveys, anthropometric measurements (height and weight) were restricted to mothers who had a child under five years, and their young children. In the 2004 BDHS, all children under five in the household and all interviewed women had their height and weight measured. In addition, the 2004 BDHS collected information on the level of arsenic in drinking water.

The 2004 BDHS was conducted under the authority of the National Institute for Population Research and Training (NIPORT) of the Ministry of Health and Family Welfare. It was implemented by Mitra and Associates, a Bangladeshi research firm located in Dhaka. Technical assistance was provided by ORC Macro through the MEASURE DHS program. Financial support for the survey was provided by the U.S. Agency for International Development (USAID)/Bangladesh.

FERTILITY

Fertility Levels and Trends. In 1971-1975, women in Bangladesh were having on average 6.3 children. The total fertility rate (TFR) declined to 5.1 fifteen years later, and to 4.3 in 1989-1991. The TFR plateaued at around 3.3 for most of the 1990s, when the three earlier BDHS surveys took place. Data from the 2004 BDHS indicate that after almost a decade-long stagnation, the Bangladesh fertility rate has declined slightly to 3.0 children per woman. Comparison of the Bangladesh TFR with fertility rates in other Asian countries that have implemented a DHS survey indicates that, with a TFR of 3.0, Bangladesh is in the mid-range among the countries—below Nepal (4.1 in 2001), Cambodia (3.8 in 2000), and the Philippines (3.5 in 2003), but above India (2.8 in 1998-1999), Indonesia (2.6 in 2002-2003), and Vietnam (1.9 in 2002).

Fertility Differentials. Differentials in fertility by background characteristics are substantial. Women in rural areas have more children than their urban counterparts (3.2 and 2.5 children per woman, respectively). The TFR is highest in Sylhet division (4.2) and lowest in Rajshahi (2.6). As expected, women's education is strongly associated with lower levels of fertility; the TFR decreases from 3.6 among women with no education to 2.2 among those who have at least completed their secondary education. Similar differentials are observed by wealth quintile, with the TFR decreasing from 4.0 among women in the lowest wealth quintile to 2.5 among those in the highest wealth quintile.

Unplanned Fertility. Despite a steady rise in the level of contraceptive use over the past thirty years, the 2004 BDHS data indicate that unplanned pregnancies are common in Bangladesh. Overall, 3 out of 10 births in Bangladesh are either unwanted (14 percent)

or mistimed and wanted later (16 percent). However, the proportion of unplanned births declined from 33 percent in 1999-2000 to 30 percent in 2004. The proportion of unwanted births did not change.

Fertility Preferences. There is considerable desire among currently married Bangladeshi women to stop having children. A total of 54 percent of women age 10-49 reported not wanting another child, and 6 percent are already sterilized. Twenty-one percent of women want to have a child but would prefer to wait two or more years. Thus, over 80 percent of women want either to space their next birth or to limit childbearing altogether. Only 13 percent of women would like to have a child soon (within two years). A comparison of the 1999-200 and 2004 data shows that the proportion of women who want to limit childbearing has not changed.

As in the 1999-2000 BDHS, a majority of ever-married women and currently married men embrace the two-child family as an ideal (2.4 and 2.3 children, respectively).

FAMILY PLANNING

Knowledge of Contraception. Knowledge of family planning is universal in Bangladesh. Among ever-married women, the most widely known methods of family planning are the pill (100 percent), injectables (99 percent), female sterilization (96 percent), and condom (92 percent); these are followed by the IUD (85 percent), Norplant (76 percent), male sterilization (73 percent), periodic abstinence (70 percent), and withdrawal (58 percent).

Since overall knowledge of contraceptive methods was already high in 1999-2000, little change has taken place. However, knowledge of Norplant has increased from 56 to 77 percent among currently married women.

Use of Contraception. The contraceptive prevalence rate (any method) among currently married women is 58 percent. The most commonly used modern method is the pill (26 percent), followed by injectables (10 percent). Female sterilization and male condoms are used by 5

percent and 4 percent of married women, respectively, while Norplant, the IUD, and male sterilization are each used by only 1 percent. Periodic abstinence, used by 7 percent of married women, is the most commonly used traditional method.

Trends in Contraceptive Use. Over the past three decades, use of any method of contraception by married women has increased sevenfold, from 8 to 58 percent, while use of modern methods has increased almost tenfold, from 5 to 47 percent. The same trend was observed between the 1999-2000 BDHS and the 2004 BDHS, when use of any method increased from 54 to 58 percent and use of modern methods increased from 43 to 47 percent. Trends in the contraceptive method mix show that short-term methods, especially the pill, are gaining in popularity against long-term methods, such as the IUD, Norplant, and sterilization. The pill now accounts for 45 percent of all contraceptive use, compared with 35 percent in 1991. On the other hand, long-term methods now account for only 12 percent of all contraceptive use, compared with 30 percent in 1991.

Differentials in Contraceptive Use. Women in urban areas are slightly more likely to use contraceptive methods (63 percent) than their rural counterparts (57 percent); however, the condom is the only method that shows differentials in use by urban-rural residence: 8 percent in urban areas compared with only 3 percent in rural areas. Differentials are more marked by division: use of any method varies from 32 percent in Sylhet and 47 percent in Chittagong to 64 percent in Khulna and 68 percent in Rajshahi. Contraceptive prevalence is 54 percent in Barisal and 59 percent in Dhaka. There is little variation in contraceptive use by level of education. However, women in economically better-off households tend to use family planning more than those in households in the lowest wealth quintile (63 and 54 percent, respectively). The proportion of women using contraception increases with increasing number of children. Twenty-three percent of women with no children are currently using a contraceptive method, compared with 62 to 70 percent of women with two or more children.

Source of Modern Methods. In Bangladesh, both the public and private sectors are important sources of supply for users of modern methods (57 and 36 percent, respectively). The most common public sector source remains government fieldworkers (23

percent), although their share has declined substantially since 1993-1994 (42 percent). Upazila health complexes are the second most important public source (10 percent). Pharmacies (29 percent) provide most of the methods in the private sector (an increase from 21 percent in 1999-2000). Femicon, the most commonly used social marketing brand of pills, is distributed through a network of retail outlets including pharmacies. Of every ten pills used in Bangladesh, three carry the Femicon brand.

Contraceptive Discontinuation. One in two contraceptive users in Bangladesh stops using their method within 12 months of starting. The most common reason for discontinuation is side effects or health problems. Discontinuation rates are highest for condoms (72 percent) and withdrawal (60 percent), and lowest for periodic abstinence (41 percent).

Unmet Need for Family Planning. Eleven percent of married women have an unmet need for family planning. Unmet need is about equally divided between spacing and limiting births. Unmet need declined from 15 percent in 1999-2000 to 11 percent in 2004. It has remained high in Sylhet division (21 percent), while dropping substantially in Rajshahi (7 percent) and Khulna (8 percent). Overall, 84 percent of the demand for family planning is currently being met.

MATERNAL HEALTH

Antenatal Care. Antenatal care coverage increased sharply between the 1999-2000 BDHS and the 2004 BDHS. One-third of women received an antenatal checkup from a medically trained provider in 1999-2000 compared with one-half (49 percent) in 2004. Thirty-one percent of women received antenatal care from a doctor and 17 percent received care from a nurse, midwife, or paramedic. A relatively high proportion of women received no antenatal care (44 percent), especially in Sylhet (52 percent) and Barisal (53 percent).

Two in three women received at least two doses of tetanus toxoid for their most recent birth in the five years preceding the survey, 21 percent received only one tetanus toxoid injection, and 15 percent received none, which was an improvement since the 1999-2000 BDHS (19 percent).

Delivery Care. Nationally, nine in ten births in the last five years were delivered at home; only 9 percent were delivered in a health facility. Delivery in a health facility is substantially higher among women who have at least completed their secondary education (44 percent), and among those in the highest wealth quintile (30 percent). The data also show that only 13 percent of babies were delivered by medically trained providers, compared with 63 percent who were delivered by untrained birth assistants.

Postnatal Care. Only 15 percent of women who had a non-institutional live birth in the five years preceding the survey received postnatal care within two days of delivery; more than 80 percent received no postnatal care at all.

Maternal Complications around Delivery. One in four births in the five years preceding the survey had at least one of the following maternal complications around delivery—prolonged labor, excessive bleeding, baby's hands or feet came first, fever with foul-smelling discharge, convulsions/eclampsia. The most common complication was prolonged labor of over 12 hours, associated with one in six live births. For 11 percent of the births, the mothers experienced excessive bleeding, and 3 percent had convulsions. Two other problems, high fever with foul discharge and baby's hands or feet coming first, were reported for 5 and 1 percent of births, respectively.

Treatment was sought from a medically trained provider for only 29 percent of the cases that had maternal complications around delivery. Nearly four in ten women with complications did not seek any care. The 2004 BDHS data confirm the findings of the 2001 BMMS, that there are two main problems regarding the treatment of maternal complications: first, a large proportion of women with potentially life-threatening maternal complications seek no health care; and second, among those who do seek health care, about half seek assistance from providers that are not medically trained.

CHILD HEALTH

Childhood Mortality. Data from the 2004 BDHS show that under-five mortality (88 deaths per 1,000 live births) has continued to decline primarily to the substantial decline (20 percent) in child mortality (age 1-4 years) over the past five years. However, this still means that for the most recent five-

year period, one in every eleven Bangladeshi children dies before reaching age five, while one in fifteen children dies before reaching the first birthday (65 deaths per 1,000 live births). A majority of infant deaths occur during the first month of life (neonatal mortality). The 2004 BDHS also collected information on causes of death. Overall, for all children under five, the two most important causes of death were: possible serious infections (31 percent) including possible ARI and diarrhea and ARI (21 percent), which particularly affect children age 1-11 months. Birth asphyxia (12 percent), which occurs in the first 28 days, diarrhea (7 percent), and prematurity/low birth weight (7 percent) were responsible for most of the other deaths.

Childhood Vaccination Coverage. Seventy-three percent of Bangladeshi children age 12-23 months are fully immunised—most of them by 12 months of age as recommended—while 3 percent have received no vaccinations. More than nine in ten children have received BCG and the first dose of DPT and polio vaccines. While coverage for the first dose of DPT and polio is high, there is a decline with subsequent doses, with only about 81 percent of children receiving the recommended three doses of these vaccines. Seventy-six percent of children have received measles vaccine. Full vaccination coverage is highest in Khulna division (83 percent) and lowest in Sylhet division (62 percent). Mother's education is strongly associated with children's vaccination coverage: only 60 percent of children of mothers with no education are fully vaccinated compared with 92 percent of children of highly educated mothers.

Child Illness and Treatment. Among children under five years of age, 21 percent were reported to have had symptoms of acute respiratory illness in the two weeks preceding the survey. Of these, only one-fifth were taken to a health facility or provider for treatment, and one-third received no treatment at all. Eight percent of children under five years had diarrhea in the two weeks preceding the survey. Of these, 16 percent were taken to a health provider. Use of oral rehydration therapy (ORT) for children with diarrhea has remained unchanged since 1999-2000, but there has been a shift toward greater use of the commercially available packets of oral rehydration salts (ORS), from 61 to 67 percent. Overall, 83 percent of the

children with diarrhea received ORS, recommended home fluids (RHF), or increased fluids.

Forty percent of children under five years had a fever in the two weeks preceding the survey. Of these, nearly two-thirds were taken to a provider for treatment, but only 19 percent were taken to a medically trained provider/facility.

NUTRITION

Breastfeeding Practices. Almost all (98 percent) Bangladeshi children are breastfed for some period of time. Twenty-four percent of infants were put to the breast within one hour of birth, and 83 percent started breastfeeding within the first day. This is a substantial increase when compared to the 1999-2000 BDHS data. The median duration of any breastfeeding in Bangladesh is 32 months, but it varies among divisions from 36 months in Khulna and Rajshahi to around 26 months in Chittagong and Sylhet.

Exclusive breastfeeding of children under six months (based on 24-hour period before the survey) has not improved in the past 10 years; it remained unchanged at around 45 percent between 1993-94 and 1999-2000, and has declined to 42 percent most recently.

Supplementary feeding of children who are also breastfed has greatly improved over the past decade. In 1993-1994, only 29 percent of children age 6-9 months received complementary foods while being breastfed, compared with 62 percent in 2004. The most commonly used complementary foods are rice, wheat, and porridge (over 60 percent); 20 to 25 percent of the children in this age group received other complementary foods (fruits, meat/fish/eggs, and green leafy vegetables), and a smaller proportion received *dal*.

Feeding children with a bottle with a nipple starts very young, and three in ten infants age 2-3 months receive some food this way. Also, commercially produced baby formula is more popular than it was at the time of the 1999-2000 BDHS.

Intake of Vitamin A. Ensuring that children 6-59 months receive enough vitamin A may be the single most effective child survival intervention because deficiencies in this micronutrient can cause blindness and increase the severity of infections such as measles

and diarrhea. Between the 1999-2000 BDHS and the 2004 BDHS, vitamin A supplementation among children 12-59 months increased from 80 to 84 percent, but it actually dropped by half for children age 9-11 months (from 73 to 38 percent). Consumption of fruits and vegetables rich in vitamin A is another way to ensure that children are protected from blindness or infection. Overall, 7 in 10 children under three consumed such foods.

Only 15 percent of mothers with a birth in the past five years reported receiving a vitamin A dose postpartum. Three percent of interviewed women reported night blindness during pregnancy.

Nutritional Status of Children. According to the 2004 BDHS which measured all children under five in the household, 43 percent of children are stunted and 17 percent severely stunted. Thirteen percent of children under five are wasted and 1 percent severely wasted. Weight-for-age results show that 48 percent of children under five are underweight, with 13 percent severely underweight. Comparison of children whose mothers were interviewed shows that in spite of the fact that child nutritional levels showed a substantial improvement from 1996-1997 to 1999-2000, since then no noticeable improvement has occurred except that the severe stunting has slightly decreased and overall wasting has increased from 10 to 13 percent.

Nutritional Status of Women. The mean height of Bangladeshi women is 151 centimetres, which is above the critical height of 145 centimetres. A high proportion of women (16 percent) are below 145 centimetres. Thirty-four percent of women were found to be chronically malnourished, their body mass index (BMI) being less than 18.5. One in ten women was found to be overweight or obese (BMI 25 or higher). A woman's place of residence, level of education, and household wealth quintile are strongly associated with her nutritional status. For example, 37 percent of rural women are considered thin (<18.5), compared with 25 percent of their urban counterparts. Among divisions, Sylhet has the highest proportion of women who are thin (48 percent) and Khulna the least (29 percent). Although Bangladeshi women with children under five years are not getting taller, there is a substantial improvement in mother's nutritional status as measured by BMI. Since 1996-97, the proportion of mothers below the cutoff point of BMI of 18.5 continued to drop, from 52 percent in 1996-97 to 38 percent in 2004—a decline of 27 percent in less than ten years.

Arsenic in Drinking Water. Arsenic in drinking water is a hazard to human health. Its main source is arsenic-rich rocks through which the water has filtered. It may also occur because of mining or industrial activity. In Bangladesh, arsenic-contaminated water is found particularly in tubewells. Overall, in the 2004 BDHS, one in twelve households were found to have elevated levels of arsenic (equal to or greater than 50 parts per billion) in their drinking water. The problem is especially severe in Chittagong, where 22 percent of the households tested had arsenic-contaminated water; arsenic contamination is almost nonexistent in Barisal and Rajshahi (1 and 2 percent).

HIV/AIDS AND STIs

Awareness of HIV/AIDS. Knowledge of HIV/AIDS among ever-married women increased from 19 percent in 1996-1997 to 31 percent in 1999-2000, and then it almost doubled to 60 percent in 2004. For currently married men, the corresponding proportions are 34, 51, and 78 percent.

A respondent's place of residence, level of education, and household wealth quintile are strongly associated with HIV/AIDS awareness. Whereas 82 percent of women and 93 percent of men in urban areas have heard of AIDS, only 54 percent of women and 78 percent of men in rural areas have heard of the disease. Education is positively associated with knowledge of HIV/AIDS. It ranges from 37 percent among women with no education, to 71 percent among those who have completed primary school (only), to virtually all women (98 percent) who have completed secondary education. A similar pattern can be found when analyzing the data by wealth quintile.

Thirty-seven percent of ever-married women, 57 percent of never-married men, and 45 percent of currently married men know that condom use is a way to avoid contracting HIV/AIDS, a clear improvement over the results of the 1999-2000 BDHS. About one in three married women and one in eight among all men or currently married men know that limiting the number of sexual partners can prevent HIV/AIDS. Overall, six in ten women and 42 percent of men do not know any way to avoid the disease.

Among respondents who know of HIV/AIDS, seven in ten women and 84 percent of men correctly reported that a healthy looking person can have the AIDS virus.

In 2004, 29 percent of ever-married women were able to cite two or more correct ways to avoid contracting HIV/AIDS. Since 1999-2000, the unprompted knowledge of at least two correct ways to avoid HIV/AIDS has increased substantially among ever-married women (from 7 to 29 percent) and moderately among currently married men (from 19 to 26 percent).

Awareness of Sexually Transmitted Infections (STIs). Knowledge of STIs is generally lower than that of HIV/AIDS. Ninety-four percent of women and 78 percent of married men still do not have any knowledge of STIs. Knowledge of STIs is highest among women and men who have completed secondary education, 19 and 38 percent, respectively.

BANGLADESH

NEPAL

Rajshahi

Sylhet

INDIA

Dhaka

★ Dhaka

INDIA

Khulna

Barisal

Chittagong

Bay of Bengal

0   50   100   Kilometers

N

INTRODUCTION

1
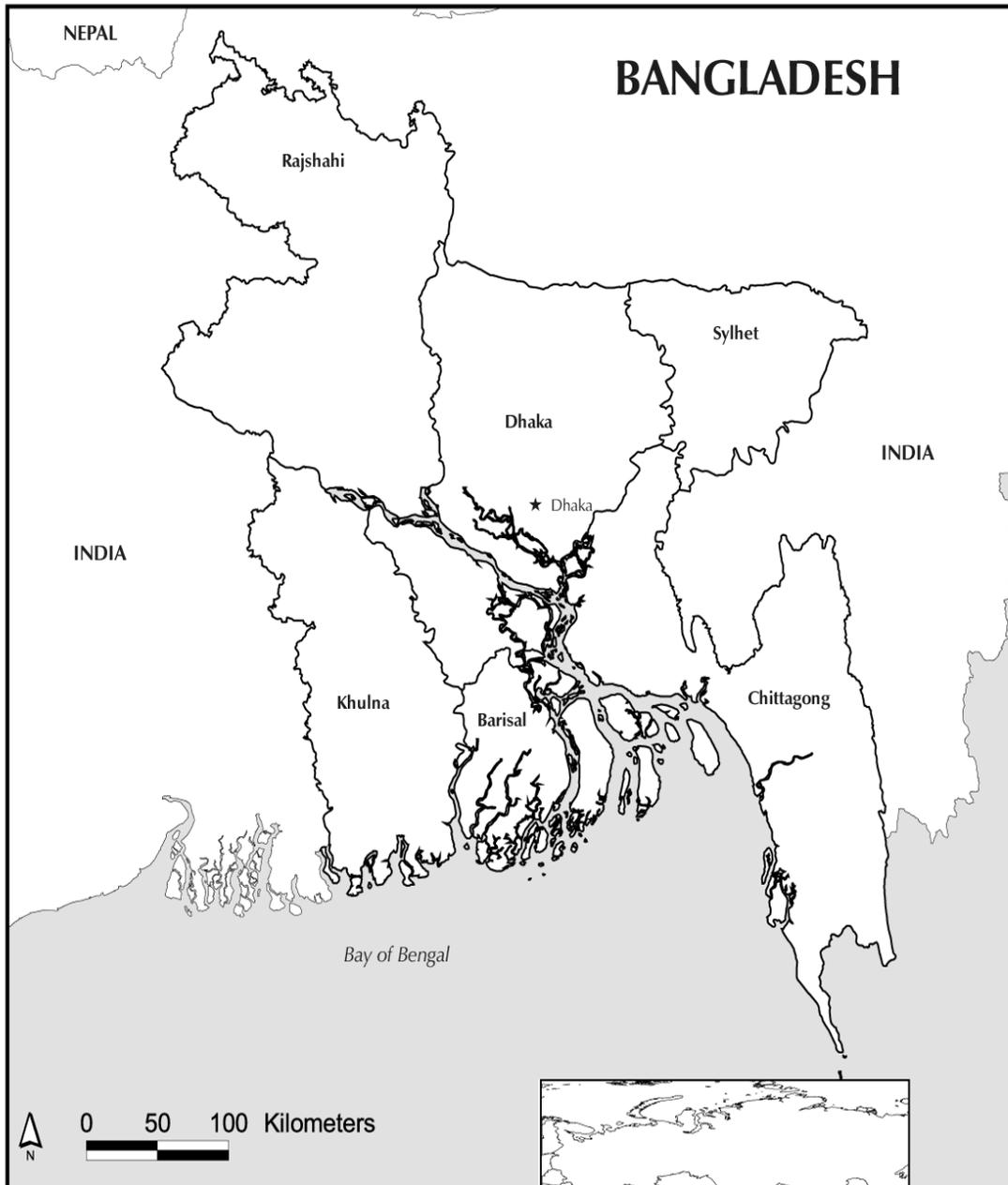
1.1   GEOGRAPHY AND ECONOMY

Bangladesh is located in the northeastern part of South Asia and covers an area of 147,570 square kilometers. It is almost entirely surrounded by India, except for a short southeastern frontier with Myanmar and a southern coastline on the Bay of Bengal. It lies between latitudes $20°34'$ and $26°38'$ north and longitudes $88°01'$ and $92°41'$ east, and has a tropical climate.

The Moguls ruled the country from the 13th century till the 18th century, when the British took over and administered the subcontinent until 1947. During British rule, Bangladesh was a part of India. In 1947, the independent states of Pakistan and India were created with the present Bangladesh territory as a part of Pakistan. Bangladesh emerged on the world map as a sovereign state on March 26, 1971 after fighting a 9-month war of liberation.

Most of Bangladesh consists of low, flat and alluvial soil. 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 496 *upazilas* (subdistricts) (BBS, 2001:19). Muslims constitute almost 90 percent of the population of Bangladesh, Hindus constitute about 9 percent, and others constitute about 1 percent. The national language of Bangladesh is Bangla, which is spoken and understood by all.

Agriculture is the overwhelmingly dominant sector of the economy, occupying 80 percent of the total population and contributing 25 percent of gross domestic product (GDP). The average per capita income is as low as $444 and more than one-third of the population live below the absolute poverty line (UNDP, 2003). Rice, wheat, jute, sugarcane, tobacco, oilseeds, and potatoes are the principal crops. The country produces about 51 million kilograms of tea per year, a sizeable quantity of which is exported to foreign markets after meeting the internal demand. Bangladesh produces about 1,057,000 metric tons of superior quality jute annually and 16 percent of export earnings come from raw-jute manufactures (BBS, 2001). Industry, although small, is increasing in importance as a result of foreign investments. 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.

Bangladesh ranks 138th in the Human Development Index (HDI) as presented in the Human Development Report of 2004 with a HDI value of 0.519. With this HDI value, the country belongs to the category of medium human development countries. However, Bangladesh ranks among the three last countries in this category, followed by Sudan and Cameroon. Within the region, the position of Bangladesh is better only than Pakistan, which ranks 144 in the HDI.

Bangladesh is still struggling to emerge from the realm of poverty. Bangladesh ranks 72nd among 94 developing countries in terms of the Human Poverty Index (HPI). The HPI is a multidimensional measure of poverty for developing countries; it takes into account social exclusion, lack of economic opportunities, and deprivations in survival, livelihood and knowledge.

1.2   POPULATION

Bangladesh is the most densely populated country in the world, excluding city-states such as Hong Kong and Singapore. The country has a population of about 140 million, with a corresponding population density of more than 900 per square kilometer. During the first half of the last century the population increased by only 45 percent. This slow increase was due to a combination of high birth rates and high death rates. In the second half of the century, population growth was rapid, tripling during the period. The relatively young age structure of the population indicates continued rapid population growth in the future. According to the 2001 census, 39 percent of the population is under 15 years of age, 57 percent are between 15 and 64 years, and 4 percent are age 65 or over (BBS, 2003:51). This young age structure constitutes built-in "population momentum," which will continue to generate population increases well into the future, even in the face of rapid fertility decline. The population projections indicate that the population will increase rapidly even after attaining replacement-level fertility because of the echo effect of the high fertility experienced in the past.

The Bangladesh Population Policy indicates that the population should stabilize at 210 million by 2060, if replacement-level fertility is reached by 2010. This estimate of future population size is reasonably consistent with the World Bank projections from 1994 (Bos et al., 1994), and the United Nations projections 1996 revision (United Nations, 1996), both of which estimated a mid-21st century population of 218 million. However, there is wide disparity between the estimates of the Bangladesh Government and others on the time when the population would stabilize. The World Bank boldly forecast a final stationary population of 263 million by mid-22nd century (2150), whereas others have not projected beyond the mid-21st century. Recently however, the United Nations has revised their estimate for 2050 by 25 million (or 11 percent) to 243 million, apparently on the basis of the decade long fertility plateau (United Nations, 2004).

This recent and very substantial upward revision of the mid-century population by the United Nations seems unduly pessimistic because a five-year delay in attaining replacement-level fertility adds only 3 percent to the population at any point in time. Nevertheless, Bangladesh still faces many decades of continued population growth, and efforts to slow that growth need to continue, through the family planning program, and increasingly, through social and health interventions that will facilitate further fertility decline, so that progress towards economic development is not hindered.

1.3   POPULATION, FAMILY PLANNING AND MATERNAL AND CHILD HEALTH POLICIES AND PROGRAMS

Family planning was introduced in Bangladesh (then East Pakistan) 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 by the Government of Bangladesh 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, content, 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 (NGOs).

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, the Health and Population Sector Program (HPSP) 1998-2003 was 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 HPSP was to ensure universal access to essential health care services of acceptable quality and to further slow population growth.

Moreover, to overcome the multidimensional problems and to meet the challenge according to the spirit of the International Conference on Population and Development (ICPD), the Government of Bangladesh launched the Health, Nutrition and Population Sector Program (HNPSP) in 2003. This aimed to reform the health and population sector. The program entails provision of a package of essential and quality health care services responsive to the needs of the people, especially those of children, women, elderly and the poor.

Recently, the government adopted the Bangladesh Population Policy with the objectives to improve the status of family planning, and maternal and child health, including reproductive health services and to improve the living standard of the people of Bangladesh through striking a desired balance between population and development in the context of the Millennium Development Goals (MDGs) and a Poverty Reduction Strategy Paper (PRSP). The objectives of the population policy include the following:

- Reduce the total fertility rate (TFR) and increase the use of family planning methods among eligible couples through raising awareness of family planning;
- Attain a net reproduction rate equal to one by the year 2010 so as to stabilize population around 2060;
- Ensure adequate availability and access of reproductive health services, especially family planning services to all including information, counseling and services for adolescents;
- Improve maternal health with emphasis on reduction of maternal mortality;
- Reduce reproductive tract and sexually transmitted infections (RTI/STIs) and prevent the spread of HIV/AIDS;
- Reduce infant and under-five mortality rates;
- Reduce maternal and child malnutrition;

- Promote and actively support programs for elimination of gender disparity in education, health and nutrition;
- Ensure early childhood development programs;
- Ensure and support gender equity and empower women;
- Develop the human resource capacity of planners, managers and service providers, including improved data collection, research and dissemination;
- Actively support measures to provide food and social security and shelter for the disadvantaged including the elderly, destitute, physically and mentally retarded persons;
- Actively support measures to regulate and reduce rural to urban migration;
- Support measures for environmental sustainability with emphasis on access to safe drinking water;
- Support poverty alleviating strategies and a conducive environment for improved quality of life;
- Ensure coordination among relevant Ministries in strengthening population and development linkages and making their respective mandates and implementation strategies more population-focused.

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. Private-sector involvement in both health and population services is being encouraged.

There has been considerable variation across the health and population sector in effectiveness of services. Some projects have very effectively targeted certain diseases or conditions, while others have been less effective. Under the HPSP, since 1998, the adoption of a sector-wide program approach has brought its own set of issues. However, throughout these strategy changes, the family planning program has continued to function reasonably effectively, and contraceptive use has steadily become more widespread.

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. Because of 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 2004 BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY

1.4.1 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 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 2004 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. ORC Macro 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.

1.4.2 Sample Design

The sample for the 2004 BDHS covered the entire population residing in private dwellings units in the country. Administratively, Bangladesh is divided into six divisions. In turn, each division is divided into *zilas,* and in turn each zila into *upazilas.* Each urban area in the *upazila* is divided into wards, and into *mahallas* within the ward; each rural area in the *upazila* is divided into *union parishads* (UP) and into *mouzas* within the UPs. The urban areas were stratified into three groups, i) Standard metropolitan areas, ii) Municipality areas, and iii) Other urban areas. These divisions allow the country as a whole to be easily separated into rural and urban areas.

For the 2001 census, subdivisions called enumeration areas (EAs) were created based on a convenient number of dwellings units. Because sketch maps of EAs were accessible, EAs were considered suitable to use as primary sampling units (PSUs) for the 2004 BDHS. In each division, the list of EAs constituted the sample frame for the 2004 BDHS survey.

A target number of completed interviews with eligible women for the 2004 BDHS was set at 10,000, based on information from the 1999-2000 BDHS. The 2004 BDHS sample is a stratified, a multistage cluster sample consisting of 361 PSUs, 122 in the urban area and 239 in the rural area. After the target sample was allocated to each group area according to urban and rural areas, the number of PSUs was calculated in terms of an average of 28 completed interviews of eligible women per PSU (or an average of 30 selected households per PSU).

Mitra and Associates conducted a household listing operation in all the sample points from 3 October 2003 to 15 December 2003. A systematic sample of 10,811 households was then selected from these lists. All ever-married women age 10-49 in the selected households were eligible respondents for

the women's questionnaire. For the men's survey, 50 percent of the selected households were chosen through systematic sampling. Interviewers interviewed one randomly selected man, regardless of marital status, in the age group 15-54, from each of the selected households. It was expected that the sample would yield interviews with approximately 10,000 ever-married women age 10-49 and 4,400 men age 15-54.

1.4.3 Questionnaires

The BDHS used a Household Questionnaire, a Women's Questionnaire, a Men's Questionnaire, and a Community Questionnaire. The contents of these questionnaires was based on MEASURE *DHS+* model questionnaire. These model questionnaires were adapted for use in Bangladesh during a series of meetings with the Technical Task Force, which consisted of representatives from NIPORT, Mitra and Associates, USAID/Dhaka, ICDDR,B's Center for Health and Population Research, Bangladesh, Pathfinder/Dhaka, and ORC Macro (see Appendix D 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 D). The questionnaires were developed in English and then translated into and printed in Bangla. In addition, two versions of a Verbal Autopsy Questionnaire were used. One version was for neonatal deaths (0-28 days old at death) and the other was for deaths among older children (age 29 days to 5 years at death). The verbal autopsy instruments were developed using the previous two BDHS verbal autopsy surveys, the WHO verbal autopsy questionnaire, and the instrument used since 2003 in the Matlab Health and Demographic Surveillance System.

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 arsenic level of the water used by households for drinking was also tested. The Household Questionnaire was also used to record the heights and weights of all children under six years of age.

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
- Awareness of AIDS and other sexually transmitted diseases
- Causes of deaths of children under five years of age

The Men's Questionnaire was used to collect information from men age 15-54 whether ever married or not. The men were asked questions on the following topics:

- Background characteristics (including respondent's work)
- Health and life style (illness, use of tobacco)

- Marriage and sexual activity
- Participation in reproductive health care
- Awareness of AIDS and other sexually transmitted diseases
- Attitudes on women's decision making roles
- Domestic violence

The Community Questionnaire was completed for each sample cluster and included questions about the existence of development organizations in the community and the availability and accessibility of health and family planning services.

The Verbal Autopsy Questionnaire was used for collection of open-ended information including narrative stories on the following topics:

- Identification including detailed address of respondent
- Informed consent
- Detailed age description of deceased child
- Information about caretaker or respondent of deceased child
- Detailed birth and delivery information
- Open-ended section allowing the respondent to provide a narrative history
- Maternal history including questions on prenatal care, labor and delivery, and obstetrical complications
- Information about accidental deaths
- Detailed signs and symptoms preceding death
- Treatment module and information on direct, underlying
- Contributing causes of death from the death certificate, if available.

The survey questionnaires, with the exception of the Verbal Autopsy Questionnaires, are included in Appendix E.

1.4.4   Training and Fieldwork

The BDHS Women's Questionnaire was pretested in September 2003 and the Men's Questionnaire was pretested in December 2003. 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 (TTF). Altogether, 108 Women's and 45 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 November 2003, 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 for four weeks (1 December to 30 December 2003). Initially, training consisted of lectures on how to complete the questionnaires, with mock interviews between participants to gain practice in asking questions. Towards 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 was carried out by 12 interviewing teams. Each consisted of one male supervisor, one female field editor, five female interviewers, two male interviewers, and one logistics

staff person, for a total of 120 field staff for the survey. Mitra and Associates also fielded four quality control teams of two persons each to check on the field teams. In addition to these field control teams, NIPORT monitored fieldwork by using their quality control teams. Additionally, USAID, ORC Macro, and NIPORT monitored the fieldwork by visiting teams in the field. Fieldwork commenced on 1 January 2004 and was completed on 25 May 2004. Fieldwork was implemented in five phases.

1.4.5 Data Processing

All questionnaires for the BDHS were periodically returned to Dhaka for data processing at Mitra and Associates. The processing of the data collected began shortly after the fieldwork commenced. 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 10 data entry operators and two data entry supervisors. The concurrent processing of the data was an advantage since the quality control teams were able to advise field teams of problems detected during the data entry. In particular, tables were generated to check various data quality parameters. Data processing commenced on 12 January 2004 and was completed by 24 June 2004.

1.4.6 Coverage of the Sample

Table 1.1 shows response rates for the survey and reasons for nonresponse. A total of 10,811 households were selected for the sample; 10,523 were occupied, of which 10,500 were successfully interviewed. The shortfall is primarily due to dwellings that were vacant or destroyed or in which the inhabitants had left for an extended period at the time the interviewing teams visited them. Of the households occupied, 99.8 percent were successfully interviewed. In these households, 11,601 women

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence, Bangladesh 2004

| | Residence | | | | | |
| | Urban | | Rural | | Total | |
Result	Number	Percent	Number	Percent	Number	Percent
Household sample						
Households occupied	3,522	96.6	7,001	97.7	10,523	97.3
Households absent for extended period of time	46	1.3	76	1.1	122	1.1
Dwelling vacant or destroyed	68	1.9	74	1.0	142	1.3
Other	10	0.3	14	0.2	24	0.2
Total households selected	3,646	100.0	7,165	100.0	10,811	100.0
Household interviews						
Households interviewed	3,513	99.7	6,987	99.8	10,500	99.8
Household not interviewed	9	0.3	14	0.2	23	0.2
Total households occupied	3,522	100.0	7,001	100.0	10,523	100.0
Household response rate		99.7		99.8		99.8
Individual interviews: women						
Eligible women interviewed	3,904	98.3	7,536	98.8	11,440	98.6
Eligible women not interviewed	69	1.7	92	1.2	161	1.4
Total eligible women	3,973	100.0	7,628	100.0	11,601	100.0
Eligible woman response rate		98.3		98.8		98.6
Individual interviews: men						
Eligible men interviewed	1,514	95.6	2,783	95.7	4,297	95.7
Eligible men not interviewed	69	4.4	124	4.3	193	4.3
Total eligible men	1,583	100.0	2,907	100.0	4,490	100.0
Eligible man response rate		95.6		95.7		95.7

were identified as eligible for the individual interview (i.e., ever-married and age 10-49) and interviews were completed for 11,440 or 98.6 percent of them. In households that were selected for inclusion in the man's survey, 4,490 eligible men age 15-54 were identified, of which 4,297 or 95.7 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 rates for the current survey were lower than those for the 1999-2000 survey.

HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

2

This chapter provides information on the social, economic, and demographic characteristics of the households included in the 2004 BDHS. It presents information on household population characteristics, such as age, sex, educational attainment, and employment status. It also provides information on household characteristics, such as source of drinking water, electricity, sanitation facilities, housing construction materials, possession of durable goods, and ownership of a homestead and land. This information is intended to assist in the assessment of the representativeness of the survey. In the 2004 BDHS, information was also collected on the prevalence of arsenic in household drinking water, through testing of arsenic in drinking water at the time of the survey.

For the purpose of the 2004 BDHS, a household is defined as a person or a group of related and/or unrelated persons who usually live in the same dwelling unit(s), who have common cooking and eating arrangements, and who acknowledge one adult member as a head of the household. A member of the household is any person who usually lives in the household; a visitor is someone who is not a member of the household, but stayed in the household the night before the interview.

This survey collected information for all usual residents of the selected household (de jure population) and persons who stayed in the selected household the night before the date of interview (de facto population). This method of data collection allows the analysis of either de jure or de facto population.

2.1 HOUSEHOLD POPULATION BY AGE, SEX, AND RESIDENCE

Age and sex are important demographic variables and are the primary basis of demographic classification in vital statistics, censuses, and surveys. They are also important variables in the study of mortality, fertility, and nuptiality. The distribution of the de facto household population in the 2004 BDHS is shown in Table 2.1 by five-year age groups, according to sex and urban-rural residence. The household population includes 51,255 persons, and the sample is 78 percent rural and 22 percent urban. Females constitute 51 percent of the population. Overall, the proportions of persons in the younger age groups are substantially larger than the proportions in the older age groups for each sex and in both urban and rural areas.

The age-sex structure of the population is shown by a population pyramid in Figure 2.1. The pyramid is wide based and slightly narrower at the lowest base, a pattern that typically describes a high-fertility regime that has recently declined slightly. Figure 2.2 shows the distribution of the male and female household population by single year of age. The figure shows that noticeable heaping is observed at ages ending with 0 and 5. Ages ending with 1 and 9 are underreported.

Table 2.1 Household population by age, sex, and residence

Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Bangladesh 2004

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	11.3	11.5	11.4	13.8	12.7	13.2	13.2	12.4	12.8
5-9	12.5	10.8	11.7	13.6	12.8	13.2	13.3	12.4	12.8
10-14	11.7	12.6	12.2	13.0	12.3	12.7	12.7	12.4	12.6
15-19	10.5	13.5	12.0	9.5	12.5	11.0	9.8	12.7	11.3
20-24	8.6	11.1	9.9	7.1	9.7	8.4	7.4	10.0	8.7
25-29	7.4	9.1	8.3	6.6	7.9	7.2	6.8	8.1	7.5
30-34	7.7	7.3	7.5	6.6	6.7	6.7	6.8	6.9	6.8
35-39	6.6	6.2	6.4	6.0	5.5	5.7	6.1	5.7	5.9
40-44	6.7	4.8	5.7	5.5	4.3	4.9	5.8	4.4	5.1
45-49	5.0	4.1	4.5	4.4	4.2	4.3	4.5	4.2	4.4
50-54	3.5	2.5	3.0	3.5	2.6	3.1	3.5	2.6	3.0
55-59	2.3	1.9	2.1	2.2	2.8	2.5	2.2	2.6	2.4
60-64	2.4	1.7	2.1	2.7	2.2	2.4	2.6	2.1	2.3
65-69	1.4	0.9	1.1	1.7	1.3	1.5	1.7	1.2	1.4
70-74	1.2	0.7	1.0	1.8	1.1	1.4	1.7	1.0	1.3
75-79	0.5	0.4	0.4	0.7	0.5	0.6	0.7	0.5	0.6
80+	0.7	0.8	0.7	1.3	0.9	1.1	1.2	0.8	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	5,530	5,721	11,251	19,570	20,435	40,004	25,099	26,156	51,255

Figure 2.1 Population Pyramid, Bangladesh 2004
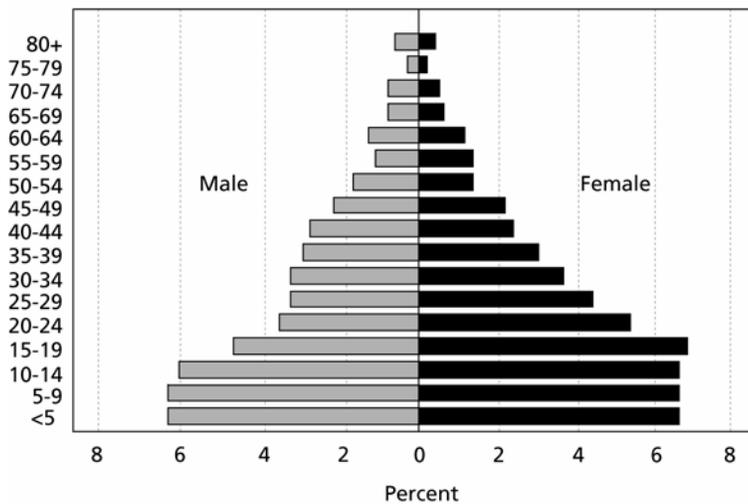
BDHS 2004

Figure 2.2 Distribution of De Facto Household Population by Single Year of Age and Sex
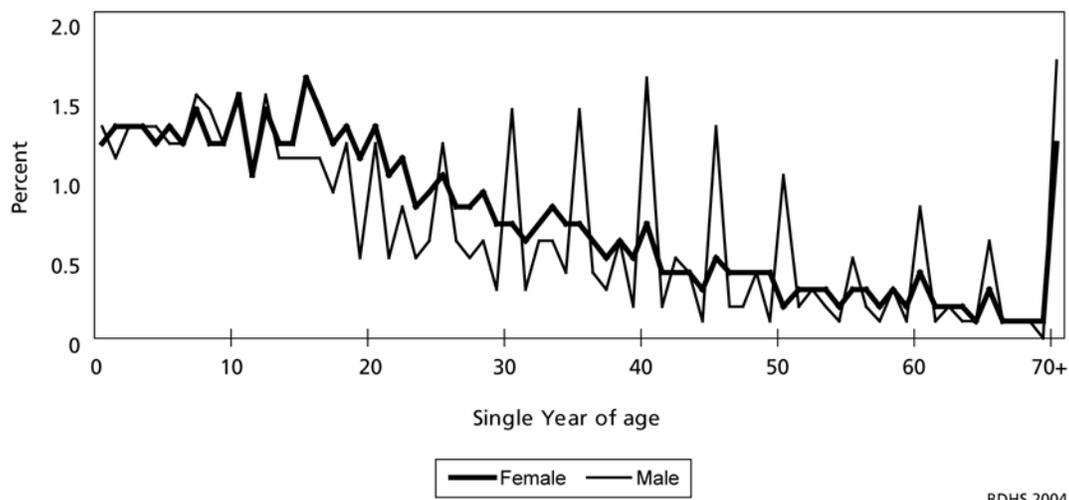
Table 2.2 compares the broad age structure of the population from the 1989 Bangladesh Fertility Survey; the 1989 and 1991 Contraceptive Prevalence Surveys; and the 1993-1994, 1996-1997, 1999-2000, and 2004 Bangladesh Demographic and Health Surveys. There has been a decline in the proportion of population less than 15 years of age and an increase in the proportion age 15-59; also, the median age of the population has been increasing. 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, Bangladesh 1989-2004

Age group	1989 BFS	1989 CPS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS	2004 BDHS
<15	43.2	43.2	42.7	42.6	41.0	39.2	38.2
15-59	50.9	50.9	51.2	51.2	53.1	54.4	55.1
60+	5.9	5.9	6.0	6.2	5.9	6.4	6.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median age	u	u	u	18.4	18.8	19.5	20.2

u = Unknown (not available)
Source: Huq and Cleland, 1990:38; Mitra et al., 1993:14; Mitra et al., 1997:9; NIPORT et al., 2001:11

2.2 HOUSEHOLD COMPOSITION

Table 2.3 shows the distribution of households by sex of the head of household and by household size, according to urban-rural residence. At the national level and in rural areas, women head 10 percent of Bangladeshi households. The proportion of female-headed households is slightly lower in urban areas (9 percent). Fifty-eight percent of households in Bangladesh are composed of three to five members; the corresponding figure for urban areas is 60 percent. Average household size in Bangladesh is 5.0 members; urban household size is marginally smaller than rural household size.

Table 2.3 Household composition

Percent distribution of households by sex of head of household and household size, according to residence, Bangladesh 2004

Characteristic	Residence		Total
	Urban	Rural	
Sex of head of household			
Male	90.6	89.7	89.9
Female	9.4	10.3	10.1
Total	100.0	100.0	100.0
Number of usual members			
1	1.4	1.8	1.7
2	6.8	7.2	7.1
3	16.0	15.3	15.5
4	23.3	22.5	22.7
5	20.7	19.4	19.7
6	14.8	14.2	14.4
7	7.0	8.5	8.2
8	4.3	4.6	4.5
9+	5.6	6.4	6.2
Total	100.0	100.0	100.0
Number of households	2,306	8,194	10,500
Mean size	4.9	5.0	5.0

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

2.3 EDUCATIONAL ATTAINMENT OF HOUSEHOLD MEMBERS

Education is a key determinant of the lifestyle and status an individual enjoys in a society. It affects many aspects of life, including demographic and health behavior. Studies have shown that educational attainment has strong effects on reproductive behavior, contraceptive use, fertility, mortality, morbidity, and attitudes and awareness related to family health and hygiene.

In the 2004 BDHS, information on educational attainment was collected for each member of the household age six years and above. Tables 2.4.1 and 2.4.2 present the distribution of the de facto female and male household populations, respectively, by educational level, according to age, urban-rural residence, and administrative division.

Generally, education has become more widespread over the years among both men and women, as is clear from a comparison of older and younger cohorts.

Table 2.4.1 Level of education of household population: women

Percent distribution of the de facto female household population age six and over by highest level of education attended or completed, according to background characteristics, Bangladesh 2004

Background characteristic	No education	Primary incomplete	Primary complete[1]	Secondary incomplete	Secondary complete or higher[2]	Total	Number of women	Median number of years
Age								
6-9	12.4	87.0	0.1	0.4	0.0	100.0	2,573	0.2
10-14	7.3	49.5	5.6	37.5	0.1	100.0	3,245	3.6
15-19	12.0	17.5	9.8	52.9	7.7	100.0	3,321	5.7
20-24	23.9	17.7	9.4	32.6	16.4	100.0	2,625	4.6
25-29	40.1	20.0	9.1	19.1	11.8	100.0	2,129	1.9
30-34	48.4	22.1	7.9	14.8	6.8	100.0	1,795	0.0
35-39	56.0	20.8	6.7	11.6	4.8	100.0	1,479	0.0
40-44	56.4	18.4	8.0	12.5	4.7	100.0	1,159	0.0
45-49	61.8	18.9	8.3	7.6	3.5	100.0	1,095	0.0
50-54	69.6	13.3	7.0	7.5	2.5	100.0	684	0.0
55-59	74.2	17.1	5.3	2.8	0.6	100.0	676	0.0
60-64	80.1	10.2	4.5	4.3	0.5	100.0	547	0.0
65+	85.0	8.9	2.9	2.7	0.2	100.0	915	0.0
Residence								
Urban	28.2	27.1	6.8	25.5	12.3	100.0	4,932	3.2
Rural	36.2	31.5	6.8	21.8	3.7	100.0	17,317	1.2
Division								
Barisal	24.8	35.2	9.7	23.3	7.0	100.0	1,480	2.8
Chittagong	34.8	29.5	6.5	23.9	5.2	100.0	4,374	1.7
Dhaka	34.6	30.0	7.0	21.3	7.1	100.0	6,836	1.5
Khulna	29.0	32.4	6.0	27.2	5.4	100.0	2,544	2.6
Rajshahi	37.4	30.6	5.2	22.2	4.6	100.0	5,387	1.1
Sylhet	40.8	27.5	10.3	18.0	3.3	100.0	1,628	0.7
Total	34.4	30.5	6.8	22.6	5.6	100.0	22,249	1.6

Note: Total includes eight females missing information on age. Total includes a small proportion missing education level.
[1] Primary complete is defined as completing grade 5.
[2] Secondary complete or higher is defined as completing grade 10 or more.

As expected, educational attainment is higher in urban areas than in rural areas. For example, 72 percent of females and 80 percent of males in urban areas have some education, compared with 64 and 71 percent of females and males, respectively, in rural areas. Differences in the median number of years of schooling between urban and rural persons are around two years for females and males. However, the urban-rural gap is narrowing: Figure 2.3 shows that since 1993-1994, education has improved more rapidly among women and men in rural areas than in urban areas.

Table 2.4.2 Level of education of household population: men

Percent distribution of the de facto male household population age six and over by highest level of education attended or completed, according to background characteristics, Bangladesh 2004

Background characteristic	No education	Primary incomplete	Primary complete[1]	Secondary incomplete	Secondary complete or higher[2]	Total	Number of men	Median number of years
Age								
6-9	15.5	84.0	0.0	0.4	0.0	100.0	2,726	0.1
10-14	8.7	56.4	5.9	29.0	0.0	100.0	3,194	3.1
15-19	13.3	20.0	12.1	45.7	8.9	100.0	2,449	5.0
20-24	15.8	17.4	12.1	30.9	23.8	100.0	1,858	5.3
25-29	27.9	17.1	9.3	25.1	20.6	100.0	1,701	4.4
30-34	34.7	16.5	8.7	20.5	19.5	100.0	1,712	3.8
35-39	40.2	17.2	7.9	17.6	16.8	100.0	1,535	2.3
40-44	43.0	19.2	7.9	18.6	11.2	100.0	1,445	1.3
45-49	41.3	17.5	6.9	19.4	14.8	100.0	1,135	2.1
50-54	42.3	16.4	7.5	16.5	17.3	100.0	879	2.2
55-59	39.4	17.0	7.8	16.9	18.7	100.0	564	2.5
60-64	45.7	20.4	8.4	15.3	10.0	100.0	652	0.3
65+	50.0	19.0	9.2	13.8	7.9	100.0	1,303	0.0
Residence								
Urban	20.1	27.3	7.2	25.1	20.2	100.0	4,762	4.2
Rural	28.6	33.8	7.8	21.3	8.5	100.0	16,397	2.1
Division								
Barisal	18.0	39.3	7.1	22.3	13.0	100.0	1,312	3.2
Chittagong	25.9	33.2	7.4	23.2	10.2	100.0	3,910	2.7
Dhaka	26.9	32.0	7.9	20.8	12.3	100.0	6,640	2.6
Khulna	23.7	30.4	7.0	26.2	12.6	100.0	2,539	3.5
Rajshahi	29.6	31.3	6.6	22.0	10.4	100.0	5,236	2.3
Sylhet	29.8	32.3	12.2	19.0	6.8	100.0	1,522	2.0
Total	26.7	32.3	7.6	22.2	11.1	100.0	21,159	2.7

Note: Total includes seven males missing information on age. Total includes a small proportion missing education level.
[1] Primary complete is defined as completing grade 5.
[2] Secondary complete or higher is defined as completing grade 10.

The proportion of the population that has achieved some education varies among administrative divisions. The proportions of women and men with some education are the highest in Barisal division (75 percent of women and 82 percent of men) and the lowest in Rajshahi and Sylhet divisions (around six in ten women and seven in ten men).

The positive impact of different interventions to encourage women to attend school is also evident from the data available through the various surveys. In 2004, 70 percent of women age 15-19 had completed at least primary education, compared with 44 percent in 1993-1994, and 16 percent of women age 20-24 had completed at least secondary education, compared with 9 percent ten years ago. This steady increase in female education has narrowed the gap in education levels between males and females in younger cohorts. In fact, the 2004 BDHS indicates that a higher percentage of women age 15-19 have

Figure 2.3 Trends in Percentage of Men and Women Age Six and Above With No Education by Sex and Residence

■ 1993-1994 ⊠ 1996-1997 ▨ 1999-2000 ▨ 2004
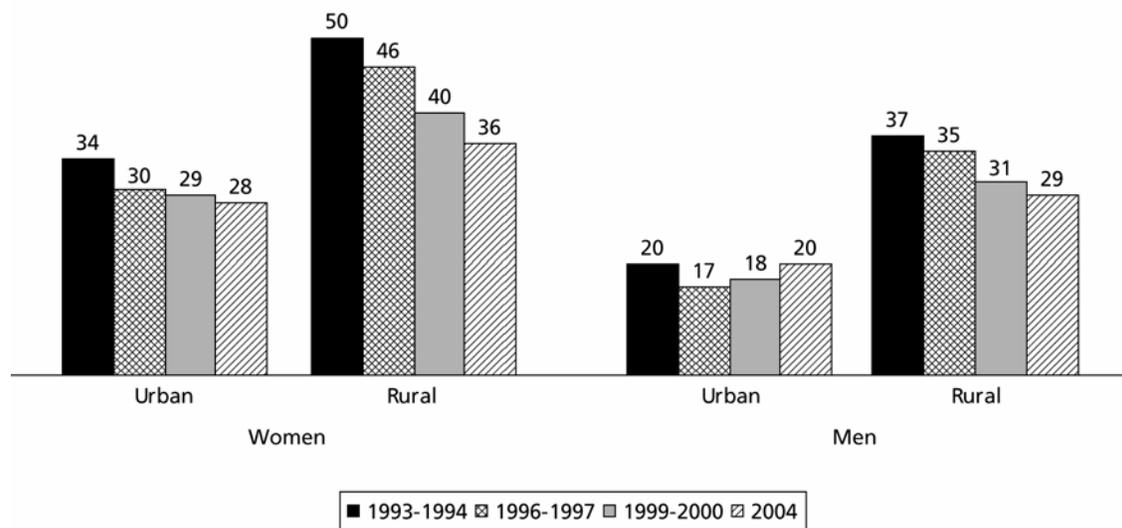
completed at least primary education, compared with men in the same age group. Nevertheless, men are still more likely than women to have completed secondary school. The difference, however, has narrowed in the last ten years. In 1993-1994, men age 20-24 were 2.3 times more likely than women in the same age group to have completed secondary school; in 2004 this ratio had declined to 1.5 times.

2.3.1 School Attendance

Data for school attendance by age group, sex, and place of residence are presented in Table 2.5. In the whole country, more than eight in ten (84 percent) children age 6-10 years are in school. More than two-thirds of children age 11-15 years are attending school. School attendance of both age groups is higher for girls than for boys. Also, boys and girls age 6-15 years are more likely to attend school in rural areas than in urban areas. For those age 16-20, school attendance drops sharply from levels seen at younger ages, and attendance is higher for males than for females, and in urban areas than in rural areas.

Table 2.5 School attendance

Percentage of the de facto household population age 6-24 years attending school, by age, sex, and residence, Bangladesh 2004

	Male			Female			Total		
Age	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10	81.1	83.0	82.6	83.2	86.9	86.2	82.1	84.9	84.4
11-15	63.0	66.9	66.1	65.9	71.3	70.1	64.6	69.2	68.2
6-15	72.6	75.5	74.9	74.0	79.4	78.2	73.3	77.4	76.6
16-20	33.3	29.2	30.2	32.2	22.0	24.4	32.7	25.3	27.0
21-24	26.2	14.5	17.6	11.3	5.1	6.7	17.6	8.8	11.1

Over the last decade, school attendance has increased both for girls and boys in the younger age group (6-15 years), but the increases have been higher for girls than for boys. The data suggest that for

those age 16-20, school attendance has actually fallen for males, while for females it has seen a slight increase.

2.4   EMPLOYMENT

The 2004 BDHS Household Questionnaire included questions on whether each person age eight and above in the sampled households was working at the time of the survey and how he or she was compensated (or if at all) for work. Table 2.6 shows the percentage of women and men age eight and over working at the time of survey, by age and residence. Men are much more likely than women to be employed, regardless of age group or residence. Overall, 68 percent of men eight years or older are employed, compared with only 15 percent of female household members. Employment is higher in urban than in rural areas for males and females. Female employment rates are highest for women age 25-44; at least one in four women in this age group is working. Half of men age 65 and over are employed.

Table 2.6 Employment status

Percentage of female and male household population age eight and over working at the time of the survey, by age, sex, and residence, Bangladesh 2004

	Female			Male		
Age	Urban	Rural	Total	Urban	Rural	Total
8-9	2.3	0.4	0.8	2.6	2.3	2.3
10-14	10.4	3.1	4.7	19.7	17.6	18.0
15-19	17.7	7.4	9.7	54.5	58.0	57.2
20-24	22.0	15.4	17.0	71.2	79.6	77.5
25-29	26.1	24.9	25.2	89.6	92.5	91.8
30-34	30.7	26.9	27.8	97.8	96.8	97.0
35-39	32.3	26.8	28.1	98.4	98.6	98.6
40-44	31.5	24.5	26.2	97.3	98.2	98.0
45-49	23.1	21.5	21.8	98.1	98.3	98.3
50-54	19.1	14.7	15.5	94.3	94.8	94.7
55-59	12.9	8.7	9.4	86.2	93.8	92.1
60-64	11.3	7.7	8.4	71.6	79.4	77.8
65+	2.2	4.2	3.9	49.0	53.2	52.5
Total	19.9	13.8	15.2	68.4	67.2	67.5
Number of persons	4,628	16,365	20,994	4,614	16,051	20,665

Table 2.7 presents the percent distribution of employed women and men by type of earnings, according to background characteristics. Almost 80 percent of working women and about 70 percent of the employed men work for cash only. The proportion of employed women who work for cash only is markedly higher for those who have completed secondary education. Employed men in urban areas and those who have completed secondary education are much more likely to be working for cash only.

Table 2.7 Form of earnings

Percent distribution of currently employed men and women age eight and over by type of earnings (cash, in kind, no payment), according to background characteristics, Bangladesh 2004

	Women							Men						
Background characteristic	Earns cash only	Earns kind only	Both cash and kind	Not paid	Don't know/ missing	Total	Number of employed women	Earns cash only	Earns kind only	Both cash and kind	Not paid	Don't know/ missing	Total	Number of employed men
Age														
8-9	*	*	*	*	*	100.0	9	(51.0)	(14.0)	(7.1)	(27.9)	(0.0)	100.0	31
10-14	51.7	7.6	35.2	4.5	1.0	100.0	154	58.3	13.3	7.9	20.3	0.2	100.0	589
15-19	76.7	5.0	12.1	5.5	0.7	100.0	319	67.3	16.9	6.7	9.1	0.0	100.0	1,488
20-24	84.6	3.3	8.6	3.5	0.0	100.0	440	75.8	14.7	5.9	3.6	0.0	100.0	1,503
25-29	84.3	5.4	6.9	3.1	0.3	100.0	537	76.4	17.5	5.2	0.8	0.0	100.0	1,644
30-34	82.7	5.5	10.0	1.8	0.0	100.0	500	78.3	16.9	4.4	0.2	0.2	100.0	1,739
35-39	77.1	8.7	11.3	2.4	0.5	100.0	416	76.0	17.4	6.2	0.4	0.0	100.0	1,610
40-44	81.1	6.4	10.1	2.3	0.0	100.0	306	75.8	18.7	5.4	0.0	0.0	100.0	1,494
45-49	76.4	9.2	11.1	3.3	0.0	100.0	242	72.7	20.8	6.4	0.0	0.2	100.0	1,194
50-54	73.8	10.0	14.9	1.3	0.0	100.0	107	69.1	24.5	6.3	0.1	0.0	100.0	876
55-59	64.8	19.1	16.2	0.0	0.0	100.0	65	60.5	32.8	6.7	0.0	0.0	100.0	549
60-64	(61.4)	(10.8)	(23.6)	(4.1)	(0.0)	100.0	50	56.2	34.3	9.3	0.1	0.1	100.0	529
65+	(54.7)	(6.4	(34.9	(3.9)	(0.0)	100.0	37	48.7	39.4	10.9	0.9	0.1	100.0	705
Residence														
Urban	80.7	2.8	14.9	1.7	0.0	100.0	922	89.3	5.2	3.8	1.6	0.1	100.0	3,157
Rural	77.2	8.1	10.7	3.6	0.3	100.0	2,262	65.8	24.4	7.0	2.8	0.1	100.0	10,793
Division														
Barisal	71.2	10.1	12.3	5.2	1.1	100.0	110	76.2	16.4	5.7	1.5	0.2	100.0	786
Chittagong	74.6	6.5	13.8	4.6	0.5	100.0	481	75.4	15.9	6.6	2.0	0.1	100.0	2,384
Dhaka	82.2	4.8	9.8	3.0	0.1	100.0	1,071	72.9	20.4	4.4	2.2	0.0	100.0	4,350
Khulna	79.3	6.4	8.8	5.6	0.0	100.0	374	71.7	19.4	5.8	3.0	0.1	100.0	1,799
Rajshahi	78.4	8.1	12.1	1.5	0.0	100.0	965	64.5	23.7	8.3	3.4	0.0	100.0	3,650
Sylhet	65.1	7.7	24.7	1.3	1.3	100.0	183	72.0	19.4	7.1	1.4	0.1	100.0	982
Education														
No education	73.4	7.8	16.1	2.6	0.1	100.0	1,649	69.6	21.6	7.9	0.8	0.0	100.0	4,858
Primary incomplete	74.8	8.1	12.4	4.2	0.4	100.0	642	69.6	21.0	5.9	3.4	0.1	100.0	3,090
Primary complete	84.3	5.1	7.8	2.8	0.0	100.0	193	67.8	23.6	6.4	2.1	0.0	100.0	1,348
Secondary incomplete	87.4	3.8	3.6	4.5	0.7	100.0	451	69.5	20.2	5.5	4.8	0.1	100.0	2,946
Secondary complete or higher	97.7	0.8	1.1	0.5	0.0	100.0	248	83.5	11.0	3.3	2.0	0.2	100.0	1,702
Wealth index														
Lowest	69.0	11.3	16.6	3.0	0.1	100.0	839	50.1	18.8	6.6	2.1	0.0	100.0	2,723
Second	82.0	6.0	7.6	4.4	0.1	100.0	688	64.9	24.4	7.8	2.8	0.1	100.0	2,827
Middle	80.7	7.3	7.9	3.7	0.4	100.0	540	65.3	25.9	5.6	3.1	0.0	100.0	2,858
Fourth	85.0	4.5	7.1	3.0	0.4	100.0	482	69.2	22.0	6.2	2.6	0.0	100.0	2,741
Highest	79.1	1.9	17.5	1.2	0.3	100.0	635	83.9	9.0	5.1	1.8	0.2	100.0	2,801
Total	78.2	6.6	11.9	3.1	0.2	100.0	3,184	71.1	20.1	6.3	2.5	0.1	100.0	13,951

Note: Total includes one woman and seven men missing information on education. 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.

2.5 HOUSING CHARACTERISTICS

In the Household Questionnaire, respondents were asked about characteristics of their households, including access to electricity, source of drinking water, type of sanitation facilities, fuel used for cooking, and main housing materials. Table 2.8 summarizes this information by residence.

In Bangladesh, 41 percent of households have access to electricity. Coverage of electricity has increased by 9 percentage points since 1999-2000. There is a wide urban-rural gap with regard to access to electricity, with three in four households in urban areas and less than one in three households in rural areas having electricity. This gap, though wide, has narrowed since 1999-2000.

Information on household source of drinking water is important because potentially fatal diseases, including typhoid, cholera, and dysentery, are prevalent in unprotected water sources. Tubewells are the predominant source of drinking water throughout Bangladesh. Almost seven in ten households in urban areas and more than nine in ten households in rural areas obtain drinking water from tubewells. Piped water is accessible only in urban areas; around one-third of urban households drink piped water, mainly piped inside the dwelling. The household drinking water was also tested for levels of arsenic. The results are presented in the last section of this chapter.

Access to adequate sanitation facilities is an important determinant of health conditions. Table 2.8 shows that 86 percent of Bangladeshi households have some type of sanitation facility, including 59 percent that have hygienic toilets (septic tank/modern toilets, water-sealed/slab latrines, and pit latrines). As expected, sanitation facilities vary between rural and urban areas. Only 55 percent of rural households have hygienic toilets, compared with 71 percent of urban households. Moreover, 16 percent of rural households have no facility at all, compared with only 4 percent of urban households.

A question about fuel used for cooking was also asked in the Household Questionnaire. Two types of fuel are predominantly used for cooking in Bangladesh: wood and crop residue. More than one-third of all households (35 percent) use wood; almost half use crop residue or straw for cooking. In urban areas, wood (40 percent) is the primary fuel used for cooking, followed by liquid gas or gas (31 percent), whereas the majority of rural residents depend on crop residue (56 percent), followed by wood (34 percent). In urban areas, one in five households uses crop residue as fuel for cooking.

Tin is the most common roofing material in Bangladesh, accounting for 72 percent of rural households and 86 percent of urban households. However, urban and rural households vary widely in the use of cement or concrete for roofs. In urban areas, 23 percent of households live in dwellings with cement or concrete roofs, while in rural areas only 4 percent of household roofs are made of the same material. Since 1999-2000, tin roofing has become more popular in both urban and rural areas; in rural areas, the use of bamboo or thatch for roofing has declined dramatically.

Almost half of all 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 34 percent live in houses with tin walls. Tin as a material for walls has become almost twice as popular both in urban and rural areas in 2004 compared with 1999-2000. Urban households live in more solid dwellings than rural households. More than four in ten urban households live in structures with brick or cement walls, compared with only 9 percent of rural households.

Table 2.8 Household characteristics

Percent distribution of households by household characteristics, according to residence, Bangladesh 2004

Household	Residence		
characteristic	Urban	Rural	Total
Electricity			
Yes	76.6	30.4	40.6
No	23.4	69.5	59.4
Total	100.0	100.0	100.0
Source of drinking water			
Piped inside dwelling	23.3	0.0	5.1
Piped outside dwelling	7.8	0.1	1.8
Tubewell	65.5	92.9	86.8
Shallow tubewell	0.1	0.3	0.3
Deep tubewell	2.4	3.2	3.0
Surface well/other well	0.1	1.2	1.0
Pond/tank/lake	0.8	1.9	1.6
River/stream	0.1	0.4	0.3
Total	100.0	100.0	100.0
Sanitation facility			
Septic tank/modern toilet	29.5	3.2	9.0
Water-sealed/slab latrine	18.5	12.8	14.1
Pit latrine	23.1	39.0	35.5
Open latrine	23.0	26.7	25.9
Hanging latrine	1.7	1.9	1.9
No facility/bush/field	4.2	16.4	13.7
Total	100.0	100.0	100.0
Cooking fuel			
Wood	40.2	34.0	35.3
Crop residue	20.2	56.3	48.3
Dung cakes	5.5	8.8	8.1
Liquid gas/gas	30.9	0.5	7.2
Other	3.2	0.4	1.0
Total	100.0	100.0	100.0
Main roof material			
Katcha (bamboo/thatch)	4.2	9.7	8.5
Tin	72.1	86.4	83.3
Cement, concrete, or tile	23.4	3.8	8.1
Total	100.0	100.0	100.0
Main wall material			
Jute/bamboo/mud (katcha)	30.1	52.5	47.6
Wood	1.2	1.8	1.6
Brick/cement	44.4	9.2	16.9
Tin	24.3	36.5	33.8
Total	100.0	100.0	100.0
Floor material			
Earth/bamboo (katcha)	52.5	93.7	84.6
Wood	1.5	0.2	0.5
Cement/concrete	45.9	5.9	14.7
Total	100.0	100.0	100.0
Food consumption			
Deficit in whole year	8.5	13.4	12.3
Sometimes deficit	29.5	38.6	36.6
Neither deficit nor surplus	42.9	35.2	36.9
Surplus	19.1	12.8	14.2
Total	100.0	100.0	100.0
Number of households	2,306	8,194	10,500

The type of material used for flooring is an indicator of economic standing of the household as well as an indicator of potential exposure to disease-causing agents. The most commonly used floor materials in Bangladesh are earth or bamboo. The other floor materials used in the country are cement or concrete. Forty-six percent of urban households have cement floors; earth flooring is almost universal in rural areas (94 percent).

In order to get a measure of a household's economic vulnerability, the Household Questionnaire asked respondents whether they thought their household was a surplus or deficit household in terms of food consumption. One in eight households seems to experience food deficit throughout the year, while almost half of the households face food deficit at least some time in the year. Rural households are more likely than urban households to face food deficit at least sometimes in the year (52 versus 38 percent). Since 1999-2000, economic vulnerability, measured in terms of food deficit faced by the households, seems to have decreased. About 18 percent of respondents in 1999-2000 reported that their household faced food shortages throughout the year, compared with 12 percent in 2004.

2.6   HOUSEHOLD POSSESSIONS

Information on possession of durable goods, a homestead, and land is presented in Table 2.9. Ownership of a radio or television is a measure of access to mass media; telephone ownership measures access to efficient communication; and bicycle and motorcycle ownership is a measure of access to means of transportation. In general, ownership of these items has a bearing on households' access to information and health; along with other data, this information can also be used to rank households according to economic status.

Table 2.9 Household durable goods and land ownership

Percentage of households possessing various durable consumer goods, and ownership of land, according to residence, Bangladesh 2004

Ownership	Residence		Total
	Urban	Rural	
Durable goods			
Almirah or wardrobe	46.9	24.1	29.1
Table	65.5	61.5	62.3
Chair/bench	67.9	63.7	64.7
Watch/clock	79.3	62.2	66.0
Cot/bed	93.5	91.1	91.7
Radio	36.5	28.6	30.4
Television	49.1	15.5	22.9
Bicycle	18.3	25.8	24.2
Motorcycle	4.0	1.3	1.9
Sewing machine	12.6	3.3	5.4
Telephone	15.6	1.8	4.8
None of the above	4.0	5.7	5.3
Land ownership			
Owns a homestead	90.2	95.5	94.3
Owns other land	38.5	56.3	52.4
Neither of the above	9.0	4.0	5.1
Number of households	2,306	8,194	10,500

More than 90 percent of households in urban and rural areas own a cot or bed. More than 60 percent of households own a watch or clock, a chair or bench, or a table. Almost 30 percent have an almirah or wardrobe. The urban-rural differentials in ownership of the above durable goods are small except for ownership of a watch or clock, or an almirah, which is markedly higher in urban areas. Thirty percent of households have radios, and 23 percent have a television. As for the two items of means of transportation, 24 percent of households own a bicycle, and 2 percent own a motorcycle. Only 1 in 20 households has a telephone or a sewing machine. Rural households are more likely to own bicycles than are urban households. Not surprisingly, urban households are more likely to own televisions, radios, telephones, motorcycles, and sewing machines.

Ownership of almost all durable consumer goods has increased in rural areas since 1999-2000, in urban areas, there has been no increase in ownership of various items and for some items, a smaller proportion of households own the item. For example, ownership of radios in urban areas has decreased from 45 to 37 percent, while it has remained unchanged in rural areas at 29 percent. In rural areas, the proportion of households with television has increased from 10 to 16 percent, whereas television penetration in urban areas is at 49 percent, the same as in 1999-2000.

Respondents were also asked about their household's ownership of a house and other land. Ninety-four percent of households own a homestead, and slightly more than half own land other than a homestead. Ownership of a homestead or land is less common in urban areas than in rural areas. In the past four years, ownership of a homestead has increased by almost 10 percentage points from 81 to 90 percent in urban areas and from 88 to 96 percent in rural areas.

2.7   WEALTH INDEX

In this report, an index of household economic status was created and used as a background characteristic with information on household ownership of assets and use of selected services.[1] The economic status index used here was developed and tested in a large number of countries in relation to inequities in household income, use of health services, and health outcomes (Gwatkin et al., 2000). It is an indicator of the level of wealth that is consistent with expenditure and income measures (Rutstein, 1999).

The wealth index was constructed using principal components analysis (Rutstein and Johnson, 2004). Asset information was collected with the 2004 BDHS Household Questionnaire and covered information on household ownership of a number of consumer items, ranging from a television to a bicycle, as well as dwelling characteristics, such as source of drinking water, sanitation facilities, and type of material used for flooring.

Each asset was assigned a weight (factor score) generated through principal components analysis, and the resulting asset scores were standardized in relation to a normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household; individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from one (lowest) to five (highest). A single asset index was developed for the whole sample; indexes were not prepared for urban and rural populations.

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[1] Variables include ownership of items listed in Table 2.9, except homestead; household characteristics in Table 2.8, except food consumption; and whether a household has at least one domestic worker.

2.8   ARSENIC IN HOUSEHOLD DRINKING WATER

Arsenic in drinking water is a hazard to human health. It has attracted much attention since recognition in the 1990s of its wide occurrence in well water in Bangladesh. The main source of arsenic in drinking water is arsenic-rich rocks through which the water has filtered. It may also occur because of mining or industrial activity in some areas.

In Bangladesh, water is considered to have an unsafe level of arsenic if the measured level of arsenic is equal to or greater than 50 parts per billion (ppb). A public health program has been undertaken throughout Bangladesh to test tubewell water for arsenic levels. The tubewells that have had their water tested are marked either red or green; a red mark means its water has an unsafe level of arsenic, and green implies that the water is not highly contaminated with arsenic. In addition, mass media communication strategies have been used to make communities aware of the importance of avoiding drinking arsenic-contaminated water.

The Bangladesh Arsenic Mitigation Water Supply Project (BAMWSP) reports that 29 percent of the 4.9 million tubewells tested using Aqua kit had arsenic contamination at or greater than 50 ppb (BAMWSP).

BAMWSP's indicator, "proportion of tubewells having arsenic-contaminated water" provides only an indication of the proportion of the population exposed to arsenic-contaminated water—it is not an actual measure of the proportion of households consuming arsenic-contaminated water. To provide such an estimate for Bangladesh, specially trained interviewers tested the household drinking water using Hach's EZ Arsenic Kit.[2] Household drinking water was tested in 10,465 of the 10,500 households surveyed. In addition, the survey collected information on respondents' awareness of the significance of arsenic in water and of the meaning of the color marking on the tubewells for those obtaining drinking water from a tubewell.

The results show that, overall, 84 percent of household respondents had heard about the problem of arsenic in water. This included 75 to 78 percent of households in Barisal, Sylhet, and Rajshahi divisions and more than 90 percent in Dhaka and Khulna divisions (Figure 2.4). The awareness of the problem of arsenic in water increases from 69 percent among households in the lowest wealth quintile to 97 percent among those in the highest quintile.

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[2] Respondents to the Household Questionnaire were asked to provide a glass of the water that the household uses for drinking. Interviewers poured 50 milliliters of that water into a special testing vessel, added two reagents in the prescribed order, and quickly closed the vessel with a lid to which a testing strip was attached. Twenty minutes later, the testing strip was removed and matched with a color chart to determine the level of arsenic in the water.

Figure 2.4 Percentage of Household Respondents Who Know About Arsenic in Water, According to Background Characteristics, Bangladesh 2004

RESIDENCE
Urban — 90
Rural — 82

DIVISION
Barisal — 78
Chittagong — 83
Dhaka — 91
Khulna — 95
Rajshahi — 75
Sylhet — 78

SOURCE OF DRINKING WATER
Piped into residence — 84
Piped outside residence — 87
Tubewell — 84
Shallow tubewell — 91
Deep tubewell — 81
Surface well, pond, lake, river, or stream — 72

WEALTH INDEX
Lowest — 69
Second — 79
Middle — 85
Fourth — 93
Highest — 97

Percent
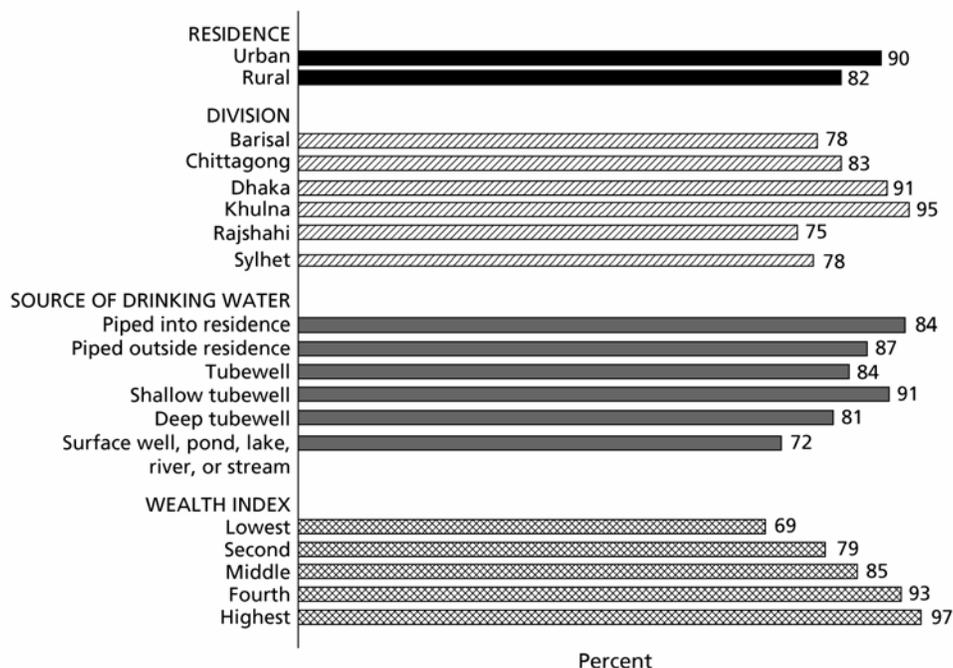
BDHS 2004

Table 2.10 shows that one in twelve households had elevated arsenic levels (equal to or greater than 50 ppb) in their drinking water on the day of the interview. Overall, households in Chittagong division, followed by Sylhet division, are most likely to have arsenic-contaminated drinking water (22 and 12 percent, respectively). Arsenic levels are not associated with wealth index quintile. Although households in the highest wealth quintile are least likely to drink water with high arsenic levels, those in the fourth quintile are most likely to have arsenic in their drinking water. According to Table 2.11, households with higher levels of arsenic in drinking water are more likely to be aware of the problem.

Table 2.10 Level of arsenic in household drinking water

Percent distribution of households by level of arsenic in drinking water, according to background characteristics, Bangladesh 2004

Background characteristic	Level of arsenic (parts per billion)		Total	Number of households tested for arsenic
	<50	≥50		
Residence				
Urban	93.1	6.9	100.0	2,293
Rural	91.1	8.9	100.0	8,173
Division				
Barisal	98.7	1.3	100.0	631
Chittagong	78.0	22.0	100.0	1,811
Dhaka	92.3	7.7	100.0	3,357
Khulna	93.1	6.9	100.0	1,288
Rajshahi	97.7	2.3	100.0	2,748
Sylhet	88.5	11.5	100.0	630
Source of drinking water[1]				
Piped into residence	99.2	0.8	100.0	535
Piped outside residence	98.1	1.9	100.0	189
Tubewell	90.4	9.6	100.0	9,089
Shallow tubewell	(89.1)	(10.9)	100.0	27
Deep tubewell	99.1	0.9	100.0	317
Surface well, pond, lake, river or stream	99.1	0.9	100.0	308
Wealth index				
Lowest	90.7	9.3	100.0	2,360
Second	92.1	7.9	100.0	2,203
Middle	90.6	9.4	100.0	2,021
Fourth	90.3	9.7	100.0	1,951
Highest	93.9	6.1	100.0	1,930
Heard of arsenic				
Yes	90.3	9.7	100.0	8,781
No	97.9	2.1	100.0	1,664
Total	91.5	8.5	100.0	10,465

Note: Total includes 20 households missing information on "heard of arsenic"; they are not shown separately. Figures in parentheses are based on 25-49 unweighted cases.
[1] Water that was used for arsenic testing

Table 2.11 presents data on households that obtain their drinking water from tubewells. Six out of ten of these households reported that the tubewells they use for drinking water are not marked. A puzzling finding was that almost half (45 percent) of the households that obtain drinking water from a red-marked tubewell did not have unsafe levels of arsenic when their drinking water was tested. This may indicate that arsenic levels can vary over time, or that there was some error in the original marking of the tubewell, or that there were measurement errors associated with the use of the test kits.

Table 2.11 Arsenic levels and knowledge of arsenic and markings on tubewells

Percent distribution of households that obtain their drinking water from tubewells by level of arsenic in water, according to whether they had heard of arsenic in drinking water and the reported marking on the tubewell used by the household for drinking water, Bangladesh 2004

Knowledge of arsenic/ marking on tubewell	Level of arsenic (ppb)		Total	Number of households tested
	<50	≥50		
Heard of arsenic				
Yes	89.3	10.7	100.0	7,890
No	97.7	2.3	100.0	1,517
Marking on tubewell				
Red	45.2	54.8	100.0	614
Green	94.0	6.0	100.0	2,962
Not marked	93.6	6.4	100.0	5,611
Don't know	95.8	4.2	100.0	241
Total	90.7	9.3	100.0	9,427

Note: Table includes 19 households with missing information on awareness of arsenic in drinking water.
ppb = parts per billion

The results of the 2004 BDHS and BAMWSP water testing efforts suggest a need to explore the following possibilities:

(1) Awareness of unsafe levels of arsenic in drinking water may have caused some households to shift to safer sources of water.

(2) Arsenic levels in water may be different when measured directly from the source and after storage of the same water. It is thought that iron in water may reduce the arsenic in stored water. (The International Centre for Diarrhoeal Disease Research, Bangladesh [ICDDR,B] is currently testing this hypothesis in Matlab.)

(3) Measurements of arsenic levels in water vary over time. Tests of water from the same source can show different levels of arsenic when measured on different dates; results in Table 2.11 indicate some support for this statement.

CHARACTERISTICS OF SURVEY RESPONDENTS

3

3.1 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Information on the basic characteristics of women and men interviewed in the survey is essential for the interpretation of findings presented later in the report. The 2004 BDHS interviewed 11,440 ever-married women under the age of 50 years, and 4,297 men in the age group 15-54 for information on individual respondents.

Table 3.1.1 shows the distribution of ever-married and currently married women respondents by various background characteristics. More than nine in ten (93 percent) ever-married women under 50 years of age are currently married; almost three in four women reported having a marriage certificate. The age distribution of ever-married women is very similar to that found in the last three BDHS surveys; a little more than half are under 30 years of age.

Twenty-three percent of the women live in urban areas. The distribution of female respondents by division is similar to that of the 1999-2000 BDHS. Nearly one-third live in Dhaka and about one-quarter in Rajshahi. Eighteen percent of the women respondents live in Chittagong and 12 percent in Khulna. The proportion of respondents from Sylhet and Barisal are smaller—6 percent from each division.

There has been an increase in women's educational attainment. The percentage of ever-married women with at least some secondary education has increased from 18 percent in 1996-1997 to 29 percent in 2004. On the other hand, the 2004 BDHS shows that about 40 percent of female respondents still have no education. Nine out of ten women are Muslim, with most of the remainder being Hindu.

The 2004 BDHS interviewed both never-married and ever-married men in the age group 15-54 by randomly selecting one eligible man in every other household included in the sample for the 2004 survey. The 2004 survey is the first of the four BDHS surveys to include never-married men in the sample. About one-third of the male respondents in the 2004 BDHS have never married. The distribution of the male respondents by background characteristics is presented in Table 3.1.2. About 25 percent of the ever-married male respondents are in age group 15-29, compared with 95 percent of the never-married males. Less than 2 percent of the ever-married males are divorced, separated or widowed, compared to nearly 8 percent of the female respondents.

The urban-rural distribution of ever-married males is similar to the urban-rural distribution of female respondents. However, the proportion of never-married men living in urban areas is slightly higher (26 percent) than the proportion of ever-married men (23 percent). The distribution of ever-married male respondents by administrative division shows that Dhaka (31 percent) and Rajshahi (29 percent) have the largest proportions of respondents, while Sylhet and Barisal have the smallest proportions. The distribution by division of never-married men is slightly different. The largest proportion of never-married male respondents is in Dhaka (31 percent), followed by Chittagong (21 percent) and Rajshahi (20 percent).

About three in ten ever-married men have at least some secondary education, while another three in ten have no education. The educational attainment of never-married men is higher than ever-married men, perhaps because most of the never-married men belong to a relatively younger cohort; never-married men are almost twice as likely to have at least some secondary education compared to ever-married men.

The distribution of male respondents by religion is similar to that of the women respondents; nine out of ten respondents are Muslims.

Table 3.1.1 Background characteristics of respondents: women

Percent distribution of ever-married women and currently married women age 10-49, by selected background characteristics, Bangladesh 2004

Background characteristic	Ever-married women			Currently married women		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted Number
Age						
10-14	1.3	150	140	1.4	145	136
15-19	14.0	1,598	1,563	14.5	1,536	1,498
20-24	19.2	2,202	2,202	20.0	2,121	2,112
25-29	17.6	2,013	2,012	18.3	1,935	1,929
30-34	15.7	1,793	1,783	15.9	1,683	1,673
35-39	12.7	1,457	1,480	12.4	1,309	1,330
40-44	10.1	1,160	1,185	9.3	982	1,005
45-49	9.3	1,066	1,075	8.2	870	870
Marital status						
Married	92.5	10,582	10,553	100.0	10,582	10,553
Divorced, separated or widowed	7.5	858	887	na	na	na
Has marriage certificate						
Yes	73.1	8,360	8,234	73.8	7,810	7,675
No	26.9	3,073	3,198	26.2	2,768	2,874
Residence						
Urban	22.6	2,586	3,904	22.4	2,372	3,578
Rural	77.4	8,854	7,536	77.6	8,210	6,975
Division						
Barisal	6.3	719	1,360	6.4	674	1,271
Chittagong	17.8	2,041	2,069	17.7	1,877	1,898
Dhaka	31.2	3,570	2,589	31.3	3,315	2,399
Khulna	12.2	1,397	1,708	12.2	1,296	1,587
Rajshahi	26.2	2,994	2,564	26.3	2,782	2,376
Sylhet	6.3	719	1,150	6.0	638	1,022
Education						
No education	41.2	4,713	4,419	39.6	4,187	3,896
Primary incomplete	20.5	2,348	2,327	20.6	2,176	2,152
Primary complete	8.8	1,011	1,054	9.1	958	996
Secondary incomplete	22.2	2,541	2,648	23.2	2,457	2,547
Secondary complete or higher	7.2	827	992	7.6	804	962
Religion						
Islam	90.1	10,310	10,182	90.0	9,524	9,389
Hinduism	9.0	1,032	1,192	9.1	961	1,100
Buddhism	0.1	12	13	0.1	11	12
Christianity	0.7	80	47	0.8	80	46
Other/none/missing	0.1	6	6	0.1	6	6
Total	100.0	11,440	11,440	100.0	10,582	10,553

na = Not applicable

Table 3.1.2 Background characteristics of respondents: men

Percent distribution of ever-married men and never-married men age 15-54, by selected background characteristics, Bangladesh 2004

Background characteristic	Ever-married men			Never-married men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted Number
Age						
15-19	1.0	28	30	53.9	794	586
20-24	8.0	227	237	29.4	433	336
25-29	14.7	416	431	11.7	173	150
30-34	17.7	499	604	3.6	53	46
35-39	16.1	456	582	1.3	19	11
40-44	17.4	491	579	0.1	1	1
45-49	16.4	464	474	0.1	1	2
50-54	8.6	242	228	0.0	0	0
Marital status						
Never married	na	na	na	100.0	1,474	1,132
Married	98.5	2,780	3,133	na	na	na
Divorced, separated or widowed	1.5	43	32	na	na	na
Residence						
Urban	23.3	657	1,106	26.1	385	408
Rural	76.7	2,166	2,059	73.9	1,090	724
Division						
Barisal	5.3	148	329	5.2	77	123
Chittagong	15.1	426	474	21.2	313	236
Dhaka	31.2	880	752	31.4	462	260
Khulna	13.8	388	524	12.5	184	174
Rajshahi	29.0	819	803	20.0	295	196
Sylhet	5.7	160	283	9.7	143	143
Education						
No education	31.2	879	964	12.1	178	124
Primary incomplete	30.1	850	950	20.5	302	243
Primary complete	7.6	213	228	8.9	131	94
Secondary incomplete	18.0	508	576	36.4	537	391
Secondary complete or higher	13.2	372	447	22.2	327	280
Religion						
Islam	89.4	2,523	2,822	88.3	1,302	999
Hinduism	9.8	276	328	10.3	152	122
Buddhism	0.0	1	2	0.1	2	3
Christianity	0.7	21	11	1.1	16	7
Other/none/missing	0.8	24	15	1.3	20	11
Total	100.0	2,823	3,165	100.0	1,474	1,132

na = Not applicable

Because the men interviewed in the BDHS survey were selected from a sub-sample of households in which ever-married women were interviewed, it is possible to match married male respondents with their wives to obtain a set of matched couples. Figure 3.1 shows the husband-wife differential in age for 2,533 couples. It is not surprising that for almost all couples, the husband is older than the wife, because it is the tradition in Bangladesh. However, it is noteworthy that the husband is at least ten years older than the wife among 44 percent of the couples, including 13 percent in which the wife is at least 15 years younger than the husband.

Figure 3.1 Differences (%) in Husband's and Wife's Ages (Husband's Age Minus Wife's Age), 1999-2000 and 2004 BDHS
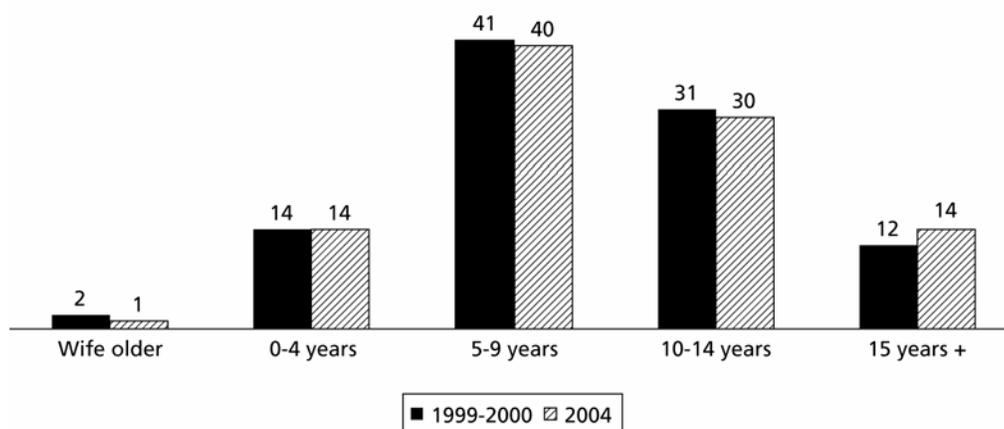
3.2 EDUCATIONAL ATTAINMENT

Tables 3.2.1 and 3.2.2 present the distributions of female and male respondents, respectively, by the highest level of education completed or attended, according to age, urban-rural residence, division, and wealth index. A large majority of females and a majority of male respondents have not gone beyond the primary level of education. Generally, younger persons have reached higher levels of schooling than older people, as have urban residents. For example, 40 percent of women in urban areas have attended at least some secondary school, compared with 26 percent of rural women. Among the divisions, Barisal division has the largest and Sylhet division the lowest proportion of women and men who have completed secondary school. The educational level of women in Sylhet is worrisome, as a majority of women reported that they did not attend school at all, and only 17 percent of women had attended or completed secondary education. As expected, the level of education increases with the wealth index. For example, among women and men in the lowest quintile, only 6 and 12 percent, respectively, have at least some secondary education, compared with almost 60 percent of women and 70 percent of men in the highest quintile.

Table 3.2.1 Level of education by background characteristics: women

Percent distribution of ever-married women by highest level of schooling attended or completed, and median number of years of schooling, according to background characteristics, Bangladesh 2004

Background characteristic	No education	Primary incomplete	Primary complete[1]	Secondary incomplete	Secondary complete or higher[2]	Total	Number of women	Median years of schooling
Age								
10-14	12.3	20.5	18.7	48.4	0.0	100.0	150	4.6
15-19	15.3	22.5	10.7	46.2	5.2	100.0	1,598	4.7
20-24	26.5	19.4	9.7	32.2	12.2	100.0	2,202	4.3
25-29	41.4	21.0	9.2	18.5	9.9	100.0	2,013	1.6
30-34	49.4	22.0	7.7	14.4	6.5	100.0	1,793	0.0
35-39	55.7	21.2	6.7	11.5	5.0	100.0	1,457	0.0
40-44	57.3	17.9	8.0	12.4	4.4	100.0	1,160	0.0
45-49	62.8	18.4	8.1	7.4	3.3	100.0	1,066	0.0
Residence								
Urban	33.0	18.8	8.0	25.0	15.2	100.0	2,586	3.7
Rural	43.6	21.0	9.1	21.4	4.9	100.0	8,854	1.1
Division								
Barisal	25.3	27.3	13.3	24.5	9.5	100.0	719	3.7
Chittagong	40.4	18.3	8.8	24.4	8.2	100.0	2,041	2.4
Dhaka	42.1	19.8	9.0	20.3	8.8	100.0	3,570	1.5
Khulna	32.9	23.7	7.7	28.9	6.7	100.0	1,397	3.2
Rajshahi	45.4	20.9	6.9	21.4	5.4	100.0	2,994	0.5
Sylhet	53.0	16.3	13.7	13.5	3.5	100.0	719	0.0
Wealth index								
Lowest	67.9	21.0	4.8	6.1	0.2	100.0	2,279	0.0
Second	51.9	24.4	7.5	14.9	1.3	100.0	2,290	0.0
Middle	40.1	23.9	9.1	23.6	3.2	100.0	2,267	1.9
Fourth	28.9	19.9	13.0	30.6	7.6	100.0	2,307	4.1
Highest	17.4	13.5	9.6	35.7	23.7	100.0	2,297	6.3
Total	41.2	20.5	8.8	22.2	7.2	100.0	11,440	1.8

[1] Primary complete is defined as completing grade 5
[2] Secondary complete is defined as completing grade 10

Regarding educational differences between spouses, in half of the couples both have some education, and in one in five couples the wife has no education and neither does the husband (Figure 3.2). As in 1999-2000, for three in ten couples, only one partner is educated. However, there is a slight decrease in the proportion of couples in which only the husband is educated.

Figure 3.2 Education of Couples, 1999-2000 and 2004 BDHS

Husband and wife both educated: 49 (2004), 44 (1999-2000)
Husband educated, wife not: 20 (2004), 21 (1999-2000)
Wife educated, husband not: 11 (2004), 10 (1999-2000)
Husband and wife: no education: 20 (2004), 25 (1999-2000)

Percent

■ 1999-2000 ☒ 2004
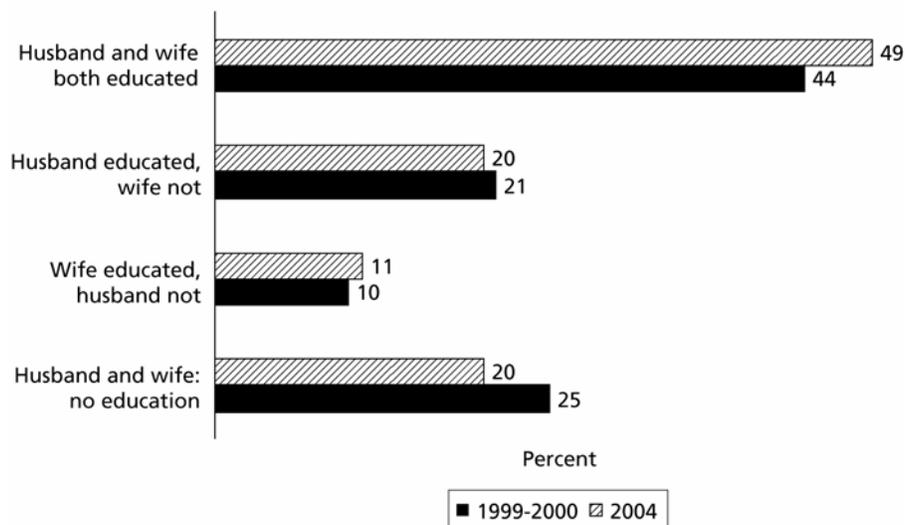
Table 3.2.2 Level of education by background characteristics: men

Percent distribution of men by highest level of schooling attended or completed, and median number of years of schooling, according to background characteristics, Bangladesh 2004

Background characteristic	Highest level of schooling attended or completed					Total	Number of men	Median years of schooling
	No education	Primary incomplete	Primary complete[1]	Secondary incomplete	Secondary complete or higher[2]			
Age								
15-19	12.0	21.6	10.7	43.4	12.5	100.0	822	6.5
20-24	15.0	28.9	8.8	23.4	23.8	100.0	660	4.7
25-29	24.0	24.6	6.5	24.6	20.3	100.0	589	4.2
30-34	29.8	26.6	7.1	21.8	14.8	100.0	552	3.0
35-39	34.6	28.2	7.4	13.8	16.0	100.0	475	1.4
40-44	31.6	31.5	8.1	17.9	10.9	100.0	491	2.1
45-49	33.8	27.7	5.2	18.1	15.2	100.0	465	1.7
50-54	31.9	30.7	9.2	13.0	15.2	100.0	242	2.2
Residence								
Urban	18.5	22.2	7.5	25.2	26.6	100.0	1,042	6.0
Rural	26.6	28.3	8.2	24.1	12.9	100.0	3,255	3.2
Division								
Barisal	13.2	31.4	5.7	26.3	23.4	100.0	225	4.9
Chittagong	25.2	26.7	7.6	23.7	16.8	100.0	739	3.6
Dhaka	27.2	23.7	8.7	24.7	15.7	100.0	1,342	3.8
Khulna	18.8	27.5	9.7	26.6	17.4	100.0	573	4.4
Rajshahi	27.6	27.4	6.5	22.4	16.1	100.0	1,114	3.2
Sylhet	20.4	33.4	10.6	25.6	10.0	100.0	304	3.6
Wealth index								
Lowest	49.5	34.0	4.4	10.5	1.6	100.0	717	0.0
Second	33.4	34.7	7.8	18.4	5.6	100.0	869	1.5
Middle	22.6	29.3	11.6	25.6	10.9	100.0	846	3.8
Fourth	16.5	24.0	8.0	32.9	18.6	100.0	892	6.1
Highest	7.5	14.9	7.8	30.8	38.9	100.0	973	9.3
Total	24.6	26.8	8.0	24.3	16.2	100.0	4,297	3.8

[1] Primary complete is defined as completing grade 5
[2] Secondary complete is defined as completing grade 10

3.3   EXPOSURE TO MASS MEDIA

Information access is essential to increase people's knowledge and awareness of what is taking place around them, which may affect their perceptions and behavior. In the survey, exposure to media was assessed by asking respondents how frequently they read a newspaper, watched television, or listened to a radio. It is important to know the subgroups that are more or less likely to be reached by the media for purposes of planning programs intended to spread information about health and family planning. Tables 3.3.1 and 3.3.2 show the percentage of female and male respondents, respectively, who are exposed to different types of mass communication media, by background variables.

Table 3.3.1 Exposure to mass media: women

Percentage of ever-married women who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Bangladesh 2004

Background characteristic	No media	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	Number of women
Age						
10-14	32.4	4.8	49.0	48.1	2.9	150
15-19	31.8	7.7	52.7	44.6	3.6	1,598
20-24	33.7	9.3	53.7	38.7	4.9	2,202
25-29	38.9	7.5	49.3	32.9	3.1	2,013
30-34	44.5	5.8	43.7	30.4	2.1	1,793
35-39	46.6	5.5	40.4	28.7	1.9	1,457
40-44	50.5	6.2	38.0	27.0	2.2	1,160
45-49	59.4	3.7	29.1	22.8	1.2	1,066
Residence						
Urban	21.5	15.4	72.6	33.4	5.5	2,586
Rural	47.7	4.3	37.7	33.4	2.2	8,854
Division						
Barisal	49.4	7.4	29.2	36.7	3.3	719
Chittagong	41.5	7.4	45.5	35.1	3.4	2,041
Dhaka	36.2	8.1	53.3	33.4	3.0	3,570
Khulna	38.0	6.6	48.9	37.2	3.1	1,397
Rajshahi	46.2	4.8	40.9	31.4	2.2	2,994
Sylhet	51.4	7.4	37.3	25.6	3.8	719
Education						
No education	58.9	0.0	30.1	23.4	0.0	4,713
Primary incomplete	43.3	0.7	43.0	34.2	0.3	2,348
Primary complete	33.7	3.4	50.8	38.4	1.6	1,011
Secondary incomplete	22.8	13.3	63.0	45.5	6.7	2,541
Secondary complete or higher	7.4	47.7	81.1	44.8	17.2	827
Wealth index						
Lowest	71.7	0.3	19.4	16.2	0.1	2,279
Second	56.7	1.1	28.9	28.5	0.5	2,290
Middle	41.9	2.9	38.7	37.4	1.3	2,267
Fourth	27.2	6.5	58.2	44.7	3.3	2,307
Highest	11.7	23.4	82.3	39.9	9.5	2,297
Total	41.8	6.8	45.6	33.4	2.9	11,440

Table 3.3.2 Exposure to mass media: men

Percentage of men who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Bangladesh 2004

Background Characteristic	No media	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	Number of men
Age						
15-19	8.1	37.8	82.6	62.7	20.3	822
20-24	8.9	42.2	83.2	58.1	21.1	660
25-29	13.8	34.0	75.1	52.9	16.7	589
30-34	18.9	32.7	69.5	49.2	17.3	552
35-39	19.5	28.9	67.9	46.8	14.7	475
40-44	22.5	30.8	63.7	44.3	14.4	491
45-49	31.5	25.3	55.4	43.7	12.9	465
50-54	32.4	28.8	48.8	40.1	12.9	242
Residence						
Urban	9.3	50.8	84.3	45.8	21.4	1,042
Rural	19.8	28.2	67.2	53.6	15.6	3,255
Division						
Barisal	20.8	34.6	59.4	58.3	20.5	225
Chittagong	11.9	35.7	79.1	53.8	15.9	739
Dhaka	19.2	30.9	68.9	49.3	15.0	1,342
Khulna	15.3	44.6	74.8	56.9	27.0	573
Rajshahi	19.2	29.3	69.0	49.6	14.2	1,114
Sylhet	15.0	35.8	74.2	50.6	17.8	304
Education						
No education	35.3	0.2	51.9	42.6	0.1	1,057
Primary incomplete	21.8	11.4	65.9	51.6	5.5	1,152
Primary complete	10.1	42.8	76.9	55.9	18.3	345
Secondary incomplete	5.9	53.3	84.7	57.6	28.7	1,045
Secondary complete or higher	2.7	87.0	86.9	55.0	43.7	698
Wealth index						
Lowest	35.8	9.0	48.9	43.9	4.2	717
Second	24.7	15.7	61.9	48.0	8.0	869
Middle	16.7	30.4	68.2	55.3	13.6	846
Fourth	10.4	39.2	79.9	57.4	23.5	892
Highest	3.5	65.7	91.1	52.5	31.5	973
Total	17.2	33.7	71.3	51.7	17.0	4,297

For both men and women, exposure to television is higher than exposure to radio or newspapers. Exposure to any media varies by gender; men are more likely to be exposed to any type of mass media than women (Figure 3.3). Seven percent of women and 34 percent of men read newspapers at least once a week, 46 percent of women and 71 percent of men watch television at least once a week, and 33 percent of women and 52 percent of men listen to the radio once a week. Only 3 percent of women and 17 percent of men are exposed to all three of these media sources. Forty-two percent of women and 17 percent of men have no access to mass media. Since 1999-2000, the proportion of women listening to the radio has increased moderately but it is still below the 1996-97 survey level. However, the exposure to television continues to increase substantially during the same period—around 30 percent during each interval between the surveys. On the other hand, in spite of progress in women's education, the proportion of ever-married women who reported reading newspapers has declined.

Figure 3.3 Percentage of Ever-Married Women and All Men Exposed to Various Media at Least Once a Week, 2004 BDHS

Media	Women	Men
No media	42	17
All three media	3	17
Radio	33	52
Television	46	71
Newspaper	7	34

Percent

☑ Women ■ Men

BDHS 2004
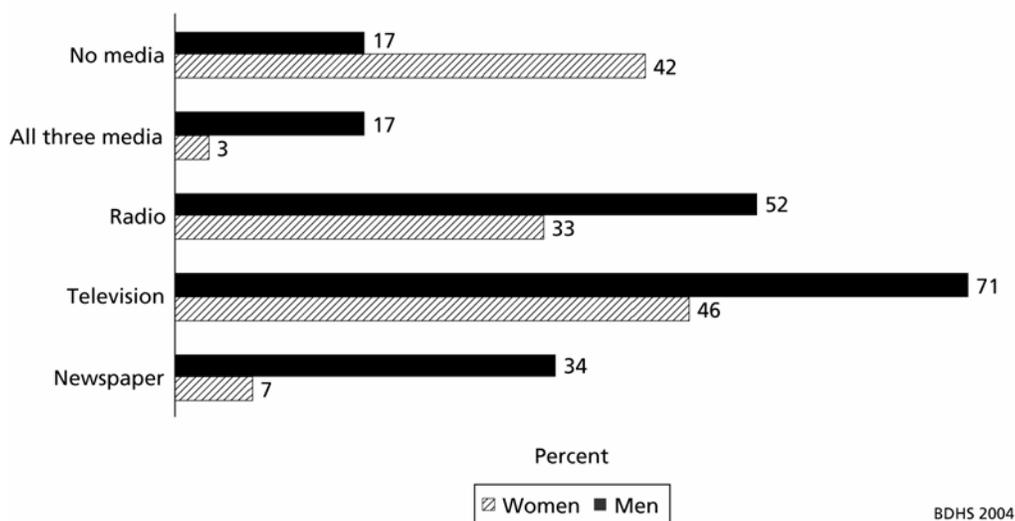
Although listening to the radio is more common among rural men than urban men, it is no surprise that urban residents are more likely to have access to television than rural residents. Exposure to television is found to be the least in Barisal division compared with the other administrative divisions. Listening to the radio and watching television are both negatively related to respondent's age.

Exposure to media is positively associated with educational attainment; the proportion with access to all three media outlets increases with increasing educational level of respondents. Similarly, access to all three media outlets increases as wealth increases for both sexes.

3.4   EMPLOYMENT

3.4.1   Employment Status

The BDHS asked respondents whether they were employed at the time of the survey and, if not, whether they were employed in the 12 months preceding the survey. Tables 3.4.1 and 3.4.2 show that 22 percent of ever-married women and 87 percent of men are currently employed. Most men and women who are employed work year-round.

Table 3.4.1 Employment status: women

Percent distribution of ever-married women by employment status and continuity of employment, according to background characteristics, Bangladesh 2004

Background characteristic	Not employed	Currently employed			Total	Number of women
		Work all year	Work seasonally	Work occasionally		
Age						
10-14	95.6	4.2	0.2	0.0	100.0	150
15-19	90.1	7.1	1.7	1.0	100.0	1,598
20-24	82.9	12.9	2.4	1.6	100.0	2,202
25-29	74.8	19.0	4.0	2.1	100.0	2,013
30-34	71.0	23.4	3.7	1.9	100.0	1,793
35-39	71.6	22.5	4.2	1.7	100.0	1,457
40-44	71.8	23.3	3.6	1.2	100.0	1,160
45-49	77.4	18.1	2.7	1.7	100.0	1,066
Residence						
Urban	74.4	21.6	2.2	1.9	100.0	2,586
Rural	78.7	16.3	3.4	1.6	100.0	8,854
Division						
Barisal	86.8	9.5	2.1	1.4	100.0	719
Chittagong	84.3	11.6	3.1	1.0	100.0	2,041
Dhaka	77.3	18.3	2.9	1.5	100.0	3,570
Khulna	76.3	17.2	3.7	2.8	100.0	1,397
Rajshahi	71.6	23.0	3.6	1.8	100.0	2,994
Sylhet	80.7	15.7	2.5	1.1	100.0	719
Education						
No education	70.7	22.8	4.6	1.9	100.0	4,713
Primary incomplete	78.5	15.8	3.1	2.5	100.0	2,348
Primary complete	85.4	11.3	2.2	1.2	100.0	1,011
Secondary incomplete	86.4	11.0	1.6	1.0	100.0	2,541
Secondary complete or higher	79.7	19.2	0.7	0.4	100.0	827
Wealth index						
Lowest	70.5	20.4	6.5	2.6	100.0	2,279
Second	73.6	20.6	3.7	2.1	100.0	2,290
Middle	78.3	17.7	2.8	1.2	100.0	2,267
Fourth	83.2	13.7	1.8	1.2	100.0	2,307
Highest	82.9	15.1	1.0	1.0	100.0	2,297
Total	77.7	17.5	3.1	1.6	100.0	11,440

The proportion currently employed among both men and women increases with age, and then plateaus after age 30. The lower employment among men under 25 is probably because many of them are enrolled in schools and colleges.

Table 3.4.2 Employment status: men

Percent distribution of men by employment status and continuity of employment, according to background characteristics, Bangladesh 2004

Background characteristic	Not employed	Currently employed			Total	Number of men
		Work all year	Work seasonally	Work occasionally		
Age						
15-19	40.7	47.3	7.6	4.4	100.0	822
20-24	20.8	67.8	8.5	2.9	100.0	660
25-29	6.7	80.5	9.6	3.2	100.0	589
30-34	3.0	86.9	8.1	2.0	100.0	552
35-39	0.9	89.0	8.7	1.2	100.0	475
40-44	1.8	89.7	7.3	1.2	100.0	491
45-49	2.8	88.9	7.4	0.9	100.0	465
50-54	0.9	91.5	6.2	1.3	100.0	242
Residence						
Urban	15.5	77.7	3.8	2.9	100.0	1,042
Rural	12.1	76.2	9.4	2.3	100.0	3,255
Division						
Barisal	16.3	74.4	6.4	2.9	100.0	225
Chittagong	15.4	72.3	10.5	1.8	100.0	739
Dhaka	14.3	75.2	7.3	3.2	100.0	1,342
Khulna	12.4	79.0	7.7	0.8	100.0	573
Rajshahi	9.1	80.3	7.8	2.8	100.0	1,114
Sylhet	13.7	76.0	8.3	1.9	100.0	304
Education						
No education	2.3	87.2	8.4	2.2	100.0	1,057
Primary incomplete	3.0	83.4	10.3	3.2	100.0	1,152
Primary complete	5.5	82.7	11.0	0.9	100.0	345
Secondary incomplete	25.3	64.5	7.1	3.1	100.0	1,045
Secondary complete or higher	30.7	64.2	3.9	1.2	100.0	698
Wealth index						
Lowest	3.7	84.1	10.3	1.9	100.0	717
Second	6.4	79.9	9.1	4.6	100.0	869
Middle	10.4	77.3	9.5	2.6	100.0	846
Fourth	19.2	71.3	7.8	1.7	100.0	892
Highest	22.1	72.2	4.4	1.4	100.0	973
Total	12.9	76.5	8.1	2.4	100.0	4,297

There are some divisional variations in the proportion currently employed. Men and women in Rajshahi division are most likely to be employed (91 and 28 percent, respectively), while those in Barisal are least likely to be employed; women in Barisal are only half as likely to be employed as their counterparts in Rajshahi.

Current employment for men shows a negative relation with educational level but for women the relationship of education to employment is not clear. Men with primary or lower education are generally fully employed compared with 75 percent or fewer of those who have attended secondary or higher education. The proportion currently employed decreases as the wealth status of respondents increases; however, the variations in employment by household economic status are much larger for men than for women.

3.4.2 Control over Women's Earnings

Women who were working and receiving cash earnings were asked who decides how their earnings are used. Out of 2,550 women who were currently employed, 2,291 earned cash. Table 3.5 shows that slightly less than half (47 percent) of working women decide by themselves how their cash earnings are used, while 40 percent make the decision jointly with someone else. One in eight women is not involved in making decisions on how her earnings are used.

Table 3.5 Decision on use of earnings

Percent distribution of currently employed, ever-married-women who receive cash earnings by person who decides how earnings are to be used, according to background characteristics, Bangladesh 2004

Background characteristic	Person who decides how earnings are used					Number of women
	Respondent only	Respondent jointly with others[1]	Someone else only[2]	Missing	Total	
Age						
15-19	39.2	40.6	20.2	0.0	100.0	134
20-24	42.1	43.9	14.0	0.0	100.0	344
25-29	41.3	44.6	14.1	0.0	100.0	461
30-34	44.9	40.4	14.7	0.0	100.0	474
35-39	52.0	37.2	10.0	0.7	100.0	362
40-44	58.8	34.2	7.0	0.0	100.0	301
45-49	52.1	39.6	8.4	0.0	100.0	211
Marital status						
Married	39.3	46.5	14.2	0.0	100.0	1,910
Divorced/separated/widowed	85.7	9.5	4.2	0.7	100.0	382
Number of living children						
0	47.5	36.4	16.1	0.0	100.0	193
1-2	48.4	40.6	10.7	0.2	100.0	1,035
3-4	44.7	41.2	14.0	0.0	100.0	773
5+	47.5	40.0	12.5	0.0	100.0	290
Residence						
Urban	54.6	36.6	8.9	0.0	100.0	628
Rural	44.1	41.8	13.9	0.2	100.0	1,663
Division						
Barisal	48.4	33.5	18.1	0.0	100.0	85
Chittagong	52.5	35.5	12.0	0.0	100.0	285
Dhaka	51.7	37.3	10.6	0.4	100.0	719
Khulna	55.0	35.0	10.0	0.0	100.0	298
Rajshahi	38.3	49.1	12.6	0.0	100.0	776
Sylhet	41.0	32.9	26.1	0.0	100.0	127
Education						
No education	47.8	37.1	14.9	0.2	100.0	1,221
Primary incomplete	44.5	47.3	8.2	0.0	100.0	443
Primary complete	42.4	47.0	10.6	0.0	100.0	138
Secondary incomplete	46.5	40.5	13.0	0.0	100.0	322
Secondary complete or higher	52.7	40.0	7.3	0.0	100.0	167
Wealth index						
Lowest	46.4	37.5	16.2	0.0	100.0	568
Second	42.4	44.8	12.3	0.5	100.0	543
Middle	40.6	45.1	14.2	0.0	100.0	437
Fourth	54.1	36.4	9.6	0.0	100.0	360
Highest	55.0	36.7	8.2	0.0	100.0	383
Total	47.0	40.4	12.5	0.1	100.0	2,291

Note: Total includes five women age 10-14, who are not shown separately.
[1] Husband or someone else
[2] Includes husband

Table 3.5 also shows how women's degree of control over their earnings varies by background characteristics. Irrespective of age, most respondents make their own decisions (either alone or jointly with others) on how their cash earnings are used. However, the sole control over earnings generally increases and having no control at all over earnings declines, with increasing age. Currently married women, compared with other ever-married women, are much more likely to involve another person in making the decision or to have no say at all in decisions about the use of her earnings. Urban women are more independent than rural women in making their own decisions without involving anyone else (55 and 44 percent, respectively). Comparatively, few women in both rural (14 percent) and urban areas (9 percent) report that they are not involved in decisions as to the use of their earnings.

There are variations by divisions in the way decisions are made on how women's earnings are used. The percentage of women who make decisions on their earnings by themselves alone ranges from 52-55 percent in Dhaka, Chittagong, and Khulna divisions, to 38 percent in Rajshahi division. There are no clear patterns by education or wealth index, although the percentages of women deciding about their earnings are higher for the two highest wealth quintiles and also higher for women who have completed secondary education; 50 percent or more of these women have complete control over their earnings.

In the 2004 BDHS, each man whose wife earned cash was asked who decides how her earnings are used. Table 3.6 shows that according to husbands, two-thirds of couples jointly decide how her

Table 3.6 Decision on use of wife's earnings

Percent distribution of currently married men whose wives earn cash for work by person who decides how her earnings are to be used, according to background characteristics, Bangladesh 2004

Background characteristic	Person who decides how wife's earnings are used, according to husband			Total	Number of men
	Husband only	Wife only	Husband jointly with wife		
Age					
20-24	(5.9)	(19.1)	(75.0)	100.0	22
25-29	(14.2)	(26.5)	(59.2)	100.0	41
30-34	16.0	16.2	67.8	100.0	76
35-39	11.9	30.0	58.1	100.0	70
40-44	15.2	28.3	56.5	100.0	84
45-49	8.0	14.5	77.5	100.0	85
50-54	6.0	25.2	68.8	100.0	50
Residence					
Urban	10.1	26.1	63.9	100.0	104
Rural	12.6	21.6	65.8	100.0	326
Division					
Barisal	(9.7)	(10.3)	(80.1)	100.0	19
Chittagong	9.0	24.5	66.5	100.0	43
Dhaka	8.8	19.6	71.6	100.0	142
Khulna	7.4	22.7	69.9	100.0	58
Rajshahi	12.4	26.6	61.0	100.0	148
Sylhet	(53.5)	(23.3)	(23.2)	100.0	20
Education					
No education	14.1	25.2	60.7	100.0	145
Primary incomplete	16.3	16.2	67.5	100.0	130
Primary complete	(11.5)	(19.9)	(68.6)	100.0	38
Secondary incomplete	7.3	19.1	73.5	100.0	58
Secondary complete or higher	1.9	36.0	62.1	100.0	59
Total	12.0	22.7	65.4	100.0	430

Note: Based on data obtained from male respondents. Total includes one man age 15-19, who is not shown separately. Figures in parentheses are based on 25-49 men.

earnings are used. One in eight husbands says that he has control over her earnings. Husbands age 35-49 and those most educated are more likely to report that their wives by themselves decide how their earnings are used. Some of these results are inconsistent with what married women report (see Table 3.5). For example, according to husbands one in four wives decides by herself how her earnings are used compared with almost four in ten married women who say that they decide without anyone else's participation.

3.5 WOMEN'S EMPOWERMENT

In addition to information on women's education, employment status, and control over earnings, the 2004 BDHS survey collected information from women and men on other measures of women's autonomy and status. In particular, questions were asked about women's roles in making household decisions. Such information provides insight into women's control over their environment and their attitudes towards gender roles, both of which are relevant to understanding women's demographic and health behavior.

3.5.1 Women's Participation in Decisionmaking: Women's Perspective

To assess women's decisionmaking autonomy, the 2004 BDHS sought information on women's participation in six different types of household decisions: on the respondents' own health care; on child health care; on making large household purchases; on making household purchase for daily needs; on visits to family or relatives; and on what food to cook each day. Table 3.7 shows the percent distribution of women according to who in the household usually has the final say on each aspect, according to current marital status.

Table 3.7 Women's participation in household decisionmaking

Percent distribution of women by person who has the final say in making specific decisions, according to current marital status and type of decision, Bangladesh 2004

| Household decision | Currently married women | | | | | | Formerly married women[1] | | | | |
	Respondent only	Respondent jointly with husband	Respondent jointly with someone else	Husband only	Someone else only	Total	Respondent	Respondent jointly with someone else	Someone else only	Missing	Total
Own health care	17.6	23.5	4.6	47.9	6.4	100.0	58.3	13.5	28.2	0.0	100.0
Child health care	17.4	32.7	4.9	31.8	5.6	100.0	54.1	11.9	19.9	14.2	100.0
Large household purchases	8.8	38.8	8.0	34.2	10.3	100.0	46.7	23.1	30.1	0.0	100.0
Daily household purchases	18.1	30.4	7.0	34.0	10.4	100.0	50.0	18.8	31.0	0.1	100.0
Visits to family or relatives	12.4	36.6	6.8	35.7	8.5	100.0	55.6	21.1	23.2	0.1	100.0
What food to cook each day	74.2	4.6	8.8	3.4	8.9	100.0	60.5	16.9	22.4	0.1	100.0

Note: Table is based on 10,582 currently married women and 858 formerly married women.
[1] Divorced, separated or widowed women

Among currently married women, few women independently make decisions on any of the aspects asked about, except on the decision on what food to cook. In fact, a large proportion of women have no final say even on decisions that concern their own health (54 percent) or their child's health (37 percent). Close to half of the women also said that they have no say on large or daily household purchases, and on whether they could visit family members.

Ever-married women who are currently not married have slightly less control over what food to cook than married women. However, they have much more independence in other decisionmaking. More than 70 percent are involved in decisions on their own health care, with 58 percent deciding alone and 14 percent deciding with someone else. The other decisions are also made mostly by either the respondents themselves (47 to 56 percent) or jointly with someone else. Interestingly, each of the six decisions is made by someone else alone for 20-30 percent of formerly married women.

In Table 3.8, the autonomy of currently married women can be gauged either by their independently making such decisions or jointly deciding on such issues. The table shows that 28 percent of women have a say in all the six areas of decisionmaking, while 7 percent have no say at all in any of the specified areas. Generally, women's participation in making all of the specified decisions is higher in urban areas than in rural areas (35 percent as compared to 26 percent) and increases with age and also by wealth. For example, the proportion of women who participate in all decisionmaking increases from 12 percent among women age 10-14 years to a peak of 34 percent among those in age group 40-44 years. Women without children, most of whom are young, are least likely to participate in all the six household decisionmaking factors.

Women in Sylhet are least likely to have the final say (alone or jointly) on decisions regarding their child's health, large household purchases or daily household purchases, and visiting relatives, compared with the other divisions. Less than half of the Sylheti women are involved in these decisions. Women in Rajshahi are least likely to make decisions about their own health care—only four in ten women reported that they are involved in the final say. Thirty-one percent of women who are employed for cash participate in making all decisions, compared with 27 percent of unemployed women.

Except for deciding about what food to cook, urban women, the highest educated women, women employed for cash, and women in the wealthiest households are generally more likely to participate in final decisions on household matters. Nevertheless, between 43 and 49 percent of these women do not participate in final decisions concerning their own health care.

Table 3.8 Women's participation in decisionmaking by background characteristics

Percentage of currently married women who say that they alone or jointly have the final say in specific decisions, by background characteristics, Bangladesh 2004

Background characteristic	Alone or jointly have final say in:								Number of women
	Own health care	Child health care	Large household purchases	Daily household purchases	Visits to family or relatives	What food to cook each day	All specified decisions	No specified decisions	
Age									
10-14	31.9	22.6	32.4	31.4	31.4	42.3	12.3	44.5	145
15-19	37.0	36.9	45.4	45.0	43.4	70.3	18.1	18.8	1,536
20-24	41.9	52.1	52.0	51.4	51.8	84.3	23.4	8.8	2,121
25-29	47.4	59.6	59.0	59.2	57.7	91.5	30.2	4.8	1,935
30-34	49.3	62.1	59.4	61.1	61.1	93.6	31.3	4.1	1,683
35-39	50.1	63.6	62.8	64.5	64.5	95.1	33.5	2.5	1,309
40-44	52.9	61.5	60.2	58.7	61.8	95.3	34.1	2.1	982
45-49	47.0	55.0	54.1	52.8	56.6	94.3	30.0	3.8	870
Number of living children									
0	36.5	19.5	42.2	42.7	43.8	64.0	11.4	23.8	1,246
1-2	45.7	59.4	56.7	56.4	56.2	87.2	28.4	6.9	4,542
3-4	48.4	61.0	60.1	60.2	59.8	94.0	31.6	3.6	3,303
5+	47.5	57.7	52.9	53.4	55.5	94.6	31.1	3.8	1,490
Residence									
Urban	53.2	61.7	64.1	64.3	65.2	87.3	34.5	6.6	2,372
Rural	43.5	53.0	53.0	53.0	53.0	87.7	25.8	7.7	8,210
Division									
Barisal	47.7	56.4	54.2	55.5	57.2	84.0	29.7	9.7	674
Chittagong	50.7	59.4	58.1	59.0	59.7	87.4	31.7	7.3	1,877
Dhaka	46.9	54.5	55.7	55.9	58.0	87.6	29.3	7.8	3,315
Khulna	49.6	58.5	57.0	55.7	54.3	86.0	29.1	8.2	1,296
Rajshahi	39.3	52.0	54.8	54.3	52.1	91.0	22.7	5.0	2,782
Sylhet	42.6	48.5	48.1	48.9	49.9	81.3	25.4	12.2	638
Education									
No education	43.3	52.8	53.4	53.7	53.5	92.1	26.5	5.5	4,187
Primary incomplete	46.5	57.6	56.7	56.5	55.3	89.4	29.1	6.4	2,176
Primary complete	47.2	56.0	60.4	60.6	60.0	86.3	29.6	7.6	958
Secondary incomplete	45.0	53.6	52.7	52.4	54.2	80.9	25.9	11.2	2,457
Secondary complete or higher	56.6	62.5	66.2	66.6	68.4	81.9	34.4	8.5	804
Current employment									
Not employed	44.4	53.6	53.7	53.5	54.2	86.4	26.9	8.3	8,455
Employed for cash	51.2	61.5	63.2	64.2	61.8	93.5	31.1	3.2	1,910
Employed not for cash	45.4	51.1	59.3	58.9	62.2	84.7	30.2	9.0	213
Wealth index									
Lowest	42.6	50.1	51.9	52.0	50.8	90.4	24.7	6.7	2,042
Second	42.4	53.3	53.5	52.8	51.9	89.5	23.9	6.1	2,112
Middle	43.9	54.2	53.1	53.7	53.7	87.3	27.0	8.2	2,112
Fourth	46.2	54.7	55.3	54.7	57.0	86.4	28.0	7.8	2,168
Highest	53.1	62.2	63.5	64.4	65.0	84.7	34.9	8.2	2,148
Total	45.7	55.0	55.5	55.6	55.7	87.6	27.8	7.4	10,582

Note: Total includes three women with missing information on employment, who are not shown separately.

3.5.2 Wife's Participation in Decisionmaking: Husbands' Perspective

All married men interviewed in the 2004 BDHS survey were asked whether they take their wife's opinion into account when making decisions on large household expenses, minor daily household expenses, and when they wish to visit family, friends, or relatives. An overwhelming majority of currently married men—almost nine in ten—assert that they take their wife's opinion into account in deciding about large household expenses and also about visiting family, friends, and relatives (Table 3.9). The wife's opinion is not as widely sought for making daily household expenses; seven in ten men say that they seek their spouse's opinion on minor household expenses. Only 5 percent of men said that they do not seek their wife's opinion when making any of the above decisions. Differentials by all background characteristics for specific decisions are minimal.

Table 3.9 Wife's participation in decisionmaking

Percentage of currently married men who take their wife's opinion into account in making specific decisions, according to background characteristics, Bangladesh 2004

Background characteristic	Decision				
	Large household expenses	Daily household expenses	Visiting family, friends or relatives	None of the specified decisions	Number of currently married men
Age					
15-19	(72.1)	(64.6)	(77.9)	(15.6)	28
20-24	81.7	64.9	85.3	7.0	221
25-29	81.3	65.3	87.3	7.5	401
30-34	88.0	68.9	90.4	4.7	493
35-39	89.5	71.6	89.4	5.2	446
40-44	90.9	70.1	91.3	4.8	490
45-49	92.4	79.6	94.9	1.6	462
50-54	90.8	75.4	91.2	3.1	240
Residence					
Urban	87.1	70.5	89.5	5.7	655
Rural	88.4	71.1	90.5	4.6	2,125
Division					
Barisal	93.7	64.6	89.9	3.1	146
Chittagong	86.0	68.3	88.8	6.3	422
Dhaka	87.7	74.1	91.0	4.4	866
Khulna	84.5	62.0	90.3	5.9	384
Rajshahi	90.6	73.0	90.3	4.0	805
Sylhet	86.4	78.5	90.0	6.1	157
Education					
No education	85.8	72.4	86.4	6.8	866
Primary incomplete	87.2	71.1	92.4	4.0	831
Primary complete	93.2	68.3	93.2	2.8	209
Secondary incomplete	87.7	68.3	90.7	4.9	504
Secondary complete or higher	93.0	72.8	91.8	3.2	370
Total	88.1	71.0	90.2	4.8	2,780

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

3.5.3 Freedom of Movement

Table 3.10 gives information on another dimension of women's autonomy measured in this BDHS survey: women's freedom of movement. Currently married women were asked whether they go alone or can go alone outside the village/town/city and to a health center or hospital. The data show that

31 percent of women say that they go or can go alone outside village/town/city and the exactly the same proportion state that they go or can go alone to the hospital or health center. Seventeen percent of women say that they go or can go alone to both these places. By age, the proportion of women who have no freedom (those who can go to neither place alone) varies little except that the teenagers are slightly more restricted. Overall, urban women, women in Khulna division, the best-educated women, and the wealthiest women have more freedom of movement. On the other hand, women in Sylhet and Barisal divisions have the least freedom of all subgroups shown in Table 3.10.

Table 3.10 Freedom of movement

Percentage of currently married women who say they go or can go outside the village or town, or to a hospital or health center, according to background characteristics, Bangladesh 2004

Background characteristic	Goes or can go alone outside village	Goes or can go alone to a health center or hospital	Goes or can go to both places	Goes or can go to at least one place	Goes or can go to neither place	Number of women
Age						
10-14	35.4	16.1	12.4	39.0	61.0	145
15-19	34.7	19.2	12.1	41.8	58.2	1,536
20-24	31.8	26.9	14.0	44.8	55.2	2,121
25-29	27.0	33.7	15.8	44.9	55.1	1,935
30-34	29.4	36.8	18.6	47.6	52.4	1,683
35-39	28.7	35.9	18.4	46.1	53.9	1,309
40-44	33.8	36.7	23.5	47.0	53.0	982
45-49	34.0	33.0	20.9	46.0	54.0	870
Residence						
Urban	37.6	42.6	24.8	55.4	44.6	2,372
Rural	29.1	27.6	14.4	42.2	57.8	8,210
Division						
Barisal	21.5	30.4	13.1	38.7	61.3	674
Chittagong	32.3	30.0	17.4	44.9	55.1	1,877
Dhaka	31.3	30.6	16.8	45.0	55.0	3,315
Khulna	34.3	40.0	22.4	51.9	48.1	1,296
Rajshahi	32.7	30.1	16.0	46.8	53.2	2,782
Sylhet	21.6	21.5	10.3	32.9	67.1	638
Education						
No education	27.7	29.9	16.0	41.6	58.4	4,187
Primary incomplete	26.9	29.3	14.2	42.0	58.0	2,176
Primary complete	27.9	29.4	14.7	42.6	57.4	958
Secondary incomplete	34.2	31.3	17.2	48.3	51.7	2,457
Secondary complete or higher	52.9	41.6	28.9	65.6	34.4	804
Wealth index						
Lowest	27.0	27.2	13.9	40.4	59.6	2,042
Second	27.1	27.6	13.8	40.9	59.1	2,112
Middle	29.9	28.4	15.5	42.9	57.1	2,112
Fourth	31.9	31.0	16.2	46.7	53.3	2,168
Highest	38.6	40.3	24.3	54.7	45.3	2,148
Total	31.0	31.0	16.8	45.2	54.8	10,582

3.6 MEN'S ATTITUDES TOWARDS WIFE-BEATING

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 the following four situations: if she goes out without telling him, if she neglects the children, if she argues with him, and if she fails to provide food on time.

Table 3.11 shows that many currently married men find wife-beating to be justified in certain circumstances. Overall, more than half (55 percent) of Bangladeshi men agree that at least one of these factors is sufficient justification for wife-beating. This is not unexpected because many traditional customs in Bangladesh teach and expect women to accept, tolerate, and even rationalize wife-beating. This custom impedes women's empowerment and has serious health consequences.

The most widely accepted reason for wife-beating in Bangladesh is a wife going out without informing her husband; almost half of currently married men agree with this reason for wife-beating. Nearly three in ten currently married men think that if a wife argues with her husband it is a justifiable reason for beating. Only one in six men think that neglecting the children is a justification for wife-beating. An even smaller proportion believes that failing to provide food on time is a justifiable reason to hit or beat the wife.

Table 3.11 Men's attitude towards spousal violence

Percentage of currently married men who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Bangladesh 2004

Background characteristic	Husband is justified in hitting or beating his wife if she:				Percentage who agree with at least one of the specified reasons	Percentage who agree with none of the specified reasons	Number of currently married men
	Goes out without telling him	Neglects the children	Argues with him	Fails to provide food on time			
Age							
15-19	(55.0)	(24.2)	(23.6)	(6.0)	(56.2)	(43.8)	28
20-24	54.1	20.7	32.8	6.2	60.8	39.2	221
25-29	48.5	18.5	32.5	9.5	57.9	42.1	401
30-34	49.4	13.4	25.4	6.6	56.0	44.0	493
35-39	47.2	17.1	27.0	8.5	54.2	45.8	446
40-44	46.3	14.8	28.8	10.4	53.2	46.8	490
45-49	47.2	18.3	24.5	6.6	52.6	47.4	462
50-54	51.5	14.5	25.1	9.4	56.9	43.1	240
Residence							
Urban	39.1	11.4	19.8	4.6	45.8	54.2	655
Rural	51.6	18.2	30.1	9.3	58.3	41.7	2,125
Division							
Barisal	55.0	23.0	34.7	12.3	59.7	40.3	146
Chittagong	42.1	12.7	20.9	6.3	47.6	52.4	422
Dhaka	51.5	17.0	27.6	6.4	59.3	40.7	866
Khulna	48.1	13.3	25.6	6.1	54.6	45.4	384
Rajshahi	50.1	19.8	32.7	11.4	56.9	43.1	805
Sylhet	38.0	10.7	18.8	8.4	44.7	55.3	157
Education							
No education	56.0	20.5	34.9	11.9	64.2	35.8	866
Primary incomplete	53.1	19.3	33.1	9.3	60.7	39.3	831
Primary complete	50.1	15.5	29.2	7.9	56.4	43.6	209
Secondary incomplete	40.3	14.4	21.1	3.8	46.6	53.4	504
Secondary complete or higher	31.8	4.9	6.6	3.1	34.0	66.0	370
Wealth index							
Lowest	54.3	22.5	35.1	13.1	64.4	35.6	552
Second	56.0	17.6	32.6	9.3	62.9	37.1	599
Middle	53.0	19.1	33.4	9.3	60.0	40.0	555
Fourth	44.8	15.3	24.7	6.3	51.1	48.9	520
Highest	34.3	8.3	11.9	2.6	37.6	62.4	554
Total	48.6	16.6	27.7	8.2	55.4	44.6	2,780

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

The table also shows attitudes towards wife-beating by background characteristics. Acceptance of wife-beating for each specified reason is lower among urban men and generally among those in Sylhet and Chittagong divisions. Men's acceptance of wife-beating declines as their level of education increases. The acceptance of wife-beating is almost one-half as much among the most educated men as among the uneducated men. For each reason, poorer men (in the two lowest quintiles) are more likely than their wealthier counterparts to hold the attitude that wife-beating is justified.

Since 1999-2000, attitudes toward wife-beating have changed for the worse. More than half of currently married men (55 percent) in 2004, compared with 37 percent earlier, agree with at least one specified reason justifying a husband beating his wife. The most noticeable change in men's attitudes since 1999-2000 is a greater restriction on women's movement. The percentage of men who consider wife-beating justified if a wife goes out without telling her husband has doubled from 25 percent to 49 percent. On the other hand, in the same period, the proportion of men who agree that a husband may beat his wife if she neglects her children has dropped from 23 to 17 percent.

FERTILITY   *4*

4.1   INTRODUCTION

A major objective of the 2004 Bangladesh Demographic and Health Survey (BDHS) is to examine fertility levels, trends, and differentials in Bangladesh. The focus on fertility is due to its important role in determining Bangladesh's population growth rate and its impact on economic development. 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 are based on the birth histories collected from ever-married women age 15-49 interviewed during the survey. Each woman was asked a series of questions to give a retrospective history of all of her births. To encourage complete reporting, the interviewer asked the respondent about the number of sons and daughters living with her, the number living elsewhere, and the number who had died. She was then asked for a history of all of her births, including the month and year of birth, name, sex, and survival status of each birth. For children who had died, age at death was recorded. Interviewers were given extensive training in probing techniques designed to help respondents report this information accurately.

The following measures of current fertility are derived from the birth history data:

- **Age-specific fertility rates[1] (ASFR)** are expressed as the number of births per thousand women in the age group and represent a valuable measure for assessing the current age pattern of childbearing. They are defined in terms of the number of live births during a specific period to women in the particular age group divided by the number of woman-years lived in that age group during the specified period.

- **Total fertility rate (TFR)** is defined as the total number of births a woman would have by the end of her childbearing period if she were to pass through those years bearing children at the currently observed rates of age-specific fertility. The TFR is obtained by summing the age-specific fertility rates and multiplying by five.

- **General fertility rate (GFR)** is the number of live births occurring during a specified period per 1,000 women of reproductive age.

- **Crude birth rate (CBR)** is the number of births per 1,000 population during a specified period.

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[1] Numerators for 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 for the rates are the number of woman-years lived in each of the specified five-year age groups during the period 1-36 months preceding the survey. Since only women who had ever married were interviewed in the BDHS, the number of women in the denominator of the rates was inflated by factors calculated from information in the Household Questionnaire on the proportions ever married to produce a count of all women. Never-married women are presumed not to have given birth.

The various measures of current fertility are calculated for the three-year period preceding the survey, which roughly corresponds to the calendar period 2001-2003. A three-year period was chosen because it reflects the current situation, without unduly increasing sampling error.

Despite 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, possible 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.3 and shows that such errors are minimal.

4.2 CURRENT FERTILITY LEVELS

Table 4.1 presents information on the current fertility levels for Bangladesh as a whole and for urban and rural areas. According to the 2004 BDHS results, the total fertility rate for women age 15-49 is 3.0. This means that a Bangladeshi woman would have, on average, 3.0 children in her lifetime if the current age-specific fertility rates remained constant.

Table 4.1 Current fertility rates

Age-specific fertility rates, the total fertility rate, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Bangladesh 2004

| | Residence | | |
Age group	Urban	Rural	Total
15-19	110	142	135
20-24	154	204	192
25-29	112	143	135
30-34	82	84	83
35-39	31	44	41
40-44	12	18	16
45-49	1	3	3
TFR 15-49	2.5	3.2	3.0
GFR	97	122	117
CBR	25.8	29.5	28.7

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

The general fertility rate in Bangladesh is 117. This means that there were 117 births for every 1,000 women of reproductive age during the three-year period preceding the survey. Data also show a crude birth rate of 29 births per 1,000 population for the period under review.

Bangladeshi women have a pattern of early childbearing. According to current fertility rates, on average, women will have 22 percent of their births before reaching age 20 and will complete 76 percent of their childbearing before age 30.

4.3   FERTILITY DIFFERENTIALS

Table 4.2 shows differentials in fertility by residence, administrative division, educational attainment, and wealth index. The total fertility rate for rural women (3.2 births) is almost one child higher than for urban women. The urban-rural difference is especially large at younger ages, which probably reflects longer education and later marriage of women in urban areas (Figure 4.1).

Table 4.2 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 years, by background characteristics, Bangladesh 2004

Background characteristic	Total fertility rate[1]	Mean number of children ever born to women age 40-49
Residence		
Urban	2.5	4.4
Rural	3.2	5.3
Division		
Barisal	2.9	5.5
Chittagong	3.7	5.6
Dhaka	2.9	4.9
Khulna	2.8	4.5
Rajshahi	2.6	4.9
Sylhet	4.2	5.8
Education		
No education	3.6	5.3
Primary incomplete	3.3	5.4
Primary complete	2.9	5.0
Secondary incomplete	2.7	4.3
Secondary complete or higher	2.2	2.8
Wealth index		
Lowest	4.0	5.4
Second	3.2	5.6
Middle	3.0	5.3
Fourth	2.3	5.1
Highest	2.5	4.3
Total	3.0	5.1

[1] Women age 15-49 years

Figure 4.1 Age-Specific Fertility Rates by Residence
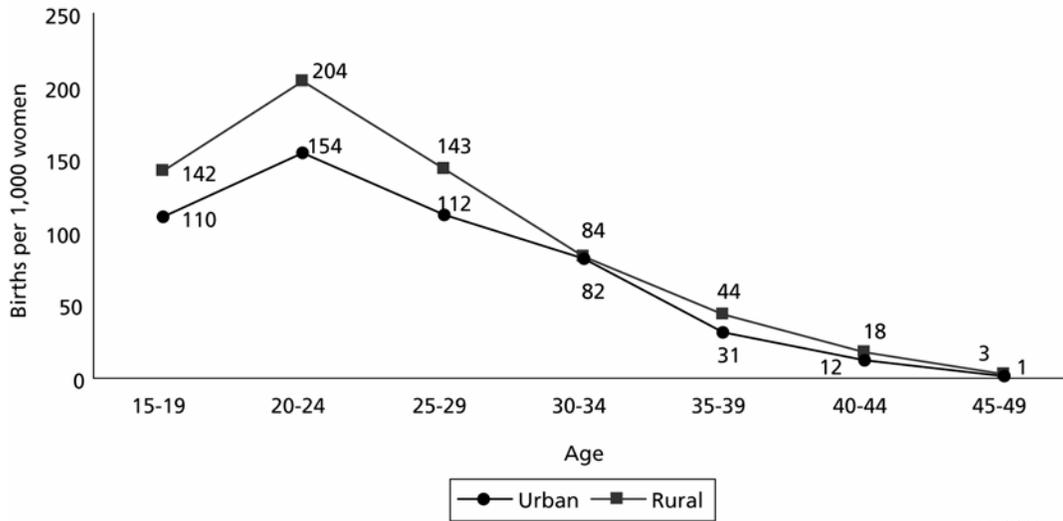
BDHS 2004

Fertility varies widely by administrative divisions (Figure 4.2). Sylhet and Chittagong divisions have the highest TFRs (4.2 and 3.7, respectively), while the lowest TFRs are in Rajshahi and Khulna (2.6 and 2.8, respectively).

Figure 4.2 Total Fertility Rates by Background Characteristics
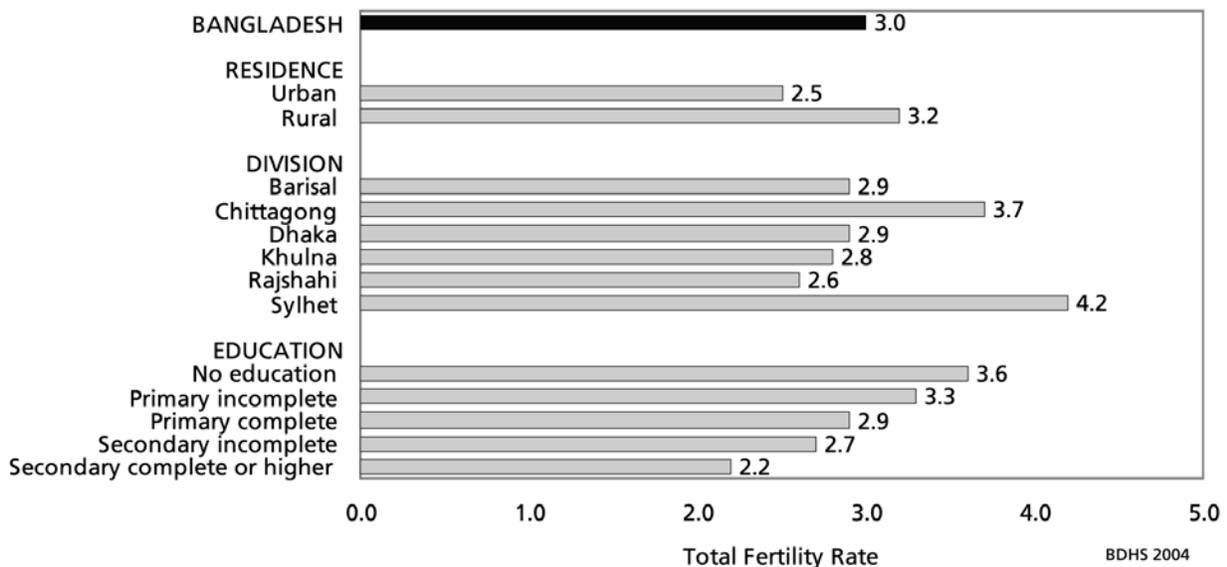
BDHS 2004

As expected, the educational attainment of women is strongly associated with fertility. The TFR decreases steeply from 3.6 for women with no education to 2.2 for women with secondary complete or higher

education. Fertility is also negatively related with wealth; the disparity in fertility between women in the lowest and highest wealth quintiles is 1.5 children per woman.

Table 4.2 also presents a crude assessment of trends in fertility in the various subgroups by comparing the TFRs 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. Overall, comparison of past and present fertility indicators suggests a decline of two children per woman, from 5.1 to 3.0 children. There has been a substantial decline in fertility in urban and rural areas, and in all administrative divisions. The fertility declined by two or more children in three of the six divisions: Barisal, Dhaka, and Rajshahi.

4.4   FERTILITY TRENDS

Trends in fertility in Bangladesh since the early 1970s 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 4.3 describe the ongoing Bangladeshi fertility transition. Fertility has declined sharply, from 6.3 in 1971-1975 to 3.0 in 2001-2003 (Figure 4.3). During this period, fertility declined rapidly in the late 1980s and early 1990s, and plateaued at around 3.3 for most of the 1990s. The 2004 BDHS data indicate that after almost a decade-long stagnation, the TFR declined slightly from 3.3 to 3.0 between 1997-1999 and 2001-2003. Since 1997-1999, a small decline in fertility was observed in all divisions except Sylhet and Khulna. 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.

Table 4.3 Trends in current fertility rates

Age-specific fertility rates (per 1,000 women) and total fertility rates (TFRs) among women age 15-49, selected sources, Bangladesh, 1975-2004

	Survey and approximate time period						
	1975 BFS	1989 BFS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS	2004 BDHS
Age group	1971-1975	1984-1988	1989-1991	1991-1993	1994-1996	1997-1999	2001-2003
15-19	109	182	179	140	147	144	135
20-24	289	260	230	196	192	188	192
25-29	291	225	188	158	150	165	135
30-34	250	169	129	105	96	99	83
35-39	185	114	78	56	44	44	41
40-44	107	56	36	19	18	18	16
45-49	35	18	13	14	6	3	3
TFR 15-49	6.3	5.1	4.3	3.4	3.3	3.3	3.0

Note: For the 1975 Bangladesh Fertility Survey (BFS) and 1989 BFS, the rates refer to the five-year period preceding the survey; for the other surveys, the rates refer to the three-year period preceding the survey. The BFS and Bangladesh Demographic and Health Survey (BDHS) utilized full birth histories, while the 1991 Contraceptive Prevalence Survey (CPS) used an eight-year truncated birth history.

Sources: 1975 BFS (MHPC, 1978:73), 1989 BFS (Huq and Cleland, 1990:103), 1991 CPS (Mitra et al., 1993 :34), 1993-1994 BDHS (Mitra et al., 1994:24), 1996-1997 BDHS (Mitra et al., 1997:30), and 1999-2000 BDHS (NIPORT et al., 2001:34)

Table 4.4 shows trends in the percentage 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

Figure 4.3 Trends in Total Fertility Rates, Bangladesh 1971-2003
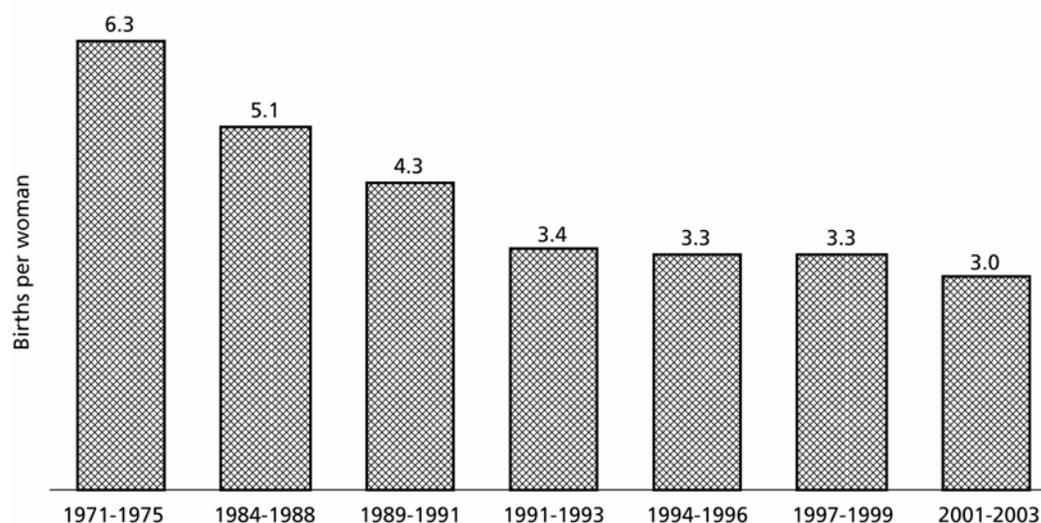
useful because, while fertility rates depend to some extent on accurate reporting of dates of events, the proportion pregnant is a "current status" indicator. Change over time in the percent pregnant is an independent indicator of fertility change. In Bangladesh, the percent pregnant has generally declined over time, from 13 percent in 1975 to 7 percent in 2004. During this period, the percent pregnant declined in the late 1980s and early 1990s, and stalled around 8 percent for most of the 1990s. The 2004 BDHS results show that the percent pregnant has declined to 7 percent from 8 percent in 1996-1997 and 1999-2000.

Table 4.4 Percent pregnant

Percentage of currently married women who were pregnant at the time of interview, by age group, selected sources, Bangladesh 1975-2004

Age group	1975 BFS	1989 BFS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS	2004 BDHS
15-19	15.2[a]	14.7[a]	19.6	17.1	14.7	15.9	14.3
20-24	15.5	13.3	16.2	13.0	10.3	11.8	9.9
25-29	14.9	10.4	11.2	9.0	8.9	8.5	7.8
30-34	11.2	8.3	7.1	7.0	5.1	4.8	4.8
35-39	10.7	4.8	4.2	2.7	3.4	2.4	2.3
40-44	u	u	1.5	0.8	1.3	1.0	0.1
45-49	u	u	0.2	0.0	0.0	0.4	0.2
Total	12.5	9.3	10.7	8.7	7.7	7.8	6.6

u = Unknown (not available)
[a] Currently married women under age 20
Source: 1975 Bangladesh Fertility Survey (BFS) and 1989 BFS (Cleland et al., 1994:21), 1991 Contraceptive Prevalence Survey (CPS) (Mitra et al., 1993:39), 1993-1994 Bangladesh Demographic and Health Survey (BDHS) (Mitra et al., 1994:31), 1996-1997 BDHS (Mitra et al.1997:34), and 1999-2000 BDHS (NIPORT et al., 2001:36)

| Table 4.5 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 2004

Marriage duration	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
0-4	253	279	260	266
5-9	205	229	249	282
10-14	143	175	202	242
15-19	86	109	166	[207]
20-24	45	75	[114]	-
25-29	22	[45]	-	-

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

Table 4.5 presents fertility rates for ever-married women by marital duration, the number of years since the first marriage, for five-year periods preceding the survey. The data confirm a sharp decline in fertility and indicate that fertility has declined at all marital durations.

4.5   CHILDREN EVER BORN AND LIVING

Table 4.6 shows the distribution of all women and currently married women by age and number of children ever born. It also shows the mean number of children ever born to women in each five-year age group, an indicator of the momentum of childbearing. The mean number of children ever born for all women is 2.5, which means that, on average, Bangladeshi women age 15-49 have had fewer than three births; currently married women have 3.0 births on average. Allowing for mortality of children, Bangladeshi women have, on average, 2.2 living children, while currently married women have an average of 2.6 living 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.

Currently married women age 45-49 have given birth to an average of 5.8 children, of whom 4.7 survived. Among all women age 15-49, the average number of children who have died per woman is 0.35. Among currently married women, it is 0.41; that is, 14 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 8 percent for women age 20-24 to 20 percent for women age 45-49.

Table 4.6 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, and mean number of children ever born and mean number of living children, according to age group, Bangladesh 2004

Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	Mean number of children ever born	Mean number of living children
					Number of children ever born										
ALL WOMEN															
15-19	72.1	21.5	5.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3,337	0.35	0.32
20-24	24.4	30.0	28.5	13.3	3.2	0.5	0.0	0.0	0.0	0.0	0.0	100.0	2,597	1.42	1.31
25-29	8.4	12.0	30.8	25.9	14.8	5.7	1.6	0.7	0.1	0.1	0.0	100.0	2,100	2.55	2.28
30-34	4.4	6.3	21.2	23.5	19.9	12.9	6.5	3.1	1.8	0.5	0.1	100.0	1,815	3.43	3.02
35-39	2.7	4.8	14.0	19.7	20.3	14.9	11.3	5.9	3.7	1.7	1.0	100.0	1,463	4.12	3.48
40-44	3.0	3.0	8.5	17.6	21.1	14.8	11.2	10.0	5.1	2.9	2.7	100.0	1,164	4.65	3.84
45-49	1.4	1.6	6.0	10.9	15.3	15.0	15.2	12.1	9.3	6.4	6.8	100.0	1,066	5.63	4.48
Total	25.0	14.7	17.3	14.3	10.8	6.8	4.5	3.0	1.8	1.0	0.9	100.0	13,542	2.50	2.15
CURRENTLY MARRIED WOMEN															
15-19	40.8	45.3	12.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,536	0.74	0.68
20-24	10.3	35.0	34.0	16.2	3.9	0.6	0.0	0.0	0.0	0.0	0.0	100.0	2,121	1.70	1.56
25-29	3.8	11.9	32.2	27.7	15.8	6.1	1.6	0.7	0.1	0.1	0.0	100.0	1,935	2.69	2.41
30-34	2.6	5.3	20.9	24.4	20.7	13.7	6.8	3.2	1.9	0.5	0.1	100.0	1,683	3.55	3.14
35-39	1.8	3.7	13.2	19.7	20.7	16.0	11.7	6.4	3.8	1.8	1.0	100.0	1,309	4.25	3.61
40-44	1.8	2.5	8.1	16.5	21.4	15.9	11.8	10.3	5.1	3.5	3.0	100.0	982	4.81	4.01
45-49	1.1	0.8	5.2	9.7	15.4	15.4	15.7	12.7	9.8	6.8	7.6	100.0	870	5.82	4.67
Total	9.7	17.6	21.0	17.3	12.9	8.3	5.3	3.5	2.1	1.2	1.1	100.0	10,436	3.00	2.59

Nearly three-fourths of women age 15-19 have never given birth. However, this proportion declines to 4 percent for women age 30-34 years and rapidly decreases further for older women, indicating that childbearing among Bangladeshi women is nearly universal.

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 have children. The BDHS results suggest that primary infertility is low, less than 2 percent. (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*].)

A comparison of the mean number of children ever born reported in the 2004 BDHS and various other surveys is presented in Table 4.7. The comparison does not highlight recent changes in fertility, but rather is an indication of the cumulative changes in fertility over the decades preceding the 2004 BDHS. 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 this was followed by little change between 1989 and 1991, the mean number of children again declined considerably between 1991 and 1993-1994, especially among women age 25 and above, and showed further decline between 1993-1994 and 1999-2000 at all ages except 15-19. The most recent data showed a decline in the mean number of children between 1999-2000 and 2004 among women age 30 and above.

Table 4.7 Trends in children ever born										
Mean number of children ever born by age group, selected sources, Bangladesh, 1975-2004										
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	2004 BDHS
15-19	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.3	0.4	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	1.4
25-29	4.2	3.7	3.8	3.6	3.1	3.3	3.2	2.9	2.8	2.6	2.6
30-34	5.7	5.4	5.5	5.1	4.7	4.7	4.5	4.1	3.9	3.6	3.4
35-39	6.7	6.4	6.5	6.5	5.9	5.9	5.7	5.2	4.8	4.3	4.1
40-44	7.1	7.3	7.4	7.4	6.6	7.0	6.7	6.4	5.6	5.1	4.7
45-49	6.7	7.6	7.5	7.2	7.3	7.5	7.4	6.9	6.4	6.1	5.6
Total	u	u	u	u	u	u	3.5	3.0	2.8	2.6	2.5

u = Unknown (not available)
Source: 1975 Bangladesh Fertility Survey (BFS), 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); 1999-2000 BDHS (NIPORT et al., 2001:39) all others (Cleland et al., 1994:11)

4.6   BIRTH INTERVALS

Examination of birth intervals, defined as the length of time between two successive live births, is important in providing insights into birth spacing patterns and, subsequently, maternal and child health. Short birth intervals are associated with an increased risk of death for mother and child. Studies have shown that children born less than 24 months after a previous sibling risk poorer health and also threaten maternal health. Table 4.8 shows the percent distribution of non-first births that occurred in the five years preceding the BDHS by the number of months since the previous birth.

Birth intervals are generally long in Bangladesh (the median birth interval is 39 months). The long period of breastfeeding in Bangladesh (an average of 32 months [Chapter 11]) and the corresponding long period of postpartum amenorrhea (an average of 9 months [Chapter 6]) are likely to contribute to the relatively high percentage of births occurring after an interval of 24 months or more. Almost six in ten non-first births occur three or more years after the previous birth, while one-fourth of births take place 24-35 months after the previous birth (Table 4.8). Nearly one in six children (16 percent) is born after a "too short" interval (less than 24 months).

The median birth interval in the 2004 BDHS (39 months) is almost the same as in the 1999-2000 BDHS. However, it is longer than the median reported in the 1993-1994 BDHS (35 months) and in the 1996-1997 BDHS (37 months).

The median birth interval is substantially shorter for teenage mothers (27 months). More than one in three births to teenage mothers age 15-19 occurs after a "too short" interval of less than 24 months.

Table 4.8 Birth intervals

Percent distribution of non-first births in the five years preceding the survey, by number of months since preceding birth, according to background characteristics, Bangladesh 2004

Background characteristic	Months since preceding birth					Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48+			
Age of mother								
15-19	14.5	20.0	40.6	21.0	3.9	100.0	224	26.5
20-29	6.9	10.1	27.4	23.1	32.5	100.0	3,028	37.8
30-39	4.6	8.4	20.7	18.9	47.4	100.0	1,485	46.0
40-49	4.0	8.1	17.7	14.1	56.1	100.0	213	52.2
Birth order								
2-3	6.0	9.4	24.6	21.9	38.0	100.0	3,018	40.3
4-6	6.9	10.2	26.9	20.7	35.3	100.0	1,516	38.5
7+	8.1	12.8	27.4	19.6	32.0	100.0	417	36.7
Sex of prior birth								
Male	6.7	9.6	24.9	21.7	37.0	100.0	2,484	39.5
Female	6.2	10.3	26.2	21.0	36.3	100.0	2,467	39.1
Survival of prior birth								
Living	4.3	9.2	24.8	22.5	39.2	100.0	4,409	41.2
Dead	24.4	15.7	31.6	12.2	16.1	100.0	542	26.0
Residence								
Urban	6.5	10.2	21.3	20.1	41.9	100.0	939	42.8
Rural	6.5	9.9	26.5	21.7	35.5	100.0	4,012	38.7
Division								
Barisal	4.6	7.2	26.3	22.1	39.8	100.0	294	41.6
Chittagong	6.8	10.4	30.1	24.1	28.7	100.0	1,106	36.8
Dhaka	6.1	9.7	26.4	20.7	37.1	100.0	1,580	39.7
Khulna	6.8	7.8	14.8	18.1	52.5	100.0	480	49.4
Rajshahi	5.2	9.9	21.7	20.2	43.0	100.0	1,034	43.5
Sylhet	10.7	13.9	30.9	22.7	21.9	100.0	456	33.7
Education								
No education	5.7	10.2	26.8	21.5	35.7	100.0	2,454	38.8
Primary incomplete	5.1	9.3	25.6	25.2	34.8	100.0	965	39.5
Primary complete	8.5	9.4	24.1	19.8	38.1	100.0	455	39.5
Secondary incomplete	8.3	9.8	23.7	19.5	38.7	100.0	863	40.2
Secondary complete or higher	9.1	10.6	20.9	13.4	46.0	100.0	213	44.1
Wealth index								
Lowest	6.5	11.1	30.7	22.8	28.9	100.0	1,422	36.5
Second	5.7	9.4	25.4	23.4	36.1	100.0	1,056	39.1
Middle	6.8	9.3	25.2	20.3	38.3	100.0	947	39.5
Fourth	5.1	10.6	23.2	19.8	41.2	100.0	817	41.3
Highest	8.6	8.4	18.7	18.6	45.7	100.0	708	45.5
Total	6.5	9.9	25.5	21.4	36.7	100.0	4,951	39.3

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

The length of the birth interval is closely associated with the survival status of the previous sibling. The median birth interval is 15 months shorter for children whose previous sibling died than for children whose previous sibling is alive (26 and 41 months, respectively). The percentage of births occurring within a very short interval (less than 18 months) is six times higher for children whose prior sibling died than for children whose prior sibling survived (24 and 4 percent, respectively). The shorter intervals for the former group are partly due to a shortened period of breastfeeding (or no breastfeeding) for the preceding child, leading to an earlier return of ovulation and hence increased chance of pregnancy. Minimal use of contraception, presumably because of a desire to "replace" the dead child as soon as possible, could also be one of the factors responsible for the shorter birth interval in these cases. The median number of months since the preceding birth increases with household economic status; from 37 months in the lowest wealth quintile to 46 months for households in the highest wealth quintile.

4.7   AGE AT FIRST BIRTH

The onset of childbearing has a direct effect on fertility. Early initiation into childbearing lengthens the reproductive period and subsequently increases fertility. In many countries, postponement of first births—reflecting an increase in the age at marriage—has contributed greatly to overall fertility decline. 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 4.9 presents the percent distribution of women by age at first birth according to current age.[2] The median age at first birth is not shown for women age 15-19 because the large majority of these young girls had not become mothers before age 15. The median age at first birth is about 18 years across all age cohorts, except for women age 45-49 years, whose median age at first birth is 17 years, indicating a slight change in the age at first birth. This slight increase in age at first birth is reflected in the smaller proportion of younger women whose first birth occurred before age 15; 18 percent of women in their late forties report having had their first birth before age 15, compared with only 6 percent of women age 15-19. Comparison of data from the 1999-2000 BDHS and the 2004 BDHS shows little change in the median age at first birth for women age 20-49.

Table 4.9 Age at first birth

Percent distribution of women by age at first birth, according to current age, Bangladesh 2004

Current age	Percentage of women with no births	<15	15-17	18-19	20-21	22-24	25+	Total	Number of women	Median age at first birth
				Age at first birth						
15-19	72.1	6.4	na	na	na	na	na	100.0	3,337	a
20-24	24.4	10.2	35.8	17.7	na	na	na	100.0	2,597	18.4
25-29	8.4	13.4	40.7	19.5	9.3	6.7	2.0	100.0	2,100	17.7
30-34	4.4	13.2	40.7	19.9	10.4	7.2	4.2	100.0	1,815	17.7
35-39	2.7	11.5	43.0	19.5	12.3	5.6	5.5	100.0	1,463	17.7
40-44	3.0	13.7	42.2	19.0	11.4	5.9	4.8	100.0	1,164	17.6
45-49	1.4	17.7	47.6	14.6	8.4	6.0	4.4	100.0	1,066	16.9

na = Not applicable
a = Omitted because less than 50 percent of the women had a birth before reaching age 15

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[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 4.10 summarizes the median age at first birth for different age cohorts by background characteristics of respondents. For women age 20-49, the median is slightly higher in urban areas than in rural areas, and is highest in Sylhet division, compared with other divisions. Median age at first birth is about two years higher for women in the highest wealth quintile (19 years), compared with those in the lowest wealth quintile (17 years). Women with secondary or more education start childbearing later than those with less or no education. Among women age 25-49, the median age at first birth is 17 years for women with no education and 23 years for women who have completed secondary education.

Table 4.10 Median age at first birth

Median age at first birth among women age 20-49 years, by current age and background characteristics, Bangladesh 2004

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	19.5	18.3	18.1	18.2	18.1	17.5	18.4	18.1
Rural	18.1	17.5	17.6	17.6	17.5	16.8	17.6	17.4
Division								
Barisal	18.9	17.0	18.4	17.5	17.7	17.7	17.8	17.7
Chittagong	19.2	18.0	18.0	18.1	17.5	17.4	18.2	17.8
Dhaka	18.3	17.9	17.5	17.5	17.7	17.1	17.7	17.6
Khulna	17.9	17.4	17.4	17.7	17.1	16.4	17.4	17.3
Rajshahi	17.7	17.1	17.5	17.5	17.5	16.4	17.3	17.2
Sylhet	19.9	19.0	18.9	18.7	18.6	17.3	18.9	18.6
Education								
No education	16.6	16.8	17.2	17.6	17.4	16.5	17.0	17.1
Primary incomplete	17.1	17.2	17.6	17.3	17.4	17.1	17.3	17.3
Primary complete	17.4	17.6	17.6	17.2	17.8	17.9	17.6	17.6
Secondary incomplete	19.0	18.3	18.6	18.0	18.0	17.7	18.6	18.3
Secondary complete or higher	a	23.4	23.0	21.0	21.1	21.4	a	22.6
Wealth index								
Lowest	16.9	16.8	17.5	17.7	17.9	16.4	17.1	17.2
Second	17.4	17.2	17.3	17.6	17.7	16.7	17.3	17.3
Middle	18.6	17.4	17.7	17.3	17.1	17.0	17.6	17.3
Fourth	19.7	18.4	17.5	17.5	17.5	17.0	18.1	17.7
Highest	19.8	19.3	18.8	18.4	18.1	17.5	18.9	18.5
Total	18.4	17.7	17.7	17.7	17.6	16.9	17.7	17.6

Note: The medians for cohort 15-19 could not be determined because more than half of these women have not yet had a birth.
a = Omitted because less than 50 percent of the women had a birth before reaching age 20

4.8 ADOLESCENT FERTILITY

Adolescent fertility is a major social and health concern. 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, young mothers may not be sufficiently emotionally mature to bear the burden

of childbearing and rearing. Early entry into reproduction denies them the opportunity to pursue academic goals. This is detrimental to their prospects for good careers, which often lowers their status in society.

Table 4.11 shows that one-third of adolescents age 15-19 have begun childbearing. Twenty-eight percent of these teenagers in Bangladesh have given birth, and another 5 percent are pregnant with their first child. As expected, the proportion of women age 15-19 who have begun childbearing rises rapidly with age. Early childbearing among teenagers is more prominent in rural areas, compared with urban areas, and in Rajshahi and Khulna divisions, compared with other divisions. Childbearing begins later in Sylhet, compared with the rest of the divisions, mainly because of relatively late marriage in Sylhet. Delayed childbearing is strongly related to education among women age 15-19. Only 16 percent of the teenagers who had completed secondary education had begun childbearing, compared with almost half of those with primary incomplete or no education. Childbearing begins earlier among adolescents in the poorest 40 percent of the households; in these households, four out of ten adolescents have begun childbearing. In contrast, three out of ten of the adolescents in the richest 20 percent of the households either have had births or are pregnant with their first child.

Table 4.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who are mothers or pregnant with their first child, by background characteristics, Bangladesh 2004

Background characteristic	Percentage who are:		Percentage who have begun childbearing	Number of women
	Mothers	Pregnant with first child		
Age				
15	7.5	4.0	11.5	778
16	18.3	3.9	22.2	706
17	30.8	6.4	37.2	660
18	36.9	5.9	42.8	629
19	54.8	4.0	58.8	563
Residence				
Urban	21.9	4.3	26.1	758
Rural	29.7	5.0	34.7	2,576
Division				
Barisal	25.9	3.6	29.5	215
Chittagong	23.7	4.0	27.7	725
Dhaka	27.2	4.2	31.5	956
Khulna	31.2	6.4	37.7	367
Rajshahi	35.7	6.6	42.3	797
Sylhet	16.2	2.8	19.0	271
Education				
No education	42.5	4.0	46.5	435
Primary incomplete	40.2	5.6	45.8	541
Primary complete	32.8	4.3	37.1	334
Secondary incomplete	22.3	5.0	27.2	1,760
Secondary complete or higher	10.9	4.6	15.5	253
Wealth index				
Lowest	37.7	3.2	40.9	559
Second	33.7	5.6	39.2	665
Middle	21.7	3.6	25.2	1,006
Fourth	17.4	4.5	21.9	949
Highest	23.0	5.6	28.5	492
Total	27.9	4.8	32.7	3,337

Between the 1999-2000 BDHS and the 2004 BDHS, the proportion of adolescents age 15-19 who had begun childbearing declined slightly, from 35 to 33 percent.

FERTILITY REGULATION

<div style="text-align: right">*5*</div>

5.1   KNOWLEDGE OF FAMILY PLANNING METHODS

Information on knowledge of family planning methods was collected by asking female respondents to name ways or methods by which a couple could delay or avoid pregnancy. If the respondent did not mention a particular method spontaneously, the interviewer described the method and asked whether the respondent had heard about the method. In this manner, knowledge was assessed for seven modern methods of family planning (the pill, IUD, injectables, Norplant, condoms, female sterilization, and male sterilization) and two traditional methods of family planning (periodic abstinence and withdrawal). Any other methods, if spontaneously mentioned by the respondent, were also recorded.

Knowledge of family planning methods is widespread in Bangladesh (Table 5.1). All ever-married women know of at least one modern method of family planning, and eight out of every ten women know of at least one traditional method. On average, a woman has heard of 7.6 methods of family planning. There is virtually no difference in knowledge between ever-married and currently married women.

Table 5.1 Knowledge of contraceptive methods

Percentage of ever-married and currently married women who know any contraceptive methods, by specific method, Bangladesh 2004

Contraceptive method	Ever-married women	Currently married women
Any method	100.0	100.0
Any modern method	100.0	100.0
Pill	99.9	99.9
IUD	84.9	85.0
Injectables	98.5	98.6
Norplant	76.0	76.7
Condom	91.6	92.2
Female sterilization	96.1	96.1
Male sterilization	72.7	72.9
Any traditional method	80.3	81.0
Periodic abstinence	70.4	71.0
Withdrawal	57.8	58.7
Other	7.3	7.6
Mean number of methods known	7.6	7.6
Number of women	11,440	10,582

Almost all respondents have heard of pills, injectables, and female sterilization. More than nine out of ten women know of condoms. Knowledge of other modern methods is also widespread; a majority of currently married women have heard of the IUD (85 percent), Norplant (77 percent), and male sterilization (73 percent). Knowledge of traditional methods is lower than modern methods. The data show similar levels of knowledge of specific methods for both currently married and ever-married women.

Since the 1999-2000 Bangladesh Demographic and Health Survey (BDHS), there has been little overall change in knowledge of contraceptives. However, knowledge of some specific methods has changed. For example, knowledge of implants has increased from 56 to 77 percent of currently married women and knowledge of condoms increased from 90 to 92 percent.

5.2   EVER USE OF CONTRACEPTION

Respondents who said that they had heard of a method of family planning were asked whether they had ever used that method. Ever use of family planning methods in the 2004 BDHS 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 have special significance for family planning programs. These data indicate the proportion of the population who were exposed to contraceptive use at least once. Therefore, data on ever use reflect 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.

Among ever-married women, four-fifths have used a contraceptive method at some time, three-fourths have used a modern method, and more than one-fourth have used a traditional method (Table 5.2). The pill is by far the most commonly used method; more than six out of ten ever-married women say they have used it. The next most commonly used method is injectables (26 percent). Very few women report having ever used male sterilization (less than 1 percent). As expected, currently married women are somewhat more likely than ever-married women to report ever use of a family planning method.

Table 5.2 Ever use of contraception

Percentage of ever-married and currently married women who have ever used any contraceptive method, by specific method and age, Bangladesh 2004

| Age | Any method | Modern method | | | | | | | | Traditional method | | | | Number of women |
		Any modern method	Pill	IUD	Inject-ables	Norplant	Condom	Female sterili-zation	Male sterili-zation	Any tradi-tional method	Periodic absti-nence	With-drawal	Other	
						EVER-MARRIED WOMEN								
10-14	54.0	48.1	42.7	0.0	0.4	0.0	14.3	0.0	0.0	10.2	5.2	5.0	0.0	150
15-19	67.0	60.3	49.9	0.5	10.4	0.3	21.9	0.0	0.0	18.8	7.5	13.1	0.4	1,598
20-24	81.1	76.0	67.4	1.6	22.1	1.5	26.9	0.3	0.1	25.3	14.0	14.6	1.1	2,202
25-29	87.1	83.8	73.8	4.3	33.8	2.3	23.4	2.1	0.4	29.0	17.6	15.5	3.0	2,013
30-34	86.8	82.0	70.7	8.2	39.2	1.3	20.5	5.2	0.4	33.4	23.4	14.0	3.9	1,793
35-39	84.7	80.4	65.7	11.4	32.3	1.6	18.8	9.3	1.8	34.9	25.8	14.5	3.5	1,457
40-44	80.5	73.1	56.1	10.7	26.0	1.0	14.9	13.2	1.9	37.8	30.3	15.0	4.2	1,160
45-49	70.9	59.9	40.0	6.7	15.7	0.2	8.8	15.9	1.4	32.8	25.3	10.6	3.7	1,066
Total	80.2	74.5	62.4	5.6	26.0	1.3	20.5	5.2	0.7	29.3	19.3	14.0	2.6	11,440
						CURRENTLY MARRIED WOMEN								
10-14	54.6	48.6	43.0	0.0	0.4	0.0	14.7	0.0	0.0	10.5	5.4	5.1	0.0	145
15-19	68.5	61.8	51.2	0.5	10.8	0.3	22.5	0.0	0.0	19.1	7.6	13.3	0.4	1,536
20-24	82.0	77.1	68.4	1.7	22.5	1.5	27.5	0.3	0.1	25.8	14.3	14.8	1.1	2,121
25-29	88.9	85.6	75.5	4.4	34.5	2.4	23.8	2.2	0.4	29.4	17.6	16.0	3.1	1,935
30-34	88.8	84.5	73.1	8.6	40.8	1.4	21.4	5.4	0.5	34.4	24.0	14.5	4.2	1,683
35-39	89.2	84.7	69.9	12.0	34.7	1.8	19.8	9.6	1.8	37.1	27.4	15.6	3.8	1,309
40-44	86.1	79.4	61.3	12.0	29.5	1.2	16.4	14.1	1.9	40.7	32.7	16.2	4.8	982
45-49	75.5	65.4	44.3	7.9	18.1	0.2	10.2	16.7	1.5	35.2	27.1	11.3	4.1	870
Total	82.8	77.4	65.1	5.8	27.4	1.4	21.5	5.2	0.7	30.2	19.7	14.6	2.8	10,582

The level of ever use of family planning has increased steadily in Bangladesh (Table 5.3). In 2004, 80 percent of ever-married women of reproductive age reported having used a family planning method at some time, compared with only 14 percent in 1975, registering a more than fivefold increase over the past three decades.

Table 5.3 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 1975-2004

Method	1975 BFS	1983 CPS	1985 CPS	1989 CPS	1989 BFS[1]	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS	2004 BDHS
Any method	13.6	33.4	32.5	44.2	45.0	59.0	63.1	69.2	74.6	80.2
Any modern method	u	23.8	25.9	37.5	u	49.2	56.4	63.0	67.9	74.5
Pill	5.0	14.1	14.3	23.3	22.0	34.1	42.0	48.9	55.4	62.4
IUD	0.9	2.2	2.7	4.6	4.0	6.2	7.3	6.9	6.9	5.6
Injectables	u	1.2	1.3	2.8	2.0	6.6	11.0	15.7	20.1	26.0
Vaginal methods	0.5	2.2	1.6	2.4	1.0	2.9	u	u	u	u
Condom	4.8	7.1	5.7	9.3	6.0	13.4	13.9	15.0	18.6	20.5
Female sterilization	0.3	5.8	7.4	8.7	9.0	8.0	7.9	7.6	6.6	5.2
Male sterilization	0.4	1.4	1.6	1.6	1.0	1.4	1.4	1.2	0.6	0.7
Any traditional method	u	17.3	11.9	15.3	u	29.6	24.0	23.0	28.8	29.3
Periodic abstinence	4.5	11.0	7.8	9.7	13.0	21.5	16.5	16.7	18.9	19.3
Withdrawal	2.6	5.3	2.9	3.6	7.0	11.1	10.1	9.5	14.0	14.0
Number of women	6,515	8,523	8,541	10,293	11,907	10,573	9,640	9,127	10,544	11,440

u = Unknown (no information)
[1] Published data were presented in whole numbers; the decimal was added to balance the table.

Sources: 1975 Bangladesh Fertility Survey (BFS) (MHPC, 1978:A275); 1983 Contraceptive Prevalence Survey (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); 1993-1994 Bangladesh Demographic and Health Survey (BDHS) (Mitra et al., 1994:43); 1996-1997 BDHS (Mitra et al., 1997:47); and 1999-2000 BDHS (NIPORT et al., 2001:50)

5.3   KNOWLEDGE AND EVER USE OF MENSTRUAL REGULATION

In the 2004 BDHS, women were asked if they knew about or had ever used menstrual regulation (MR). MR is a procedure used to bring on menses in women who have missed their menstrual cycle. According to Government of Bangladesh policy, the MR procedure can be performed within eight weeks from the first day of the last menstrual period (LMP) by a paramedic (namely, a trained family welfare visitor) or within ten weeks from the first day of the LMP by a trained medical doctor.

Eight in ten ever-married and currently married women know about MR (Table 5.4). Although rates of ever use of MR have been rising since the 1996-1997 BDHS, they remain low, with 6 percent of women reporting they had ever used MR. Rates of ever use are highest among women in their thirties— 9 percent for currently married women and 8 percent for ever-married women.

Table 5.4 Menstrual regulation

Percentage of ever-married and currently married women who know of menstrual regulation (MR) and the percentage who have ever used MR, by age group, Bangladesh 2004

	Ever-married women			Currently married women		
Age	Know of MR	Ever used MR	Number of women	Know of MR	Ever used MR	Number of women
10-14	51.3	0.0	150	52.6	0.0	145
15-19	75.1	1.3	1,598	75.3	1.4	1,536
20-24	81.9	3.6	2,202	81.8	3.6	2,121
25-29	83.8	7.0	2,013	83.8	7.1	1,935
30-34	84.6	8.2	1,793	85.0	8.6	1,683
35-39	84.0	8.1	1,457	85.4	9.0	1,309
40-44	82.7	6.7	1,160	83.2	7.4	982
45-49	76.3	5.0	1,066	77.2	5.9	870
Total	81.1	5.6	11,440	81.5	5.9	10,582

5.4 CURRENT USE OF CONTRACEPTION

In BDHS surveys, current use of contraception is defined as the proportion of currently married women who report that they are currently using a family planning method.

Overall, 58 percent of currently married women in Bangladesh are using a contraceptive method, with 47 percent using a modern method and 11 percent relying on traditional methods (Table 5.5).

Table 5.5 Current use of contraception

Percent distribution of currently married women by contraceptive method currently used, according to age, Bangladesh 2004

		Modern method								Traditional method						
Age	Any method	Any modern method	Pill	IUD	Inject-ables	Norplant	Condom	Female sterili-zation	Male sterili-zation	Any tradi-tional method	Periodic absti-nence	With-drawal	Other	Not currently using	Total	Number of women
10-14	29.1	21.9	15.5	0.0	0.4	0.0	6.0	0.0	0.0	7.2	4.1	3.1	0.0	70.9	100.0	145
15-19	42.2	34.1	23.1	0.3	6.2	0.3	4.2	0.0	0.0	8.1	3.4	4.5	0.1	57.8	100.0	1,536
20-24	52.9	46.8	31.3	0.4	8.8	1.1	4.8	0.3	0.1	6.2	3.2	2.6	0.3	47.1	100.0	2,121
25-29	61.3	54.2	33.2	0.6	11.9	1.5	4.5	2.2	0.4	7.0	3.8	2.8	0.5	38.7	100.0	1,935
30-34	68.6	56.6	31.2	0.6	13.7	0.8	4.5	5.4	0.5	12.1	7.8	3.1	1.1	31.4	100.0	1,683
35-39	72.1	56.9	25.3	1.4	13.6	0.7	4.4	9.6	1.8	15.2	10.7	3.6	0.9	27.9	100.0	1,309
40-44	64.7	43.9	17.1	1.0	6.7	0.5	3.1	14.1	1.4	20.9	13.8	5.7	1.3	35.3	100.0	982
45-49	47.3	32.2	8.1	0.1	4.0	0.0	1.8	16.7	1.5	15.1	9.6	4.8	0.8	52.7	100.0	870
Total	58.1	47.3	26.2	0.6	9.7	0.8	4.2	5.2	0.6	10.8	6.5	3.6	0.6	41.9	100.0	10,582

Note: If more than one method is used, only the most effective method is considered in this tabulation.

Oral contraceptive pills continue to be by far the most popular method of contraception, with over a quarter of currently married women using the method. It now accounts for 45 percent of all contraceptive use and 55 percent of modern method use in the country. Other commonly used methods are injectables (10 percent of currently married women), periodic abstinence (7 percent), female sterilization (5 percent), and

condoms and withdrawal (4 percent each). Less than 1 percent of married women report the use of Norplant, the IUD, or male sterilization.

Current use of contraception varies by age. Use of any contraceptive rises with age, from 29 percent among currently married women age 10-14, to a peak of 72 percent at age 35-39, and then drops to 47 percent at age 45-49. This inverted U-shaped pattern of contraceptive use by age is typical of most countries. The drop in current use among older women is usually attributed to their declining fecundity—whether perceived or real—while lower levels of use among younger women are usually attributed to their desire to have (more) children. Younger women in Bangladesh are increasingly becoming aware and appreciative of the advantages of deliberately controlling childbirth early in marriage. Contraceptive use among women age 15-19 has increased from 25 percent in 1993-94 to 42 percent in 2004.

There are also variations in the use of specific methods by age. The pill is the most popular method among married women in all age groups, except for those in the oldest age group, who are more likely to be sterilized. Injectables are the second most popular modern method after the pill for women age 15-39.

5.4.1 Trends in Current Use of Family Planning

The contraceptive prevalence rate in Bangladesh has increased from 8 percent in 1975 to 58 percent of currently married women in 2004 (Table 5.6 and Figure 5.1). This translates to more than a sevenfold increase. The increase in the use of modern methods is even more dramatic—a more than ninefold increase (from 5 to 47 percent) in three decades.

Table 5.6 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 1975-2004

Method	1975 BFS	1983 CPS	1985 CPS	1989 BFS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS	2004 BDHS
Any method	7.7	19.1	25.3	30.8	39.9	44.6	49.2	53.8	58.1
Any modern method	5.0	13.8	18.4	23.2	31.2	36.2	41.5	43.4	47.3
Pill	2.7	3.3	5.1	9.6	13.9	17.4	20.8	23.0	26.2
IUD	0.5	1.0	1.4	1.4	1.8	2.2	1.8	1.2	0.6
Injectables	u	0.2	0.5	0.6	2.6	4.5	6.2	7.2	9.7
Norplant	u	u	u	u	u	u	0.1	0.5	0.8
Vaginal methods	0.0	0.3	0.2	0.1	u	u	u	u	u
Condom	0.7	1.5	1.8	1.8	2.5	3.0	3.9	4.3	4.2
Female sterilization	0.6	6.2	7.9	8.5	9.1	8.1	7.6	6.7	5.2
Male sterilization	0.5	1.2	1.5	1.2	1.2	1.1	1.1	0.5	0.6
Any traditional method	2.7	5.4	6.9	7.6	8.7	8.4	7.7	10.3	10.8
Periodic abstinence	0.9	2.4	3.8	4.0	4.7	4.8	5.0	5.4	6.5
Withdrawal	0.5	1.3	0.9	1.8	2.0	2.5	1.9	4.0	3.6
Other traditional methods	1.3	1.8	2.2	1.8	2.0	1.1	0.8	0.9	0.6
Number of women	u	7,662	7,822	10,907	9,745	8,980	8,450	9,720	10,582

u = Unknown (not available)

Sources: 1975 Bangladesh Fertility Survey (BFS) (Islam and Islam, 1993:43); 1983 Contraceptive Prevalence Survey (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 Bangladesh Demographic and Health Survey (BDHS) (Mitra et al., 1994:45); 1996-1997 BDHS (Mitra et al., 1997:50); and 1999-2000 BDHS (NIPORT et al., 2001:53)

Figure 5.1 Trends in Contraceptive Use (%) Among Currently Married Women Age 10-49, Selected Surveys 1975-2004
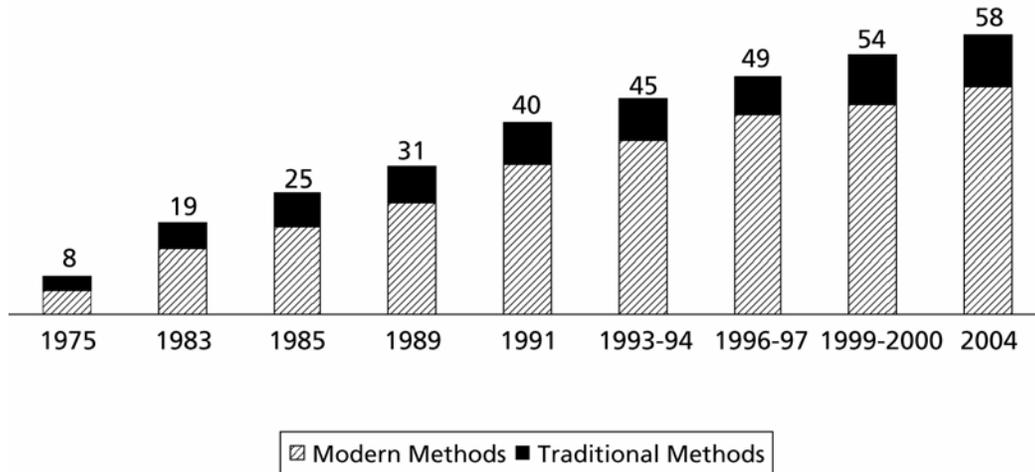
Between the 1999-2000 BDHS and the 2004 BDHS, overall contraceptive use increased by 4 percentage points, from 54 to 58 percent of currently married women. This increase has been almost entirely due to the higher use of modern methods, namely, the pill and injectables. Condom use has remained unchanged since the 1999-2000 BDHS, while the use of traditional methods shows a slight increase. A decade-long decline in the use of long-lasting contraceptive methods continues. In 2004, only 7 percent of currently married women were using sterilization, IUD, or Norplant, compared with 11 percent in 1993-94.

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 45 percent of total contraceptive use, compared with 35 percent in 1991 (Figure 5.2). In contrast, long-lasting methods (sterilization, Norplant, and IUD) now account for 12 percent of total contraceptive use, compared with 30 percent in 1991.

Figure 5.2 Trends in Conctraceptive Method Mix Currently Married Women Age 10-49 Using a Method Selected Surveys 1991-2004
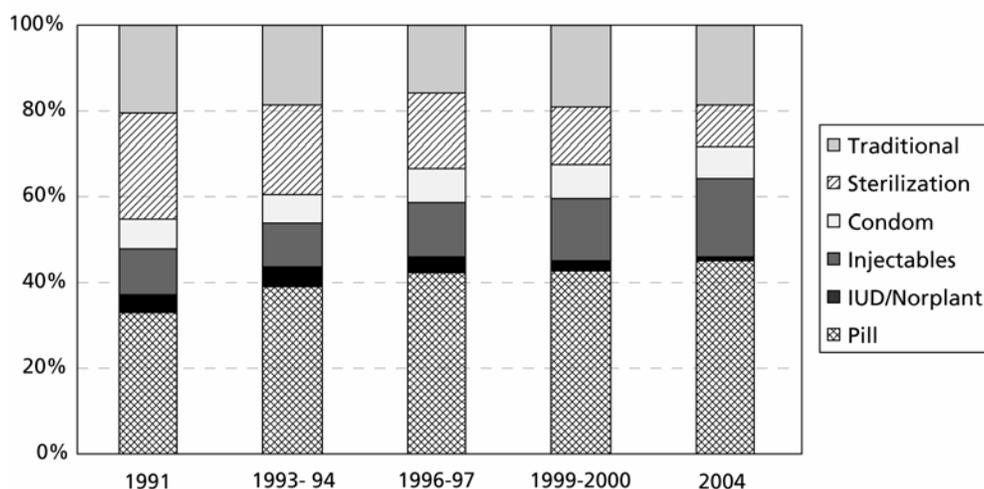
5.4.2 Differentials in Current Use of Family Planning

Current use of contraceptive methods varies by urban-rural areas, administrative divisions, and the other background characteristics of women (Table 5.7). The level of current contraceptive use is higher in urban than in rural areas, 63 versus 57 percent. The urban-rural gap has, however, narrowed with contraceptive use rising more rapidly in the rural areas. The urban-rural differences are predominantly due to higher proportions of couples using condoms in urban areas (8 percent) than in rural areas (3 percent). There is little variation in use of other methods between the rural and urban areas.

Differentials in current contraceptive use by the six administrative divisions of the country are large. Contraceptive use is highest in Rajshahi division (68 percent) and lowest in Sylhet division (32 percent). In 2004, only two divisions, namely Chittagong and Sylhet, had contraceptive prevalence rates below 50 percent. Since the 1999-2000 BDHS, contraceptive use has increased in Rajshahi, Dhaka, and Chittagong divisions. The largest increase was in Rajshahi, 10 percentage points. During this period, contraceptive use remained unchanged in Khulna and decreased slightly in Barisal and Sylhet.

Table 5.7 Current use of contraception by background characteristics

Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Bangladesh 2004

Background characteristic	Any method	Modern method								Traditional method				Not currently using	Total	Number of women
		Any modern method	Pill	IUD	Inject-ables	Norplant	Condom	Female sterili-zation	Male sterili-zation	Any tradi-tional method	Periodic absti-nence	With-drawal	Other			
Residence																
Urban	62.9	51.6	26.9	0.5	9.1	1.0	8.3	5.3	0.5	11.3	6.5	4.1	0.7	37.1	100.0	2,372
Rural	56.7	46.0	26.0	0.6	9.8	0.7	3.0	5.2	0.7	10.6	6.5	3.5	0.6	43.3	100.0	8,210
Division																
Barisal	54.2	42.7	22.5	0.6	12.8	0.4	1.9	3.8	0.6	11.5	7.3	3.4	0.8	45.8	100.0	674
Chittagong	47.1	37.4	19.4	0.6	8.3	0.5	4.8	3.6	0.2	9.7	5.7	3.1	0.9	52.9	100.0	1,877
Dhaka	59.3	48.5	27.3	0.5	8.0	1.2	4.9	6.2	0.4	10.8	6.7	3.4	0.7	40.7	100.0	3,315
Khulna	63.8	50.7	28.6	0.7	11.5	0.4	4.9	3.6	1.1	13.0	6.8	5.6	0.6	36.2	100.0	1,296
Rajshahi	68.3	57.8	33.1	0.6	12.2	0.7	3.4	6.5	1.2	10.5	6.3	3.7	0.5	31.7	100.0	2,782
Sylhet	31.8	22.0	9.6	0.9	4.1	1.2	2.5	3.7	0.1	9.8	7.6	1.8	0.4	68.2	100.0	638
Education																
No education	58.8	48.3	23.1	0.7	12.2	1.2	1.5	8.5	1.0	10.5	7.1	2.4	1.1	41.2	100.0	4,187
Primary incomplete	56.8	45.4	25.4	0.4	11.0	0.5	2.5	4.9	0.8	11.4	7.0	3.8	0.6	43.2	100.0	2,176
Primary complete	58.9	47.4	31.1	0.5	7.1	0.9	4.1	3.1	0.6	11.5	7.5	3.7	0.3	41.1	100.0	958
Secondary incomplete	56.3	46.7	31.0	0.6	7.0	0.4	5.9	1.7	0.1	9.7	4.6	4.9	0.2	43.7	100.0	2,457
Secondary complete or higher	62.0	49.1	24.0	1.0	3.9	0.2	17.8	2.1	0.1	12.9	7.0	5.8	0.2	38.0	100.0	804
Number of living children																
0	23.4	17.1	10.2	0.0	0.3	0.0	5.9	0.1	0.6	6.4	2.5	3.8	0.1	76.6	100.0	1,246
1	54.2	46.1	30.5	0.4	7.7	0.7	4.6	1.6	0.5	8.1	4.7	3.1	0.2	45.8	100.0	2,028
2	64.3	55.3	32.9	0.6	10.9	1.2	4.7	4.4	0.5	9.0	5.5	3.3	0.2	35.7	100.0	2,514
3	69.7	57.9	28.5	0.7	12.8	1.0	4.5	9.7	0.7	11.9	7.8	3.3	0.8	30.3	100.0	2,002
4+	62.4	46.8	22.6	1.0	11.9	0.7	2.4	7.5	0.8	15.5	9.7	4.3	1.5	37.6	100.0	2,791
Wealth index																
Lowest	53.6	44.7	22.9	0.3	11.9	0.9	1.2	6.1	1.2	9.0	5.5	2.5	1.0	46.4	100.0	2,042
Second	57.6	47.7	26.5	0.8	11.8	1.0	1.7	5.1	0.7	10.0	6.4	3.0	0.6	42.4	100.0	2,112
Middle	57.8	46.6	27.4	0.4	9.0	0.6	2.5	5.9	0.7	11.2	6.9	3.5	0.8	42.2	100.0	2,112
Fourth	58.5	47.4	28.3	0.7	9.0	0.7	3.8	4.6	0.3	11.1	7.0	3.7	0.5	41.5	100.0	2,168
Highest	62.5	50.0	25.8	0.7	6.7	0.7	11.4	4.3	0.2	12.5	6.9	5.3	0.4	37.5	100.0	2,148
Total	58.1	47.3	26.2	0.6	9.7	0.8	4.2	5.2	0.6	10.8	6.5	3.6	0.6	41.9	100.0	10,582

Note: If more than one method is used, only the most effective method is considered in this tabulation.

There is little variation in contraceptive use by education levels of women; only those who have completed at least secondary education are more likely to report a higher use rate than others. The pill is the most widely used method among women in all educational categories. Injectables are the second most widely used method among women who have no education or have an incomplete primary education, while condoms are the second most popular method among those who have completed at least secondary education. Since

1999-2000, contraceptive use has increased among women with little or no education; the increase in use was highest among women with no education (8 percentage points). Women who had at least some secondary education had no increase in contraceptive use.

There are notable variations in contraceptive use among women by number of living children. Only 23 percent of women use contraception before having a child. After the first child, contraceptive use increases sharply to 54 percent, increases to 64 percent after two children, and peaks at 70 percent after three children. The slight drop in use that follows may be due to declining fecundity associated with the older age of women. The pill is the most widely used method across all categories of women by number of living children, followed by injectables, except for women who have no children, who are more likely to use condoms.

Women generally report higher use of contraception if they are from economically better-off households, upholding the relationship that contraceptive use increases with the improved economic status of women. Sixty-three percent of women in the highest wealth quintile reported that they use a contraceptive method, compared with only 54 percent of those in the lowest wealth quintile. The pill is the most widely used method among women across all wealth quintiles. The second most widely used methods are condoms among women in households in the highest quintile and injectables among women in households in the other four wealth quintiles.

Figure 5.3 shows the level of current use of contraceptive methods by two women's status indicators. The likelihood of women using a contraceptive method rises with their increasing status. Women are more likely to use a method if they participate in the decisionmaking in their family. Only 41 percent of women having no say in any decision in the family report using a contraceptive method. The proportion rises sharply to 55 percent among women who have a final say in one or two decisions and then rises further to over 60 percent among women who have a final say in three or more decisions.

Figure 5.3 Contraceptive Use and Women's Status Indicators
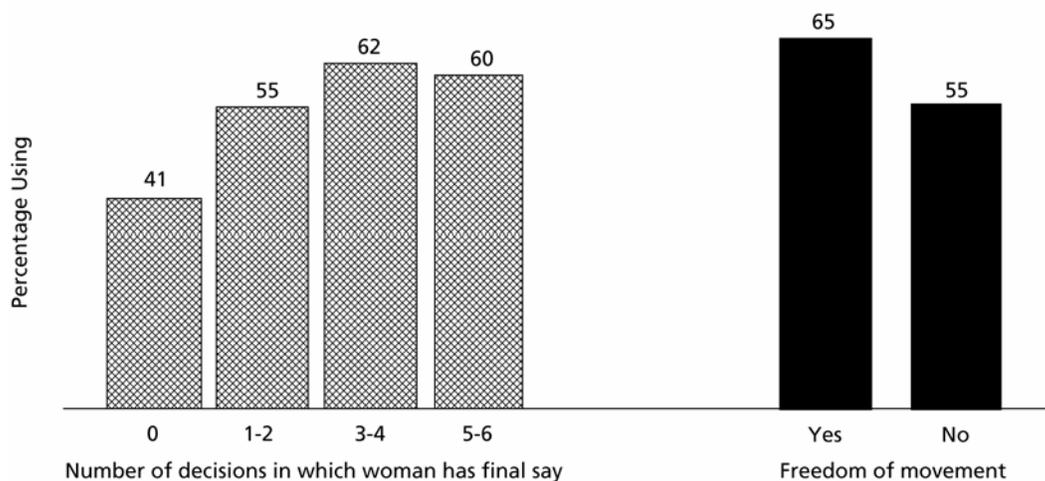
BDHS 2004

Similarly, current use of contraceptive methods increases with freedom of movement. The proportion of women who report using a method is higher among women who go or can go alone to a hospital or clinic than those who cannot.

5.5   NUMBER OF CHILDREN AT FIRST USE OF CONTRACEPTION

The BDHS 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 5.8 shows the distribution of ever-married women in the 2004 BDHS by the number of living children they had when they first used contraception, according to five-year age groups. 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.

									Median number of
	Never used contra- ception	Number of living children at time of first use of contraception						Number of	children at first
Age		0	1	2	3	4+	Total	women	use
10-14	46.0	52.2	1.8	0.0	0.0	0.0	100.0	150	0.0
15-19	33.0	41.3	22.8	2.8	0.1	0.0	100.0	1,598	0.0
20-24	18.9	31.3	37.5	9.2	2.7	0.4	100.0	2,202	0.2
25-29	12.9	19.7	38.7	17.7	7.7	3.4	100.0	2,013	0.6
30-34	13.2	13.2	30.9	19.2	12.5	10.9	100.0	1,793	1.0
35-39	15.3	9.6	21.0	18.7	16.0	19.4	100.0	1,457	1.6
40-44	19.5	6.0	17.4	14.4	17.5	25.2	100.0	1,160	2.1
45-49	29.1	3.3	10.0	11.2	13.2	33.2	100.0	1,066	2.8
Total	19.8	20.1	27.4	13.2	8.9	10.5	100.0	11,440	0.7

5.8 Number of children at first use of contraception

Percent distribution of ever-married women by number of living children at time of first use of contraception and median number of children at first use, according to current age, Bangladesh 2004

Overall, 61 percent of women initiated contraceptive use when they had fewer than three living children, with 20 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 23 percent of women age 35 and older initiated family planning use before having two children, the proportion rises with younger cohorts, reaching 67 percent among women age 15-24.

Comparison of information available through the various BDHS surveys indicates that Bangladeshi women are initiating family planning use at lower parities than before. For example, in 2004, almost half of the women reported that they initiated family planning use before they had two children, compared with 27 percent in 1993-94. Although a few women initiate family planning to delay starting childbearing, that proportion has also been increasing over the last decade. In 1993-94 about one in nine women reported using family planning to delay the first birth; in 2004, one in five women reported adopting family planning before having the first child.

5.6   PROBLEMS WITH CURRENT METHOD

In this survey, women currently using modern family planning methods were asked whether they were having any health-related or other problems in using the method they were currently using and, if so,

what those problems were. Problems in using a family planning method may reduce the effectiveness with which it is used or even lead to termination of its use. Identifying problems associated with the use of specific methods therefore has important implications both for educational and publicity campaigns and for efforts toward improving delivery of family planning services in Bangladesh. Table 5.9 presents information on the problems as reported in the 2004 BDHS.

Table 5.9 Problems with current method of contraception

Among women who are currently using a modern method of family planning, percentage who are having problems with their method, by specific method and type of problem, Bangladesh 2004

	Contraceptive method						
Problem	Pill	IUD	Injectables	Condom	Female sterilization	Norplant	Total
Any problem	23.4	17.7	41.8	3.2	33.0	40.6	26.7
Weight gain	0.7	0.0	1.1	0.0	0.6	1.1	0.7
Weight loss	1.2	2.8	2.4	0.0	4.5	4.8	1.8
Excessive bleeding	0.4	3.6	2.5	0.0	2.6	8.7	1.3
Hypertension	0.4	3.0	0.2	0.0	0.7	1.8	0.4
Headache	13.3	1.3	9.6	0.4	5.4	8.8	10.2
Nausea	5.5	1.3	1.7	0.0	0.6	3.5	3.5
No menstruation	1.2	0.0	25.2	0.0	1.6	15.7	6.3
Weak/tired	10.8	5.9	16.6	0.3	15.8	15.5	11.7
Dizziness	2.3	1.3	3.7	0.2	3.9	6.2	2.6
Husband disapproves	0.1	0.0	0.1	0.5	0.2	0.0	0.1
Inconvenient to use	0.1	0.0	0.1	0.2	0.4	0.0	0.1
Abdominal pain	0.5	6.8	2.2	1.6	15.9	1.2	2.9
Other	0.5	6.8	2.2	1.6	16.2	1.2	2.9
Number of users	2,775	65	1,022	442	599	83	4,987

Note: Male sterilization has been omitted.

Among women using modern methods, more than a quarter report having problems with their methods. Injectable and Norplant users are most likely (four out of ten) to report problems associated with the method. Their most common complaints are amenorrhea and feeling weak or tired. One in three sterilized women complains about problems related to sterilization; the most common complaints are abdominal pain and feeling weak or tired. Among pill users, one in five had some complaints; the most frequent complaints are headaches and feeling weak or tired. IUD users tend to complain of abdominal pain and feeling weak or tired. Condom users rarely report problems. Overall, feeling weak or tired is a frequently cited complaint across users of most modern methods. Problems with specific methods seem to have changed little between 1999-2000 and 2004.

5.7   USE OF SOCIAL MARKETING BRANDS

Bangladesh has an active contraceptive social marketing program that distributes pills, condoms, and oral rehydration salts (ORS) 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, Femicon, and Minicon.* To obtain information on the number of users purchasing the social marketing brands, the BDHS interviewer asked current pill users to show her a packet of the pills they were 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 major pill brands and asked the user to identify which brand she was currently using.

As shown in Table 5.10, overall, 40 percent of pill users use social marketing brands, compared with 56 percent using the government-supplied brand, *Shuki*. The government-supplied brand is provided free of charge through government fieldworkers and clinics and at a nominal charge from nongovernmental service providers. *Femicon* is the most widely used social marketing brand of pills, used by three in ten pill users in both rural and urban areas. The next most widely used social marketing brand is *Nordette*, used more by urban pill users (13 percent) than by rural pill users (5 percent). *Minicon*, a new brand of pills introduced by the Social Marketing Company, is used by 3 percent of pill users, with little variation between urban and rural areas. Few women report the use of any other social marketing brand. The percentage of pill users using a social marketing brand has consistently increased, from 14 percent in 1993-94 to 40 percent in 2004.

Table 5.10 Use of pill brands

Percent distribution of current pill users by brand of pill used, according to urban-rural residence, Bangladesh 2004

Pill brand	Residence		Total
	Urban	Rural	
Social marketing	47.7	38.0	40.1
Maya	0.3	0.3	0.3
Ovacon	0.2	0.1	0.1
Norquest	0.1	0.0	0.0
Nordette	12.8	5.3	7.0
Femicon	31.9	29.7	30.2
Minicon	2.4	2.6	2.5
Government			
Shuki	43.6	59.4	55.8
Private	7.8	2.2	3.5
Marvelon	2.5	0.2	0.7
Ovostat	5.2	1.4	2.3
Lyndiol	0.1	0.0	0.0
Ovral	0.0	0.6	0.5
Don't know	0.8	0.5	0.6
Total	100.0	100.0	100.0
Number of pill users	638	2,138	2,775

To assess the social marketing program's reach in condom use, the 2004 BDHS gathered information to estimate the proportion of condom users using a social marketing brand. Interviewers showed a chart depicting all major condom brands to women who reported that their husband was currently using condoms. They were asked to identify the brand they use. Men would presumably be a more reliable source of data on condom brands; however, because of the larger sample of women than men in the BDHS survey, the data shown in Table 5.11 are derived from women.

Table 5.11 Use of condom brands

Percent distribution of current condom users by brand of condom used, according to urban-rural residence, Bangladesh 2004

	Residence		
Condom brand	Urban	Rural	Total
Social marketing brand	72.6	60.1	65.7
Raja	13.8	31.5	23.6
Panther	43.5	23.9	32.6
Sensation	15.3	4.7	9.5
Government			
Nirapad	10.5	24.5	18.3
Private and others	11.3	7.9	9.3
Carex	1.7	1.9	1.8
Titanic	0.7	0.0	0.3
Lotus	0.3	1.3	0.9
Feelings	0.6	0.0	0.2
Expot	0.4	0.0	0.2
Lubricant	2.4	3.5	3.0
Greenlove	4.9	1.2	2.8
Romeo	0.3	0.0	0.1
Don't know	5.8	7.3	6.6
Total	100.0	100.0	100.0
Number of users	197	245	442

Note: Table is based on women's reports.

Condom brands sold by the Social Marketing Company have a high market share. Two out of three condom users use a social marketing brand, with 33 percent using *Panther,* 24 percent using *Raja,* and another 10 percent using *Sensation*. The *Panther* and *Sensation* brands are more popular among urban users, while *Raja* is predominant among rural users. The proportion of condoms supplied through the Social Marketing Company has decreased slightly in the last four years, from 71 to 66 percent.

5.8   AGE AT STERILIZATION AND STERILIZATION REGRET

Table 5.12 shows the distribution of sterilized women by the age at which they had the procedure, according to the number of years preceding the survey that the procedure was done. However, because 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 recall errors in reporting either the date of the operation or the date of birth and/or age of the woman.

Table 5.12 Timing of sterilization

Percent distribution of sterilized women by age at the time of sterilization and median age at sterilization, according to the number of years since the operation, Bangladesh 2004

Years since operation	Age at time of sterilization					Total	Number of women	Median age[1]
	<25	25-29	30-34	35-39	40-44			
<2	(8.6)	(44.2)	(31.0)	(15.8)	(0.4)	100.0	28	29.8
2-3	(38.3)	(20.1)	(24.4)	(7.4)	(9.9)	100.0	34	27.5
4-5	(23.5)	(31.5)	(26.9)	(18.0)	(0.0)	100.0	42	29.1
6-7	(27.5)	(26.7)	(34.0)	(7.7)	(4.0)	100.0	50	28.2
8-9	28.1	31.6	23.0	14.0	3.4	100.0	52	28.6
10+	47.0	32.4	18.4	2.2	0.0	100.0	394	a
Total	39.8	31.6	21.7	5.7	1.2	100.0	599	26.5

Note: Figures in parentheses are based on 25-49 unweighted cases.
a = Not calculated because of censoring
[1] Median ages are calculated only for women sterilized at less than 40 years of age to avoid problems of censoring.

Women who decide to get sterilized generally have the procedure early in their reproductive years. Seven out of ten sterilized women had the procedure done before age 30. The median age of sterilization is 27 years, and this has not changed over the last decade.

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 5.13. 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, a higher percentage (15 percent) of the women in the 2004 BDHS survey reported that they regretted that they or their husband had been sterilized compared with 11 percent in the 1999-2000 BDHS.

Table 5.13 Sterilization regret

Percentage of currently married women who are sterilized or whose husbands are sterilized and who regret the operation, by reasons for regret and selected background characteristics, Bangladesh 2004

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	9.7	6.7	2.1	0.6	0.2	0.0	137
Rural	16.5	10.8	2.5	0.5	1.5	1.1	480
Division							
Barisal	16.2	13.4	1.2	0.0	1.6	0.0	30
Chittagong	14.1	9.2	3.2	0.0	0.0	1.7	70
Dhaka	12.8	7.0	3.4	0.0	2.4	0.0	217
Khulna	11.6	8.3	1.9	1.4	0.0	0.0	60
Rajshahi	18.9	13.5	1.7	1.2	0.7	1.9	215
Sylhet	(8.6)	(6.5)	(0.9)	(0.0)	(1.3)	(0.0)	24
Education							
No education	16.3	10.4	2.7	0.5	1.3	1.3	396
Primary incomplete	13.0	9.8	1.7	1.1	0.4	0.0	122
Primary complete	(10.1)	(9.2)	(1.0)	(0.0)	(0.0)	(0.0)	36
Secondary incomplete	13.3	4.9	3.7	0.0	4.7	0.0	45
Number of living children							
<2	(70.6)	(54.0)	(4.9)	(0.0)	(3.8)	(7.8)	51
2	22.8	15.1	4.3	0.0	3.4	0.0	124
3	8.4	5.1	2.0	0.6	0.7	0.0	210
4+	4.4	1.7	1.2	0.9	0.0	0.5	232
Total	15.0	9.9	2.4	0.5	1.2	0.8	617

Note: Total includes 17 women who have completed secondary education. Figures in parentheses are based on 25 to 49 women.

A woman with fewer children is more likely to regret having had the procedure. Less than 5 percent of women with four or more living children regret having had the operation, compared with 23 percent of those having two living children. The number of living children, of course, refers to the current number and not the number at the time of sterilization. Presumably, many of those who regret being sterilized include unfortunate cases in which couples decide on sterilization and subsequently lose one or more of their children. Sterilization regret is more common among rural women than urban women. Sterilization regret also varies by division (from 9 to 19 percent) and by education (from 10 to 16 percent).

The most common reason for regret is the desire to have another child, stated by two-thirds of women regretting sterilization.

5.9   SOURCE OF FAMILY PLANNING SERVICES

To ascertain the coverage of different sources of family planning methods in Bangladesh, women who report 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 (hospital, *upazila* health complex, family welfare center, or 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.

In Table 5.14, sources of family planning methods are classified into four major categories: public sector sources (including government hospitals, upazila health complexes, family welfare centers, satellite/EPI clinics, maternal and child welfare centers, 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 5.14 and Figure 5.4 show the percentage of current users of modern methods who obtained their method from a specific source.

Table 5.14 Source of supply of modern contraceptive methods

Percent distribution of current users of modern contraceptive methods by most recent source of supply, according to specific method, Bangladesh 2004

	Contraceptive method							
Source of supply	Pill	IUD	Injectables	Norplant	Condom	Female sterilization	Male sterilization	Total
Public sector	47.6	85.7	79.1	70.0	16.8	85.7	92.4	57.3
Government hospital	0.4	4.2	1.6	13.7	0.3	25.4	37.4	4.4
Family welfare center	4.3	34.0	26.3	9.4	2.6	11.7	4.8	9.9
Upazila health complex	1.9	34.1	11.1	45.5	0.3	41.4	49.7	10.1
Satellite clinic or EPI outreach site	4.4	6.1	22.5	1.0	0.4	0.1	0.0	7.1
Maternal and child welfare center	0.2	2.0	1.4	0.5	0.3	7.0	0.5	1.3
Community clinic	1.4	3.3	4.4	0.0	0.1	0.0	0.0	1.7
Government fieldworker	35.0	1.9	11.8	0.0	12.7	0.0	0.0	22.7
Nongovernmental organization (NGO) sector	3.3	8.6	13.5	28.1	4.7	5.4	2.0	6.2
Static clinic	1.1	8.6	7.9	28.1	3.2	5.4	2.0	3.7
Satellite clinic	0.3	0.0	3.6	0.0	0.3	0.0	0.0	0.9
Depot holder	0.8	0.0	0.0	0.0	0.5	0.0	0.0	0.5
Fieldworker	1.1	0.0	2.0	0.0	0.7	0.0	0.0	1.1
Private medical sector	42.6	3.9	7.1	1.9	63.5	8.0	0.8	31.4
Private hospital or clinic	0.0	3.9	1.2	1.9	0.0	8.0	0.8	1.3
Qualified doctor	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.1
Traditional doctor	0.8	0.0	1.3	0.0	0.0	0.0	0.0	0.7
Pharmacy	41.7	0.0	4.1	0.0	63.5	0.0	0.0	29.3
Other private	6.1	0.0	0.0	0.0	13.5	0.0	0.0	4.5
Shop	4.1	0.0	0.0	0.0	13.0	0.0	0.0	3.4
Friend/relatives	2.0	0.0	0.0	0.0	0.5	0.0	0.0	1.1
Other	0.4	0.7	0.1	0.0	0.5	0.9	2.7	0.4
Don't know	0.1	0.0	0.0	0.0	0.6	0.0	2.1	0.1
Missing	0.0	1.0	0.1	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 women	2,775	65	1,022	83	442	599	67	5,053

The public sector is the predominant source of family planning methods. Nearly six out of ten modern contraceptive method users obtain their methods from a public sector source, with 34 percent obtaining them from a public facility and 23 percent from a government fieldworker. Thirty-six percent of modern contraceptive users acquire their supplies from a private source. Thirty-one percent of users get their contraceptive methods from private medical sources such as pharmacies, private doctors, and hospitals or clinics; an additional 5 percent use nonmedical private sources such as shops and friends or relatives. Only 6 percent of users obtain their contraceptive methods from an NGO source.

Figure 5.4 Distribution of Current Users of Modern Contraceptive Methods By Source of Supply

Private Medical 31%

Other Private 5%

Don't Know/Other 1%

NGO 6%

Public 57%

BDHS 2004
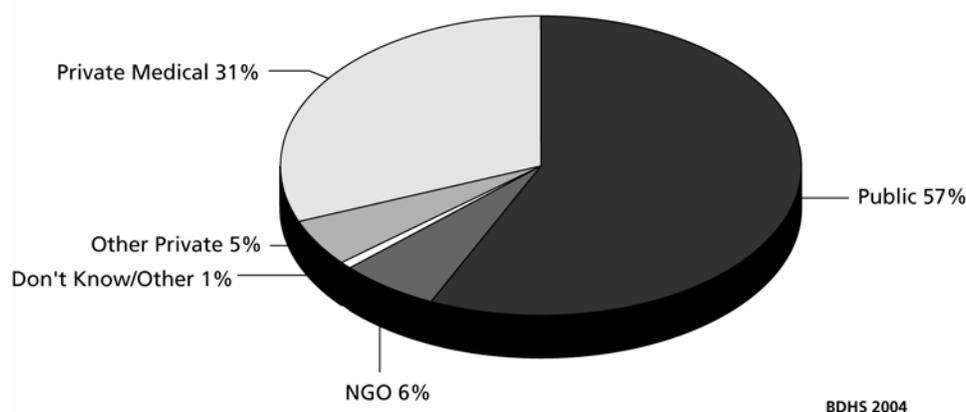
Over the years, there has been a substantial decline in the proportion of users obtaining methods from government fieldworkers, from 42 percent in 1993-1994, 39 percent in 1996-1997, and 28 percent in 1999-2000, to 23 percent in 2004. Conversely, more couples now seem to procure their methods from pharmacies; 29 percent of users in 2004 reported that they obtain their method from pharmacies, compared with 21 percent in 1999-2000.

The source a woman uses is related to the type of method she is using. Pill and condom users are most likely to get supplies from a pharmacy. In 2004, 42 percent of pill users and 64 percent of condom users were getting their supplies from pharmacies. Another one-third of the pill users obtain their method from government fieldworkers. About four out of five users of injectables get their method from government health facilities, while one in nine obtains it from NGO facilities. Most IUD users get their method from government facilities. Both female and male sterilization procedures are mainly performed in government facilities.

5.10   CONTRACEPTIVE DISCONTINUATION

Couples can realize their reproductive goals only when they consistently and correctly use contraceptive methods. A key concern for family planning programs is the rate at which contraceptive users discontinue using their method and the reasons for such discontinuation. Life table contraceptive discontinuation rates are presented in Table 5.15. These rates are based on information collected in the five-year, month-by-month calendar in the 2004 BDHS questionnaire. All episodes of contraceptive use between June 1998 (the third month of the Bengali year 1405) 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 June 1998 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 5.15 are cumulative one-year discontinuation rates and represent the proportion of users who discontinue using a 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 this table, the reasons are classified into four main categories: method failure (resulting in a pregnancy), desire to become pregnant, side effects or health concerns, and all other reasons. Switching from one method to another is included in the last category.

Table 5.15 Contraceptive discontinuation rates

Percentage of contraceptive users who discontinued use of a method within 12 months after beginning its use, by reason for discontinuation and specific method, Bangladesh 2004

| Method | Reason for discontinuation | | | | |
	Method failure	Desire to become pregnant	Side effects or health problem	Other reasons	Total
Pill	3.9	8.5	20.8	13.3	46.5
Injectables	0.4	5.2	33.6	9.5	48.7
Condom	6.3	11.4	6.8	46.9	71.5
Periodic abstinence	10.7	5.7	0.1	24.9	41.4
Withdrawal	8.2	13.5	0.8	37.0	59.6
All methods	4.5	8.1	17.5	19.3	49.4

Note: Table is based on episodes of contraceptive use that began 3-59 months prior to the survey.

The results indicate that nearly half of all contraceptive users in Bangladesh stop using their method within 12 months of starting. Nearly 5 percent of users stop using because of method failure, while 8 percent discontinue because they want to become pregnant. Eighteen percent discontinue using their method as a result of side effects or health concerns, and another 19 percent discontinue for other reasons. Discontinuation rates are highest for condoms (72 percent) and lowest for periodic abstinence (41 percent). There has been little change in discontinuation rates since 1996-1997.

Further information on reasons for contraceptive discontinuation is presented in Table 5.16. This table shows the percent distribution of all discontinuations occurring during the five years preceding the survey, regardless of whether they occurred during the first 12 months of use or not. Side effects are the most common reason for discontinuation, accounting for 28 percent of all discontinuations. The next most common reason for discontinuation is the desire to become pregnant (22 percent), followed by accidental pregnancies (11 percent).

There are variations in reasons for discontinuation by method. Side effects are the most common reason of discontinuation for the pill, the IUD, injectables, and Norplant. 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 users of other methods. Husband's disapproval is cited as a major reason of discontinuation of condoms, as well as the two traditional methods. Method failure ("became pregnant") is a major reason for discontinuing periodic abstinence.

Table 5.16 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason for discontinuation, according to specific method, Bangladesh 2004

Reason for discontinuation	Method								All methods
	Pill	IUD	Injectables	Norplant	Condom	Periodic abstinence	With-drawal	Other	
Became pregnant	11.2	1.6	1.4	(0.0)	10.6	25.5	15.9	(55.2)	11.2
Wanted to become pregnant	24.8	11.3	14.9	(13.6)	20.4	19.6	24.1	(11.3)	21.8
Husband disapproved	0.8	2.1	1.2	(0.0)	24.1	13.2	12.0	(0.0)	5.8
Side effects	33.6	54.6	52.5	(64.0)	4.5	0.1	0.3	(7.0)	27.7
Health concerns	6.5	9.1	9.9	(2.1)	4.0	0.1	1.1	(0.0)	5.7
Access/availability	1.4	0.0	5.8	(0.0)	2.0	0.1	0.0	(3.2)	1.9
Wanted a more effective method	2.7	0.0	1.1	(1.9)	8.8	21.4	19.3	(12.6)	6.1
Inconvenient to use	3.2	7.6	0.9	(2.5)	13.9	2.8	11.1	(0.8)	4.8
Infrequent sex/husband away	9.9	2.7	3.9	(4.1)	5.1	5.6	11.8	(2.9)	7.9
Cost too much	0.4	0.0	0.2	(0.0)	0.4	0.0	0.0	(0.0)	0.3
Fatalistic	0.1	0.0	0.0	(0.0)	0.1	0.1	0.0	(0.0)	0.1
Difficult to get pregnant/menopausal	0.8	3.0	2.5	(4.1)	0.6	6.3	1.8	(2.4)	1.7
Marital dissolution/separation	0.8	0.0	0.7	(0.0)	0.2	1.4	0.9	(0.0)	0.7
Other	3.2	8.0	4.7	(7.7)	4.1	2.7	1.0	(4.6)	3.4
Missing	0.6	0.0	0.4	(0.0)	1.2	1.1	0.7	(0.0)	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	4,632	134	1,348	39	1,165	808	556	43	8,729

Note: Total includes 5 male sterilization discontinuations. Figures in parentheses are based on 25-49 discontinuations.

5.11 FUTURE INTENTIONS TO USE FAMILY PLANNING

5.11.1 Future Use of Contraception

Currently married women who were not using contraception at the time of survey—defined as nonusers—were asked about their intention to use family planning in the future. The results are presented in Table 5.17, according to the number of living children the women had.

Table 5.17 Future use of contraception

Percent distribution of currently married women who are not using a contraceptive method by intention to use in the future, according to number of living children, Bangladesh 2004

Future intention	Number of living children[1]					Total
	0	1	2	3	4+	
Intends to use	84.0	88.3	82.9	72.2	45.4	73.2
Unsure	4.1	1.5	1.5	1.4	1.0	1.7
Does not intend to use	11.7	10.1	15.2	25.9	53.4	24.8
Missing	0.1	0.1	0.4	0.4	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	676	1,019	957	659	1,125	4,437

[1] Includes current pregnancy

An important indicator of the changing demand for family planning is the extent to which nonusers of contraception plan to use family planning in the future. Among nonusers, nearly three-fourths intend to use family planning methods. Only a few nonusers (2 percent) say they are unsure of their intention. Intention to use varies with the number of children. The proportion of nonusers who say they intend to use family planning in the future peaks at 88 percent for women with one child and falls sharply to 45 percent among women with four or more children. The proportion of nonusers intending to use family planning in the future has remained practically unchanged between the 1999-2000 BDHS and the 2004 BDHS.

5.11.2 Reasons for Not Intending to Use Contraception

Table 5.18 presents the main reasons for not intending to use contraception in the future as reported by nonintenders (nonusers who do not intend to use family planning in the future). Nearly eight out of ten nonintenders do not plan to use family planning for reasons related to fertility. The most common fertility-related reason for nonuse is infecundity, cited by 51 percent of nonintenders, who are either menopausal/have had a hysterectomy or are subfecund. Fifteen percent do not intend to use a contraceptive method because of fatalistic attitudes (believing that having children depends on God's will), while 12 percent stated that infrequent sex or not having sex was the reason for not intending to use family planning.

Table 5.18 Reason for not intending to use contraception

Percent distribution of currently married women 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 2004

| | Age | | |
Reason	10-29	30-49	Total
Fertility related	50.2	82.2	78.4
Not having sex	0.0	5.1	4.5
Infrequent sex	3.7	8.2	7.7
Menopausal or hysterectomy	9.2	51.1	46.2
Subfecund or infecund	4.5	5.2	5.1
Postpartum amenorrheic	2.2	0.2	0.4
Fatalistic	30.5	12.4	14.6
Opposition to use	30.5	6.2	9.1
Respondent opposed	6.9	1.3	1.9
Husband opposed	10.5	1.9	2.9
Others opposed	0.0	0.1	0.1
Religious prohibition	13.2	2.9	4.1
Knows no source	1.2	0.1	0.2
Method related	10.2	6.2	6.7
Health concerns	4.6	1.3	1.7
Fear of side effects	2.6	3.8	3.7
Costs too much	0.7	0.0	0.1
Inconvenient to use	0.0	0.1	0.1
Interferes with body's normal process	2.3	1.1	1.2
Other	7.9	4.9	5.2
Don't know	0.0	0.1	0.1
Missing	0.0	0.2	0.2
Total	100.0	100.0	100.0
Number of women	130	969	1,099

Other major reasons for nonuse are opposition to family planning and method-related reasons. Nine percent of nonintenders do not intend to use contraceptives because of opposition to family planning—by themselves, their husband, or others or because of religious prohibitions. Only 7 percent do not intend to use because of method-related reasons, mainly fear of side effects.

Between the 1999-2000 BDHS and the 2004 BDHS, the proportion of women citing fatalistic attitude as the reason for not using family planning rose from 9 to 15 percent, and those reporting themselves as menopausal, infecund, or subfecund rose from 44 to 51 percent. These increases were associated with a drop in the proportion of women citing infrequent sex or not having sex (from 16 to 12 percent) and opposition to family planning by the women themselves or their husbands.

5.11.3 Preferred Method for Future Use

In assessing future demand for specific contraceptive methods, currently married women who were not using contraception but said they intended to use a contraceptive method in the future were asked which method they would prefer to use. The results on method preferences are presented in Table 5.19. The largest proportion of prospective users mentioned the pill (45 percent) as their preferred method, and 18 percent

favored injectables. There are only minor variations in method preference between the 1999-2000 BDHS and the 2004 BDHS.

Table 5.19 Preferred method of contraception for future use

Percent distribution of currently married women who are not using a contraceptive method but who intend to use in the future by preferred method, according to age, Bangladesh 2004

Method	Age 10-29	Age 30-49	Total
Pill	45.3	44.8	45.2
IUD	0.4	0.9	0.5
Injectables	18.8	16.9	18.4
Norplant	1.0	1.3	1.1
Condom	2.4	2.0	2.3
Female sterilization	1.6	2.8	1.9
Periodic abstinence	0.8	3.2	1.4
Withdrawal	0.5	1.1	0.6
Other	0.2	0.3	0.2
Unsure	29.0	26.6	28.4
Total	100.0	100.0	100.0
Number of women	2,457	793	3,250

5.12 FAMILY PLANNING OUTREACH SERVICES

Fieldworkers and satellite clinics are two crucial elements in the provision of family planning services in Bangladesh. The extent of coverage of both these services, as assessed in the 2004 BDHS, is presented in Table 5.20 for fieldworkers and in Table 5.21 for satellite clinics.

Only 18 percent of currently married women reported having been visited for family planning services by a fieldworker in the six months preceding the survey (Table 5.20), with most of them saying they were visited by a government family planning fieldworker (15 percent). Fieldworker visits are not uniform across all groups of women. Younger (age 10-19) and older (age 40 and over) women are less likely to be visited than women in the prime reproductive ages. Fieldworkers' visits also vary by the number of children women have; fieldworkers are least likely to visit women with no children and most likely to visit those who have two or three children. Fieldworkers' visits for family planning are more common for women in rural areas (19 percent) than in urban areas (14 percent). Women in Khulna are most likely (one in five), while women in Chittagong and Sylhet are least likely (about one in eight) to be visited by fieldworkers providing family planning services. Fieldworker visits varied by contraceptive method use status of the woman. Fieldworkers mostly visit pill and IUD users; nonusers and sterilized women receive the fewest visits.

Table 5.20 Contact with family planning fieldworkers and health fieldworkers

Percentage of currently married women who reported being visited by a government fieldworker or a nongovernmental organization (NGO) fieldworker for family planning (FP) services and for health services in the six months preceding the survey, by selected background characteristics and contraceptive use status, Bangladesh 2004

Background characteristic	Fieldworker visit for family planning services					Fieldworker visit for health services					Not visited by either type of fieldworker in last 6 months	Number of women
	No one	Govern-ment FP worker	Govern-ment health worker	NGO worker	Total	No one	Govern-ment FP worker	Govern-ment health worker	NGO worker	Total		
Age												
10-14	91.2	6.4	1.9	0.9	100.0	96.7	0.4	2.3	1.0	100.0	89.9	145
15-19	86.3	11.4	0.9	1.6	100.0	89.5	3.7	5.6	1.3	100.0	79.7	1,536
20-24	80.6	15.7	1.7	2.0	100.0	86.7	4.6	7.2	1.7	100.0	72.6	2,121
25-29	78.3	17.4	1.9	2.6	100.0	88.7	3.7	6.3	1.5	100.0	72.1	1,935
30-34	77.8	19.1	1.3	1.8	100.0	89.6	3.6	5.8	1.2	100.0	72.4	1,683
35-39	79.0	17.8	1.7	1.9	100.0	91.7	3.1	4.1	1.1	100.0	75.1	1,309
40-44	85.6	11.9	0.8	1.7	100.0	94.4	1.3	3.5	0.9	100.0	82.3	982
45-49	91.2	7.4	0.6	1.1	100.0	96.1	1.4	2.7	0.1	100.0	89.4	870
Residence												
Urban	85.6	9.6	1.1	3.7	100.0	93.0	2.2	3.1	1.8	100.0	81.7	2,372
Rural	80.7	16.6	1.5	1.4	100.0	89.4	3.7	6.1	1.1	100.0	74.8	8,210
Division												
Barisal	82.4	13.9	2.7	1.3	100.0	83.4	4.8	10.5	1.2	100.0	72.8	674
Chittagong	87.3	9.9	1.0	2.0	100.0	89.0	4.4	5.3	1.5	100.0	81.3	1,877
Dhaka	82.1	14.7	1.3	2.0	100.0	91.9	2.6	4.5	1.2	100.0	77.1	3,315
Khulna	76.5	19.2	2.0	2.5	100.0	89.8	2.8	6.7	1.0	100.0	72.0	1,296
Rajshahi	78.9	18.3	1.0	1.8	100.0	92.1	2.4	4.2	1.3	100.0	74.6	2,782
Sylhet	87.4	10.2	1.9	1.1	100.0	84.5	7.6	7.8	1.5	100.0	77.8	638
Education												
No education	83.4	13.8	1.3	1.6	100.0	91.7	3.0	4.5	1.0	100.0	78.4	4,187
Primary incomplete	80.3	16.7	1.2	1.9	100.0	88.4	3.7	6.6	1.4	100.0	73.9	2,176
Primary complete	77.9	18.4	2.3	1.8	100.0	88.4	3.1	7.2	1.4	100.0	71.0	958
Secondary incomplete	81.5	15.1	1.4	2.2	100.0	89.5	3.9	5.4	1.5	100.0	76.1	2,457
Secondary complete or higher	83.6	12.9	1.3	2.5	100.0	91.2	2.5	5.1	1.3	100.0	78.8	804
Number of living children												
0	92.7	6.0	1.1	0.2	100.0	98.5	0.5	0.8	0.3	100.0	91.8	968
1	83.4	13.3	1.2	2.2	100.0	88.4	3.9	6.1	1.9	100.0	76.9	2,118
2	78.7	17.9	1.4	2.1	100.0	88.6	4.1	6.5	1.0	100.0	71.9	2,574
3	77.8	18.1	1.5	2.8	100.0	89.8	3.2	5.5	1.7	100.0	72.8	2,055
4+	82.7	14.6	1.6	1.4	100.0	90.5	3.3	5.5	1.0	100.0	77.1	2,866
Current contraceptive use												
Pill	69.2	26.6	2.2	2.2	100.0	88.8	4.1	6.0	1.2	100.0	63.9	2,775
IUD	72.3	23.5	5.0	3.0	100.0	87.1	2.4	10.5	0.0	100.0	67.5	65
Injections	78.0	17.1	1.0	4.1	100.0	88.0	4.1	5.9	1.8	100.0	72.3	1,022
Norplant	82.1	15.7	0.0	2.2	100.0	90.7	3.0	6.2	0.0	100.0	81.3	83
Condom	78.8	18.2	0.9	2.6	100.0	93.7	2.0	3.7	0.7	100.0	76.5	442
Female sterilization	94.8	3.4	0.9	1.0	100.0	96.4	1.2	2.0	0.5	100.0	92.3	550
Male sterilization	92.7	6.2	0.0	1.1	100.0	96.4	0.8	2.8	0.0	100.0	92.0	67
Periodic abstinence	81.2	14.9	1.5	2.5	100.0	89.5	3.0	6.9	0.9	100.0	75.3	690
Withdrawal	83.2	14.3	1.7	1.3	100.0	91.3	2.9	3.6	2.2	100.0	79.2	382
Other	95.7	4.3	0.0	0.0	100.0	83.3	5.8	10.3	0.6	100.0	80.5	68
Not using	89.1	8.7	1.1	1.3	100.0	90.5	3.2	5.3	1.3	100.0	82.7	4,437
Total	81.8	15.0	1.4	1.9	100.0	90.2	3.3	5.4	1.2	100.0	76.3	10,582

Fieldworker visits have been declining since the 1996-1997 BDHS. The proportion of currently married women visited for family planning services by fieldworkers in the six months before a survey dropped from 35 percent in 1996-97 to 18 percent in 2004.

Fieldworkers are less likely to visit women for health services than for family planning services. Only 10 percent of women were visited for health services in the 2004 BDHS, compared with 18 percent who were visited for family planning services. Differentials in visitation for health services by fieldworkers show almost for the same patterns as those for family planning services.

As shown in Table 5.21, nearly three-fourths of ever-married women interviewed in the 2004 BDHS were found to be aware of the satellite clinic in their community (including those who obtained their contraceptive method from a community clinic). Awareness of satellite clinics is lower among younger women, women in urban areas, women in Sylhet division, and among women who completed at least secondary education.

Table 5.21 Satellite clinics

Percentage of ever-married women who reported a satellite clinic in their community in the past three months, the percentage who visited a clinic, and the percentage who reported various types of services provided at the clinic, by background characteristics, Bangladesh 2004

			Of those reporting a clinic in community:		Of those who visited a clinic, percentage reporting availability of various services:						
Background characteristic	Percentage reporting a clinic in community	Number of women	Percentage who visited clinic	Number of women	Family planning methods[1]	Child immunization	Child growth monitoring	Vitamin A for children	Other	Don't know/missing	Number of women
Age											
10-14	56.6	150	11.5	85	*	*	*	*	*	*	10
15-19	67.5	1,598	40.4	1,079	9.1	69.0	0.9	19.7	20.8	0.9	436
20-24	73.8	2,202	47.5	1,625	10.5	72.4	0.9	28.8	12.0	1.5	773
25-29	75.4	2,013	42.3	1,517	15.5	66.9	0.6	28.9	10.0	1.5	642
30-34	73.3	1,793	32.3	1,314	19.2	55.9	0.5	27.5	12.9	2.2	425
35-39	74.5	1,457	22.3	1,085	27.1	49.4	0.0	27.7	14.9	3.1	242
40-44	75.6	1,160	14.5	878	19.1	59.9	0.0	17.5	17.5	5.9	127
45-49	73.8	1,066	13.5	787	12.8	58.5	0.0	18.2	19.2	4.7	106
Residence											
Urban	65.9	2,586	28.3	1,704	12.0	67.5	1.0	23.6	11.5	2.3	482
Rural	75.3	8,854	34.2	6,664	15.3	64.4	0.6	26.6	14.4	1.9	2,278
Division											
Barisal	74.2	719	30.8	534	21.4	68.6	0.0	11.4	10.8	2.7	165
Chittagong	72.9	2,041	36.3	1,489	10.1	72.0	0.4	35.2	13.7	1.9	540
Dhaka	71.5	3,570	31.7	2,552	13.8	61.0	1.2	23.7	13.6	1.8	809
Khulna	75.6	1,397	30.2	1,056	14.7	68.3	0.3	13.6	10.9	1.0	319
Rajshahi	75.1	2,994	34.9	2,248	18.6	63.1	0.1	32.6	14.0	1.9	784
Sylhet	68.1	719	29.0	490	7.9	59.1	2.9	14.6	25.1	5.1	142
Education											
No education	73.2	4,713	31.1	3,451	19.6	60.7	0.2	28.4	10.9	1.7	1,074
Primary incomplete	76.5	2,348	33.6	1,796	15.9	65.2	0.4	24.9	15.1	2.0	604
Primary complete	77.0	1,011	34.5	779	10.4	64.8	1.3	25.1	18.7	2.9	269
Secondary incomplete	71.9	2,541	36.5	1,827	9.3	70.6	1.2	24.7	14.7	2.1	667
Secondary complete or higher	62.5	827	28.2	517	6.3	69.1	1.4	22.4	17.5	2.1	146
Total	73.2	11,440	33.0	8,369	14.7	64.9	0.7	26.1	13.9	2.0	2,760

Note: An asterisk indicates that the figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes those who obtained contraceptive supplies from satellite clinic in past three months.

Only one-third of those aware of satellite clinics reported to have visited a clinic in the three months before the 2004 BDHS. About two-thirds of women who visited a satellite clinic knew that the clinic provided immunization services for children. However, it seems there has been a substantial decline in awareness that immunization services are available at these sites (from 83 percent in 1999-2000 to 65 percent in 2004). About one-quarter of the women who visited a satellite clinic knew that the clinic provided vitamin A for children, but only 15 percent knew that the clinic provided family planning methods.

5.13 DISCUSSION ABOUT FAMILY PLANNING BETWEEN SPOUSES

Discussion between husbands and wives about family planning is an important intermediate step towards eventual adoption and sustained use of contraception. Use of family planning methods is facilitated when husbands and wives discuss the issue and share their views. On the other hand, 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 assess the extent to which couples discuss family planning, interviewers asked currently married women who were not sterilized and who knew a contraceptive method, how often they had talked with their husband about family planning in the three months preceding the survey. The results are presented in Table 5.22.

Table 5.22 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 three months, according to current age, Bangladesh 2004

| | Number of times family planning discussed | | | | | Number of |
Age	Never	Once or twice	More than twice	Missing	Total	women
10-14	56.4	33.7	9.9	0.0	100.0	145
15-19	51.4	39.8	8.7	0.1	100.0	1,536
20-24	50.8	40.3	8.6	0.3	100.0	2,113
25-29	53.5	39.8	6.6	0.1	100.0	1,893
30-34	56.3	37.1	6.5	0.1	100.0	1,591
35-39	61.1	32.7	6.2	0.0	100.0	1,183
40-44	69.0	27.1	3.6	0.2	100.0	843
45-49	79.6	17.5	2.8	0.2	100.0	725
Total	57.2	35.9	6.8	0.1	100.0	10,030

About six in ten (57 percent) of the women questioned had not talked with their husband about family planning in the past three months, 36 percent had discussed it once or twice, and only 7 percent had discussed it more than twice. Interspousal discussion about family planning was generally less common among younger women than among older women.

5.14 EXPOSURE TO FAMILY PLANNING MESSAGES

In assessing the reach of family planning messages, women in the 2004 BDHS 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 5.23 presents the proportion of ever-married women who had heard or seen such a message from a media source, according to background characteristics.

Overall, 44 percent of women have had exposure to family planning messages disseminated through the media in the month preceding the survey. Television and radio are the two major sources of exposure to family planning messages. Among women, one-third reported hearing or seeing a family planning message on television, and one-quarter reported hearing a message on the radio. Exposure to messages from other media sources, namely, poster/billboards (8 percent), newspaper/magazines (5 percent), and community events (3 percent) is low.

Table 5.23 Exposure to family planning messages

Percentage of ever-married women who heard or saw a family planning message in the media during the month preceding the interview, according to background characteristics, Bangladesh 2004

Background characteristic	Radio	Television	Newspaper/ magazine	Poster/ billboard/ leaflet	Community event	At least one of these media sources	None of these media sources	Number of women
Age								
10-14	32.1	35.0	4.8	8.8	1.7	51.6	48.4	150
15-19	31.9	38.8	4.6	8.5	3.2	51.5	48.5	1,598
20-24	28.2	40.5	6.0	10.3	3.2	51.0	49.0	2,202
25-29	25.8	36.0	5.5	9.4	3.0	46.5	53.5	2,013
30-34	22.2	32.6	4.2	7.7	3.1	42.3	57.7	1,793
35-39	21.0	30.4	4.2	7.3	3.1	41.8	58.2	1,457
40-44	19.6	27.5	3.8	5.3	3.7	38.2	61.8	1,160
45-49	14.5	21.3	2.2	4.7	2.5	29.1	70.9	1,066
Residence								
Urban	24.4	55.5	10.6	16.9	4.1	62.0	38.0	2,586
Rural	24.3	27.4	2.9	5.5	2.8	39.3	60.7	8,854
Division								
Barisal	33.2	28.8	7.4	8.7	4.6	46.4	53.6	719
Chittagong	26.7	35.9	5.7	6.8	2.5	45.6	54.4	2,041
Dhaka	21.8	36.6	5.0	10.4	3.2	45.6	54.4	3,570
Khulna	26.3	36.9	5.1	8.2	4.5	48.1	51.9	1,397
Rajshahi	23.1	29.4	2.5	5.7	2.4	40.8	59.2	2,994
Sylhet	22.4	30.8	4.7	8.9	3.2	41.2	58.8	719
Education								
No education	15.8	19.9	0.3	2.0	1.9	28.7	71.3	4,713
Primary incomplete	24.8	31.4	1.1	4.9	2.9	43.4	56.6	2,348
Primary complete	27.6	37.0	3.0	6.9	2.7	48.3	51.7	1,011
Secondary incomplete	34.2	49.2	7.9	13.4	3.7	61.1	38.9	2,541
Secondary complete or higher	37.2	67.8	31.4	36.3	9.2	80.6	19.4	827
Wealth index								
Lowest	11.9	11.0	0.3	1.9	1.6	19.4	80.6	2,279
Second	20.6	19.9	0.8	2.7	2.9	32.9	67.1	2,290
Middle	25.3	26.0	2.2	5.6	2.4	40.7	59.3	2,267
Fourth	33.3	45.3	4.2	9.0	3.7	56.5	43.5	2,307
Highest	30.3	66.2	15.5	21.0	4.8	72.3	27.7	2,297
Total	24.3	33.8	4.6	8.1	3.1	44.4	55.6	11,440

Younger women, women in urban areas, those who have more education, and women who live in wealthier households are more likely to have had exposure to family planning messages through at least one mass media source, compared with other women.

Overall, exposure to family planning messages through the media has remained largely unchanged since 1999-2000. However, exposure to family planning messages through television increased considerably between the two surveys, from 29 to 34 percent. There was also an increase in exposure to poster/billboards (6 to 8 percent). Exposure to family planning messages through radio and newspaper/magazines has remained largely unchanged. Efforts to disseminate family planning messages through community events appear to have declined between the two surveys, with only 3 percent of women reporting that they heard a message at a community event in 2004, compared with 6 percent in 1999-2000.

OTHER PROXIMATE DETERMINANTS OF FERTILITY   **6**

6.1   INTRODUCTION

This chapter addresses the principal factors—other than contraception—that influence fertility. Marriage is among the most important of these proximate determinants because it is a primary indicator of women's exposure to the risk of pregnancy. Populations in which age at marriage is low also tend to experience early childbearing, a longer period of exposure to the risk of pregnancy, and, thus, higher fertility levels. The early initiation of childbearing associated with early marriage may also adversely affect the health of women and their children.

Besides marriage, this chapter explores three other factors that influence fertility: postpartum amenorrhea, postpartum abstinence, and menopause. Postpartum amenorrhea and postpartum abstinence determine the length of time a woman is insusceptible to pregnancy after childbirth, which affects the length of the birth interval and, thus, fertility levels. Menopause is important because it marks the end of a woman's period of exposure to the risk of pregnancy. These factors taken together determine the length and pace of reproduction; hence they are important in understanding fertility levels and differences.

6.2   MARITAL STATUS

In the 2004 BDHS, 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, both ever-married and never-married. For 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. As both ever-married and never-married men were interviewed, the results for men are based on those who were interviewed; no inflation factors were employed.

It is important to take note of the definition of marriage that was used in the 2004 BDHS. 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 2004 BDHS 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.

The distribution of women age 10-49 by marital status at the time of survey is presented in Table 6.1. In Bangladesh, most women in this age group are married. Twenty-three percent of women age 10-49 have never been married; most never-married women are age 10-19. The low proportion (1 percent or less) of women over age 30 who have never been married indicates that marriage is universal in Bangladesh and that almost all women marry before age 30. Divorce and separation (2 percent) are uncommon in Bangladesh, and even among women over age 30, only 3 or 4 percent are divorced or separated. Widowhood is limited until older ages. Twelve percent of women age 40-44 and 15 percent of those age 45-49 are widowed.

Table 6.1 Current marital status

Percent distribution of women and men by current marital status, according to age, Bangladesh 2004

Age	Never married	Married	Divorced	Separated	Widowed	Total	Number
			WOMEN				
10-14	88.6	11.0	0.1	0.2	0.0	100.0	1,317
15-19	52.1	46.0	0.8	0.9	0.1	100.0	3,337
20-24	15.2	81.7	1.1	1.3	0.7	100.0	2,597
25-29	4.2	92.1	1.2	1.3	1.2	100.0	2,100
30-34	1.2	92.7	1.1	1.9	3.1	100.0	1,815
35-39	0.4	89.4	1.6	2.2	6.3	100.0	1,463
40-44	0.3	84.4	1.5	2.1	11.7	100.0	1,164
45-49	0.0	81.6	0.6	2.3	15.4	100.0	1,066
Total	23.0	71.2	1.0	1.4	3.3	100.0	14,859
			MEN				
15-19	96.6	3.4	0.0	0.0	0.0	100.0	822
20-24	65.6	33.4	0.3	0.4	0.2	100.0	660
25-29	29.4	68.0	2.1	0.4	0.2	100.0	589
30-34	9.5	89.3	0.6	0.3	0.3	100.0	552
35-39	4.0	94.0	1.0	0.6	0.4	100.0	475
40-44	0.2	99.7	0.2	0.0	0.0	100.0	491
45-49	0.3	99.3	0.0	0.0	0.4	100.0	465
50-54	0.0	99.0	0.0	0.0	1.0	100.0	242
Total	34.3	64.7	0.5	0.2	0.2	100.0	4,297

One-third of the interviewed men age 15-54 have never been married; about two-thirds of the men are currently married; and only 1 percent are separated, divorced, or widowed. A greater proportion of men, compared with women, have never been married (11 percentage points more).

Table 6.2 shows trends in the proportion of women reported as never married by age group from previous surveys in Bangladesh. Between 1975 and 2000, the proportion of never-married women in age groups 15-19 and 20-24 increased, but this upward trend did not continue beyond 2000. In 2004, the overall proportion of never-married women age 10-49 (23 percent) was lower than that reported in 1999-2000 (30 percent) and 1996-1997 (34 percent). The decline in the percentage of never-married women among those age 10-14 and 20-24 accounts for the decrease in the overall percentage of never-married women age 10-49.

Table 6.2 Trends in proportion never married

Percentage of women who have never married, by age group, as reported in various surveys, Bangladesh 1975-2004

Age	1975 BFS	1983 CPS	1985 CPS	1989 BFS	1989 CPS	1991 CPS	1993-1994 BDHS	1996-1997 BDHS	1999-2000 BDHS	2004 BDHS
10-14	91.2	98.0	98.7	96.2	96.4	98.5	95.2	95.2	92.7	88.6
15-19	29.8	34.2	47.5	49.0	45.8	46.7	50.5	49.8	51.9	52.1
20-24	4.6	4.0	7.1	12.0	9.3	12.3	12.4	17.2	18.5	15.2
25-29	1.0	0.7	1.0	2.3	1.6	2.8	2.2	3.4	4.2	4.2
30-34	0.2	0.4	0.1	0.3	0.5	0.5	0.3	0.5	0.1	1.2
35-39	0.4	-	-	0.1	0.5	0.1	0.3	0.0	0.2	0.4
40-44	0.1	0.1	-	0.2	0.2	0.3	0.7	0.0	0.0	0.3
45-49	0.0	0.1	-	0.1	0.1	-	0.2	0.0	0.0	0.0

 - = Less than 0.1 percent
Sources: 1975 Bangladesh Fertility Survey (BFS) (MHPC, 1978:49); 1983, 1985, 1989, and 1991 Contraceptive Preva-lence Surveys (CPSs) (Mitra et al., 1993:24); 1989 BFS (Huq and Cleland, 1990:43); 1993-1994 Bangladesh Demo-graphic and Health Survey (BDHS) (Mitra et al, 1994:72); 1996-1997 BDHS (Mitra et al., 1997:82); and 1999-2000 BDHS (NIPORT et al., 2001:78)

6.3   AGE AT FIRST MARRIAGE

Marriage in most Asian societies defines the onset of the socially acceptable time for childbearing. Women who marry early will have, on average, a longer period of exposure to pregnancy, often leading to a higher number of children ever born.

Table 6.3.1 shows the percentage of women who were first married by specific ages, and the median age at first marriage, according to current age. The data show that median age at first marriage has been increasing over time. The median age at first marriage rises from 13.9 years for women age 45-49 to 16.0 years for those age 20-24. The proportion of women marrying by age 15 has declined by almost half over time, from 71 percent among women in the oldest cohort to 37 percent among women age 20-24.

Table 6.3.1 Age at first marriage: women

Percentage of women age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Bangladesh 2004

Current age	Percentage first married by exact age:						Percentage never mar-ried	Number of women	Median age at first mar-riage
	12	15	18	20	22	25			
15-19	0.4	26.7	na	na	na	na	52.1	3,337	a
20-24	0.6	37.3	68.4	78.6	na	na	15.2	2,597	16.0
25-29	1.1	50.5	79.7	87.6	91.3	94.4	4.2	2,100	15.0
30-34	1.1	54.2	83.7	90.5	94.1	97.1	1.2	1,815	14.7
35-39	1.9	58.7	84.6	93.5	96.3	97.8	0.4	1,463	14.5
40-44	3.0	61.6	88.7	95.0	97.2	98.3	0.3	1,164	14.2
45-49	2.4	71.4	91.7	95.8	97.5	99.0	0.0	1,066	13.9
20-49	1.4	52.4	80.5	88.4	na	na	5.0	10,205	14.8
25-49	1.7	57.6	84.7	91.7	94.7	97.0	1.6	7,608	14.5

na = Not applicable
 a = Omitted because less than 50 percent of the women married for the first time before reaching age 15

Still, more than half of all women age 20-49 enter marriage before their 15th birthday. Comparison of data from the four BDHS surveys since 1993 indicates that although the median age at first marriage for women age 20-49 has increased over time, there was a decrease from a median of 15.0 years at the time of the 1999-2000 BDHS to 14.8 years in 2004.

In Bangladesh the legal age of marriage is 18 years for women; however a large proportion of marriages still take place before the legal age. Figure 6.1 shows that in the 2004 BDHS, 68 percent of women age 20-24 were married before age 18. Data indicate that over the last two decades, the proportion of women marrying before the legal age had been gradually declining; but in recent years, it has increased again.

Figure 6.1 Trends in Percentage of Women Age 20-24 Who Were First Married by Age 18
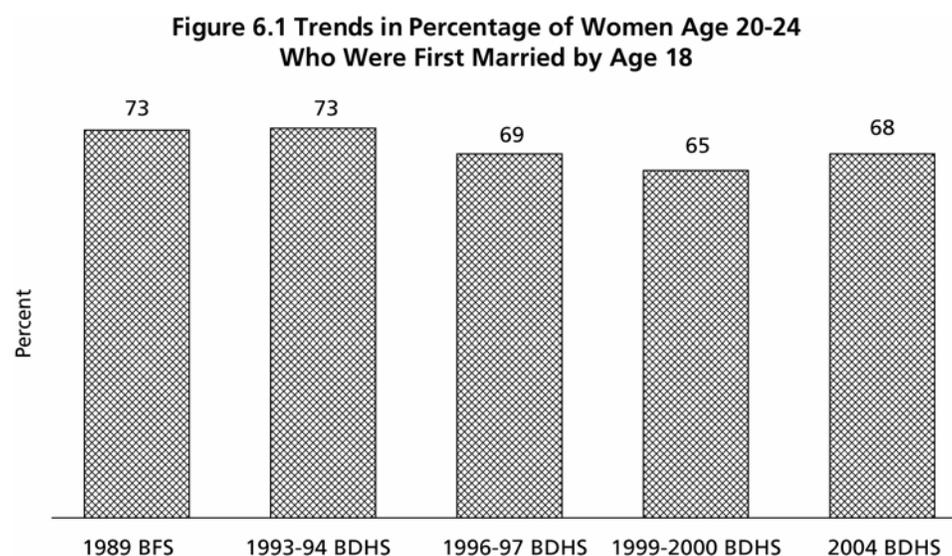
Table 6.3.2 shows the distribution of age at first marriage for men. Only 17 percent of men marry before their 20th birthday, and a little more than half marry before age 25. The trend of rising median age at marriage among men ceased a few years ago and is now reversed; the median age at marriage was 22.3 years for men in their early fifties, increased to around 25 years for men age 35-44, and then declined to 24.4 years for men in their late twenties.

Table 6.3.2 Age at first marriage: men

Percentage of men age 15-54 who were first married by specific exact ages and median age at first marriage, according to current age, Bangladesh 2004

Current age	Percentage first married by exact age:					Percentage never married	Number of men	Median age at first marriage
	15	18	20	22	25			
15-19	0.2	na	na	na	na	96.6	822	a
20-24	0.4	4.4	15.3	na	na	65.6	660	a
25-29	1.1	5.3	14.9	30.1	54.0	29.4	589	24.4
30-34	0.4	5.7	15.9	28.7	52.8	9.5	552	24.6
35-39	0.3	6.9	14.9	28.1	48.5	4.0	475	25.1
40-44	0.5	5.1	13.1	29.3	49.7	0.2	491	25.0
45-49	0.2	5.8	18.0	32.8	56.6	0.3	465	23.7
50-54	0.8	10.3	29.2	47.6	64.8	0.0	242	22.3
25-54	0.5	6.1	16.5	31.3	53.5	8.8	2,815	24.5
30-54	0.4	6.3	17.0	31.6	53.3	3.3	2,225	24.5

na = Not applicable
a = Omitted because less than 50 percent of the men married for the first time before reaching the beginning of the age group

Table 6.4.1 further examines the median age at first marriage for women age 20-49 and 25-49, by background characteristics. Urban women tend to marry almost one year later than their rural counterparts. The variation by division is larger. Women in Sylhet and Chittagong divisions generally enter into marriage at least one year later than women in Rajshahi and Khulna divisions. Median age at first marriage for women age 25-49 is highest for women in Sylhet (15.5 years) and lowest for those in Rajshahi division (14.0 years). The median age at marriage increases with level of education and with household economic status. For example, among women age 25-49, the median age at first marriage is 14.0 years for those with no education and 19.8 years for those who have at least completed secondary education. Likewise, for the same age group, the median age at marriage is 14.2 years for women in the lowest wealth quintile and 15.8 years for those in the highest wealth quintile.

Table 6.4.1 Median age at first marriage: women

Median age at first marriage among women age 20-49, by current age and background characteristics, Bangladesh 2004

| 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	17.1	15.7	15.3	15.1	14.7	14.0	15.6	15.1
Rural	15.7	14.8	14.6	14.3	14.1	13.8	14.7	14.4
Division								
Barisal	16.4	14.9	15.5	14.6	14.8	14.0	15.0	14.8
Chittagong	17.1	15.5	15.6	15.4	14.5	14.5	15.6	15.2
Dhaka	15.9	15.3	14.5	14.4	14.0	13.9	14.9	14.5
Khulna	15.3	14.5	14.5	14.1	14.0	13.7	14.5	14.2
Rajshahi	15.3	14.2	14.3	14.1	14.0	13.6	14.2	14.0
Sylhet	17.4	16.5	15.6	15.4	14.8	14.7	15.9	15.5
Education								
No education	14.4	14.1	14.2	14.1	13.9	13.7	14.0	14.0
Primary incomplete	14.7	14.2	14.5	14.3	14.1	13.8	14.3	14.2
Primary complete	15.2	15.1	14.7	14.7	14.5	14.7	14.9	14.8
Secondary incomplete	16.7	15.9	15.9	15.5	15.6	14.7	16.1	15.7
Secondary complete or higher	a	21.1	19.9	18.4	17.9	18.9	a	19.8
Wealth index								
Lowest	14.6	14.4	14.4	14.1	14.1	13.7	14.3	14.2
Second	14.9	14.3	14.3	14.2	14.1	13.7	14.3	14.1
Middle	15.9	14.5	14.8	14.3	13.9	13.9	14.6	14.3
Fourth	16.9	15.6	14.6	14.5	14.0	13.9	15.1	14.6
Highest	18.3	17.0	16.3	15.4	15.2	14.7	16.5	15.8
Total	16.0	15.0	14.7	14.5	14.2	13.9	14.8	14.5

a = Omitted because less than 50 percent of the women married for the first time before reaching age 20

Table 6.4.2 shows a difference of slightly more than one year in the median age at first marriage between men age 30-54 in urban areas (25.3 years) and in rural areas (24.1 years). The divisional difference between the highest (Sylhet) and lowest (Rajshahi) median age at marriage is 2.8 years. As in the case of women, men with lower levels of education and those who are relatively poor also enter into marriage earlier than other men.

Table 6.4.2 Median age at first marriage: men

Median age at first marriage among men age 25-54, by current age and background characteristics, Bangladesh 2004

Background characteristic	Current age						Men age 25-54	Men age 30-54
	25-29	30-34	35-39	40-44	45-49	50-54		
Residence								
Urban	24.7	25.5	25.5	25.6	24.4	24.1	a	25.3
Rural	24.3	24.2	25.0	24.7	23.6	22.1	24.2	24.1
Division								
Barisal	a	23.2	25.2	25.9	24.3	23.3	24.3	24.3
Chittagong	a	26.3	25.5	26.7	24.1	25.6	a	25.6
Dhaka	24.6	24.7	25.6	24.3	23.4	22.9	24.5	24.5
Khulna	24.1	24.8	25.3	24.5	25.2	20.5	24.6	24.8
Rajshahi	23.2	23.2	23.2	24.2	22.7	20.5	23.0	23.0
Sylhet	a	27.4	25.7	28.5	24.9	22.4	a	25.8
Education								
No education	22.7	23.4	24.3	24.4	22.9	20.8	23.2	23.3
Primary incomplete	22.3	23.9	24.4	25.2	23.7	22.8	23.8	24.3
Primary complete	23.3	23.4	24.9	23.0	22.7	20.8	23.3	23.4
Secondary incomplete	a	25.1	25.2	24.5	22.9	25.1	a	24.6
Secondary complete or higher	a	28.4	28.6	27.3	26.6	24.9	a	27.4
Wealth index								
Lowest	22.8	24.1	24.2	24.0	24.0	22.9	23.7	23.8
Second	24.4	22.9	25.3	23.8	22.9	20.7	23.8	23.5
Middle	24.1	24.7	24.6	25.2	22.9	22.1	24.4	24.5
Fourth	23.8	24.5	24.7	25.4	24.8	20.9	24.3	24.4
Highest	a	25.9	25.8	25.4	24.2	24.6	a	25.5
Total	24.4	24.6	25.1	25.0	23.7	22.3	24.5	24.5

a = Omitted because less than 50 percent of the men married for the first time before reaching age 25

6.4   POSTPARTUM AMENORRHEA, ABSTINENCE, AND INSUSCEPTIBILITY

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). Postpartum amenorrhea is defined as the period between childbirth and the return of ovulation, generally approximated by the resumption of menstruation following childbirth. The risk of conception in this period is very low. Delaying the resumption of sexual relations after a birth also prolongs the period of postpartum protection. The duration of the postpartum amenorrhea and the period of sexual abstinence following birth jointly determine the length of the insusceptibility period. Thus, women are considered insusceptible if they are abstaining from sex following childbirth and/or are amenorrheic.

Women who gave birth since June 1998 were asked about the duration of amenorrhea and sexual abstinence following the most recent birth. The results presented in Table 6.5 pertain to the most recent birth in the three years preceding the survey. Almost all women are insusceptible to pregnancy within the first two months following childbirth. After the second month, the contribution of abstinence is greatly

reduced. At six to seven months after birth, about half of all women are still amenorrheic, but only 6 percent are abstaining. At 14 to 15 months after birth, the proportion amenorrheic drops sharply to 16 percent. After 20 months, only about 4 percent are amenorrheic, and at most, 6 percent are still insusceptible to the risk of pregnancy.

Table 6.5 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 2004

| Months since birth | Percentage of births for which the mother is postpartum: | | | Number of births |
	Amenor-rheic	Abstaining	Insuscep-tible	
<2	98.4	88.6	99.6	170
2-3	68.2	19.4	71.6	288
4-5	55.3	9.8	57.4	257
6-7	45.3	6.3	47.6	251
8-9	41.9	1.2	42.7	172
10-11	39.0	2.4	40.9	188
12-13	29.9	3.4	31.7	245
14-15	16.2	3.3	19.0	270
16-17	9.8	1.5	11.1	273
18-19	8.0	3.9	11.8	203
20-21	1.6	1.7	3.4	166
22-23	4.1	2.2	6.3	188
24-25	2.7	3.4	5.6	274
26-27	1.3	3.2	4.1	280
28-29	0.5	4.3	4.8	274
30-31	0.9	2.6	3.5	221
32-33	0.6	1.8	2.4	189
34-35	0.0	0.4	0.4	178
Total	23.3	8.1	25.6	4,088
Median	6.1	2.0	6.5	na
Mean	8.7	3.5	9.5	na

Note: Estimates are based on status at the time of the survey.
 na = Not applicable

The principal determinant of the length of the period of insusceptibility is postpartum amenorrhea. The median duration of amenorrhea is 6.1 months; abstinence, 2.0 months; and insusceptibility, 6.5 months. The duration of abstinence has remained constant since 1993-1994 presumably because of the Muslim tradition of abstaining for 40 days after birth. However, the median period of amenorrhea continues to decline from more than 10 months in 1993-1994 to 8.4 months in 1996-1997 to 7.9 months in 1999-2000; and to 6.1 months in 2004 (Mitra et al., 1994:77, Mitra et al., 1997:86; NIPORT et al., 2001:82)

Table 6.6 shows the median durations of postpartum amenorrhea, abstinence, and insusceptibility, by background characteristics of the respondents. The median duration of abstinence in Bangladesh does not vary by background characteristics; therefore, insusceptibility varies directly according to duration of amenorrhea. Older women (age 30-49), compared with younger women (age less than 30), have a longer median period of insusceptibility. Women living in urban areas have a shorter median duration of

amenorrhea than women in rural areas and hence a shorter period of insusceptibility. There are considerable variations by division in the period of insusceptibility. The median duration in Chittagong division (9.7 months) is much higher than in Dhaka division (5.5 months). Although the median duration of insusceptibility has decreased across all divisions except Chittagong since 1999-2000, the declines in Dhaka, Sylhet, and Barisal divisions have been the largest.

Table 6.6 Median duration of postpartum insusceptibility by background characteristics

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Bangladesh 2004

| Background characteristic | Postpartum: | | | Number of births |
	Amenor-rhea	Abstinence	Insuscep-tibility	
Age				
<30	5.8	1.9	6.2	3,244
30-49	8.0	2.0	8.9	844
Residence				
Urban	4.4	1.9	5.4	804
Rural	6.4	2.0	6.9	3,284
Division				
Barisal	6.1	1.9	6.7	235
Chittagong	8.9	2.0	9.7	913
Dhaka	5.3	1.9	5.5	1,237
Khulna	5.3	1.8	6.3	447
Rajshahi	7.1	2.1	7.1	893
Sylhet	6.2	2.3	7.0	362
Education				
No education	10.6	2.1	10.7	1,451
Primary incomplete	8.6	1.9	8.7	872
Primary complete	3.9	2.0	4.0	377
Secondary incomplete	4.2	1.8	4.6	1,070
Secondary complete or higher	5.6	2.2	6.4	317
Wealth index				
Lowest	10.1	1.9	10.0	1,024
Second	7.6	2.0	7.9	822
Middle	5.3	1.9	5.9	843
Fourth	6.2	2.0	6.7	714
Highest	3.6	1.9	4.3	685
Total	6.1	2.0	6.5	4,088

Note: Medians are based on status at the time of the survey.

There is no relationship between the median duration of amenorrhea or insusceptibility and the level of education; however, the duration of postpartum amenorrhea is much higher among mothers who have no education or have not completed primary school, as compared with other mothers. The median duration of postpartum amenorrhea declines as wealth status increases. The poorest women have the longest duration of amenorrhea, and hence insusceptibility.

6.5 TERMINATION OF EXPOSURE TO PREGNANCY

While the onset of infecundity is difficult to determine for an individual woman, there are ways of estimating it for a given population. One indicator of infecundity is the onset of menopause. Menopausal women are defined by the BDHS as women who are neither pregnant nor postpartum amenorrheic, but who have not had a menstrual period in the six months preceding the survey. Women who report that they had a hysterectomy are also defined as menopausal. The prevalence of menopause increases with age, typically from around age 30.

Table 6.7 shows the percentage of ever-married women age 30-49 who are menopausal—the indicator for termination of exposure to pregnancy. The percent menopausal increases from 5 percent among women age 30-34, to 41 percent among women age 46-47, and then to 64 percent among women age 48-49. Seventeen percent of women age 30-49 were reported to be menopausal in 2004, compared with 14 percent in 1999-2000. Since 1999-2000, the proportion of women over 34 years who are menopausal has increased in all age categories; the largest increase is among women age 42-43 (from 13 to 22 percent), indicating earlier termination of exposure to pregnancy among Bangladeshi women due to menopause.

Table 6.7 Menopause

Percentage of ever-married women age 30-49 who are menopausal, Bangladesh 2004

Age	Percentage menopausal[1]	Number of women
30-34	4.8	1,793
35-39	8.7	1,457
40-41	16.9	526
42-43	21.6	440
44-45	25.2	434
46-47	41.4	422
48-49	63.9	406
Total	17.2	5,477

[1] Percentage of all women who are not pregnant and not postpartum amenorrheic and whose last menstrual period occurred six or more months preceding the survey

FERTILITY PREFERENCES

7

The subject of future reproductive preferences is of fundamental importance for population policy and for family planning programs. Whether couples want to cease childbearing or delay the next pregnancy determines the demand for family planning. In the 2004 BDHS, as in the previous BDHS surveys, women were asked a series of questions to ascertain fertility preferences. These data are utilized in this chapter to quantify fertility preferences and, in combination with data on contraceptive use, to permit estimation of unmet need for family planning, for both spacing and limiting births. Another indicator of fertility preferences, which pertains to both past and future reproductive behavior, perhaps the most common measure of fertility preference, is ideal number of children (i.e., how many children a woman would want in total if she could start afresh). The information on ideal family size (ideal number of children) provides two measures. First, for men and women who have not yet started a family, the data provide an idea of future fertility (to the extent that couples are able to realize their fertility desires). Second, for all women, the excess of past fertility over the ideal family size provides a measure of unwanted fertility. Two other topics are discussed in this chapter: fertility planning in the past and the effect of unwanted births on fertility rates.

7.1   DESIRE FOR MORE CHILDREN

In order to obtain information on fertility preferences, the 2004 BDHS asked currently married, nonpregnant, nonsterilized 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 7.1 and Figure 7.1 show the percent distribution of currently married women by desire for another child, according to the number of living children.

Table 7.1 Fertility preferences by number of living children

Percent distribution of currently married women by desire for children, according to number of living children, Bangladesh 2004

Desire for children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Have another soon[2]	63.3	20.3	7.9	4.0	1.7	1.0	0.2	12.9
Have another later[3]	29.2	63.7	17.7	5.2	2.5	1.0	0.4	21.2
Have another, undecided when	1.8	1.8	1.2	0.5	0.4	0.2	0.4	1.0
Undecided	1.4	2.2	3.6	1.9	0.8	1.1	1.0	2.1
Want no more	0.5	9.0	62.6	75.2	79.5	80.8	82.1	53.5
Sterilized[4]	0.9	2.0	4.8	10.2	9.7	8.9	4.3	5.8
Declared infecund	2.7	1.0	2.1	3.0	5.4	6.8	11.6	3.6
Missing	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	968	2,118	2,574	2,055	1,343	771	752	10,582

[1] Includes current pregnancy
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilization

Overall, six in ten currently married women age 10-49 either do not want another child (54 percent) or are sterilized (6 percent). Thirty-five percent of women want to have a child at some time in the future; only 13 percent want one within two years, 21 percent would prefer to wait two or more years, and 1 percent could not decide on the timing. Thus, the vast majority of married women want either to space their next birth or to limit childbearing altogether. Since 1999-2000, there is no change in the proportion that wants to limit childbearing.

Figure 7.1 Fertility Preferences Among Currently Married Women Age 10-49
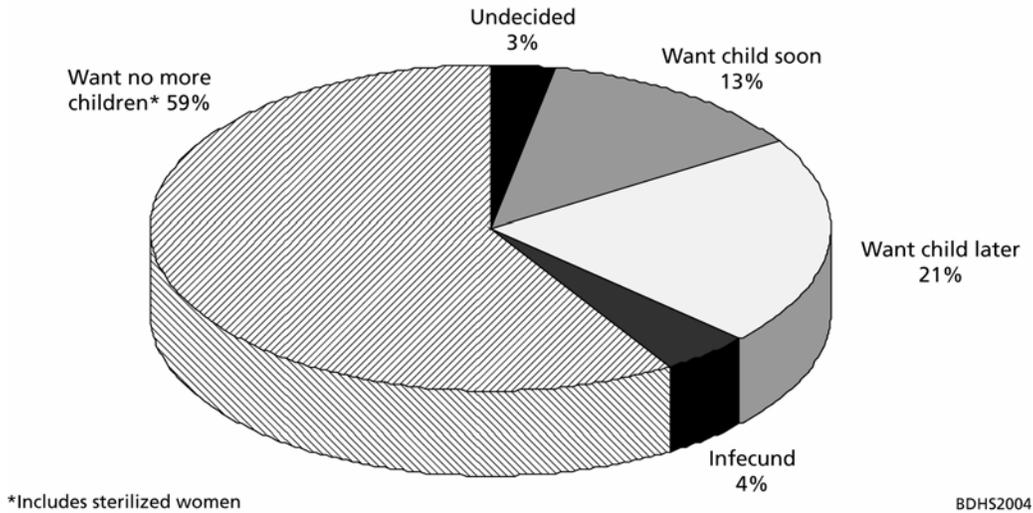
The desire to stop childbearing (including those sterilized) increases with the number of living children (Figure 7.2), reaching 67 percent among women with two living children and 86 percent among those with six or more children. Among women who want to have another child, the reverse is observed; that is, the proportion of women who want to have another child decreases with the number of living children.

Figure 7.2 Percentage of Currently Married Women Who Want No More Children, by Number of Living Children
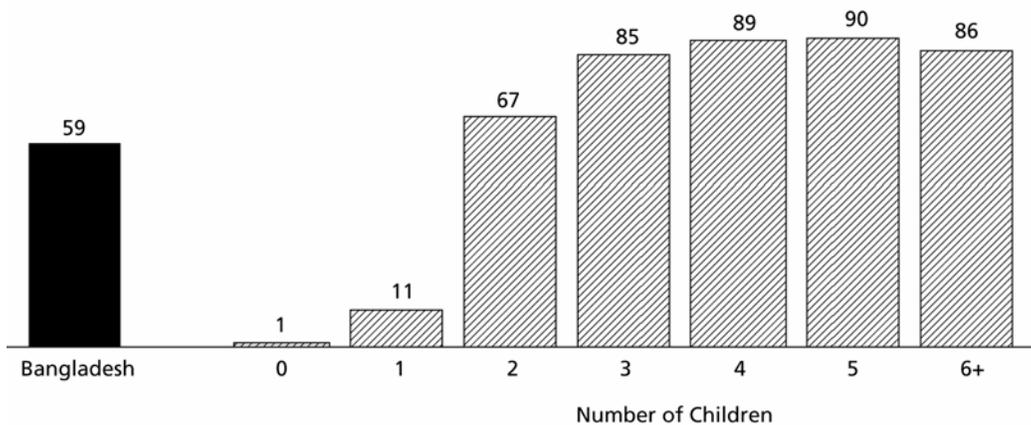
NOTE: Includes sterilized women and men.   BDHS 2004

Table 7.2 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. Twelve percent of women age 15-19 want no more children, compared with 73 percent of women age 45-49 years who either want to cease childbearing or are sterilized. The proportion that wants to delay the next birth for two or more years declines with age, as does the proportion of women who want the next birth within two years. The proportion reporting that they are unable to have more children (infecund) is 1 percent or less among women under 35, but this proportion rises to 10 percent of women age 40-44 and 26 percent of older women.

Table 7.2 Fertility preferences by age

Percent distribution of currently married women by desire for children, according to age, Bangladesh 2004

Desire for children	Age of woman								Total
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Have another soon[1]	36.4	24.4	17.2	14.1	10.8	6.0	3.0	0.6	12.9
Have another later[2]	59.0	60.0	38.6	16.4	4.8	0.8	0.2	0.0	21.2
Have another, undecided when	3.1	1.9	1.7	0.8	0.8	0.3	0.2	0.2	1.0
Undecided	1.0	1.9	3.8	3.1	1.7	0.9	0.2	0.4	2.1
Want no more	0.4	11.8	38.2	62.5	74.7	78.5	70.9	55.1	53.5
Sterilized[3]	0.0	0.0	0.4	2.5	5.9	11.4	15.5	18.2	5.8
Declared infecund	0.0	0.0	0.1	0.4	1.1	2.1	10.0	25.5	3.6
Missing	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	145	1,536	2,121	1,935	1,683	1,309	982	870	10,582

[1] Wants next birth within two years
[2] Wants to delay next birth for two or more years
[3] Includes both male and female sterilization

7.2   DESIRE TO LIMIT CHILDBEARING

The desire to stop childbearing by residence, division, education, and wealth index is shown in Table 7.3 and Figure 7.3. Women in rural areas have the same preference for not having more children as urban women; however, rural women already have more children than urban women do (Chapter 4). Among women living in urban areas, the desire to have no more children is higher at almost all levels of current family size than in rural areas. Some divisional variations are observed in the desire for more children. Less than half of currently married women with two children in Barisal and Sylhet divisions do not want to have another child, compared with 78 percent of women in Rajshahi.

Table 7.3 Desire to limit childbearing

Percentage of currently married women age 10-49 who want no more children, by number of living children and background characteristics, Bangladesh 2004

Background	Number of living children[1]							
characteristic	0	1	2	3	4	5	6+	Total
Residence								
Urban	1.3	14.6	69.6	90.3	91.2	89.8	90.1	59.4
Rural	1.4	9.8	66.8	84.0	88.7	89.7	85.8	59.3
Division								
Barisal	1.0	9.0	67.5	81.8	88.1	91.1	83.2	58.8
Chittagong	1.4	8.2	45.9	76.6	89.9	90.2	89.1	56.0
Dhaka	1.3	10.3	67.9	85.3	86.5	89.4	87.6	59.6
Khulna	0.0	12.6	75.0	92.5	91.7	92.0	90.0	60.5
Rajshahi	2.2	13.3	78.2	90.6	94.3	92.3	85.3	62.6
Sylhet	1.6	8.2	46.2	73.7	79.0	79.4	76.9	51.6
Education								
No education	6.3	21.9	69.2	83.7	88.4	87.5	85.8	72.5
Primary incomplete	0.0	11.8	65.4	86.2	91.4	93.0	86.5	63.3
Primary complete	0.6	6.8	64.8	88.1	87.8	92.4	84.1	56.9
Secondary incom- plete	0.2	7.4	64.3	86.9	89.3	95.6	(95.6)	40.9
Secondary complete or higher	0.0	7.6	76.5	90.4	*	*	*	38.8
Wealth index								
Lowest	4.6	15.5	64.2	79.7	88.2	85.2	86.9	61.2
Second	1.5	9.7	67.3	83.6	87.2	92.0	88.5	61.3
Middle	0.0	7.9	65.8	86.8	91.1	89.2	88.0	58.4
Fourth	1.4	11.2	68.2	88.5	88.0	90.9	86.1	59.5
Highest	0.2	11.1	71.0	88.4	92.8	90.9	77.6	56.3
Total	1.4	11.0	67.5	85.4	89.2	89.7	86.4	59.3

Note: Women who have been sterilized are considered to want no more children. 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.
[1] Includes current pregnancy

Major differences in fertility preferences among women by levels of education are apparent. For example, 73 percent of married women with no education want to stop childbearing, compared with 39 percent of those who have completed secondary education. This is because the educated women have not yet achieved their ideal family size. Moreover, at all parities above one, the proportions of women wanting no more children are higher for more educated women than for less educated women. There are only small differences in fertility preferences by wealth index.

Figure 7.3 Percentage of Married Women with Two Children Who Want No More Children, by Background Characteristics

RESIDENCE	
Urban	70
Rural	67
DIVISION	
Barisal	68
Chittagong	46
Dhaka	68
Khulna	75
Rajshahi	78
Sylhet	46
EDUCATION	
No education	69
Primary incomplete	65
Primary complete	65
Secondary incomplete	64
Secondary complete or higher	77
WEALTH INDEX	
Lowest	64
Second	67
Middle	66
Fourth	68
Highest	71
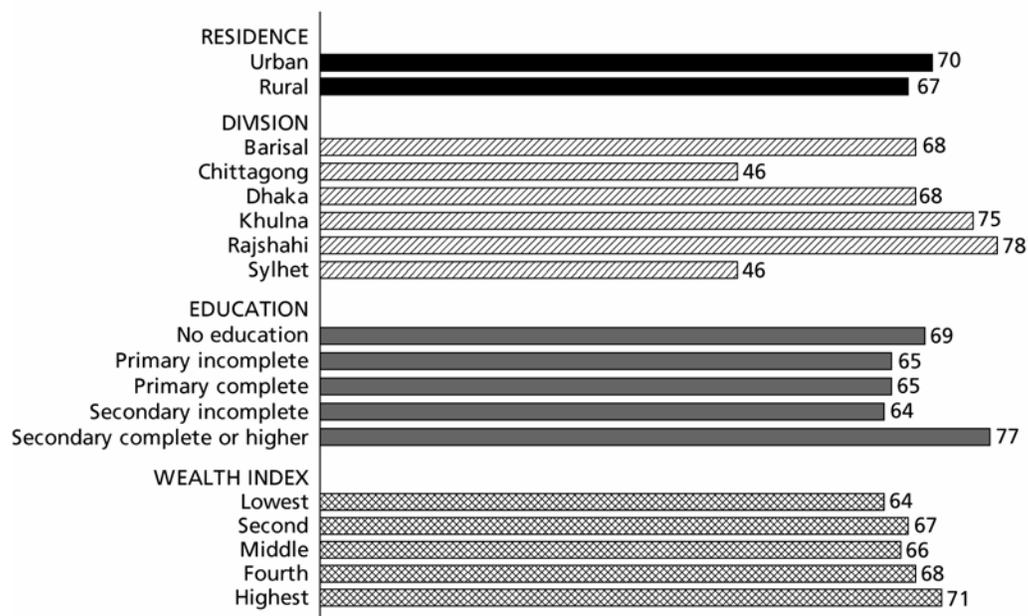
BDHS 2004

7.3   NEED FOR FAMILY PLANNING SERVICES

Fecund women who are currently married and who say that they either 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. Women who are using family planning methods are said to have a met need for family planning. Women with unmet need and met need constitute the total demand for family planning. Table 7.4 presents information for currently married women on unmet need, met need, and total demand for family planning, according to whether the need or demand is for spacing or limiting births.

Eleven percent of currently married women in Bangladesh have an unmet need for family planning: 5 percent for spacing and 6 percent for limiting. Because 58 percent of currently married women are using a contraceptive method, 11 percent have an unmet need for contraception, and 2 percent of currently married women had the last pregnancy while using a contraceptive method, it implies that the total demand for family planning comprises 71 percent of married women in Bangladesh, which is at about the same level estimated in 1999-2000. However, unmet need has dropped from 15 percent to 11 percent during that period. The data in this table show that 84 percent of this total demand among married women is satisfied.

Unmet need declines with age, from 23 percent among the youngest cohort to 4 percent among the oldest cohort. Analysis of the unmet need for spacing and limiting reveals the expected patterns: Unmet need for spacing declines with age, while that for limiting increases. Unmet need for family planning is higher in rural areas (12 percent) than urban areas (9 percent). By division (Figure 7.4), unmet need remains highest in Sylhet division (21 percent) and dropped substantially in Rajshahi (7 percent) and Khulna (8 percent) divisions since 1999-2000. Unmet need is lowest among women with the most education and does not vary much among those with lower levels of education. Differentials by wealth show a similar pattern—the unmet need is lowest among the wealthiest women.

Table 7.4 Need for family planning services

Percentage of currently married women with unmet need, met need, and the total demand for family planning services, by background characteristics, Bangladesh 2004

Background characteristic	Unmet need for family planning[1]			Met need for family planning[2] (currently using)			Total demand for family planning[3]			Percent-age of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
10-14	23.3	0.0	23.3	28.7	0.4	29.1	52.0	0.4	52.5	55.5	145
15-19	14.4	0.8	15.1	36.9	5.2	42.2	53.9	6.0	60.0	74.7	1,536
20-24	8.3	4.1	12.5	31.3	21.6	52.9	42.3	26.4	68.7	81.9	2,121
25-29	3.4	9.5	12.9	16.5	44.7	61.3	20.9	55.8	76.7	83.2	1,935
30-34	1.8	9.6	11.4	6.3	62.4	68.6	8.6	73.5	82.1	86.1	1,683
35-39	0.6	9.0	9.7	1.1	71.0	72.1	1.7	81.0	82.7	88.3	1,309
40-44	0.0	6.8	6.8	0.3	64.4	64.7	0.3	71.4	71.7	90.5	982
45-49	0.0	3.6	3.6	0.1	47.2	47.3	0.1	51.0	51.1	92.9	870
Residence											
Urban	3.2	6.2	9.4	19.0	43.9	62.9	23.4	50.8	74.2	87.4	2,372
Rural	5.6	6.3	11.9	15.4	41.2	56.7	22.2	48.4	70.6	83.2	8,210
Division											
Barisal	5.5	7.2	12.7	15.8	38.4	54.2	23.0	47.0	69.9	81.8	674
Chittagong	7.9	9.1	17.0	13.7	33.5	47.1	22.4	43.4	65.8	74.2	1,877
Dhaka	4.2	6.5	10.7	16.5	42.8	59.3	21.9	50.2	72.1	85.1	3,315
Khulna	3.4	4.9	8.3	19.4	44.4	63.8	24.2	50.1	74.3	88.8	1,296
Rajshahi	4.0	3.2	7.2	18.1	50.2	68.3	23.3	54.2	77.5	90.7	2,782
Sylhet	9.3	11.3	20.6	8.5	23.3	31.8	18.4	34.9	53.4	61.4	638
Education											
No education	3.5	7.6	11.1	7.4	51.4	58.8	11.4	60.0	71.4	84.4	4,187
Primary incomplete	5.0	7.3	12.2	13.5	43.3	56.8	19.7	51.6	71.3	82.8	2,176
Primary complete	5.2	6.9	12.0	18.9	40.0	58.9	25.3	47.6	72.9	83.5	958
Secondary incom-plete	7.9	3.8	11.7	27.2	29.1	56.3	36.8	33.4	70.2	83.3	2,457
Secondary complete or higher	4.7	3.2	7.9	32.7	29.3	62.0	40.4	32.8	73.2	89.2	804
Wealth index											
Lowest	5.6	7.4	13.0	12.6	41.0	53.6	19.3	49.4	68.7	81.1	2,042
Second	5.2	6.5	11.7	14.5	43.2	57.6	20.8	50.5	71.3	83.6	2,112
Middle	5.8	5.8	11.7	17.0	40.9	57.8	23.8	47.7	71.5	83.7	2,112
Fourth	5.3	6.0	11.3	15.7	42.8	58.5	22.5	49.4	71.8	84.2	2,168
Highest	3.4	5.2	8.6	21.2	41.4	62.5	25.8	47.2	73.0	88.3	2,148
Total	5.1	6.3	11.3	16.2	41.8	58.1	22.5	48.9	71.4	84.1	10,582

[1] Unmet need for spacing includes pregnant women whose pregnancy was mistimed, amenorrheic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth. unless they say it would not be a problem if they discovered they were pregnant in the next few weeks. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrheic, who are not using any method of family planning, and who want no more children. Excluded from the unmet need category are pregnant and amenorrheic women who became pregnant while using a method (these women are in need of a better method of contraception).

[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 and women whose pregnancy was the result of a contraceptive failure; they account for 2.0 percent of currently married women.

Figure 7.4 Trends in Unment Need for Family Planning by Division (%)
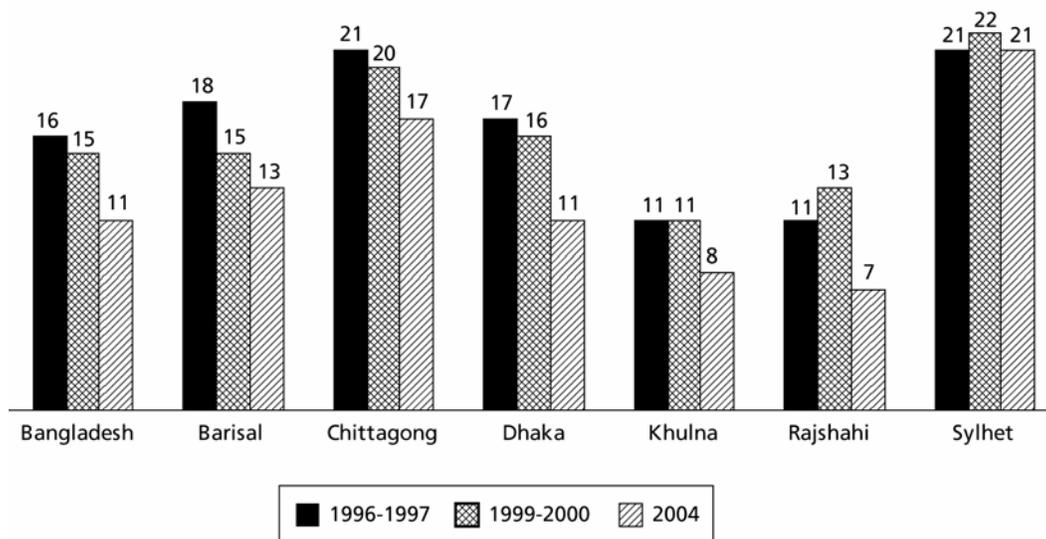
Demand for family planning is also associated with demographic and socioeconomic indicators. Demand increases with age and peaks at age 30-39 (82 to 83 percent), and it is much lower in Sylhet division (53 percent) than other divisions (over 65 percent). The percentage of demand that is satisfied is highest in Rajshahi and Khulna divisions. Differentials in demand by education and wealth index are minimal. Similar patterns are observed for the percentage of demand satisfied.

7.4   IDEAL FAMILY SIZE

Women and men who were interviewed in the 2004 BDHS were asked two questions for determining ideal family size. Respondents who did not have any living children were asked, "If you could choose exactly the number of children to have in your lifetime, how many would that be?" For respondents who had living 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 lifetime, how many would that be?" The results for women and men are presented in Tables 7.5.1 and 7.5.2. respectively. One minor difference in the two tables is that in Table 7.5.2 (for men), wife's current pregnancy, if any, is not considered.

Results indicate that the vast majority of both women and men gave a numeric response; less than 5 percent of women and men failed to give a numeric response. Among ever-married women, 62 percent prefer a two-child family, 21 percent consider a three-child family ideal, and 1 percent said they would choose five or more children. Data are similar for all men and currently married men. A majority of men prefer a two-child family, irrespective of their current family size.

Table 7.5.1 Ideal and actual number of children: women

Percent distribution of ever-married women by ideal number of children, and mean ideal number of children for ever-married women and for currently married women, according to number of living children, Bangladesh 2004

| Ideal number of children | Number of living children[1] | | | | | | | Total |
	0	1	2	3	4	5	6+	
0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	4.7	5.7	1.4	1.7	1.3	0.5	0.6	2.5
2	71.2	73.9	72.7	55.9	54.5	42.7	33.6	62.3
3	13.9	14.3	18.8	28.9	21.0	32.7	27.8	21.3
4	6.1	3.7	5.0	9.5	17.3	15.2	20.5	9.1
5	0.4	0.3	0.5	0.5	1.2	1.7	2.9	0.8
6+	0.2	0.1	0.1	0.3	0.1	0.3	1.1	0.2
Non-numeric responses	3.3	1.9	1.5	3.1	4.6	6.8	13.5	3.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of ever-married women	1,117	2,302	2,746	2,198	1,432	834	812	11,440
Mean ideal number of children for[2]:								
Ever-married women	2.2	2.2	2.3	2.5	2.6	2.7	2.9	2.4
Number	1,080	2,257	2,704	2,130	1,367	777	702	11,017
Currently married women	2.2	2.2	2.3	2.5	2.6	2.8	2.9	2.4
Number	939	2,080	2,542	2,001	1,283	724	660	10,227

[1] Includes current pregnancy
[2] Means are calculated excluding the women giving non-numeric responses.

Among both the ever-married and currently married women who gave a numeric response, the mean ideal family size is 2.4 children. For currently and ever-married women, there has been no change at all in the mean ideal family size over the last ten years. As in the 1999-2000 BDHS, ideal family size was 0.1 children lower for currently married men. The ideal number of children increases with the number of living children; it is also consistently lower than the actual number of living children at the higher parities. Women with six or more children have an average ideal family size of 2.9, compared with a desired family size of 2.2 for those with no children or only one child. Among all men, ideal family size ranges from 2.1 for those with one or two children to 2.6 for men with at least six living children. As in the 1999-2000 BDHS, a majority of both ever-married women and currently married men embrace the two-child family as an ideal. Slightly more men prefer a two-child family than women do; however, there is not much difference in the proportion of currently married men and ever-married women who prefer a two- or three-child family as the ideal family size.

Table 7.5.2 Ideal and actual number of children: men

Percent distribution of all men and currently married men by ideal number of children, and mean ideal number of children, according to number of living children, Bangladesh 2004

| Ideal number of children | Number of living children | | | | | | | Total |
	0	1	2	3	4	5	6+	
ALL MEN								
0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
1	4.9	7.9	4.8	3.1	1.2	1.3	0.8	4.5
2	71.0	71.5	78.3	59.5	58.7	50.2	53.5	68.2
3	14.5	14.5	12.9	25.4	12.6	22.1	22.2	16.1
4	4.1	3.1	2.3	6.7	15.5	6.9	8.4	5.1
5	0.9	0.3	0.3	1.5	1.9	8.2	1.1	1.2
6+	0.5	0.0	0.2	0.0	0.5	1.1	2.1	0.4
Non-numeric responses	4.2	2.7	1.0	3.8	9.7	10.2	11.9	4.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,826	550	696	534	323	192	176	4,297
Mean ideal number[1]	2.2	2.1	2.1	2.4	2.6	2.7	2.6	2.3
Number of men	1,750	535	689	514	291	173	155	4,107
CURRENTLY MARRIED MEN								
1	6.0	8.0	4.9	3.1	1.2	1.3	0.8	4.4
2	67.9	71.2	78.3	59.5	58.7	49.5	53.4	66.3
3	16.7	14.7	12.9	25.4	12.6	22.4	22.5	17.3
4	4.8	3.1	2.3	6.7	15.5	7.0	8.0	5.8
5	0.1	0.3	0.3	1.5	1.9	8.3	1.2	1.3
6+	0.3	0.0	0.2	0.0	0.5	1.1	2.1	0.4
Non-numeric responses	4.1	2.7	0.9	3.8	9.7	10.4	12.0	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	328	544	687	534	323	190	174	2,780
Mean ideal number[1]	2.2	2.1	2.1	2.4	2.6	2.7	2.6	2.3
Number of currently married men	315	530	681	514	291	170	153	2,653

[1]Means are calculated excluding the men giving non-numeric responses.

Table 7.6 presents data on the mean ideal number of children for ever-married women and all men and currently married men, by age, according to background characteristics. The ideal family size for both men and women increases with age, from 2.2 for women age 10-14 to 2.7 for women age 45-49. For men, the highest ideal family size of 2.4 is for the oldest cohort (45-54 years), and the lowest is for men under age 25 (about 2.2). Ideal family size for both men and women is minimally higher in rural areas, compared with urban areas, and it decreases with the level of education. A similar trend is observed with the wealth index. Overall, divisional variations in ideal family size for both women and men are the greatest. All men and ever-married women have the highest ideal family size in Chittagong and Sylhet (2.7 and 2.6, respectively) and the lowest in Khulna (2.1). Similar differences are observed across all age groups in divisions.

Table 7.6 Mean ideal number of children by background characteristics

Mean ideal number of children for ever-married women, all men, and currently married men, by age and background characteristics, Bangladesh 2004

Background characteristic	Age								Ever-married women	All men	Currently married 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	2.2	2.3	2.3	2.6	2.6	2.3	2.1	2.2
Rural	2.2	2.3	2.4	2.4	2.5	2.5	2.6	2.7	2.5	2.3	2.3
Division											
Barisal	*	2.3	2.3	2.4	2.4	2.6	2.6	2.8	2.4	2.3	2.3
Chittagong	*	2.5	2.5	2.7	2.7	2.7	2.9	2.9	2.7	2.6	2.7
Dhaka	(2.2)	2.3	2.3	2.3	2.5	2.5	2.6	2.7	2.4	2.3	2.3
Khulna	(2.0)	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.2	2.1	2.1
Rajshahi	(2.2)	2.2	2.1	2.2	2.3	2.4	2.5	2.6	2.3	2.2	2.2
Sylhet	*	2.6	2.7	2.7	2.8	2.8	2.9	2.9	2.7	2.6	2.6
Education											
No education	*	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.6	2.5	2.4
Primary incomplete	(2.2)	2.3	2.4	2.4	2.5	2.4	2.6	2.7	2.4	2.4	2.4
Primary complete	(2.3)	2.3	2.3	2.4	2.5	2.5	2.4	2.7	2.4	2.2	2.3
Secondary incomplete	2.1	2.2	2.3	2.3	2.2	2.4	2.5	2.6	2.3	2.2	2.2
Secondary complete or higher	nc	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.1	2.0	2.1
Wealth index											
Lowest	(2.3)	2.4	2.5	2.5	2.6	2.7	2.7	2.7	2.6	2.5	4.0
Second	(2.2)	2.3	2.3	2.4	2.6	2.5	2.6	2.8	2.5	2.4	3.2
Middle	(2.1)	2.3	2.3	2.4	2.5	2.6	2.7	2.6	2.4	2.3	3.0
Fourth	(2.3)	2.2	2.2	2.3	2.4	2.4	2.4	2.7	2.4	2.2	2.3
Highest	*	2.2	2.2	2.2	2.3	2.3	2.5	2.7	2.3	2.1	2.5
Total for ever-married women	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.7	2.4	na	na
Total for all men	na	2.2	2.2	2.3	2.3	2.3	2.3	2.4[1]	na	2.3	na
Total for currently married men	na	2.0	2.2	2.3	2.3	2.3	2.3	2.4[1]	na	na	2.3

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates that the number is based on fewer than 25 unweighted cases and has been suppressed.
[1] Age 45-54
na = Not applicable
nc = No cases

7.5   WANTED AND UNWANTED FERTILITY

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 preceding 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.

Interviewers asked women a series of questions regarding children born in the five years preceding the survey date and any current pregnancy to determine whether each birth or current pregnancy was wanted then, wanted later, or unwanted. These questions provide a powerful indicator of the degree to which couples successfully control fertility. Also, the data can be used to gauge the effect of the prevention of unwanted births on fertility rates. Table 7.7 shows the percent distribution of births in the five years preceding the survey by whether the birth was wanted by the mother then, wanted later, or not wanted at all.

Table 7.7 Fertility planning status

Percent distribution of births in the five years preceding the survey (including current pregnancies), by fertility planning status, according to birth order and mother's age at birth, Bangladesh 2004

Birth order and mother's age at birth	Planning status of birth					Number of births
	Wanted then	Wanted later	Not wanted	Missing	Total	
Birth order						
1	85.6	14.3	0.0	0.0	100.0	2,302
2	74.6	23.9	1.3	0.2	100.0	1,952
3	66.1	16.8	17.2	0.0	100.0	1,378
4+	52.5	9.2	38.1	0.1	100.0	2,094
Mother's age at birth						
<20	78.8	20.3	0.8	0.1	100.0	2,499
20-24	73.7	18.6	7.6	0.1	100.0	2,466
25-29	65.6	11.6	22.8	0.1	100.0	1,494
30-34	56.2	7.1	36.5	0.3	100.0	809
35-39	48.2	4.9	46.9	0.0	100.0	324
40-44	43.0	4.5	51.9	0.6	100.0	102
Total	70.4	15.8	13.7	0.1	100.0	7,725

Note: Birth order includes current pregnancy. Total includes 12 births to mothers age 45-49 at birth.

The data indicate that nearly three out of ten births in Bangladesh are either unwanted (14 percent) or mistimed or wanted later (16 percent). Figure 7.5 shows that in the last four years, unplanned births have been reduced because mistimed births decreased. Unplanned births increase with increasing birth order and mother's age at birth. For first- and second-order births, almost no birth is considered unwanted, and 14 to 24 percent are considered mistimed. Third-order births are equally likely to be

considered mistimed or unwanted (17 percent). In contrast, for fourth- or higher-order births, more than four-fifths of unplanned births are unwanted. Similarly, a larger proportion of births to older women are reported as unwanted, compared with births to younger women. This is because the older women have large families, and younger women have not achieved their desired family size. Less than 10 percent of births in the five years preceding the survey to mothers age 20-24 are unwanted, compared with nearly half of all births to mothers 35 years or older.

Figure 7.5 Trends in Unplanned Mistimed, and Unwanted Births

BDHS 2004
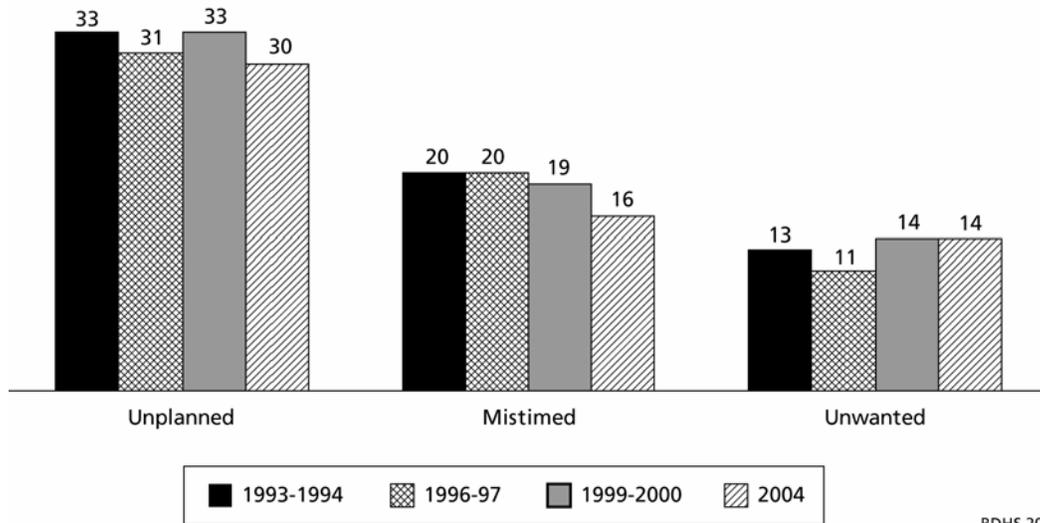
Table 7.8 presents wanted fertility rates. These rates are calculated in the same manner as the total fertility rate (TFR), but unwanted births are excluded from the numerator. For this purpose, unwanted births are defined as those that exceed the number considered ideal by the respondent. Women who did not report a numeric ideal family size were assumed to want all of their births. These rates represent 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 (TWFR) and the actual total fertility rate (TFR) suggests the potential demographic impact of the elimination of unwanted births.

Table 7.8 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Bangladesh 2004

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	1.6	2.5
Rural	2.1	3.2
Division		
Barisal	1.7	2.9
Chittagong	2.3	3.7
Dhaka	1.9	2.9
Khulna	1.9	2.8
Rajshahi	1.7	2.6
Sylhet	2.9	4.2
Education		
No education	2.3	3.6
Primary incomplete	2.0	3.2
Primary complete	1.9	2.9
Secondary incomplete	1.8	2.7
Secondary complete or higher	2.0	2.2
Wealth index		
Lowest	2.6	4.1
Second	1.9	3.2
Middle	2.1	3.3
Fourth	1.7	2.5
Highest	1.6	2.2
Total	2.0	3.0

Note: Rates are based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.2.

The total wanted fertility rate for Bangladesh is 2.0, which is one-third lower than the actual TFR, as was the TWFR observed in the 1999-2000 BDHS. If women's fertility desires could be met, the TFR in all divisions except Chittagong and Sylhet would be below the replacement level of 2.1 children per woman. Of the other characteristics shown in Table 7.8, only two other subgroups have total wanted fertility rates above replacement level: uneducated women and the poorest women.

The gap between the wanted and observed total fertility rates measured as a ratio of observed fertility rate to wanted fertility rate indicates a larger gap for women in Barisal and Chittagong divisions, for those who have attended school but have not completed primary school, and also for women in households in the three lowest wealth quintiles. For all these women, the actual fertility rate is at least 60 percent higher than the wanted fertility rate. The gap is narrowest for women who have completed secondary school or who live in the wealthiest households (the TFR is higher than the corresponding TWFR by 10 and 38 percent, respectively).

INFANT AND CHILD MORTALITY

<div align="right">8</div>

8.1 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. The rates are also important for monitoring the progress of the United Nations Millennium Development Goal to reduce child mortality. This chapter provides information on mortality of children under the age of five. Specifically, it presents information 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 socioeconomic characteristics, such as urban-rural residence, division, mother's education, and wealth index, and also by selected demographic characteristics, to identify segments of the population requiring special attention.

The data for mortality estimates were collected in the birth history section of the Women's Questionnaire. In the 2004 BDHS, 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 children dying before their second birthday, and in years for children dying at later ages. In this chapter, the following direct estimates of infant and child mortality[1] were used:

- Neonatal mortality (NN): The probability of dying in the first month of life
- Postneonatal mortality (PNN): 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.

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to their first birthday (12 months of age).

8.2 ASSESSMENT OF DATA QUALITY

The reliability of mortality estimates calculated from retrospective birth histories depends upon 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

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[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:

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

misreporting of the date of birth or age at death (which could distort the age pattern of 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 for 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 for children born recently, any decline in mortality will tend to be understated.

Results from Table C.5 in Appendix C suggest that early neonatal deaths have not been seriously underreported in the 2004 BDHS because the ratios of deaths under seven days to all neonatal deaths are acceptable—72 percent for the most recent period, 0 to 4 years preceding the survey, and 65 percent for the periods 10 to 14 years and 15 to 19 years preceding the survey.[2] A ratio of about 70 percent is often considered as normal. The ratios of neonatal to infant deaths (Table C.6 in Appendix C) are also consistently high (between 60 and 66 percent) for the various 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 2004 BDHS, there appears to be a preference for reporting age at death at 3, 7, 10, 14 and 21 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 (Table C.6 in Appendix C) indicates a slight heaping of deaths at 3, 6, 12, and 18 months of age. Some heaping on 12 months is found despite the strong emphasis on this problem during the training of interviewers for the BDHS fieldwork.[3] However, this brief assessment of the internal consistency of childhood mortality data suggests that the extent of digit preference is such that 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 to 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 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 7.7 (Chapter 7) shows that very few of the children born in the five years before the survey

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[2] There are no models for mortality patterns during the neonatal period. However, one review of data from developing countries concluded that, at neonatal mortality of 20 per 1,000 or higher, approximately 70 percent of neonatal deaths occur within the first six days of life (Boerma, 1988).

[3] 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."

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.

8.3   LEVELS AND TRENDS IN INFANT AND CHILD MORTALITY

Mortality rates for children under five years of age are presented in Table 8.1 for the five-year period preceding the four BDHS surveys. The under-five mortality rate for the most recent five-year period (which roughly corresponds to the period 1999-2003) is 88 deaths per 1,000 live births, and infant mortality is 65 deaths per 1,000 life births. This means that 1 in 11 children born in Bangladesh dies before reaching the fifth birthday, while 1 in 15 children dies before reaching the first birthday. A child's risk of dying is highest during the first month of life. Almost half of all under-five deaths occur during the neonatal period, about a quarter occur during the postneonatal period, and another quarter occur between ages 1 and 4 years.

Table 8.1 Trend in early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for the five-year period preceding the surveys, BDHS surveys 1993-2004

Data source	Approximate reference period	Neonatal mortality (NN)	Postneonatal mortality[1] (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
BDHS 2004	1999-2003	41	24	65	24	88
BDHS 1999-2000	1995-1999	42	24	66	30	94
BDHS 1996-1997	1992-1996	48	34	82	37	116
BDHS 1993-1994	1989-1993	52	35	87	50	133

[1] Computed as the difference between the infant and neonatal mortality rates

Comparisons of mortality estimates over time show continued declines in child (age 1-4 years) and under-five mortality (Table 8.1 and Figure 8.1). Between the two most recent five-year periods, there was a 20 percent decline in child mortality and a 6 percent decline in under-five mortality. Infant mortality seems to have leveled off during recent years. For infant mortality to decline significantly, the Bangladesh program may need to focus on reducing neonatal deaths since most infant deaths occur during the first month of life.

Figure 8.1 Trends in Infant and Childhood Mortality, 1989-93 to 1999-2003

■ 1989-1993   ☒ 1992-1996   ▨ 1995-1999   ▨ 1999-2003
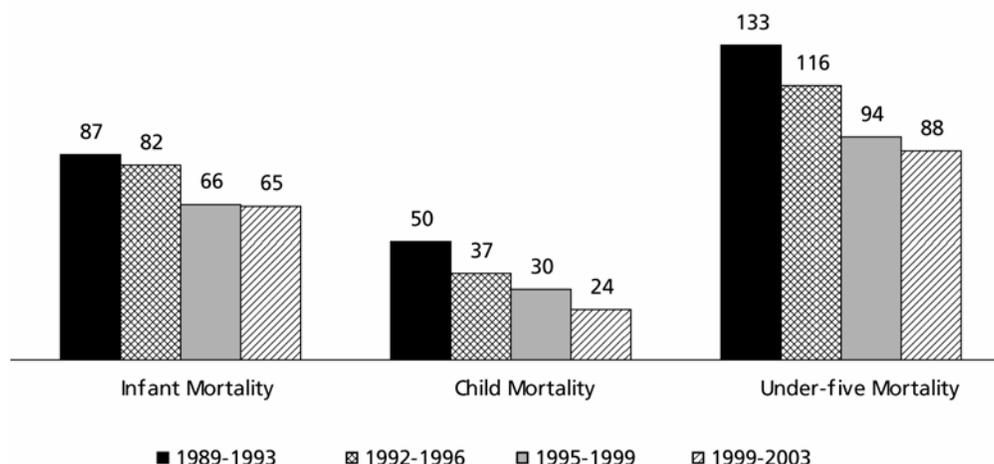
8.4 SOCIOECONOMIC DIFFERENTIALS IN INFANT AND CHILD MORTALITY

Differentials in childhood mortality for the ten years preceding the survey by selected background characteristics are presented in Table 8.2 and Figure 8.2. There is very little difference in mortality levels in urban and rural areas among children who are less than one year of age. Child mortality is still somewhat higher in rural areas than in urban areas. Over the years, mortality levels at various ages among children under five have declined faster in the rural areas than in the urban areas, reducing the urban-rural differentials in all measures of childhood mortality.

Table 8.2 Early childhood mortality rates by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the ten-year period preceding the survey, by socioeconomic characteristics, Bangladesh 2004

Socioeconomic characteristic	Neonatal mortality (NN)	Postneonatal mortality[1] (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Residence					
Urban	44	28	72	21	92
Rural	47	26	72	27	98
Division					
Barisal	32	29	61	32	92
Chittagong	41	27	68	39	103
Dhaka	47	28	75	27	99
Khulna	47	19	66	13	78
Rajshahi	48	22	70	17	86
Sylhet	63	37	100	29	126
Education					
No education	51	30	81	35	113
Primary incomplete	44	26	70	18	87
Primary complete	51	32	82	15	96
Secondary incomplete	38	10	48	19	66
Secondary complete or higher	35	22	57	14	70
Wealth index					
Lowest	55	35	90	34	121
Second	43	23	66	34	98
Middle	50	25	75	23	97
Fourth	39	20	59	23	81
Highest	42	24	65	7	72

[1] Computed as the difference between the infant and neonatal mortality rates

The 2004 BDHS data show wide variations in mortality by division. Sylhet division has the highest mortality rates for all mortality indicators except child mortality. Child mortality is highest in Chittagong division. Khulna division has the lowest rates for postneonatal, child, and under-five mortality, and Barisal division has the lowest rates for neonatal and infant mortality.

Figure 8.2 Under-Five Mortality Rates by Socioeconomic Characteristics
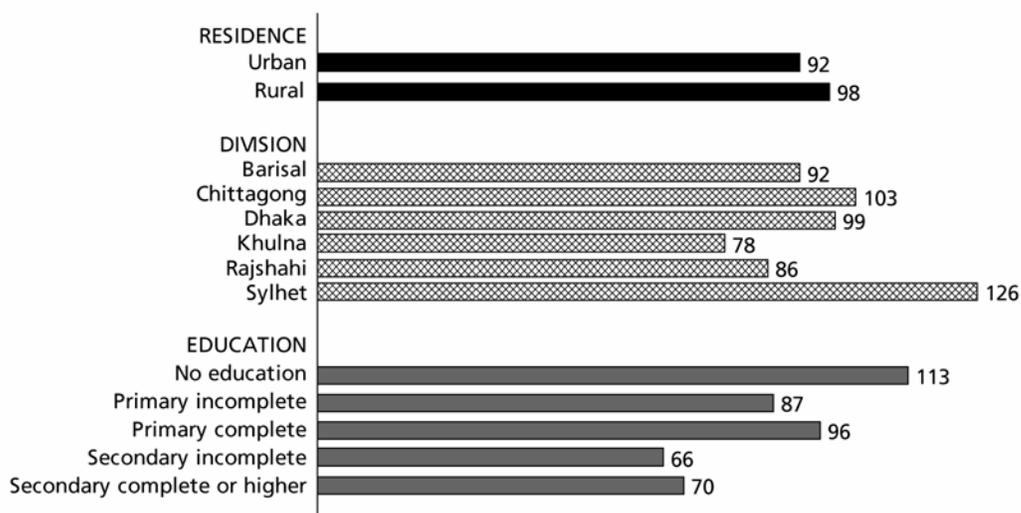
NOTE: Rates are for the 10-year period preceding the survey.   BDHS 2004

Mother's level of education is inversely related to her child's risk of dying. Higher levels of educational attainment are generally associated with lower mortality risks, since education exposes mothers to information about better nutrition, use of contraception to limit and space births, and childhood illnesses and their treatment. The 2004 BDHS shows that under-five mortality declines sharply with increased level of mother's education; the rate is almost 40 percent lower for children whose mothers have at least some secondary education, compared with those who have no education. Also, a child's chance of dying in neonatal and postneonatal periods is much lower when the mother has at least some secondary education.

The mortality risk of children is associated with the economic status of the household. All childhood mortality rates are highest for those in the lowest wealth quintile. Under-five mortality declines steadily with increasing economic status of the household, dropping from a high of 121 deaths per 1,000 live births in households in the lowest wealth quintile to 72 deaths per 1,000 live births in households in the highest wealth quintile.

8.5   DEMOGRAPHIC DIFFERENTIALS IN INFANT AND CHILD MORTALITY

This section examines differentials in mortality of children under age five at various ages by demographic characteristics of the child and mother. Table 8.3 and Figure 8.3 present mortality rates for the ten-year period preceding the survey by sex of the child, age of mother at birth, birth order, and previous birth interval.

Table 8.3 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the ten-year period preceding the survey, by demographic characteristics, Bangladesh 2004

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality[1] (PNN)	Infant mortality $(_1q_0)$	Child mortality $(_4q_1)$	Under-five mortality $(_5q_0)$
Child's sex					
Male	52	28	80	24	102
Female	40	24	64	29	91
Mother's age at birth					
<20	58	28	86	22	106
20-29	37	23	60	25	84
30-39	48	34	83	35	115
Birth order					
1	63	26	88	16	103
2-3	36	21	57	24	80
4-6	42	29	71	34	102
7+	53	49	102	46	144
Previous birth interval[2]					
<24 months	66	36	101	43	140
24-35 months	39	33	72	35	104
36-47 months	31	20	51	29	79
48 months or more	27	19	46	14	59

[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births

Male children experience higher neonatal and postneonatal mortality than female children, while female children experience higher child mortality than males. The pattern of gender differentials in neonatal mortality is expected because neonatal mortality (which reflects largely congenital conditions) tends to be higher for boys than for girls. With the exception of the 2004 BDHS, all previous BDHS surveys reported both higher postneonatal and child mortality for females than for males—a pattern that has been observed in other countries of South Asia where strong son preference is thought to result in relative nutritional and medical neglect of female children (Das Gupta, 1987; Basu, 1989). In the most recent ten-year reference period, some changes in the postneonatal and under-five mortality patterns by sex of the child are observed, compared with the patterns reported for the ten-year reference periods preceding the 1999-2000 BDHS, the 1996-1997 BDHS, and the 1993-1994 BDHS. The 2004 BDHS indicates that there are no longer more female deaths than male deaths in the postneonatal period and that the under-five mortality of male children is now higher than that of female children.

Figure 8.3 Under-Five Mortality Rates by Demographic Characteristics
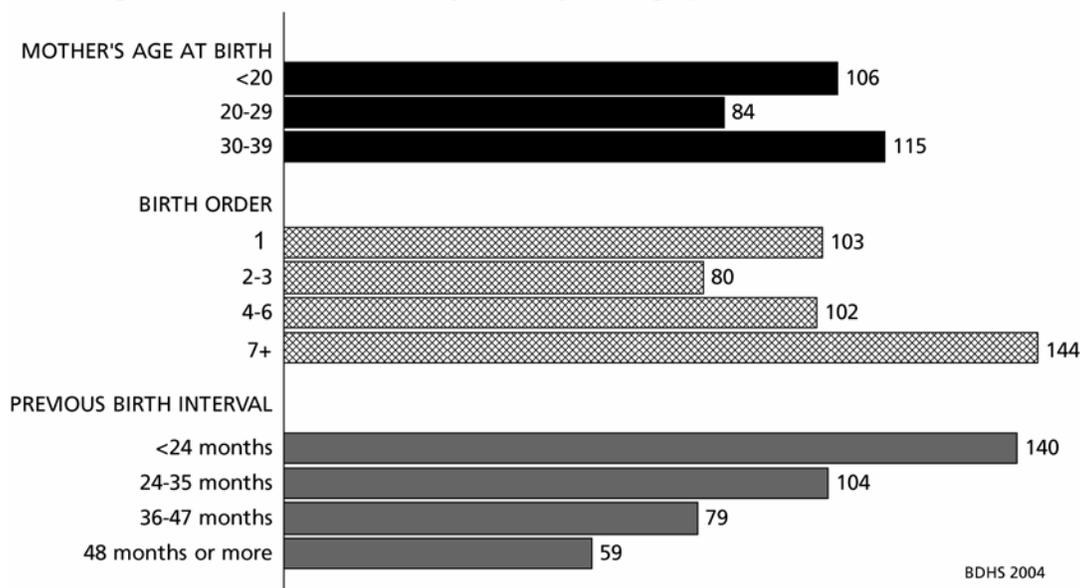
The relationship between mother's age at birth and childhood mortality rates exhibits a U-shaped pattern—children of both the youngest and oldest mothers experience the highest mortality risks. The 2004 BDHS shows a similar pattern for all mortality estimates except child mortality.

Childhood mortality rates also tend to have a U-shaped relationship with birth order, with first births and very high order births having elevated mortality rates. In Table 8.3, 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 or higher than for second- and third-order birth. Child mortality 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 utilization of health care, and for nutritious food once children are weaned.

Short birth intervals are associated with an increased risk of dying. Retherford and others (1989) observe an association between short birth interval (less than 24 months) and increased mortality, even after controlling for other demographic and socioeconomic variables. In Table 8.3, all childhood mortality rates show a sharp decline as the birth interval gets longer. The neonatal, infant, child and under-five mortality rates are more than twice as high for children born after an interval of less than 24 months, compared with children who are born after an interval of 48 months or more.

8.6   PERINATAL MORTALITY

Perinatal deaths are composed of pregnancy losses occurring after seven completed months of gestation (stillbirths) and deaths within the first seven days of life (early neonatal deaths). The perinatal death rate is calculated by dividing the total number of perinatal deaths by the total number of pregnancies reaching seven months of gestation. The distinction between a stillbirth and an early neonatal death is a delicate one, often depending on the observed presence or absence of some signs of life after delivery. The causes of stillbirths and early neonatal deaths are overlapping, and examining just one or the other can understate the true level of mortality around delivery. For this reason, it is suggested that both events be combined and examined together. In the BDHS, 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 8.4 presents the number of stillbirths and early neonatal deaths, as well as the perinatal mortality rate for the five-year period preceding the 2004 BDHS, by selected demographic and socioeconomic

characteristics. The data indicate that the perinatal mortality rate in Bangladesh is 65 deaths per 1,000 pregnancies and that the rate is slightly higher than it was in the 1999-2000 BDHS (57 deaths per 1,000 pregnancies). Perinatal mortality is higher among teenage mothers and during first pregnancies. There are virtually no urban-rural differences in perinatal mortality. Rajshahi division has the highest perinatal mortality rate among all divisions. Variations in perinatal mortality by mother's education and household wealth index are small.

8.7   HIGH-RISK FERTILITY BEHAVIOR

Many studies have found a strong relationship between children's chances of dying and certain fertility behaviors. In general, the probability of dying in early childhood is much greater if children are born to mothers who are too young or too old, if they are born after a short birth interval, or if they are born to mothers with high parity. For this analysis, mothers are classified as too young if they are less than 18 years of age and too old if they are over 34 years of age at the time of delivery. A short birth interval is defined as a birth occurring within 24 months of a previous birth, and a high birth order is defined as occurring after 3 or more previous births (birth order 4 or higher). After cross-classification of births by combinations of all three characteristics, a birth may have from zero to three high-risk characteristics.

Table 8.5 shows the percent distribution of births in the five-year period preceding the survey and the distribution of all currently married women across various risk categories. It also shows the relative risk of children dying across the different risk categories. The purpose of this table is to identify areas in which changes in reproductive behavior would be likely to effect a reduction in infant and child mortality. Mortality risk is represented by the proportion of children born during the five years preceding 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.

Among children born in the five years preceding the survey, more than half fell in one of the avoidable high-risk categories; only one-third were not in any of the high-risk categories. One in ten births were in one of the multiple high-risk categories, while four in ten births were in one of the single high-risk categories. In the avoidable high-risk category, most births were to mothers younger than 18 years or mothers who had three or more children.

About 65 percent of the women who gave birth in the five years preceding the survey were in one of the avoidable high-risk categories (last column of Table 8.5). About one-third of the women had a single high-risk factor, while another one-third had multiple high-risk factors.

Risk ratios, which describe the relationship between a particular risk category and a reference category, are used to compare risk categories. Children born to mothers age 35 or older are three times more likely to die, compared with those born to mothers who are not in any high-risk category. This child mortality risk is further elevated and is the highest for births to older women who have three or more children and whose preceding birth interval is less than 24 months; fortunately, only about 1 percent of the births are to women in this multiple high-risk category. About 17 percent of the children are born to women who are younger than 18 years; these children are almost twice as likely to die as those born to mothers who are not in any high-risk category. Births to mothers who have three or more children and a short preceding birth interval have over twice the mortality risk of births to mothers who are not in any high-risk category. About 4 percent of the births occur in this high-risk category.

Table 8.4 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 2004

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate (per 1,000 pregnancies)	Number of pregnancies of 7+ months duration[3]
Mother's age at birth				
<20	108	83	80	2,396
20-29	115	85	54	3,699
30-39	43	35	73	1,064
40-49	3	4	*	113
Previous pregnancy interval in months				
First pregnancy	108	84	99	1,937
<15	21	16	(89)	414
15-26	52	19	52	1,352
27-38	33	28	48	1,258
39+	56	59	50	2,310
Residence				
Urban	54	43	67	1,446
Rural	216	163	65	5,826
Division				
Barisal	9	7	(40)	419
Chittagong	53	33	54	1,581
Dhaka	87	65	67	2,262
Khulna	29	22	68	760
Rajshahi	64	59	76	1,624
Sylhet	26	20	73	625
Education				
No education	121	83	69	2,971
Primary incomplete	50	36	62	1,386
Primary complete	16	25	60	677
Secondary incomplete	32	24	59	945
Secondary complete or higher	52	38	70	1,292
Wealth index				
Lowest	79	50	69	1,871
Second	57	39	64	1,501
Middle	44	47	64	1,425
Fourth	45	32	59	1,287
Highest	45	38	70	1,187
Total	270	206	65	7,271

Note: Rates based on 250-499 pregnancies are in parentheses. An asterisk indicates that a rate is based on fewer than 250 pregnancies and has been suppressed.
[1] Stillbirths are fetal deaths in pregnancies lasting seven or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration.

Table 8.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey by category of elevated risk of dying and the risk ratio, and percent distribution of currently married women by category of risk of child death, Bangladesh 2004

Risk category	Births in the five years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high-risk category	34.0	1.00	29.3[a]
Unavoidable risk category			
First-order births between ages 18 and 34 years	13.9	1.43	6.2
Single high-risk category			
Mother's age <18	17.1	1.82	5.1
Mother's age >34	0.6	3.28	3.7
Birth interval <24 months	5.2	1.73	7.5
Birth order >3	18.3	1.36	16.8
Subtotal	41.2	1.62	33.1
Multiple high-risk category			
Mother's age <18 and birth interval <24 months[2]	1.4	1.33	1.5
Mother's age >34 and birth interval <24 months	0.1	*	0.1
Mother's age >34 and birth order >3	4.4	1.54	23.1
Mother's age >34 and birth interval <24 months & birth order >3	0.7	4.17	1.0
Birth interval <24 months and birth order >3	4.3	2.32	5.8
Subtotal	10.8	1.97	31.5
In any avoidable high-risk category	52.0	1.70	64.6
Total	100.0	na	100.0
Number of births	7,002	na	10,582

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. An asterisk indicates that a rate is based on fewer than 25 cases and has been suppressed.
na = Not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category mother's age <18 and birth order >3
[a] Includes sterilized women

CAUSES OF DEATH IN CHILDREN UNDER FIVE YEARS OF AGE

9

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9.1   INTRODUCTION

Knowledge of causes of death among children under five is important because it pertains to policy and programs. Patterns and trends in causes of under-five mortality help decisionmakers assess programmatic needs, prioritize interventions, and monitor progress. However, data on causes of death tend to be limited in developing countries, including Bangladesh. The vital registration systems are deficient in coverage and most deaths occur outside the health system, where cause of death is unreported. Verbal autopsy is a method of assessing the cause of death based on an interview with the next of kin or other caregivers who were present at the time of death or who are knowledgeable about the events leading up to the death. Verbal autopsies have been used previously in Bangladesh to provide important data on causes of child death (Chen et al., 1980; Zimicki et al., 1985; D'Souza, 1985; Bhatia, 1989; Fauveau et al., 1994; Snow et al., 1992; Kalter et al., 1990; Kamal et al., 1989; Salway et al., 1994; Baqui et al., 1998).

Baqui and others have reported on causes of death under age five based on verbal autopsy interviews in the 1993-1994 and 1996-1997 BDHS sample (Baqui et al., 1998; Baqui et al., 2001). Causes of deaths were assigned using predefined computer algorithms. The verbal autopsy study in the BDHS 1993-94 revealed that about one-quarter of deaths among children under five years were associated with acute respiratory infections (ARI) and about one-fifth of the deaths were associated with diarrhea (Baqui et al., 1998). Drowning was a major cause of death in children age 1-4 years. Neonatal tetanus and measles were the other important causes of death. The same verbal autopsy instrument and cause of death algorithms were used in the 1996-1997 BDHS. Comparison of the two surveys revealed that deaths due to almost all causes declined. The exceptions were deaths due to neonatal tetanus, diarrhea, and malnutrition (Baqui et al., 2001). The reduction in ARI-related deaths was almost entirely limited to children 1-4 years old; there was almost no decline in ARI deaths in the neonatal and postneonatal periods. In both surveys, cause of death could not be assigned to a substantial proportion of deaths, particularly those occurring in the neonatal period. In the 1996-97 BDHS, 21 percent of deaths were classified as early neonatal and another 15 percent were not identified. This reflects the limitations of the algorithms used to assign cause of death. A verbal autopsy assessment was not included in the 1999-2000 BDHS, and thus we have no national data on cause of death for children in Bangladesh since the mid-1990s. The 2004 BDHS shows that the under-five mortality rate declined by about 6 percent since the 1999-2000 survey and by 24 percent since the 1996-97 survey. This impressive decline in child mortality warrants further investigation. An assessment of the cause structure of child deaths may help explain this decline while guiding attention towards those causes of death that remain persistently high.

This chapter presents information on the proportional distribution of causes of neonatal, postneonatal, infant, and child deaths. The cause of death distribution is disaggregated by the sex of the child, urban-rural residence, division, and mother's education. During the survey, information on deaths of children under five in the sampled households was obtained from the birth history section of the questionnaire that was administered to eligible women. If a child under age five died in a household in the five years preceding the survey (which corresponds roughly to calendar years 1999-2003), a verbal autopsy questionnaire was administered by a supervisor of data collectors, or a specially trained data collector, within a day of identification of the death. This process is different from that used in the two previous verbal autopsy studies,

where information on the deceased was collected by revisiting those households with reported deaths after the main survey was completed.

9.2 DESCRIPTION OF THE DATA COLLECTION INSTRUMENT

The verbal autopsy instrument was developed from several instruments, including the questionnaire used in the two previous BDHS verbal autopsy surveys (Baqui et al., 1998; Baqui et al., 2001), the WHO verbal autopsy questionnaire, and the instrument being used since 2003 in the Matlab Health and Demographic Surveillance System (HDSS). This last instrument was developed based on the work done by the In-Depth Verbal Autopsy Working Group, which used the verbal autopsy questionnaire from the Adult Morbidity and Mortality Project (AMMP) in Tanzania, which, in turn, had evolved out of the WHO questionnaire. The final questionnaire was pre-tested and is somewhat different from the instrument used in the two previous surveys. The differences were primarily in terms of the structure of the instrument and in the level of specificity of the information collected. An entirely separate module on neonatal deaths (0-28 days old at death) was used. For the module on older children (age at death between 29 days and 5 years), sections were added to obtain addition information in cases with convulsions, unconsciousness, rash, malnutrition, glandular swellings, jaundice, vomiting, abdominal pain, mass in the body, urine color and amount, and any surgery. This was a structured instrument with sections allowing for collection of open-ended information including narrative stories. The complete instrument had the following sections: 1) identification including detailed address of respondent; 2) informed consent; 3) information on age of the deceased child; 4) information about caretaker or respondent of deceased child; 5) information on prenatal care, labor, delivery, and obstetrical complications; 6) open-ended section allowing the respondent to provide a narrative history; 7) information about accidental deaths; 8) detailed signs and symptoms preceding death; 9) and information about treatment preceding death, and on direct, underlying and contributing causes of death from the death certificate, if available.

9.3 ASSIGNING CAUSE OF DEATH

The death of a child often has more than one cause. The assignment of cause of death followed a hierarchical process whereby certain diagnoses were viewed as more certain than others—and thus given priority—with the possibility of assigning multiple causes of death included in the hierarchical process.

The hierarchical process followed several mutually exclusive tiers applied in sequence (Figure 9.1). In tier 1, neonatal tetanus was assigned as the cause in a child whose age at death was between 4 and 14 days, who had had convulsions any time during this period, and who either cried normally after birth and stopped crying at least one day before the final illness, or who suckled normally after birth and stopped suckling at least one day before the final illness. Tier 2 was limited to deaths before the age of 29 days. The cause of death of a child was confirmed as death due to congenital abnormality if the child had a reported malformation at birth. Tier 3 applied to accidental deaths at or after the age of 29 days, including drowning deaths. Tiers 4 and 5 applied to neonatal deaths at age 7 days or less. In tier 4, birth asphyxia was assigned as the cause of death if the child was not able to cry normally after birth and the baby was either not able to breathe after birth or not able to suckle normally after birth. In tier 5, deaths due to bruises or marks of injury on the body or head at birth were considered as birth injury.

Tier 6 allowed for the assignment of multiple causes of death simultaneously. ARI was assigned for neonates if difficult or rapid breathing started at least 1 day before death and lasted until death and the child had at least two of the following three specific symptoms: grunting, nostril flaring, and chest indrawing. ARI was confirmed for postneonatal and child deaths if the child had a cough that started at least three days before death and lasted at least until the day before death and at least two of the following six specific symptoms: noisy breathing, stridor, grunting, wheezing, nostril flaring, or chest indrawing. ARI was also assigned for

non-neonatal deaths if the child had difficult breathing or rapid breathing that started at least one day before death and lasted until death and had at least two of the six specific symptoms listed above for cough.

Figure 9.1 Flow Chart Showing the Different Tiers Used in Assigning Cause of Death Based on Algorithms, and Comparison with Previously Used Algorithms

Current Algorithm Tiers

1. Neonatal tetanus
2. Congenital abnormality
3. Injury
4. Birth asphyxia
5. Birth Injury
6. ARI, diarrhea, measles
7. Possible serious infections
8. Prematurity/LBW
9. Malnutrition

Previous Algorithm Tiers

Early neonatal (0-3days)

Injury

Neonatal tetanus

ARI, diarrhea, measles

Congenital abnormality, delivery complication, prematurity, other neonatal

Possible ARI, diarrhea

Malnutrition

Source: Baqui et al., 1998; Baqui et al., 2001

Diarrhea for neonates was assigned if frequent liquid or watery or loose or soft stools or diarrhea was reported with a peak of six or more stools in 24 hours. Diarrhea for older child deaths was assigned if there had been frequent loose or liquid stools starting from 1 to 13 days before death and continuing until death and with a peak number of six or more stools in 24 hours, and at least two of the four following specific symptoms were reported: dry mouth, sunken eyes, loose skin, and no or very little urine. Diarrhea for deaths at age 29 days to 59 months was also confirmed if frequent loose or liquid stools started from at least 14 days prior to death and continued until death. A child whose age at death was six months or more, and had a rash all over the body and on the face that appeared during the three months before death, and was accompanied by fever, with no water in the rash, and with at least one of the three following specific symptoms reported: dry cough, red or runny eyes and running nose during the illness, was assigned as measles. Any combinations of these causes were allowed in this tier.

Tier 7 was used to classify deaths due to other serious infections. Possible serious infection was assigned as cause of death if the child had at least two signs of serious infection. Among neonates, the signs included: child had stopped suckling, child had stopped crying, difficult breathing, rapid breathing, chest indrawing, convulsions, fever, child was cold to touch, child was lethargic, child was unresponsive or unconscious, bulging fontanelle, redness or drainage from the umbilical cord stump, skin rash with bumps containing pus, vomiting everything. Among postneonates, the signs included: difficult breathing, rapid

breathing, chest indrawing, convulsions, fever, child was unresponsive or unconscious or stopped being able to grasp or stopped being able to respond to a voice or stopped being able to follow movements with the eyes, stiff neck, bulging fontanelle, and vomiting everything. In order to understand overlaps of possible serious infection with ARI and diarrhea, we used cause of death definitions of possible ARI and possible diarrhea. Among those with possible serious infection, possible ARI was classified if cough, difficult breathing or rapid breathing had been present before death. Possible diarrhea was assigned if frequent loose or liquid stools were reported.

Tier 8 was used if age at death was less than 29 days and pregnancy ended early or the baby was reported to be very small or smaller than usual. In these cases, the death was confirmed as due to prematurity or low birth weight (LBW). In tier 9, if the child was reported to have been very thin or the child's feet were reported to have been swollen, the cause of death was confirmed as due to malnutrition.

If no cause of death had been assigned in tiers 1 to 9, then a physician review process was used to assign cause of death. All the verbal autopsies in this category were independently reviewed by any two physicians from a panel of three. These three physicians had received guidance from the investigators on the cause of death assignment process. They were required to assign direct and underlying causes of death based on the International Classification of Diseases version 10 (ICD-10). If the two physicians agreed on the direct and underlying cause, that cause was accepted. In the event of disagreement, the verbal autopsy was reviewed by the third physician. If his/her assigned cause of death agreed with that of either of the other two physicians then that cause was accepted. If there was still disagreement, a "not determined" cause of death was assigned. The physicians were allowed to assign "unspecified" as a cause of death if they felt there was not enough information to lead to a definite cause of death. If any two physicians agreed on "unspecified" as cause of death then that was assigned.

This algorithm is somewhat different from the one used in the two previous surveys (Baqui et al., 1998; Baqui et al., 2001). There are three differences. The case definitions used in the current survey, for deaths due to ARI and diarrhea, differ from previous definitions because of differences in the questionnaires. For ARI, the current questionnaire asked about rapid and difficult breathing in two separate questions; while previously, the queries were included in one question. Unlike the previous questionnaire, the current one does not ask about cough, noisy breathing, stridor, and wheezing in neonates, resulting in different algorithms for neonates. In the diarrhea set of algorithms, there are differences in three of the specific symptoms used to confirm the assignment of diarrhea as cause of death. The symptoms of weakness and depressed fontanel present in the previous questionnaire were not present in the new one, while the symptom of loose skin used in the new questionnaire was not collected previously. None of the specific symptoms were available for neonates in the new questionnaire. The diagnosis of persistent diarrhea is now made only for postneonates and children age 1-4 years. The tiers were also modified in order to reduce the number of unspecified causes of death as shown in the chart (Figure 9.1). The physician review was added for the same reason. The two major changes in the tiers are the following:

1.   The previous first tier—grouping together all neonatal deaths during 0-3 days of life—was dropped. Such a broad category did not allow understanding the causes of the large number deaths in this age group and, consequently, was not useful for policy or program purposes. The tier of birth asphyxia was added as a specific cause of death that contributed the most to these very early deaths; and

2.   The inclusion of "possible serious infection" as a cause of death tier, replacing the previous possible ARI and diarrhea causes. This was done in an attempt to capture infections and sepsis as cause of death, as well as to reduce the number of deaths where a cause could not be assigned.

9.4   CAUSES OF DEATH AMONG CHILDREN UNDER FIVE

The percent distribution of children under five years by cause of death is presented in Table 9.1 by age group. Possible serious infection is the most important cause of death among neonates (33 percent), followed by birth asphyxia (21 percent), prematurity/LBW (11 percent) and ARI (10 percent). This large category of possible serious infection included 9 cases classified as such by the physician review. Of the remaining 102 cases in this category, 46 were also premature/LBW and 61 had possible ARI. Among neonates, 135 (39 percent) of the deaths were associated with prematurity/LBW (not presented in the table). Of these 135 cases, the direct causes of death indicated in Table 9.1 are: neonatal tetanus (4), congenital abnormality (7), birth Asphyxia (16), birth injury (5), diarrhea (2), ARI (15), possible serious infection (46), and prematurity/LBW (42).

Among infants aged 29 days-11 months, ARI was associated with almost half of the deaths (ARI alone: 43 percent and ARI and diarrhea 5 percent). A quarter of the post-neonatal deaths were due to possible serious infections, and diarrhea (with or with out ARI) contributed 15 percent of deaths in this age group.

Among older children (12-59 months), possible serious infection was the most important killer (37 percent), followed by injuries (22 percent) ─ particularly drowning (19 percent) ─ ARI (17 percent), malnutrition (11 percent) and diarrhea (9 percent). This large category of possible serious infection among post-neonates and children aged 12-59 months (n=78) was examined. In 64 of these cases, the child had fever along with at least one other symptom. Half of these 78 cases were malnourished, 28 had possible ARI, 13 had possible diarrhea, and 14 had possible ARI and diarrhea.

Overall among all under-five children, possible serious infections (31 percent) and ARI (21 percent) were responsible for most of the deaths. This was followed by birth asphyxia (12 percent), diarrhea (7 percent) and prematurity/LBW (7 percent). Malnutrition was associated with 131 (22 percent) of all under-five deaths (not presented in the table). Of these 131 cases, the direct causes of death indicated in Table 9.1 are: injuries (2), measles with ARI diarrhea (1), diarrhea (16), ARI (47), ARI and diarrhea (5), Possible serious infection (39), and malnutrition alone (21). Overall, a cause could not be assigned to 31 (6 percent) of the under-five deaths.

Compared to the cause of death pattern observed in the 1996-97 survey, several differences are observed in even the current survey, limiting this comparison to those unlikely to be complicated by the changes in methodology. A big difference has been the reduction of the number of post-neonatal and child deaths. In 1996-97, deaths at ages 0-28 days, 1-11 months, and 12-59 months were 42 percent, 30 percent and 28 percent respectively; in 2004 this distribution was 56 percent, 31 percent and 13 percent respectively. Drowning is responsible for about 19 percent of deaths at 12-59 months, similar to the proportion in 1996-97. The proportion of neonatal deaths attributed to neonatal tetanus shows a dramatic decline from 17 to 4 percent. Of considerable interest is the reduction of "confirmed" Diarrhea as a cause of death from 13 percnt in 1996-97 to 7 percent in 2004.

Table 9.1 Causes of death among children under five by age group

Percent distribution of deaths among children under five years, by cause of death according to age group, Bangladesh 2004

| Cause of death | Age group | | | |
	Neonatal (0-28 days)	Postneonatal 29 days - 11 months	Child 12-59 months	Under five years total
Neonatal tetanus	4.2	0.0	0.0	2.3
Congenital abnormality	5.1	0.0	0.0	2.8
Injury	0.0	3.2	22.3	4.1
Drowning	0.0	0.9	19.3	3.0
Birth asphyxia	21.1	0.0	0.0	11.7
Birth injury	3.9	0.0	0.0	2.2
Measles	0.0	0.4	1.6	0.3
Measles followed by ARI or diarrhea	0.0	0.0	1.8	0.3
Diarrhea	1.2	10.3	9.3	5.1
ARI	10.3	42.7	17.0	21.1
ARI and diarrhea	0.5	4.9	0.0	1.8
Possible serious infection[1]	33.2	24.6	37.3	31.2
Premature birth/LBW	10.9	1.2	0.0	6.5
Malnutrition	0.0	7.1	10.7	3.6
Other causes[2]	2.3	1.0	0.0	1.6
Unspecified	3.9	3.5	0.0	3.2
Undetermined	3.4	1.1	0.0	2.3
Total	100.0	100.0	100.0	100.0
Number of deaths	326	183	78	587

Note: Estimates are weighted.
[1] Possible serious infections include possible ARI and diarrhea.
[2] Causes includes umbilical hemorrhage (1), hemorrhage disorder of newborn (3), otitis media (1), neonatal malnutrition (1), intestinal obstruction (1), aspiration pneumonia (1), and congenital heart disease (1).

9.5   DIFFERENTIALS IN CAUSE OF UNDER-FIVE DEATHS

Differentials in cause of death by sex of child, urban-rural residence, mother's education and administrative division are presented in Tables 9.2-9.4. There are some differences between boys and girls in terms of causes of death (Table 9.2). Birth asphyxia and possible serious infections are more common causes of death among boys, while ARI is more common among girls. However, the confidence intervals are wide and overlapping therefore these differences are not statistically significant. In the 1996-97 BDHS, drowning deaths were more common in boys. This was still true in 2004 but the difference is smaller. ARI deaths were also more common among girls in 1996-97. An interesting change that has occurred between 1996-97 and 2004 that while in the previous BDHS, death to girls outnumbered deaths to boys (348 vs. 330); this was reversed in 2004 with 321 deaths to boys to 266 deaths to girls.

Urban-rural comparisons reveal that ARI is a more common cause of death in rural areas, while malnutrition as a cause of death is more common in urban areas (Table 9.2). The other causes do not differ when all under-five children are considered. However, data disaggregated by age at death (not presented) indicate that birth asphyxia contributes to higher percentage of neonatal deaths in urban areas (27 percent versus 20 percent), and drowning is almost twice as common among 12-59 month old children in rural areas (22 percent vs. 12 percent).

Table 9.2 Causes of death among children under five by sex of child and residence

Percent distribution of deaths among children under five years by cause of death, according to sex of child and residence, Bangladesh 2004

	Sex of child		Residence	
Cause of death	Male	Female	Rural	Urban
Neonatal tetanus	1.5	3.4	2.4	2.2
Congenital abnormality	2.3	3.5	3.2	1.6
Injury	4.3	3.9	4.1	4.0
Drowning	3.3	2.5	3.1	2.4
Birth asphyxia	13.0	10.1	11.4	12.9
Birth injury	1.9	2.4	2.2	2.2
Measles	0.2	0.5	0.3	0.6
Measles followed by ARI				
or diarrhea	0.0	0.6	0.2	0.5
Diarrhea	4.5	5.9	4.7	6.3
ARI	19.1	23.5	22.3	16.8
ARI and diarrhea	1.8	1.8	1.5	2.7
Possible serious infection[1]	33.8	27.9	31.2	31.0
Premature birth/LBW	7.2	5.6	6.7	5.6
Malnutrition	4.6	2.4	2.3	8.3
Other causes	1.5	1.8	1.6	1.7
Unspecified	2.6	4.0	3.8	1.3
Undetermined	1.8	2.8	2.3	2.3
Total	100.0	100.0	100.0	100.0
Number of deaths	321	266	408	179

Note: Estimates are weighted.
[1]Possible serious infections include possible ARI and diarrhea

Congenital abnormalities, injuries including drowning, prematurity/LBW and birth asphyxia are more important causes of death among children whose mothers had at least secondary education compared to those with no education (Table 9.3). Malnutrition, possible serious infections, ARI and diarrhea are associated with a larger proportion of deaths among children of mothers with no education.

Small numbers and wide confidence intervals make it difficult to be conclusive about the divisional variations in cause death presented in Table 9.4. Barisal, and Khulna divisions are presented together due to small numbers and because they were part of same division previously. Several patterns are of interest: possible serious infections are the most important cause of childhood death in all divisions. Malnutrition is important in Dhaka and Chittagong divisions while ARI deaths are proportionately more common in Sylhet and least common in Rajshahi divisions. Diarrhea deaths were relatively more common in Chittagong and Sylhet divisions, and asphyxia deaths in Barisal/Khulna and Rasjshahi divisions. Drowning deaths contribute more to under-five deaths in Chittagong and Rajshahi divisions.

Table 9.3 Causes of death among children under five by mother's education

Percent distribution of deaths among children under five years by cause of death, according to mother's level of education, Bangladesh 2004

	Mother's education		
Cause of death	None	Primary complete	Secondary complete or higher
Neonatal tetanus	3.4	2.3	0.0
Congenital abnormality	2.6	2.3	4.5
Injury	3.6	1.2	10.2
Drowning	2.0	1.2	9.0
Birth asphyxia	6.7	13.9	22.0
Birth Injury	1.5	3.2	2.5
Measles	0.5	0.0	0.0
Measles followed by ARI			
or diarrhea	0.2	0.5	0.0
Diarrhea	5.8	5.2	3.8
ARI	23.0	21.4	15.4
ARI and diarrhea	1.8	2.0	1.7
Possible serious infection[1]	32.8	29.3	28.7
Premature birth/LBW	4.8	9.4	6.9
Malnutrition	3.9	4.0	1.7
Other causes	2.0	1.3	1.3
Unspecified	4.8	2.0	0.8
Undetermined	2.6	2.1	0.8
Total	100.0	100.0	100.0
Number of deaths	288	180	104

Note: Estimates are weighted.
[1]Possible serious infections include possible ARI and diarrhea

Table 9.4 Causes of death among children under five by division

Percent distribution deaths among children under five years by cause of death, according to division, Bangladesh 2004

	Division				
Cause of death	Chittagong	Dhaka	Barisal/ Khulna	Rajshahi	Sylhet
Neonatal tetanus	1.6	3.2	0.0	0.0	7.5
Congenital abnormality	2.2	3.0	2.4	3.3	2.8
Injury	6.4	2.0	2.9	8.0	0.9
Drowning	5.6	0.7	1.2	6.9	0.0
Birth asphyxia	8.8	10.0	20.0	15.3	7.4
Birth Injury	2.5	1.7	2.0	1.7	3.8
Measles	0.0	0.0	0.0	1.7	0.0
Measles followed by ARI					
or diarrhea	1.3	0.0	0.0	0.0	0.0
Diarrhea	8.5	4.8	4.4	2.1	6.2
ARI	21.3	22.3	20.3	17.5	24.2
ARI and diarrhea	1.1	3.6	0.8	1.1	0.0
Possible serious infection[1]	33.0	30.8	31.2	29.8	31.4
Premature birth/LBW	1.4	4.5	9.6	10.6	10.3
Malnutrition	5.3	5.4	2.8	1.1	0.6
Other causes	1.3	0.5	0.4	4.2	1.9
Unspecified	2.0	4.8	3.2	1.6	3.2
Undetermined	3.5	3.2	0.0	2.1	0.0
Total	100.0	100.0	100.0	100.0	100.0
Number of deaths	124	153	101	102	107

Note: Estimates are weighted.
[1] Possible serious infections include possible ARI and diarrhea

MATERNAL AND CHILD HEALTH

10

This chapter provides information from the 2004 BDHS on the use of various maternal and child health services and the prevalence of important childhood illnesses. Specifically, it presents findings on the use of antenatal care, delivery assistance and postnatal care, vaccination coverage, and particular 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 live births that occurred in the five years preceding the survey.

10.1 ANTENATAL CARE

The reproductive health care services that a mother receives during her pregnancy and at the time of delivery are important for the well-being of the mother and her child. A well-designed and implemented national antenatal care program facilitates detection and treatment of complications during pregnancy, and it 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. Antenatal care (ANC) can be assessed according to the type of service provider, the number of visits made, the stage of pregnancy at the time of first visit, and services and information received during pregnancy.

10.1.1 Antenatal Care Coverage

Antenatal care from a medically 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 10.1 shows the percent distribution of women who had a live birth in the five years preceding the survey by source of antenatal care received during pregnancy, according to selected background characteristics. Interviewers were instructed to record all persons a woman had consulted for antenatal care for the most recent birth; but in Table 10.1, only the provider with the highest qualifications is considered if the woman had seen more than one provider.

The 2004 BDHS shows that 56 percent of women who had a live birth in the five years preceding the survey received antenatal care from a provider at least once (trained or untrained) for the most recent birth, while 49 percent received care from medically trained providers (e.g., doctors, nurses or midwives) (Table 10.1). Antenatal coverage increased sharply in the four years between the 1999-2000 BDHS and the 2004 BDHS. In the 1999-2000 BDHS, only one-third of the women reported receiving antenatal care from a medically trained provider, compared with about half in the 2004 BDHS.

There are sharp differences in antenatal care coverage among subgroups in Bangladesh. Antenatal care from a medically trained provider is received more often by young mothers than older mothers and for lower-order births than for higher-order births. Antenatal coverage also increases with level of mother's education and the household economic status. Nine out of ten mothers who completed secondary education received antenatal care from a medically trained provider, compared with only three in ten mothers with no education. Women in households in the highest wealth quintile are more than three

times as likely to have received antenatal care from a medically trained provider as those in households in the lowest wealth quintile

Table 10.1 Antenatal care

Percent distribution of women who had a live birth in the five years preceding the survey by source of antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Bangladesh 2004

| Background characteristic | Received any ANC | Medically trained provider | | | Non-medically trained provider | | | | Other | No one | Total | Number of women |
		Qualified doctor	Nurse/ midwife/ paramedic[1]	MA/ SACMO	HA/ FWA	Trained birth attendant	Un-trained birth attendant	Unqualified provider				
Age at birth												
<20	59.3	30.8	21.6	0.2	3.0	0.2	0.1	2.3	1.1	40.7	100.0	1,628
20-34	55.9	32.5	16.0	0.0	3.6	0.0	0.1	2.6	0.9	44.2	100.0	3,444
35-49	42.2	21.4	11.4	0.5	3.0	0.3	0.3	2.5	1.3	59.3	100.0	344
Birth order												
1	68.2	42.0	20.0	0.1	2.9	0.1	0.2	2.0	1.0	31.8	100.0	1,491
2-3	57.7	32.2	18.2	0.2	3.5	0.1	0.1	2.5	0.9	42.3	100.0	2,376
4-5	47.1	22.3	16.1	0.1	4.2	0.1	0.0	3.4	1.0	52.7	100.0	984
6+	31.1	14.7	9.4	0.2	2.7	0.1	0.2	2.3	1.5	68.9	100.0	565
Residence												
Urban	74.8	53.0	17.8	0.2	1.9	0.0	0.1	1.6	0.3	25.2	100.0	1,123
Rural	50.9	25.6	17.3	0.1	3.8	0.1	0.1	2.7	1.2	49.1	100.0	4,293
Division												
Barisal	46.8	27.0	12.5	0.0	3.4	0.0	0.2	2.7	1.0	53.2	100.0	333
Chittagong	54.3	32.7	14.4	0.3	1.7	0.4	0.2	3.1	1.5	45.7	100.0	1,115
Dhaka	56.1	32.9	15.7	0.1	4.5	0.0	0.1	2.0	0.9	43.9	100.0	1,677
Khulna	61.4	35.2	19.6	0.0	3.1	0.2	0.1	2.5	0.6	38.6	100.0	607
Rajshahi	59.1	25.9	25.2	0.1	4.2	0.0	0.1	2.5	1.0	40.8	100.0	1,285
Sylhet	48.2	35.2	8.6	0.0	1.2	0.1	0.0	2.4	0.7	51.8	100.0	400
Education												
No education	37.6	15.4	14.8	0.1	3.9	0.0	0.1	2.6	0.7	62.4	100.0	1,998
Primary incomplete	52.9	24.6	19.9	0.2	3.8	0.1	0.2	2.5	1.6	47.0	100.0	1,138
Primary complete	59.2	33.1	18.4	0.0	3.7	0.0	0.3	2.8	1.0	40.8	100.0	504
Secondary incomplete	72.5	44.9	20.7	0.3	2.8	0.2	0.0	2.8	0.8	27.5	100.0	1,371
Secondary complete or higher	93.6	79.4	10.7	0.0	1.6	0.3	0.0	0.6	1.0	6.4	100.0	406
Wealth index												
Lowest	33.7	12.3	12.5	0.1	4.4	0.1	0.2	3.4	0.8	66.3	100.0	1,298
Second	46.0	18.9	19.6	0.1	3.3	0.1	0.1	2.3	1.6	54.0	100.0	1,124
Middle	58.3	26.8	21.9	0.1	4.4	0.1	0.2	3.4	1.4	41.5	100.0	1,054
Fourth	66.5	42.0	18.5	0.1	2.8	0.1	0.1	2.0	0.9	33.5	100.0	998
Highest	84.1	65.6	15.4	0.1	1.6	0.1	0.0	1.0	0.3	15.9	100.0	943
Total	55.9	31.3	17.4	0.1	3.4	0.1	0.1	2.5	1.0	44.1	100.0	5,416

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
MA = medical assistant; SACMO = sub-assistant community medical officer; HA = health assistant; FWA = family welfare assistant
[1] Including family welfare visitor (FWV)

The urban-rural differential in antenatal care coverage is quite large; overall, 71 percent of urban women received antenatal care from a medically trained person, compared with only 43 percent of rural women. Mothers in Barisal and Sylhet divisions are the least likely to receive antenatal care from a medically trained provider

For births that did not receive an antenatal checkup during pregnancy, mothers were asked why they did not seek antenatal care. Almost two-thirds of the women who did not seek antenatal care reported that the checkup was not needed or that it provided no benefit (Figure 10.1). Another one in eight women mentioned that they did not know that antenatal care was needed during pregnancy. Almost one in five nonreceivers of antenatal care did not seek the service because they considered it to be expensive.

Figure 10.1 Reasons For Not Seeing Anyone for Antenatal Care

Reason	Percent
Not needed/not beneficial	63
Expensive	18
Did not know service was needed	13
Not permited to/cannot go outside the house	6
Other	4
Religious reasons	2
Issues related to quality of service	2
Too far	2
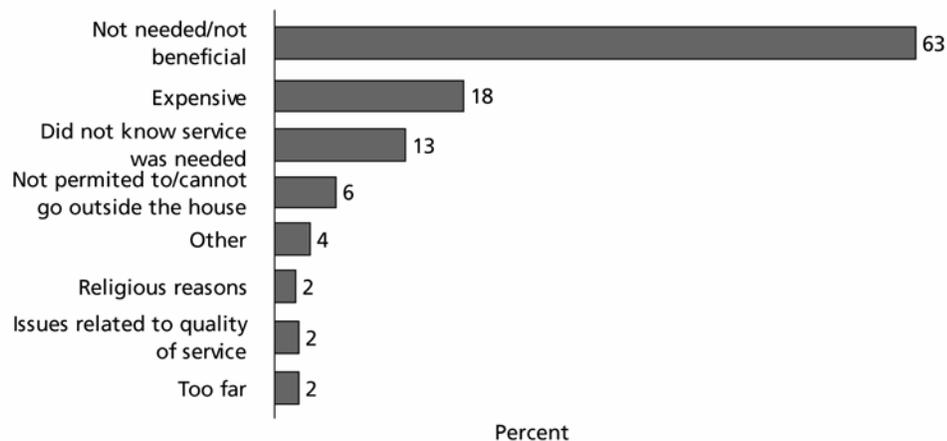
NOTE: Respondants could give more than one reason.   BDHS 2004

10.1.2 Number and Timing of Antenatal Visits

Antenatal care can be more effective in avoiding adverse pregnancy outcomes when it is sought early in the pregnancy and continues through to delivery. The Bangladesh Maternal Health Strategy recommends at least three visits during pregnancy. The first visit is to be made soon after the woman realizes she is pregnant. The second visit should be made between the fifth and seventh months of pregnancy. The third visit should be made at the ninth month of pregnancy. Additional visits should be made if any problems or danger signs arise.

Information about the number and timing of visits made by pregnant women is presented in Table 10.2. The 2004 BDHS findings show that not only are more women receiving antenatal care, they are also seeking more visits than before. The percentage of women who had three or more antenatal visits with any provider increased from 16 to 27 percent between the 1999-2000 BDHS and the 2004 BDHS. Among those who sought care, the median number of visits has increased from 1.8 to 2.9 during the same period. Urban women are more than twice as likely as rural women to have three or more antenatal visits. In urban areas, the median number of visits is 3.7, one visit higher than in the rural areas.

Pregnant women seem to seek antenatal care rather late in their pregnancy. Among those who sought care, the median duration of pregnancy at first visit was 5.2 months.

Table 10.2 Number of antenatal care visits and timing of first visit

Percent distribution of women who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent birth and by the timing of the first visit, according to residence, Bangladesh 2004

Number and timing of ANC visits and median number of visits	Residence		
	Urban	Rural	Total
Number of ANC visits			
None	25.2	49.1	44.1
1	13.7	16.7	16.1
2	13.1	12.5	12.7
3	14.3	10.4	11.2
4+	33.7	11.3	15.9
Total	100.0	100.0	100.0
Median number of visits	3.7	2.7	2.9
Number of months pregnant at time of first ANC visit			
No antenatal care	25.2	49.1	44.1
<4 months	32.8	16.0	19.5
4-5 months	24.6	17.0	18.5
6-7 months	12.6	12.4	12.5
8+ months	4.8	5.4	5.3
Total	100.0	100.0	100.0
Median months pregnant at first visit (for those with ANC)	4.6	5.4	5.2
Number of women	1,123	4,293	5,416

10.1.3 Health Services Received during Pregnancy

Pregnancy complications are an important cause of maternal and child morbidity and mortality, and monitoring these complications is a crucial component of safe motherhood. A number of health care procedures are recommended to be performed to monitor and check the development of pregnancies in mothers. For women who had a live birth in the five years preceding the survey, the 2004 BDHS included a series of questions on whether they were told about the signs of pregnancy complications, whether they were weighed, whether their height and blood pressure were measured, whether urine and blood samples were taken, whether their eyes were examined, and whether they received iron tablets or syrup at any time during the pregnancy of their most recent live birth.

Table 10.3 shows the various health services received during pregnancy by women for their most recent birth in the five years preceding the survey. Only three out of ten mothers were informed about the signs of pregnancy complications by any health provider at any time during the pregnancy. Half of the mothers received iron supplementation, and the same proportion had their blood pressure measured at least once during the most recent pregnancy; 44 percent had their weight measured. Other health services (e.g., urine test, blood test, ultrasonic test) were much less likely to have been received. One in four women had a urine sample taken, less than one in five had a blood sample taken, and about one in eight

women had an ultrasonic test. The levels of use reported in the 2004 BDHS for all services mentioned above are notably higher than the levels reported in the 1999-2000 BDHS.

Table 10.3 Health care during pregnancy

Percentage of women who had a live birth in the five years preceding the survey by specific health services received during pregnancy of the most recent birth, according to background characteristics, Bangladesh 2004

Background characteristic	Informed of signs of pregnancy complications	Weight measured	Height measured	Eyes examined	Blood pressure measured	Urine sample taken	Blood sample taken	Received iron tablets or syrup	Ultrasonic test	Number of women
Age at birth										
<20	32.1	48.9	20.2	45.1	52.9	25.3	17.1	52.4	11.5	1,628
20-34	30.7	43.2	20.2	45.3	50.4	27.2	19.5	50.3	14.2	3,444
35-49	18.9	28.6	8.8	31.5	36.1	14.8	9.5	34.8	7.7	344
Birth order										
1	39.1	57.6	26.0	54.5	62.1	34.1	26.0	61.4	19.1	1,491
2-3	30.6	44.8	20.2	46.5	51.2	26.4	18.2	51.8	13.5	2,376
4-5	24.7	33.8	14.8	35.5	42.4	21.2	13.1	38.9	8.2	984
6+	16.4	22.6	7.3	24.1	28.6	9.9	5.9	31.7	3.3	565
Residence										
Urban	42.2	60.3	28.4	60.8	68.4	43.6	33.8	64.2	28.5	1,123
Rural	27.3	39.7	17.1	40.1	45.5	21.2	14.1	46.3	8.9	4,293
Division										
Barisal	27.9	37.4	17.8	38.4	43.8	22.9	17.0	46.1	9.5	333
Chittagong	31.1	38.2	14.5	45.8	48.4	25.8	20.0	48.8	13.2	1,115
Dhaka	29.4	45.6	21.0	42.7	50.7	26.5	19.8	48.5	16.9	1,677
Khulna	32.7	51.1	26.2	54.5	57.9	26.3	20.4	53.2	17.3	607
Rajshahi	32.7	48.4	19.8	42.7	50.7	25.5	13.0	52.9	7.6	1,285
Sylhet	23.8	33.9	16.8	41.9	45.8	25.7	20.1	48.8	9.5	400
Education										
No education	17.8	29.8	12.4	27.6	32.2	12.9	7.1	33.8	3.2	1,998
Primary incomplete	26.9	41.5	19.9	40.9	47.2	22.2	13.3	48.8	8.4	1,138
Primary complete	31.3	41.9	18.7	43.8	52.9	25.2	16.5	50.7	9.2	504
Secondary incomplete	41.8	56.3	23.2	59.7	66.1	34.5	25.7	63.3	20.3	1,371
Secondary complete or higher	62.6	81.9	41.0	85.6	91.2	71.4	62.3	87.3	54.2	406
Wealth index										
Lowest	18.8	26.9	12.7	24.6	30.0	11.4	6.6	31.6	1.9	1,298
Second	21.9	34.5	14.3	33.9	40.2	14.3	7.0	44.6	3.7	1,124
Middle	30.5	45.2	19.0	45.6	50.1	22.4	12.8	48.1	8.5	1,054
Fourth	35.2	51.8	21.9	54.2	59.8	30.2	22.3	57.3	17.4	998
Highest	51.2	69.3	32.8	72.2	80.2	58.8	48.9	76.1	39.9	943
Total	30.4	44.0	19.4	44.4	50.3	25.8	18.1	50.0	13.0	5,416

10.1.4 Tetanus Toxoid Vaccinations

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus, historically one of the principal causes of death among infants in many developing countries. To achieve protection for herself and her newborn baby, typically, a pregnant woman should receive at least two doses of tetanus toxoid. On the other hand, if a woman was fully vaccinated during a previous pregnancy, she may only require one dose during her current pregnancy to achieve such protection. Five doses are considered adequate to provide lifetime protection. To estimate the extent of tetanus toxoid coverage during pregnancy, the 2004 BDHS collected data for the last birth in the five years preceding the survey as to whether the mother received any tetanus toxoid vaccinations during that pregnancy and, if so, how many. These results are presented in Table 10.4. The data may underestimate the actual extent of protection from tetanus, since women were asked about vaccinations received only during the most recent pregnancy. Women who had received prior tetanus toxoid vaccinations may not have received additional injections because they were considered unnecessary.

Table 10.4 Tetanus toxoid injections

Percent distribution of women who had a live birth in the five years preceding the survey by number of tetanus toxoid injections received during pregnancy for the most recent birth, according to background characteristics, Bangladesh 2004

Background characteristic	Number of tetanus toxoid injections				Total	Number of women
	None	One injection	Two or more injections	Don't know/missing		
Age at birth						
<20	10.2	15.5	74.1	0.2	100.0	1,628
20-34	15.9	23.9	60.1	0.2	100.0	3,444
35-49	28.9	22.4	48.7	0.0	100.0	344
Birth order						
1	8.4	10.9	80.5	0.2	100.0	1,491
2-3	11.6	24.7	63.4	0.2	100.0	2,376
4-5	23.0	26.7	50.3	0.0	100.0	984
6+	32.7	24.3	42.6	0.3	100.0	565
Residence						
Urban	11.9	21.2	66.6	0.3	100.0	1,123
Rural	15.8	21.3	62.8	0.1	100.0	4,293
Division						
Barisal	13.9	14.0	72.2	0.0	100.0	333
Chittagong	16.9	20.6	62.5	0.0	100.0	1,115
Dhaka	13.1	23.4	63.3	0.2	100.0	1,677
Khulna	13.4	25.9	60.1	0.6	100.0	607
Rajshahi	13.4	19.5	66.9	0.2	100.0	1,285
Sylhet	26.1	18.5	55.4	0.1	100.0	400
Education						
No education	21.8	21.5	56.5	0.3	100.0	1,998
Primary incomplete	15.4	22.1	62.5	0.0	100.0	1,138
Primary complete	11.8	22.6	65.4	0.2	100.0	504
Secondary incomplete	8.6	19.6	71.7	0.2	100.0	1,371
Secondary complete or higher	6.3	21.8	71.9	0.0	100.0	406
Wealth index						
Lowest	22.5	21.4	56.0	0.1	100.0	1,298
Second	17.7	20.8	61.2	0.3	100.0	1,124
Middle	13.2	23.3	63.5	0.0	100.0	1,054
Fourth	11.1	19.1	69.6	0.2	100.0	998
Highest	7.6	21.4	70.7	0.2	100.0	943
Total	15.0	21.2	63.6	0.2	100.0	5,416

The data indicate that tetanus toxoid coverage is relatively widespread in Bangladesh. Overall, 64 percent of the mothers received two or more tetanus toxoid injections during pregnancy, while another 21 percent received one injection. The remaining 15 percent of mothers did not receive any tetanus toxoid injection. The proportion of mothers who did not receive any tetanus toxoid injection during pregnancy decreased from 19 percent in 1999-2000 to 15 percent in 2004.

Mothers giving birth at a younger age and those with low birth order children are more likely to have received two or more tetanus toxoid injections. For example, three-fourths of mothers below age 20 received two or more doses, compared with half of mothers age 35-49. These patterns occur because older, higher parity mothers most likely received tetanus toxoid injections during previous pregnancies. Women in Sylhet are less likely to have had a tetanus vaccination during their most recent pregnancy. Women with more education and those in households in the higher wealth quintiles are more likely to receive two or more doses of tetanus toxoid, compared with less educated women and women in households in the lower wealth quintiles.

10.2   DELIVERY CARE

The objective of providing safe delivery services is to protect the life and health of the mother and her child by ensuring safe delivery. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may cause death or serious illness to the mother, the newborn, or both. The Bangladesh Maternal Health Strategy encourages women to deliver under the care of medically trained birth attendants. In the 2004 BDHS, women were asked to provide information on the place and type of assistance during delivery for all children born in the five years preceding the survey. In this section, two topics related to delivery are discussed: place of delivery and type of assistance during delivery.

10.2.1 Place of Delivery

Table 10.5 presents the distribution of live births in the five years preceding the survey by place of delivery. Only 9 percent of births occur at a health facility, while almost all others are delivered at home. The proportion of births delivered at a facility has hardly changed between the 1999-2000 BDHS and the 2004 BDHS. The likelihood of delivering at a health institution is higher for first births, for women in urban areas, and for women in Khulna division. Women who have completed secondary education and those in households in the higher wealth quintiles have a substantially greater likelihood of delivering at a facility (44 and 30 percent, respectively).

Table 10.5 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Bangladesh 2004

| Background characteristic | Place of delivery | | | | | Number of births |
	Public health facility	Private health facility	Home	Other	Total	
Age at birth						
<20	6.7	2.1	90.5	0.7	100.0	2,287
20-34	5.9	4.0	89.3	0.9	100.0	4,313
35-49	4.1	1.9	93.7	0.2	100.0	402
Birth order						
1	10.5	5.6	82.7	1.2	100.0	2,042
2-3	5.6	2.9	90.7	0.8	100.0	3,026
4-5	2.7	1.6	95.4	0.3	100.0	1,223
6+	1.5	0.6	97.7	0.2	100.0	711
Residence						
Urban	12.8	9.1	76.5	1.5	100.0	1,392
Rural	4.4	1.8	93.2	0.6	100.0	5,610
Division						
Barisal	3.6	1.3	94.0	1.0	100.0	410
Chittagong	4.8	2.5	92.4	0.2	100.0	1,527
Dhaka	7.1	4.3	87.7	0.9	100.0	2,175
Khulna	9.2	6.0	83.4	1.4	100.0	731
Rajshahi	5.8	2.1	91.1	1.0	100.0	1,560
Sylhet	4.3	1.9	93.8	0.1	100.0	599
Education						
No education	2.0	0.5	97.3	0.1	100.0	2,688
Primary incomplete	4.3	1.4	93.2	1.1	100.0	1,499
Primary complete	6.0	2.1	91.2	0.7	100.0	661
Secondary incomplete	9.3	4.6	85.0	1.1	100.0	1,678
Secondary complete or higher	23.5	20.8	53.2	2.3	100.0	475
Antenatal care visits						
None	1.7	0.5	97.7	0.1	100.0	2,389
1-3	6.9	2.5	89.6	1.0	100.0	2,163
4+	18.8	15.1	64.0	2.0	100.0	863
Wealth index						
Lowest	1.8	0.2	97.6	0.5	100.0	1,791
Second	2.5	0.7	96.7	0.1	100.0	1,444
Middle	4.6	0.9	93.3	1.1	100.0	1,381
Fourth	8.4	3.5	87.4	0.7	100.0	1,243
Highest	16.7	13.6	67.9	1.7	100.0	1,142
Total	6.1	3.2	89.9	0.8	100.0	7,002

Note: Figures are for all births in the period 0-59 months preceding the survey.
Total includes three cases with missing information on antenatal care visits.

10.2.2 Assistance during Delivery

Assistance by medically trained birth attendants during delivery is considered to be effective in the reduction of maternal and neonatal mortality. Women who had a live birth in the five years preceding the survey were asked who assisted with the delivery. Interviewers recorded multiple responses if more than one person assisted during delivery; however, for the purpose of this tabulation, only the most qualified attendant was considered if there was more than one in attendance.

Medically trained providers, (e.g., doctors, trained nurses or midwives, or family welfare visitors) assist in the delivery of only 13 percent of births (Table 10.6). Traditional birth attendants continue to play a major role, assisting with 77 percent of deliveries. Relatives and friends assist in 9 percent of births.

Table 10.6 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by type of assistance during delivery, according to background characteristics, Bangladesh 2004

| Background characteristic | Medically trained | | | Non-medically trained | | | | | | |
	Qualified doctor	Nurse/ midwife/ paramedic[1]	HA/FWA	Tradidtional birth attendant	Untrained birth attendant	Relatives and friends	Other	No one	Total	Number of births
Age at birth										
<20	6.5	5.9	0.3	14.4	63.4	8.7	0.2	0.6	100.0	2,287
20-34	8.4	5.8	0.2	13.4	62.4	8.7	0.3	1.0	100.0	4,313
35-49	4.3	3.4	0.0	14.3	67.3	9.0	0.0	1.8	100.0	402
Birth order										
1	13.3	8.6	0.4	13.8	57.1	6.4	0.1	0.3	100.0	2,042
2-3	6.4	5.4	0.1	14.2	62.9	9.7	0.3	0.9	100.0	3,026
4-5	3.7	3.5	0.2	14.7	67.2	9.6	0.1	1.2	100.0	1,223
6+	2.3	2.3	0.0	10.1	73.1	10.1	0.4	1.6	100.0	711
Residence										
Urban	19.4	10.0	0.2	12.8	51.0	5.1	0.3	1.1	100.0	1,392
Rural	4.6	4.6	0.2	14.0	65.9	9.6	0.2	0.8	100.0	5,610
Division										
Barisal	4.4	6.7	0.3	8.6	72.8	6.4	0.1	0.9	100.0	410
Chittagong	6.4	5.1	0.2	13.4	69.5	4.7	0.0	0.7	100.0	1,527
Dhaka	9.4	5.3	0.2	17.2	58.5	8.2	0.2	0.9	100.0	2,175
Khulna	12.1	8.4	0.7	12.7	56.3	8.4	0.6	0.9	100.0	731
Rajshahi	5.4	5.2	0.0	12.6	62.1	13.4	0.2	1.1	100.0	1,560
Sylhet	5.4	5.7	0.0	10.2	66.3	10.8	0.8	0.8	100.0	599
Education										
No education	1.9	2.4	0.1	12.3	70.3	11.7	0.3	1.1	100.0	2,688
Primary incomplete	3.9	4.6	0.2	14.0	68.3	7.8	0.3	1.0	100.0	1,499
Primary complete	4.7	7.3	0.4	13.8	61.6	10.8	0.1	1.3	100.0	661
Secondary incomplete	11.3	9.0	0.4	16.6	56.2	6.0	0.1	0.4	100.0	1,678
Secondary complete or higher	41.3	13.8	0.1	11.1	31.0	2.0	0.2	0.5	100.0	475
Wealth index										
Lowest	0.8	2.5	0.1	12.5	71.8	11.1	0.1	1.0	100.0	1,791
Second	2.0	2.3	0.2	14.3	68.9	11.0	0.4	0.9	100.0	1,444
Middle	4.7	5.5	0.3	15.3	64.1	8.9	0.3	0.8	100.0	1,381
Fourth	8.9	8.1	0.4	12.7	61.4	7.0	0.3	1.2	100.0	1,243
Highest	26.9	12.6	0.1	14.3	41.9	3.8	0.1	0.4	100.0	1,142
Total	7.5	5.7	0.2	13.8	63.0	8.7	0.2	0.9	100.0	7,002

Note: Figures are for all births in the period 0-59 months preceding the survey. If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
HA = health assistant; FWA = family welfare assistant
[1] Including family welfare visitor (FWV)

Although there are substantial differences in delivery assistance by background characteristics, and some subgroups of women have noticeably higher levels than others, the use of a medically trained provider for delivery is generally low for all women. Even among women in households in the highest wealth quintile, only two out of five births are delivered with assistance from health professionals, and in the poorest 40 percent of households this figure drops to 4 percent. Use of a medically trained provider for delivery is highest (55 percent) among women who have completed secondary education. However, even among this group of women, an unacceptably large proportion of births are delivered without assistance from medically trained providers. In terms of variations by geographic location, attendance during delivery by trained health professionals is higher (one in three) in urban than in rural areas and higher in Khulna (one in five) than in other divisions.

The proportion of births assisted by medically trained personnel has hardly changed since the 1999-2000 BDHS.

10.3   CAESAREAN SECTION

Table 10.7 shows the percentage of live births during the five years preceding the survey that were delivered by caesarean section. The number of births by caesarean section is sometimes considered to be a proxy indicator of women's access to care for complicated deliveries.

Table 10.7 Delivery characteristics

Percentage of live births in the five years preceding the survey delivered by caesarean section (C-section), according to background characteristics, Bangladesh 2004

Background characteristic	Delivery by C-section	Number of births
Age at birth		
<20	2.7	2,287
20-34	4.0	4,313
35-49	2.5	402
Birth order		
1	6.7	2,042
2-3	3.1	3,026
4-5	1.0	1,223
6+	0.2	711
Residence		
Urban	10.5	1,392
Rural	1.7	5,610
Division		
Barisal	2.5	410
Chittagong	2.5	1,527
Dhaka	5.2	2,175
Khulna	4.5	731
Rajshahi	2.1	1,560
Sylhet	2.6	599
Education		
No education	0.7	2,688
Primary incomplete	1.6	1,499
Primary complete	1.7	661
Secondary incomplete	5.3	1,678
Secondary complete or higher	21.4	475
Wealth index		
Lowest	0.1	1,791
Second	0.9	1,444
Middle	1.7	1,381
Fourth	3.1	1,243
Highest	14.4	1,142
Total	3.5	7,002

According to the 2004 BDHS, 3.5 percent of babies born are delivered by caesarean section. The results indicate that since the 1999-2000 BDHS, the proportion of births delivered by caesaerean section has increased by one percentage point (from 2.4 to 3.5 percent.) This is lower than the general estimate that 5 percent of all deliveries will require caesarean sections for life-threatening complications.

Caesarean sections are more common among first births (7 percent), births to urban women (11 percent), births to mothers with secondary complete or higher education (21 percent), and births to women in the highest wealth quintile (14 percent).

10.4   POSTNATAL CARE

A crucial component of safe motherhood is postnatal care. Postnatal care is important for mothers for treatment of complications arising from delivery, especially for births that occur at home. Postnatal checkups provide an opportunity to assess and treat delivery complications and to counsel mothers on how to care for themselves and their newborns.

In order to assess the extent of postnatal care utilization, in the 2004 BDHS, women whose most recent live birth in the five years preceding the survey was delivered outside a health facility were asked whether they and/or the child received a postnatal checkup from a health provider and within how many days of delivery the checkup was received. It is assumed that deliveries in any health facility will receive a postnatal checkup for the mother and the child within the first two days of delivery, as a part of routine institutional delivery care. So, in the 2004 BDHS, questions on postnatal checkups for mothers were not asked for births delivered in a health facility.

Table 10.8 shows that very few mothers in Bangladesh receive postnatal care. Only 18 percent of mothers received a postnatal checkup from a trained health service provider within 42 days of delivery, and most checkups were received within the first two days after delivery. Among mothers who did not deliver at a facility, only 8 percent received postnatal care from a medically trained provider (data not shown). Since the 1999-2000 BDHS, the proportion of mothers receiving a postnatal checkup from a medically trained provider has increased from 14 to 18 percent.

Table 10.8 Postnatal care for mothers and children

Percent distribution of last live births in the five years preceding the survey for which the mothers and/or the children received postnatal care from a trained provider, by timing of postnatal care, Bangladesh 2004

Timing	Received postnatal care from a trained provider	
	Children	Mothers
Within 2 days of delivery	12.1	14.5
3-6 days after delivery	1.2	0.6
7-41 days after delivery	4.3	2.6
Don't know/ missing	0.1	0.0
Within 42 days of delivery	17.5	17.8
Did not receive postnatal checkup	82.5	82.2
Total	100.0	100.0
Number	5,416	5,416

Note: Women and children are assumed to have received postnatal care within two days of delivery for births delivered at a health facility.

In Bangladesh, newborns are as likely as their mothers to have received postnatal care from a medically trained provider. Less than one in five newborns is checked by a health professional within six weeks of delivery. The timing of postnatal care for newborns is important since most neonatal deaths occur within two days of delivery. The data indicate that only 12 percent of babies receive a postnatal checkup by a trained health provider within the first two days of delivery.

Table 10.9 presents information on postnatal checkups by background characteristics. The proportion of newborns receiving postnatal care from a medically trained provider within 42 days after birth is noticeably higher than the national average among first-order births (28 percent), births in urban areas (34 percent), births in Khulna division (23 percent), and births to women who have at least some secondary education (33 percent). The proportion of newborns receiving postnatal care is substantially higher for children of households in the highest wealth quintile (47 percent), or for children whose mothers have completed secondary education (58 percent), than for other subgroup. Patterns and levels of postnatal care for mothers are very similar to those of the children.

Table 10.9 Postnatal care by background characteristics

Percentage of last live births in the five years preceding the survey for which the mothers and the children received postnatal care (PNC) from a trained provider within 42 days of delivery, by background characteristics, Bangladesh 2004

Background characteristic	Children		Mothers	
	Percentage with PNC	Number of children	Percentage with PNC	Number of mothers
Mother's age at birth				
<20	18.6	1,628	17.6	1,628
20-34	17.7	3,444	18.4	3,444
35-49	10.4	344	12.1	344
Birth order				
1	27.8	1,491	27.0	1,491
2-3	17.1	2,376	17.4	2,376
4-5	9.6	984	11.2	984
6+	5.5	565	6.2	565
Residence				
Urban	34.3	1,123	34.1	1123
Rural	13.1	4,293	13.5	4,293
Division				
Barisal	14.2	333	15.0	333
Chittagong	19.1	1,115	17.4	1,115
Dhaka	17.2	1,677	17.6	1,677
Khulna	23.2	607	25.6	607
Rajshahi	13.7	1,285	14.5	1,285
Sylhet	20.3	400	20.4	400
Education				
No education	6.4	1,998	6.7	1,998
Primary incomplete	13.0	1,138	13.4	1,138
Primary complete	15.8	504	15.4	504
Secondary incomplete	26.0	1,371	26.8	1,371
Secondary complete or higher	57.8	406	56.9	406
Wealth index				
Lowest	5.6	1,298	5.1	1,298
Second	7.9	1,124	8.6	1,124
Middle	13.2	1,054	12.7	1,054
Fourth	20.3	998	22.3	998
Highest	47.1	943	46.9	943
Total	17.5	5,416	17.8	5,416

Note: Women and children are assumed to have received PNC for births delivered at a health facility.

10.5 COMPLICATIONS DURING PREGNANCY, DURING DELIVERY OR AFTER DELIVERY

10.5.1 Knowledge of Life-Threatening Maternal Conditions

Ever-married female respondents were asked if they were aware of any maternal conditions during pregnancy, during delivery, or after delivery that may be potentially life-threatening for the woman. Only spontaneous mentions of various maternal complications were recorded.

Awareness of potentially life-threatening conditions during pregnancy, during delivery, or after delivery is low among Bangladeshi women (Table 10.10). Awareness is highest for tetanus and prolonged/obstructed labor (57 and 52 percent of the women, respectively). Four in ten women mentioned retained placenta, and one in three women identified malpresentation of the baby to be life-threatening conditions. Although convulsions/eclampsia and excessive bleeding account for most of the maternal deaths in Bangladesh (as shown in the 2001 Bangladesh Maternal Health Services and Maternal Mortality Survey (BMMS) (NIPORT et al., 2003)), very few women (28 and 22 percent, respectively) mentioned these conditions as life-threatening complications.

Table 10.10 Knowledge of life-threatening maternal conditions

Percentage of ever-married women who are aware of specific maternal conditions during pregnancy, during delivery, or after delivery that could be life-threatening for the mother, Bangladesh 2004

Complication	Residence		Total
	Urban	Rural	
Preeclampsia or any symptoms of preeclampsia (severe headache/ blurry vision/high blood pressure)	16.1	11.6	12.6
Convulsions/eclampsia	31.9	27.3	28.4
Excessive bleeding	26.3	20.4	21.7
Tetanus	58.0	56.3	56.7
Malpresentation	36.0	32.2	33.1
Prolonged/obstructed labor	47.8	53.5	52.2
Retained placenta	39.1	43.4	42.4
Foul-smelling discharge with fever	0.9	0.6	0.7
Other	15.2	14.1	14.3
Don't know	2.4	3.3	3.1
Number of ever-married women	2,586	8,854	11,440

Comparison of data from the 2004 BDHS and the 2001 BMMS indicates that knowledge levels of potentially life-threatening maternal complications may have increased slightly.

10.5.2 Experience of Specific Maternal Complications

Women who had a live birth in the five years preceding the survey were asked whether they had experienced any of the following potentially life-threatening conditions around delivery: prolonged labor of over 12 hours; excessive bleeding; high fever with foul discharge; baby's hands or feet came first; and convulsions.

Table 10.11 presents information on the percentage of live births for which mothers experienced maternal complications around the time of delivery. One in four births had at least one of the five specified complications. The most common complication was prolonged labor of over 12 hours, associated with 17 percent of live births. Eleven percent of the mothers experienced excessive bleeding, and 3 percent had convulsions.

Table 10.11 Experience of complications around delivery	
Percentage of live births in the five years preceding the survey for which there were complications around delivery, by type of complication, Bangladesh 2004	
Complication	Percentage of births
Prolonged labor	16.8
Excessive bleeding	10.5
Foul-smelling discharge with fever	4.5
Convulsion	3.2
Baby's hands/feet came first	1.4
At least one of the above five complications	25.9
Two or more of the above five complications	7.8
None of the above five complications	74.1
Number of births	7,002

10.5.3 Treatment for Maternal Complications

Table 10.12 provides information on the types of assistance sought for maternal complications (e.g., prolonged labor, excessive bleeding, malpresentation of the baby, high fever with discharge, convulsions). If multiple providers were seen, all types of assistance sought were recorded. For this table however, only the most qualified provider was considered.

Treatment was sought from a medically trained provider for only 29 percent of the cases that had maternal complications around delivery. Another one-third sought assistance from a medically unqualified provider, like traditional birth attendants, unqualified doctors, and others. The rest (38 percent) did not seek care for complications. The 2004 BDHS findings are similar to those of the 2001 BMMS. Both surveys indicate two types of problems—a large proportion with potentially life-threatening maternal complications seek no health care, and among those who seek care, about half seek assistance from a medically unqualified provider.

Treatment-seeking from a medically trained provider varied somewhat by type of complication; it was highest for convulsions (41 percent) and lowest for excessive bleeding (27 percent). The likelihood of seeking treatment from a medically trained provider for maternal complications increased with the level of women's education and household economic status. Also, women having their first birth and those who live in urban areas have a higher likelihood of seeking treatment for life-threatening maternal complications.

Table 10.12 Treatment seeking for maternal complications

Percentage of births in the five years preceding the survey who had at least one complication around delivery, by type of assistance sought for the complication, according to specific complication and background characteristic, Bangladesh 2004

Complication/ background characteristic	Medically trained providers				Non-medically trained providers							
	Qualified doctor	Nurse/ midwife/ FWV	MA/ SACMO	HA/ FWA	Trained birth attendant	Untrained birth attendant	Unqualified doctor	Relatives and friends	Other	No one	Total	Number of births
Complication												
Long labor	22.9	7.1	0.3	0.8	1.5	4.6	22.6	0.4	3.9	35.8	100.0	1,180
Excessive bleeding	22.8	4.0	0.1	0.4	1.2	2.7	25.7	0.5	1.2	41.3	100.0	734
High fever	27.7	2.1	0.0	1.4	2.6	2.8	25.9	0.0	2.3	35.2	100.0	312
Convulsions	33.5	7.2	0.0	0.2	0.3	4.5	25.5	0.4	2.1	26.4	100.0	227
Hands and feet came first	23.4	4.6	0.0	1.2	9.2	19.6	14.7	0.0	0.0	27.3	100.0	99
At least two of the above complications	28.2	5.2	0.0	1.3	1.6	3.8	25.0	0.5	1.9	32.4	100.0	549
Age at birth												
<20	24.5	5.5	0.3	0.7	1.2	6.1	23.8	0.2	2.6	35.0	100.0	677
20-34	22.5	6.0	0.2	0.4	2.2	3.6	21.7	0.5	3.5	39.5	100.0	1,022
35-49	14.5	5.0	0.0	0.6	0.9	2.8	31.3	0.0	1.7	43.1	100.0	111
Birth order												
1	30.8	6.9	0.1	1.0	1.3	4.4	23.0	0.2	2.5	29.8	100.0	628
2-3	21.0	5.6	0.3	0.2	1.9	5.8	22.3	0.5	2.8	39.4	100.0	699
4-5	15.4	5.5	0.0	0.7	2.2	2.5	23.2	0.3	5.4	44.9	100.0	297
6+	13.9	2.7	0.5	0.0	1.6	3.2	26.0	0.0	2.2	49.7	100.0	185
Residence												
Urban	37.2	7.8	0.2	1.0	1.2	3.4	18.6	0.5	1.7	28.3	100.0	360
Rural	19.2	5.2	0.2	0.4	1.8	4.8	24.2	0.3	3.4	40.4	100.0	1,450
Division												
Barisal	20.8	6.9	0.7	0.0	0.5	2.5	13.7	0.0	5.0	49.8	100.0	124
Chittagong	22.8	4.7	0.2	1.2	1.2	3.4	29.0	0.2	2.8	34.4	100.0	443
Dhaka	18.5	6.5	0.2	0.4	3.2	5.4	19.8	0.3	3.3	42.5	100.0	557
Khulna	31.3	4.2	0.0	0.6	1.1	3.8	27.9	0.0	2.5	28.6	100.0	201
Rajshahi	23.8	6.3	0.4	0.2	1.1	4.8	26.1	0.2	1.8	35.3	100.0	334
Sylhet	26.2	5.8	0.0	0.5	1.2	6.5	12.7	1.5	4.7	41.1	100.0	151
Education												
No education	10.2	4.3	0.4	0.4	2.0	5.4	24.4	0.6	2.5	49.8	100.0	669
Primary incomplete	20.2	4.8	0.0	0.4	1.2	4.6	25.6	0.1	4.1	39.0	100.0	390
Primary complete	27.2	6.8	0.8	0.7	0.8	6.8	18.9	0.0	2.1	36.0	100.0	177
Secondary incomplete	32.8	8.2	0.0	0.7	1.9	3.0	23.3	0.2	3.3	26.5	100.0	451
Secondary complete or higher	56.4	6.2	0.0	1.0	2.3	1.6	13.1	0.6	2.9	16.0	100.0	122
Wealth index												
Lowest	10.5	3.5	0.0	0.0	1.7	5.2	25.0	0.1	2.8	51.2	100.0	472
Second	13.1	3.7	0.8	1.0	2.1	5.3	23.2	0.5	7.0	43.3	100.0	391
Middle	19.4	6.4	0.0	0.7	1.5	4.6	24.1	0.3	2.1	40.8	100.0	344
Fourth	32.5	10.3	0.0	0.4	1.9	2.6	24.0	0.2	0.6	27.5	100.0	311
Highest	49.1	6.4	0.3	0.9	1.4	4.3	17.5	0.7	1.9	17.5	100.0	291
Total	22.8	5.7	0.2	0.5	1.7	4.5	23.1	0.3	3.0	38.0	100.0	1,810

Note: If more than one provider mentioned, only the provider with the highest qualifications is considered.
FWV = Family welfare visitor; MA = medical assistant, SACMO = sub-assistant community medical officer, HA = health assistant, and FWA = family welfare assistant

10.6 CHILDHOOD VACCINATION

Universal immunization of children under one year of age against the six vaccine-preventable diseases (tuberculosis; diphtheria, pertussis, and tetanus [DPT]; poliomyelitis; and measles) is one of the most cost-effective programs in reducing infant and child morbidity and mortality. The Expanded Program on Immunization (EPI) is a priority program for the government of Bangladesh. It 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 2004 BDHS, data on childhood vaccinations 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 vaccination card for the child and, if so, to show the card to the interviewer. When the mother was able to show the vaccination card, the dates of vaccinations were transferred from the card to the questionnaire. If the vaccination card was not available (or a vaccination was not recorded), mothers were asked questions to determine whether the child had received each vaccine.

In Table 10.13, the estimates of vaccination coverage among children age 12-23 months are based on information taken from the health card and, for those for whom a card was not seen (or a vaccination not recorded), on information provided by the mother. Mothers were able to provide health cards for 49 percent of the children age 12-23 months.

10.6.1 Vaccination Coverage

Table 10.13 presents information on vaccination coverage according to the source of information. The data are presented for children age 12-23 months, thereby including only those children who have

Table 10.13 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccinations at any time before the survey, by source of information (health card or mother's report), and percentage vaccinated by 12 months of age, Bangladesh 2004

Source of of information	Percentage of children who received:										No vacci- nations	Number of children
	BCG	DPT 1	DPT 2	DPT 3	Polio 0[1]	Polio 1	Polio 2	Polio 3	Measles	All[2]		
Vaccinated at any time before survey												
Vaccination card	49.4	49.3	47.7	45.8	0.4	49.3	47.7	45.8	41.7	41.4	0.0	625
Mother's report	44.0	43.7	39.5	35.2	1.6	47.1	40.7	36.5	34.0	31.6	3.3	640
Either source	93.4	93.1	87.2	81.0	1.9	96.4	88.3	82.3	75.7	73.1	3.3	1,265
Vaccinated by 12 months of age[3]	93.3	92.9	86.8	80.3	1.9	96.3	88.0	81.6	70.3	68.4	3.5	1,265

[1] Polio 0 is the polio vaccination given at birth.
[2] BCG (for tuberculosis), measles, and three doses each of diphtheria, pertusis, and tetanus (DPT) and polio vaccine (excluding polio vaccine given at birth)
[3] 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.

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 the age of 12 months, the age at which vaccination coverage is recommended to be completed.

According to information from both the vaccination cards and mothers' reports, 73 percent of Bangladeshi children age 12-23 months are fully vaccinated. Although the levels of coverage for BCG and the first two doses of DPT and polio are close to 90 percent or above, the proportions of children who go on to complete the third dose of DPT or polio vaccines fall to 81 and 82 percent, respectively. A much lower percentage (76 percent) receives the measles vaccine. Only 3 percent of children age 12-23 months have not received any childhood vaccinations.

Vaccinations are most effective when given at the proper age; thus, it is recommended that children complete the schedule of immunizations during their first year of life (i.e., by 12 months of age). Overall, 68 percent of children age 12-23 months had received all the recommended vaccinations before their first birthday.

10.6.2 Differentials in Vaccination Coverage

Table 10.14 and Figure 10.2 show vaccination coverage rates among children age 12-23 months by selected background characteristics. 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 health cards and mothers' reports.

The data indicate that girls and boys are almost equally likely to receive the basic vaccinations. Birth order is negatively related to the likelihood of being fully vaccinated—as birth order increases, vaccination coverage decreases.

The vaccination program has been more successful in urban areas than in rural areas; vaccination coverage is 10 percentage points higher in urban areas compared to rural areas. Among administrative divisions, vaccination coverage for children is highest in Khulna (83 percent), while children in Sylhet division are the least likely (62 percent) to have received all the basic vaccinations.

As expected, mother's education is positively associated with children's likelihood of being fully vaccinated; 92 percent of children whose mothers have completed secondary or higher education are fully vaccinated, compared with 60 percent of children whose mothers have no education. Similarly, children in households in the highest wealth quintile are more likely to be fully vaccinated (87 percent), compared with those in the lowest quintile (57 percent).

10.6.3 Trends in Vaccination Coverage

There has been significant improvement in vaccination coverage in recent years (Figure 10.3). The proportion fully vaccinated among children age 12-23 months has increased by 13 percentage points between 1999-2000 and 2004 (from 60 to 73 percent). Closer examination of the data by types of vaccines indicates that this trend is entirely due to a reduction in dropout rates from the first to the third doses for polio and DPT vaccines. Improvement in vaccination coverage has occurred in all divisions, but the greatest increase has been in Rajshahi (20 percentage points) and Sylhet divisions (17 percentage points).

Table 10.14 Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccinations at any time before the survey (according to a health card or the mother's report), and percentage with a health card, by background characteristics, Bangladesh 2004

Background characteristic	Percentage of children who received:										No vacci-nations	Percen-tage with a health card seen	Number of children
	BCG	DPT 1	DPT 2	DPT 3	Polio 0[1]	Polio 1	Polio 2	Polio 3	Measles	All[2]			
Sex													
Male	93.4	93.3	88.0	81.2	1.5	97.6	89.1	82.6	75.6	73.4	2.4	46.8	589
Female	93.4	92.9	86.4	80.8	2.3	95.4	87.6	82.0	75.7	72.8	4.1	51.7	676
Birth order													
1	97.1	96.7	92.2	88.1	1.8	97.9	92.7	90.4	81.8	79.6	1.9	52.7	381
2-3	93.3	93.1	87.4	81.3	2.7	96.5	88.8	82.2	75.9	73.6	3.4	49.5	540
4-5	93.0	92.3	83.3	76.2	1.5	97.8	84.4	75.9	72.5	68.7	1.6	45.5	220
6+	83.3	83.3	77.8	66.5	0.0	89.5	79.9	69.0	61.4	58.5	10.5	46.2	125
Residence													
Urban	94.2	93.4	90.0	85.7	3.6	96.6	90.8	85.8	82.8	80.9	2.8	58.1	251
Rural	93.2	93.0	86.5	79.8	1.5	96.4	87.7	81.4	73.9	71.1	3.5	47.3	1,014
Division													
Barisal	96.2	95.4	90.0	81.5	4.0	98.0	91.5	84.6	77.3	72.5	1.2	49.6	75
Chittagong	93.1	91.9	88.4	84.3	2.7	94.0	89.2	84.4	77.1	75.1	5.3	48.9	268
Dhaka	95.5	95.7	85.7	78.1	2.0	98.5	87.2	79.5	72.0	68.8	1.5	43.0	375
Khulna	96.9	96.9	93.2	87.6	2.8	100.0	95.1	90.2	86.6	82.8	0.0	58.2	130
Rajshahi	91.1	90.8	87.2	82.9	0.9	95.0	87.7	84.2	77.0	76.4	4.8	53.4	313
Sylhet	87.1	86.8	79.6	68.3	0.6	94.0	81.1	69.5	66.3	61.5	6.0	50.9	105
Education													
No education	89.0	88.6	79.0	69.2	0.9	94.4	80.1	70.2	62.3	60.3	5.0	43.4	439
Primary incomplete	94.0	93.4	87.3	81.2	0.6	98.3	88.6	83.2	76.3	72.5	1.7	53.4	286
Primary complete	95.4	95.4	90.6	86.5	2.7	95.6	92.3	87.2	81.1	80.3	4.4	41.1	127
Secondary incomplete	96.3	96.1	93.3	89.8	2.6	97.2	94.5	90.8	85.4	82.2	2.8	53.4	304
Secondary complete or higher	98.8	98.8	98.6	96.8	6.6	98.8	98.8	98.6	94.2	92.2	1.2	62.1	109
Wealth index													
Lowest	87.1	87.1	77.3	70.7	0.7	93.5	79.1	70.8	59.5	57.4	5.9	43.9	323
Second	95.5	95.0	90.7	80.9	0.4	96.6	90.9	84.0	79.2	76.0	3.4	46.4	242
Middle	94.9	94.6	86.9	82.4	2.8	97.7	88.7	83.7	76.3	74.1	1.9	47.9	280
Fourth	94.2	93.0	89.4	84.9	2.0	96.1	90.3	86.4	80.5	78.7	3.9	52.3	210
Highest	97.9	97.9	96.2	91.1	4.4	99.4	97.1	91.7	90.5	86.7	0.6	60.7	211
Total	93.4	93.1	87.2	81.0	1.9	96.4	88.3	82.3	75.7	73.1	3.3	49.4	1,265

[1] Polio 0 is the polio vaccination given at birth.
[2] BCG (for tuberculosis), measles, and three doses each of diphtheria, pertussis, and tetanus (DPT) and polio vaccine (excluding polio vaccine given at birth)

Figure 10.2 Vaccinations by Background Characteristics

Total	73
SEX	
Male	73
Female	73
RESIDENCE	
Urban	81
Rural	71
DIVISION	
Barisal	73
Chittagong	75
Dhaka	69
Khulna	83
Rajshahi	76
Sylhet	62
EDUCATION	
No education	60
Primary incomplete	73
Primary complete	80
Secondary incomplete	82
Secondary complete or higher	92
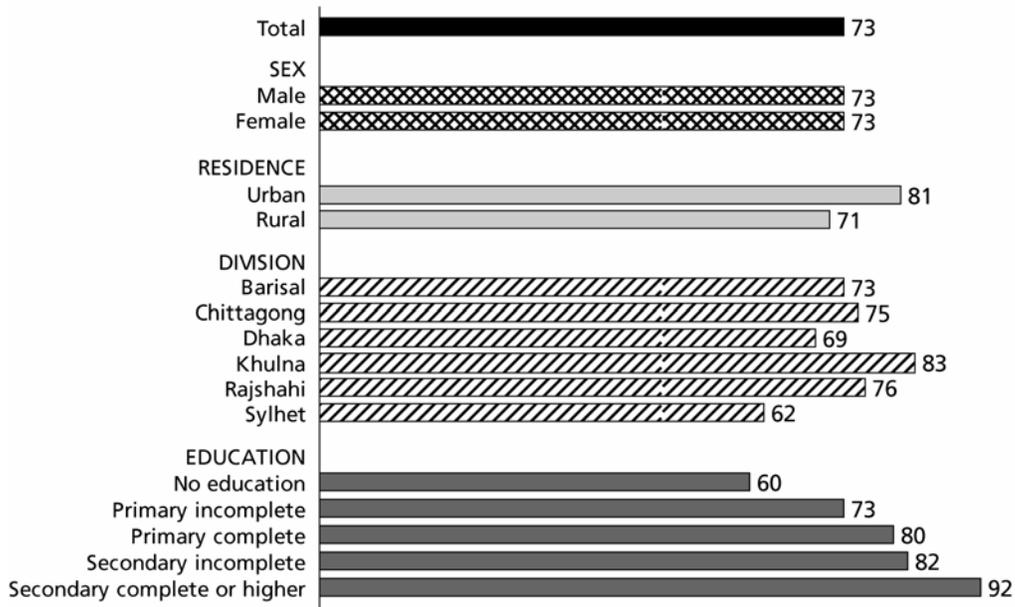
BDHS 2004

Figure 10.3 Trends in Vaccination Coverage among Children Age 12-23 Months

	BCG	DPT3	Polio 3	Measles	All
1993-1994	85	66	67	69	59
1996-1997	86	69	62	70	54
1999-2000	91	72	71	71	60
2004	93	81	82	76	73

■ 1993-1994 ▨ 1996-1997 ▬ 1999-2000 ⊠ 2004
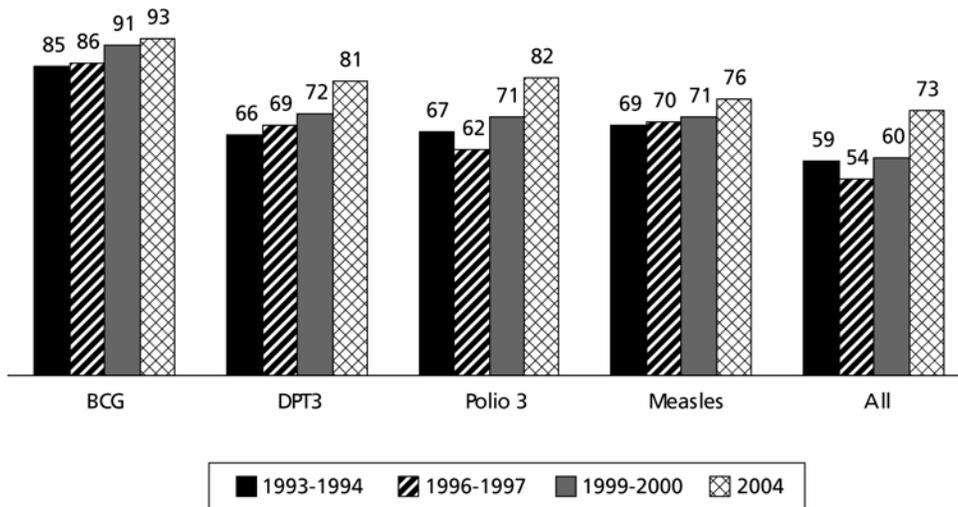
10.7   CHILDHOOD ILLNESS AND TREATMENT

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.

10.7.1 Acute Respiratory Infection

Acute respiratory infection (ARI) is one of the leading causes of morbidity and mortality among children in Bangladesh (see chapter 9). Common symptoms associated with severe respiratory infection include fever, cough, difficult or rapid breathing, or chest indrawing. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths from respiratory infections.

The 2004 BDHS defines respiratory illness as cough with rapid or difficult breathing, or chest indrawing. Mothers of children under five were asked in the 2004 BDHS survey whether their children had symptoms (cough, rapid/difficult breathing, and chest indrawing) of respiratory illness, and/or fever during the two weeks preceding the survey. Those who said yes were asked where the treatment was sought. It bears mentioning that reports of disease prevalence are inherently imprecise, since they are based on a mother's subjective assessment. The prevalence of ARI is also subject to seasonality. Information on the prevalence and treatment of ARI is presented in Table 10.15.

One in five children under five was reported to have had symptoms of respiratory illness. ARI is slightly less common among children over 24 months old than among younger children. ARI seems more prevalent in Barisal division (27 percent) and less common in Dhaka and Rajshahi divisions (19 percent). ARI prevalence is lower for children of mothers who have completed secondary education and children in households in the highest wealth quintile.

Use of a health facility or a medically trained provider for treatment of ARI is low in Bangladesh. Overall, one in five children who had symptoms of ARI was taken to a health facility or medically trained provider for treatment.

Table 10.15 Prevalence and treatment of acute respiratory infection

Percentage of children under five years who were ill with acute respiratory infection (ARI) during the two weeks preceding the survey and the percentage of children with ARI for whom treatment was sought from a health facility or medically trained provider, by background characteristics, Bangladesh 2004

Background characteristic	Percentage with ARI[1]	Number of children	Among children with ARI,[1] percentage taken to health facility or provider[2]	Number of children with ARI
Age in months				
<6	28.3	687	26.5	194
6-11	29.5	592	27.9	175
12-23	24.9	1,265	23.4	314
24-35	20.0	1,312	18.9	263
36-47	15.7	1,343	8.9	211
48-59	14.9	1,300	16.2	193
Sex				
Male	22.0	3,294	23.3	723
Female	19.6	3,204	16.8	627
Residence				
Urban	19.3	1,284	35.4	248
Rural	21.1	5,215	16.8	1,103
Division				
Barisal	26.7	386	13.3	103
Chittagong	24.5	1,424	22.2	348
Dhaka	18.8	2,005	17.0	377
Khulna	21.7	694	23.7	150
Rajshahi	18.5	1,449	19.1	268
Sylhet	19.2	540	30.3	104
Education				
No education	21.0	2,447	12.5	514
Primary incomplete	25.2	1,410	21.6	356
Primary complete	18.9	612	20.1	115
Secondary incomplete	19.6	1,572	27.4	308
Secondary complete or higher	12.5	457	43.9	57
Wealth index				
Lowest	23.0	1,636	10.8	376
Second	24.2	1,351	15.5	326
Middle	22.1	1,265	18.7	279
Fourth	17.5	1,171	27.4	205
Highest	15.2	1,075	45.3	163
Total	20.8	6,498	20.3	1,350

[1] Refers to cough with either rapid or difficult breathing or chest indrawing
[2] Includes GOB/NGO/Private health facilities, as well as medically qualified doctor; excludes pharmacy, shop, and traditional practitioner

Male children are more likely than females to be taken to a health facility/trained provider when ill with ARI. Urban children are twice as likely to receive treatment at a health facility or by a medically trained provider as rural children. Treatment seeking for ARI from health professionals and/or facilities is higher in Sylhet than in other divisions. The likelihood of seeking treatment for ARI from a health facility/trained health provider rises with increased level of mother's education and household economic status.

Table 10.16 shows the type of health provider used for treatment of ARI. Overall treatment seeking for ARI is quite high: Seven in ten children with ARI are taken for treatment, but only two of these children are taken to a health facility or medically trained provider. Traditional doctors are the most popular choice for seeking treatment for ARI, accounting for 25 percent of the children with ARI.

Data from various BDHS surveys show a declining trend in the proportion seeking care from a health facility or medically trained provider for children with ARI; the proportion decreased from 33 percent in 1996-97, to 27 percent in 1999-2000, and to 20 percent in 2004.

Four in ten children under five were reported to have been ill with fever during the two weeks preceding the survey (Table 10.17). Those age 6-23 months were more likely to have been ill than younger or older children. Prevalence of fever is lowest among the children of mothers with complete secondary or higher education

Sixty-four percent of children with fever were taken to a provider for treatment, but only 19 percent were taken to a medically trained provider/facility (Table 10.18). Traditional doctors are the most popular choice for treatment of fever; 22 percent of children with fever were taken to a traditional doctor. The use of a qualified provider is markedly higher in urban areas (34 percent), among mothers with at least a complete secondary education (36 percent), and in households in the highest wealth quintile (41 percent), compared with the national average. The use of traditional doctors is substantially higher in rural areas than in urban areas. The use of traditional doctors for fever does not vary by mother's level of education.

Table 10.16 Treatment seeking for children with acute respiratory infection

Percentage of children under five years with acute respiratory infection in the two weeks preceding the survey who were taken for treatment, by type of provider and background characteristics, Bangladesh 2004

Background characteristic	Health facility and/or medically trained provider	Pharmacy	Traditional doctor	Other	No one	Number of Children
Age in months						
<6	26.5	10.3	19.2	11.7	32.9	194
6-11	27.9	15.2	26.8	6.0	26.5	175
12-23	23.4	17.4	30.9	7.1	23.7	314
24-35	18.9	21.0	23.0	7.7	31.2	263
36-47	8.9	27.9	27.0	4.0	34.4	211
48-59	16.2	14.0	22.2	4.1	44.3	193
Sex						
Male	23.3	17.4	25.8	5.4	29.9	723
Female	16.8	18.6	24.7	8.5	33.3	627
Residence						
Urban	35.4	16.5	15.5	9.1	25.5	248
Rural	16.8	18.3	27.5	6.3	32.8	1,103
Division						
Barisal	13.3	19.0	18.0	4.7	45.5	103
Chittagong	22.2	22.8	26.4	9.3	22.1	348
Dhaka	17.0	14.6	24.8	3.1	41.2	377
Khulna	23.7	13.7	26.4	8.7	31.1	150
Rajshahi	19.1	17.7	27.5	9.7	27.2	268
Sylhet	30.3	19.4	23.2	4.0	25.1	104
Education						
No education	12.5	19.2	25.3	6.0	38.5	514
Primary incomplete	21.6	15.8	23.8	7.0	33.2	356
Primary complete	20.1	20.3	28.4	7.6	27.2	115
Secondary incomplete	27.4	17.7	28.1	7.4	20.8	308
Secondary complete or higher	43.9	16.6	13.2	8.2	23.1	57
Wealth index						
Lowest	10.8	20.1	29.7	7.6	33.4	376
Second	15.5	13.4	26.2	5.9	39.6	326
Middle	18.7	21.5	23.6	7.9	31.5	279
Fourth	27.4	17.1	27.3	3.3	25.9	205
Highest	45.3	17.0	13.7	9.3	17.6	163
Total	20.3	18.0	25.3	6.8	31.5	1,350

Table 10.17 Prevalence of fever

Percentage of children under five years of age who had fever in the two weeks preceding the survey, Bangladesh 2004

Background characteristic	Percentage of children with fever	Number of children
Age in months		
<6	40.9	687
6-11	47.3	592
12-23	49.0	1,265
24-35	41.4	1,312
36-47	35.1	1,343
48-59	31.4	1,300
Sex		
Male	40.8	3,294
Female	39.3	3,204
Residence		
Urban	40.7	1,284
Rural	39.9	5,215
Division		
Barisal	38.9	386
Chittagong	43.1	1,424
Dhaka	37.2	2,005
Khulna	35.5	694
Rajshahi	45.4	1,449
Sylhet	35.6	540
Education		
No education	40.3	2,447
Primary incomplete	40.1	1,410
Primary complete	41.5	612
Secondary incomplete	41.1	1,572
Secondary complete or higher	33.8	457
Wealth index		
Lowest	42.4	23.0
Second	42.3	24.2
Middle	40.1	22.1
Fourth	36.5	17.5
Highest	37.6	15.2
Total	40.1	20.8

Table 10.18 Treatment seeking for children with fever

Percentage of children under five years with fever in the two weeks preceding the survey who were taken for treatment, by type of provider and by background characteristics, Bangladesh 2004

Background characteristic	Health facility and/or medically trained provider	Pharmacy	Traditional doctor	Other	No one	Number
Age in months						
<6	20.9	12.2	16.2	11.8	39.0	281
6-11	25.7	16.2	23.2	6.4	30.4	280
12-23	22.4	18.5	24.1	5.8	29.5	621
24-35	19.7	19.7	22.6	6.4	32.0	544
36-47	10.5	23.0	19.2	4.0	44.4	471
48-59	13.8	18.0	21.1	4.8	42.7	408
Sex						
Male	19.8	19.2	22.0	5.8	34.0	1,344
Female	17.2	17.9	20.9	6.5	38.0	1,260
Residence						
Urban	33.7	18.1	12.4	7.2	29.7	522
Rural	14.7	18.7	23.8	5.9	37.5	2,082
Division						
Barisal	11.7	17.9	16.8	5.2	48.4	150
Chittagong	22.6	23.2	24.1	5.9	25.3	613
Dhaka	16.3	18.6	19.7	4.0	41.8	745
Khulna	23.6	13.3	22.9	8.6	32.8	246
Rajshahi	14.7	17.0	22.3	9.0	37.6	657
Sylhet	25.8	16.1	19.3	3.3	35.5	192
Education						
No education	12.0	19.4	20.7	4.6	43.4	985
Primary incomplete	17.6	18.1	21.4	7.0	36.5	565
Primary complete	16.5	21.1	22.7	4.4	36.9	254
Secondary incomplete	25.9	17.5	22.4	7.6	27.2	645
Secondary complete or higher	35.9	14.7	21.1	9.9	20.5	155
Wealth index						
Lowest	9.2	18.0	24.8	6.6	41.6	694
Second	12.7	15.1	23.0	5.7	43.5	572
Middle	17.6	23.4	18.6	7.3	34.3	507
Fourth	21.6	19.2	26.9	3.4	29.4	427
Highest	40.7	17.6	11.5	7.5	24.3	404
Total	18.5	18.5	21.5	6.2	35.9	2,604

10.7.2 Childhood Diarrhea

Dehydration from diarrhea is an important contributing cause of childhood mortality. The administration of oral rehydration therapy (ORT) is a simple means of countering the effects of dehydration. During diarrhea, the child is given a solution either prepared by mixing water with the commercially prepared packet of oral rehydration salts (ORS)—also called *khabar,* or packet saline, in Bangladesh—or by making a homemade solution of sugar, salt, and water—also called *labon gur*. ORT has a long history in Bangladesh since it was developed some 30 years ago by the Cholera Research Laboratory (now ICDDR,B: Center for Health and Population Research). Currently, ORS packets are available through health facilities and at shops and pharmacies, and many packets are distributed by the Social Marketing Company.

In the 2004 BDHS, mothers of children under age five were asked whether their children had experienced an episode of diarrhea in the two weeks preceding the survey. If the child had had diarrhea, the mother was asked what she had done to treat the illness. Since the prevalence of diarrhea varies seasonally, the results pertain only to the period from January to May, when the BDHS interviewing took place.

Table 10.19 presents information on recent episodes of diarrhea among young children and the actions that were taken to treat the illness. Overall, 8 percent of children under age five were reported to have had diarrhea in the two-week period preceding 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 sex and residence are minimal. Diarrhea is less common among children whose mothers have secondary or higher education than those whose mothers have less education.

Table 10.19 Prevalence of diarrhea

Percentage of children under five years who had diarrhea in the two weeks preceding the survey, by background characteristics, Bangladesh 2004

Background characteristic	Percentage of children with diarrhea	Number of children
Age in months		
<6	3.9	687
6-11	12.1	592
12-23	12.5	1,265
24-35	7.7	1,312
36-47	4.9	1,343
48-59	4.8	1,300
Sex		
Male	7.7	3,294
Female	7.3	3,204
Residence		
Urban	6.7	1,284
Rural	7.7	5,215
Division		
Barisal	9.2	386
Chittagong	8.2	1,424
Dhaka	6.6	2,005
Khulna	8.0	694
Rajshahi	7.4	1,449
Sylhet	7.3	540
Education		
No education	7.6	2,447
Primary incomplete	9.0	1,410
Primary complete	6.6	612
Secondary incomplete	6.8	1,572
Secondary complete or higher	5.6	457
Wealth index		
Lowest	8.7	1,636
Second	7.4	1,351
Middle	7.5	1,265
Fourth	7.1	1,171
Highest	6.0	1,075
Total	7.5	6,498

10.7.3 Treatment of Diarrhea

Table 10.20 shows data concerning treatment of recent episodes of diarrhea among children less than five years of age, as reported by the mothers. Four-fifths of the children with diarrhea received at least one of the following—ORS packets; homemade solution of sugar, salt, and water; or increased fluid intake. Three-fourths of the children with diarrhea were given ORT that included ORS packets or homemade solution. About one in ten children with diarrhea was given nothing to treat the diarrhea.

Table 10.20 Treatment of diarrhea

Among children under five years who had diarrhea in the two weeks preceding the survey, percentage who were taken for treatment to a health provider, percentage who received oral rehydration therapy (ORT), and percentage given other treatments, by background characteristics, Bangladesh 2004

Background characteristic	Percentage taken to a health provider[1]	Oral rehydration therapy					Other treatments				No treatment	Number of children with diarrhea
		Received ORS packets	Received RHF	Received either ORS or RHF	Increased fluids	Received ORS, RHF, or increased fluids	Pill/syrup	Injection	Intra-venous solution	Home remedy/ herbs/ other		
Age in months												
<6	(19.1)	(44.9)	(4.7)	(44.9)	(36.3)	(62.5)	(29.2)	(0.0)	(0.0)	(23.2)	(30.7)	27
6-11	29.1	65.8	13.3	71.3	42.2	79.9	56.2	1.2	0.0	14.1	12.4	71
12-23	14.2	68.4	22.3	79.7	53.5	88.1	49.5	1.1	0.7	11.6	5.4	158
24-35	14.2	71.8	20.2	77.8	55.1	85.4	45.6	1.0	0.0	3.3	10.3	101
36-47	10.2	62.1	14.4	67.0	57.8	80.8	34.3	2.8	2.6	3.6	14.1	66
48-59	10.7	73.1	23.4	81.0	57.2	84.3	44.1	0.0	0.0	2.4	10.9	63
Sex												
Male	16.3	67.3	15.5	73.2	51.5	83.3	50.7	1.0	0.5	8.3	11.3	254
Female	15.1	67.1	22.1	76.1	53.1	83.5	40.5	1.3	0.7	8.9	10.2	232
Residence												
Urban	31.4	77.1	16.9	82.1	56.2	87.0	48.1	3.4	0.0	5.7	6.4	86
Rural	12.3	65.1	19.0	73.0	51.4	82.7	45.3	0.6	0.7	9.2	11.7	400
Division												
Barisal	6.9	52.3	15.9	59.4	44.6	70.6	28.9	1.9	0.0	7.6	18.3	36
Chittagong	13.5	78.9	25.0	83.4	53.5	88.8	61.2	0.8	0.0	5.3	5.9	116
Dhaka	15.7	63.7	19.1	73.2	59.0	83.7	42.1	2.3	1.3	8.5	11.0	132
Khulna	17.2	71.2	7.5	73.3	51.5	86.5	44.0	1.5	2.1	15.7	6.6	55
Rajshahi	19.8	60.7	17.6	73.1	50.5	83.9	39.0	0.0	0.0	9.0	12.5	107
Sylhet	16.7	69.9	18.8	72.8	38.9	72.8	49.0	0.0	0.0	8.8	18.4	40
Mother's education												
No education	8.9	64.3	25.7	72.3	48.2	81.4	36.6	0.5	0.0	9.0	14.0	187
Primary incomplete	12.6	59.0	12.6	64.8	53.2	75.7	44.7	2.4	2.3	11.0	16.2	126
Primary complete	(18.1)	(65.5)	(15.8)	(77.3)	(42.5)	(84.1)	(59.6)	(1.7)	(0.0)	(8.5)	(8.0)	40
Secondary incomplete	25.9	76.7	14.0	83.8	58.9	92.8	55.6	0.8	0.0	6.5	2.0	107
Secondary complete or higher	(33.9)	(91.3)	(20.8)	(96.6)	(64.3)	(96.6)	(55.9)	(0.0)	(0.0)	(3.0)	(1.4)	26
Wealth index												
Lowest	6.9	55.9	16.9	64.6	47.1	74.9	31.8	0.0	1.2	10.8	18.7	142
Second	17.2	61.0	27.9	71.4	45.4	82.0	48.9	1.9	0.0	13.1	11.5	101
Middle	17.8	69.4	18.7	76.9	53.8	83.9	49.4	2.2	1.2	8.0	5.9	95
Fourth	14.8	84.0	10.2	86.1	59.2	90.7	55.0	0.8	0.0	3.0	9.3	83
Highest	30.6	76.8	19.0	83.3	63.0	94.4	54.6	1.3	0.0	4.8	1.2	65
Total	15.7	67.2	18.6	74.6	52.3	83.4	45.8	1.1	0.6	8.6	10.7	486

Note: ORT includes solution prepared from oral rehydration salt (ORS) packets, recommended home fluids (RHF), and increased fluids. Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes pharmacy, shop, and traditional practitioner

Overall, one in six children with diarrhea was taken to a medically trained health provider for treatment of diarrhea. Children under one year of age, those who live in urban areas, children whose

mothers have at least some secondary education, and those who are from households in the highest wealth quintile have a much higher likelihood of seeking treatment for diarrhea from a health professional or a facility. There is no apparent discrimination between a male and female child in treatment of diarrhea.

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 ORT and increased fluid intake. Among children in households in the lowest and highest wealth quintiles, there is a large difference in the proportion of children with diarrhea who receive any type of treatment for the illness,

The BDHS survey also investigated the extent to which mothers made changes in the amount of fluids and food 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 preceding the survey were asked whether they had changed the amount that the child was given to drink and eat during the diarrheal episode. Table 10.21 indicates that 34 percent of children with diarrhea were given the same amount of fluids as usual and 52 percent received more fluids than usual; 13 percent received less fluids than usual. These results suggest that although the benefit of increasing fluid intake during a diarrheal episode is widely understood in Bangladesh, about one in eight mothers still engages in the dangerous practice of curtailing fluid intake when their children have diarrhea. One-third of children were given the same amount of food as before the illness, but more than one-third were given less than before.

Table 10.21 Feeding practices during diarrhea

Percent distribution of children under five years who had diarrhea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, Bangladesh 2004

Liquid/food offered	Percentage
Amount of liquids offered	
Same as usual	34.4
More than usual	52.3
Less than usual	13.0
Don't know/missing	0.4
Total	100.0
Amount of food offered	
Same as usual	33.6
More than usual	29.5
Less than usual	36.2
Don't know/missing	0.6
Total	100.0
Number of children	486

Although the proportion of children with diarrhea who received ORT has remained unchanged between 1999-2000 and 2004, there has been a switch toward greater use of commercially available ORS packets in 2004 (increased from 61 in 1999-2000 to 67 percent in 2004). The recommendation to increase fluid intake during diarrhea has yet to be practiced on a wide scale. About one in two mothers reported giving increased fluids to their children with diarrhea; and there was little change in this pattern between 1999-2000 and 2004.

INFANT FEEDING AND NUTRITIONAL STATUS
OF CHILDREN AND WOMEN

11

Nutritional status is the result of complex interactions between food consumption and the overall status of health and care practices. Poor nutritional status is one of the most important health and welfare problems facing Bangladesh. Young children and women of reproductive age are especially vulnerable to nutritional deficits and micronutrient deficiency disorders. At the individual level, inadequate or inappropriate feeding patterns lead to malnutrition. Numerous socioeconomic and cultural factors influence the decision on patterns of feeding and nutritional status. The 2004 BDHS collected data on feeding practices, that is, breastfeeding, exclusive breastfeeding, complementary feeding, and use of feeding bottles. Information was also collected on important nutritional issues that pertain to micronutrients—vitamin A in food and also as a supplement. Heights and weights of all children under five years and ever-married women age 10-49 were measured to determine the female and child nutritional status. This chapter presents the findings on infant feeding practices and nutritional status of women and children.

11.1   BREASTFEEDING AND SUPPLEMENTATION

Feeding practices play a pivotal role in determining the optimal development of infants. Poor breastfeeding and infant feeding practices have adverse consequences for the health and nutritional status of children, which in turn have consequences on the mental and physical development of the child. Breastfeeding also affects mothers through the physiological suppression of the return to fertile status, thereby affecting the length of interval between pregnancies.

UNICEF and WHO recommend that children be exclusively breastfed (no other complementary liquid or solid food or plain water) for the first six months of life and that children be given solid (semisolid) complementary food beginning with the seventh month of life. The standard indicator of exclusive breastfeeding is the percentage of children less than six months of age who are exclusively breastfeeding. The standard indicator of timely complementary feeding is the percentage of children age 6-9 months who are breastfeeding and receiving complementary foods. Giving other milk to children is acceptable after the first six months, but breastfeeding is recommended to be continued through the second year of life.

11.1.1 Initiation of Breastfeeding

UNICEF and WHO recommend that children be fed colostrum (the first breast milk) immediately after birth and continue to be exclusively breastfed even if the regular breast milk has not yet come down. Early breastfeeding increases the chances of breastfeeding success and generally lengthens the duration of breastfeeding. Early initiation of breastfeeding also encourages bonding between the mother and newborn, and it helps to maintain the baby's body temperature.

Table 11.1 indicates that 98 percent of children are breastfed at some point, almost the same proportion as in the 1999-2000 BDHS. Overall, 24 percent of children are breastfed within one hour of birth, and 83 percent are breastfed within one day after delivery, indicating a substantial increase when compared with results from the 1999-2000 BDHS. The proportion of women initiating breastfeeding within one hour of birth is the highest in Sylhet division (32 percent) and the lowest in Barisal division (20 percent). However, initiation of breastfeeding within one day after birth is highest in Barisal division

and lowest in Dhaka division. It is not surprising that assistance at birth by a medically trained provider is associated with greater likelihood of breastfeeding within an hour of birth.

Table 11.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breast-fed, percentage who started breastfeeding within one hour and within one day of birth, and percentage who received colostrum, by background characteristics, Bangladesh 2004

Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding:		Percentage who received colostrum	Number of children
		Within one hour of birth	Within one day of birth[1]		
Sex					
Male	97.9	24.1	83.3	87.2	3,559
Female	98.4	23.3	82.8	86.9	3,442
Residence					
Urban	97.9	22.2	83.2	89.0	1,392
Rural	98.2	24.1	83.0	86.6	5,610
Division					
Barisal	99.0	19.8	89.0	86.7	410
Chittagong	98.5	20.8	85.3	86.9	1,527
Dhaka	98.0	20.6	78.0	86.6	2,175
Khulna	97.5	24.5	85.8	92.6	731
Rajshahi	98.2	28.4	84.3	90.0	1,560
Sylhet	97.5	31.8	85.3	74.7	599
Mother's education					
No education	97.9	19.8	80.3	82.9	2,688
Primary incomplete	98.6	21.4	84.1	85.9	1,499
Primary complete	97.9	26.0	84.8	86.0	661
Secondary incomplete	98.2	29.0	85.0	92.3	1,678
Secondary complete or higher	98.3	31.6	86.1	97.1	475
Assistance at delivery					
Medically trained[2]	96.4	31.5	83.1	93.0	924
Traditional birth attendant	98.3	26.3	84.3	87.8	964
Other	98.5	21.8	82.7	85.8	5,049
No one	95.4	23.8	86.3	84.3	61
Place of delivery					
Health facility	95.7	29.6	80.5	92.7	651
At home	98.4	23.0	83.3	86.4	6,295
Other	96.6	31.9	83.9	87.6	53
Wealth index					
Lowest	98.1	16.8	81.0	80.2	1,791
Second	98.4	23.2	81.4	86.4	1,444
Middle	98.1	24.4	83.3	89.1	1,381
Fourth	98.3	29.7	85.9	90.4	1,243
Highest	97.7	28.0	84.9	92.5	1,142
Total	98.1	23.7	83.0	87.0	7,002

Note: Table is based on all births whether the children are living or dead at the time of interview. Total includes three children with missing information on assistance at delivery, and two children with missing information on place of delivery.
[1] Includes children who started breastfeeding within one hour of birth.
[2] Doctor, nurse/midwife, family welfare assistant or visitor, or health assistant

Table 11.1 shows that 87 percent of births in the five years preceding the survey received first milk or colostrum. The likelihood of a child receiving colostrum increases with mother's education and household wealth. Children who are born in health facilities and whose delivery is assisted by health professionals are more likely to receive colostrum than other children. The children in Sylhet division are least likely to receive colostrum.

11.1.2 Age Pattern of Breastfeeding

For optimal growth, it is recommended that infants should be exclusively breastfed for the first six months of life. Exclusive breastfeeding in the early months of life is correlated strongly with increased child survival and reduced risk of morbidity, particularly from diarrheal diseases. Table 11.2 and Figure 11.1 show the breastfeeding status of children up to three years of age. The data indicate that breastfeeding is widespread in Bangladesh and that newborns are breastfed for a long time. Even among children age 12-15 months, 96 percent are still breastfed, and among children age 20-23 months, the practice of breastfeeding is only slightly lower (90 percent). However, despite extensive breastfeeding,

Table 11.2 Breastfeeding status by child's age

Percent distribution of children under three years living with the mother by breastfeeding status, and percentage of all children under three years using a bottle with a nipple, according to age in months, Bangladesh 2004

| Age in months | Not breast-feeding | Exclusively breastfed | Breastfeeding and consuming: | | | | Total | Number of children | Percentage using a bottle with a nipple[1] | Number of children |
			Plain water only	Water-based liquids/ juice	Other milk	Comple-mentary food				
<2	0.0	54.8	15.1	17.1	9.6	3.3	100.0	167	6.9	167
2-3	0.9	38.1	14.2	23.2	17.6	6.0	100.0	274	30.2	274
4-5	0.1	21.3	18.0	22.3	14.5	23.8	100.0	241	24.3	246
6-7	3.0	4.8	8.7	14.5	10.5	58.5	100.0	237	29.9	238
8-9	2.3	0.0	4.0	6.4	2.8	84.5	100.0	165	23.8	166
10-11	1.3	0.0	4.1	3.0	1.2	90.3	100.0	188	12.7	188
12-15	4.1	0.1	1.4	1.3	0.3	92.8	100.0	479	13.7	479
16-19	6.6	0.0	0.5	0.0	0.4	92.5	100.0	452	12.3	453
20-23	9.7	0.0	0.0	0.2	0.2	89.9	100.0	330	13.2	333
24-27	23.8	0.0	0.0	0.0	0.0	76.2	100.0	510	5.7	514
28-31	36.6	0.0	0.2	0.2	0.0	63.0	100.0	454	7.0	456
32-35	50.0	0.0	0.0	0.0	0.0	50.0	100.0	338	5.3	341
<6	0.4	36.2	15.8	21.4	14.5	11.6	100.0	682	22.4	687
6-9	2.7	2.8	6.8	11.1	7.4	69.2	100.0	402	27.4	403

Note: Breastfeeding status refers to the seven-day period before the survey. Children classified as "breastfeeding and consuming plain water only" consume no supplements. The categories not breastfeeding; exclusively breastfed; and breastfeeding and con-suming plain water, water-based liquids/juice, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and water-based liquids and who do not receive complementary foods are classified in the water-based liquid category, even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.
[1] Based on all children under three years

the pattern of exclusive breastfeeding among children under six months is of concern. Only 55 percent of children under the age of two months are exclusively breastfed.[1] Exclusive breastfeeding drops to 38 percent among children age 2-3 months, and to 21 percent among those age 4-5 months. Overall, only 36

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[1] Unlike the 1993-1994, 1996-1997 and 1999-2000 BDHS results, breastfeeding status in Table 11.2 refers to the seven-day period before the survey.

percent of infants less than six months old are exclusively breastfed. From about six months of age, the introduction of complementary food is critical to meeting the protein, energy, and micronutrient needs of children. Although some young children are given complementary food early, among children age 6-9 months (all of whom should be receiving complementary food), only seven in ten children receive breast milk and complementary food.

Figure 11.1 Infant Feeding Practices by Age
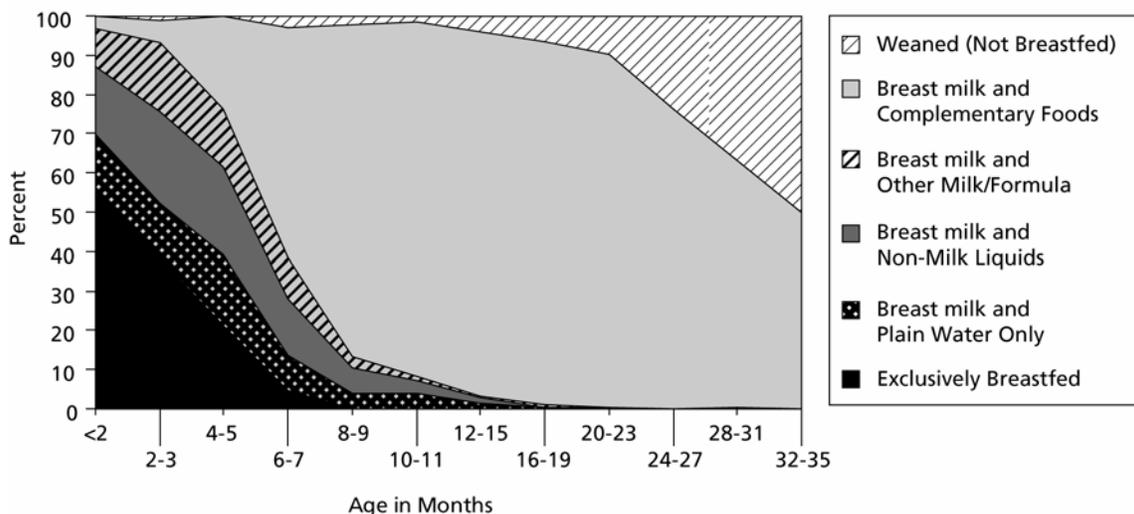
BDHS2004

Bottle-feeding practices may result in increased morbidity because of unsafe water and preparation facilities. Table 11.2 shows that bottle-feeding is fairly common in Bangladesh. Feeding children with a bottle with a nipple starts at very young age, and three in ten infants age 2-3 months receive some food this way. The practice of feeding children with a bottle with a nipple remains very high (at least 24 percent) until children are age 8-9 months and fairly high (13 percent) for children age 10-23 months.

Figure 11.2 examines the trends since the 1993-1994 BDHS in exclusive breastfeeding of children less than six months. To make the 2004 BDHS data comparable to earlier surveys, the percentage of exclusive breastfeeding was recalculated for the 24-hour period preceding the survey (Data in Table 11.2 refer to a period of seven days preceding the survey). Figure 11.2 shows that exclusive breastfeeding has not increased in the past ten years. It remained unchanged at around 45 percent between the 1993-1994 BDHS and the 1999-2000 BDHS, and it declined to 42 percent in the 2004 BDHS.

Figure 11.3 shows the trend in the standard indicator of timely complementary feeding: the percentage of children age 6-9 months who were breastfeeding and received complementary foods in the 24 hours preceding the survey. The proportion of children age 6-9 months who were breastfed and received complementary foods was rather low in the 1993-1994 BDHS (28.5 percent) and the 1996-1997 BDHS (28.4 percent), then it more than doubled to 58.9 percent in the 1999-2000 BDHS, and was slightly higher at 62 percent in the 2004 BDHS.

Figure 11.2 Trends In Exclusive Breastfeeding for Children Under Six Months

| 1993-1994 | 1996-1997 | 1999-2000 | 2004 |
| 46 | 45 | 46 | 42 |
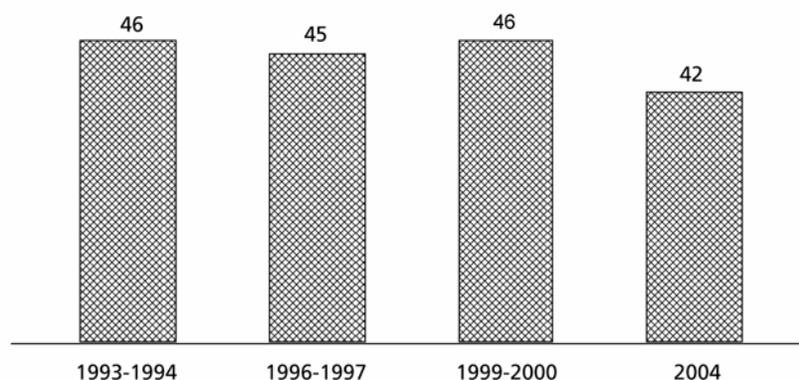
Figure 11.3 Trends In Complementary Feeding for Children 6-9 Months

| 1993-1994 | 1996-1997 | 1999-2000 | 2004 |
| 29 | 28 | 59 | 62 |
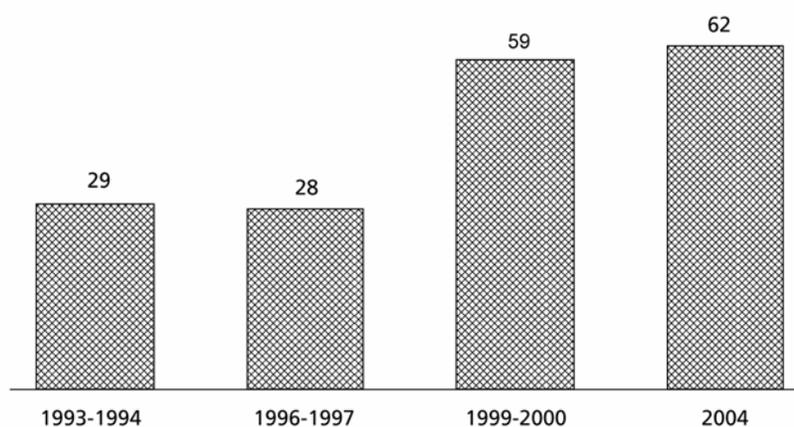
11.1.3 Duration of Breastfeeding

Table 11.3 indicates that the median duration of breastfeeding among Bangladeshi children is 32.4 months, which is slightly higher than the 1999-2000 BDHS estimate. The median duration of exclusive breastfeeding is estimated at 1.7 months, and the median duration of predominant breastfeeding is 5.4 months. The corresponding mean duration of any breastfeeding is 28.8 months, while the mean duration of exclusive breastfeeding is only 2.9 months and predominant breastfeeding is 5.7 months.

As Table 11.3 and Figure 11.4 show, at the divisional level, duration of breastfeeding is longest in Khulna and Rajshahi (36 months) and shortest in Chittagong and Sylhet (26 and 27 months, respectively). Analysis by other background characteristics indicates that educational level and socioeconomic level as measured by the wealth index have no relationship except that mothers who have completed primary school only are likely to breastfeed for the longest period and mothers who have at least attended secondary school breastfeed for a slightly shorter duration than their lesser educated counterparts.

Differentials in the median duration of exclusive breastfeeding are small except that Chittagong division stands out as having the highest median duration of exclusive breastfeeding (2.6 months).

Table 11.3 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breast-feeding among children born in the four years preceding the survey, by background characteristics, Bangladesh 2004

| Background characteristic | Median duration (months) of breastfeeding[1] | | | Number of children |
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding[2]	
Sex				
Male	32.4	1.1	4.3	2,066
Female	32.0	0.9	5.1	2,060
Residence				
Urban	32.0	0.8	4.9	815
Rural	32.6	1.1	4.7	3,310
Division				
Barisal	31.7	1.5	5.5	237
Chittagong	25.9	2.6	6.1	922
Dhaka	33.5	0.7	4.3	1,251
Khulna	35.5	0.6	4.9	451
Rajshahi	35.9	1.6	3.1	898
Sylhet	27.4	0.7	5.8	367
Mother's education				
No education	33.4	1.0	4.9	1,464
Primary incomplete	31.7	1.3	4.7	882
Primary complete	35.3	0.6	5.7	379
Secondary incom-plete	30.3	1.0	4.1	1,080
Secondary complete or higher	30.8	1.5	5.2	321
Wealth index				
Lowest	33.3	2.0	5.6	1,414
Second	32.6	1.6	5.4	1,126
Middle	31.1	2.5	5.6	1,135
Fourth	33.2	1.9	5.0	993
Highest	31.4	0.6	5.1	925
Total	32.4	1.7	5.4	5,593
Mean for all children	28.8	2.9	5.7	na

Note: Median and mean durations are based on the seven-day period preceding the survey.
na = Not applicable
[1]It is assumed that non-last-born children or last-born child not living with the mother are not currently breastfeeding.
[2]Either exclusively breastfed or received breast milk and plain water, water-based liquids, and/or juice only (excludes other milk)

Figure 11.4 Median Duration (Months) of Breastfeeding
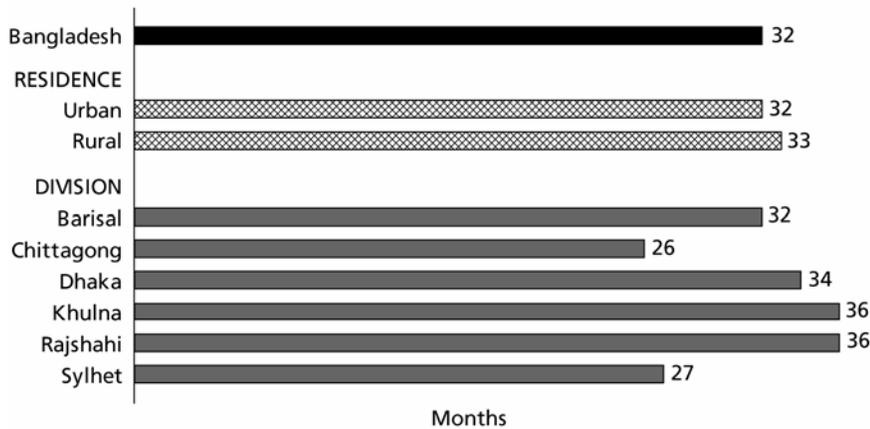
BDHS 2004

The median duration of exclusive breastfeeding for children under four years for the last three surveys[2] shows little change. Results for children under four years from data referring to the 24-hour period before the survey show that median duration of exclusive breastfeeding has always been low. While it was higher in 1999-2000 (1.8 months) than in 1996-1997 (1.5 months), in 2004 it showed no increase (1.7 months). It should be noted that although 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 volatile.

11.1.4 Complementary Feeding

Given that babies need nutritious food in addition to breast milk from the age of six months, it is recommended that children should begin receiving complementary foods at this age. The 2004 BDHS collected data on certain foods given to breastfeeding and nonbreastfeeding children. Table 11.4 presents information on the types of complementary foods received by children less than three years of age in the seven days preceding the survey. Because of the small number of nonbreastfeeding children under 16 months of age, the table shows only three age categories for this group—16-19, 20-23, and 24-35 months. As observed in Table 11.4, the use of commercially produced baby formula has become much more popular since 1999-2000, particularly among breastfeeding infants age 2-7 months; most notably, the proportion of children age 4-7 months who consume baby formula has almost doubled since 1999-2000. It is not surprising that one-third of nonbreastfeeding children receive baby formula.

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[2] The results for the 1993-1994 are only for children born in the three years preceding the survey.

Table 11.4 Foods consumed by children in the day preceding the interview

Percentage of children under three years of age living with the mother who consumed specific foods in the seven days preceding the interview, by breastfeeding status and age, Bangladesh 2004

Age in months	Baby formula	Animal milk	Other liquids[1]	Banana/ mango/ papaya	Green leafy vege- tables	Rice/ wheat/ porridge	Meat/ fish/ eggs	Dal	Any solid or semi- solid food	Number of children
				BREASTFEEDING CHILDREN						
<2	2.8	10.9	18.3	0.9	0.0	2.5	0.0	0.0	3.4	165
2-3	11.7	20.1	22.5	1.6	0.6	5.6	0.0	0.0	6.1	271
4-5	16.0	21.4	27.0	8.0	2.0	17.3	1.4	0.7	23.8	241
6-7	15.4	32.3	35.4	19.6	10.4	51.3	9.9	7.2	60.1	229
8-9	12.1	39.4	30.7	30.1	41.7	80.2	40.0	27.4	86.9	161
10-11	8.1	38.7	30.2	30.4	60.1	88.2	56.0	34.9	91.4	183
12-15	7.2	42.3	25.3	42.7	74.4	95.8	69.4	48.0	96.8	458
16-19	6.3	50.9	27.1	52.3	77.6	97.7	82.6	53.2	99.0	419
20-23	4.2	48.4	35.0	57.3	85.0	98.9	88.0	64.1	99.6	295
24-35	3.5	46.1	25.3	58.6	90.3	99.5	92.1	60.4	99.8	827
<6	11.0	18.3	23.1	3.7	1.0	9.0	0.5	0.2	11.7	677
6-9	14.0	35.2	33.5	24.0	23.3	63.2	22.3	15.5	71.1	390
				NONBREASTFEEDING CHILDREN						
16-19	(33.4)	(50.8)	(46.9)	(65.3)	(79.5)	(95.0)	(87.3)	(56.0)	(96.8)	30
20-23	(32.3)	(47.3)	(32.0)	(76.0)	(94.6)	(100.0)	(93.0)	(72.7)	(100.0)	32
24-35	7.9	49.8	24.3	56.3	91.2	99.1	94.6	65.8	99.3	457

Note: Breastfeeding status and food consumed refer to the seven-day period preceding the survey. Figures in parentheses are based on 25-49 unweighted cases.
[1] Does not include plain water

Twelve percent of breastfeeding children under six months receive solid or semisolid foods. The most commonly used complementary foods for these children include liquids other than water (23 percent), animal milk (18 percent), and baby formula (11 percent). Animal milk and other liquids are introduced to children at age 2-3 months (20 and 23 percent, respectively); by age 6-7 months, one-third are already receiving these foods. On the other hand, baby formula and foods made from cereals are mainly introduced to children age 4-5 months (16 to 17 percent), and cereals quickly become the complementary food for a majority of children at age 6-7 months.

Consumption of green leafy vegetables and foods rich in protein (meat, fish, and eggs) generally begins at age 6-7 months (10 percent), is around 40 percent before 10 months of age, and then increases rapidly. *Dal (*or lentils) is also introduced at the same age as green leafy vegetables. More than one-quarter of children (27 percent) are given dal when they are age 8-9 months, and the proportion receiving dal increases with age. Fruits rich in vitamin A, such as banana, mango, and papaya, are introduced at a somewhat earlier age. By age 4-5 months, 8 percent of children eat fruit; this proportion rises to 42 percent by the first year of life and then continues to increase as does the consumption of dal.

Comparison of feeding patterns of breastfeeding children and nonbreastfeeding children for whom the data are presented in Table 11.4 shows that although nonbreastfeeding children age 16-23 months are almost as likely to receive animal milk, they are more likely to consume all other foods. The differences between older (age 24-35 months) breastfeeding and nonbreastfeeding children in consuming other foods are smaller.

11.2 MICRONUTRIENT INTAKE

Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. High levels of vitamin A deficiency (VAD) can cause eye damage leading to blindness and can increase the severity of infections such as measles and diarrheal diseases in children. Deficiency in this crucial micronutrient can be avoided by giving children capsule supplements of vitamin A, usually every six months. Bangladesh has instituted such a program of supplementation through its health care system. Current policy is to begin vitamin A supplementation after a child completes the first nine months of life. Children age 9-11 months are first provided vitamin A supplementation at the time of measles vaccination, and those age 12-59 months receive the supplementation once every six months during National Immunization Days and vitamin A campaigns.

11.2.1 Micronutrient Intake among Children

Table 11.5 shows the percentage of youngest children under three years who consumed foods rich in vitamin A in the seven days preceding the survey and the percentage of children age 9-59 months who received vitamin A supplements in the six months preceding the survey. Overall, 69 percent of children under three years consumed foods rich in vitamin A in the seven days preceding the survey.

The consumption of foods rich in vitamin A increases with time since birth, from 38 percent among children age 6-9 months to 95 percent among two-year-old children. The proportion of children consuming foods rich in vitamin A is highest in Rajshahi division (74 percent) and lowest in Sylhet (60 percent); it varies little from the national average in the remaining four divisions.

In the 2004 BDHS, mothers were asked if their children under age five had taken a vitamin A capsule during the six months preceding the survey; the analysis is confined to children between 9 and 59 months. The data show that 82 percent of targeted children had received vitamin A supplementation in the six months preceding the survey (Table 11.5). Children living in Sylhet are not only least likely to consume fruits and vegetables rich in vitamin A (60 percent), they are also disadvantaged in terms of receiving vitamin A supplementation (73 percent). Children in Barisal are almost as likely as children in Sylhet to receive vitamin A supplements (74 percent). Although there is only a small difference between children living in the wealthiest households and those living in the poorest households in consumption of fruits and vegetables rich in vitamin A, the corresponding difference among children receiving vitamin A supplements is larger: 88 percent of children in the wealthiest households compared with 77 percent in the poorest households received vitamin A supplements. Between the 1999-2000 BDHS and the 2004 BDHS, the likelihood of receiving vitamin A supplementation among children age 12-59 months increased from 80 to 84 percent, but among children age 9-11 months, supplementation declined from 73 to 38 percent (data not shown).

11.2.2 Micronutrient Intake and Deficiencies among Women

Table 11.6 presents, among women with a birth in the five years preceding the survey, the percentage who received a vitamin A dose in the first two months after birth and who had night blindness during pregnancy. Overall, 15 percent received a postpartum vitamin A dose; this varies with residence, division, and educational attainment. Women in urban areas (21 percent) are more likely to receive vitamin A supplements than those in rural areas (13 percent). At the divisional level, the percentage of women who reported receiving a postpartum vitamin A dose is highest in Sylhet and Chittagong (22 and 21 percent, respectively) and is fairly high in Barisal (17 percent). Only 11 to 12 percent of women in the other three divisions received vitamin A in the postpartum period.

Table 11.5 Micronutrient intake among children

Percentage of children under age three living with the mother who consumed fruits and vegetables rich in vitamin A in the seven days preceding the survey, and percentage of children age 9-59 months who received vitamin A supplements in the six months preceding the survey, by background characteristics, Bangladesh 2004

Background characteristic	Consumed fruits and vegetables rich in vitamin A[1]	Number of children under three years	Consumed vitamin A supplements	Number of children age 9-59 months
Age in months				
<6	4.2	682	na	na
6-9	37.8	402	27.0[a]	71
10-11	67.8	188	41.6	188
12-23	85.9	1,261	78.5	1,265
24-35	95.0	1,303	85.8	1,312
36-47	na	na	86.8	1,343
48-59	na	na	84.5	1,300
Sex				
Male	67.7	1,912	82.1	2,779
Female	69.4	1,925	81.4	2,700
Birth order				
1	70.0	1,147	82.1	1,553
2-3	68.2	1,659	82.1	2,390
4-5	66.4	666	81.5	973
6+	69.6	365	83.8	563
Residence				
Urban	70.9	721	85.2	1,079
Rural	68.0	2,876	80.9	4,399
Division				
Barisal	65.5	218	73.7	319
Chittagong	66.8	788	83.8	1,185
Dhaka	69.7	1,102	83.9	1,682
Khulna	66.2	406	83.5	581
Rajshahi	74.2	796	81.5	1,251
Sylhet	60.0	288	72.9	461
Mother's education				
No education	68.2	1,248	79.0	2,133
Primary incomplete	66.7	787	81.6	1,169
Primary complete	72.8	332	83.0	533
Secondary incomplete	68.5	939	83.9	1,276
Secondary complete or higher	70.7	292	89.4	367
Mother's age at birth				
<20	69.2	1,139	79.1	1,785
20-24	66.6	1,183	83.0	1,739
25-29	69.0	695	83.6	1,063
30-34	70.0	385	86.0	572
35-49	72.1	196	76.5	320
Wealth index				
Lowest	68.5	883	77.2	1,410
Second	68.5	724	82.1	1,149
Middle	67.3	732	81.2	1,045
Fourth	67.4	645	83.2	979
Highest	71.5	614	87.6	895
Total	68.6	3,597	81.8	5,479

Note: Information on vitamin A supplements is based on mother's recall.
na = Not applicable
[1]Includes green leafy vegetables, banana, mango, and papaya
[a] Includes children age 9 months only

Table 11.6 Micronutrient intake and deficiency among mothers

Percentage of women with a birth in the five years preceding the survey who received a vitamin A dose in the first two months after delivery, and percentage with night blindness during pregnancy, by background characteristics, Bangladesh 2004

Background characteristic	Received vitamin A dose postpartum[1]	Night blindness		Number of women
		Reported	Adjusted[2]	
Age at birth				
<20	13.9	4.8	2.1	1,628
20-24	15.0	5.7	3.0	1,754
25-29	16.1	7.5	3.7	1,078
30-34	13.2	8.4	4.1	611
35-49	12.8	11.6	4.9	344
Number of children ever born				
1	17.1	4.1	2.0	1,491
2-3	15.0	5.7	2.7	2,376
4-5	11.9	9.9	5.4	984
6+	10.6	10.0	3.7	565
Residence				
Urban	20.9	4.2	1.8	1,123
Rural	12.9	7.1	3.5	4,293
Division				
Barisal	17.2	8.5	3.7	333
Chittagong	20.5	5.1	1.7	1,115
Dhaka	12.0	5.5	2.7	1,677
Khulna	10.9	7.1	4.1	607
Rajshahi	11.5	6.7	2.8	1,285
Sylhet	21.6	11.2	7.5	400
Education				
No education	10.2	9.9	4.6	1,998
Primary incomplete	11.5	6.6	2.9	1,138
Primary complete	15.1	4.7	2.6	504
Secondary incom- plete	18.2	3.5	2.1	1,371
Secondary complete or higher	31.4	1.1	0.3	406
Wealth index				
Lowest	8.5	11.3	5.9	1,298
Second	8.9	7.0	3.2	1,124
Middle	14.7	6.1	2.7	1,054
Fourth	17.9	3.8	1.8	998
Highest	25.9	2.5	0.9	943
Total	14.5	6.5	3.1	5,416

Note: For women with two or more live births in the five-year period, data refer to the most recent birth.
[1] In the first two months after delivery
[2] Women who reported night blindness but did not report difficulty with vision during the day

With regard to educational level, women with no education (10 percent) or those with incomplete primary education (12 percent) are less likely to receive vitamin A doses. The data show that 18 percent of women with some secondary education reported having received a postpartum vitamin A dose. Those who have completed secondary school are most likely to receive vitamin A and are three times as likely to receive vitamin A as women with no education. Vitamin A supplementation is also strongly associated with wealth, increasing from 9 percent among mothers in households in the two lowest quintiles to 26 percent among mothers in the wealthiest households.

Table 11.6 shows that 3 percent of women with a recent birth experienced night blindness (with normal day vision), an indication of vitamin A deficiency. Night blindness during pregnancy is more prevalent when age at birth is 35 and over, mothers are uneducated, they have four or more births, they live in Sylhet division, and live in the poorest households. It is much lower among those living in urban areas and Chittagong division, as well as among highly educated women and those in the wealthiest households.

11.3   NUTRITIONAL STATUS OF CHILDREN UNDER FIVE

The growth patterns of healthy and well-fed children are reflected in positive changes in their height and weight. Inadequate food supply, among other factors, often leads to malnutrition, resulting in serious consequences on the physical and mental growth and development of the children.

In addition to questions about the feeding practices of infants and young children, the 2004 BDHS included an anthropometric component, in which all children under five years of age were both weighed and measured. Each interviewing team carried a scale and measuring board. The scales were lightweight, with a digital screen designed and manufactured under the authority of UNICEF. The measuring boards were specially produced by Shorr Productions for use in survey settings. Children younger than 24 months were measured lying down on the board (recumbent length), and standing height was measured for older children.

In previous BDHS surveys, anthropometric measurements were restricted to children born to women interviewed with the Women's Questionnaire. However, these data do not represent all children, since they exclude children whose mothers were not in the household (either because they did not live there or because they had died), children whose mothers were not eligible for the individual interview (i.e., under age 15 or age 50 and over), and children whose mothers did not complete an individual interview. To overcome these biases, in the 2004 BDHS, workers weighed and measured all children who were born in the five years preceding the survey and listed in the Household Questionnaire.

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 Organisation (WHO). The use of this reference population is based on the finding that young children of all population groups have similar genetic potential for growth.

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 the three nutritional indicators is expressed in standard deviations (Z-scores) from the mean of the reference population.[3] Deviations of the indicators between below -2 and -3 standard deviations (SD) indicate that the children are moderately affected, while deviations below -3 SD indicate that the children are severely affected. A total of 6,528 (weighted) children under age five were eligible to be weighed and measured. Six percent of these children were missing height or weight information. The following analysis focuses on the 6,005 children under five for whom complete and plausible anthropometric data were collected.

11.3.1 Stunting

Height-for-age is a measure of linear growth. A child who is below -2 SD from the median of the NCHS reference population in terms of height-for-age is considered short for his/her age, or "stunted," a condition reflecting the cumulative effect of chronic malnutrition. If the child is below -3 SD from the reference median, then the child is considered to be severely stunted. A child between -2 and -3 SD is considered to be moderately stunted. Stunting reflects failure to receive adequate nutrition over a long period of time 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.

Table 11.7 shows the nutritional status of children under five as measured by stunting (height-for-age) indicators and various background characteristics. At the national level, 43 percent of children under five are stunted, and 17 percent severely stunted. Analysis of the indicator by various age groups shows that stunting generally increases with age from 10 percent of children under six months to 51 percent of children age 12-23 months, and after dropping at age 24-35 months, it again rises to the highest level among four-year-old children (Figure 11.5). Table 11.7 shows that severe stunting is highest for children age 48-59 months (23 percent) and lowest for those less than six months of age (2 percent). Stunting levels do not differ among children that are first- to third-order births, but increase steadily for higher-order births. First births and births occurring 48 or more months after a prior birth are less likely to be stunted than children born after a shorter birth interval.

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[3] The distribution of the standard reference population has been normalized; hence the mean and median coincide.

Figure 11.5 Percentage of Children Under Five Who Are Stunted, According to Demographic Characteristics

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CHILD'S AGE
<6 (Months)          10
6-9 (Months)         24
10-11 (Months)       28
12-23 (Months)       51
24-35 (Months)       45
36-47 (Months)       49
48+                  51

SEX
Male                 43
Female               44

BIRTH ORDER
1                    40
2-3                  40
4-5                  49
6+                   54

BIRTH INTERVAL (MONTHS)
First birth          40
<24                  49
24-47                48
48+                  37
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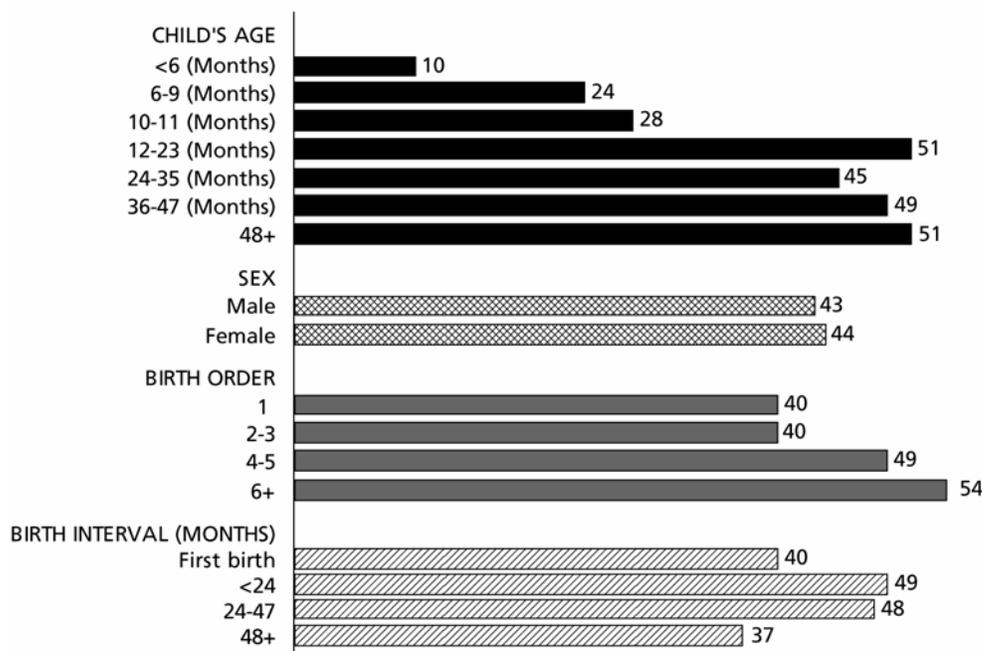
BDHS 2004

The survey data show that children living in urban areas are less likely to be stunted than children in rural areas (38 and 44 percent, respectively) (Table 11.8 and Figure 11.6). At the divisional level, Barisal (49 percent) has the highest proportion of stunted children, while Khulna has the lowest (32 percent).

Figure 11.6 Percentage of Children Under Five Who Are Stunted According to Socioeconomic Characteristics

```
Bangladesh                          43

RESIDENCE
Urban                               38
Rural                               44

DIVISION
Barisal                             49
Chittagong                          46
Dhaka                               45
Khulna                              32
Rajshahi                            40
Sylhet                              46

MOTHER'S EDUCATION
No education                        51
Primary incomplete                  45
Primary complete                    46
Secondary incomplete                36
Secondary complete or higher        14
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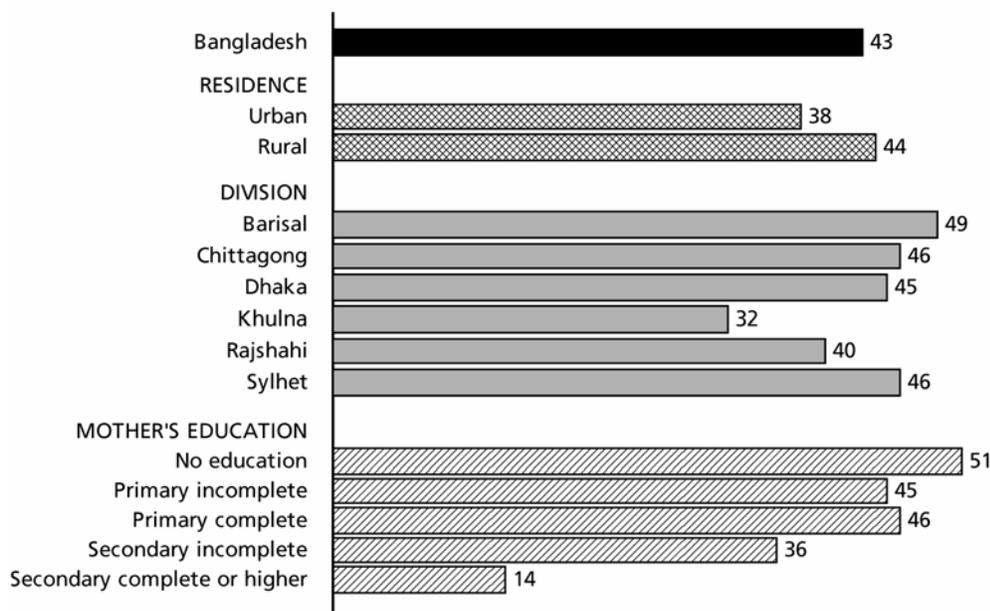
BDHS 2004

Table 11.7 Nutritional status of children by demographic characteristics

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by demographic characteristics, Bangladesh 2004

Demographic characteristic	Height-for-age		Weight-for-height		Weight-for-age		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]	
Child's age							
<6 months	1.5	10.4	0.6	3.1	0.9	8.3	581
6-9 months	6.5	23.5	1.3	8.3	7.1	29.4	378
10-11 months	5.0	28.3	1.3	12.9	13.3	42.9	181
12-23 months	20.4	50.9	2.8	24.0	17.8	58.5	1,170
24-35 months	16.0	44.7	1.9	13.4	16.8	54.6	1,222
36-47 months	21.0	49.2	0.4	10.6	13.4	51.1	1,249
48-59 months	22.5	51.2	0.4	10.0	10.8	51.1	1,224
Sex							
Male	16.6	42.5	1.4	13.2	11.9	46.4	3,041
Female	17.2	43.5	1.2	12.5	13.7	48.7	2,964
Birth order							
1	15.4	40.1	1.2	12.8	11.8	44.9	1,688
2-3	14.1	40.1	1.1	13.0	10.9	45.7	2,616
4-5	20.5	48.9	1.5	13.1	17.1	52.0	1,019
6+	25.3	53.8	1.6	12.7	17.0	55.0	573
Birth interval in months							
First birth	15.4	40.1	1.2	12.8	11.8	44.9	1,691
<24	20.4	49.0	1.2	11.2	13.8	54.7	645
24-47	20.0	48.1	1.4	13.5	14.8	51.7	1,974
48+	12.4	37.1	1.2	13.1	10.9	42.1	1,586
Total[2]	16.9	43.0	1.3	12.8	12.8	47.5	6,005
Total BDHS-2004 (mother interviewed)	16.7	43.0	1.3	12.9	12.8	47.5	5,896
Total BDHS-1999-2000 (mother interviewed)	18.3	44.7	1.1	10.3	12.9	47.7	5,421
Total BDHS 1996-1997 (mother interviewed)	28.0	54.6	3.7	17.7	20.6	56.3	4,787

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO International Reference Population. The percentage of children who are more than three or more than two standard deviations below the median of the International Reference Population (-3 SD and -2 SD) are shown by background characteristics. Table is based on children who have a valid date of birth (month and year) and valid height and weight measurements. Total includes 21 children whose mother was in household but was not interviewed; they are not shown separately.
[1]Includes children who are below -3 SD
[2]Includes children whose mothers were not interviewed

Table 11.8 Nutritional status of children by background characteristics

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Bangladesh 2004

Background characteristic	Height-for-age		Weight-for-height		Weight-for-age		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	13.6	37.6	1.2	11.5	12.0	42.2	1,174
Rural	17.7	44.3	1.3	13.2	13.0	48.8	4,832
Division							
Barisal	20.2	48.9	0.4	7.2	12.4	46.3	354
Chittagong	19.4	46.2	1.5	14.1	16.2	49.9	1,320
Dhaka	18.5	44.7	1.1	11.7	12.6	47.6	1,837
Khulna	8.6	31.7	1.9	14.2	8.3	40.3	662
Rajshahi	14.5	40.3	1.3	14.2	12.0	48.1	1,349
Sylhet	20.1	46.2	1.0	12.2	13.1	49.8	485
Mother's education[2]							
No education	22.8	50.5	1.3	13.9	17.0	55.4	2,217
Primary incomplete	16.9	45.2	1.0	13.4	12.5	48.6	1,292
Primary complete	20.0	46.2	1.8	13.0	14.3	48.8	563
Secondary incomplete	10.4	35.7	1.6	12.1	9.0	41.6	1,424
Secondary complete or higher	2.0	17.4	0.2	9.6	3.0	21.8	422
Mother's age							
15-19	17.0	42.5	1.9	13.6	13.7	46.2	955
20-24	14.6	40.3	1.2	12.8	10.3	46.0	1,985
25-29	15.7	43.2	1.2	13.9	13.9	48.6	1,526
30-34	19.4	43.5	0.9	13.0	15.1	48.5	898
35-49	22.6	52.2	1.5	9.7	14.1	51.4	553
Mother's height[2]							
<145 cm	28.0	62.3	1.1	16.0	23.5	63.6	935
145 cm or above	14.6	39.3	1.3	12.4	10.9	44.6	4,952
Mother's BMI[2]							
<18.5	21.3	50.4	2.0	17.9	18.5	58.9	2,208
18.5 or above	14.0	38.5	0.8	10.0	9.5	40.8	3,679
Mother's initerview status[3]							
Mother interviewed	16.7	43.0	1.3	12.9	12.8	47.5	5,896
Mother not interviewed, not in household[3]	27.9	42.8	1.5	6.2	10.1	42.9	89
Wealth index							
Lowest	25.7	54.4	1.3	15.5	18.2	59.3	1,512
Second	19.4	46.7	1.9	13.5	14.7	52.9	1,237
Middle	15.2	42.4	1.2	13.5	12.1	45.1	1,179
Fourth	13.3	39.9	1.1	10.8	10.2	43.4	1,091
Highest	6.5	25.0	0.7	9.4	5.9	30.2	987
Total[4]	16.9	43.0	1.3	12.8	12.8	47.5	6,005
Total BDHS-2004 (mother interviewed)	16.7	43.0	1.3	12.9	12.8	47.5	5,896
Total BDHS-1999-2000 (mother interviewed)	18.3	44.7	1.1	10.3	12.9	47.7	5,421
Total BDHS 1996-97 (mother interviewed)	28.0	54.6	3.7	17.7	20.6	56.3	4,787

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO International Reference Population. The percentage of children who are more than three or more than two standard deviations below the median of the International Reference Population (-3 SD and -2 SD) are shown by background characteristics. Table is based on children who have a valid date of birth (month and year) and valid height and weight measurements. Total includes 21 children whose mother was in household but was not interviewed; they are not shown separately.
[1] Includes children who are below -3 SD
[2] Excludes children whose mothers were not interviewed.
[3] Includes children whose mothers are deceased
[4] Includes children whose mothers were not interviewed
BMI = Body mass index (kg/m^2)

Figure 11.7 Trends in Nutritional Status of Children Under Five
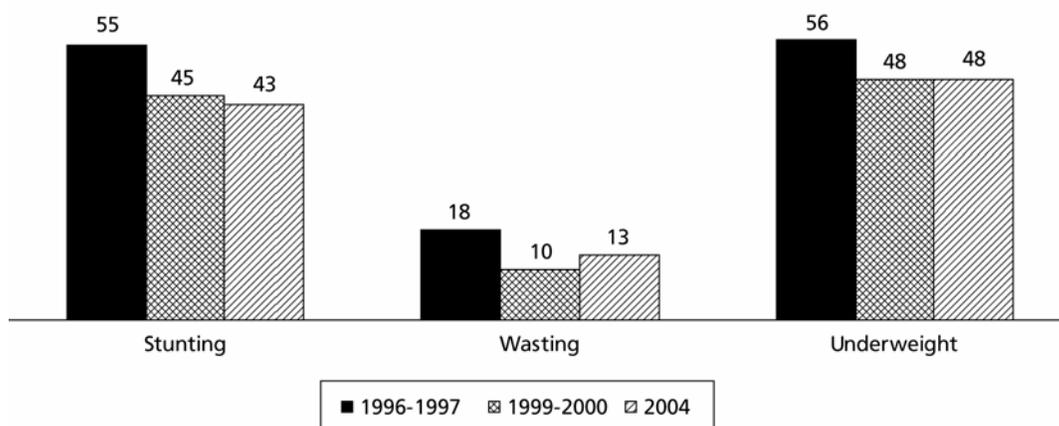
Children of older mothers (above age 34) are more likely to be stunted than children of younger mothers. As expected, the mother's level of education has a strong inverse relationship with stunting levels. For example, children whose mothers have completed secondary education are half as likely to be stunted as children of mothers with incomplete secondary education (36 percent), while children whose mothers have no education are three times as likely to be stunted as children of mothers with most education. The relationship between wealth index and stunting is similar; stunting declines as wealth increases. For both of these characteristics, the inverse relationship is even stronger for severe stunting (Table 11.8). The nutritional status of mothers affects the development of their children. Children whose mothers are short or malnourished are more likely to be stunted.

11.3.2 Wasting

Weight-for-height measures body mass in relation to body length and describes current nutritional status. A child who is below -2 SD from the reference median for weight-for-height is considered to be too thin for his/her height, or "wasted," a condition reflecting acute malnutrition. Wasting represents the 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 below -3 SD from the reference mean. Severe wasting is closely linked to an elevated risk of mortality. Prevalence of wasting may vary considerably by season.

Table 11.7 also shows the nutritional status of children under five years as measured by wasting. In Bangladesh, 13 percent of children are wasted, and the proportion of severely wasted children is 1 percent.

Wasting is highest at age 12-23 months (24 percent) and lowest in children under six months of age (3 percent). The survey data show few sharp differences in wasting by background characteristics (Table 11.8) except for children in Barisal division; those children are most likely to be stunted but least likely to be wasted. Other differentials for wasting are similar to the differentials in stunting; however, the differences are smaller.

11.3.3 Underweight

Weight-for-age is a composite index of height-for-age and weight-for-height and, thus, does not distinguish between acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for his/her age because of stunting, wasting, 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 -2 SD from the median of the reference population are classified as "underweight," and those who fall below -3 SD are classified as "severely underweight."

As shown in Table 11.7, 48 percent of children under five are underweight. The proportion of severely underweight children is 13 percent. As with the other two indicators of nutrition, underweight of children increases with age and peaks at 59 percent for children age 12-23 months. The majority of older children are also underweight. Differentials by other background characteristics show the same pattern as for stunting.

At the bottom of Tables 11.7 and 11.8, the results for children whose mothers were interviewed for the 1996-1997, 1999-2000, and 2004 BDHS surveys are presented. Despite the fact that child nutritional levels showed a substantial improvement from 1996-1997 to 1999-2000, no noticeable improvement has occurred since then (Figure 11.7) except that severe stunting has decreased slightly (Table 11.7) and overall wasting has increased from 10 to 13 percent.

11.3.4 Nutritional Status of Women

The 2004 BDHS also collected data on the height and weight of ever-married women age 10-49.[4] The data are used to derive two measures of nutritional status: height and body mass index (BMI). A woman's height can be used to predict the risk of having difficulty in pregnancy, given the relationship between height and pelvic size. The risk of giving birth to low-weight babies is also higher among women of small stature. The cutoff point at which mothers can be considered at risk because of short stature is normally taken to be between 140 and 150 centimeters. The BMI or Quetelet index is used to measure thinness or obesity. It is defined as weight in kilograms divided by height in meters squared (kg/m^2). The main advantage of the BMI is that it does not require a reference table from a well-nourished population. A cutoff point of 18.5 is used to define thinness or acute undernutrition. A BMI of 25 or above usually indicates overweight or obesity, and 30 or above indicates obesity.

Table 11.9 presents nutritional indicators for women by various background characteristics. At the national level, the mean height for women is 150.5 centimeters, with 16 percent of women falling below the cutoff of 145 centimeters. Variation by most background characteristics is minimal. Urban women and women in Barisal and Khulna divisions are less likely to be short than other women. Education and wealth show a negative relationship to women being short. For example, 20 percent of the poorest women and 19 percent of uneducated women are below 145 centimeters, compared with only 11 percent of women in the wealthiest households and 6 percent of women who have completed secondary or higher education.

The mean BMI for women age 10-49 is 20.2. Only 57 percent are normal or have a BMI between 18.5 and 24.9. Nine percent are overweight or obese (BMI ≥ 25). Thus, 34 percent of women are thin (BMI < 18.5). Analysis by background characteristics shows that although the proportion of women with

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[4] The 2004 BDHS measured nutritional status of ever-married women age 10-49, whereas the 1999-2000 BDHS included only mothers age 15-49 who had children under five years. A comparable analysis of 2004 data (Table 11.9) shows that the proportion of mothers age 15-49 who are less than 145 centimeters in height is almost the same, 16.0 percent; however, there was a substantial decrease (from 45 to 38 percent) in the proportion of women with a BMI below 18.5.

a normal BMI is almost the same in urban and rural areas, women not in the normal range of BMI differ dramatically by residence. The proportion considered thin in rural areas is 37 percent—50 percent higher than in urban areas (25 percent). On the other hand, urban women are more than three times as likely to be overweight or obese as rural women. Among divisions, Sylhet has the highest proportion of women who are thin (48 percent), and Khulna has the least (29 percent). Differentials by education and wealth index for BMI are similar to differentials by these variables for women's height. The proportion of overweight or obese women is low among women under 30 and varies little among older women (11 to 13 percent). Overweight and obese women are much more likely to be in urban areas, among those highly educated, and among those in the highest quintile of the wealth index.

The 2004 BDHS included anthropometric measurements of all ever-married women under age 50, while in the previous two BDHS surveys, only women who had children under five years of age were selected for anthropometric measurements. To compare changes in women's nutritional status over time, the 2004 BDHS data are reestimated based on 4,737 women who had a living child under five years of age. Figure 11.8 and Table 11.9 present the comparative data. The mean height of Bangladeshi mothers with children under five has not changed since the 1996-1997 BDHS. Although the proportion of women with height under 145 cm decreased between the 1996-1997 BDHS and the 1999-2000 BDHS, the proportion of mothers who were short in the 2004 BDHS is the same as in the 1999-2000 BDHS. However, the data indicate a substantial improvement in mother's nutritional status as measured by the BMI. Since 1996-1997, the mean BMI has increased steadily, from 18.8 to 19.7 in 2004; consequently, the proportion of mothers below the BMI cutoff point of 18.5 has continued to drop, from 52 percent in 1996-97 to 38 percent in 2004—a decline of 27 percent in less than ten years.

Figure 11.8 Trends in the Nutritional Status of Women with Children under Five Years of Age

Legend: ■ 1996-1997 ⊠ 1999-2000 ▨ 2004
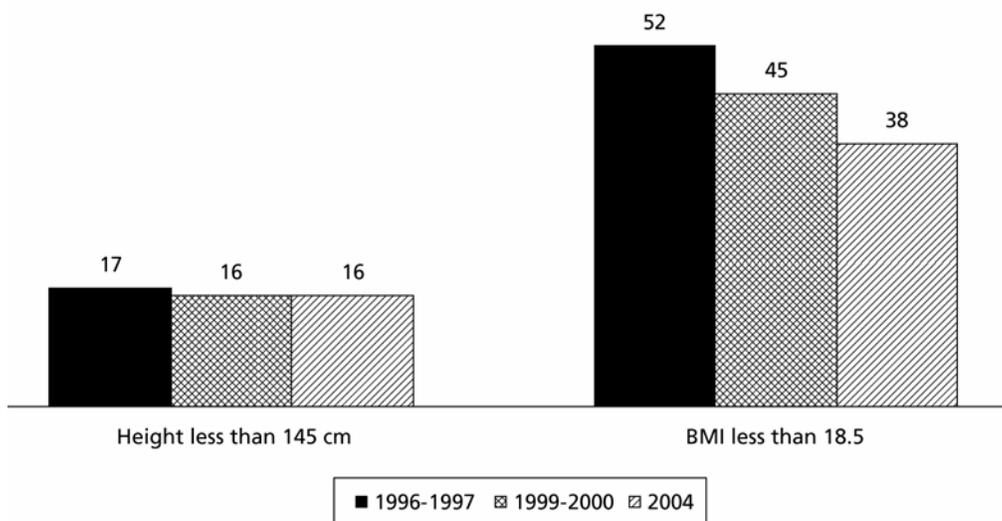
Table 11.9 Nutritional status of women by background characteristics

Among ever-married women age 15-49, mean height, percentage under 145 centimeters, mean body mass index (BMI), and percentage with specific BMI levels, by background characteristics, Bangladesh 2004

Background Characteristic	Height			BMI[1] (kg/m^2)				
	Mean height in centimeters	Percentage below 145 cm	Number of women	Mean BMI	18.5-24.9 (normal)	<18.5 (thin)	≥25.0 (overweight or obese)	Number of ever-married women
Age								
10-14	149.1	17.2	148	19.0	60.2	39.8	0.0	122
15-19	150.4	15.8	1,573	19.2	58.6	39.6	1.8	1,303
20-24	150.4	16.1	2,187	19.8	58.2	36.1	5.7	1,923
25-29	150.9	13.9	1,999	20.3	60.6	30.9	8.5	1,819
30-34	150.4	16.4	1,771	20.5	57.4	31.3	11.2	1,671
35-39	150.7	14.1	1,443	20.7	56.5	30.1	13.3	1,405
40-44	150.3	16.6	1,144	20.5	52.8	34.4	12.8	1,140
45-49	150.0	17.5	1,051	20.1	48.6	40.1	11.3	1,048
Residence								
Urban	150.7	13.4	2,552	21.5	55.4	25.0	19.5	2,374
Rural	150.4	16.3	8,765	19.8	57.2	37.1	5.8	8,057
Division								
Barisal	150.6	13.0	711	19.9	55.2	37.8	7.0	657
Chittagong	150.4	15.2	2,007	20.2	57.3	32.9	9.7	1,825
Dhaka	150.3	16.3	3,536	20.4	54.8	34.0	11.3	3,266
Khulna	151.1	12.9	1,391	20.5	60.6	29.2	10.3	1,293
Rajshahi	150.5	16.9	2,969	19.9	60.1	34.2	5.7	2,759
Sylhet	150.3	16.6	704	19.3	45.3	47.6	7.1	632
Education								
No education	149.9	18.7	4,645	19.5	55.2	40.1	4.8	4,409
Primary incomplete	150.2	17.0	2,321	19.9	56.6	36.2	7.2	2,130
Primary complete	150.6	13.6	1,002	20.4	58.6	31.7	9.7	908
Secondary incomplete	151.1	12.6	2,530	20.8	59.7	27.9	12.4	2,248
Secondary complete or higher	152.5	6.3	818	22.4	55.9	17.3	26.8	737
Wealth index								
Lowest	149.7	20.3	2,244	18.9	50.8	47.1	2.1	2,074
Second	150.4	16.5	2,255	19.3	56.6	40.5	2.9	2,077
Middle	150.3	15.8	2,251	19.7	59.4	35.6	5.0	2,057
Fourth	150.6	14.5	2,293	20.4	59.2	31.3	9.5	2,128
Highest	151.3	11.2	2,274	22.3	58.0	17.2	24.8	2,096
Total all women	150.5	15.6	11,316	20.2	56.8	34.3	8.9	10,431
WOMEN WHO HAVE CHILDREN UNDER 5								
Total 2004 BDHS	150.5	16.0	5,192	19.7	56.3	37.9	5.8	4,737
Total 1999-2000 BDHS	150.4	15.9	5,154	19.3	na	45.4	na	4,483
Total 1996-1997 BDHS	150.2	17.3	4,457	18.8	na	52.0	na	3,921

Note: BMI is weight in kilograms divided by height in meters squared (kg/m^2)
[1] Excludes pregnant women and women with a birth in the preceding two months
na = Not applicable

KNOWLEDGE, ATTITUDES, AND BEHAVIOR RELATED TO HIV/AIDS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

12

Acquired immunodeficiency syndrome (AIDS) is caused by the human immunodeficiency virus (HIV), which weakens the immune system and makes the body susceptible to and unable to recover from other opportunistic diseases, which lead to death if not adequately treated. The virus is generally transmitted through sexual contact, from infected mother to child during delivery or breastfeeding, or through contaminated needles (injections) or blood. In Bangladesh, there have been various efforts to prevent HIV transmission, such as public health education through the media and program activities of both government and nongovernmental organizations, particularly with groups that are considered to be at high risk for the transmission of HIV/AIDS.

The 2004 BDHS included a section of questions on HIV/AIDS in order to assess knowledge and attitudes about the transmission and prevention of HIV/AIDS. The survey also included 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.

12.1 KNOWLEDGE OF HIV/AIDS

Table 12.1.1 and Table 12.1.2 show the percentage of ever-married women and all men (ever-married and never-married), respectively, who have heard of HIV/AIDS, by background characteristics. Six in ten women and more than eight in ten men in Bangladesh have heard of HIV/AIDS. The level of knowledge has been increasing significantly since 1996-1997 (Figure 12.1). Knowledge of HIV/AIDS for ever-married women has increased from 19 percent in 1996-97 to 31 percent in 1999-2000, and then almost doubled by 2004 to 60 percent. The corresponding increase in knowledge among currently married men age 15-54 has been from 34 percent in 1996-97 to 51 percent in 1999-2000 and 78 percent in 2004.[1]

Generally, younger men and women are more likely to have knowledge of HIV/AIDS. Urban residents have a substantially higher level of knowledge about HIV/AIDS than rural residents, especially women (Figure 12.2). Eighty-two percent of women and 93 percent of men in urban areas have heard of HIV/AIDS, compared with 54 percent of women and 78 percent of men in rural areas. Awareness of HIV/AIDS is lower in Sylhet and Rajshahi, compared with the other divisions. Education is positively associated with knowledge of HIV/AIDS. The level of HIV/AIDS knowledge is low among uneducated women (37 percent), increases to 71 percent among women who have completed primary school only, and increases again to virtually all women (98 percent) with completed secondary education. A similar pattern exists for men. Awareness about HIV/AIDS is also positively associated with household economic status. For example, three in ten women in the lowest wealth quintile have heard about HIV/AIDS, compared with nine in ten women in the highest wealth quintile. For men, a similar pattern is observed, except that the difference in knowledge between the highest and lowest quintiles is not as large as that for women.

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[1] Direct comparison of the 1996-1997 and 1999-2000 BDHS surveys with the 2004 BDHS survey cannot be made for men because earlier surveys included married men age 15-64 years and 15-59 years, respectively. In comparing the results of the three surveys, statistics for currently married men for earlier surveys have been recalculated for men age 15-54. The results published in the 1996-1997 and 1999-2000 BDHS reports for currently married men age 15-64 and 15-59 years, respectively, are lower than those calculated for men age 15-54.

As part of the AIDS prevention program, the mass media are playing a major role in creating awareness among the general public. Tables 12.1.1 and 12.1.2 show the percentage of respondents who have heard of AIDS from specific sources and the mean number of sources for such information. Television is by far

Table 12.1.1 Knowledge of HIV/AIDS and sources of AIDS information: women

Percentage of ever-married women who have ever heard of HIV/AIDS, percentage who have received information about HIV/AIDS from specific sources, and mean number of sources of information about HIV/AIDS, by background characteristics, Bangladesh 2004

Background characteristic	Ever heard of HIV/AIDS	Radio	TV	News-papers	Pam-phlets	Health workers	Mosques/ churches	School	Com-munity meetings	Friend/ relative	Work-place	Bill-board	Other	Number of ever-married women	Mean number of sources[1]
Age															
10-14	61.9	29.7	49.1	3.5	1.8	2.8	0.0	0.0	1.1	21.1	0.0	2.5	0.0	150	1.8
15-19	70.9	32.9	56.6	4.3	3.5	6.1	0.1	0.9	0.3	24.8	0.6	1.9	0.5	1,598	1.9
20-24	69.5	30.3	55.8	4.1	3.0	7.2	0.0	0.9	0.8	26.9	0.3	2.9	0.5	2,202	1.9
25-29	62.1	21.8	47.1	4.6	2.4	6.0	0.0	0.4	1.2	25.5	0.4	2.9	0.6	2,013	1.8
30-39	55.6	17.1	39.4	3.1	1.5	6.4	0.1	0.2	1.1	23.3	0.7	2.3	0.4	3,251	1.7
40-49	47.1	13.0	31.6	3.0	0.9	4.2	0.1	0.1	1.0	20.5	0.4	1.4	0.9	2,227	1.6
15-24	70.1	31.4	56.1	4.2	3.2	6.7	0.0	0.9	0.6	26.0	0.5	2.5	0.5	3,800	1.9
Marital status															
Currently married	61.0	22.7	45.8	3.8	2.3	6.1	0.0	0.5	0.9	24.4	0.5	2.4	0.5	10,582	1.8
Divorced/separated/ widowed	47.8	13.3	33.7	2.2	0.7	4.1	0.0	0.3	0.6	19.1	0.6	1.3	0.9	858	1.6
Residence															
Urban	81.7	21.3	72.7	8.1	3.8	8.4	0.0	0.8	0.9	30.0	0.7	4.8	0.5	2,586	1.9
Rural	53.7	22.3	36.8	2.4	1.7	5.3	0.1	0.4	0.9	22.3	0.4	1.6	0.6	8,854	1.8
Division															
Barisal	60.2	29.3	37.7	2.6	2.6	7.5	0.0	0.5	0.6	26.1	0.4	2.6	0.2	719	1.8
Chittagong	59.1	21.5	46.1	4.1	1.6	5.7	0.0	0.2	0.4	21.1	0.3	1.6	0.5	2,041	1.7
Dhaka	66.9	21.8	52.6	4.4	2.5	6.0	0.1	0.5	1.2	26.9	0.8	3.0	0.5	3,570	1.8
Khulna	72.6	28.9	52.6	3.6	2.1	7.3	0.0	1.0	1.2	32.1	0.3	2.9	0.9	1,397	1.8
Rajshahi	49.9	19.9	36.0	2.7	2.2	5.2	0.0	0.3	0.9	19.5	0.4	1.6	0.4	2,994	1.8
Sylhet	45.4	12.8	32.8	4.0	1.5	5.1	0.1	0.3	0.9	19.1	0.4	2.6	1.3	719	1.8
Education															
No education	37.1	10.0	23.4	0.0	0.1	3.7	0.0	0.1	0.8	16.3	0.3	0.2	0.4	4,713	1.5
Primary incomplete	59.0	18.9	41.4	0.5	0.5	6.1	0.0	0.1	0.9	24.9	0.4	0.6	0.8	2,348	1.6
Primary complete	71.4	25.9	53.2	2.0	0.7	6.8	0.0	0.6	1.4	28.9	0.4	1.5	0.6	1,011	1.7
Secondary incomplete	86.3	38.3	70.1	5.8	4.1	8.3	0.1	0.7	1.0	33.3	0.4	4.0	0.6	2,541	1.9
Secondary complete or higher	98.4	44.6	90.1	29.1	13.9	10.5	0.0	2.7	1.0	31.3	2.3	14.5	0.6	827	2.4
Wealth index															
Lowest	28.9	8.3	14.3	0.1	0.2	3.4	0.0	0.0	0.7	13.5	0.3	0.3	0.3	2,279	1.4
Second	44.6	16.2	26.6	0.8	0.5	4.2	0.0	0.0	1.0	21.3	0.5	0.5	0.7	2,290	1.6
Middle	58.7	24.2	38.5	1.6	1.7	6.2	0.0	0.5	1.0	24.7	0.2	1.8	0.4	2,267	1.7
Fourth	75.0	31.5	59.7	3.4	2.2	6.9	0.2	0.8	1.0	28.9	0.5	2.7	0.7	2,307	1.8
Highest	92.4	29.9	85.0	12.2	5.8	9.2	0.0	1.0	0.8	31.6	0.9	6.2	0.7	2,297	2.0
Total	60.0	22.0	44.9	3.7	2.1	6.0	0.0	0.5	0.9	24.0	0.5	2.3	0.6	11,440	1.8

[1] Mean number of sources is based on women who have heard of HIV/AIDS.

the most important source of information about HIV/AIDS: 45 percent of women and 68 percent of men report television as a source of their information about HIV/AIDS. Other significant sources for both men and women are the radio and friends and relatives. For men, newspapers are an important source of information about HIV/AIDS (one in five men mentioned them as a source), while very few women (4 percent) were aware of HIV/AIDS through newspapers.

Table 12.1.2 Knowledge of HIV/AIDS and sources of AIDS information: men

Percentage of men who have ever heard of HIV/AIDS, percentage who have received information about HIV/AIDS from specific sources, and mean number of sources of information about HIV/AIDS, by background characteristics, Bangladesh 2004

Background characteristic	Ever heard of HIV/AIDS	Radio	TV	News-papers	Pam-phlets	Health workers	Mosques/churches	School	Com-munity meetings	Friend/relative	Work-place	Bill-board	Other	Number of men	Mean number of sources[1]
Age															
15-19	86.4	40.5	75.0	15.9	10.9	9.8	0.1	4.4	1.5	25.3	0.4	12.0	2.2	822	2.3
20-24	90.9	48.2	83.1	23.1	9.9	12.6	0.0	1.2	2.5	30.3	0.5	13.5	3.9	660	2.5
25-29	87.6	42.1	73.1	24.6	5.4	18.9	0.1	0.9	1.2	30.7	1.5	12.8	6.0	589	2.5
30-39	81.0	36.7	66.8	16.9	3.1	16.4	0.2	1.0	1.7	27.5	1.5	10.4	2.2	1,026	2.3
40-49	72.6	34.1	56.7	16.9	2.5	13.9	0.1	0.3	2.2	26.4	1.0	7.8	2.4	957	2.3
50-54	68.0	30.4	46.2	17.4	4.8	15.3	0.0	0.0	2.8	25.9	1.4	5.6	2.2	242	2.2
15-24	88.4	43.9	78.6	19.1	10.5	11.0	0.1	2.9	1.9	27.5	0.5	12.7	2.9	1,482	2.4
Marital status															
Never married	89.3	42.8	79.7	22.9	11.1	10.7	0.1	3.0	1.7	26.6	0.9	15.1	3.5	1,474	2.4
Currently married	78.0	37.4	62.5	16.9	3.3	16.1	0.1	0.5	2.0	28.4	1.1	8.4	2.7	2,780	2.3
Divorced/separated/ widowed	(71.6)	(7.4)	(52.1)	(90.0)	(0.0)	(18.0)	(0.0)	(7.0)	(0.0)	(10.2)	(0.0)	(3.8)	(4.6)	43	1.4
Residence															
Urban	93.0	34.5	84.9	29.2	9.8	12.3	0.1	0.9	2.4	32.3	1.7	20.3	3.7	1,042	2.5
Rural	78.3	40.5	63.0	15.4	4.7	14.9	0.1	1.6	1.7	26.1	0.8	7.6	2.8	3,255	2.3
Division															
Barisal	82.3	53.3	64.1	19.1	6.9	11.9	0.0	1.3	1.4	19.8	0.5	12.3	3.7	225	2.4
Chittagong	81.4	29.6	72.7	18.7	5.2	11.6	0.1	1.2	0.4	25.2	0.2	9.2	2.6	739	2.2
Dhaka	84.6	39.8	69.9	19.4	6.3	15.1	0.1	1.1	2.4	31.0	1.1	13.6	2.7	1,342	2.4
Khulna	91.7	47.3	76.9	21.2	9.9	15.3	0.1	2.7	2.4	33.2	2.3	14.4	3.8	573	2.5
Rajshahi	75.2	40.2	62.4	17.2	3.8	16.1	0.0	1.5	2.5	25.3	0.8	6.3	3.5	1,114	2.4
Sylhet	76.3	27.8	59.2	16.9	5.9	9.9	0.3	1.1	0.5	22.5	1.9	8.7	2.0	304	2.1
Education															
No education	61.2	26.8	42.4	0.5	0.6	9.0	0.1	0.2	1.8	26.6	0.8	0.8	2.3	1,057	1.8
Primary incomplete	76.2	34.6	60.5	6.1	1.6	12.0	0.0	0.4	2.0	30.4	1.0	3.5	2.2	1,152	2.0
Primary complete	89.4	41.5	75.2	14.3	2.9	20.1	0.0	1.2	1.7	27.5	0.2	11.5	1.4	345	2.2
Secondary incomplete	95.1	43.8	85.2	25.9	11.1	18.0	0.2	2.8	1.7	28.4	1.3	15.3	3.6	1,045	2.5
Secondary complete or higher	98.9	56.4	91.8	58.8	14.9	17.5	0.2	3.2	2.1	23.4	1.4	30.0	5.3	698	3.1
Wealth index															
Lowest	61.1	28.4	42.0	3.8	1.1	11.5	0.0	0.3	0.8	23.5	0.3	3.5	2.5	717	1.9
Second	71.1	33.5	53.4	7.9	3.5	11.7	0.0	1.3	1.4	24.5	0.6	3.9	1.9	869	2.0
Middle	82.6	42.2	67.2	16.6	4.2	17.7	0.0	0.7	2.3	28.3	0.9	7.7	3.4	846	2.3
Fourth	90.5	46.9	80.4	23.1	6.9	16.1	0.2	2.0	2.5	30.5	1.4	11.4	3.5	892	2.5
Highest	98.2	41.7	90.9	37.4	12.3	13.9	0.4	2.4	2.1	30.2	1.8	23.9	3.7	973	2.7
Total	81.9	39.0	68.3	18.7	5.9	14.3	0.1	1.4	1.9	27.6	1.0	10.7	3.0	4,297	2.3

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Mean number of sources is based on men who have heard of HIV/AIDS.

Figure 12.1 Trends in Knowledge of HIV/AIDS Among Every-Married Women and Currently Married Men

- Ever-married women age 10-49
- Currently married men age 15-54
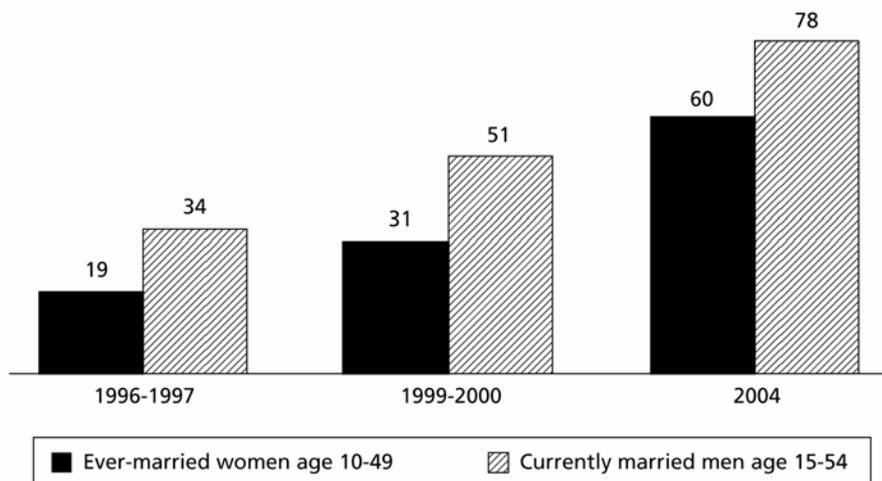
Figure 12.2 Percentage of Ever-married Women and All Men Who have Heard of HIV/AIDS, by Background Characteristics
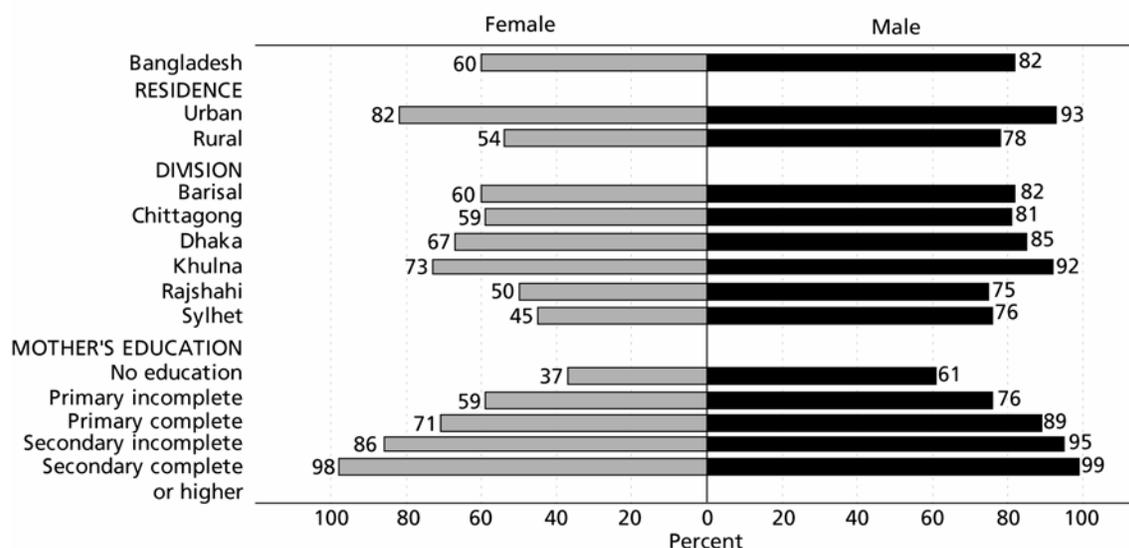
12.2 KNOWLEDGE OF WAYS TO AVOID HIV/AIDS

Tables 12.2.1 and 12.2.2 show the percentage of ever-married women and all men, respectively. who have heard of HIV/AIDS by knowledge of ways to avoid contracting the disease. To ascertain knowledge about modes of HIV/AIDS transmission, respondents were asked general questions as to whether there is anything a person can do to avoid getting AIDS or the virus that causes AIDS and, if so, what can be done. Six percent of women who have heard of HIV/AIDS reported that there is no way to avoid getting AIDS or the virus that causes AIDS and 18 percent do not know if AIDS can be avoided. These knowledge gaps are much smaller among men. The proportions of ever-married women and currently married men who said that there is no way to avoid AIDS and who do not know if AIDS can be avoided has declined sharply since 1999-2000.

Table 12.2.1 Knowledge of ways to avoid HIV/AIDS: women

Among ever-married women who know of HIV/AIDS, percentage who know of ways to avoid contracting the disease, by background characteristics, Bangladesh 2004

				Correct ways to avoid HIV/AIDS									Incorrect ways to avoid HIV/AIDS					
Background characteristic	Does not know if AIDS can be avoided	Believes no way to avoid AIDS	Does not know specific way	Abstain from sex	Use con-doms	Limit sex to one partner/ stay faithful to one partner	Avoid sex with prosti-tutes	Avoid sex with persons who have many part-ners	Avoid sex with homo-sexuals	Avoid sex with persons who inject drugs intra-venously	Avoid blood trans-fusions	Avoid injections	Avoid sharing razors/ blades	Avoid kissing	Avoid mos-quito bites	Seek pro-tection from tradi-tional healer	Other	Number of ever-married women who know of HIV/AIDS
Age																		
15-19	17.5	2.0	2.5	8.6	39.8	35.3	21.1	16.0	2.8	6.2	10.6	22.2	0.0	0.0	0.0	2.1	1.6	93
20-24	17.3	5.9	4.6	9.7	40.4	33.9	14.4	15.7	0.5	1.1	12.6	27.8	0.5	0.1	0.2	0.9	1.1	1,133
25-29	13.1	5.4	4.3	13.1	44.9	34.4	17.6	18.8	0.5	1.7	13.2	27.5	0.7	0.2	0.4	0.9	0.9	1,530
30-39	18.5	5.8	5.1	11.3	39.6	31.3	17.1	19.1	0.5	1.2	13.2	24.2	2.0	0.4	0.2	0.9	1.2	1,251
40-49	20.1	6.7	7.0	10.8	31.3	27.4	17.7	18.4	0.5	1.1	10.1	20.9	0.5	0.2	0.1	1.5	1.4	1,808
50-54	24.2	8.1	8.5	10.1	24.6	22.8	15.1	15.9	0.3	0.4	8.1	17.3	0.4	0.0	0.6	1.9	1.3	1,049
15-24	14.9	5.7	4.4	11.6	43.0	34.2	16.2	17.5	0.5	1.4	13.0	27.6	0.6	0.1	0.3	0.9	1.0	2,664
Marital status																		
Currently married	17.9	6.2	5.8	11.2	37.3	30.5	16.8	17.9	0.5	1.2	11.8	24.0	0.8	0.2	0.3	1.1	1.2	6,454
Divorced/separated/ widowed	25.9	7.3	6.4	8.7	23.0	24.7	14.9	15.2	0.1	0.7	7.1	16.9	0.8	0.2	0.0	2.4	0.5	410
Residence																		
Urban	10.7	4.2	5.1	11.7	46.0	33.4	21.3	22.5	0.7	1.5	17.6	32.3	1.0	0.3	0.2	0.5	1.1	2,113
Rural	21.8	7.2	6.1	10.8	32.2	28.7	14.6	15.7	0.4	1.1	8.7	19.7	0.7	0.1	0.3	1.5	1.2	4,751
Division																		
Barisal	22.0	4.4	9.5	13.1	28.5	26.6	11.5	17.1	0.2	0.8	7.2	21.6	0.3	0.2	0.8	2.2	0.9	433
Chittagong	17.0	8.1	4.9	10.3	37.4	30.4	18.7	12.0	0.4	0.5	10.7	23.6	0.5	0.5	0.0	1.4	0.7	1,207
Dhaka	17.6	5.4	5.8	11.5	36.9	29.5	16.8	20.6	0.6	1.5	12.4	25.3	1.0	0.2	0.3	1.1	1.2	2,388
Khulna	19.9	6.5	5.7	12.1	35.3	27.2	20.5	19.4	1.3	2.4	13.2	26.1	0.9	0.0	0.2	0.3	0.5	1,014
Rajshahi	17.1	5.7	5.9	7.8	40.1	36.9	13.3	18.0	0.1	0.9	11.6	21.9	0.7	0.0	0.3	1.6	1.6	1,495
Sylhet	25.7	10.8	3.8	19.4	27.4	16.0	18.3	13.0	0.0	0.3	7.3	13.0	1.1	0.0	0.7	1.1	3.1	327
Education																		
No education	29.2	9.1	8.5	7.6	22.0	23.2	14.0	14.1	0.3	0.5	5.7	10.9	0.5	0.1	0.1	1.3	0.8	1,749
Primary incomplete	22.8	7.7	6.7	10.4	27.9	29.1	13.0	16.4	0.1	0.9	6.3	16.0	0.4	0.2	0.2	1.5	1.2	1,385
Primary complete	19.2	6.3	4.8	12.9	36.4	28.2	15.3	17.4	0.5	0.9	8.7	18.3	0.8	0.0	0.1	1.2	1.9	722
Secondary incomplete	12.5	5.0	4.9	11.6	43.2	33.8	17.8	19.6	0.7	1.4	13.8	28.8	0.9	0.1	0.4	1.3	1.1	2,194
Secondary complete or higher	2.7	1.2	1.7	16.7	63.9	38.7	26.9	23.2	1.1	3.1	28.7	54.3	1.6	0.5	0.8	0.3	1.5	814
Wealth index																		
Lowest	34.6	9.0	7.0	5.6	20.8	21.7	10.1	11.7	0.3	0.2	2.6	9.2	0.0	0.2	0.2	1.8	0.9	659
Second	26.8	10.8	8.1	8.1	24.2	24.7	12.4	13.9	0.4	1.1	6.1	12.6	0.2	0.0	0.1	1.0	1.3	1,021
Middle	21.2	7.8	6.1	10.3	30.2	31.2	13.2	15.8	0.5	1.2	7.7	16.5	0.5	0.2	0.2	2.0	1.3	1,332
Fourth	16.9	5.4	6.3	11.4	36.1	30.7	15.5	18.2	0.2	1.0	11.2	25.1	1.3	0.1	0.4	1.2	0.9	1,730
Highest	8.8	3.0	3.8	14.4	51.4	34.2	23.9	22.4	0.9	1.8	19.4	36.5	1.0	0.3	0.4	0.7	1.3	2,123
Total	18.4	6.3	5.8	11.1	36.5	30.1	16.7	17.8	0.5	1.2	11.5	23.6	0.8	0.2	0.3	1.2	1.2	6,864

The most frequently cited way to avoid contracting HIV/AIDS by both women and men is condom use, cited by 37 percent of women and 50 percent of men. Knowledge of condom use as a way to avoid HIV/AIDS has increased significantly in the past four years. In the 1999-2000 BDHS, only 16 percent of the ever-married women under age 50 and 18 percent of currently married men age 15-54 cited condom use as a way to avoid HIV/AIDS. Men are less likely than women to cite limiting the number of sexual partners as a way to avoid AIDS. Almost one in three currently married women and only one in eight men (and one in eight currently married men) said that limiting the number of sexual partners can prevent HIV/AIDS. The proportion of women and men who reported that abstinence from sex can help prevent the spread of the disease is almost the same (11 and 12 percent, respectively). Awareness that HIV/AIDS can be transmitted through shared needles seems to have increased noticeably among both men and women in the past four years.

Table 12.2.2 Knowledge of ways to avoid HIV/AIDS: men

Among men who know of HIV/AIDS, percentage who know of ways to avoid contracting the disease, by background characteristics, Bangladesh 2004

| Background Characteristic | Does not know if AIDS can be avoided | Believes no way to avoid AIDS | Does not know specific way | Correct ways to avoid HIV/AIDS | | | | | | | | | Incorrect ways to avoid HIV/AIDS | | | | | Number of men who know of HIV/AIDS |
				Abstain from sex	Use con-doms	Limit sex to one partner/ stay faithful to one partner	Avoid sex with prosti-tutes	Avoid sex with persons who have many part-ners	Avoid sex with homo-sexuals	Avoid sex with persons who inject drugs intra-venously	Avoid blood trans-fusions	Avoid injections	Avoid sharing razors/ blades	Avoid kissing	Avoid mos-quito bites	Seek pro-tection from tradi-tional healer	Other	
Age																		
15-19	8.8	3.3	8.1	15.4	52.8	10.3	13.5	1.5	1.5	1.6	15.9	29.9	1.8	0.2	0.4	1.9	2.3	710
20-24	3.0	1.3	5.6	13.6	55.9	13.0	18.7	0.5	1.9	3.7	16.9	31.0	3.4	0.3	0.2	1.8	0.6	600
25-29	3.5	1.1	7.0	12.6	60.7	11.3	19.7	1.9	1.2	1.9	11.5	19.0	4.3	0.0	0.0	1.3	1.4	516
30-39	5.9	2.4	8.7	10.7	47.2	13.1	17.6	2.1	1.5	2.3	8.2	16.0	2.6	0.5	0.0	3.3	2.5	831
40-49	6.6	2.6	10.9	8.7	39.5	9.8	18.1	1.4	0.4	0.9	4.8	14.9	2.3	0.0	0.6	3.1	3.6	695
50-54	9.4	3.3	9.6	7.1	34.3	15.5	20.2	0.9	1.2	1.1	8.6	17.4	0.8	0.0	0.0	1.9	2.0	165
15-24	6.2	2.4	7.0	14.6	54.3	11.5	15.9	1.0	1.7	2.5	16.4	30.4	2.5	0.2	0.3	1.8	1.6	1,311
Marital status																		
Never married	5.5	2.0	6.8	15.2	57.2	10.6	16.8	1.6	2.0	3.0	17.3	31.9	3.3	0.2	0.3	2.1	1.6	1,317
Currently married	6.2	2.5	9.2	9.7	45.3	12.4	18.1	1.3	0.9	1.4	7.4	15.6	2.3	0.2	0.2	2.4	2.6	2,170
Divorced/separated/ widowed	(6.4)	(0.0)	(7.0)	(21.7)	(35.6)	(12.8)	(5.1)	(10.9)	(0.0)	(0.0)	(0.0)	(5.8)	(0.0)	(0.0)	(0.0)	(9.8)	(0.0)	31
Residence																		
Urban	3.7	1.3	5.4	13.4	59.1	11.7	24.2	1.7	1.8	2.0	13.4	26.5	4.8	0.4	0.0	1.0	2.6	968
Rural	6.8	2.7	9.4	11.3	46.1	11.7	14.9	1.4	1.1	2.0	10.2	19.8	1.9	0.1	0.3	2.9	2.0	2,549
Division																		
Barisal	1.7	4.2	8.2	18.5	49.9	12.9	17.1	3.2	0.2	0.1	6.6	20.2	4.0	0.9	0.0	0.0	2.9	185
Chittagong	5.7	0.8	12.3	10.6	45.2	7.7	18.2	0.9	1.8	0.7	8.0	24.8	1.8	0.3	0.6	2.5	1.9	602
Dhaka	8.5	2.2	4.9	13.5	49.1	13.7	17.0	1.3	1.5	2.3	12.6	23.2	2.4	0.2	0.0	2.3	2.9	1,135
Khulna	3.9	1.9	6.4	13.3	58.2	12.8	18.0	2.0	0.5	3.4	14.8	24.5	3.8	0.0	0.5	2.8	1.9	525
Rajshahi	4.2	2.7	9.5	8.4	51.2	10.5	16.3	1.2	0.9	1.9	11.1	19.1	2.8	0.0	0.2	2.6	1.4	838
Sylhet	8.4	4.4	14.4	11.3	39.3	13.1	21.6	2.5	3.1	2.5	6.6	9.9	2.4	0.1	0.0	2.4	2.5	232
Education																		
No education	10.3	6.4	13.6	5.2	28.2	8.5	13.4	1.2	0.8	0.2	2.2	6.1	0.3	0.0	0.2	2.8	1.6	647
Primary incomplete	8.6	3.0	12.7	9.4	40.1	10.8	16.7	0.5	0.7	1.4	4.0	8.9	1.2	0.0	0.4	3.6	1.9	878
Primary complete	4.4	0.9	7.1	11.4	49.7	12.4	14.1	0.4	1.1	2.0	6.1	17.6	2.5	0.7	0.0	1.3	1.8	308
Secondary incomplete	4.4	1.0	5.3	12.8	58.6	11.7	17.4	2.5	1.8	2.1	15.3	29.0	2.4	0.1	0.3	2.4	2.5	994
Secondary complete or higher	1.4	0.0	2.5	20.0	69.2	15.5	23.9	2.1	1.9	4.3	24.6	43.6	7.2	0.5	0.0	0.8	3.0	691
Wealth index																		
Lowest	12.5	6.5	15.3	8.3	33.4	8.0	11.6	0.7	0.7	0.5	2.5	6.5	0.4	0.0	0.0	2.7	1.0	438
Second	9.1	3.2	12.2	10.3	38.2	9.7	14.4	1.5	1.3	1.7	6.4	12.1	1.7	0.0	0.0	2.9	2.0	617
Middle	6.1	2.6	9.4	11.7	45.6	13.3	15.2	1.2	0.7	0.9	8.4	16.9	0.9	0.4	0.3	4.0	2.4	699
Fourth	4.9	1.4	6.4	13.6	53.2	12.9	17.0	1.3	1.2	3.4	15.0	27.5	3.0	0.0	0.6	1.9	2.3	807
Highest	1.7	0.3	3.3	13.1	64.6	12.4	24.3	2.3	2.0	2.5	16.7	33.3	5.4	0.4	0.1	1.0	2.6	956
Total	5.9	2.3	8.3	11.9	49.7	11.7	17.5	1.5	1.3	2.0	11.1	21.7	2.7	0.2	0.2	2.4	2.2	3,517

Note: Figures in parentheses are based on 25-49 unweighted cases.

The proportion of women and men reporting each of the correct[2] ways to avoid contracting AIDS is lower among rural than among urban respondents; however, the urban-rural gap in correct knowledge is wider for women than for men. The level of education and the wealth index are positively associated with knowledge of correct ways to avoid HIV/AIDS.

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[2] The following are considered correct ways: abstain from sex, use condom, limit sex with persons who have many partners, avoid sex with homosexuals, avoid sex with persons who inject drugs intravenously, avoid blood transfusions, and avoid injections.

Table 12.3.1 shows the percent distribution of ever-married women with knowledge of correct ways to avoid HIV/AIDS. Six in ten women do not know any way to avoid HIV/AIDS. In the 2004 BDHS, about 30 percent of ever-married women were able to mention two or more correct ways to avoid getting HIV/AIDS. As far as specific ways to avoid HIV/AIDS, one-fifth of ever-married women mentioned condoms, and a slightly lower proportion mentioned limiting the number of sexual partners, limiting sex to one partner, and/or staying faithful to one partner.

Table 12.3.1 Knowledge of HIV/AIDS and its prevention: women

Percent distribution of ever-married women by knowledge of correct ways to avoid HIV/AIDS, and percentage of women who know of two specific ways to avoid HIV/AIDS, according to background characteristics, Bangladesh 2004

| Background characteristic | Knows no correct way to avoid HIV/AIDS | | Knows one or more correct ways to avoid HIV/AIDS | | | Knowledge of specific ways to avoid HIV/AIDS | | Number of ever-married women |
	Does not know of HIV/AIDS	Knows of HIV/AIDS but does not know any correct ways	One way	Two or more ways	Total	Use condoms	Limit number of sexual partners[1]	
Age								
10-14	38.1	14.9	12.3	34.8	100.0	24.7	21.9	150
15-19	29.1	20.4	13.5	37.0	100.0	28.6	24.0	1,598
20-24	30.5	16.4	13.8	39.3	100.0	31.2	23.9	2,202
25-29	37.9	18.9	11.4	31.8	100.0	24.6	19.4	2,013
30-39	44.4	19.7	11.0	24.9	100.0	17.4	15.2	3,251
40-49	52.9	20.3	9.4	17.4	100.0	11.6	10.7	2,227
Marital status								
Currently married	39.0	19.0	11.7	30.3	100.0	22.8	18.6	10,582
Divorced/separated/widowed	52.2	19.8	11.1	16.8	100.0	11.0	11.8	858
Residence								
Urban	18.3	17.0	15.2	49.6	100.0	37.6	27.3	2,586
Rural	46.3	19.7	10.7	23.3	100.0	17.3	15.4	8,854
Division								
Barisal	39.8	23.1	12.3	24.8	100.0	17.2	16.0	719
Chittagong	40.9	18.6	12.1	28.4	100.0	22.1	18.0	2,041
Dhaka	33.1	20.0	13.4	33.5	100.0	24.7	19.8	3,570
Khulna	27.4	23.7	11.1	37.9	100.0	25.6	19.8	1,397
Rajshahi	50.1	15.2	10.0	24.8	100.0	20.0	18.4	2,994
Sylhet	54.6	19.2	9.4	16.9	100.0	12.4	7.3	719
Education								
No education	62.9	17.9	7.2	12.0	100.0	8.2	8.6	4,713
Primary incomplete	41.0	22.7	12.3	24.0	100.0	16.5	17.1	2,348
Primary complete	28.6	22.9	15.9	32.7	100.0	26.0	20.2	1,011
Secondary incomplete	13.7	20.6	17.4	48.3	100.0	37.3	29.2	2,541
Secondary complete or higher	1.6	6.1	12.5	79.8	100.0	62.9	38.1	827
Wealth index								
Lowest	71.1	15.2	5.9	7.8	100.0	6.0	6.3	2,279
Second	55.4	20.8	8.7	15.1	100.0	10.8	11.0	2,290
Middle	41.3	21.9	12.9	24.0	100.0	17.7	18.3	2,267
Fourth	25.0	22.3	15.3	37.3	100.0	27.1	23.0	2,307
Highest	7.6	15.2	15.5	61.7	100.0	47.5	31.6	2,297
Total	40.0	19.1	11.7	29.2	100.0	21.9	18.1	11,440

Note: See top of Table 12.2.1 correct ways to avoid HIV/AIDS.
[1] Refers to limiting number of sexual partners, limiting sex to one partner, or staying faithful to one partner

Table 12.3.2 shows similar data for all men. Forty-two percent of men do not know of any way to avoid HIV/AIDS. One-third of men know two or more correct ways to avoid the disease. Knowledge of ways to avoid the disease is much lower among married men than among never-married men. One-fourth of currently married men and 44 percent of never-married men know two or more correct ways to avoid HIV/AIDS.

Table 12.3.2 Knowledge of HIV/AIDS and its prevention: men

Percent distribution of men by knowledge of correct ways to avoid HIV/AIDS, and percentage of men who know of two specific ways to avoid HIV/AIDS, according to background characteristics, Bangladesh 2004

| Background characteristic | Knows no correct way to avoid HIV/AIDS | | Knows one or more correct ways to avoid HIV/AIDS | | | Knowledge of specific ways to avoid HIV/AIDS | | |
	Does not know of HIV/AIDS	Knows of HIV/AIDS but does not know any correct ways	One way	Two or more ways	Total	Use condoms	Limit number of sexual partners[1]	Number of men
Age								
10-14	13.6	25.2	21.2	40.1	100.0	45.7	8.9	822
15-19	9.1	17.9	28.2	44.8	100.0	50.9	11.8	660
20-24	12.4	19.2	31.6	36.8	100.0	53.2	9.9	589
25-29	19.0	24.9	28.4	27.6	100.0	38.2	10.6	1,026
30-39	27.4	28.6	24.2	19.8	100.0	28.7	7.1	957
40-49	32.0	26.6	20.4	21.0	100.0	23.3	10.5	242
Marital status								
Never married	10.7	20.2	25.4	43.8	100.0	51.1	9.4	1,474
Currently married	22.0	26.1	26.3	25.6	100.0	35.4	9.6	2,780
Divorced/separated/widowed	(8.4)	(21.6)	(31.6)	(18.4)	100.0	(25.5)	(9.1)	43
Residence								
Urban	7.0	18.4	30.7	43.9	100.0	54.9	10.9	1,042
Rural	21.7	25.8	24.6	27.9	100.0	36.1	9.2	3,255
Division								
Barisal	17.7	20.8	29.1	32.4	100.0	41.0	10.7	225
Chittagong	18.6	25.7	25.8	29.9	100.0	36.8	6.3	739
Dhaka	15.4	24.3	26.2	34.1	100.0	41.5	11.6	1,342
Khulna	8.3	21.8	26.7	43.1	100.0	53.4	11.7	573
Rajshahi	24.8	23.7	25.0	26.5	100.0	38.5	7.9	1,114
Sylhet	23.7	26.2	26.5	23.6	100.0	30.0	10.0	304
Education								
No education	38.8	31.5	20.5	9.2	100.0	17.2	5.2	1,057
Primary incomplete	23.8	30.1	26.5	19.6	100.0	30.5	8.2	1,152
Primary complete	10.6	24.5	35.3	29.6	100.0	44.4	11.1	345
Secondary incomplete	4.9	19.1	29.9	46.1	100.0	55.8	11.1	1,045
Secondary complete or higher	1.1	9.8	23.4	65.8	100.0	68.4	15.3	698
Wealth index								
Lowest	38.9	30.4	19.3	11.4	100.0	20.4	4.9	717
Second	28.9	29.9	21.3	19.8	100.0	27.2	6.9	869
Middle	17.4	27.2	28.1	27.3	100.0	37.7	11.0	846
Fourth	9.5	21.5	27.7	41.3	100.0	48.1	11.7	892
Highest	1.8	13.7	31.9	52.7	100.0	63.4	12.2	973
Total	18.1	24.0	26.0	31.8	100.0	40.7	9.6	4,297

Note: See top of Table 12.2.2 for correct ways to avoid HIV/AIDS. Figures in parentheses are based on 25-49 unweighted cases.
[1]Refers to limiting number of sexual partners, limiting sex to one partner, or staying faithful to one partner

Since 1999-2000, the unprompted knowledge of at least two correct ways to avoid HIV/AIDS has increased substantially among ever-married women, from 7 to 29 percent, and only moderately among currently married men age 15-54, from 19 to 26 percent (Figure 12.3). Although awareness of HIV/AIDS is much higher among currently married men (Figure 12.1), Figure 12.3 shows that the gender gap in knowledge of two or more correct ways to avoid HIV/AIDS has been completely eliminated since the 1999-2000 BDHS.

Figure 12.3 Trends in Knowledge of Two or More Correct Ways to Avoid HIV/AIDS Among Ever-Married Women and Currently Married Men

Legend: ■ Ever-married women age 10-49   ▨ Currently married men age 15-54
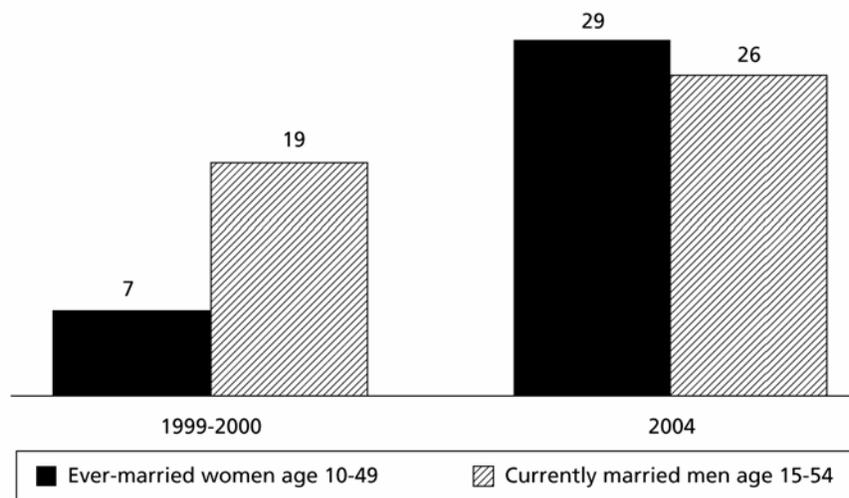
12.3 KNOWLEDGE OF HIV/AIDS-RELATED ISSUES AND COMMUNICATION WITH SPOUSES

Ever-married women and all men who know of HIV/AIDS were asked whether they think that a healthy-looking person can have the AIDS virus and whether they think that HIV/AIDS can be transmitted from a mother to a child. The results of the responses are shown in Table 12.4.

Among respondents who know of HIV/AIDS, seven in ten women and more than eight in ten men say that a healthy-looking person can have the AIDS virus. Women and men living in Barisal division and men in Khulna division have the highest awareness that a healthy-looking person can be infected with HIV. Since 1999-2000, the proportion of currently married men who know that a healthy-looking person can have the AIDS virus has increased substantially—from 66 to 85 percent.

Table 12.4 also shows that 91 percent of ever-married women and all men who have heard of HIV/AIDS know that it can be transmitted from a mother to her child. Differentials in knowledge of mother-to-child transmission by background variables show a pattern similar to that observed for the knowledge that a healthy-looking person can have AIDS.

Table 12.4 Perceptions of HIV/AIDS-related issues

Percentage of ever-married women and all men who have heard of HIV/AIDS by perception of AIDS related issues, according to background characteristics, Bangladesh 2004

	Percentage of ever-married women who think:			Percentage of men who think:		
Background characteristic	A healthy-looking person can have the AIDS virus	HIV/AIDS can be transmitted from a mother to a child	Number of ever-married women	A healthy-looking person can have the AIDS virus	HIV/AIDS can be transmitted from a mother to a child	Number of men
Age						
10-14	65.7	88.5	150	na	na	na
15-19	69.2	90.8	1,598	78.7	88.9	710
20-24	70.5	92.2	2,202	84.0	93.6	600
25-29	70.9	91.9	2,013	84.7	90.2	516
30-39	71.3	90.5	3,251	85.3	91.9	831
40-49	69.5	90.3	2,227	85.5	88.7	695
50-54	na	na	na	87.4	94.3	165
15-24	69.9	91.6	2,664	81.1	91.0	1,311
Marital status						
Never married	na	na	na	82.7	90.1	1,317
Currently married	70.7	91.3	6,454	84.6	91.3	2,170
Divorced/separated/ widowed	65.0	87.6	410	(70.9)	(90.4)	31
Residence						
Urban	72.0	92.9	2,113	87.8	93.6	968
Rural	69.6	90.3	4,751	82.3	89.7	2,549
Division						
Barisal	83.7	93.3	433	89.4	93.7	185
Chittagong	65.4	89.4	1,207	83.8	92.0	602
Dhaka	68.1	92.3	2,388	79.8	89.4	1,135
Khulna	74.0	89.5	1,014	89.7	90.4	525
Rajshahi	71.9	91.4	1,495	85.3	92.4	838
Sylhet	69.1	89.9	327	80.1	87.2	232
Education						
No education	64.1	88.4	1,749	76.7	86.4	647
Primary incomplete	67.1	89.0	1,385	79.4	88.2	878
Primary complete	70.1	91.2	722	85.2	87.9	308
Secondary incomplete	73.5	92.7	2,194	84.5	93.0	994
Secondary complete or higher	81.2	96.4	814	94.2	96.4	691
Wealth index						
Lowest	67.2	87.4	659	74.4	87.2	438
Second	64.0	86.5	1,021	78.8	84.8	617
Middle	69.7	89.5	1,332	83.3	90.1	699
Fourth	70.4	92.5	1,730	84.5	93.4	807
Highest	74.8	94.4	2,123	91.0	94.7	956
Total	70.4	91.1	6,864	83.8	90.8	3,517

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

The 2004 BDHS respondents who are currently married were asked whether they ever discussed HIV/AIDS prevention with their spouse. It seems that only a few currently married men (24 percent) and

fewer women (14 percent) discussed HIV/AIDS prevention with their spouse (Table 12.5). Urban residents, those with higher education, and those who come from the wealthiest households are most likely to have discussed HIV/AIDS prevention methods with their spouse. It may appear that since the 1999-2000 BDHS, spousal discussion of HIV/AIDS prevention methods has decreased for both currently married women and men; however, the results are not directly comparable because Table 12.5 is based on all currently married respondents while the corresponding tables in the 1999-2000 BDHS were based on currently married women and currently married men who had knowledge of HIV/AIDS. The adjusted 2004 BDHS results for knowledge of HIV/AIDS indicate that since 1999-2000, spousal discussion has remained virtually unchanged for currently married women and has increased by more than 40 percent for currently married men.[3]

Table 12.5 Discussion of HIV/AIDS with spouse

Percent distribution of women and men who are currently married by whether they ever discussed HIV/AIDS prevention methods with their spouse, according to background characteristics, Bangladesh 2004

Background characteristic	Women				Men			
	Ever discussed HIV/AIDS prevention methods	Never discussed HIV/AIDS prevention methods	Has not heard of AIDS	Number of currently married women	Ever discussed HIV/AIDS prevention methods	Never discussed HIV/AIDS prevention methods	Has not heard of AIDS	Number of currently married men
Age								
10-14	7.2	53.8	38.9	145	na	na	na	na
15-19	16.5	54.8	28.7	1,536	(38.8)	(49.2)	(12.1)	28
20-24	18.5	51.1	30.4	2,121	20.0	68.1	11.9	221
25-29	15.9	46.5	37.6	1,935	29.7	54.6	15.7	401
30-39	13.2	43.5	43.4	2,992	25.8	54.8	19.5	939
40-49	8.7	39.5	51.9	1,852	21.9	50.9	27.2	952
50-54	na	na	na	na	16.8	51.3	31.8	240
15-24	17.7	52.6	29.7	3,657	22.1	66.0	11.9	249
Residence								
Urban	21.7	61.2	17.1	2,372	30.5	60.6	8.9	655
Rural	12.2	42.4	45.3	8,210	21.9	52.1	26.0	2,125
Division								
Barisal	14.9	45.9	39.1	674	27.4	50.3	22.3	146
Chittagong	10.0	50.2	39.8	1,877	20.4	58.0	21.7	422
Dhaka	16.0	51.5	32.5	3,315	26.0	55.6	18.5	866
Khulna	17.5	56.9	25.6	1,296	26.8	64.0	9.2	384
Rajshahi	13.9	37.0	49.1	2,782	21.4	48.5	30.0	805
Sylhet	13.6	33.0	53.4	638	24.7	44.0	31.3	157
Education								
No education	5.9	31.3	62.8	4,187	12.8	47.9	39.3	866
Primary incomplete	10.0	49.7	40.3	2,176	16.8	58.1	25.1	831
Primary complete	15.4	56.0	28.7	958	32.5	59.3	8.2	209
Secondary incomplete	23.5	62.9	13.5	2,457	32.4	59.7	7.9	504
Secondary complete or higher	41.1	57.4	1.5	804	49.5	49.1	1.4	370
Wealth index								
Lowest	4.5	24.4	71.1	2,042	11.7	46.1	42.2	552
Second	8.1	36.7	55.2	2,112	14.9	52.9	32.2	599
Middle	11.9	48.1	40.0	2,112	23.9	56.2	19.9	555
Fourth	19.1	56.6	24.4	2,168	30.4	57.9	11.6	520
Highest	27.6	66.0	6.4	2,148	39.7	57.7	2.5	554
Total	14.4	46.6	39.0	10,582	23.9	54.1	22.0	2,780

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

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[3] The adjusted percentages of currently married women and currently married men with knowledge of HIV/AIDS who had communication about HIV/AIDS with their spouse are 23.6 and 30.6, respectively.

12.4 AWARENESS, PREVALENCE, AND TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS

Tables 12.6.1 and 12.6.2 show the percentage of ever-married women and all men, respectively, who know of the signs and symptoms of sexually transmitted infections (STIs) other than HIV/AIDS, according to background characteristics. Knowledge of STI symptoms among ever-married women and currently married men has not changed much since 1999-2000. Ninety-four percent of women and 78 percent of currently married men do not have any knowledge of STIs. Ignorance about the symptoms of STI is higher among never-married men than among formerly and currently married men. Knowledge of STIs is highest among men and women who have completed secondary education (38 and 19 percent, respectively).

Table 12.6.1 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 2004

Background characteristic	No knowledge of STIs	Knowledge of symptoms of STIs in a man			Knowledge of symptoms of STIs in a woman			Number of ever-married women
		No symptoms	One symptom	Two or more symptoms	No symptoms	One symptom	Two or more symptoms	
Age								
10-14	94.3	4.3	0.0	1.4	4.3	0.2	1.2	150
15-19	96.4	2.4	0.5	0.7	2.4	0.3	0.9	1,598
20-24	93.6	3.7	1.1	1.6	3.5	1.4	1.5	2,202
25-29	92.7	4.0	0.9	2.3	3.7	1.0	2.6	2,013
30-39	93.4	3.0	1.3	2.3	2.9	1.0	2.7	3,251
40-49	92.3	3.9	1.2	2.6	3.9	1.2	2.6	2,227
15-24	94.8	3.1	0.9	1.2	3.0	1.0	1.2	3,800
Marital status								
Currently married	93.5	3.4	1.1	2.0	3.3	1.0	2.1	10,582
Divorced/separated/widowed	93.8	3.0	1.1	2.1	3.0	0.8	2.4	858
Residence								
Urban	90.3	5.0	1.3	3.4	4.9	1.4	3.4	2,586
Rural	94.5	2.9	1.0	1.6	2.8	0.9	1.8	8,854
Division								
Barisal	89.3	5.3	1.5	3.9	4.7	1.7	4.3	719
Chittagong	94.6	3.4	0.8	1.2	3.1	0.7	1.6	2,041
Dhaka	92.2	4.4	1.3	2.1	4.1	1.3	2.4	3,570
Khulna	92.8	3.8	0.8	2.6	4.1	0.9	2.3	1,397
Rajshahi	95.9	1.8	1.0	1.3	1.9	0.9	1.3	2,994
Sylhet	93.0	2.6	1.1	3.2	2.7	0.7	3.6	719
Education								
No education	96.7	1.4	0.6	1.2	1.5	0.5	1.3	4,713
Primary incomplete	95.1	2.4	0.9	1.5	2.6	0.8	1.5	2,348
Primary complete	92.1	4.3	1.1	2.5	4.2	1.0	2.8	1,011
Secondary incomplete	90.8	5.6	1.2	2.4	5.3	1.3	2.6	2,541
Secondary complete or higher	81.1	9.6	3.5	5.8	8.1	3.8	6.9	827
Wealth index								
Lowest	97.4	1.2	0.7	0.7	1.2	0.5	0.8	2,279
Second	96.9	1.6	0.6	1.0	1.7	0.3	1.1	2,290
Middle	93.8	3.2	1.1	2.0	3.0	1.1	2.2	2,267
Fourth	91.5	4.3	1.2	3.0	4.3	1.3	2.9	2,307
Highest	88.2	6.7	1.7	3.4	6.3	1.8	3.7	2,297
Total	93.5	3.4	1.1	2.0	3.3	1.0	2.1	11,440

Table 12.6.2 Knowledge of signs and symptoms of STIs: men

Percent distribution of men by knowledge of signs and symptoms associated with sexually transmitted infections (STIs) other than HIV/AIDS, according to background characteristics, Bangladesh 2004

Background characteristic	No knowledge of STIs	Knowledge of symptoms of STIs in a man			Knowledge of symptoms of STIs in a woman			Number of men
		No symptoms	One symptom	Two or more symptoms	No symptoms	One symptom	Two or more symptoms	
Age								
10-14	92.3	4.3	1.2	2.1	6.0	0.7	0.9	822
15-19	87.9	4.2	2.7	5.2	8.2	1.7	2.3	660
20-24	79.2	7.1	3.4	10.3	12.8	2.6	5.3	589
25-29	76.0	6.8	5.0	12.2	13.8	3.7	6.5	1,026
30-39	77.0	7.1	3.5	12.4	12.7	3.5	6.8	957
40-49	79.7	4.6	4.6	11.2	10.5	3.6	6.2	242
15-24	90.3	4.3	1.9	3.5	7.0	1.1	1.5	1,482
Marital status								
Never married	88.1	4.8	2.1	5.0	8.6	1.3	1.9	1,474
Currently married	78.4	6.5	4.0	11.1	12.2	3.2	6.1	2,780
Divorced/separated/widowed	(87.0)	(2.6)	(7.8)	(2.6)	(2.6)	(7.8)	(2.6)	43
Residence								
Urban	72.0	8.8	4.7	14.5	17.8	3.3	6.9	1,042
Rural	85.0	5.0	2.9	7.1	8.7	2.4	3.9	3,255
Division								
Barisal	75.5	7.5	3.8	13.2	15.6	3.8	5.1	225
Chittagong	82.6	7.3	2.5	7.6	12.6	1.6	3.1	739
Dhaka	80.0	5.2	4.8	10.0	11.8	3.2	5.0	1,342
Khulna	79.4	7.5	2.1	11.0	10.7	3.0	6.9	573
Rajshahi	84.5	5.4	3.3	6.8	8.6	2.3	4.5	1,114
Sylhet	87.3	3.7	1.4	7.7	7.7	1.9	3.0	304
Education								
No education	89.8	4.1	2.2	3.8	6.8	1.0	2.4	1,057
Primary incomplete	86.7	3.8	3.1	6.5	8.3	1.8	3.1	1,152
Primary complete	84.5	5.5	2.0	8.0	8.9	2.9	3.7	345
Secondary incomplete	80.9	6.4	3.9	8.8	12.2	2.9	4.0	1,045
Secondary complete or higher	61.7	11.6	5.5	21.2	20.4	5.9	12.1	698
Wealth index								
Lowest	90.0	3.2	2.0	4.8	5.5	1.6	3.0	717
Second	88.4	4.7	2.4	4.5	8.1	1.0	2.5	869
Middle	84.3	5.8	4.6	5.4	10.8	2.3	2.7	846
Fourth	80.2	5.9	2.8	11.2	10.9	3.4	5.6	892
Highest	69.3	9.1	4.7	16.8	17.4	4.5	8.7	973
Total	81.8	5.9	3.4	8.9	10.9	2.6	4.7	4,297

Note: Figures in parentheses are based on 25-49 unweighted cases.

Information about the incidence of STIs is not only useful as a marker of unprotected sexual intercourse, but also as a cofactor for HIV transmission. The 2004 BDHS asked women for information on specific gynecological health problems that they had during the six months preceding the survey. Men were asked whether they had an STI in the 12 months preceding the survey or whether they had some specific symptoms related to an STI. Since information on health problems is based on self-reports rather than clinical tests or examinations, the results should be interpreted with caution.

Table 12.7 shows the prevalence of gynecological health problems experienced by currently married women, according to their background characteristics. The prevalence is estimated from the self-reported experience with each of the following problems in the past six months: itching or irritation on/around genitals, genital sore, bad odor with discharge, abdominal pain with discharge (not related to menstruation), vaginal discharge accompanied by fever, pain and burning while urinating or frequent or difficult urination, painful intercourse, and bleeding after intercourse. One in five currently married women reported having had each of

Table 12.7 Gynecological health problems

Percentage of currently married women self-reporting gynecological health problems during the six months preceding the survey, by specific problem and background characteristics, Bangladesh 2004

| Background characteristic | Percentage of women with: | | | | | | | | | | Number of currently married women |
	Itching or irritation on/around genitals	Genital sore/ulcer	Bad odor with discharge	Abdominal pain with discharge	Vaginal discharge with fever	Urinating problem	Pain during intercourse	Bleeding after intercourse	Other problem	Any problem	
Age											
10-14	13.5	2.7	3.3	17.6	3.4	12.2	24.2	4.2	1.3	42.1	145
15-19	18.2	6.1	4.7	16.4	6.2	16.6	17.6	1.3	2.3	41.0	1,536
20-24	20.0	6.1	3.7	17.9	7.2	17.5	15.0	1.0	3.1	41.2	2,121
25-29	21.4	6.8	3.8	20.3	8.3	20.8	15.3	0.6	3.2	42.7	1,935
30-39	20.8	7.5	5.2	20.7	9.2	22.8	13.3	1.3	4.0	43.1	2,992
40-49	18.8	6.0	4.2	17.4	6.7	21.7	10.0	0.9	3.0	38.9	1,852
15-24	19.3	6.1	4.2	17.2	6.8	17.1	16.1	1.1	2.8	41.1	3,657
Residence											
Urban	19.8	5.7	3.9	18.2	6.4	18.2	13.7	1.3	4.4	40.7	2,372
Rural	19.9	6.8	4.5	19.0	8.0	20.7	14.4	1.0	2.9	41.8	8,210
Division											
Barisal	26.7	13.2	10.0	25.1	10.0	24.9	17.6	0.7	3.0	48.5	674
Chittagong	24.0	8.5	3.8	22.8	9.7	23.8	16.7	1.0	3.7	46.0	1,877
Dhaka	20.0	5.9	3.7	18.1	7.0	20.9	13.6	1.1	3.7	42.0	3,315
Khulna	18.9	6.0	4.3	20.0	6.3	18.2	17.0	1.3	3.5	43.1	1,296
Rajshahi	15.7	4.4	4.1	14.2	6.8	17.2	11.3	1.3	2.7	35.7	2,782
Sylhet	20.6	7.5	5.2	21.8	9.7	16.9	13.5	0.8	1.6	41.1	638
Education											
No education	19.2	6.4	4.6	19.5	8.6	21.8	12.2	1.1	3.2	41.0	4,187
Primary incomplete	21.5	8.2	5.2	20.6	9.7	23.3	16.6	1.5	3.9	45.1	2,176
Primary complete	18.2	5.4	3.9	19.0	6.7	17.4	13.7	0.7	2.5	37.8	958
Secondary incomplete	20.8	6.4	4.2	17.5	6.0	17.2	16.0	1.1	2.8	42.2	2,457
Secondary complete or higher	18.7	4.9	2.7	14.3	3.8	14.6	13.0	0.3	3.4	37.9	804
Wealth index											
Lowest	21.2	8.4	5.8	20.2	9.9	22.4	15.3	1.3	2.4	42.8	2,042
Second	19.9	6.5	4.4	19.0	8.3	21.1	13.8	1.3	2.8	42.0	2,112
Middle	19.6	7.3	4.9	19.5	8.5	21.6	15.8	1.0	3.8	42.7	2,112
Fourth	20.4	5.4	3.8	19.0	7.3	19.6	13.7	1.1	3.2	41.7	2,168
Highest	18.5	5.2	3.2	16.4	4.5	16.1	12.5	0.9	3.8	38.7	2,148
Total	19.9	6.5	4.4	18.8	7.7	20.1	14.2	1.1	3.2	41.6	10,582

the following three problems: itching or irritation on/around genitals, urinating problem, and abdominal pain with discharge in the six months preceding the survey. Eight percent reported vaginal discharge with fever. Reproductive health problems are somewhat less common: 14 percent of women reported having pain during intercourse, and 7 percent reported genital sores or ulcers. Overall, four out of ten women reported having one or more gynecological health problems in the six months preceding the survey. Differentials in the proportion who reported having a gynecological health problem or reproductive health problem are muted, with only slightly higher levels among women living in Barisal and Chittagong divisions.

Women who had at least one gynecological health problem were asked, "Have you seen anyone for advice or treatment to help you with (this/these) problem(s)?" Among women who reported a gynecological health problem, six in ten did not see anyone for advice or treatment (Table 12.8). Women seeking advice or treatment are practically the same proportion in urban areas and rural areas—around four in ten women. The main sources for advice or treatment were health facilities or trained providers (22 percent), followed by traditional doctors (11 percent). Urban women were more likely than rural women to seek advice from a health facility or a medically trained provider.

Table 12.8 Women seeking treatment for gynecological health problems

Among currently married women reporting gynecological health problems in the six months preceding the survey, the percentage who sought advice or treatment by source, according to residence, Bangladesh 2004

| Source of advice or treatment | Residence | | Total |
	Urban	Rural	
No one	56.8	60.5	59.7
Facility/trained provider	29.5	19.6	21.8
Traditional doctor	6.7	12.2	11.0
Pharmacy	4.8	4.5	4.5
Other	3.7	5.5	5.1
Total	964	3,434	4,398

Although only 2 percent of the men who ever had sex reported that they had an STI in the 12 months preceding the survey, almost one in five men had one of the following signs of STI—discharge from penis, sore or ulcer on penis, or pain or burning during urination. Almost one in eleven men had an STI or discharge from the penis or a sore or ulcer on the penis (Table 12.9). The proportion of men who reported having an STI or any of the symptoms of a probable STI decreases steadily with age. By marital status, the highest infection rates are reported by never-married men who ever had sex and the lowest by those who are currently married. One in three never-married men who ever had sex had an STI or related symptoms in the 12 months preceding the survey; the most commonly reported problems were pain during urination (27 percent) and sore or ulcer on penis (20 percent). Rural residents, compared with urban residents, and those living in Barisal, compared with those living in other divisions, are more likely to report having had an STI or a related symptom. By education, the highest infection rates are reported by men who have no education or have not completed primary education. The proportion of men who reported having had an STI or a related symptom is almost double among men in the lowest wealth quintile (24 percent), compared with men in the highest quintile of the wealth index (13 percent).

Table 12.9 Self-reporting (men) of sexually transmitted infections (STIs) and STI symptoms

Among men who have ever had sex, percentage self-reporting having an STI and/or symptoms of an STI in the 12 months preceding the survey, by background characteristics, Bangladesh 2004

Background characteristic	Percentage of men who had:						Number of men who ever had sex
	STI	Discharge from penis	Sore or ulcer on penis	Pain or burning sensation during urination	Had STI or discharge from penis or sore or ulcer on penis	Had STI or any symptoms	
Age							
15-19	4.2	10.2	23.9	28.9	29.7	40.0	135
20-24	3.7	3.1	11.6	23.9	13.9	26.1	320
25-29	2.2	2.7	6.4	19.0	8.7	21.8	487
30-39	1.9	2.4	5.2	13.7	7.3	16.3	980
40-49	2.1	1.7	4.0	13.2	6.4	15.9	956
50-54	0.8	0.8	2.7	10.2	3.6	12.0	242
15-24	3.9	5.2	15.3	25.4	18.6	30.2	454
Marital status							
Never married	4.9	7.1	19.5	27.3	22.9	33.1	297
Currently married	1.9	2.0	4.9	14.5	7.1	17.1	2,780
Divorced/separated/widowed	(2.2)	(3.7)	(6.8)	(23.8)	(24.8)	(24.8)	43
Residence							
Urban	1.6	2.1	4.7	12.0	6.7	14.2	732
Rural	2.4	2.6	6.8	17.0	9.2	20.1	2,388
Division							
Barisal	6.2	4.1	11.7	20.1	15.7	26.1	166
Chittagong	1.6	3.6	9.9	18.2	13.1	21.0	477
Dhaka	2.1	2.4	5.3	14.3	7.4	17.7	970
Khulna	1.9	1.3	5.3	15.6	6.8	18.6	431
Rajshahi	1.7	1.7	4.9	14.8	6.7	16.6	875
Sylhet	3.2	4.9	6.6	19.0	10.1	21.6	200
Education							
No education	1.4	2.8	5.9	16.7	8.0	20.0	912
Primary incomplete	3.4	3.3	8.0	18.9	11.0	21.9	916
Primary complete	2.0	2.0	6.9	9.2	10.1	13.2	241
Secondary incomplete	1.3	1.8	5.3	16.3	7.4	18.1	607
Secondary complete or higher	2.6	1.4	4.6	10.7	5.8	13.5	444
Wealth index							
Lowest	2.9	3.5	8.0	19.9	11.2	24.1	588
Second	1.7	3.2	7.3	17.3	8.0	20.1	657
Middle	1.9	1.9	6.2	15.8	9.6	18.1	629
Fourth	3.5	2.8	6.5	16.2	9.4	19.2	590
Highest	1.1	1.2	3.7	10.5	5.1	12.9	655
Total	2.2	2.5	6.3	15.8	8.6	18.7	3,120

Note: Figures in parentheses are based on 25-49 unweighted cases.

Men who reported having an STI or any of the three symptoms of STIs were asked if they sought advice or treatment from each of the following health care providers: health worker, traditional healer, pharmacy, or homeopath. In addition, they were asked if they had asked for advice from friends or relatives.

Table 12.10 shows the percentage of men seeking advice or treatment for STIs or symptoms of an STI, by residence. Forty-four percent of men who reported having had an STI or STI-related symptoms sought neither advice nor treatment. Men were most likely to seek advice from a health worker in urban areas (32 percent) and from a traditional healer and/or pharmacy (26 percent) in rural areas. About one in four men in both urban and rural areas sought advice or treatment from a pharmacy.

Table 12.10 Men seeking treatment for sexually transmitted infections (STIs)

Among men reporting an STI or symptoms of an STI in the 12 months preceding the survey, the percentage who sought advice or treatment from specific sources, by residence, Bangladesh 2004

| Source of advice or treatment | Residence | | |
	Urban	Rural	Total
No one	46.4	43.0	43.6
Health worker	31.6	20.4	22.4
Traditional healer	14.0	26.0	23.8
Pharmacy	24.9	25.7	25.6
Homeopath	15.7	14.7	14.9
Friends/relatives	11.4	14.3	13.8
Total	104	481	584

COMMUNITY CHARACTERISTICS

13

This chapter includes the findings from a Service Availability survey conducted by a separate team of interviewers as part of the 2004 Bangladesh DHS survey. The Service Availability survey, which was implemented prior to the main survey, was carried out in each of the sample points (communities) selected for the main survey.

Data in the Service Availability survey were collected on characteristics of the selected sample points (e.g., distance to upazila headquarters, school, post office, etc.) as well as on the accessibility of health and family planning services that are available either within or near the sample point. The other reasons for conducting the Service Availability survey were to generate a list of facilities available in the sample area and a list of health and family planning fieldworkers who cover the area, including identification of affiliation (government versus non-government). These lists were later supplied to the interviewing teams for the main survey to help identify the specific source of services used by respondents.

Data about a sample point were collected by administering a community questionnaire to a group of residents in the sample point. The informants mostly included the chairman or members of the union council, the ward commissioner, village/mahallah heads, male teachers, imams, and female opinion leaders. Distance to facilities was measured from the center of each sample point; all interviewed women in the sample point were assumed to be the same distance from the facility.

Table 13.1 presents the distribution of ever-married women by distance to various services. About 90 percent of rural women have geographical access to a daily market, weekly market, post office, and telephone service within 5 kilometers of their residence. Accessibility to these services is slightly higher for urban women.

More than 90 percent of women live in a village/mahallah where there is a primary school, and almost all have access to a primary school within 5 kilometers (Table 13.2). Access to a high school is more limited; however, about 95 percent of women have access to at least a coeducational high school within 5 kilometers. Religious schools are also widespread in Bangladesh. About 58 percent of the women live in a mahallah/village that has a madrasha. Urban women are more likely to have a high school or madrasha nearby, compared with rural women.

Table 13.3 shows the availability of various income-generating organizations such as BRAC, ASHA, the Grameen Bank, and PROSHIKA, by residence. Non-governmental organizations (NGOs) are widespread in Bangladesh; more than three-fourths of women live in areas that have BRAC income-generating activities, followed by Grameen Bank (60 percent), ASHA (51 percent), other NGOs (48 percent), and PROSHIKA (36 percent). Forty-one percent of women live in areas where a cooperative society is functioning. Very few women live in areas with cottage industries. More rural than urban women have access to BRAC and Grameen Bank, while the reverse is true for ASHA, voluntary organizations, mother's clubs or ladies' associations, cooperative societies, cottage industries, and PROSHIKA.

Table 13.1 Distance to nearest general services

Percent distribution of ever-married women by distance to nearest specified service, according to type of service, Bangladesh 2004

Residence and distance to nearest service	Type of service						
	Upazila headquarters	District headquarters	Daily market	Weekly market	Telephone service	Post office	Cinema hall
Urban							
Less than one km or mile	na	4.1	61.9	na	6.5	41.3	17.3
<5 km	na	26.1	35.8	na	93.5	51.7	59.0
5-9 km	na	12.8	1.0	na	0.0	7.0	12.9
≥10 km	na	53.3	0.8	na	0.0	0.0	7.2
Don't know/missing	na	3.7	0.5	na	0.0	0.0	3.6
Total	na	100.0	100.0	na	100.0	100.0	100.0
Number of women	na	2,586	2,586	na	2,586	2,586	2,586
Median distance	na	14.4	u	na	1.6	2.3	3.3
Rural							
Less than one km or mile	0.3	0.0	42.2	32.9	8.0	29.6	2.0
<5 km	14.0	2.0	46.3	52.7	84.3	62.1	21.4
5-9 km	25.7	3.2	6.4	9.1	5.3	6.1	28.6
≥10 km	50.1	88.0	3.3	2.8	1.1	0.9	41.9
Don't know/missing	9.9	6.8	1.9	2.5	1.4	1.4	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8,854	8,854	8,854	8,854	8,854	8,854	8,854
Median distance	11.0	35.3	2.2	2.6	2.9	2.6	8.9
Total							
Less than one km or mile	na	0.9	46.6	na	7.6	32.2	5.4
<5 km	na	7.5	43.9	na	86.4	59.7	29.9
5-9 km	na	5.4	5.2	na	4.1	6.3	25.1
≥ 10 km	na	80.1	2.7	na	0.9	0.7	34.1
Don't know/missing	na	6.1	1.6	na	1.1	1.1	5.5
Total	na	100.0	100.0	na	100.0	100.0	100.0
Number of women	na	11,440	11,440	na	11,440	11,440	11,440
Median distance	na	32.3	1.6	na	2.8	2.6	8.2

na = Not applicable
u = Unknown; median distance cannot be calculated because more than 50 percent of cases are in the category "less than one km or mile."

Table 13.2 Distance to nearest education facilities

Percent distribution of ever-married women by distance to the nearest education facility, according to type of facility, Bangladesh 2004

Residence and distance to the nearest education facility	Education facility				
	Madrasha[1]	Primary school	Boys high school	Girls high school	Coeduca- tional high school
Urban					
Within mahallah	64.1	88.5	28.1	31.5	57.9
<5 km	34.2	11.5	52.3	54.3	37.6
5-9 km	1.7	0.0	4.7	6.7	4.5
≥10 km	0.0	0.0	9.0	4.2	0.0
Don't know/missing	0.0	0.0	5.9	3.3	0.0
Total	100.0	100.0	100.0	100.0	100.0
Number of women	2,586	2,586	2,586	2,586	2,586
Median distance	u	u	2.9	2.8	u
Rural					
Within village	56.1	91.9	3.1	9.7	41.3
<5 km	36.9	7.7	18.0	35.0	51.9
5-9 km	5.5	0.0	17.8	23.5	6.2
≥10 km	1.2	0.0	53.9	27.2	0.0
Don't know/missing	0.3	0.4	7.3	4.5	0.5
Total	100.0	100.0	100.0	100.0	100.0
Number of women	8,854	8,854	8,854	8,854	8,854
Median distance	u	u	11.8	6.6	2.2
Total					
Within village or mahallah	57.9	91.2	8.8	14.7	45.1
<5 km	36.3	8.5	25.7	39.4	48.7
5-9 km	4.6	0.0	14.8	19.7	5.8
≥10 km	0.9	0.0	43.7	22.0	0.0
Don't know/missing	0.2	0.3	6.9	4.2	0.4
Total	100.0	100.0	100.0	100.0	100.0
Number of women	11,440	11,440	11,440	11,440	11,440
Median distance	u	u	10.0	5.6	2.1

[1] Religious school
u = Unknown; median distance cannot be calculated because more than 50 percent of cases are in the categories "within village" and "within mahallah."

Table 13.3 Availability of income-generating organizations

Percentage of ever-married women who have access to specific income-generating organizations, by residence, Bangladesh 2004

Income-generating organization	Residence		
	Urban	Rural	Total
Mother's club or ladies' association	27.8	9.6	13.8
Grameen Bank	46.9	63.3	59.6
Voluntary organization	34.4	11.2	16.5
BRAC income-generating activities	70.2	77.3	75.7
PROSHIKA	49.0	31.8	35.7
ASHA	64.4	46.7	50.7
Cottage industries of BSIC	16.2	3.6	6.5
Cooperative society	44.6	39.6	40.7
Other NGO income-generating activities	47.4	47.5	47.5
Number of women	2,586	8,854	11,440

BSIC = Bangladesh Small Industries Corporation

Health and family planning services are available to a majority of women in Bangladesh. Table 13.4 provides information on the presence of family planning depot holders, shops that sell family planning methods, and satellite clinics, by residence. Almost 90 percent of the women live in villages/mahallahs where satellite clinics are held. Among these women, 83 percent live in villages/mahallahs with clinics that provide oral pills, 73 percent have access to clinics that distribute condoms, and 56 percent of women have access to clinics that provide injectables as a family planning method. Only 11 percent of these women have access to clinics that provides IUD insertion. Compared with 1999-2000, availability of injectables and IUDs through satellite clinics seems to have declined in 2004. In areas covered by satellite clinics, almost all women can get child immunization services and vitamin A supplies.

Almost two-thirds of the women have access to pharmacies or shops that sell family planning methods in the village/mahallah where they live. Urban women are much more likely to have a pharmacy or shop nearby, compared with rural women. About one in eight women live in areas where there is a depot holder selling family planning methods.

Table 13.4 Availability of family planning and health services

Percentage of ever-married women who have access to specific family planning (FP) and health services, by residence, Bangladesh 2004

Family planning or health service	Residence		
	Urban	Rural	Total
Depot holder who sells FP methods	17.9	11.9	13.3
Shop that sells FP methods	77.8	58.5	62.8
Satellite clinic	91.9	85.5	87.0
Number of women	2,586	8,854	11,440
Of those with satellite clinic, percentage with clinic supplying			
Family planning education	75.8	75.1	75.3
Pills	81.3	83.6	83.0
IUD insertion	10.3	11.2	10.9
Injectables	61.3	53.9	55.7
Condoms	74.6	72.8	73.3
Menstrual regulation	9.6	6.0	6.9
Antenatal care	68.2	58.1	60.5
Delivery care	18.0	7.2	9.8
Postpartum care	41.4	36.1	37.4
Child immunization	96.7	99.0	98.5
Growth monitoring	48.8	38.7	41.1
Treatment of sick children	47.7	35.1	38.1
Oral rehydration therapy	69.3	63.3	64.8
Health education	77.1	67.4	69.7
Vitamin A	99.4	97.6	98.1
National immunization day (NID)	97.5	95.1	95.7
Number of women with access to satellite clinic	2,378	7,571	9,949

As Table 13.5 shows, 92 percent of ever-married women live in areas where child immunization is available within one kilometer, while 76 percent of women can get an ORS packet within one kilometer. Not all family planning methods are equally available. Supplies of methods such as

contraceptive pills and condoms are more readily available than are clinical methods such as injectables, IUDs, and sterilization. Eighty-four percent of women live in villages/mahallahs where both pills and condoms are available within one kilometer. Other methods are less readily available to women: injectables (49 percent), IUD (18 percent), tubectomy (7 percent), and vasectomy (6 percent). Urban women are more likely to have health and family planning services available nearby, compared with rural women.

Table 13.5 Distance to nearest health and family planning services

Percent distribution of ever-married women by distance to nearest health services and family planning services that offer specific services or supplies, Bangladesh 2004

Residence and 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								
Less than one kilometer or mile	95.7	83.0	90.3	89.3	65.9	37.0	21.7	23.2
<5 km	4.3	12.6	8.8	8.8	27.6	52.3	58.9	57.4
5-9 km	0.0	3.4	1.0	1.9	3.8	6.7	9.8	9.8
≥10 km	0.0	0.0	0.0	0.0	1.7	3.0	7.5	6.7
Don't know/missing	0.0	1.0	0.0	0.0	1.0	1.0	2.0	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,586	2,586	2,586	2,586	2,586	2,586	2,586	2,586
Median distance	u	u	u	u	u	2.4	3.0	3.0
Rural								
Less than one kilometer or mile	91.4	74.1	82.4	81.9	43.8	12.4	1.9	1.9
<5 km	7.1	19.2	13.7	13.7	26.1	33.1	21.9	23.3
5-9 km	1.5	3.4	2.6	3.1	9.7	18.1	22.0	22.0
≥10 km	0.0	1.8	0.9	0.9	14.2	27.7	44.4	43.7
Don't know/missing	0.0	1.4	0.4	0.4	6.3	8.7	9.8	9.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8,854	8,854	8,854	8,854	8,854	8,854	8,854	8,854
Median distance	u	u	u	u	2.4	6.3	10.4	10.3
Total								
Less than one kilometer or mile	92.4	76.1	84.2	83.6	48.8	18.0	6.4	6.7
<5 km	6.5	17.7	12.6	12.6	26.4	37.5	30.3	31.0
5-9 km	1.2	3.4	2.2	2.8	8.3	15.5	19.2	19.2
≥ 10 km	0.0	1.4	0.7	0.7	11.4	22.1	36.1	35.3
Don't know/missing	0.0	1.3	0.3	0.3	5.1	7.0	8.0	7.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	11,440	11,440	11,440	11,440	11,440	11,440	11,440	11,440
Median distance	u	u	u	u	1.5	5.4	8.2	8.1

u = Unknown; median distance cannot be calculated because more than 50 percent of cases are in the category "less than one kilometer or mile."

POLICY IMPLICATIONS OF THE 2004 BDHS *14*

Peter Kim Streatfield, Shams El Arifeen ,and Ahmed Al-Sabir

14.1 NATIONAL POLICY ENVIRONMENT

This discussion of the policy implications of the 2004 Bangladesh Demographic and Health Survey (BDHS) will be more relevant if set in the context of the very substantial changes that have occurred in Bangladesh since 1998 in the ways health services are expected to be delivered. The following discussion is restricted to policy and sectoral changes that are likely to have affected the indicators discussed in this report.

The late 1980s and early 1990s saw considerable progress in Bangladesh in areas of rising contraceptive prevalence, declining fertility rates, improving child survival, and indications of declining maternal mortality. However, during the Fourth Five Year Plan (Family Planning and Health Program - FPHP, 1990-1995), progress in immunization coverage, antenatal care, and control of diarrhea with oral rehydration therapy slowed, and child malnutrition remained widespread. Reviews of FPHP indicated that despite encouraging progress, poverty-related diseases, maternal mortality and morbidity, and substantial unmet need for family planning, remained as challenges for the next five-year plan. (HPSP Annual Programme Review 2005: 11).

In response to these issues, the following five-year Health and Population Sector Programme (HPSP),[1] 1998-2003 was designed with a sector-wide approach where:

- In terms of policy and strategy, the HPSP was intended to look at the sector as a whole, whether the services were run by the Government, the private sector, NGOs, or by other agencies such as community groups;

- Equally, in a sector-wide way, it was intended to consider all sources of funding, and cover a range of services (e.g., health, family planning) in an integrated way;

- Planning was intended to embrace all relevant programs as a single entity rather than have separate plans for individual projects;

- The major focus was to be on an Essential Services Package (ESP) that would benefit vulnerable groups, particularly poor women and children, and which would be delivered from facilities close to the population affected;

- The review of performance for the sector would be carried out collectively and annually.

There were some other differences as well, but the key points resulting from this major shift in the way of doing business were that:

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[1] FPHP was extended until mid-1998

- Procurement of drugs, vaccines, equipment, etc., was centralized; although some time passed before the procurement agency was adequately strengthened to deal with the very large increase in business, especially international procurement, under new procurement procedures;

- Procurement of training was centralized, rather than being project-based; although flexibility to expand capacity was limited, especially for training in ESP services;

- The formerly separate Health and Family Planning Management Information Systems (MIS) were merged, and some of the existing functioning components were stopped before the new system was operational;

- It was planned that Community Clinics (CC) would be constructed with community participation, including land donation, for every 6,000 population. They would be staffed by one female Family Welfare Assistant, and one Health Assistant (usually male), and would offer selected ESP services from the CC, with occasional outreach activities;

- It was planned to unify the Directorate of Health and the Directorate of Family Planning, from the field level on up (though not initially at the top levels), with various functions such as Behavior Change Communication (BCC), logistics, and Management Information Systems, being merged;

- The former projects were grouped together under a small number of Line Directors. Financial authority was transferred from the former Project Directors to the Line Directors.

There was a variety of consequences of these changes in the functioning of the health system. The consequences relevant to this discussion are that drug supplies were sometimes erratic, new training capacity took time to develop, outreach services were disrupted by changes to service delivery, and information was less than adequate for program managers to make decisions.

Given this unsettled environment, it is encouraging that most of the survey indicators presented in this report show virtually no deterioration during HPSP. Several have picked up subsequently, such as antenatal care, family planning, and child immunization. In the following section, the individual indicators for Bangladesh will be reviewed, with reference to other countries where appropriate, and with suggestions for future action.

14.2 FERTILITY

In October 2004, the MOHFW formulated the Bangladesh Population Policy, the finalization of efforts that began with the Population Policy Outline of 1976. Since that time, the focus on managing rapid population growth has been reflected in all successive five-year plans and programs. The current target is to reach replacement-level fertility by 2010 so as to stabilize the population at 210 million around the year 2060. This projection differs from other population projections, which estimate that the population will continue growing for another century to around 260 million (Bos et al., 1994).

After almost a decade of a fertility plateau at 3.3 children, the current survey shows a decline (borderline statistically significant) to 3.0. The question is, does it signal the resumption of the decline of the 1980s, or is it a minor drop to a new plateau.

Global comparison. At the end of the last century (1995-2000), the average TFR for the world's less developed regions had declined to 3.1 children per woman, so Bangladesh is far from alone with this fertility level. Out of 50 Asian countries, 24 had a TFR of 3 or less, and of those, 14 countries were below replacement-level fertility. But many countries have also experienced fertility declines that have slowed down, "often when fertility levels approach 3 children per women" (United Nations, 2004a: 29). India's

TFR decline stalled at a level similar to Bangladesh (3.3) at the end of the 1990s, as did Malaysia and Myanmar (3.3 to 3.5) during the 1990s.

So, is Bangladesh resuming a decline in fertility towards replacement level? Most countries that have achieved such low levels have undergone a shift in the pattern of childbearing to older ages, due to postponement of marriage and first birth, and lengthening of the birth intervals. Bangladesh appears to have undergone a steady rise in the average age at birth for second and higher birth orders. This pattern resulted when many couples adopted family planning after the first birth—the so-called "tempo effect" (Bongaarts and Feeney, 1998). But, the country has not experienced any substantial rise in age at marriage for women, nor in age at first birth (Streatfield et al., 2005). As a result, women under age 30 account for three out of four births—a higher proportion than generally found in the developing world.

This pattern of fertility in Bangladesh is due to the extremely high level of adolescent fertility, which has failed to decline over the past decade. At present, because of the young age structure of the Bangladesh population, 30 percent of all births are to teenage mothers. The adolescent fertility rate is 133 births per 1,000 women. By comparison, more than half of the Asian countries have adolescent fertility rates below 50 per 1,000 women.

This extraordinarily high level of teenage fertility is related to the pattern of early marriage in Bangladesh. The proportion of women age 15-19 who have ever been married remains about one-half (Figure 14.1). This level is the highest in Asia, and, with the exception of two African countries, is the highest among the 70 countries covered by the DHS program.

Figure 14.1 Percentage of Women Age 15-19 Ever Married

Country/Year	Percent
Sri Lanka 1987	6.9
Vietnam 1997	7.7
Philippines 1998	8.5
Cambodia 2000	12.9
Thailand 1987	17.4
Indonesia 1997	17.9
Pakistan 1990/91	24.9
India 1998/99	34.5
Nepal 2001	40.3
Bangladesh 2004	48.7
Bangladesh 1999/2000	48.1
Bangladesh 1996/1997	50.2
Bangladesh 1993/1994	49.5
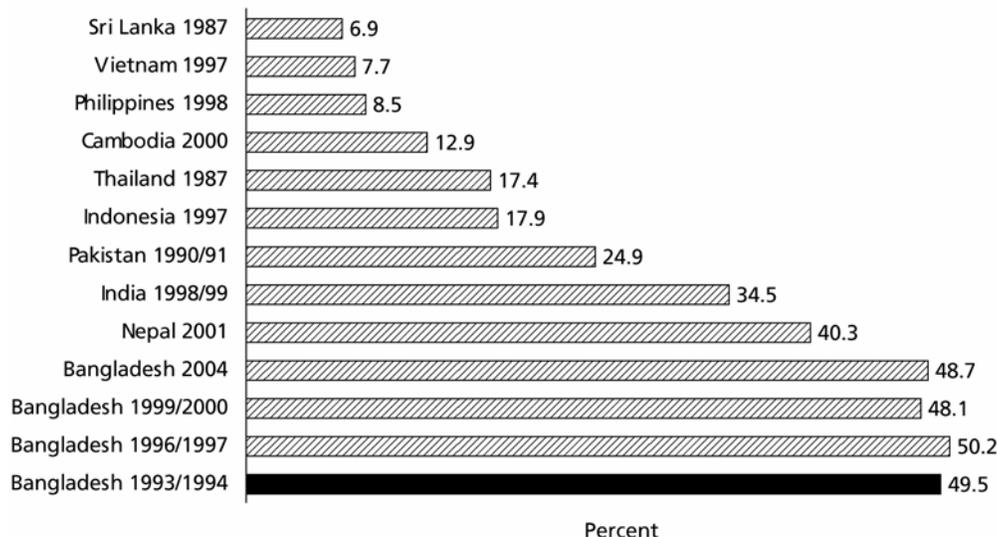
Recent data suggest that the downward trend in the proportion of young women (age 20-24) who have married before age 18—the legal minimum age for girls to marry—has reversed, rising above two-thirds again. Anecdotal information suggests that due to various types of insecurity there may be a greater urgency for parents to marry their young daughters off in the belief that marriage can provide some protection.

This resistance of adolescent fertility to change is surprising considering the major inputs over the past decade to female education (Figure 14.2), and increased urban employment opportunities for young

females. Even so, only about 6 percent of women 15-19 are in cash employment, a minimal level that is not showing any positive impact from increasing educational attainment.

The following graph shows the extraordinarily rapid growth in secondary school enrollment for girls in Bangladesh—more than a twelvefold increase in a decade. While there are concerns about classroom crowding, quality of teaching, low school completion rates, etc., the fact remains that there are as many girls enrolled in secondary school, as boys—a very different situation from a decade earlier.

Figure 14.2 Percentage of Females Age 15-19 with No Education and Percentage with at Least Some Secondary Education
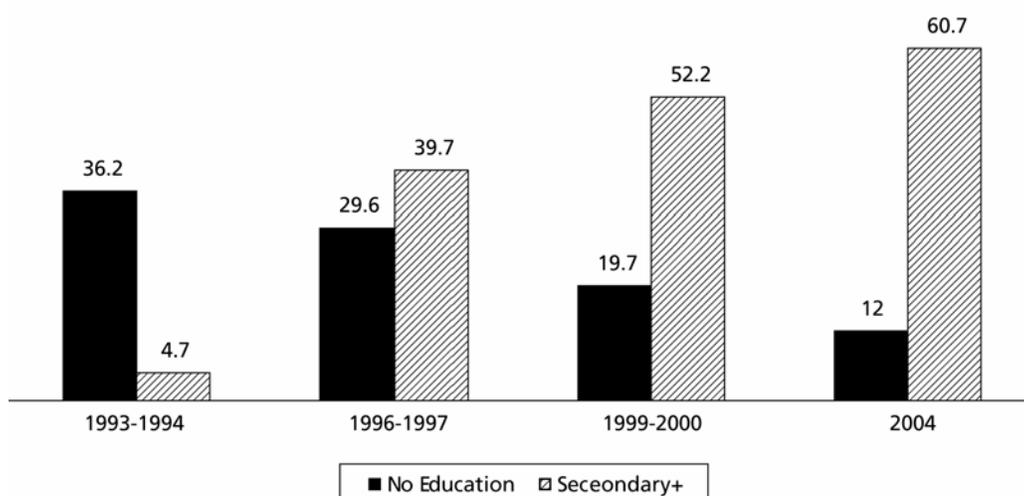
Examples of interventions that are needed to address this highly undesirable pattern of early marriage and early initiation of childbearing are:

- Communities are being encouraged to proceed with marriages without any requirements or demands for dowry;

- Community meetings are being organized to discuss the disadvantages of dowry marriages, and early marriages, in the context of increased education opportunities for girls;

- Efforts are underway to convince "matchmakers" and unofficial marriage registrars to cease endorsing early marriage (below the legal minimum age) and producing marriage certificates with falsely reported age of bride;

- Enforcement of the legal minimum age at marriage for girls is urgently needed, and would delay two out of three marriages.

In addition to increasing education opportunities, there needs to be greater effort put toward the creation of employment opportunities in rural areas for single women after they leave school. At this time, most of such employment opportunities are in urban areas, and require young women to leave their families and migrate to the cities—a process regarded as dangerous and undesirable by many families.

While large-scale employment generation in rural areas is a major challenge in most countries, and will require central Government intervention offering tax breaks and subsidized transport to manufacturers, there are other options.

One such option is broadening of the widespread microcredit facilities offered to married women in rural areas for employment or income generation. Indeed, some NGOs are now offering such facilities to single women, including one of the biggest, BRAC, with its BRAC Junior credit scheme.

In addition to efforts to delay early marriage, there are options within marriage to delay the first birth. Figure 14.3 shows that while age at marriage has risen slightly (less than 1 year) over the past decade, age at first birth has not changed; rather, the average interval between marriage and first birth has shrunk from 3.0 years to 2.4 years. This is often the pattern when age at marriage starts to rise. This decrease is also in a context of slowly rising proportions of couples using family planning before first birth (23 percent in 2004), though these are often adopting male controlled short-term methods. There is also anecdotal evidence that many couples consciously avoid hormonal contraception before their first birth.

Figure 14.3 Median Age at Marriage and Median Age at First Birth among Women Age 20-24
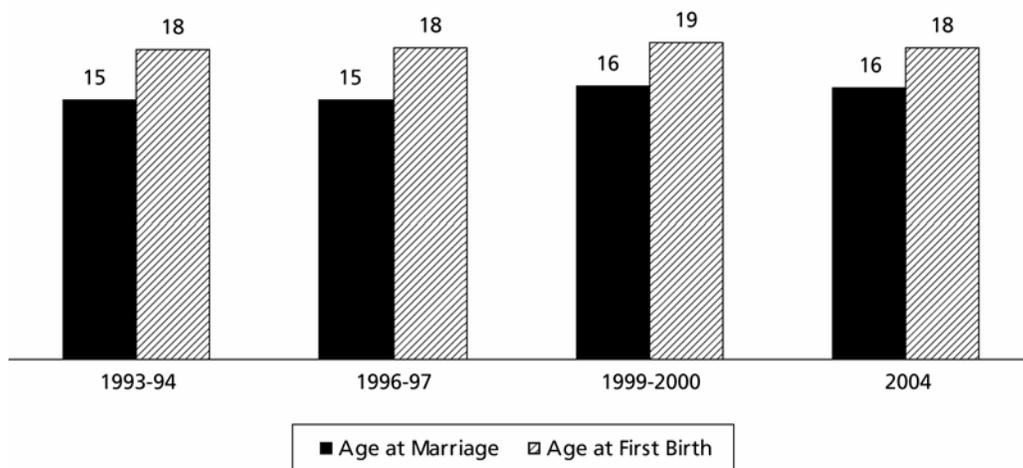
This decline in marriage-first birth interval is the reverse of the pattern amongst second and higher births, where birth intervals have increased substantially over the past decade, largely due to adoption of family planning, which will be discussed in more detail below.

14.3 FAMILY PLANNING

Over the past several decades, the contraceptive prevalence rate (CPR) in Bangladesh has been rising at a rate similar to that of many other Asian countries—about 1.5 to 1.8 percent per year, slightly less in recent years. In only a few Asian countries have contraceptive prevalence rates risen faster: Iran, Vietnam, and Pakistan, at over 2 percent per year in recent years.

Contraceptive method mix in Bangladesh shares one similarity with many other countries, namely a reliance on oral contraceptives, although elsewhere, female sterilization and IUDs account for many more users than pills. In Bangladesh, female sterilization accounts for one in twenty users, although it

> **Key Messages**
>
> • *Early marriage is still a major obstacle to fertility decline in Bangladesh. As a result, one in three births are to teenage mothers.*
>
> Greater efforts are needed to delay early marriage, and delay first births within marriage.
>
> This must include greater investment in secondary schooling and employment for single women in rural areas.

is falling, and IUD use is negligible.

Use of methods requiring male participation (condom or male sterilization) or cooperation (rhythm or withdrawal) in Bangladesh (11 percent of users) is about half the average in developing countries. The low and declining level of female sterilization in Bangladesh—half the level of the early 1990s—is of concern. The age pattern of sterilized women reflects high acceptance rates in the 1980s, at an average age of 27 years, and these women are now in their 40s, and are not being replaced by new acceptors in any significant numbers.

In developing countries, the IUD ranks as the second most popular contraceptive method. But in Bangladesh, because of a tendency for women to avoid clinical methods, this is not the case. The current IUD level of 0.6 percent for couples is about the same as when the family planning program began three decades ago. Indeed, even Norplant, which is used by less than 1 percent of couples, now exceeds the IUD in prevalence, even though it is a type of clinical method.

It is encouraging that recent efforts to increase acceptance of long-term clinical methods appear to be succeeding. The Ministry of Health and Family Welfare devised a strategy, with the assistance of EngenderHealth, to provide training, upgrading of facilities, and motivation at individual and community level, including religious leaders, and numbers of acceptors of both male and female sterilization have been increasing impressively to more than 6,000 monthly. This is one of the first signs of a reversal of the disturbing declines of the past decade. However, with 22 million couples of reproductive age, a 1 percent increase in CPR requires over 200,000 additional users. Efforts to increase use of Norplant and injectables should be promoted, as both are less invasive and less susceptible to access barriers than sterilization.

One of the major controversial aspects of HPSP was the proposed transition from outreach or domiciliary family planning services to static community clinics (CCs). In the confusion surrounding this issue, the public sector lost a substantial share of family planning service provision, very little of which was picked up by the CCs. Household visits for family planning by GOB fieldworkers have fallen dramatically since the mid-1990s. However, CPR has not fallen, suggesting that demand for family planning is no longer fragile in Bangladesh. In the reduction in household visits by GOB workers, many couples switched to private outlets (especially pharmacies), and less so to NGOs.

There are still 'low-performing' areas of the country where a proportion of GOB fieldworker posts remain vacant long-term. The Government needs to recognize difficulties in recruitment and retention in these areas, and consider alternative approaches to provision of services. For example, contracting out family planning service provision at the community level is being piloted by the MOHFW. Further involvement of the NGO and private sectors should be considered to bring these areas in the north and east of the country up to the levels of the rest of the country.

This experience suggests a reassessment of the role of GOB fieldworkers who were formerly responsible for carrying out household visits. It could be that they would be more effectively utilized for BCC activities, for motivation of pregnant women to make ANC visits, for nutrition activities, for

> ## Key Messages
>
> - ***Longer-term and clinical family planning methods are almost nonexistent now.***
>
> Global experience indicates sustainable and high CPR must have substantial reliance on long-term, clinical methods.
>
> - ***The role of family planning fieldworkers changed away from doorstep delivery recently, but CPR continued to rise.***
>
> It is time to reassess the role of FWAs regarding motivation and referral for long-term and clinical methods, rather than delivering pills and condoms.
>
> The FWAs can potentially play an important role in motivating couples for sound safe mother-hood practices, such as using antenatal care, facility delivery, and postnatal care. They can also convey behavior change communi-cation for other reproductive health programs.

awareness rising about HIV/AIDS, and other related health education activities. It needs to be remembered that targeted visits can only be made if there is some way that the fieldworkers can identify the target group. If the fieldworkers are no longer making outreach visits, then community-level or village-level informants, such as depot holders, need to be made responsible for identifying family planning dropouts, EPI dropouts, newly weds, etc., and notifying the fieldworkers.

14.4   CHILDHOOD HEALTH AND MORTALITY

Is Bangladesh on target for achieving the millennium development goals for child mortality? The United Nations has recently assessed that of the 10 developing country regions, only 3 (North Africa, South East Asia, and Latin America/Caribbean were on track to achieve MDG 4 (United Nations, 2004). The target for Bangladesh is to reduce under-five mortality from 151 deaths/1000 live births in 1990 to 50 in 2015. From 1991 to 2001 (mid-years of the BDHS 1993-94 and 2004), under-five mortality in Bangladesh declined by a third, i.e., about 4.1 percent per year, which compares well with the required annual decline of 4.3 percent needed to achieve the MDG of a two-third reduction in under-five mortality by 2015 from 1990 levels. However, if this estimate is disaggregated, between 1991 and 1997 the decline was more than 5.6 percent annually; but from 1997 till 2001, the decline has only been 1.6 percent per annum. The reduction in mortality appears to have slowed down and it is obvious that if the rate of reduction is not revived, Bangladesh will not achieve MDG 4 (Table 14.1).

Table 14.1 Percent reduction in mortality per year, among children under five, Bangladesh 1991-2001

Infant and child mortality	Percent reduction in mortality		
	1991 to 1994	1994 to 1997	1997 to 2001
Child mortality (age 1-4 years)	-10.0	-6.6	-8.2
Postneonatal mortality	-1.3	-10.4	-0.4
Neonatal mortality	-2.6	-4.6	-0.8

What needs to be done to achieve MDG 4 in Bangladesh? The answers to this lie to some extent on the knowledge about when and why these children die. Recent global reviews indicate that almost 60 percent of under-five deaths can be prevented by taking known/existing interventions to scale and high coverage (Jones, 2003). The 2004 BDHS shows that while neonatal deaths were 39 percent of all under-five deaths in 1991, they constituted almost half of under-five deaths in 2001. Birth asphyxia is responsible for a fifth of the neonatal deaths, while infections (sepsis, ARI and diarrhea) kill 45 percent of the neonates. Almost two-fifths of the neonatal deaths are associated with prematurity/low birth weight. In postneonates, the single biggest killer is ARI followed by other infections which together account for about 72 percent of these deaths. In older children (1-4 years), a similar pattern of a large contribution by ARI and infections is observed. However, a fifth of these deaths are due to injuries (particularly drowning). Among all under-five children, prematurity/low birth weight and malnutrition together contribute to about 45 percent of all deaths.

The age and cause of death pattern indicate certain interventions that need to be scaled up rapidly to reach high coverage, if one still hopes to achieve the MDG for under-five

Key Messages
• *Bangladesh is faltering in its effort to achieve MDG 4 of reducing under-five mortality by two-thirds.*
Strengthening and implementing programs to reduce neonatal deaths and deaths due to ARI is critical.
• *Exclusive breastfeeding rates are not improving at all.*
Large-scale programs are needed that provide appropriate counseling and support to pregnant and lactating women
• *There have been significant improvements in child immunization rates and these need to be sustained.*

mortality. These include skilled attendance at delivery, postnatal care for the child and prevention and management of infections.

Skilled attendance and postnatal care is important because of their critical role in preventing neonatal deaths. Progress in ensuring skilled attendance at delivery has been very limited in Bangladesh, increasing from about 9 percent in 1993-1994 to 13 percent in 2004. Only 12 percent of the newborns in the 2004 survey received care from a trained provider within 2 days of birth, and 83 percent received no care within 42 days post partum. It is inconceivable that one can achieve substantial declines in neonatal mortality if rates of skilled delivery assistance and post-partum care are not increased. It is reported that achieving national coverage with skilled birth attendant (SBA) may require at least 15-20 years, and even then, uncertainties remain as to whether the newly trained SBA cadre can reach effective coverage. Recent reviews on neonatal health (Darmstadt, 2005) as well as experiences from India, Nepal and Bangladesh suggest that other community-based interventions such as health education to improve neonatal care practices and care-seeking for illness, and creating demand for skilled care can be used to improve neonatal survival. A policy dialogue and decisions on such interventions seem essential and urgent.

Poor quality of care, misperceptions regarding need for care, and other social barriers underlie the low level of care-seeking for childhood illness in Bangladesh. However, there is also evidence that with appropriate training and sustained support, the quality of care from government first-level facilities can be improved substantially and maintained (Arifeen, 2004). It has also been shown that such improvements in care quality along with targeting families and communities with well designed messages and counseling can improve utilization of these facilities—by at least threefold. There are important lessons here that can be scaled up to contribute to a reduction in under-five mortality.

A key lesson here is that good quality and sustained supervision and support are indispensable. While various projects in the past have been successful in ensuring adequate supervision and monitoring, this has not been translated into sector-wide systems that function effectively. Many of these successes in the past came when programs created semi-independent or external supervisory and monitoring systems that did not depend only on managers at different levels who usually are too busy with routine work to be effective supervisors and monitors. Examples are the current EPI program and the Polio Eradication program that have successfully used an independent network of monitors. This kind of monitoring requires additional finance, the lack of which is also a barrier.

The second key lesson is the need to reach families and communities with targeted messages and information. Families and parents require information to make the right decision regarding care for their children. They often need support to change deeply ingrained practices. The very large government community-based work force (HAs and FWAs) would seem ideal for reaching the community with such information. However, structural problems, e.g., many of these workers being nonresidents in their work areas, and an overwhelming emphasis on providing "hard" services such as immunizations, contraceptives, etc. are barriers to their assuming this role effectively. Under the current system, they have little incentive to spend their time on communication, even if we were able to provide them with appropriately designed training on communication, tools and messages.

Case management of ARI remains the primary tool for reducing ARI deaths in this country. Unfortunately, the percentage of children with ARI taken to a facility or health worker has declined from 33 percent in 1996-1997 to 20 percent in 2004. This trend highlights lack of progress and the serious challenges that impede the achievement of high coverage of ARI case management. This is in sharp contrast to consistently increasing use of ORS for the management of diarrhea, up from 50 percent in 1993-1994 to 67 percent in 2004.

The 2003 *Lancet* series on child survival identifies four interventions of established efficacy in preventing ARI deaths (Jones, 2005). These include breastfeeding, complementary feeding, Hemophilus influenza (Hib) vaccine and zinc. Among these, the Hib vaccine is not available in Bangladesh through the public health system while no policy decision has been taken on introducing zinc in the country. The government does have the opportunity to introduce Hib vaccine in the country, if it wished to, using Global Alliance for Vaccines and Immunization (GAVI) funds. The last four BDHS surveys show that the percent of newborn started on breast milk within 1 hour of birth has increased from 9 percent in 1993 to 24 percent in 2004. However, the median duration of breastfeeding has remained unchanged at about 32 months, and there has been absolutely no change in rates of exclusive breastfeeding.

The consistent and very similar patterns of exclusive breastfeeding over 10 years show that the various efforts at improving the practice of exclusive breastfeeding including Baby Friendly Initiatives, BCC, etc has had minimal impact, if any. A critical review of the situation and programs is essential. There is considerable evidence that with appropriate counseling and support more women are able to breast-feed exclusively. These include antenatal education, showing and helping mothers how to breast-feed, and continuing support. As coverage of antenatal care increases, the opportunities now exist with reaching a large proportion of pregnant women with messages on exclusive breastfeeding. However, low skilled birth attendance and post partum care present barriers to providing further support and guidance to the newly delivered woman. Even though studies in Bangladesh and elsewhere have demonstrated the value of community-based peer counselors in breastfeeding promotion, these interventions have not been widely implemented (Haider, 2000). Using existing government community-based workers is a possibility, but problems associated with this have already been discussed above.

Nutritional status was first assessed in the 1996-1997 BDHS. Significant improvement in child nutritional status was observed between the 1996-1997 BDHS and the 1999-2000 BDHS. Since then, children's nutritional status has not improved. It is obvious that the initial gains in reducing childhood malnutrition have been difficult to sustain. Although the National Nutrition Project still covers only 22 percent of the subdistricts, it remains the only program being implemented at scale in Bangladesh aimed at improving childhood nutrition. However, questions have been raised recently as to the effectiveness of this project (Hossain, 2005). Though this particular analysis had various limitations and was not definitive, it does raise the need to review NNP program strategies, emphasis (in terms of funds allocated), and expansion plans.

BDHS 2004 shows that in many areas of child health, Bangladesh has made sustained and remarkable progress. A remarkable achievement has been in the percentage of 12-23 month old children who have received all vaccines. In urban areas, it is 81 percent (an increase of 16 percent from 1999-2000) and in the rural areas it is 71 percent (a 22 percent increase from 1999-2000). The goal of immunizing at least 80 percent of children with all vaccines (particularly measles) has not been achieved yet, but recent improvements suggest that it is achievable.

Much has been written about the experience and successes in Bangladesh in taking oral rehydration therapy for diarrhea to scale (Chowdhury, 1998). The evidence from four BDHS confirms this achievement. The use of ORS for the management of diarrhea has been consistently increasing from 50 percent in 1993-1994 to 67 percent in 2004.

Vitamin A coverage among children age 9-59 months has been consistently increasing in every BDHS since the first survey in 1993-4. Much of this achievement can be attributed to linking vitamin A supplementation to national immunization days (NID) for polio vaccination. The first NID was held in Bangladesh in 1994. This success demonstrates the advantages of using a campaign-based strategy to deliver interventions that need only be delivered intermittently. With the last NID implemented in early 2004, it remains to be seen if this coverage can be sustained.

14.5   MATERNAL CARE

The National Strategy for Maternal Health was released in October 2001, well into the HPSP. The strategy adopted the three delays approach, based on the now widely accepted view that all pregnant women are at risk of developing life-threatening complications, and that most of these complications can neither be predicted accurately nor prevented. Once a woman develops any of these complications, she needs prompt access to emergency obstetric care (EOC) services (MOHFW, 2001: 5).

The dominant approach during the 1990s has been to build or renovate existing facilities to provide EOC services across the country, at a target level of one comprehensive EOC and four basic EOC facilities per 500,000 population. By the end of the HPSP in mid-2003, C-EOC was available in all 59 District Hospitals, some 60 MCWCs, and 45 selected Upazila Health Complexes, still some way below the target. To complement the provision of facilities, efforts have been made to strengthen the referral system to those facilities by building capacity of Female Welfare Assistants (FWA) and female Health Assistants (HA) as Skilled Birth Attendants (SBA).

14.5.1 Use of Antenatal Care

Antenatal Care (ANC) has been rising in recent years, but is still too low with just over half of all women receiving any ANC during their most recent pregnancy. It is encouraging that in the 2004 BDHS, among users of ANC, the number of visits finally jumped from less than two towards the recommended number of three. While this increase is positive, it remains a source of concern that among ANC users, only one in three make their first visit in the first trimester, as recommended. It should be kept in mind that if all pregnant women made all the recommended ANC visits, it would amount to some 12-15 million annually, more than double the current number of 5.5 million or so. There is a question of the capacity of the health system to deal with such numbers, even if all the planned upgrading of institutions to provide safe motherhood services takes place.

> **Key Messages**
>
> - *Almost half of all pregnant women do not get ANC, and two of three ANC users start late.*
>
> FWAs need to identify newly preg- nant women and motivate them to make an ANC visit in each trimester.
>
> ANC needs to be promoted as part of a total care package through pregnancy, delivery and the post-natal period.

Among ANC users, the source, in almost all cases, remains a medically skilled provider, as it has been for a decade. Since the previous BDHS, there has also been an encouraging increase in the useful content of the ANC visits. In 2004, one in three women say they had received information on the danger signs of pregnancy, although this and other content is highly skewed towards the well educated and economically better off.

14.5.2 Place of Delivery and Delivery Attendant

One proxy indicator that remains resistant to change is place of delivery. A decade ago, 19 out of 20 deliveries were at home. In 2004, it is 18 out of 20, with the private sector accounting for one-third of facility deliveries. This is despite a very substantial effort to construct and renovate a large number of MOHFW facilities.

The major shift in attendance over the past decade has been from relatives/family members, who previously accounted for one quarter or more, but have now declined to less than one in ten. The disturbing aspect of this shift though, is that it is not to highly trained providers like doctors and nurse/midwives, but largely to birth attendants who now do 77 percent of deliveries compared with 60 percent a decade ago. Even today, less than one in five of these TBAs are trained, and the evidence from

1980s is that even those who have received training do not necessarily absorb or retain those skills, due to infrequent practice, and other reasons. At the least, TBAs need to receive training in how to recognize complications, to know when and where to refer patients with complications, and they need close supportive supervision.

As mentioned above, to provide community-level, safe delivery services, two schemes to train higher-level female staff have been implemented. At the Union level, Family Welfare Visitors attached to UHFWCs have been receiving six months training in batches of 100 for several years. More recently, Family Welfare Assistants and female Health Assistants have started to receive six months training on safe delivery. Some 900 have now received training, with the expectation that they would participate in normal deliveries, and actively refer cases experiencing complications. At the reported rate of only a few deliveries a month by these Skilled Birth Attendants, this approach will take some time before having a major impact on the national childbirth scene (DGHS, 2005). Evidence from the Bangladesh TBA Training Program of the 1980s, and from other countries, is that SBAs need to conduct 8-16 deliveries monthly to retain their skills.

It is not yet clear that families will rely on workers with limited training to provide delivery services at the home. Even if large numbers of families decide to use these workers, the families need to understand that lower level workers, however well trained, cannot be expected to perform all necessary procedures at household level.

Under emergency circumstances, the TBAs will have to refer cases with complications to higher-level facilities. With some of the new approaches being developed, such as oral oxytocics (e.g., Misoprostol), they may also need training in how to administer such home-based measures to minimize hemorrhage.

The recent focus for upgrading has been at district level (59 District Hospitals and 60 MCWCs), and Upazila level (80 or so Upazila Health Centers). The district and Upazila headquarters are 35 km and 11 km, respectively, from the average home. These lengthy distances may be an obstacle for many people to utilize such EOC facilities. An alternative might be to consider upgrading Union level facilities (Union Health and Family Welfare Centres where there is already a plan to post two Family Welfare Visitors, who could work in shifts to ensure round the clock service. Many of these facilities have residential accommodation for staff, although at present only one in three FWVs posted there actually live on the premises.

The average Union has about 700 deliveries annually (two per day), many of which are conducted at higher level facilities, especially those referred with complications. Other deliveries will continue to take place at home for some time to come, so a UHFWC could cope with expected numbers of deliveries under these circumstances. This possibility could be explored using an Operations Research approach for a small number of UHFWCs that are functioning well.

Key Messages

- *Skilled Birth Attendants (SBA) training requires substantial hands-on practice, and thus training suf-ficient numbers will take a long time.*

This suggests that the TBAs will continue to play a role in delivery for a considerable time to come. Thus they need to be oriented to avoid bad practices, and to refer for complica-tions.

- *The EOC facility approach and the skilled birth attendant approach are not sufficiently linked for refer-rals of complicated cases to be effective.*

The investments in training SBAs must be linked through referrals of compli-cated cases to EOC facilities.

- *Even with widespread invest-ments in EOC facilities, at least at the district level, little improvement in facility delivery is being seen.*

It is worthwhile to consider testing models of normal delivery at Union level, linked with referral to higher levels if complications arise.

The use of medically trained attendants is among the most highly inequitable health services, with the least poor quintile being ten or more times more likely than the poorest quintile to use a doctor or nurse/midwife. This skewed use of services is showing no signs of becoming more equitable.

14.5.3 Postnatal Care

Information on PNC has been limited, but it appears that a small proportion of mothers who deliver at home are accessing PNC. Mothers need to be made aware that postnatal care is a natural part of the process of childbirth, and an integral not optional part of the "package." This will require BCC to explain when maternal deaths and neonatal deaths occur. A large proportion of the latter occur within three days of delivery, and neonatal deaths account for half of all deaths to children under five years, so proper care in this period around delivery has great potential to reduce not only maternal but infant deaths and morbidity.

Key Messages

- *Among mothers who experienced complications around delivery, only one of three sought assistance from trained providers. Another one in three went to unqualified providers, and one in three did nothing.*

As awareness of dangers is raised, families must be motivated to make use of medically trained providers for these complications.

- *Postnatal care is currently seen as an option, and used by very few mothers. Many maternal deaths due to hemorrhage occur at this time, also many neonatal deaths.*

ANC, safe delivery, and postnatal checkups must be promoted as a total 'package' of maternity care.

14.6 KNOWLEDGE OF HIV/AIDS AND WAYS TO AVOID HIV/AIDS

The National Policy on HIV/AIDS and sexually transmitted disease-related issues was issued in late 1996. It concentrated mainly on surveillance, testing policy, management and counseling of patients, and safe blood. The focus was generally on high-risk groups. In terms of interventions, there was very little said about awareness raising or behavior change—half page on information, education, and communication (IEC) in 90 pages.

A new program HAPP (2000-2005) was formed with the MOHFW and development partners, but working closely with NGOs and the private sector for implementation. Although "by mid-2003, [HAPP] program implementation had been very slow" (HPSP Annual Program Review, 2005: 44), the proportion of men and women who have knowledge of HIV/AIDS has risen dramatically since the mid-1990s. In the 1996-1997 BDHS, less than one in five women, and one in three men, had ever heard of HIV/AIDS. In the 2004 BDHS, it was three out of five women and four out of five men. The source of this information has consistently been TV, followed by radio, for both men and women. Newspapers are also an important third source for men, though not for women.

While it can be argued that having heard of HIV/AIDS does not necessarily mean the respondent understands the routes of transmission, or the incurable and fatal nature of the disease. In the 1996/97 BDHS, some two-thirds of those respondents who had heard of HIV/AIDS did report that it is almost always fatal. But only a small proportion knew ways of preventing it. Since then, knowledge that condoms can prevent the disease has risen from 1 to 37 percent among women, and from 6 to 50 percent among men. These levels are much higher than knowledge of two or more symptoms of sexually transmitted infections for both men and women. The protective effect of having only one partner has also become more widely known among women (30 percent), though reportedly less so for men (12 percent).

Among all male and female respondents, it is encouraging that 30 percent of women and 50 percent of men correctly know two or more ways of avoiding HIV. It is disturbing though, that around

half of women (47 percent) and men (54 percent) have never discussed HIV/AIDS prevention methods with their spouse.

There have been a variety of approaches to raising awareness of HIV/AIDS. Social Marketing Company (SMC) is using eight mobile film units, which move around the country conducting up to 18 film sessions each per month for audiences of around 1,000 per night, thereby addressing large numbers of the rural population.

Education packages containing information and advocacy materials (but no services), are being offered at the community level, and also targeting factory workers, transport workers, and young people in and out of school—the latter through youth clubs. Outreach educational activities are targeting registered brothels, areas with heavy industries where a large proportion of males live away from families, and border crossings with truck waiting areas.

Increasingly, since 2000, the visual media has become a more important source, with short films with popular themes such as overseas employment, being used as vehicles for messages about risk, symptoms of STIs and HIV, and treatment. Recently, the Ministry of Information has approved the showing of condoms for disease prevention on television. The GOB Censorship Board still blocks certain messages, but satellite TV falls outside their purview, and is increasingly being used to broadcast such messages. They do control Bangladesh TV (BTV), which recently banned advertisements showing condoms.

> **Key Messages**
>
> • *There are encouraging signs of growing awareness of HIV/AIDS among the general public, including knowledge of ways to avoid infection, less so for STIs.*
>
> Greater effort is needed to explain STIs and their link with susceptibility to HIV/AIDS.
>
> • *Between spouses, there is still little communication about HIV/AIDS and ways to prevent it.*
>
> More spousal communication is needed, along with greater capacity of wives to negotiate sex when their spouse has an STI.

14.7 ARSENIC IN HOUSEHOLD DRINKING WATER

Awareness of arsenic, in terms of having heard of it, is common for five out of six people, although substantial numbers who rely on tubewells for drinking water seem not to have heard of it. There is considerable geographic variation in knowledge, just as there is in prevalence of the problem.

A couple of important points emerge from the DHS. A modest number of tubewells, labeled red (contaminated) in the past, tested clear (green) in this survey. One explanation might be that their arsenic concentration can vary between testings, or the testing procedure differs in important ways. A substantial number of people are still drawing their drinking water from tubewells marked contaminated (red). This may be because they have no choice, or it could reflect a lack of understanding of the significance of the markings. Or it could be that they do not perceive any serious danger from doing so.

The latter could be explained by the observation that relatively few people with long exposure to arsenic show any external physical symptoms. For example, two-thirds of the 16,000 tubewells in the ICDDR,B Matlab field site are contaminated, yet only 3 in 1,000 people show skin changes as a result of this exposure. This is puzzling, and points to the need for research into the sequence of damage due to arsenicosis. For example, do the external skin changes appear before, after, or simultaneous with internal organ damage? Can switching to noncontaminated water reverse organ damage? Are certain individuals protected from the negative effects by a more effective capacity to convert (methylate) arsenic into a non-toxic form?

The national program, BAMWSP, has focused mainly on testing tube wells (almost 5 million so far), and providing alternative sources of drinking water, through sinking deep tubewells (11,000 plus)

and providing dug wells (1,100) where needed. There has been awareness raising, but it would be useful for the national program to increase its awareness raising efforts on the dangers of consuming arsenic contaminated water in future activities.

14.8 DISPARITIES

Bangladesh has achieved impressive equity in the use of certain health and family planning services, where the poorest 20 percent (quintile) of the population has levels of use around three quarters of the level of the best off 20 percent. These tend to be services like EPI and family planning, which have traditionally relied for delivery on fieldworkers. Other vital services, such as safe motherhood, remain disturbingly inequitable, with delivery by a medically trained attendant, and delivery in a health institution, show levels for the poorest quintile around 10 percent of levels for the best off.

It is encouraging that gender inequities have been disappearing, especially in the area of child survival, where in earlier days, girls suffered increased risk of death in the postnatal and childhood years.

Geographic disparities persist, with Sylhet division and Chittagong division (to a lesser degree), lagging behind other divisions on many of the health and family planning indicators. There are paradoxes within these broad inequities. For example, Sylhet has much later age at marriage and age at first birth than Khulna and Rajshahi, but it has much higher lifetime fertility; additionally, household economic status is relatively high in Sylhet. There can be no doubt that special, focused efforts must be made in these parts of the country if overall performance of the health, nutrition, and population sector is to reach the targets set by the country in the Poverty Reduction Strategy Paper and the MDGs.

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SAMPLE IMPLEMENTATION

Table A.1.1 Sample implementation: women

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall response rates, according to urban-rural residence and Division, Bangladesh 2004

Result	Division						Residence		Total
	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Urban	Rural	
Selected households									
Completed (C)	96.5	96.7	96.8	97.3	98.3	96.5	96.4	97.5	97.1
Household present but no competent respondent at home (HP)	0.4	0.1	0.1	0.0	0.0	0.4	0.2	0.1	0.1
Refused (R)	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0
Dwelling not found (DNF)	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.1	0.0
Household absent (HA)	1.2	1.6	0.8	1.4	0.7	1.5	1.3	1.1	1.1
Dwelling vacant/address not a dwelling (DV)	1.6	1.1	1.7	0.9	0.6	1.0	1.6	0.9	1.2
Dwelling destroy (DD)	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1
Other (O)	0.2	0.3	0.3	0.0	0.3	0.4	0.3	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	1,274	1,920	2,547	1,620	2,400	1,050	3,646	7,165	10,811
Household response rate (HRR)	99.6	99.9	99.8	99.8	99.9	99.4	99.7	99.8	99.8
Eligible women									
Completed (EWC)	98.2	98.5	98.6	99.0	99.3	97.5	98.3	98.8	98.6
Not at home (EWNH)	1.6	0.9	1.1	0.8	0.5	1.5	1.2	0.9	1.0
Refused (EWR)	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Incapacitated (EWI)	0.2	0.5	0.2	0.1	0.2	0.6	0.3	0.3	0.3
Other (EWO)	0.0	0.0	0.1	0.0	0.0	0.3	0.2	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	1,385	2,101	2,627	1,726	2,583	1,179	3,973	7,628	11,601
Eligible women response rate (EWRR)	98.2	98.5	98.6	99.0	99.3	97.5	98.3	98.8	98.6
Overall response rate (ORR)	97.8	98.4	98.4	98.8	99.2	97.0	98.0	98.6	98.4

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 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 divided by 100.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{100 * EWC}{EWC + EWNH + EWP + EWR + EWPC + EWI + EWO}$$

[3] The overall response rate (ORR) is calculated as: ORR = HRR * EWRR/100

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall response rates, according to urban-rural residence and Division Bangladesh 2004

	Division						Residence		
Result	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Urban	Rural	Total
Selected households									
Completed (C)	97.1	96.7	96.5	96.9	98.4	97.0	96.2	97.6	97.1
Household present but no competent respondent at home (HP)	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Refused (R)	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Dwelling not found (DNF)	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.1	0.1
Household absent (HA)	1.0	1.5	0.9	1.4	0.7	1.6	1.2	1.1	1.1
Dwelling vacant/address not a dwelling (DV)	1.2	1.3	2.2	1.4	0.6	0.5	2.0	0.9	1.3
Dwelling destroy (DD)	0.3	0.4	0.1	0.1	0.1	0.2	0.3	0.1	0.2
Other (O)	0.1	0.1	0.1	0.0	0.1	0.4	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	679	1,024	1,358	864	1,280	560	1,944	3,821	5,765
Household response rate (HRR)	99.7	99.9	99.9	99.8	99.9	99.6	99.8	99.8	99.8
Eligible men									
Completed (EMC)	94.0	94.8	95.0	98.2	96.8	94.2	95.6	95.7	95.7
Not at home (EMNH)	4.6	4.7	4.4	1.5	2.8	5.8	3.5	3.9	3.8
Postponed (EMP)	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Refused (EMR)	0.4	0.1	0.3	0.1	0.0	0.0	0.4	0.0	0.2
Partly completed (EMPC)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Incapacitated (EMI)	0.4	0.4	0.3	0.1	0.3	0.0	0.4	0.2	0.3
Other (EMO)	0.2	0.0	0.0	0.0	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	100.0	100.0
Number of men	481	749	1,065	711	1,032	452	1,583	2,907	4,490
Eligible men response rate (EMRR)	94.0	94.8	95.0	98.2	96.8	94.2	95.6	95.7	95.7
Overall response rate (ORR)	93.7	94.7	95.0	97.9	96.7	93.9	95.5	95.6	95.5

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 man response rate is calculated for completed interviews as 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 man response rates divided by 100.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:

$$\frac{100 * EWC}{EMC + EMNH + EMP + EMR + EMPC + EMI + EMO}$$

[3] The overall response rate (ORR) is calculated as: ORR = HRR * EMRR/100

Figure A.1 Urban Sampling Points, Bangladesh
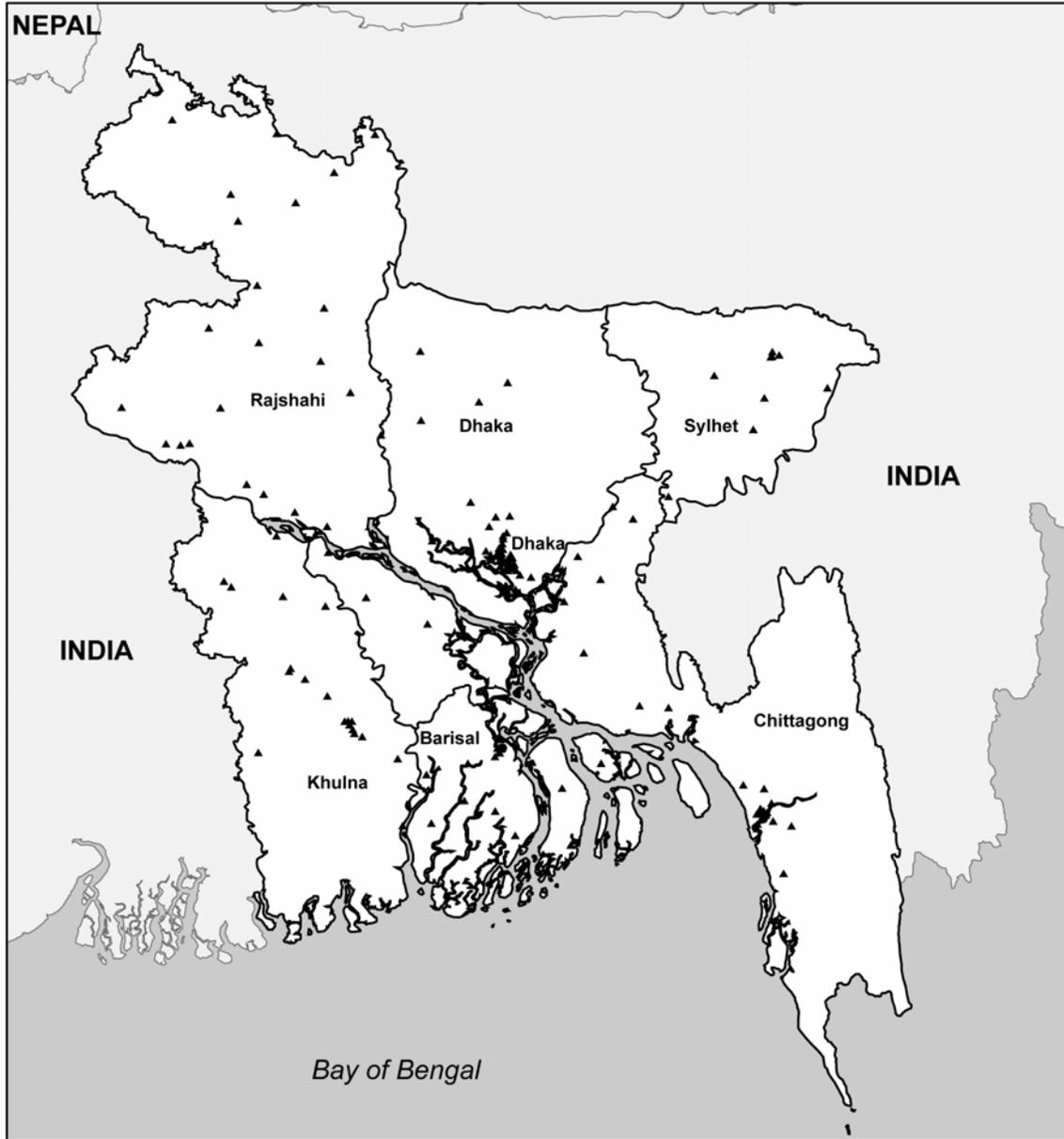
Figure A.1 Rural Sampling Points, Bangladesh

ESTIMATES OF SAMPLING ERRORS   *APPENDIX* **B**
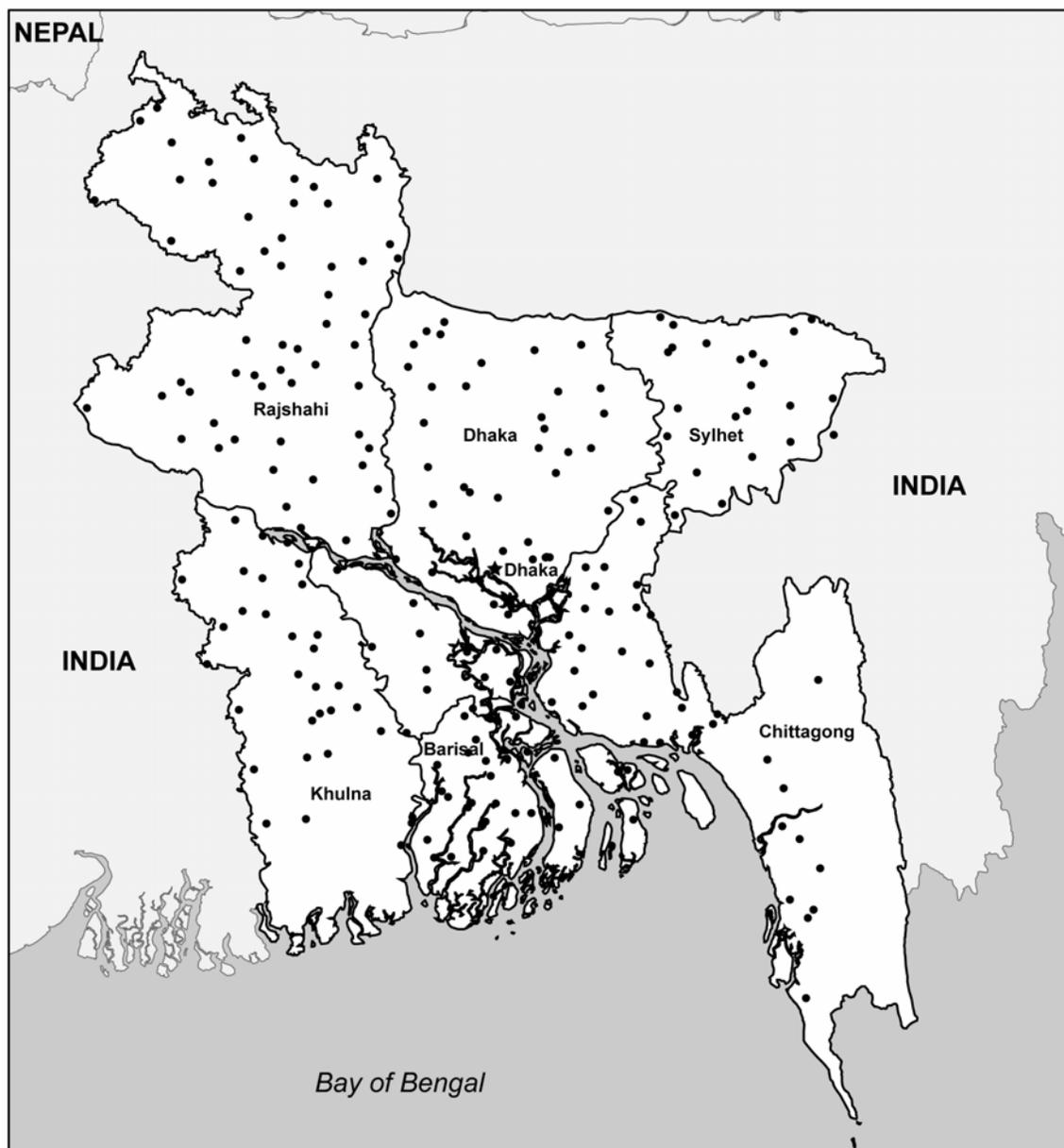
The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding 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 2004 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 2004 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 2004 BDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2004 BDHS is the ISSA Sampling Error Module. This module used the Taylor linearization 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 linearization 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:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^{H} \left[\frac{m_h}{m_{h-1}} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi} \text{ , and } z_h = y_h - rx_h$$

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 2004 BDHS, there were 361 non-empty clusters. Hence, 361 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

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 361 clusters,
              $r_{(i)}$ is the estimate computed from the reduced sample of 360 clusters (i^{th} cluster excluded), and
              k is the total number of clusters.

In addition to the standard error, ISSA 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. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2004 BDHS are calculated for selected variables considered to be of primary interest for woman's survey and for man's surveys, respectively. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the 6 divisions of the country. 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-UNWE) and weighted (N-WEIG) 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 the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to child-bearing.

The confidence interval (e.g., as calculated for *children ever born to women aged 40-49*) can be interpreted as follows: the overall average from the national sample is 5.118 and its standard error is 0.072. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 5.118±2×0.072. There is a high probability (95 percent) that the *true* average number of children ever born to all women aged 40 to 49 is between 4.974 and 5.261.

Sampling errors are analyzed for the national woman sample and for two separate groups of estimates: (1) means and proportions, and (2) complex demographic rates. The relative standard errors (SE/R) for the means and proportions range between 0.3 percent and 14.3 percent with an average of 3.5 percent; the highest relative standard errors are for estimates of very low values (e.g., *currently using female sterilization*). If estimates of very low values (less than 10 percent) were removed, then the average drops to 2.4 percent. So in general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. The relative standard error for the total fertility rate is small, 2.2 percent. However, for the mortality rates, the average relative standard error is much higher, 7.2 percent.

There are differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *want no more children*, the relative standard errors as a percent of the estimated mean for the whole country, and for the urban areas are 0.9 percent and 1.9 percent, respectively.

For the total sample, the value of the design effect (DEFT), averaged over all variables, is 1.44 which means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.44 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, BDHS 2004

Variable	Estimate	Base population
WOMEN		
Urban residence	Proportion	Ever-married women 10-49
No education	Proportion	Ever-married women 10-49
Secondary education or higher	Proportion	Ever-married women 10-49
Currently married	Proportion	Ever-married women 10-49
Currently pregnant	Proportion	Women aged 15-49
Children ever born	Mean	Currently married women 10-49
Children surviving	Mean	Currently married women 10-49
Children ever born to women over 40	Mean	Women aged 40-49
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 injectables	Proportion	Currently married women 10-49
Currently using Norplant	Proportion	Currently married women 10-49
Currently using female sterilization	Proportion	Currently married women 10-49
Currently using periodic abstinence	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
Mother received ANC (trained provider)	Proportion	Births in the five years before survey
Mothers received tetanus injection in the last birth	Proportion	Women with at least one live birth in five years before survey
Mothers received medical care at birth	Proportion	Births occurring 1-59 months before survey
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
Child having health card	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
Received all vaccinations	Proportion	Children 12-23 months
Height-for-age (<-2SD)	Proportion	Children under 5 who are measured
Weight-for-height (<-2SD)	Proportion	Children under 5 who are measured
Weight-for-age (<-2SD)	Proportion	Children under 5 who are measured
BMI < 18.5	Proportion	Ever-married women 10-49
Has heard of HIV/AIDS	Proportion	Ever-married women 10-49
Knows about condoms to prevent AIDS	Proportion	Ever-married women 10-49
Knows about limiting partners to prevent AIDS	Proportion	Ever-married women 10-49
Total fertility rate (3 years)	Rate	Women-years of exposure to childbearing
Neonatal mortality rate[1]	Rate	Births in 5 (10) years before survey
Postneonatal mortality rate[1]	Rate	Births in 5 (10) years before survey
Infant mortality rate[1]	Rate	Births in 5 (10) years before survey
Child mortality rate[1]	Rate	Births in 5 (10) years before survey surviving to age one
Under five mortality rate[1]	Rate	Births in 5 (10) years before survey
MEN		
Urban residence	Proportion	All men 15-54
No education	Proportion	All men 15-54
With secondary education or higher	Proportion	All men 15-54
Never married	Proportion	All men 15-54
Currently married	Proportion	All men 15-54
Ideal number of children	Mean	Currently married men 15-54
Has heard of HIV/AIDS	Proportion	All men 15-54
Knows about condoms to prevent AIDS	Proportion	All men 15-54
Knows about limiting partners to prevent AIDS	Proportion	All men 15-54

[1] The mortality rates are calculated for 10 years except at the national level, which are for five years.

Table B.2 Sampling errors: Total sample, Bangladesh 2004

Variable	Value (R)	Standard error (SE)	Number of cases Un-weighted (N)	Number of cases Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.226	0.006	11,440	11,440	1.557	0.027	0.214	0.238
No education	0.412	0.008	11,440	11,440	1.780	0.020	0.396	0.428
With secondary education or higher	0.294	0.008	11,440	11,440	1.787	0.026	0.279	0.310
Currently married	0.925	0.003	11,440	11,440	1.102	0.003	0.920	0.930
Currently pregnant	0.051	0.002	13,543	13,542	1.122	0.041	0.047	0.056
Children ever born	2.998	0.028	10,417	10,436	1.300	0.009	2.941	3.054
Children surviving	2.591	0.022	10,417	10,436	1.240	0.009	2.547	2.635
Children ever born to women 40-49	5.118	0.072	2,263	2,230	1.415	0.014	4.974	5.261
Ever used any contraceptive method	0.828	0.006	10,553	10,582	1.705	0.008	0.815	0.840
Currently using any contraceptive method	0.581	0.007	10,553	10,582	1.433	0.012	0.567	0.594
Currently using a modern method	0.473	0.007	10,553	10,582	1.451	0.015	0.459	0.487
Currently using pill	0.262	0.006	10,553	10,582	1.352	0.022	0.251	0.274
Currently using IUD	0.006	0.001	10,553	10,582	1.154	0.143	0.004	0.008
Currently using condom	0.042	0.003	10,553	10,582	1.346	0.063	0.037	0.047
Currently using injectables	0.097	0.005	10,553	10,582	1.819	0.054	0.086	0.107
Currently using female sterilization	0.052	0.004	10,553	10,582	1.741	0.072	0.044	0.060
Currently using periodic abstinence	0.065	0.003	10,553	10,582	1.290	0.048	0.059	0.071
Currently using withdrawal	0.036	0.002	10,553	10,582	1.178	0.059	0.032	0.040
Currently using Norplant	0.008	0.001	10,553	10,582	1.251	0.137	0.006	0.010
Obtained method from public sector source	0.573	0.011	4,994	5,053	1.602	0.020	0.550	0.595
Want no more children	0.628	0.006	10,553	10,582	1.188	0.009	0.617	0.640
Want to delay birth at least 2 years	0.212	0.004	10,553	10,582	1.096	0.021	0.203	0.220
Ideal number of children	2.420	0.013	11,012	11,017	1.840	0.006	2.393	2.446
Mothers received ANC (trained provider)	0.487	0.13	5,366	5,416	1.936	0.027	0.460	0.513
Mothers received tetanus injection (last birth)	0.848	0.009	5,366	5,416	1.837	0.011	0.830	0.866
Mothers received medical care at delivery	0.132	0.006	6,908	7,002	1.447	0.049	0.119	0.145
Child had diarrhea in the last 2 weeks	0.075	0.004	6,424	6,498	1.064	0.048	0.068	0.082
Treated with ORS packets	0.672	0.026	485	486	1.193	0.039	0.619	0.724
Sought medical treatment	0.157	0.018	485	486	1.085	0.117	0.120	0.193
Child having health card, seen	0.494	0.017	1,247	1,265	1.199	0.034	0.460	0.528
Child received BCG vaccination	0.934	0.012	1,247	1,265	1.671	0.013	0.911	0.958
Child received DPT vaccination (3 doses)	0.810	0.017	1,247	1,265	1.576	0.022	0.775	0.845
Child received polio vaccination (3 doses)	0.823	0.017	1,247	1,265	1.554	0.020	0.789	0.856
Child received measles vaccination	0.757	0.019	1,247	1,265	1.600	0.026	0.718	0.795
Child fully immunized	0.731	0.020	1,247	1,265	1.563	0.027	0.692	0.770
Height-for-age (-2SD)	0.430	0.009	6,012	6,005	1.421	0.022	0.411	0.449
Weight-for-height (-2SD)	0.128	0.005	6,012	6,005	1.105	0.038	0.119	0.138
Weight-for-age (-2SD)	0.475	0.010	6,012	6,005	1.534	0.022	0.454	0.496
BMI < 18.5	0.343	0.006	10,448	10,431	1.373	0.019	0.330	0.356
Has heard of HIV/AIDS	0.600	0.011	11,440	11,440	2.407	0.018	0.578	0.622
Knows about condoms	0.219	0.008	11,440	11,440	1.987	0.035	0.203	0.234
Knows about limiting partners	0.181	0.007	11,440	11,440	1.953	0.039	0.167	0.195
Total fertility rate (last 3 years)	3.028	0.067	na	38,850	1.497	0.022	2.894	3.161
Neonatal mortality (last 5 years)	41.373	2.861	6,967	7,056	1.149	0.069	35.652	47.095
Post-neonatal mortality (last 5 years)	23.822	2.048	6,978	7,065	1.133	0.086	19.725	27.918
Infant mortality (last 5 years)	65.195	3.604	6,980	7,068	1.181	0.055	57.986	72.403
Child mortality (last 5 years)	23.936	2.434	7,038	7,133	1.282	0.102	19.068	28.805
Under-five mortality (last 5 years)	87.571	4.327	7,053	7,148	1.239	0.049	78.917	96.224
MEN								
Urban residence	0.242	0.008	4,297	4,297	1.220	0.033	0.226	0.258
No education	0.246	0.011	4,297	4,297	1.642	0.044	0.224	0.268
With secondary education or higher	0.406	0.011	4,297	4,297	1.532	0.028	0.383	0.429
Never married	0.343	0.011	4,297	4,297	1.506	0.032	0.321	0.365
Currently married	0.647	0.011	4,297	4,297	1.511	0.017	0.625	0.669
Ideal number of children	2.314	0.021	2,993	2,653	1.513	0.009	2.272	2.356
Has heard of HIV/AIDS	0.819	0.009	4,297	4,297	1.480	0.011	0.801	0.836
Knows about condoms	0.407	0.012	4,297	4,297	1.537	0.028	0.384	0.430
Knows about limiting partners	0.096	0.007	4,297	4,297	1.498	0.070	0.082	0.109

na = Not applicable

Table B.3 Sampling errors: Urban sample, Bangladesh 2004

Variable	Value (R)	Standard error (SE)	Number of cases Un-weighted (N)	Number of cases Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	1.000	0.000	3,904	2,586	na	0.000	1.000	1.000
No education	0.330	0.017	3,904	2,586	2.221	0.051	0.297	0.363
With secondary education or higher	0.402	0.019	3,904	2,586	2.478	0.048	0.363	0.441
Currently married	0.917	0.006	3,904	2,586	1.305	0.006	0.905	0.928
Currently pregnant	0.049	0.004	4,846	3,196	1.429	0.089	0.040	0.058
Children ever born	2.695	0.048	3,534	2,336	1.428	0.018	2.600	2.791
Children surviving	2.364	0.038	3,534	2,336	1.380	0.016	2.288	2.441
Children ever born to women 40-49	4.441	0.164	780	505	1.966	0.037	4.113	4.769
Ever used any contraceptive method	0.878	0.010	3,578	2,372	1.790	0.011	0.858	0.897
Currently using any contraceptive method	0.629	0.012	3,578	2,372	1.546	0.020	0.604	0.654
Currently using a modern method	0.516	0.014	3,578	2,372	1.700	0.028	0.488	0.545
Currently using pill	0.269	0.010	3,578	2,372	1.368	0.038	0.249	0.289
Currently using IUD	0.005	0.001	3,578	2,372	1.233	0.284	0.002	0.008
Currently using condom	0.083	0.009	3,578	2,372	1.915	0.106	0.066	0.101
Currently using injectables	0.091	0.007	3,578	2,372	1.417	0.075	0.078	0.105
Currently using female sterilization	0.053	0.004	3,578	2,372	1.089	0.077	0.045	0.061
Currently using periodic abstinence	0.065	0.005	3,578	2,372	1.328	0.084	0.054	0.076
Currently using withdrawal	0.041	0.003	3,578	2,372	1.037	0.084	0.034	0.048
Currently using Norplant	0.010	0.002	3,578	2,372	1.196	0.204	0.006	0.013
Obtained method from public sector source	0.376	0.019	1,895	1,238	1.685	0.050	0.339	0.414
Want no more children	0.627	0.012	3,578	2,372	1.452	0.019	0.603	0.650
Want to delay birth at least 2 years	0.204	0.008	3,578	2,372	1.226	0.041	0.187	0.220
Ideal number of children	2.306	0.018	3,825	2,531	1.580	0.008	2.271	2.341
Mothers received ANC (trained provider)	0.708	0.024	1,684	1,123	2.131	0.033	0.661	0.755
Mothers received tetanus injection (last birth)	0.878	0.014	1,684	1,123	1.801	0.016	0.850	0.907
Mothers received medical care at delivery	0.295	0.021	2,073	1,392	1.907	0.072	0.252	0.337
Child had diarrhea in the last 2 weeks	0.067	0.006	1,930	1,284	1.089	0.095	0.054	0.080
Treated with ORS packets	0.771	0.047	136	86	1.269	0.061	0.676	0.866
Sought medical treatment	0.314	0.054	136	86	1.332	0.173	0.205	0.422
Child having health card, seen	0.581	0.027	377	251	1.044	0.046	0.527	0.635
Child received BCG vaccination	0.942	0.026	377	251	2.011	0.027	0.891	0.993
Child received DPT vaccination (3 doses)	0.857	0.035	377	251	1.912	0.041	0.786	0.927
Child received polio vaccination (3 doses)	0.858	0.035	377	251	1.905	0.041	0.787	0.928
Child received measles vaccination	0.828	0.037	377	251	1.862	0.045	0.754	0.901
Child fully immunized	0.809	0.037	377	251	1.780	0.045	0.736	0.883
Height-for-age (-2SD)	0.376	0.024	1,795	1,174	1.971	0.063	0.329	0.424
Weight-for-height (-2SD)	0.115	0.008	1,795	1,174	1.021	0.068	0.099	0.131
Weight-for-age (-2SD)	0.422	0.022	1,795	1,174	1.816	0.052	0.378	0.466
BMI < 18.5	0.250	0.014	3,599	2,374	1.986	0.057	0.221	0.279
Has heard of HIV/AIDS	0.817	0.018	3,904	2,586	2.853	0.022	0.782	0.852
Knows about condoms	0.376	0.019	3,904	2,586	2.394	0.049	0.339	0.413
Knows about limiting partners	0.273	0.015	3,904	2,586	2.137	0.056	0.242	0.303
Total fertility rate (last 3 years)	2.511	0.096	na	8,767	1.429	0.038	2.319	2.703
Neonatal mortality (last 10 years)	43.853	4.135	4,308	2,889	1.265	0.094	35.583	52.123
Post-neonatal mortality (last 10 years)	28.440	3.447	4,312	2,892	1.379	0.121	21.546	35.334
Infant mortality (last 10 years)	72.293	4.959	4,312	2,892	1.227	0.069	62.375	82.211
Child mortality (last 10 years)	21.435	3.222	4,326	2,899	1.412	0.150	14.990	27.879
Under-five mortality (last 10 years)	92.178	6.422	4,330	2,902	1.451	0.070	79.333	105.023
MEN								
Urban residence	1.000	0.000	1,514	1,042	na	0.000	1.000	1.000
No education	0.185	0.017	1,514	1,042	1.752	0.095	0.150	0.220
With secondary education or higher	0.518	0.026	1,514	1,042	2.016	0.050	0.466	0.569
Never married	0.369	0.023	1,514	1,042	1.816	0.061	0.324	0.414
Currently married	0.629	0.023	1,514	1,042	1.821	0.036	0.584	0.675
Ideal number of children	2.202	0.041	1,064	630	1.895	0.019	2.121	2.284
Has heard of HIV/AIDS	0.930	0.010	1,514	1,042	1.488	0.011	0.910	0.949
Knows about condoms	0.549	0.026	1,514	1,042	2.063	0.048	0.496	0.602
Knows about limiting partners	0.109	0.013	1,514	1,042	1.623	0.119	0.083	0.135

na = Not applicable

Table B.4 Sampling errors: Rural sample, Bangladesh 2004

Variable	Value (R)	Standard error (SE)	Number of cases Un-weighted (N)	Number of cases Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.000	0.000	7,536	8,854	na	na	0.000	0.000
No education	0.436	0.010	7,536	8,854	1.677	0.022	0.417	0.455
With secondary education or higher	0.263	0.008	7,536	8,854	1.614	0.031	0.247	0.279
Currently married	0.927	0.003	7,536	8,854	1.026	0.003	0.921	0.933
Currently pregnant	0.052	0.002	8,838	10,355	1.024	0.046	0.047	0.057
Children ever born	3.085	0.034	6,883	8,100	1.244	0.011	3.017	3.153
Children surviving	2.657	0.027	6,883	8,100	1.181	0.010	2.604	2.710
Children ever born to women 40-49	5.305	0.078	1,488	1,729	1.257	0.015	5.149	5.462
Ever used any contraceptive method	0.813	0.008	6,975	8,210	1.635	0.009	0.798	0.828
Currently using any contraceptive method	0.567	0.008	6,975	8,210	1.381	0.014	0.550	0.583
Currently using a modern method	0.460	0.008	6,975	8,210	1.373	0.018	0.444	0.477
Currently using pill	0.260	0.007	6,975	8,210	1.306	0.026	0.247	0.274
Currently using IUD	0.006	0.001	6,975	8,210	1.096	0.164	0.004	0.008
Currently using condom	0.030	0.002	6,975	8,210	1.109	0.076	0.025	0.034
Currently using injectables	0.098	0.006	6,975	8,210	1.809	0.066	0.085	0.111
Currently using female sterilization	0.052	0.005	6,975	8,210	1.774	0.091	0.042	0.061
Currently using periodic abstinence	0.065	0.004	6,975	8,210	1.241	0.056	0.058	0.073
Currently using withdrawal	0.035	0.003	6,975	8,210	1.174	0.074	0.030	0.040
Currently using Norplant	0.007	0.001	6,975	8,210	1.235	0.172	0.005	0.010
Obtained method from public sector source	0.636	0.013	3,099	3,816	1.526	0.021	0.610	0.663
Want no more children	0.629	0.006	6,975	8,210	1.098	0.010	0.616	0.642
Want to delay birth at least 2 years	0.214	0.005	6,975	8,210	1.036	0.024	0.204	0.224
Ideal number of children	2.454	0.017	7,187	8,486	1.808	0.007	2.420	2.487
Mothers received ANC (trained provider)	0.429	0.016	3,682	4,293	1.909	0.036	0.397	0.460
Mothers received tetanus injection (last birth)	0.840	0.011	3,682	4,293	1.761	0.013	0.819	0.862
Mothers received medical care at delivery	0.092	0.006	4,835	5,610	1.394	0.069	0.079	0.104
Child had diarrhea in the last 2 weeks	0.077	0.004	4,494	5,215	1.013	0.054	0.068	0.085
Treated with ORS packets	0.651	0.030	349	400	1.129	0.046	0.590	0.711
Sought medical treatment	0.123	0.018	349	400	0.988	0.146	0.087	0.159
Child having health card, seen	0.473	0.020	870	1,014	1.182	0.043	0.433	0.513
Child received BCG vaccination	0.932	0.013	870	1,014	1.551	0.014	0.906	0.959
Child received DPT vaccination (3 doses)	0.798	0.020	870	1,014	1.468	0.025	0.758	0.838
Child received polio vaccination (3 doses)	0.814	0.019	870	1,014	1.443	0.023	0.776	0.852
Child received measles vaccination	0.739	0.023	870	1,014	1.509	0.030	0.694	0.784
Child fully immunized	0.711	0.023	870	1,014	1.481	0.032	0.666	0.757
Height-for-age (-2SD)	0.443	0.010	4,217	4,832	1.286	0.023	0.422	0.464
Weight-for-height (-2SD)	0.132	0.006	4,217	4,832	1.068	0.044	0.120	0.143
Weight-for-age (-2SD)	0.488	0.012	4,217	4,832	1.434	0.024	0.464	0.512
BMI < 18.5	0.371	0.007	6,849	8,057	1.251	0.020	0.356	0.385
Has heard of HIV/AIDS	0.537	0.014	7,536	8,854	2.369	0.025	0.509	0.564
Knows about condoms	0.173	0.008	7,536	8,854	1.898	0.048	0.156	0.189
Knows about limiting partners	0.154	0.008	7,536	8,854	1.923	0.052	0.138	0.170
Total fertility rate (last 3 years)	3.187	0.082	na	28,462	1.434	0.026	3.023	3.352
Neonatal mortality (last 10 years)	46.793	2.577	9,834	11,429	1.109	0.055	41.639	51.947
Post-neonatal mortality (last 10 years)	25.684	1.730	9,846	11,443	1.041	0.067	22.224	29.144
Infant mortality (last 10 years)	72.477	3.284	9,848	11,446	1.162	0.045	65.908	79.046
Child mortality (last 10 years)	27.225	2.148	9,893	11,493	1.130	0.079	22.929	31.521
Under-five mortality (last 10 years)	97.729	3.953	9,909	11,513	1.197	0.040	89.824	105.634
MEN								
Urban residence	0.000	0.000	2,783	3,255	na	na	0.000	0.000
No education	0.266	0.013	2,783	3,255	1.586	0.050	0.239	0.292
With secondary education or higher	0.370	0.013	2,783	3,255	1.421	0.035	0.344	0.396
Never married	0.335	0.012	2,783	3,255	1.393	0.037	0.310	0.360
Currently married	0.653	0.013	2,783	3,255	1.397	0.019	0.627	0.678
Ideal number of children	2.349	0.024	1,929	2,023	1.387	0.010	2.301	2.398
Has heard of HIV/AIDS	0.783	0.011	2,783	3,255	1.438	0.014	0.760	0.805
Knows about condoms	0.361	0.013	2,783	3,255	1.414	0.036	0.335	0.387
Knows about limiting partners	0.092	0.008	2,783	3,255	1.443	0.086	0.076	0.107

na = Not applicable

Table B.5 Sampling errors: Barisal sample, Bangladesh 2004

Variable	Value (R)	Standard error (SE)	Number of cases Un-weighted (N)	Number of cases Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.146	0.033	1,360	719	3.405	0.223	0.081	0.212
No education	0.253	0.027	1,360	719	2.325	0.108	0.198	0.308
With secondary education or higher	0.340	0.023	1,360	719	1.826	0.069	0.293	0.387
Currently married	0.936	0.007	1,360	719	1.054	0.007	0.922	0.950
Currently pregnant	0.047	0.005	1,598	851	0.916	0.102	0.037	0.056
Children ever born	3.226	0.120	1,254	665	1.755	0.037	2.986	3.467
Children surviving	2.768	0.104	1,254	665	1.880	0.038	2.559	2.977
Children ever born to women 40-49	5.543	0.187	296	159	1.291	0.034	5.169	5.918
Ever used any contraceptive method	0.839	0.016	1,271	674	1.526	0.019	0.808	0.871
Currently using any contraceptive method	0.542	0.014	1,271	674	1.028	0.027	0.513	0.571
Currently using a modern method	0.427	0.020	1,271	674	1.441	0.047	0.387	0.467
Currently using pill	0.225	0.017	1,271	674	1.414	0.074	0.192	0.259
Currently using IUD	0.006	0.003	1,271	674	1.164	0.423	0.001	0.011
Currently using condom	0.019	0.005	1,271	674	1.193	0.238	0.010	0.029
Currently using injectables	0.128	0.010	1,271	674	1.055	0.077	0.108	0.148
Currently using female sterilization	0.038	0.006	1,271	674	1.168	0.164	0.026	0.051
Currently using periodic abstinence	0.073	0.007	1,271	674	1.013	0.101	0.058	0.088
Currently using withdrawal	0.034	0.007	1,271	674	1.452	0.217	0.019	0.049
Currently using Norplant	0.004	0.002	1,271	674	1.233	0.537	0.000	0.009
Obtained method from public sector source	0.562	0.043	569	291	2.058	0.076	0.476	0.648
Want no more children	0.641	0.015	1,271	674	1.132	0.024	0.611	0.672
Want to delay birth at least 2 years	0.215	0.012	1,271	674	1.025	0.055	0.191	0.238
Ideal number of children	2.431	0.029	1,318	693	1.414	0.012	2.372	2.489
Mothers received ANC (trained provider)	0.395	0.034	615	333	1.747	0.086	0.327	0.463
Mothers received tetanus injection (last birth)	0.861	0.024	615	333	1.757	0.028	0.813	0.910
Mothers received medical care at delivery	0.111	0.022	752	410	1.788	0.199	0.067	0.155
Child had diarrhea in the last 2 weeks	0.092	0.014	709	386	1.233	0.148	0.065	0.120
Treated with ORS packets	0.523	0.080	66	36	1.264	0.153	0.363	0.684
Sought medical treatment	0.069	0.028	66	36	0.936	0.413	0.012	0.125
Child having health card, seen	0.496	0.057	135	75	1.352	0.115	0.382	0.610
Child received BCG vaccination	0.962	0.025	135	75	1.536	0.026	0.912	1.000
Child received DPT vaccination (3 doses)	0.815	0.053	135	75	1.639	0.066	0.708	0.922
Child received polio vaccination (3 doses)	0.846	0.052	135	75	1.720	0.062	0.742	0.950
Child received measles vaccination	0.773	0.036	135	75	1.017	0.046	0.701	0.845
Child fully immunized	0.725	0.043	135	75	1.142	0.059	0.639	0.811
Height-for-age (-2SD)	0.489	0.024	658	354	1.248	0.049	0.440	0.537
Weight-for-height (-2SD)	0.072	0.011	658	354	1.136	0.158	0.049	0.095
Weight-for-age (-2SD)	0.463	0.026	658	354	1.327	0.057	0.411	0.516
BMI < 18.5	0.378	0.019	1,247	657	1.368	0.050	0.340	0.416
Has heard of HIV/AIDS	0.602	0.039	1,360	719	2.901	0.064	0.525	0.679
Knows about condoms	0.172	0.022	1,360	719	2.136	0.127	0.128	0.215
Knows about limiting partners	0.160	0.016	1,360	719	1.586	0.099	0.128	0.191
Total fertility rate (last 3 years)	2.879	0.186	na	2,319	1.576	0.064	2.508	3.250
Neonatal mortality (last 10 years)	31.995	5.345	1,646	899	1.203	0.167	21.305	42.685
Post-neonatal mortality (last 10 years)	29.443	5.708	1,649	901	1.329	0.194	18.026	40.859
Infant mortality (last 10 years)	61.438	8.108	1,649	901	1.300	0.132	45.222	77.653
Child mortality (last 10 years)	32.162	4.629	1,660	907	1.028	0.144	22.904	41.420
Under-five mortality (last 10 years)	91.623	9.363	1,663	909	1.286	0.102	72.897	110.350
MEN								
Urban residence	0.168	0.040	452	225	2.251	0.236	0.089	0.247
No education	0.132	0.029	452	225	1.830	0.221	0.074	0.190
With secondary education or higher	0.497	0.048	452	225	2.053	0.097	0.400	0.594
Never married	0.340	0.043	452	225	1.929	0.126	0.254	0.426
Currently married	0.648	0.040	452	225	1.766	0.061	0.568	0.727
Ideal number of children	2.296	0.056	308	139	1.363	0.024	2.184	2.408
Has heard of HIV/AIDS	0.823	0.028	452	225	1.558	0.034	0.767	0.879
Knows about condoms	0.410	0.036	452	225	1.534	0.087	0.339	0.481
Knows about limiting partners	0.107	0.016	452	225	1.124	0.153	0.074	0.139

na = Not applicable

Table B.6 Sampling errors: Chittagong sample, Bangladesh 2004								
			Number of cases				Confidence limits	
Variable	Value (R)	Standard error (SE)	Un-weighted (N)	Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	R-2SE	R+2SE
WOMEN								
Urban residence	0.260	0.010	2,069	2,041	1.034	0.038	0.240	0.280
No education	0.404	0.024	2,069	2,041	2.219	0.059	0.356	0.452
With secondary education or higher	0.325	0.022	2,069	2,041	2.155	0.068	0.281	0.369
Currently married	0.920	0.006	2,069	2,041	1.022	0.007	0.907	0.932
Currently pregnant	0.060	0.005	2,602	2,561	1.120	0.086	0.049	0.070
Children ever born	3.260	0.064	1,883	1,862	1.162	0.019	3.133	3.387
Children surviving	2.858	0.048	1,883	1,862	1.047	0.017	2.761	2.954
Children ever born to women 40-49	5.637	0.137	395	394	1.168	0.024	5.363	5.910
Ever used any contraceptive method	0.744	0.020	1,898	1,877	2.040	0.027	0.703	0.785
Currently using any contraceptive method	0.471	0.018	1,898	1,877	1.542	0.037	0.436	0.507
Currently using a modern method	0.374	0.017	1,898	1,877	1.544	0.046	0.340	0.409
Currently using pill	0.194	0.013	1,898	1,877	1.386	0.065	0.169	0.220
Currently using IUD	0.006	0.002	1,898	1,877	1.204	0.353	0.002	0.010
Currently using condom	0.048	0.007	1,898	1,877	1.447	0.148	0.034	0.062
Currently using injectables	0.083	0.009	1,898	1,877	1.393	0.106	0.066	0.101
Currently using female sterilization	0.036	0.005	1,898	1,877	1.158	0.138	0.026	0.046
Currently using periodic abstinence	0.057	0.005	1,898	1,877	1.033	0.097	0.046	0.068
Currently using withdrawal	0.031	0.005	1,898	1,877	1.127	0.144	0.022	0.040
Currently using Norplant	0.005	0.002	1,898	1,877	0.997	0.314	0.002	0.009
Obtained method from public sector source	0.512	0.026	750	708	1.425	0.051	0.460	0.564
Want no more children	0.589	0.013	1,898	1,877	1.176	0.023	0.562	0.616
Want to delay birth at least 2 years	0.221	0.012	1,898	1,877	1.261	0.054	0.197	0.245
Ideal number of children	2.685	0.040	1,970	1,934	2.047	0.015	2.604	2.765
Mothers received ANC (trained provider)	0.471	0.031	1,109	1,115	2.067	0.065	0.409	0.532
Mothers received tetanus injection (last birth)	0.831	0.019	1,109	1,115	1.746	0.023	0.792	0.870
Mothers received medical care at delivery	0.115	0.014	1,503	1,527	1.526	0.120	0.088	0.143
Child had diarrhea in the last 2 weeks	0.082	0.008	1,400	1,424	1.050	0.098	0.066	0.098
Treated with ORS packets	0.789	0.044	113	116	1.120	0.056	0.700	0.877
Sought medical treatment	0.135	0.035	113	116	1.017	0.260	0.065	0.206
Child having health card, seen	0.489	0.037	261	268	1.224	0.077	0.414	0.564
Child received BCG vaccination	0.931	0.025	261	268	1.525	0.026	0.882	0.980
Child received DPT vaccination (3 doses)	0.843	0.035	261	268	1.569	0.042	0.772	0.914
Child received polio vaccination (3 doses)	0.844	0.036	261	268	1.578	0.042	0.773	0.915
Child received measles vaccination	0.771	0.042	261	268	1.624	0.055	0.687	0.855
Child fully immunized	0.751	0.042	261	268	1.571	0.056	0.668	0.835
Height-for-age (-2SD)	0.462	0.018	1,316	1,320	1.303	0.040	0.425	0.499
Weight-for-height (-2SD)	0.141	0.012	1,316	1,320	1.160	0.083	0.118	0.164
Weight-for-age (-2SD)	0.499	0.018	1,316	1,320	1.206	0.035	0.464	0.534
BMI < 18.5	0.329	0.012	1,857	1,825	1.104	0.037	0.305	0.353
Has heard of HIV/AIDS	0.591	0.032	2,069	2,041	2.957	0.054	0.527	0.655
Knows about condoms	0.221	0.017	2,069	2,041	1.871	0.077	0.187	0.255
Knows about limiting partners	0.180	0.015	2,069	2,041	1.823	0.086	0.149	0.211
Total fertility rate (last 3 years)	3.709	0.175	na	6,903	1.493	0.047	3.359	4.058
Neonatal mortality (last 10 years)	40.551	4.038	2,985	3,010	1.054	0.100	32.476	48.627
Post-neonatal mortality (last 10 years)	27.011	3.078	2,991	3,016	1.048	0.114	20.855	33.167
Infant mortality (last 10 years)	67.563	4.349	2,991	3,016	0.948	0.064	58.865	76.260
Child mortality (last 10 years)	38.509	4.598	3,007	3,033	1.189	0.119	29.313	47.706
Under-five mortality (last 10 years)	103.470	5.797	3,013	3,039	0.992	0.056	91.876	115.065
MEN								
Urban residence	0.306	0.016	710	739	0.916	0.052	0.274	0.338
No education	0.252	0.026	710	739	1.621	0.105	0.199	0.305
With secondary education or higher	0.406	0.029	710	739	1.575	0.072	0.347	0.464
Never married	0.423	0.025	710	739	1.332	0.058	0.374	0.473
Currently married	0.572	0.025	710	739	1.335	0.043	0.522	0.621
Ideal number of children	2.663	0.087	437	390	1.768	0.033	2.490	2.836
Has heard of HIV/AIDS	0.814	0.019	710	739	1.335	0.024	0.775	0.853
Knows about condoms	0.368	0.026	710	739	1.445	0.071	0.316	0.420
Knows about limiting partners	0.063	0.014	710	739	1.510	0.219	0.035	0.090
na = Not applicable								

Table B.7 Sampling errors: Dhaka sample, Bangladesh 2004

Variable	Value (R)	Standard error (SE)	Number of cases Un-weighted (N)	Number of cases Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.321	0.014	2,589	3,570	1.490	0.043	0.294	0.348
No education	0.421	0.016	2,589	3,570	1.616	0.037	0.390	0.453
With secondary education or higher	0.291	0.016	2,589	3,570	1.793	0.055	0.259	0.323
Currently married	0.929	0.006	2,589	3,570	1.102	0.006	0.917	0.940
Currently pregnant	0.049	0.005	3,067	4,237	1.194	0.093	0.040	0.059
Children ever born	2.981	0.048	2,364	3,266	1.097	0.016	2.886	3.076
Children surviving	2.559	0.037	2,364	3,266	1.050	0.015	2.484	2.634
Children ever born to women 40-49	4.931	0.157	492	669	1.492	0.032	4.617	5.245
Ever used any contraceptive method	0.862	0.011	2,399	3,315	1.540	0.013	0.840	0.883
Currently using any contraceptive method	0.593	0.013	2,399	3,315	1.275	0.022	0.567	0.619
Currently using a modern method	0.485	0.014	2,399	3,315	1.350	0.028	0.457	0.512
Currently using pill	0.273	0.010	2,399	3,315	1.147	0.038	0.252	0.294
Currently using IUD	0.005	0.002	2,399	3,315	1.068	0.303	0.002	0.008
Currently using condom	0.049	0.005	2,399	3,315	1.215	0.109	0.039	0.060
Currently using injectables	0.080	0.011	2,399	3,315	1.975	0.137	0.058	0.102
Currently using female sterilization	0.062	0.010	2,399	3,315	1.963	0.156	0.042	0.081
Currently using periodic abstinence	0.067	0.007	2,399	3,315	1.353	0.103	0.053	0.081
Currently using withdrawal	0.034	0.004	2,399	3,315	1.120	0.121	0.026	0.043
Currently using Norplant	0.012	0.002	2,399	3,315	1.094	0.206	0.007	0.016
Obtained method from public sector source	0.534	0.019	1,193	1,623	1.282	0.035	0.497	0.572
Want no more children	0.633	0.011	2,399	3,315	1.155	0.018	0.611	0.656
Want to delay birth at least 2 years	0.198	0.008	2,399	3,315	1.041	0.043	0.181	0.215
Ideal number of children	2.401	0.024	2,510	3,453	1.654	0.010	2.353	2.450
Mothers received ANC (trained provider)	0.485	0.025	1,192	1,677	1.717	0.051	0.436	0.535
Mothers received tetanus injection (last birth)	0.867	0.017	1,192	1,677	1.726	0.019	0.833	0.901
Mothers received medical care at delivery	0.148	0.013	1,531	2,175	1.323	0.089	0.122	0.174
Child had diarrhea in the last 2 weeks	0.066	0.006	1,409	2,005	0.888	0.090	0.054	0.078
Treated with ORS packets	0.637	0.057	91	132	1.113	0.089	0.523	0.750
Sought medical treatment	0.157	0.042	91	132	1.140	0.266	0.073	0.240
Child having health card, seen	0.430	0.031	266	375	1.017	0.072	0.368	0.492
Child received BCG vaccination	0.955	0.015	266	375	1.170	0.015	0.926	0.985
Child received DPT vaccination (3 doses)	0.781	0.034	266	375	1.363	0.044	0.713	0.849
Child received polio vaccination (3 doses)	0.795	0.032	266	375	1.321	0.041	0.730	0.859
Child received measles vaccination	0.720	0.040	266	375	1.479	0.056	0.640	0.801
Child fully immunized	0.688	0.040	266	375	1.437	0.059	0.608	0.769
Height-for-age (-2SD)	0.447	0.020	1,309	1,837	1.444	0.045	0.407	0.488
Weight-for-height (-2SD)	0.117	0.008	1,309	1,837	0.917	0.069	0.101	0.133
Weight-for-age (-2SD)	0.476	0.024	1,309	1,837	1.659	0.051	0.427	0.524
BMI < 18.5	0.340	0.014	2,372	3,266	1.449	0.042	0.311	0.368
Has heard of HIV/AIDS	0.669	0.019	2,589	3,570	2.102	0.029	0.630	0.708
Knows about condoms	0.247	0.015	2,589	3,570	1.765	0.061	0.217	0.277
Knows about limiting partners	0.198	0.013	2,589	3,570	1.648	0.065	0.172	0.223
Total fertility rate (last 3 years)	2.898	0.111	na	11,731	1.309	0.038	2.676	3.120
Neonatal mortality (last 10 years)	46.649	4.370	3,187	4,530	1.107	0.094	37.909	55.388
Post-neonatal mortality (last 10 years)	27.940	2.933	3,191	4,535	1.006	0.105	22.074	33.806
Infant mortality (last 10 years)	74.589	5.842	3,191	4,535	1.175	0.078	62.906	86.272
Child mortality (last 10 years)	26.527	3.766	3,202	4,551	1.184	0.142	18.995	34.060
Under-five mortality (last 10 years)	99.138	7.214	3,206	4,557	1.268	0.073	84.709	113.566
MEN								
Urban residence	0.340	0.019	1,012	1,342	1.287	0.056	0.302	0.379
No education	0.272	0.023	1,012	1,342	1.619	0.083	0.226	0.317
With secondary education or higher	0.404	0.023	1,012	1,342	1.514	0.058	0.357	0.451
Never married	0.344	0.023	1,012	1,342	1.523	0.066	0.299	0.390
Currently married	0.645	0.023	1,012	1,342	1.509	0.035	0.600	0.691
Ideal number of children	2.330	0.038	715	833	1.473	0.016	2.254	2.407
Has heard of HIV/AIDS	0.846	0.014	1,012	1,342	1.255	0.017	0.817	0.874
Knows about condoms	0.415	0.024	1,012	1,342	1.547	0.058	0.367	0.463
Knows about limiting partners	0.116	0.014	1,012	1,342	1.439	0.125	0.087	0.145

na = Not applicable

Table B.8 Sampling errors: Khulna sample, Bangladesh 2004

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
WOMEN								
	0.217	0.013	1,708	1,397	1.325	0.061	0.191	0.243
No education	0.329	0.018	1,708	1,397	1.540	0.053	0.294	0.364
With secondary education or higher	0.356	0.019	1,708	1,397	1.598	0.052	0.319	0.393
Currently married	0.928	0.007	1,708	1,397	1.077	0.007	0.915	0.941
Currently pregnant	0.048	0.005	1,935	1,583	0.974	0.098	0.038	0.057
Children ever born	2.663	0.071	1,563	1,274	1.447	0.027	2.520	2.806
Children surviving	2.352	0.055	1,563	1,274	1.328	0.024	2.241	2.462
Children ever born to women 40-49	4.510	0.169	333	276	1.398	0.037	4.173	4.847
Ever used any contraceptive method	0.890	0.010	1,587	1,296	1.305	0.012	0.869	0.910
Currently using any contraceptive method	0.638	0.018	1,587	1,296	1.487	0.028	0.602	0.674
Currently using a modern method	0.507	0.015	1,587	1,296	1.186	0.029	0.478	0.537
Currently using pill	0.286	0.013	1,587	1,296	1.134	0.045	0.260	0.312
Currently using IUD	0.007	0.002	1,587	1,296	0.891	0.260	0.004	0.011
Currently using condom	0.049	0.008	1,587	1,296	1.413	0.156	0.034	0.064
Currently using injectables	0.115	0.012	1,587	1,296	1.440	0.101	0.091	0.138
Currently using female sterilization	0.036	0.006	1,587	1,296	1.272	0.165	0.024	0.048
Currently using periodic abstinence	0.068	0.008	1,587	1,296	1.184	0.110	0.053	0.083
Currently using withdrawal	0.056	0.006	1,587	1,296	0.996	0.103	0.044	0.067
Currently using Norplant	0.004	0.002	1,587	1,296	1.079	0.436	0.000	0.007
Obtained method from public sector source	0.561	0.025	818	664	1.447	0.045	0.510	0.611
Want no more children	0.637	0.011	1,587	1,296	0.930	0.018	0.615	0.659
Want to delay birth at least 2 years	0.218	0.009	1,587	1,296	0.858	0.041	0.200	0.236
Ideal number of children	2.227	0.030	1,669	1,363	1.891	0.013	2.167	2.286
Mothers received ANC (trained provider)	0.548	0.027	728	607	1.474	0.049	0.495	0.602
Mothers received tetanus injection (last birth)	0.860	0.019	728	607	1.475	0.022	0.822	0.897
Mothers received medical care at delivery	0.205	0.022	866	731	1.476	0.105	0.162	0.248
Child had diarrhea in the last 2 weeks	0.080	0.012	825	694	1.266	0.150	0.056	0.104
Treated with ORS packets	0.712	0.073	62	55	1.344	0.103	0.565	0.859
Sought medical treatment	0.172	0.044	62	55	0.922	0.256	0.084	0.261
Child having health card, seen	0.582	0.055	156	130	1.411	0.095	0.472	0.693
Child received BCG vaccination	0.969	0.015	156	130	1.101	0.016	0.939	0.999
Child received DPT vaccination (3 doses)	0.876	0.039	156	130	1.474	0.044	0.799	0.953
Child received polio vaccination (3 doses)	0.902	0.032	156	130	1.353	0.035	0.839	0.966
Child received measles vaccination	0.866	0.038	156	130	1.422	0.044	0.789	0.943
Child fully immunized	0.828	0.047	156	130	1.554	0.056	0.735	0.921
Height-for-age (-2SD)	0.317	0.026	794	662	1.556	0.083	0.265	0.370
Weight-for-height (-2SD)	0.142	0.013	794	662	1.047	0.092	0.115	0.168
Weight-for-age (-2SD)	0.403	0.028	794	662	1.600	0.070	0.347	0.459
BMI < 18.5	0.292	0.012	1,581	1,293	1.048	0.041	0.268	0.316
Has heard of HIV/AIDS	0.726	0.019	1,708	1,397	1.790	0.027	0.688	0.765
Knows about condoms	0.256	0.020	1,708	1,397	1.914	0.079	0.216	0.297
Knows about limiting partners	0.198	0.018	1,708	1,397	1.898	0.093	0.161	0.234
Total fertility rate (last 3 years)	2.777	0.131	na	4,366	1.141	0.047	2.516	3.038
Neonatal mortality (last 10 years)	46.883	6.427	1,748	1,457	1.305	0.137	34.029	59.736
Post-neonatal mortality (last 10 years)	19.070	5.008	1,748	1,457	1.493	0.263	9.055	29.086
Infant mortality (last 10 years)	65.953	7.116	1,748	1,457	1.213	0.108	51.722	80.184
Child mortality (last 10 years)	12.779	2.591	1,753	1,461	0.871	0.203	7.596	17.962
Under-five mortality (last 10 years)	77.889	7.697	1,753	1,461	1.204	0.099	62.495	93.283
MEN								
Urban residence	0.218	0.016	698	573	1.023	0.073	0.186	0.250
No education	0.188	0.021	698	573	1.400	0.110	0.147	0.230
With secondary education or higher	0.440	0.024	698	573	1.302	0.056	0.391	0.489
Never married	0.322	0.025	698	573	1.420	0.078	0.271	0.372
Currently married	0.671	0.025	698	573	1.431	0.038	0.620	0.722
Ideal number of children	2.134	0.047	507	374	1.577	0.022	2.041	2.228
Has heard of HIV/AIDS	0.917	0.014	698	573	1.379	0.016	0.888	0.945
Knows about condoms	0.534	0.027	698	573	1.436	0.051	0.479	0.588
Knows about limiting partners	0.117	0.021	698	573	1.686	0.175	0.076	0.159

na = Not applicable

Table B.9 Sampling errors: Rajshahi sample, Bangladesh 2004

Variable	Value (R)	Standard error (SE)	Number of cases Un-weighted (N)	Number of cases Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
				WOMEN				
Urban residence	0.131	0.007	2,564	2,994	0.990	0.050	0.117	0.144
No education	0.454	0.014	2,564	2,994	1.463	0.032	0.425	0.483
With secondary education or higher	0.268	0.011	2,564	2,994	1.288	0.042	0.246	0.291
Currently married	0.929	0.005	2,564	2,994	0.993	0.005	0.919	0.939
Currently pregnant	0.048	0.003	2,863	3,348	0.869	0.071	0.042	0.055
Children ever born	2.838	0.063	2,335	2,735	1.444	0.022	2.711	2.964
Children surviving	2.452	0.049	2,335	2,735	1.373	0.020	2.353	2.550
Children ever born to women 40-49	4.948	0.146	523	594	1.368	0.030	4.656	5.241
Ever used any contraceptive method	0.881	0.010	2,376	2,782	1.555	0.012	0.861	0.902
Currently using any contraceptive method	0.683	0.013	2,376	2,782	1.340	0.019	0.657	0.708
Currently using a modern method	0.578	0.014	2,376	2,782	1.339	0.023	0.551	0.605
Currently using pill	0.331	0.014	2,376	2,782	1.419	0.041	0.304	0.359
Currently using IUD	0.006	0.002	2,376	2,782	1.249	0.326	0.002	0.010
Currently using condom	0.034	0.005	2,376	2,782	1.211	0.132	0.025	0.043
Currently using injectables	0.122	0.012	2,376	2,782	1.801	0.099	0.098	0.146
Currently using female sterilization	0.065	0.007	2,376	2,782	1.316	0.102	0.052	0.079
Currently using periodic abstinence	0.063	0.006	2,376	2,782	1.215	0.096	0.051	0.075
Currently using withdrawal	0.037	0.005	2,376	2,782	1.172	0.123	0.028	0.046
Currently using Norplant	0.007	0.002	2,376	2,782	1.296	0.319	0.002	0.011
Obtained method from public sector source	0.646	0.023	1,403	1,626	1.831	0.036	0.599	0.692
Want no more children	0.654	0.011	2,376	2,782	1.143	0.017	0.631	0.676
Want to delay birth at least 2 years	0.223	0.009	2,376	2,782	1.001	0.038	0.206	0.240
Ideal number of children	2.286	0.026	2,534	2,952	2.029	0.011	2.234	2.338
Mothers received ANC (trained provider)	0.511	0.031	1,085	1,285	2.024	0.061	0.450	0.572
Mothers received tetanus injection (last birth)	0.864	0.022	1,085	1,285	2.102	0.025	0.821	0.908
Mothers received medical care at delivery	0.106	0.013	1,312	1,560	1.429	0.121	0.080	0.131
Child had diarrhea in the last 2 weeks	0.074	0.007	1,223	1,449	0.978	0.098	0.059	0.088
Treated with ORS packets	0.607	0.056	89	107	1.088	0.092	0.496	0.718
Sought medical treatment	0.198	0.044	89	107	1.064	0.224	0.109	0.287
Child having health card, seen	0.534	0.037	261	313	1.222	0.070	0.460	0.609
Child received BCG vaccination	0.911	0.036	261	313	2.076	0.040	0.839	0.983
Child received DPT vaccination (3 doses)	0.829	0.042	261	313	1.837	0.051	0.745	0.914
Child received polio vaccination (3 doses)	0.842	0.041	261	313	1.857	0.049	0.759	0.925
Child received measles vaccination	0.770	0.045	261	313	1.751	0.058	0.680	0.860
Child fully immunized	0.764	0.045	261	313	1.732	0.059	0.674	0.854
Height-for-age (-2SD)	0.403	0.020	1,148	1,349	1.352	0.050	0.363	0.444
Weight-for-height (-2SD)	0.142	0.012	1,148	1,349	1.167	0.085	0.118	0.166
Weight-for-age (-2SD)	0.481	0.021	1,148	1,349	1.398	0.044	0.438	0.524
BMI < 18.5	0.342	0.012	2,374	2,759	1.215	0.035	0.318	0.365
Has heard of HIV/AIDS	0.499	0.023	2,564	2,994	2.300	0.046	0.454	0.545
Knows about condoms	0.200	0.016	2,564	2,994	2.066	0.082	0.167	0.233
Knows about limiting partners	0.184	0.016	2,564	2,994	2.150	0.089	0.151	0.217
Total fertility rate (last 3 years)	2.570	0.109	na	9,269	1.138	0.042	2.353	2.788
Neonatal mortality (last 10 years)	48.231	5.346	2,732	3,256	1.163	0.111	37.540	58.923
Post-neonatal mortality (last 10 years)	21.903	3.283	2,733	3,258	1.139	0.150	15.337	28.470
Infant mortality (last 10 years)	70.135	6.413	2,735	3,261	1.221	0.091	57.308	82.962
Child mortality (last 10 years)	17.340	2.727	2,741	3,266	0.944	0.157	11.886	22.795
Under-five mortality (last 10 years)	86.259	7.395	2,746	3,273	1.279	0.086	71.469	101.049
				MEN				
Urban residence	0.136	0.006	999	1,114	0.577	0.046	0.123	0.148
No education	0.276	0.022	999	1,114	1.536	0.079	0.232	0.319
With secondary education or higher	0.385	0.020	999	1,114	1.293	0.052	0.345	0.425
Never married	0.265	0.021	999	1,114	1.495	0.079	0.223	0.306
Currently married	0.722	0.022	999	1,114	1.539	0.030	0.678	0.766
Ideal number of children	2.160	0.028	775	777	1.304	0.013	2.105	2.215
Has heard of HIV/AIDS	0.752	0.021	999	1,114	1.504	0.027	0.711	0.793
Knows about condoms	0.385	0.022	999	1,114	1.460	0.058	0.340	0.430
Knows about limiting partners	0.079	0.012	999	1,114	1.438	0.155	0.054	0.104

na = Not applicable

Table B.10 Sampling errors: Sylhet sample, Bangladesh 2004								
			Number of cases				Confidence limits	
			Un-	Weight-	Design	Relative		
		Standard	weighted	ed	effect	error		
Variable	Value (R)	error (SE)	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SE
WOMEN								
Urban residence	0.152	0.025	1,150	719	2.316	0.161	0.103	0.201
No education	0.530	0.032	1,150	719	2.150	0.060	0.467	0.594
With secondary education or higher	0.170	0.017	1,150	719	1.554	0.101	0.135	0.204
Currently married	0.887	0.012	1,150	719	1.303	0.014	0.863	0.911
Currently pregnant	0.059	0.006	1,559	970	1.086	0.108	0.047	0.072
Children ever born	3.436	0.071	1,018	636	0.875	0.021	3.294	3.579
Children surviving	2.869	0.061	1,018	636	0.921	0.021	2.747	2.991
Children ever born to women 40-49	5.777	0.175	230	143	0.970	0.030	5.426	6.127
Ever used any contraceptive method	0.524	0.023	1,022	638	1.493	0.045	0.477	0.571
Currently using any contraceptive method	0.318	0.019	1,022	638	1.293	0.059	0.280	0.356
Currently using a modern method	0.220	0.019	1,022	638	1.431	0.084	0.183	0.258
Currently using pill	0.096	0.012	1,022	638	1.277	0.122	0.073	0.120
Currently using IUD	0.009	0.002	1,022	638	0.855	0.287	0.004	0.014
Currently using condom	0.025	0.004	1,022	638	0.803	0.158	0.017	0.033
Currently using injectables	0.041	0.009	1,022	638	1.518	0.231	0.022	0.059
Currently using female sterilization	0.037	0.009	1,022	638	1.435	0.228	0.020	0.054
Currently using periodic abstinence	0.076	0.010	1,022	638	1.254	0.137	0.055	0.097
Currently using withdrawal	0.018	0.005	1,022	638	1.156	0.268	0.008	0.028
Currently using Norplant	0.012	0.006	1,022	638	1.611	0.452	0.001	0.023
Obtained method from public sector source	0.551	0.047	261	141	1.535	0.086	0.456	0.646
Want no more children	0.578	0.018	1,022	638	1.196	0.032	0.541	0.615
Want to delay birth at least 2 years	0.188	0.011	1,022	638	0.913	0.059	0.166	0.210
Ideal number of children	2.741	0.047	1,011	624	1.587	0.017	2.648	2.834
Mothers received ANC (trained provider)	0.438	0.038	637	400	1.914	0.086	0.363	0.513
Mothers received tetanus injection (last birth)	0.739	0.026	637	400	1.522	0.036	0.686	0.791
Mothers received medical care at delivery	0.111	0.014	944	599	1.176	0.127	0.083	0.139
Child had diarrhea in the last 2 weeks	0.073	0.014	858	540	1.520	0.196	0.045	0.102
Treated with ORS packets	0.699	0.068	64	40	1.082	0.097	0.564	0.835
Sought medical treatment	0.167	0.048	64	40	1.001	0.285	0.072	0.263
Child having health card, seen	0.509	0.038	168	105	0.994	0.075	0.433	0.586
Child received BCG vaccination	0.871	0.030	168	105	1.172	0.035	0.811	0.932
Child received DPT vaccination (3 doses)	0.683	0.034	168	105	0.955	0.050	0.615	0.752
Child received polio vaccination (3 doses)	0.695	0.029	168	105	0.818	0.042	0.637	0.753
Child received measles vaccination	0.663	0.041	168	105	1.129	0.062	0.581	0.746
Child fully immunized	0.615	0.036	168	105	0.962	0.059	0.542	0.687
Height-for-age (-2SD)	0.462	0.022	787	485	1.125	0.047	0.419	0.505
Weight-for-height (-2SD)	0.122	0.014	787	485	1.153	0.111	0.095	0.149
Weight-for-age (-2SD)	0.498	0.029	787	485	1.470	0.058	0.440	0.555
BMI < 18.5	0.476	0.030	1,017	632	1.917	0.063	0.416	0.537
Has heard of HIV/AIDS	0.454	0.030	1,150	719	2.027	0.066	0.395	0.514
Knows about condoms	0.124	0.020	1,150	719	2.003	0.157	0.085	0.163
Knows about limiting partners	0.073	0.012	1,150	719	1.546	0.163	0.049	0.096
Total fertility rate (last 3 years)	4.152	0.238	na	2,645	1.367	0.057	3.677	4.627
Neonatal mortality (last 10 years)	63.455	6.345	1,844	1,167	1.036	0.100	50.764	76.146
Post-neonatal mortality (last 10 years)	36.501	5.131	1,846	1,169	1.111	0.141	26.239	46.763
Infant mortality (last 10 years)	99.956	10.027	1,846	1,169	1.310	0.100	79.901	120.011
Child mortality (last 10 years)	29.117	6.358	1,856	1,174	1.378	0.218	16.401	41.833
Under-five mortality (last 10 years)	126.163	12.462	1,858	1,176	1.433	0.099	101.238	151.088
MEN								
Urban residence	0.147	0.029	426	304	1.694	0.198	0.089	0.205
No education	0.204	0.026	426	304	1.352	0.129	0.151	0.257
With secondary education or higher	0.356	0.044	426	304	1.894	0.124	0.268	0.444
Never married	0.472	0.035	426	304	1.434	0.074	0.403	0.542
Currently married	0.518	0.035	426	304	1.458	0.068	0.447	0.589
Ideal number of children	2.598	0.057	251	140	1.010	0.022	2.485	2.712
Has heard of HIV/AIDS	0.763	0.041	426	304	1.984	0.054	0.681	0.845
Knows about condoms	0.300	0.028	426	304	1.245	0.092	0.245	0.355
Knows about limiting partners	0.100	0.018	426	304	1.248	0.182	0.063	0.136

na = Not applicable

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Bangladesh 2004

	Male		Female			Male		Female	
Age	Number	Percentage	Number	Percentage	Age	Number	Percentage	Number	Percentage
0	670	2.7	636	2.4	36	210	0.8	289	1.1
1	587	2.3	659	2.5	37	151	0.6	260	1.0
2	677	2.7	658	2.5	38	325	1.3	296	1.1
3	689	2.7	662	2.5	39	119	0.5	280	1.1
4	692	2.8	630	2.4	40	817	3.3	345	1.3
5	625	2.5	660	2.5	41	128	0.5	209	0.8
6	635	2.5	607	2.3	42	247	1.0	209	0.8
7	747	3.0	722	2.8	43	193	0.8	217	0.8
8	706	2.8	631	2.4	44	60	0.2	179	0.7
9	639	2.5	613	2.3	45	661	2.6	282	1.1
10	748	3.0	753	2.9	46	123	0.5	230	0.9
11	533	2.1	525	2.0	47	89	0.4	189	0.7
12	790	3.1	698	2.7	48	199	0.8	207	0.8
13	573	2.3	637	2.4	49	63	0.3	188	0.7
14	549	2.2	632	2.4	50	493	2.0	85	0.3
15	567	2.3	802	3.1	51	87	0.3	148	0.6
16	578	2.3	729	2.8	52	135	0.5	160	0.6
17	442	1.8	606	2.3	53	104	0.4	163	0.6
18	602	2.4	643	2.5	54	58	0.2	128	0.5
19	260	1.0	542	2.1	55	235	0.9	177	0.7
20	607	2.4	666	2.5	56	83	0.3	153	0.6
21	282	1.1	497	1.9	57	66	0.3	119	0.5
22	431	1.7	582	2.2	58	138	0.5	136	0.5
23	252	1.0	411	1.6	59	43	0.2	91	0.3
24	286	1.1	470	1.8	60	428	1.7	225	0.9
25	634	2.5	495	1.9	61	40	0.2	96	0.4
26	333	1.3	433	1.7	62	88	0.4	90	0.3
27	267	1.1	391	1.5	63	59	0.2	77	0.3
28	328	1.3	450	1.7	64	36	0.1	59	0.2
29	140	0.6	360	1.4	65	287	1.1	160	0.6
30	705	2.8	375	1.4	66	32	0.1	40	0.2
31	165	0.7	314	1.2	67	36	0.1	40	0.2
32	315	1.3	367	1.4	68	38	0.2	44	0.2
33	316	1.3	399	1.5	69	22	0.1	30	0.1
34	211	0.8	339	1.3	70+	889	3.5	602	2.3
35	729	2.9	355	1.4	Don't know/ missing	8	0.0	7	0.0
					Total	25,099	100.0	26,156	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 5-54, interviewed women age 10-49, and percentage of eligible women who were interviewed (weighted), by five-year age groups, Bangladesh 2004

| Age group | Household population of women age 5-54 | | | | Women age 10-49 interviewed | | Percentage of eligible women age 10-49 interviewed (weighted) |
| | Total | | Ever-married | | | | |
	Number	Percentage	Number	Percentage	Number	Percentage	
5-9	3,233	15.6	na	na	na	na	na
10-14	3,245	15.6	134	1.1	133	1.2	99.2
15-19	3,321	16.0	1,565	12.9	1,549	13.7	99.0
20-24	2,625	12.6	2,221	18.3	2,200	19.5	99.1
25-29	2,129	10.3	2,039	16.8	2,013	17.8	98.7
30-34	1,795	8.6	1,772	14.6	1,756	15.5	99.1
25-39	1,479	7.1	1,471	12.1	1,448	12.8	98.5
40-44	1,159	5.6	1,152	9.5	1,133	10.0	98.3
45-49	1,095	5.3	1,095	9.0	1,077	9.5	98.4
50-54	684	3.3	684	5.6	na	na	na
10-49	16,848		11,449		11,309	100.0	98.8

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-59, men eligible to be interviewed age 15-54, interviewed men age 15-54, and percentage of eligible men who were interviewed (weighted), Bangladesh 2004

| Age group | Household population of men age 10-59 | | Men eligible for interview age 15-54 | | Interviewed men age 15-54 | | Percentage of eligible men age 15-54 interviewed (weighted) |
	Number	Percentage	Number	Percentage	Number	Percentage	
5-9	1,710	19.8	na	na	na	na	na
10-14	1,248	14.5	622	14.0	607	14.2	97.7
15-19	952	11.0	522	11.7	502	11.8	96.3
20-24	890	10.3	614	13.8	587	13.7	95.6
25-29	932	10.8	737	16.5	691	16.2	93.8
30-34	798	9.2	654	14.7	630	14.8	96.4
25-39	725	8.4	578	13.0	548	12.8	94.9
40-44	613	7.1	433	9.7	425	10.0	98.2
45-49	488	5.7	295	6.6	279	6.5	94.9
50-54	276	3.2	na	na	na	na	na
10-49	6,646		4,453	100.0	4,270	100.0	95.9

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Bangladesh 2004

Subject	Reference group	Percentage with missing information	Number of cases
Birth date	Births in the 15 years preceding the survey		
Month only		0.16	21,022
Month and year		0.00	21,022
Age at death	Deceased children born in the 15 years preceding the survey	0.00	2,226.
Age/date at first marriage[1]	Ever-married women age 15-49	0.12	11,440
Respondent's education	All women age 15-49	0.00	11,440
Diarrhea in last two weeks	Living children age 0-59 months	0.61	6,498
Anthropometry	Living children age 0-59 months (from the household questionnaire)		
Height		5.40	6,529
Weight		3.52	6,529
Height or weight		5.63	6,529

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living ,dead, and total children (weighted), Bangladesh 2004

Calendar year	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2004	271	13	284	100.0	100.0	100.0	123.4	189.9	125.7	na	na	na
2003	1,329	76	1,404	100.0	100.0	100.0	103.2	90.0	102.4	na	na	na
2002	1,283	89	1,372	100.0	99.3	99.9	87.7	133.6	90.1	96.3	87.9	95.7
2001	1,338	127	1,464	100.0	100.0	100.0	104.7	107.7	104.9	103.2	122.6	104.6
2000	1,309	118	1,426	100.0	100.0	100.0	109.8	106.1	109.5	99.9	97.1	99.7
1999	1,281	116	1,397	100.0	100.0	100.0	102.4	132.5	104.6	98.3	97.0	98.2
1998	1,297	121	1,418	100.0	100.0	100.0	99.6	108.7	100.4	99.0	80.7	97.2
1997	1,338	184	1,522	99.8	98.0	99.6	103.5	105.6	103.8	100.8	149.3	105.0
1996	1,356	126	1,482	99.8	100.0	99.8	95.7	123.0	97.7	102.3	70.1	98.5
1995	1,313	174	1,488	99.9	99.4	99.9	115.9	143.6	118.8	101.9	118.8	103.6
2000-2004	5,529	421	5,950	100.0	99.8	100.0	102.1	110.4	102.7	na	na	na
1995-1999	6,586	722	7,307	99.9	99.3	99.8	103.2	121.6	104.8	na	na	na
1990-1994	5,943	914	6,857	99.8	99.6	99.7	103.1	116.6	104.8	na	na	na
1985-1989	5,048	984	6,032	99.9	99.7	99.9	101.0	112.2	102.7	na	na	na
< 1985	5,967	1,759	7,726	99.8	99.5	99.7	106.5	105.6	106.3	na	na	na
All	29,073	4,800	33,873	99.9	99.5	99.8	103.2	111.7	104.4	na	na	na

na = Not applicable
[1] Both year and month of birth given
[2] $(B_m/B_f) \times 100$, where B_m and B_f are the numbers of male and female births, r espectively
[3] $[2B_x/(B_{x-1}+B_{x+1})] \times 100$, 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 (weighted), Bangladesh 2004

| Age at death (days) | Number of years preceding the survey | | | | Total 0-19 |
	0-4	5-9	10-14	15-19	
<1	92	104	98	82	375
1	45	48	43	56	192
2	13	14	19	12	58
3	29	43	44	39	155
4	10	16	21	17	63
5	7	19	20	26	73
6	11	5	18	15	48
7	10	24	31	31	96
8	5	13	16	10	44
9	1	3	4	6	13
10	3	9	6	8	26
11	3	3	8	13	27
12	1	5	5	12	23
13	5	5	7	3	19
14	4	7	11	10	33
15	8	8	6	7	29
16	5	1	4	3	13
17	5	8	7	3	22
18	5	1	2	1	9
19	5	3	1	2	11
20	2	7	5	1	15
21	8	4	4	4	20
22	5	3	5	6	19
23	1	0	2	1	4
24	0	1	3	1	5
25	0	3	1	2	6
26	1	0	0	2	3
27	2	3	5	0	10
28	1	2	2	3	8
29	0	1	4	2	7
30	0	1	0	1	2
Percent early neonatal[1]	72.2	68.6	65.1	64.7	67.3
Total 0-30	285	365	401	381	1,432

[1] Percent early neonatal = (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 age under one month, for five-year periods of birth preceding the survey, Bangladesh 2004

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1[a]	285	365	401	381	1,432
1	39	50	54	64	206
2	20	28	26	26	100
3	12	27	42	27	108
4	12	18	26	17	73
5	16	12	16	21	65
6	16	17	36	21	89
7	12	7	21	10	49
8	7	17	13	13	50
9	6	8	9	15	38
10	4	7	14	8	33
11	6	4	10	7	28
12	12	8	21	20	60
13	5	5	9	12	31
14	0	3	4	1	9
15	5	8	3	3	18
16	4	6	4	9	24
17	2	4	0	4	10
18	4	20	41	30	95
19	7	4	1	3	15
20	4	4	3	1	12
21	1	2	3	1	8
22	1	1	2	1	5
23	3	1	1	1	6
1 Year	0	0	0	2	2
Percent neonatal[1]	65.6	65.2	60.1	62.4	63.0
Total 0-11	435	559	668	609	2,272

[a] <1 includes deaths under one month reported in days
[1] Percent neonatal = (under one month/under one year) * 100

PERSONS INVOLVED IN THE 2004 BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY

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Mr. Md. Joynal Abdin   Secretary
Mr. Bimal Chandra Datta   Accounts Officer

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 2004
HOUSEHOLD QUESTIONNAIRE

IDENTIFICATION

DIVISION _____

DISTRICT _____

UPAZILA _____

UNION/WARD _____

VILLAGE/MOHALLA/BLOCK _____

CLUSTER NUMBER ....

HOUSEHOLD NUMBER ....

RURAL = 1, MUNICIPALITY = 2, OTHER URBAN = 3, SMA = 4 ....

IS HOUSEHOLD IN A SLUM? (YES = 1, NO = 2) _____

NAME OF THE SLUM _____

NAME OF HOUSEHOLD HEAD _____

IS HOUSEHOLD SELECTED FOR MEN'S SURVEY? (YES = 1, NO = 2) _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT	
DATE	_____	_____	_____	DAY	
				MONTH	
INTERVIEWER'S NAME	_____	_____	_____	YEAR	
RESULT*				INTV. CODE	
				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	ELIGIBILITY				EDUCATION IF AGE 5 YEARS OR OLDER			EMPLOYMENT IF AGE 8 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) stay here last night?	How old is (NAME)? IF AGE IS LESS THAN 1 YEAR, WRITE '00'	FOR ALL AGED 10 OR ABOVE What is the current marital status of (NAME)?** Currently married=1 Formerly married=2 Never married=3	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 MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHIL-DREN UNDER 6	Record mother's line no. Of all children under 6 (RECORD '00' IF MOTHER OF CHILDREN NOT LISTED IN HOUSEHOLD)	Has (NAME) ever attended school?	What is the level of schooling (NAME) has last attended?*** What is the highest class (NAME) completed at that schooling?***	IF AGED LESS THAN 25 YEARS Is (NAME) currently attending school?	Is (NAME) currently working?	Does (NAME) receive wages or income in cash or kind? CASH....1 KIND......2 BOTH....3 NONE....4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(16)	(17)	(18)	(19)	(20)
01		☐☐	M 1 F 2	YES 1 NO 2	YES 1 NO 2	IN YEARS ☐☐	CM 1 FM 2 NM 3	01	01	01	☐☐	YES.......1 NO.........2 GO TO 19	LEVEL GRADE ☐☐☐	YES 1 NO 2	YES 1 NO 2 NEXT LINE	1 2 3 4
02		☐☐	1 2	1 2	1 2	☐☐	1 2 3	02	02	02	☐☐	YES.......1 NO.........2 GO TO 19	LEVEL GRADE ☐☐☐	1 2	1 2 NEXT LINE	1 2 3 4
03		☐☐	1 2	1 2	1 2	☐☐	1 2 3	03	03	03	☐☐	YES.......1 NO.........2 GO TO 19	LEVEL GRADE ☐☐☐	1 2	1 2 NEXT LINE	1 2 3 4
04		☐☐	1 2	1 2	1 2	☐☐	1 2 3	04	04	04	☐☐	YES.......1 NO.........2 GO TO 19	LEVEL GRADE ☐☐☐	1 2	1 2 NEXT LINE	1 2 3 4
05		☐☐	1 2	1 2	1 2	☐☐	1 2 3	05	05	05	☐☐	YES.......1 NO.........2 GO TO 19	LEVEL GRADE ☐☐☐	1 2	1 2 NEXT LINE	1 2 3 4
06		☐☐	1 2	1 2	1 2	☐☐	1 2 3	06	06	06	☐☐	YES.......1 NO.........2 GO TO 19	LEVEL GRADE ☐☐☐	1 2	1 2 NEXT LINE	1 2 3 4
07		☐☐	1 2	1 2	1 2	☐☐	1 2 3	07	07	07	☐☐	YES.......1 NO.........2 GO TO 19	LEVEL GRADE ☐☐☐	1 2	1 2 NEXT LINE	1 2 3 4
08		☐☐	1 2	1 2	1 2	☐☐	1 2 3	08	08	08	☐☐	YES.......1 NO.........2 GO TO 19	LEVEL GRADE ☐☐☐	1 2	1 2 NEXT LINE	1 2 3 4

HOUSEHOLD CONTINUED

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY				EDUCATION — IF AGE 5 YEARS OR OLDER			EMPLOYMENT — IF AGE 8 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) stay here last night?	How old is (NAME)? IF AGE IS LESS THAN 1 YEAR, WRITE '00'	FOR ALL AGED 10 OR ABOVE What is the current marital status of (NAME)?** Currently married=1 Formerly married=2 Never married=3	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 MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHIL-DREN UNDER 6	Record mother's line no. Of all children under 6 (RECORD '00' IF MOTHER OF CHILDREN NOT LISTED IN HOUSEHOLD)	Has (NAME) ever attended school?	What is the level of schooling (NAME) has last attended?*** What is the highest class (NAME) completed at that schooling?***	IF AGED LESS THAN 25 YEARS Is (NAME) currently attending school?	Is (NAME) currently working?	Does (NAME) receive wages or income in cash or kind? CASH ....1 KIND ......2 BOTH ....3 NONE 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(16)	(17)	(18)	(19)	(20)
09		☐☐	M F 1 2	YES NO 1 2	YES NO 1 2	IN YEARS ☐☐	CM FM NM 1 2 3	09	09	09	☐☐	YES ....1 NO ....2 → GO TO 19	LEVEL GRADE ☐ ☐☐	YES NO 1 2	YES 1 NO 2 NEXT LINE	1 2 3 4
10		☐☐	1 2	1 2	1 2	☐☐	1 2 3	10	10	10	☐☐	YES ....1 NO ....2 → GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE	1 2 3 4
11		☐☐	1 2	1 2	1 2	☐☐	1 2 3	11	11	11	☐☐	YES ....1 NO ....2 → GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE	1 2 3 4
12		☐☐	1 2	1 2	1 2	☐☐	1 2 3	12	12	12	☐☐	YES ....1 NO ....2 → GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE	1 2 3 4
13		☐☐	1 2	1 2	1 2	☐☐	1 2 3	13	13	13	☐☐	YES ....1 NO ....2 → GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE	1 2 3 4
14		☐☐	1 2	1 2	1 2	☐☐	1 2 3	14	14	14	☐☐	YES ....1 NO ....2 → GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE	1 2 3 4
15		☐☐	1 2	1 2	1 2	☐☐	1 2 3	15	15	15	☐☐	YES ....1 NO ....2 → GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE	1 2 3 4
16		☐☐	1 2	1 2	1 2	☐☐	1 2 3	16	16	16	☐☐	YES ....1 NO ....2 → GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE	1 2 3 4

HOUSEHOLD CONTINUED

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(16)	(17)	(18)	(19)	(20)
17		☐☐	M F 1 2	YES NO 1 2	YES NO 1 2	IN YEARS ☐☐	CM FM NM 1 2 3	17	17	17	☐☐	YES ....1 NO ....2 ↓ GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE ↵	1 2 3 4
18		☐☐	1 2	1 2	1 2	☐☐	1 2 3	18	18	18	☐☐	YES ....1 NO ....2 ↓ GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE ↵	1 2 3 4
19		☐☐	1 2	1 2	1 2	☐☐	1 2 3	19	19	19	☐☐	YES ....1 NO ....2 ↓ GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT LINE ↵	1 2 3 4
20		☐☐	1 2	1 2	1 2	☐☐	1 2 3	20	20	20	☐☐	YES ....1 NO ....2 ↓ GO TO 19	LEVEL GRADE ☐ ☐☐	1 2	1 2 NEXT 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 ☐ → ENTER EACH IN TABLE NO ☐

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 ☐ → ENTER EACH IN TABLE NO ☐

3) Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed? YES ☐ → ENTER EACH IN TABLE NO ☐

* 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 Q17
EDUCATION

LEVEL
SCHOOL
1 = PRIMARY
2 = SECONDARY
3 = COLLEGE AND HIGHER

GRADE:
00 = LESS THAN 1 YEAR
COMPLETED
98 = DON'T KNOW

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

21	What is the main source of water your household used for dishwashing?
	
	(PROBE IF TUBEWELL IS MENTIONED)
		PIPED WATER
		   PIPED INSIDE DWELLING.................11
		   PIPED OUTSIDE DWELLING 12
		WELL WATER
		   TUBEWELL 21
		   SHALLOW TUBEWELL 22
		   DEEP TUBEWELL 23
		   SURFACE WELL/OTHER WELL 24	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

		SURFACE WATER
		    POND/TANK/LAKE 31
		    RIVER/STREAM...................................32
		RAINWATER 41
		
		OTHER _____ 96
		            (SPECIFY)	

22	What is the main source of drinking water for members of your household?
	
	(PROBE IF TUBEWELL IS MENTIONED)
		PIPED WATER
		    PIPED INSIDE DWELLING..................11
		    PIPED OUTSIDE DWELLING 12
		WELL WATER
		    TUBEWELL 21
		    SHALLOW TUBEWELL 22
		    DEEP TUBEWELL 23
		    SURFACE WELL/OTHER WELL 24
		SURFACE WATER
		    POND/TANK/LAKE 31
		    RIVER/STREAM...................................32
		RAINWATER 41
		
		OTHER _____ 96
		            (SPECIFY)	

	WILL YOU PLEASE GIVE ME SOME DRINKING WATER. **INTERVIEWER: PLEASE PRESERVES THE DRINKING WATER FOR ARSENIC TEST.**		

23	What is the source of this drinking water?
	
	(PROBE IF TUBEWELL IS MENTIONED)
		PIPED WATER
		    PIPED INSIDE DWELLING..................11
		    PIPED OUTSIDE DWELLING 12
		WELL WATER
		    TUBEWELL 21
		    SHALLOW TUBEWELL 22
		    DEEP TUBEWELL 23
		    SURFACE WELL/OTHER WELL 24
		SURFACE WATER
		    POND/TANK/LAKE 31
		    RIVER/STREAM...................................32
		RAINWATER 41
		OTHER _____ 96
		            (SPECIFY)	

24	How long have you been using this source for drinking water?	YEARS .... ☐☐	
25	Have you heard of arsenic?	YES ....1 NO..2	
26	CHECK Q23: CIRCLED '21' OR '22' OR '23' YES: ☐ NO ☐		→ 29
27	Is the tube well marked red or green color from where you obtained this water for drinking?	RED...1 GREEN ....2 UNMARKED ....3 DK 8	→ 28B → 29
28A	Do you know the meaning of red color in the tube well?	ARSENIC IN THE WATER........................ A NOT SAFE TO DRINK............................... B OTHER_____X (SPECIFY) DK ....Z	→ 29

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
28B	Do you know the meaning of green color in the tube well?	NOT ARSENIC IN THE WATER .... A SAFE TO DRINK .... B OTHER_____X (SPECIFY) DK ....Z	
29	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)	
31	Does your household (or any member of your household) have: Electricity? Almirah or wardrobe? A table? A chair or 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 or mobile phone?	YES NO ELECTRICITY.............................. 1 2 ALMIRAH .... 1 2 TABLE.. 1 2 CHAIR/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/MOBILE 1 2	
32	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)	
33	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)	
34	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)	
35	Besides bathroom, how many rooms are there in your household?	ROOMS .... ☐☐	
36	How many rooms do you have for sleeping?	SLEEPING ROOMS .... ☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
38	What type of fuel does your household mainly use for cooking?	WOOD ....01 CROP RESIDUE/GRASS..........................02 DUNG CAKES ....03 COAL/COKE/LIGNITE...............................04 CHARCOAL..05 KEROSENE..06 ELECTRICITY...07 LIQUID GAS/GAS.....................................08 BIO-GAS..09 OTHER _____ 96 (SPECIFY)	
39	What type of cooking stove is mainly used in your house?	KEROSINE STOVE ....1 GAS STOVE ....2 OPEN FIRE...3 OPEN FIRE OR STOVE WITH CHIMNEY OR HOOD ....4 CLOSED STOVE WITH CHIMNEY ....5 OTHER _____ 6 (SPECIFY)	

40	Where is cooking usually done?	IN A ROOM USED FOR LIVING
		   OR SLEEPING 1
		IN A SEPARATE ROOM IN SAME
		   BUILDING USED AS KITCHEN..............2
		IN A SEPARATE BUILDING USED
		   AS KITCHEN 3
		OUTDOORS 4
		OTHER _____ 6
		(SPECIFY)	

41	Does your household own any homestead? IF 'NO', PROBE: Does your household own homestead any other places?	YES ....1 NO..2	
42	Does your household own any land (other than the homestead land)?	YES ....1 NO..2	→ 44
43	How much land does your household own (other than the homestead land)? AMOUNT _____ SPECIFY UNIT_____	AMOUNT ☐☐ ☐☐☐ ACRES DECIMALS	
44	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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
44A	USE ARSENIC TEST KIT TO TEST DRINKING WATER AND CIRCLED APPROPRIATE CODE.	0 ....01 10 ....02 10-25 ....03 25 ....04 25-50 ....05 50 ....06 50-100..07 100 ....08 100-250..09 250 ....10 250-500..11 500-1500...12 1500-4000...13 OTHERS _____ 96 (SPECIFY)	
44B	**IS THERE ANY SMELL OF ROTTEN EGG IN THE DRINKING WATER THAT WAS COLLECTED FOR TESTING?**	YES ....1 NO..2	

HEIGHT AND WEIGHT MEASUREMENT

CHECK COLUMNS (9) AND (11): RECORD THE LINE NUMBER, NAME AND AGE OF ALL EVER MARRIED WOMEN AGE 10-49 AND ALL CHILDREN UNDER 6 YEARS.

WOMEN 10-49				WEIGHT AND HEIGHT MEASUREMENT OF WOMEN 10-49			
LINE NO. FROM COL.(9)	NAME FROM COL.(2)	AGE FROM COL.(7)	What is (NAME)'s date of birth?	WEIGHT (KILOGRAMS)	HEIGHT (CENTIMETERS)	MEASURED LYING DOWN OR STANDING UP	RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)
☐☐		YEARS ☐☐		☐☐☐.☐	☐☐☐.☐		☐
☐☐		☐☐		☐☐☐.☐	☐☐☐.☐		☐
☐☐		☐☐		☐☐☐.☐	☐☐☐.☐		☐
☐☐		☐☐		☐☐☐.☐	☐☐☐.☐		☐

CHILDREN UNDER 6 YEARS [FROM FOL.(7)]				WEIGHT AND HEIGHT MEASUREMENT OF CHILDREN UNDER 6 YEARS			
LINE NO. FROM COL.(11)	NAME FROM COL.(2)	AGE FROM COL.(7)	What is (NAME)'s date of birth?*	WEIGHT (KILOGRAMS)	HEIGHT (CENTIMETERS)	MEASURED LYING DOWN OR STANDING UP	RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
			DAY MONTH YEAR			LYING STAND.	
☐☐		☐☐	☐☐ ☐☐ ☐☐☐☐	0☐☐.☐	☐☐☐.☐	1 2	☐
☐☐		☐☐	☐☐ ☐☐ ☐☐☐☐	0☐☐.☐	☐☐☐.☐	1 2	☐
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☐☐		☐☐	☐☐ ☐☐ ☐☐☐☐	0☐☐.☐	☐☐☐.☐	1 2	☐
☐☐		☐☐	☐☐ ☐☐ ☐☐☐☐	0☐☐.☐	☐☐☐.☐	1 2	☐

TICK HERE IF CONTINUATION SHEET USED ☐

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 2004

WOMAN'S QUESTIONNAIRE

IDENTIFICATION	
DIVISION _____	
DISTRICT _____	
UPAZILA _____	
UNION/WARD _____	
VILLAGE/MOHALLA/BLOCK _____	
CLUSTER NUMBER..	
HOUSEHOLD NUMBER...	
RURAL = 1, MUNICIPALITY = 2, OTHER URBAN = 3, SMA = 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.
TIME	_____	_____		OF VISITS

**RESULT CODES:
1 COMPLETED	4 REFUSED	7 OTHER_____
2 NOT AT HOME	5 PARTLY COMPLETED	(SPECIFY)
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 → 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?	DHAKA/CHITTAGONG/ KHULNA/RAJSHAHI ....1 SMALL CITY ....2 TOWN ....3 VILLAGE 4	
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 countryside?	DHAKA/CHITTAGONG/ KHULNA/RAJSHAHI ....1 SMALL CITY ....2 TOWN ....3 VILLAGE 4	
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, separated, deserted, widowed, or divorced?	CURRENTLY MARRIED .... 1 SEPARATED .... 2 DESERTED... 3 DIVORCED .... 4 WIDOWED.. 5 NEVER MARRIED 6	→ END
106B	Do you have a marriage certificate/marriage registration?	YES..1 NO..2	
107	Have you ever attended school or madrasha?	YES, SCHOOL.......................................1 YES, MADRASHA..................................2 YES, BOTH ....3 NO..4	→ 108B → 111
108A	What type of schooling (NAME) have you last attended?	SCHOOL ....1 MADRASHA 2	
108B	What level of schooling (NAME) have you last attended? What is the highest grade (NAME) completed at that schooling?	LEVEL...☐ GRADE ....☐☐	
109	CHECK 108B: GRADE IS LESS THAN 6 ☐ GRADE IS 6 OR MORE THAN 6 ☐		→ 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 television?	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 (SPECIFY)	
118	Do you belong to any of the following organizations? Grameen Bank? BRAC? BRDB? Mother's Club? Any other organization (such as micro credit)?	YES NO GRAMEEN BANK........................ 1 2 BRAC .... 1 2 BRDB .... 1 2 MOTHER'S CLUB........................ 1 2 OTHER _____ 1 2 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
119	CHECK Q. 5 IN THE HOUSEHOLD SECTION: THE WOMAN INTERVIEWED IS NOT A USUAL RESIDENT ☐ THE WOMAN INTERVIEWED IS A USUSAL RESIDENT ☐		▶ 201
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	▶ 122
121	In which division is that located?	RAJSHAHI .... 1 DHAKA .... 2 CHITTAGONG .... 3 KHULNA .... 4 BARISAL .... 5 SYLHET 6	

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?
	
	(IF TUBEWELL, PROBE)
		PIPED WATER
		   PIPED INSIDE DWELLING 11
		   PIPED OUTSIDE DWELLING 12
		WELL WATER
		   TUBEWELL 21
		   SHALLOW TUBEWELL 22
		   DEEP TUBEWELL 23
		   SURFACE WELL/OTHER WELL 24
		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?
	
	(IF TUBEWELL, PROBE)
		PIPED WATER
		   PIPED INSIDE DWELLING 11
		   PIPED OUTSIDE DWELLING 12
		WELL WATER
		   TUBEWELL 21
		   SHALLOW TUBEWELL 22
		   DEEP TUBEWELL 23
		   SURFACE WELL/OTHER WELL 24
		SURFACE WATER
		   POND/TANK/LAKE 31
		   RIVER/STREAM 32
		RAINWATER 41
		
		OTHER _____ 96
		          (SPECIFY)	

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)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
126	Does your household (or any member of your household) have: Electricity? Almirah or wardrobe? A table? A chair or 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 or mobile phone?	YES NO ELECTRICITY .... 1 2 ALMIRAH.................................... 1 2 TABLE .... 1 2 CHAIR/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/MOBILE................ 1 2	

127	What is the main 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 main 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 main 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 →	132
131	How much land does your household own (other than the homestead land)? AMOUNT _____ SPECIFY UNIT_____	AMOUNT ☐☐ ☐☐ ACRES DECIMALS	
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	

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 did not survive?	YES .... 1 NO 2	→ 208
207	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)?	221A IF DEAD: RECORD LINE NUMBER OF CHILD AS IN Q212 IF CHILD WAS BORN SINCE JUNE 1998
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		LINE NUMBER ☐☐ → (NEXT BIRTH)
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 ☐☐ → 221	DAYS .... 1 ☐☐ MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ☐☐ → (NEXT BIRTH)
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 ☐☐ → 221	DAYS .... 1 ☐☐ MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ☐☐ → (NEXT BIRTH)
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 ☐☐ → 221	DAYS .... 1 ☐☐ MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ☐☐ → (NEXT BIRTH)
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 ☐☐ → 221	DAYS .... 1 ☐☐ MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ☐☐ → (NEXT BIRTH)
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 ☐☐ → 221	DAYS .... 1 ☐☐ MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ☐☐ → (NEXT BIRTH)

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)?	221A IF DEAD: RECORD LINE NUMBER OF CHILD AS IN Q212 IF CHILD WAS BORN SINCE JUNE 1998
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 ↓ 221	DAYS .... 1 MONTHS.. 2 YEARS..... 3		LINE NUMBER ↓ (NEXT BIRTH)
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 ↓ 221	DAYS .... 1 MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ↓ (NEXT BIRTH)
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 ↓ 221	DAYS .... 1 MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ↓ (NEXT BIRTH)
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 ↓ 221	DAYS .... 1 MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ↓ (NEXT BIRTH)
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 ↓ 221	DAYS .... 1 MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ↓ (NEXT BIRTH)
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 ↓ 221	DAYS .... 1 MONTHS.. 2 YEARS..... 3	YES....1 NO......2	LINE NUMBER ↓ (NEXT BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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 ☐ NUMBERS ARE ☐ ⟶ (PROBE AND RECONCILE) ARE SAME ↓ DIFFERENT 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 JUNE 1998. IF NONE, RECORD '0'.		☐
224A	CHECK 221A AND ENTER THE NUMBER OF BIRTH SINCE JUNE 1998 AND DEATHS OCCURED SINCE JUNE 1998 FOR VERBAL AUTOPSY. IF NONE, RECORD '0'.		☐
225	FOR EACH BIRTH SINCE JUNE 1998, 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.		
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 then, did you want to wait until later, or did you not want 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 ☐ LAST PREGNANCY ENDED ☐ ENDED SINCE JUNE1998 BEFORE JUNE1998 ↓		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

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
234	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JUNE 1998. 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 JUNE 1998.		
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		303 Have you ever used (METHOD)?
			YES	NO	
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: 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: Men can put a rubber sheath on their penis before sexual intercourse.	1	2	3 ⬇	YES .... 1 NO 2
08	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
09	WITHDRAWAL: Men can be careful and pull out before climax.	1	2	3 ⬇	YES .... 1 NO 2
10	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	1	2	3	YES .... 1 NO .... 2 YES .... 1 NO 2
			_____ (SPECIFY) _____ (SPECIFY)		

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
303A	CHECK 301: OTHER METHOD MR NOT MENTIONED ☐ MR MENTIONED ☐		▶303D
303B	Have you ever heard of MR (Menstrual Regulation) (MR means when a woman's menstrual period does not come on time, she can go to a health centre or to the FWV/to another provider and have a tube put in her for a short while to regularize her periods.)	YES...1 NO..2	▶ 303D
303C	Have you ever used MR (Menstrual regulation)	YES...1 NO..2	
303D	CHECK 303: NOT A SINGLE 'YES' ☐ AT LEAST ONE 'YES' ☐ (NEVER USED) (EVER USED)		▶306A
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 ....08 WITHDRAWAL ....09 OTHER METHOD_____10 (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 ☐ WOMAN ☐ STERILIZED STERILIZED		▶311A
308A	CHECK 106A: CURRENTLY ☐ SEPARATED/ DESERTED ☐ MARRIED DIVORCED/ WIDOWED		▶ 319
309	CHECK 226: NOT PREGNANT ☐ PREGNANT ☐ OR UNSURE		▶ 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 ▶ 313 MALE STERILIZATION............................02 PILL...03 IUD...04 INJECTIONS...05 ▶ 318 IMPLANTS 06	
311A	CIRCLE '01' FOR FEMALE STERILIZATION.	CONDOM..07 ▶ 312C PERIODIC ABSTINENCE ....08 WITHDRAWAL ....09 ▶ 318 OTHER _____10 (SPECIFY)	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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
312B	SHOW BRAND CHART FOR PILLS Please tell me which of these is the brand of pills that you are using.	BRAND NAME .... ☐☐ DOES NOT KNOW 98	→ 318
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 .... ☐☐ PACKAGE NOT SEEN........................... 2	→ 318
312D	SHOW BRAND CHART FOR CONDOMS Please tell me which of these is the brand of condoms that you are using.	BRAND NAME .... ☐☐ DOES NOT KNOW 98	→ 318

313	Where did the sterilization take place?
	
	(NAME OF PLACE)
		PUBLIC SECTOR
		  HOSPITAL/MEDICAL COLLEGE 11
		  FAMILY WELFARE CENTRE (FWC). 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' ☐ CODE '2' ☐
	  CIRCLED CIRCLED
	    ↓ ↓
	Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation? 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	→ 316

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
		      (SPEC IFY)	

316	In what month and year was the sterilization operation performed?	MONTH....................................... ☐☐ YEAR .... ☐☐☐☐	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

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 JUNE 1998 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 JUNE 1998.
	
	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 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 .... 08 WITHDRAWAL .... 09 OTHER METHOD 10	→ 328 → 325A → 325A

321	CHECK COLUMN 1 OF CALENDAR FOR MONTH STARTED USING CURRENT METHOD:
	
	        STARTED USING SINCE [ ] STARTED USING [ ]
	             JUNE 1998 ↓ BEFORE JUNE 1998
			→ 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	 → 325 → 325

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
323	Were you told what to do if you experienced side effects or problems?	YES.. 1 NO... 2	

325	CHECK 320:
	   ANY CODE
	   '01' TO '06'
	CIRCLED
	
	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 → 327C MALE STERILIZATION .... 02 → 330 PILL.. 03 IUD.. 04 INJECTIONS... 05 IMPLANTS .... 06 CONDOM... 07 PERIODIC ABSTINENCE .... 08 WITHDRAWAL .... 09 → 328 OTHER METHOD _____ 10 (SPECIFY)	

327	Where did you obtain (CURRENT METHOD) the last time?
	
	(NAME OF PLACE)
		PUBLIC SECTOR
		   HOSPITAL/MEDICAL COLLEGE 11
		   FAMILY WELFARE CENTRE 12
		   UPAZILA HEALTH COMPLEX 13
		   SATELLITE CLINIC/
		      EPI OUTREACH SITE 14
		   MATERNAL CHILD WELFARE
		      CENTER (MCWC) 15
		   GOVT. FIELD WORKER (FWA) 16
		   COMMUNITY CLINIC........................ 17
		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	

327A	CHECK 311/311A:
	   USING PILL OR CONDOMS USING ANOTHER
	                                                      METHOD
			→ 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 → 330	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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	▶ **330**
328	Do you know of a place where you can obtain a method of family planning?	YES... 1 NO... 2	▶ 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
		  UPZILA HEALTH COMPLEX............. 13
		  SATELLITE CLINIC/
		  EPI OUTREACH SITE....................... 14
		  MATERNAL CHILD WELFARE
		  CENTER (MCWC)............................ 15
		  GOVT. FIELD WORKER (FWA)........ 16
		  COMMUNITY CLINIC....................... 17
		
		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	

330	CHECK 327 AND 329: SATELLITE/EPI OUTREACH ☐ SATELLITE /EPI OUTREACH ☐ NOT MENTIONED MENTIONED		▶ 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 or mohalla?	YES... 1 NO... 2 DOES NOT KNOW 8	▶334A
332	Did you visit such a temporary health clinic in the last 3 months?	YES... 1 NO... 2	▶334A

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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 TT VACCINE FOR WOMEN AGE BETWEEN 15-45 YEARS................F VITAMIN 'A' FOR CHILDREN .... G 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 Anyone else? _____ NAME WRITE THE NAME OF THE FIELD WORKER.	GOVT. FP WORKER .... A GOVT. HEALTH WORKER .... B NGO WORKER...................................... C NO ONE... Y	→ 335A
334B	How many times did a worker /workers visit you for the family planning in the last six months?	TIMES ....☐☐ 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...................................☐ 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 Anyone else? _____ NAME WRITE THE NAME OF THE FIELD WORKER.	GOVT. FP WORKER .... A GOVT. HEALTH WORKER .... B NGO WORKER...................................... C NO ONE... Y	→ 336
335B	How many times did a worker visit you for the health services in the last six months?	TIMES ....☐☐ DOES NOT KNOW 98	
335C	When was the last visit? IF MORE THAN ONE WORKER VISITED (SEE 335A): When did the last worker visit you? IF LESS THAN ONE MONTH AGO, WRITE '0'.	MONTHS AGO...................................☐ DOES NOT KNOW 8	
336	CHECK 334A AND 335A: BOTH FP AND HEALTH WORKER ☐ OTHER RESPONSE ☐ i.e., 'Y's ARE NOTCIRCLED		→ 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	

SECTION 4A. PREGNANCY, POSTNATAL CARE AND BREASTFEEDING

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	ASK QUESTIONS SEPARATELY FOR PREGNANCY, DELIVERY AND AFTER DELIVERY BUT RECORD RESPONSES IN SAME CODING CATEGORY. What are the problems at the time of pregnancy that may cause death to the mother? Any other? What are the problems at the time of delivery that may cause death to the mother? Any other? What are the problems after the delivery that may cause death to the mother? Any other?	SEVERE HEADACHE ....A BLURRY VISION ....B HIGH BLOOD PRESSURE.......................C PRE-ECLAMSIA ....D CONVULSION/ECLAMSIA ....E EXCESSIVE VAGINAL BLEEDING ....F FOUL-SMELLING DISCHARGE WITH HIGH FEVER ....G JAUNDICE ....H TETANUS... I BABY'S HAND OR FEET COME/ BABY IN BAD POSITION ....J PROLONG LABOR...................................K OBSTRUCTED LABOR ....L RETAINED PLACENTA........................... M TORNED UTEROUS ....N OTHER _____X (SPECIFY) DON'T KNOW ....Y	
402A	CHECK 215: ONE OR MORE BIRTHS SINCE ☐ NO BIRTHS ☐ JUNE 1998 SINCE JUNE 1998		→ 501
402B	ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JUNE 1998. 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 407) ← LATER ....2 NO/NO MORE......................................3 (SKIP TO 407) ←	THEN ....1 (SKIP TO 417) ← LATER ....2 NO/NO MORE......................................3 (SKIP TO 417) ←
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

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/PARAMEDIC ..... B
		   FAMILY WELFARE VISITOR..........C
		   MA/SACMO....................................D
		   HEALTH ASSISTANT (HA) ....E
		   FAMILY WELFARE ASST (FWA) ...F
		
		OTHER PERSON
		   TRAINED TRADITIONAL BIRTH
		   ATTENDANT (TTBA) ....G
		   UNTRAINED TBA ....H
		   UNQUALIFIED DOCTOR I
		OTHER _____X
		(SPECIFY)
		(SKIP TO 407B) ←
		NO ONE .... Y	

		LAST BIRTH LINE NUMBER_____	NEXT-TO-LAST BIRTH LINE NUMBER_____

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)	

407B	When you were pregnant with (NAME), the first time you go for antenatal care because just to check everything was fine or you had a problem?	BECAUSE OF PROBLEM..................... 1 TO CHECK ONLY 2	
408	How many months pregnant were you when you first received medical checkup i.e., antenatal care for this pregnancy?	MONTHS................................. ☐☐ DON'T KNOW 98	
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 ☐ MORE THAN ONCE OR DK ☐ (SKIP TO 412A)	
411	How many months pregnant were you the last time your received medical checkup i.e., antenatal care?	MONTHS................................. ☐☐ DON'T KNOW 98	
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	
412G	When you were pregnant with (NAME), did you have an ultrasonography test?	YES..1 NO..2 DON'T KNOW 8	

		LAST BIRTH LINE NUMBER_____	NEXT-TO-LAST BIRTH LINE NUMBER_____
413	When you were pregnant with (NAME) were you told about the signs of pregnancy complications?	YES ....1 NO...2 (SKIP TO 415) ◄ DON'T KNOW 8	
414	Were you told where to go if you had these complications?	YES.......................................1 NO...2 DON'T KNOW 8	
415	During this pregnancy, were you given a TT Injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES.......................................1 NO...2 (SKIP TO 416) ◄ DON'T KNOW 8	
415A	During this pregnancy, how many times did you get this injection?	TIMES ....☐ 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	
417	Around the time of the birth (NAME), did you have any of the following problems: Long labor, that is, did your regular contractions last more than 12 hours? Excessive bleeding that was so much that you feared it was life threatening? A high fever with bad smelling vaginal discharge? Convulsions? Baby's hands and feet came first during delivery?	YES NO DK LONG LABOR ....1 2 8 EXCESSIVE BLEEDING ....1 2 8 HIGH FEVER ....1 2 8 CONVULSIONS ....1 2 8 HANDS AND FEET 1 2 8	YES NO DK LONG LABOR ....1 2 8 EXCESSIVE BLEEDING ....1 2 8 HIGH FEVER ....1 2 8 CONVULSIONS ....1 2 8 HANDS AND FEET 1 2 8

418	CHECK 417:	AT LEAST ☐ NOT A SINGLE ☐
		ONE 'YES' 'YES'
		          (SKIP TO 420)
			AT LEAST ☐ NOT A SINGLE ☐
			ONE 'YES' 'YES'
			          (SKIP TO 425)

419	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/PARAMEDIC .....B
		 FAMILY WELFARE VISITOR..........C
		 MA/SACMO...................................D
		 HEALTH ASSISTANT ....E
		 FAMILY WELFARE ASST (FWA) ...F
		OTHER PERSON
		 TRAINED TRADITIONAL BIRTH
		 ATTENDANT (TTBA) ....G
		 UNTRAINED TBA (DAI) ....H
		 UNQUALIFIED DOCTOR I
		 RELATIVES...................................J
		 NEIGHBOURS/FRIENDS...............K
		
		OTHER _____ X
		    (SPECIFY)
		NO ONE ....Z
			HEALTH PROFESSIONAL
			 QUALIFIED DOCTOR ....A
			 NURSE/MIDWIFE/PARAMEDIC .....B
			 FAMILY WELFARE VISITOR..........C
			 MA/SACMO...................................D
			 HEALTH ASSISTANT ....E
			 FAMILY WELFARE ASST (FWA) ...F
			OTHER PERSON
			 TRAINED TRADITIONAL BIRTH
			 ATTENDANT (TTBA) ....G
			 UNTRAINED TBA (DAI) ....H
			 UNQUALIFIED DOCTOR I
			 RELATIVES...................................J
			 NEIGHBOURS/FRIENDS...............K
			
			OTHER_____ X
			    (SPECIFY)
			NO ONE ....Z

420	During this pregnancy, did you suffer from night blindness (*ratkana*)?	YES.......................................1 NO...2 DON'T KNOW 8	

		LAST BIRTH LINE NUMBER_____	NEXT-TO-LAST BIRTH LINE NUMBER_____
421	During this pregnancy, did you have difficulty with your vision during the daylight?	YES...1 NO...2 DON'T KNOW 8	

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/PARAMEDIC ..... B
		   FAMILY WELFARE VISITOR.......... C
		   MA/SACMO.................................... D
		   HEALTH ASSISTANT .... E
		   FAMILY WELFARE ASST (FWA) ... F
		OTHER PERSON
		   TRAINED TRADITIONAL BIRTH
		   ATTENDANT (TTBA) ....G
		   UNTRAINED TBA (DAI) .... H
		   UNQUALIFIED DOCTOR I
		   RELATIVES...................................J
		   NEIGHBOURS/FRIENDS.............. K
		
		OTHER _____ X
		      (SPECIFY)
		NO ONE .... Z
			HEALTH PROFESSIONAL
			   QUALIFIED DOCTOR .... A
			   NURSE/MIDWIFE/PARAMEDIC ..... B
			   FAMILY WELFARE VISITOR.......... C
			   MA/SACMO.................................... D
			   HEALTH ASSISTANT .... E
			   FAMILY WELFARE ASST (FWA) ... F
			OTHER PERSON
			   TRAINED TRADITIONAL BIRTH
			   ATTENDANT (TTBA) ....G
			   UNTRAINED TBA (DAI) .... H
			   UNQUALIFIED DOCTOR I
			   RELATIVES...................................J
			   NEIGHBOURS/FRIENDS.............. K
			
			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
		   UPAZILA 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 434)
			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)

427	Was (NAME) delivered by caesarian section?	YES...1
		    (SKIP TO 432)
		NO...2
			YES...1
			    (SKIP TO 434)
			NO...2

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	

		LAST BIRTH LINE NUMBER_____	NEXT-TO-LAST BIRTH LINE NUMBER_____
430	Who checked on your health at that time? PROBE FOR THE MOST QUALIFIED PERSON.	HEALTH PROFESSIONAL 　　QUALIFIED DOCTOR..................... A 　　NURSE/MIDWIFE/PARAMEDIC ..... B 　　FAMILY WELFARE VISITOR..........C 　　MA/SACMO...................................D 　　HEALTH ASSISTANT .... E 　　FAMILY WELFARE ASST (FWA) ... F OTHER PERSON 　　TRAINED TRADITIONAL BIRTH 　　ATTENDANT (TTBA) ....G 　　UNTRAINED TBA (DAI) ....H 　　UNQUALIFIED DOCTOR ....I OTHER _____ X 　　　　　　(SPECIFY) NO ONE .... Z	
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 　COMMUNITY CLINIC ....16 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	
432A	After (NAME) was born did any medical persons check on your baby's health?	YES...1 NO...2 　　　　　(SKIP TO 433) ←	
432B	How many days or weeks after the delivery did the first check takes place? RECORD '00' DAYS IF SAME DAY	DAYS AFTER DELIVERY ......1 ☐☐ WEEKS AFTER DELIVERY...2 ☐☐ DON'T KNOW 998	
432C	Who checked on your baby's health at that time?	HEALTH PROFESSIONAL 　　QUALIFIED DOCTOR..................... A 　　NURSE/MIDWIFE/PARAMEDIC ..... B 　　FAMILY WELFARE VISITOR..........C 　　MA/SACMO...................................D 　　HEALTH ASSISTANT .... E 　　FAMILY WELFARE ASST (FWA) ... F OTHER PERSON 　　TRAINED TRADITIONAL BIRTH 　　ATTENDANT (TTBA) ....G 　　UNTRAINED TBA (DAI) ....H 　　UNQUALIFIED DOCTOR................I OTHER _____ X 　　　　　　(SPECIFY)	

		LAST BIRTH LINE NUMBER_____	NEXT-TO-LAST BIRTH LINE NUMBER_____

432D	Where did this first check take place?	HOME
		    OWN HOME 01
		    OTHER HOME 02
		PUBLIC SECTOR
		  HOSPITAL/MEDICAL COLLEGE 11
		  FAMILY WELFARE CENTRE 12
		  UPAZILA HEALTH COMPLEX 13
		  SATELLITE CLINIC/
		    EPI OUTREACH SITE 14
		  MATERNAL AND CHILD WELFARE
		    CENTER (MCWC) 15
		  COMMUNITY CLINIC 16
		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)	

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
436	CHECK 226: RESPONDENT PREGNANT?	NOT ☐ PREGNANT ☐ PREG- NANT OR UNSURE ↓ ↓ (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 <u>not</u> 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 ☐☐
440A	Was (NAME) given colostrum immediately after his/her birth?	YES...1 NO...2	YES..1 NO...2

441	CHECK 404:
	
	CHILD ALIVE?
		ALIVE ☐ DEAD ☐
		↓ ↓
		      (SKIP TO 443)
			ALIVE ☐ DEAD ☐
			↓ ↓
			      (SKIP TO 443)

		LAST BIRTH	NEXT-TO-LAST BIRTH
		LINE NUMBER_____	LINE NUMBER_____

		LAST BIRTH	NEXT-TO-LAST BIRTH
442	Are you still breastfeeding (NAME)?	YES...1 (SKIP TO 447) ← NO...2	YES...1 (SKIP TO 447) ← 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 ☐ DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 451) (SKIP TO 447)	ALIVE ☐ DEAD ☐ (GO BACK TO 405 AND USE LAST COLUMN OF ADDITIONAL SHEET, IF NO MORE BIRTHS, GO TO 451) (SKIP TO 447)
447	Did (NAME) drink anything from a bottle with a nipple last 24 hours?	YES...1 NO...2 DON'T KNOW 8	YES...1 NO...2 DON'T KNOW 8
447A	Do you give (NAME) anything else to eat solid/semi-solid beside breakstmilk?	YES...1 NO...2 (GO TO 449) ←	YES...1 NO...2 (GO TO 449) ←
448	How many times did (NAME) eat solid, semi-solid, or soft foods other than liquids in last 24 hours? IF 7 OR MORE TIMES, RECORD '7'	NUMBER OF LAST 24 HOURS ....☐	NUMBER OF LAST 24 HOURS ....☐

449	At any time in 7 days was (NAME) given any of the following: At any time yesterday (last 24 hours) was (NAME) given any of the following:		ANY TIME IN 7 DAYS		YESTER DAY			ANY TIME IN 7 DAYS		YESTER DAY	
			YES	NO	YES	NO		YES	NO	YES	NO
	Plain water?	PLAIN WATER	1	2	1	2	PLAIN WATER	1	2	1	2
	Sugar water/ honey/juice?	SUGAR WATER	1	2	1	2	SUGAR WATER	1	2	1	2
	Baby or infant formula?	BABY FORMULA	1	2	1	2	BABY FORMULA	1	2	1	2
	Cow's or goat's milk?	COW'S/GOAT MILK	1	2	1	2	COW'S/GOAT MILK	1	2	1	2
	Other liquids?	OTHER LIQUIDS	1	2	1	2	OTHER LIQUIDS	1	2	1	2
	Banana/papaya/mango?	BANANA/PAPAYA	1	2	1	2	BANANA/PAPAYA	1	2	1	2
	Green leafy vegetables?	GREEN VEGETABLE	1	2	1	2	GREEN VEGETABLE	1	2	1	2
	Rice, wheat, porridge?	RICE, WHEAT	1	2	1	2	RICE, WHEAT	1	2	1	2
	Meat/fish/eggs?	MEAT/FISH	1	2	1	2	MEAT/FISH	1	2	1	2
	Dal?	DAL	1	2	1	2	DAL	1	2	1	2
	Other _____? (SPECIFY)	OTHER	1	2	1	2	OTHER	1	2	1	2
450		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 451.					GO BACK TO 405 AND USE LAST COLUMN OF ADDITIONAL SHEET, 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 JUNE 1998 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 FORM).		
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 501)	NAME _____ ALIVE ☐ DEAD ☐ (GO TO 453 AND USE LAST COLUMN OF ADDITIONAL SHEET; OR, IF NO MORE BIRTHS, GO TO 501)
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 POLIO 0 (POLIO GIVEN AT BIRTH) POLIO1 POLIO 2 POLIO 3 DPT 1 DPT 2 DPT 3 MEASLES VITAMIN A (MOST RECENT)	DAY MON YEAR BCG. ☐☐ ☐☐ ☐☐☐☐ P0 .... ☐☐ ☐☐ ☐☐☐☐ P1 .... ☐☐ ☐☐ ☐☐☐☐ P2 .... ☐☐ ☐☐ ☐☐☐☐ P3 .... ☐☐ ☐☐ ☐☐☐☐ D1 .... ☐☐ ☐☐ ☐☐☐☐ D2 .... ☐☐ ☐☐ ☐☐☐☐ D3 .... ☐☐ ☐☐ ☐☐☐☐ MEA.. ☐☐ ☐☐ ☐☐☐☐ VIT. A ☐☐ ☐☐ ☐☐☐☐	DAY MON YEAR BCG. ☐☐ ☐☐ ☐☐☐☐ P0 .... ☐☐ ☐☐ ☐☐☐☐ P1 .... ☐☐ ☐☐ ☐☐☐☐ P2 .... ☐☐ ☐☐ ☐☐☐☐ P3 .... ☐☐ ☐☐ ☐☐☐☐ D1 .... ☐☐ ☐☐ ☐☐☐☐ D2 .... ☐☐ ☐☐ ☐☐☐☐ D3 .... ☐☐ ☐☐ ☐☐☐☐ MEA... ☐☐ ☐☐ ☐☐☐☐ 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 LINE NUMBER _____	NEXT-TO-LAST BIRTH LINE NUMBER _____
458	Has (NAME) received any vaccinations that were not recorded on this card? RECORD "YES" ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-3, 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
465	In the last 2 weeks, did (NAME) had: Rapid breathing? Difficulty in breathing? Chest in drawing?	YES NO RAPID BREATHING .... 1 2 DIFFICULTY IN BREATHING ...... 1 2 CHEST IN DRAWING 1 2	YES NO RAPID BREATHING .... 1 2 DIFFICULTY IN BREATHING ...... 1 2 CHEST IN DRAWING 1 2

		LAST BIRTH	NEXT-TO-LAST BIRTH
		LINE NUMBER _____	LINE NUMBER _____

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
		  UPAZILA HEALTH COMPLEX.......... C
		  SATELLITE CLINIC/
		     EPI OUTREACH SITE .... D
		  MATERNAL AND CHILD WELFARE
		     CENTER (MCWC) ....E
		  GOVT. FIELD WORKER (FWA) ....F
		  COMMUNITY CLINIC .... G
		
		NGO SECTOR
		  NGO STATIC CLINIC .... H
		  NGO SATELLITE CLINIC I
		  NGO FIELDWORKER .... J
		
		PRIVATE MEDICAL SECTOR
		  PRIVATE HOSPITAL/CLINIC ....K
		  QUALIFIED DOCTOR.......................L
		  TRADITIONAL DOCTOR .... M
		  PHARMACY .... N
		
		OTHER _____X
		        (SPECIFY)
			PUBLIC SECTOR
			  HOSPITAL/MEDICAL COLLEGE ...... A
			  FAMILY WELFARE CENTRE/FWV .. B
			  UPAZILA HEALTH COMPLEX.......... C
			  SATELLITE CLINIC/
			     EPI OUTREACH SITE .... D
			  MATERNAL AND CHILD WELFARE
			     CENTER (MCWC) .... E
			  GOVT. FIELD WORKER (FWA) ....F
			  COMMUNITY CLINIC .... G
			
			NGO SECTOR
			  NGO STATIC CLINIC .... H
			  NGO SATELLITE CLINIC I
			  NGO FIELDWORKER........................J
			
			PRIVATE MEDICAL SECTOR
			  PRIVATE HOSPITAL/CLINIC .... K
			  QUALIFIED DOCTOR.......................L
			  TRADITIONAL DOCTOR .... M
			  PHARMACY.................................... N
			
			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? Homemade 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

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

		LAST BIRTH LINE NUMBER _____	NEXT-TO-LAST BIRTH LINE NUMBER _____

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
		   UPAZILA HEALTH COMPLEX.......... C
		   SATELLITE CLINIC/
		      EPI OUTREACH SITE .... D
		   MATERNAL AND CHILD WELFARE
		      CENTER (MCWC) ....E
		   GOVT. FIELD WORKER (FWA) ....F
		   COMMUNITY CLINIC .... G
		NGO SECTOR
		   NGO STATIC CLINIC .... H
		   NGO SATELLITE CLINIC I
		   NGO FIELDWORKER.......................J
		PRIVATE MEDICAL SECTOR
		   PRIVATE HOSPITAL/CLINIC ....K
		   QUALIFIED DOCTOR........................L
		   TRADITIONAL DOCTOR .... M
		   PHARMACY .... N
		
		OTHER _____X
		       (SPECIFY)
			PUBLIC SECTOR
			   HOSPITAL/MEDICAL COLLEGE ...... A
			   FAMILY WELFARE CENTRE/FWV .. B
			   UPAZILA HEALTH COMPLEX.......... C
			   SATELLITE CLINIC/
			      EPI OUTREACH SITE .... D
			   MATERNAL AND CHILD WELFARE
			      CENTER (MCWC) .... E
			   GOVT. FIELD WORKER (FWA) ....F
			   COMMUNITY CLINIC ....G
			NGO SECTOR
			   NGO STATIC CLINIC .... H
			   NGO SATELLITE CLINIC I
			   NGO FIELDWORKER.......................J
			PRIVATE MEDICAL SECTOR
			   PRIVATE HOSPITAL/CLINIC .... K
			   QUALIFIED DOCTOR........................L
			   TRADITIONAL DOCTOR ....M
			   PHARMACY..................................... N
			
			OTHER _____X
			       (SPECIFY)

480		GO BACK TO 453 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 501	GO BACK TO 453 AND USE LAST COLUMN OF ADDITIONAL SHHET; OR IF NO MORE BIRTHS, GO TO 501

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 (WIDOWED, ☐ DIVORCED, DESERTED OR SEPARATED)		→ 507
505	Is your husband staying with you now or is he staying elsewhere?	STAYING WITH HER .... 1 STAYING ELSEWHERE 2	→ 506
505A	How long he is not staying with you?	MONTHS .... ☐☐	
506	RECORD THE HUSBAND'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'	NAM E_____ 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 MARRIED ☐ MORE THAN ONCE In what month and year did you start living with your husband? Now we will talk about your first husband. In what month and year did you start living with him?	MONTH .... ☐☐ DON'T KNOW MONTH .... 98 .... YEAR ....☐☐☐☐ DON'T KNOW YEAR........................9998	→ 510
509	How old were you when you started living with him?	AGE.. ☐☐	
510	How old was your husband when you started living with him?	AGE.. ☐☐	
512	DETERMINE MONTHS MARRIED SINCE JUNE 1998. ENTER "X" IN COLUMN 4 OF CALENDAR FOR EACH MONTH MARRIED AND ENTER "0" FOR EACH MONTH NOT MARRIED, SINCE JUNE 1998. 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 (WIDOWED, DIVORCED, DESERTED OR SEPARATED) ☐		▶ 614
601B	CHECK 106A: 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 PREGNANT ☐ 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: CHECK 602:
	
	WANTS A/ANOTHER ☐ WANTS NO MORE ☐
	CHILDREN 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? 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?
	
	RECORD ALL MENTIONED
		FERTILITY-RELATED REASONS
		    NOT HAVING SEX............................ A
		    INFREQUENT SEX........................... B
		    MENOPAUSAL/HYSTERECTOMY... C
		    SUBFECUND/INFECUND .... D
		    POSTPARTUM AMENORRHEIC...... E
		    FATALISTIC ....F
		
		OPPOSITION TO USE
		    RESPONDENT OPPOSED...............G
		    HUSBAND OPPOSED .... H
		    OTHERS OPPOSED I
		    RELIGIOUS PROHIBITION ....J
		
		LACK OF KNOWLEDGE
		    KNOWS NO METHOD...................... K
		    KNOWS NO SOURCE.......................L
		
		METHOD-RELATED REASONS
		    HEALTH CONCERNS......................M
		    FEAR OF SIDE EFFECTS................ N
		    LACK OF ACCESS/TOO FAR ....O
		    COST TOO MUCH............................ P
		    INCONVENIENT TO USE.................Q
		    INTERFERES WITH BODY'S
		       NORMAL PROCESSES.............. R
		
		OTHER _____ X
		               (SPECIFY)
		DON'T KNOW ....Z	

609	CHECK 310: USING A METHOD?
	
	    NOT ASKED ☐ NOT CURRENTLY ☐ CURRENTLY ☐
	              ↓ USING ↓ 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 PERIODIC ABSTINENCE .... 08 WITHDRAWAL...................................... 09 OTHER METHOD_____10 (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
		    FATALISTIC 16
		
		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 ☐ NO 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? 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)
			619

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?	NUMBER BOYS ....☐☐ GIRLS ....☐☐ EITHER.......................................☐☐ OTHER _____96 (SPECIFY)	

619	In the last month have you heard about family planning:
	
	        On the radio?
	        On the television?
	        In a newspaper or magazine?
	        From a poster or billboard or leaflet?
	        From a community event?
			OFTEN	SOME-
				TIMES
					NEVER

RADIO.........................1	2	3
TELEVISION 1	2	3
NEWSPAPER 1	2	3
POSTER/BILLBOARD.1	2	3
COMMUNITY EVENT .1	2	3		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
619A	CHECK 106A: CURRENTLY MARRIED ☐ NOT CURRENTLY MARRIED ☐		▸ 701
621	How often have you talked to your husband about family planning in the last three months?	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	→709A
702	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)	
703	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	→705

704	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	

705	Is it possible for a healthy-looking person to have the AIDS virus?	YES ....1 NO..2 DON'T KNOW 8	
706	Can the virus that causes AIDS be transmitted from a mother to a child?	YES ....1 NO..2 DON'T KNOW 8	
707	CHECK 106A: CURRENTLY MARRIED ☐ NOT CURRENTLY MARRIED ☐		→709A
708	Have you ever talked about ways to prevent getting the virus that causes AIDS with your husband?	YES ....1 NO..2	
709A	(Apart from AIDS), have you heard about (other) infection/disease that can be transmitted through sexual contact?	YES ....1 NO..2	710

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
709B	Have you heard about ----------------------?	YES NO	
	a. Syphilis	1 2	
	b. Gonorrhea	1 2	
709C	CHECK 709B: AT LEAST ONE "YES" ☐ NOT A SINGLE "YES" ☐ ↓		→ 712

710	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)
		DON️T KNOW .... Z	

711	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)
		DON️T KNOW .... Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
712	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: 1. Any itching or irritation in vaginal area with a discharge? 2. A genital sore or ulcer? 3. A bad odour along with a discharge? 4. Severe lower abdominal pain with a discharge, not related with menstruation? 5. A fever along with a discharge? 6. Problem with pain or burning while urinating or more frequent or difficult urination? CHECK Q106A: IF NOT CURRENTLY MARRIED THEN SKIP TO ITEM 9 7. Pain in abdomen or vagina during intercourse? 8. Blood after having sex when you are not menstruating? 9. Any other problem with a discharge?_____ (SPECIFY)	YES NO ITCHING/IRRITATION ....1 2 GENITAL SORE.................1 2 BAD ODOUR......................1 2 ABDOMINAL PAIN.............1 2 FEVER ....1 2 URINATING PROBLEM .....1 2 PAIN INTERCOURSE........1 2 BLOOD AFTER SEX..........1 2 OTHER PROBLEM 1 2	
713	CHECK 712: AT LEAST ONE "YES" ☐ NOT A SINGLE "YES" ☐		▶ 801

714	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
		   COMMUNITY CLINIC.......................... G
		
		NGO SECTOR
		   NGO STATIC CLINIC...........................H
		   NGO SATELLITE CLINIC I
		   NGO FIELDWORKER.......................... J
		
		PRIVATE MEDICAL SECTOR
		   PRIVATE HOSPITAL/CLINIC...............K
		   QUALIFIED DOCTOR.......................... L
		   TRADITIONAL DOCTOR .... M
		   PHARMACY...N
		
		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/ DESERTED/ SEPARATED ☐		▸ 803
802	How old was your husband/partner on his last birthday?	AGE.. ☐☐	
803	Have you husband ever attended school or madrasha?	YES, SCHOOL .... 1 YES, MADRASHA .... 2 YES, BOTH .... 3 NO 4	▸ 805 ▸ 805 ▸ 806
804	What type of schooling (NAME) has he last attended?	SCHOOL .... 1 MADRASHA 2	
805	What level of schooling has he last attended? What is the highest grade he completed at that schooling?	LEVEL .... ☐ GRADE....................................... ☐☐	
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 NO 2	▸ 809
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	
811A	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 ▸ 812
811B	Who mainly decides how the money you earn will be used?	RESPONDENT.. 1 HUSBAND .... 2 RESPONDENT AND HUSBAND JOINTLY.. 3 SOMEONE ELSE .... 4 RESPONDENT AND SOMEONE ELSE JOINTLY.. 5	
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
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
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 .... ☐☐	

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 STERILIZATION
        3   PILL
        4   IUD
        5   INJECTIONS
        6   IMPLANTS
        7   CONDOM
        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   COMMUNITY CLINIC
        6   PVT. CLINIC/DOCTOR
        7   TRADITIONAL DOCTOR
        8   PHARMACY
        9   SHOP
        A   FRIENDS/RELATIVES
        B   FIELDWORKER/FWA
        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 JUNE 1998

IF NO PREVIOUS PREGNANCY, RECORD '00' FOR MONTH AND
'0000' FOR YEAR
MONTH .... ☐☐
YEAR ....☐☐☐☐

		COL. 1	COL. 2	COL. 3	COL. 4			
1	02 JAISTHA	01				01	05 MAY	2
1	01 BAISHAK	02				02	04 APR	0
	12 CHOITRA	03				03	03 MAR	0
	11 FALGUN	04				04	02 FEB	4
	10 MAGH	05				05	01 JAN	
	09 POUSH	06				06	12 DEC	
	08 AGRAHAYAN	07				07	11 NOV	
1	07 KARTIK	08				08	10 OCT	2
4	06 ASHWIN	09				09	09 SEP	0
1	05 BADHRA	10				10	08 AUG	0
0	04 SRABAN	11				11	07 JUL	3
	03 ASHAR	12				12	06 JUN	
	02 JAISTHA	13				13	05 MAY	
	01 BAISHAK	14				14	04 APR	
	12 CHOITRA	15				15	03 MAR	
	11 FALGUN	16				16	02 FEB	
	10 MAGH	17				17	01 JAN	
	09 POUSH	18				18	12 DEC	
	08 AGRAHAYAN	19				19	11 NOV	
1	07 KARTIK	20				20	10 OCT	2
4	06 ASHWIN	21				21	09 SEP	0
0	05 BADHRA	22				22	08 AUG	0
9	04 SRABAN	23				23	07 JUL	2
	03 ASHAR	24				24	06 JUN	
	02 JAISTHA	25				25	05 MAY	
	01 BAISHAK	26				26	04 APR	
	12 CHOITRA	27				27	03 MAR	
	11 FALGUN	28				28	02 FEB	
	10 MAGH	29				29	01 JAN	
	09 POUSH	30				30	12 DEC	
	08 AGRAHAYAN	31				31	11 NOV	
1	07 KARTIK	32				32	10 OCT	2
4	06 ASHWIN	33				33	09 SEP	0
0	05 BADHRA	34				34	08 AUG	0
8	04 SRABAN	35				35	07 JUL	1
	03 ASHAR	36				36	06 JUN	
	02 JAISTHA	37				37	05 MAY	
	01 BAISHAK	38				38	04 APR	
	12 CHOITRA	39				39	03 MAR	
	11 FALGUN	40				40	02 FEB	
	10 MAGH	41				41	01 JAN	
	09 POUSH	42				42	12 DEC	
	08 AGRAHAYAN	43				43	11 NOV	
1	07 KARTIK	44				44	10 OCT	2
4	06 ASHWIN	45				45	09 SEP	0
0	05 BADHRA	46				46	08 AUG	0
7	04 SRABAN	47				47	07 JUL	0
	03 ASHAR	48				48	06 JUN	
	02 JAISTHA	49				49	05 MAY	
	01 BAISHAK	50				50	04 APR	
	12 CHOITRA	51				51	03 MAR	
	11 FALGUN	52				52	02 FEB	
	10 MAGH	53				53	01 JAN	
	09 POUSH	54				54	12 DEC	
	08 AGRAHAYAN	55				55	11 NOV	
1	07 KARTIK	56				56	10 OCT	1
4	06 ASHWIN	57				57	09 SEP	9
0	05 BADHRA	58				58	08 AUG	9
6	04 SRABAN	59				59	07 JUL	9
	03 ASHAR	60				60	06 JUN	
	02 JAISTHA	61				61	05 MAY	
	01 BAISHAK	62				62	04 APR	
	12 CHOITRA	63				63	03 MAR	
	11 FALGUN	64				64	02 FEB	
	10 MAGH	65				65	01 JAN	
	09 POUSH	66				66	12 DEC	
	08 AGRAHAYAN	67				67	11 NOV	
1	07 KARTIK	68				68	10 OCT	1
4	06 ASHWIN	69				69	09 SEP	9
0	05 BADHRA	70				70	08 AUG	9
5	04 SRABAN	71				71	07 JUL	8
	03 ASHAR	72				72	06 JUN	

1
4

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 2004
MAN'S QUESTIONNAIRE

IDENTIFICATION

DIVISION _____

DISTRICT _____

UPAZILA _____

UNION OR WARD_____

VILLAGE OR MOHALLA OR BLOCK _____

CLUSTER NUMBER ....

HOUSEHOLD NUMBER ....

RURAL=1, MUNICIPALITY=2, OTHER URBAN=3, SMA=4 ....

NAME OF THE HOUSEHOLD HEAD _____

NAME AND LINE NUMBER OF MAN _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT	
DATE				DAY	
				MONTH*	
INTERVIEWER□S NAME				YEAR	
RESULT**				CODE	
				RESULT**	
NEXT VISIT: DATE				TOTAL NO. OF VISITS	
TIME					

**RESULT CODES:
- 1 COMPLETED
- 2 NOT AT HOME
- 3 POSTPONED
- 4 REFUSED
- 5 PARTLY COMPLETED
- 6 RESPONDENT INCAPACITATED
- 7 OTHER _____
  (SPECIFY)

*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 → 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?	DHAKA/CHITTAGONG/ KHULNA/RAJSHAHI............................. 1 SMALL CITY .... 2 TOWN .... 3 VILLAGE 4	
103A	Do you usually live in (THE CURRENT PLACE OF RESIDENCE)?	YES... 1 NO 2	→ 106
103B	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEAR.	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 countryside?	DHAKA/CHITTAGONG/ KHULNA/RAJSHAHI............................. 1 SMALL CITY .... 2 TOWN .... 3 VILLAGE 4	
105	In the last 1 year, have you ever lived away from your home community?	YES... 1 NO 2	→ 108
106	In the last 1 year, on how many occasions have you lived away from your home community?	NUMBER OF OCCASION .... ☐☐	
107	How many days altogether **(mentioned in 106)** did you spend away from your home community?	NUMBER OF TIMES............... ☐☐☐	
108	In what month and year were you born?	MONTH .... ☐☐ DON'T KNOW MONTH .... 98 YEAR............................... ☐☐☐☐ DON'T KNOW YEAR 9998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109	How old were you at your last birthday? COMPARE AND CORRECT 108 AND /OR 109 IF INCONSISTENT	AGE IN COMPLETED YEARS....... ☐☐ IF AGE IN NOT BETWEEN 15 AND 59	➤ END
110	Have you ever attended school or madrasha?	YES, SCHOOL...1 YES, MADRASHA ....2 YES, BOTH...3 NO...4	➤111B ➤113
111A	What type of schooling did you last attend?	SCHOOL...1 MADRASHA..2	
111B	What level of schooling have you last attended? What is the highest grade you completed at that schooling?	LEVEL.................................. ☐ CLASS .... ☐☐	
112	CHECK 111B: CLASS IS LESS THAN 6 ☐⬇ CLASS IS 6 OR MORE THAN 6 ☐		➤ 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 television?	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	
117	What is your religion?	ISLAM .... 1 HINDUISM .... 2 BUDDHISM .... 3 CHRISTIANITY .... 4 OTHER _____ 6 (SPECIFY)	
119	Are you currently working?	YES ....1 NO..2 ➤ 128	
120	What is you occupation, that is, what kind of work do you mainly do?	.... ☐☐	

121	CHECK 120:
	      WORKS IN AGRICULTURE WORKS IN OTHER ☐
	                                                         SECTORS
			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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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	→126
125	During the last 1 year, how many months did you work?	NUMBER OF MONTHS................. ☐☐	
126	Do you think that your earning is sufficient, moderately sufficient or not sufficient to provide for your family's basic needs?	SUFFICIENT .... 1 MODERATELY SUFFICIENT .... 2 NOT SUFFICIENT 3	→201
128	Have you done any work in the last 1 year?	YES .... 1 NO 2	→201
129	What have you been doing over the last 1 year?	GOING TO SCHOOL/STUDYING .... 1 LOOKING FOR WORK............................... 2 INACTIVE.. 3 COULD NOT WORK/HANDICAPPED .... 4 OTHER _____ 6 (SPECIFY)	

SECTION 2. HEALTH AND LIFE STYLE

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	At any time during the last 3 months, for any health problem(s) or injury, did you have difficulty in doing your normal work, or in doing regular activities?	YES, ILLNESS ....A YES, INJURY ....B NONE...Y	→207A
202	For how many days in the last 3 months were you unable to do your normal work or regular activities due to this (these) health problem(s) and/or injuries?	NUMBER OF DAYS .... ☐☐	
203	CHECK 201: CIRCLED 'A'(ILLNESS) ☐↓ DID NOT CIRCLE 'A' ☐_____		→207A
204	What type of illness prevents you from doing your work or other regular activities?	TUBERCULOSIS...A ASTHMA ....B DIABETES ....C HIGH BLOOD PRESSURE ....D HEART PROBLEM...E MALARIA/FEBER ....F JAUNDICE/HEPATITIS .... G OTHER _____X (SPECIFY)	

207A	Do you smoke? Such as:		207B.In 24 hours usually how many times do you smoke/eat (NAME OF THE ITEM)?	207C. Have you ever smoked/eaten (NAME OF THE ITEM)?
1	Cigarette?	Yes................. 1 → No .... 2 ┐ SKIP 207C	Times .... ☐☐ GO TO NEXT ITEM	Yes ....1 No...............................2
2	Bidi?	Yes................. 1 → No .... 2 ┐ SKIP 207C	Times .... ☐☐ GO TO NEXT ITEM	Yes ....1 No...............................2
3	Hukka?	Yes................. 1 → No .... 2 ┐ SKIP 207C	Times .... ☐☐ GO TO NEXT ITEM	Yes ....1 No...............................2
4	Pipe?	Yes................. 1 → No .... 2 ┐ SKIP 207C	Times .... ☐☐ GO TO NEXT ITEM	Yes ....1 No...............................2
5	Anything else? _____ (Specify)	Yes................. 1 → No .... 2 ┐ SKIP 207C	Times .... ☐☐ GO TO NEXT ITEM	Yes ....1 No...............................2
6	Do you currently eat tobacco leaves or sada pata or gul?	Yes................. 1 → No .... 2 ┐ SKIP 207C	Times .... ☐☐ GO TO NEXT ITEM	Yes ....1 No...............................2
7	Do you currently eat pan with tobacco or zarda?	Yes................. 1 → No .... 2 ┐ SKIP 207C	Times .... ☐☐ GO TO 301	Yes ....1 No...............................2

SECTION 3. MARRIAGE AND SEXUAL ACTIVITY

Now, I would like to ask you some questions about your marriage life.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
301	Are you currently married, widowed, divorced or separated?	MARRIED .... 1 WIDOWED .... 2 DIVORCED... 3 SEPARATED .... 4 NEVER MARRIED.. 5	→306 →316A
305	Is your wife living with you now or is she staying elsewhere?	LIVING WITH HIM .... 1 STAYING ELSEWHERE 2	
306	Have you been married only once, or more than once?	ONCE... 1 MORE THAN ONCE................................... 2	
307A	CHECK 301: CURRENTLY MARRIED ☐ NOT CURRENTLY MARRIED ☐		→308
307B	RECORD THE WIFE'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF SHE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. IF THERE ARE TWO WIVES IN THE HOUSEHOLD, RECORD THE NAME AND LINE NUMBERS OF BOTH.	NAME _____ LINE NO... ☐☐ NAME _____ LINE NO... ☐☐	
308	CHECK 306: MARRIED ☐ MARRIED ☐ ONLY ONCE MORE THAN ONCE In what month and year did you start living with your wife? Now, we will talk about your first wife. In what month and year did you start living with her?	MONTH.. ☐☐ DON'T KNOW MONTH .... 98 YEAR .... ☐☐☐☐ DON'T KNOW YEAR 9998	→310
309	How old were you when you started living with her?	AGE .... ☐☐	
310	Did you have sex before (first) marriage?	YES .... 1 NO.. 2	→311
310A	How old were you when you first had sexual intercourse?	AGE IN YEARS .... ☐☐	
311	Now I would like to talk about sexual relationship after marriage. Sometimes, a man may seek for sexual relationship with women other than his wife. After marriage, have you ever had sex with any woman other than your wife?	YES .... 1 NO.. 2	→317
312	Beside your wife, with whom did you have sexual relationship? Any other?	GIRL FRIEND/FIANCEE ....A OTHER FRIEND..B CASUAL ACQUAINTANCE ....C COMMERCIAL SEX WORKER ....D RELATIVE ....E OTHER _____ X (SPECIFY)	
313A	In the last 1 year, did you have sexual intercourse with any women other than your wife?	YES .... 1 NO.. 2	→317

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313B	Beside your wife, with whom did you have sexual intercourse? Any other?	GIRL FRIEND/FIANCEE .... A OTHER FRIEND .... B CASUAL ACQUAINTANCE .... C COMMERCIAL SEX WORKER .... D RELATIVE .... E OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313C	In the last 1 year, with how many women did you have sexual intercourse other than your wife?	NUMBER ....☐☐	
313D	CHECK 313B: MULTIPLE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐		▶ 315
314A	Beside your wife, with whom (among those mentioned in Q 313B) did you have last sexual intercourse?	GIRL FRIEND/FIANCEE .... 1 OTHER FRIEND .... 2 CASUAL ACQUAINTANCE .... 3 COMMERCIAL SEX WORKER .... 4 RELATIVE .... 5 OTHER _____ 6 (SPECIFY)	
314B	The last time you had sexual intercourse with (mentioned 314A), did you use a condom?	YES... 1 ▶ 315A NO .... 2 ▶ 315B	
315	The last time you had sexual intercourse with (mentioned 313B), did you use a condom?	YES... 1 NO .... 2 ▶ 315B	
315A	Why did you use condom?	TO PREVENT STD .... A TO PREVENT PREGNENCY .... B OTHER _____ X (SPECIFY)	
315B	CHECK 106: RESPONSE GIVEN ☐ DID NOT GIVE ANY ANSWER ☐ (Lived outside in last 1 year) (Did not live outside in last 1 year)		▶ 317
315C	In the last 1 year, did you have sexual intercourse with any woman other than your wife while travelling outside your home community?	YES... 1 NO .... 2 ▶ 317	
315D	Did you have this sexual intercourse inside Bangladesh or outside Bangladesh?	INSIDE BANGLADESH................................ A OUTSIDE BANGLADESH .... B	
315E	INTERVIWER: CHECK 315D IF CODE 'A' CIRCLED THEN ASK, OTHERWISE SKIP TO 315F In the last 1 year with whom did you have sexual intercourse other than your wife while travelling inside Bangladesh? Any other?	GIRL FRIEND/FIANCEE .... A OTHER FRIEND .... B CASUAL ACQUAINTANCE .... C COMMERCIAL SEX WORKER .... D RELATIVE .... E OTHER _____ X (SPECIFY)	
315EA	Beside your wife, with how many women did you have sexual intercourse in the last 1 year?	NUMBER ....☐☐	
315EB	The last time you had sexual intercourse with (among those mentioned in 315EA), did you use a condom?	YES... 1 NO .... 2 ▶ 315F	
315EC	Why did you use condom?	TO PREVENT STD .... A TO PREVENT PREGNENCY .... B OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
315F	INTERVIWER: CHECK 315D IF CODE 'B' CIRCLED THEN ASK, OTHERWISE SKIP TO 317 In the last 1 year, with whom did you have sexual intercourse other than your wife while travelling outside Bangladesh? Any other?	GIRL FRIEND/FIANCEE ....A OTHER FRIEND..B CASUAL ACQUAINTANCE ....C COMMERCIAL SEX WORKER ....D RELATIVE ....E OTHER _____ X (SPECIFY)	
315FA	Beside your wife, with how many women did you have sexual intercourse in the last 1 year?	NUMBER .... ☐☐	
315FB	The last time you had sexual intercourse with (among those mentioned in 315FA), did you use a condom?	YES .... 1 NO...2	➔ 317
315FC	Why did you use condom?	TO PREVENT STD ....A TO PREVENT PREGNENCY......................B OTHER _____ X (SPECIFY)	➔ 317
316A	Some times men have sexual urge and have sex before marriage. Have you ever had sex with any woman?	YES .... 1 NO...2	➔ 317
316B	How old were you when you first had sexual intercourse?	AGE IN YEARS .... ☐☐	
316C	With whom did you have sexual intercourse? Any other?	GIRL FRIEND/FIANCEE ....A OTHER FRIEND..B CASUAL ACQUAINTANCE ....C COMMERCIAL SEX WORKER ....D RELATIVE ....E OTHER _____ X (SPECIFY)	
316D	In the last 1 year, did you have sexual intercourse with any women?	YES .... 1 NO...2	➔ 317
316E	With whom did you have sexual intercourse? Any other?	GIRL FRIEND/FIANCEE ....A OTHER FRIEND..B CASUAL ACQUAINTANCE ....C COMMERCIAL SEX WORKER ....D RELATIVE ....E OTHER _____ X (SPECIFY)	
316EA	With how many women did you have sexual intercourse in the last 1 year?	NUMBER .... ☐☐	
316EB	CHECK 316E : MULTIPLE CODES CIRCLED ☐	ONLY ONE CODE CIRCLED ☐	➔316H
316F	With whom (among those mentioned in Q 316E) did you have last sexual intercourse?	GIRL FRIEND/FIANCEE .... 1 OTHER FRIEND... 2 CASUAL ACQUAINTANCE .... 3 COMMERCIAL SEX WORKER .... 4 RELATIVE .... 5 OTHER _____ 7 (SPECIFY)	
316G	The last time you had sexual intercourse with (mentioned 316F), did you use a condom?	YES ....1 NO...2	➔ 316I ➔ 316IA
316H	The last time you had sexual intercourse with (mentioned 316E), did you use a condom?	YES .... 1 NO...2	➔316IA
316I	Why did you use condom?	TO PREVENT STD ....A TO PREVENT PREGNANCY......................B OTHER _____ X (SPECIFY)	
316IA	CHECK 106: RESPONSE GIVEN ☐ (Lived outside in the last 1 year)	DID NOT GIVE ANY RESPONSE ☐ (Did not live outside in the last 1 year)	➔ 317

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316J	In the last 1 year, did you have sexual intercourse with any women while travelling outside your home community?	YES.. 1 NO 2	▶ 317
316K	Was this sexual intercourse inside Bangladesh or outside Bangladesh?	INSIDE BANGLADESH................................ A OUTSIDE BANGLADESH .... B	
316L	INTERVIWER: CHECK 316K IF CODE 'A' CIRCLED THEN ASK, OTHERWISE SKIP TO 317. With whom did you have sexual intercourse? Any other?	GIRL FRIEND/FIANCEE .... A OTHER FRIEND .... B CASUAL ACQUAINTANCE ....C COMMERCIAL SEX WORKER ....D RELATIVE .... E OTHER _____ X (SPECIFY)	
316LA	With how many women did you have sexual intercourse in the last i year?	NUMBER .... ☐☐	
316LB	The last time you had sexual intercourse with (among those mentioned in 316LA), did you use a condom?	YES.. 1 NO 2	▶ 316M
316LC	Why did you use condom?	TO PREVENT STD .... A TO PREVENT PREGNANCY .... B OTHER _____ X (SPECIFY)	
316M	INTERVIWER: CHECK 316K IF CODE 'B' CIRCLED THEN ASK, OTHERWISE SKIP TO 317 With whom did you have sexual intercourse? Any other?	GIRL FRIEND/FIANCEE .... A OTHER FRIEND .... B CASUAL ACQUAINTANCE ....C COMMERCIAL SEX WORKER ....D RELATIVE .... E OTHER _____ X (SPECIFY)	
316MA	With how many women did you have sexual intercourse in the last 1 year?	NUMBER .... ☐☐	
316MB	The last time you had sexual intercourse with (among those mentioned in 316MA), did you use a condom?	YES.. 1 NO 2	▶ 317
316MC	Why did you use condom?	TO PREVENT STD .... A TO PREVENT PREGNANCY .... B OTHER _____ X (SPECIFY)	
317	Sometimes, some men may desire sexual pleasure from persons other than women. Have you ever had sex with any boys/men or transgender (hizra)?	YES, WITH A MAN/BOYS .... 1 YES, WITH A TRANSGENDER .... 2 YES, BOTH .... 3 NONE 4	▶ 321
318	In the last 1 year, did you have such sex?	YES, WITH A MAN .... 1 YES, WITH A TRANSGENDER .... 2 YES, BOTH .... 3 NONE 4	
319	The last time you had such sexual intercourse, did you or your partner use a condom?	YES.. 1 NO 2	▶ 321
320	Why did you use condom?	TO PREVENT STD .... A OTHER_____X (SPECIFY)	
321	Do you know of a place where you can obtain a condom?	YES.. 1 NO 2	▶ 401

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
322	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 　UPAZILA HEALTH COMPLEX .... 13 　SATELLITE CLINIC/ 　　EPI OUTREACH SITE .... 14 　MATERNAL CHILD WELFARE 　　CENTER (MCWC) .... 15 　GOVT. FIELD WORKER (FWA)............. 16 　COMMUNITY CLINIC .... 17 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. PARTICIPATION IN HEALTH CARE

Now, I would like to ask you some questions about the participation in healthcare.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	ASK QUESTIONS SEPARATELY FOR PREGNANCY, DELIVERY AND AFTER DELIVERY BUT RECORD RESPONSES IN SAME CODING CATEGORY. What are the problems at the time of pregnancy that may cause death to the mother? Any other? What are the problems at the time of delivery that may cause death to the mother? Any other? What are the problems after the delivery that may cause death to the mother? Any other? RECORD ALL MENTIONED	SEVERE HEADACHE ....A BLURRY VISION ....B HIGH BLOOD PRESSURE .... C PRE-ECLAMSIA .... D CONVULSION/ECLAMSIA............................E EXCESSIVE VAGINAL BLEEDING ....F FOUL-SMELLING DISCHARGE WITH HIGH FEVER..................................... G JAUNDICE .... H TETANUS ....I BABY'S HAND OR FEET COME/ BABY IN BAD POSITION .... J PROLONG LABOR..K OBSTRUCTED LABOR.................................L RETAINED PLACENTA................................ M TORNED UTEROUS .... N OTHER _____ X (SPECIFY) DON'T KNOW..Y	
402	Do you think that women should have a medical checkup when they are pregnant even if they are not sick?	YES ....1 NO ....2 DON'T KNOW..8	➤ 404
403	At what months of pregnancy do you think that women should have first check up for pregnancy?	MONTH .... ☐☐ DON'T KNOW..98	
404	During the pregnancy do you think women should eat more, same or less?	MORE...1 SAME ....2 LESS ....3 DON'T KNOW..8	
405A	In what year was you last child born? PROBE	YEAR................................. ☐☐☐☐ UNMARRIED/NO CHILDREN BORN 9996	➤ 419B
405B	CHECK 405A : CHILD BORN 1998 OR LATER ☐ CHILD BORN 1997 OR EARLIER ☐		➤ 418B
406	What is the name of your last born child?	_____ (NAME OF LAST CHILD)	
407	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	➤ 409
408	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	➤ 412
409	Were you present anytime during the antenatal care visit?	YES ....1 NO 2	
410	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	
411	During this pregnancy, did you ever talk with your wife about what the health professional such as doctor, nurse, or FWV told her about her own health or the baby's health?	YES ....1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

412	Where did your wife give birth to (NAME OF LAST BORN CHILD)?	HOME
		    OWN HOME...11
		    OTHER HOME.......................................12
		PUBLIC SECTOR
		    GOVT. HOSPITAL 21
		    UPAZILA 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)	

413	When she gave birth to (NAME OF LAST BORN CHILD), were you present (NAME OF THE PLACE IN 412) at that time?	YES.. 1 NO.. 2	
414	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 child's health?	YES, VISITED.. 1 YES, CAME TO THEIR PLACE .... 2 NO.. 8	► 416
415	Were you present at that time?	YES.. 1 NO.. 2	
416	Where is your last child (alive or dead)?	ALIVE... 1 DEAD.. 2	► 418B
417	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	► 418B
418A	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	
418B	How many living children do you have?	NUMBER .... ☐☐	
419	**419A** **CHECK 418B** 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? PROBE FOR A NUMERIC RESPONSE.	**419B** NO LIVING CHILDREN If you could choose exactly the the number of children to have in your whole life, how many would that be?	NUMBER .... ☐☐ OTHER _____ 96 (SPECIFY)	► 501
420	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?	NUMBER BOYS... ☐☐ GIRLS... ☐☐ EITHER... ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 5: AIDS AND OTHER SEXUALLY TRANSMITTED DISEASES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES..1 NO 2	→ 509A
502	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)	
503	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	→ 505
504	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 AVOID SEX WITH OTHER WOMEN ....O OTHER_____ W (SPECIFY) OTHER _____ X (SPECIFY) DON'T KNOW .... Z	
505	Is it possible for a healthy-looking person to have the AIDS virus?	YES..1 NO ....2 DON'T KNOW 8	
506	Can the virus that causes AIDS be transmitted from a mother to a child?	YES..1 NO ....2 DON'T KNOW 8	
507	CHECK 301: 　YES CURRENLY MARRIED ☐　　　NOT CURRENTLY MARRIED ☐		→ 509A
508	Have you ever talked with your wife about ways to prevent getting the virus that causes AIDS?	YES..1 NO 2	
509A	(Apart from AIDS), have you heard about (other) infection or disease that can be transmitted through sexual contact?	YES..1 NO 2	→ 510

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
509B	Have you heard about _____? a. Syphilis? b. Gonorrhea?	YES NO 1 2 1 2	
509C	CHECK 509B: AT LEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐		➤ 514

510	In a man, what signs and symptoms would lead you to think that he has diseases such as STD or syphilis or gonorrhea?
	
	 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	

511	In a woman, what signs and symptoms would lead you to think that she has such a disease STD/syphilis/gonorrhea?
	
	 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	

513	Now I would like to ask you some questions about your health in the last 1 year. During the last 1 year, have you had a sexually transmitted disease?	YES .... 1 NO.. 2 DON'T KNOW 8	
514	During the last 1 year, have you had a discharge from your penis?	YES .... 1 NO.. 2 DON'T KNOW 8	
515	Sometimes, men experience a sore or ulcer on or near their penis? During the last 1 year, have you had a sore or ulcer on or near your penis?	YES .... 1 NO.. 2 DON'T KNOW 8	
516	During the last 1 year, have you had pain or burning sensation during urination?	YES .... 1 NO.. 2 DON'T KNOW 8	
517	CHECK 513, 514, 515 OR 516: AT LEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐		➤ 521

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
518	The last time you had (INFECTION/DISEASE FROM 513, 514, 515 OR 516), did you seek any kind of advice or treatment?	YES.. 1 NO 2	→ 520

519	The last time you had (INFECTION/DISEASE FROM 513, 514, 515 OR 516) 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	

520	CHECK 301: CURRENTLY MARRIED ☐ CURRENTLY NOT MARRIED ☐		→ 520B
520A	The last time when you had (INFECTION/DISEASE FROM 513, 514, 515 OR 516), did you inform your wife?	YES.. 1 NO .... 2 SOME/NOT ALL.. 3	
520B	The last time when you had (INFECTION/DISEASE FROM 513, 514, 515 OR 516), did you have sex with anyone?	YES.. 1 NO 2	→ 521
520C	The last time when you had infection and had sexual intercourse with someone, did you use condom?	YES.. 1 NO 2	→ 521
520D	As long as you had the infection, did you use condom every time you had sexual intercourse or did you use condom occasionally?	AS LONG AS INFECTION .... 1 OCCASIONALLY 2	
520E	The last time why did you use condom?	TO PREVENT STD .... A TO PREVENT PREGNANCY .... B OTHER_____X (SPECIFY)	→ 601
521	If a woman's husband has a sexually transmitted disease? Would it be acceptable for her to ask him to use a condom?	YES.. 1 NO .... 2 DOES NOT KNOW 8	
521A	If a woman's husband has a sexually transmitted disease? Would it be acceptable for her to refuse to have sex with him?	YES.. 1 NO .... 2 DOES NOT KNOW 8	

SECTION 6. ATTITUDES TOWARDS WOMEN AND DOMESTIC VIOLENCE

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.		
601	If the husband is making enough money, do you believe that it is acceptable for married women to work outside the home to earn an income?	YES ....1 NO ....2 DK 8	
602	If for some reason the husband cannot making enough money for the family, do you believe that it is acceptable for married women to work outside the home to earn an income?	YES ....1 NO ....2 DK 8	
603	CHECK 301: YES CURRENLY MARRIED ☐ NOT CURRENTLY MARRIED ☐		➤ 612
606	Do you take your wife's opinion on: a. Large household expenses, that require a lot of money? b. Minor daily household expenses? C. When you wish visit family, friends or relatives?	NO YES NO OPINION 1 2 8 1 2 8 1 2 8	
606A	Does your wife own cash in her work?	YES ....1 NO ....2 ➤ 607	
606B	Who mainly decides how to spend the money that your own wife earn?	RESPONDENT ....1 WIFE ....2 HUSBAND AND WIFE TOGETHER ....3 SOMEONE ELSE ....4 RESPONDENT WITH SOMEONE ELSE ..5	
607	It is normal for couple 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: If she neglects the children? If she argues with her husband? If she fails to provide food on time If she visit family or friend without her husband's permission?	NO YES NO OPINION 1 2 8 1 2 8 1 2 8 1 2 8	

610

	Anytime, were there any circumstances or family disagreement which caused you to do?		In the last 1 year, were there any circumstances or family disagreement which caused you to do any of the following?	
	YES	NO	YES	NO
A. Pushing or shaking your wife, or throwing something at her?	1 →	2	1	2
B. Slapping her or twisting her arm?	1 →	2	1	2
C. Punching her with your fist or with something that could hurt her?	1 →	2	1	2
D. Kicking her or dragging her?	1 →	2	1	2
E. Trying to strangle her or kill her or by burning her?	1 →	2	1	2
H. Physically forcing her to have sexual intercourse with her even when she did not want to?	1 →	2	1	2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Now I would now like to ask you a very personal question. Some people take such things as Ganja, Charas, Phensidle, Pethedine, Heroin, Morphine, etc. I would like to know if you have any such habits. The information you provide shall be kept confidential and be used only for research purposes like the other information. In the last 3 months, have you taken ....? (In addition to this/these), have you taken any injectable drug in the last three months?	YES NO GANJA ....1 2 CHARAS ....1 2 PHENSIDLE.................................1 2 PETHEDINE.................................1 2 HEROIN ....1 2 MORPHINE..................................1 2 INJECTABLE DRUG...................1 OTHER _____ 1 2 (SPECIFY)	
613	RECORD THE TIME	HOUR.. ☐☐ MINUTES .... ☐☐	

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 2003-04
COMMUNITY QUESTIONNAIRE

DIVISION

DISTRICT _____

THANA _____

UNION/WARD_____

VILLAGE/MOHALLA/BLOCK_____

PSU NUMBER _____

RESIDENCE: RURAL =1, MUNICIPALITY =3, OTHER URBAN =4, SMA =5 .....

GPS READING:

LATITUDE...................................... | N | Degrees | Minutes | Thousandths

LONGITUDE .... | E | Degrees | Minutes | Thousandths

WAYPOINT ....

DATE OF VISIT_____

DAY...

MONTH ....

YEAR ....

RESULTS OF THE INTERVIEW:
(COMPLETED =1, INCOMPLETE = 2, OTHER (SPECIFY) = 6)

RESULT ....

NAME OF INTERVIEWER_____

INTERVIEWER CODE..

POSITION OF PERSON INTERVIEWED

1 _____

2 _____

3 _____

4 _____

5 _____

SEX (Male =1; Female =2)

BEGINNING TIME:

HOUR ....

MINUTES...

1. Community information

AFTER ASSEMBLING THE INFORMANTS, READ THE FOLLOWING GREETING:
Hello. I am representing the NIPORT of Ministry of Health and Family Welfare. We are carrying out a survey of communities to get a picture of services available to the communities and to understand when and why people use health services. I would like to ask you some questions about your community and about sources of health care in it and around it as a way of better understanding how to serve the population. Please be assured that this discussion is strictly confidential and you may choose to stop the interview at any time. May I continue?

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
100	PERMISSION RECEIVED TO CONTINUE?	YES...1 NO 2	Stop
100A	CHECK: RURAL AREA ☐	URBAN AREA ☐	104
101	How far is the Thana Health Center? IF LESS THAN ONE MILE/KILOMETER, RECORD "00". RECORD "97" IF DISTANCE IS MORE THAN 97 MILES/KILOMETERS.	MILE .... 1 KILOMETER .... 2 ☐☐	
102	Which is the most common type of transportation i.e, most of the people use to go to the Thana Health Center?	CAR/BUS/TEMPO ....01 MOTORCYCLE..................................02 MOTOR LAUNCH ....03 BICYCLE...04 ANIMAL CART ....05 BOAT ....06 PATH ....07 RICKSHAW/RICKSHAW VAN...........08 BABYTAXI/CNG.................................09 TRAIN...10 OTHER _____ 96 (SPECIFY)	
103	How long does it take to go to the Thana Health Center using the transportation (MENTIONED IN Q 102)?	MINUTES........................ ☐☐☐	
104	How far is the District Headquarters? IF LESS THAN ONE MILE/KILOMETER, RECORD "00". RECORD "97" IF DISTANCE IS MORE THAN 97 MILES/KILOMETERS.	MILE .... 1 KILOMETER .... 2 ☐☐	
105	Which is the most common type of transportation i.e, most of the people use to go to the District Headquarters?	CAR/BUS/TEMPO ....01 MOTORCYCLE..................................02 MOTOR LAUNCH ....03 BICYCLE...04 ANIMAL CART ....05 BOAT ....06 PATH ....07 RICKSHAW/RICKSHAW VAN...........08 BABYTAXI/CNG.................................09 TRAIN...10 OTHER _____ 96 (SPECIFY)	
106	How long does it take to go to the District Headquarters using the transportation (MENTIONED IN Q 105)?	MINUTES.................... ☐☐☐	

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
107	What is the main access road to this community?	ALL WEATHER ROAD........................1 SEASONAL ROAD ....2 WATERWAY......................................3 PATH...4 OTHER _____ 6 (SPECIFY)	
108	What type of work usually done by most people of this community i.e what is the main economic activities of this community?	AGRICULTURE ....01 LIVESTOCK ....02 FISHING ....03 COMMERCE ....04 MANUFACTURING...........................05 LABOR..06 OTHER _____ 96 (SPECIFY)	
109	How far is the nearest daily market from this village/mohalla? IF LESS THAN ONE MILE/KILOMETER, RECORD "00". RECORD "97" IF DISTANCE IS MORE THAN 97 MILES/KILOMETERS.	MILE ....1 KILOMETER 2	
109A	CHECK: RURAL AREA ☐	URBAN AREA ☐	►111a
110	How far is the nearest weekly market from this village/mohalla? IF LESS THAN ONE MILE/KILOMETER, RECORD "00". RECORD "97" IF DISTANCE IS MORE THAN 97 MILES/KILOMETERS.	MILE ....1 KILOMETER 2	
111a	Is there any telephone service in this area?	YES..1 NO 2	► 112
111b	How far is the nearest telephone service (government or private) from this village? IF LESS THAN ONE MILE/KILOMETER, RECORD "00". RECORD "97" IF DISTANCE IS MORE THAN 97 MILES/KILOMETERS.	MILE ....1 KILOMETER 2	
112	Is electricity available here?	YES..1 NO 2	

113	What is the primary source of drinking water for the majority of people in this village?	PIPED WATER
		  PIPED INSIDE DWELLING............11
		  PIPED OUTSIDE DWELLING 12
		WELL WATER
		  TUBEWELL....................................21
		  DEEP TUBEWELL 22
		  SURFACE WELL/OTHER WELL ...23
		SURFACE WATER
		  POND/TANK/LAKE 31
		  RIVER/STREAM 32
		RAINWATER 41
		OTHER _____ 96
		(SPECIFY)
			► 116
			
			► 116

114	Is there any arsenic problem in the drinking water in your area?	YES..1 NO 2	
114A	Did you know whether the wells/tubewells in the water for arsenic?	YES..1 NO 2	► 116
115	Is there a red marker, a green marker on the well?	ALL RED MARK..................................1 ALL GREEN MARK.............................2 SOME RED AND SOME GREEN MARK....................................3 NO MARK 4	

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO

116	In this village/mohalla, are there any of the following :
	      MOTHER'S CLUB OR LADIES ASSOCIATIONS?
	      GRAMEEN BANK MEMBER?
	      VOLUNTARY ORGANIZATION MEMBER?
	      BRAC INCOME GENERATING ACTVITIES
	      PROSHIKA
	      ASHA
	      COTTAGE INDUSTRIES OF BSIC
	      COOPERATIVE SOCIETY
	      OTHER NGO INCOME GENERATING ACTIVITIES
		YES NO
		 MOTHERS CLUB.......................1 2
		 GRAMEEN BANK 1 2
		 V0 MEMBER............................1 2
		 BRAC..1 2
		 PROSHIKA 1 2
		 ASHA..1 2
		 BSIC 1 2
		 COOPERATIVE SOCIETY........1 2
		 NGOS 1 2	

121	In this village/mohalla, is there a television for the community?	YES...1 NO 2	
122	Please tell me if the following things are in this village/mohalla. IF LOCATED IN THE VILLAGE/MOHALLA, WRITE '00'. IF NO, ASK: How far is it? IF DO NOT KNOW, PUT '98'. A. How far is the madrasha from this village/mohalla?	MILE 1 KILOMETER 2 ☐☐	
	B. How far is the primary school from this village/mohalla?	MILE 1 KILOMETER 2 ☐☐	
	C. How far is the boy's high school from this viilage/mohalla?	MILE 1 KILOMETER 2 ☐☐	
	D. How far is the girl's high school from this village/mohalla?	MILE 1 KILOMETER 2 ☐☐	
	E. How far is the high school (co-education)?	MILE 1 KILOMETER 2 ☐☐	
	F. How far is the post office from this village/mohalla?	MILE 1 KILOMETER 2 ☐☐	
	G. Is there a cinema hall here?	MILE 1 KILOMETER 2 ☐☐	
123	Is there anyone in the village/mohalla who sells family planning methods from his or her house?	YES...1 NO 2	
124	Is there any shop in this village/mohalla, which sells family planning methods?	YES...1 NO 2	
125	In some places, there is a clinic, which is set up temporarily in someone's house or a school on certain days to provide health and family planning services to mothers and children. It is called the satellite clinic. Is there a clinic like this held in this village/mohalla in the last 6 months?	YES...1 NO ....2 DOES NOT KNOW 8	→ 127
126	Was there a clinic like this held nearby to this village/mohalla in the last 6 months? IF YES; How far away is the place where they had the clinic?	YES...1 NO ....2 DOES NOT KNOW ....8 MILES................... 1 ☐☐ KM 2	→ 128

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO

127	Does this outreach program /satellite clinic provide:
	A. Family Planning Education/ Counseling?
	B. Family Planning Services? if YES
	    I. Pill?
	    II. IUD Insertion?
	    III. Injections?
	    IV. Condoms?
	C. Menstrual Regulation (MR)?
	D. Antenatal Care?
	E. Delivery Care?
	F. Postpartum Care?
	G. Child Immunization?
	H. Growth Monitoring?
	I. Treatment of sick children?
	J. Oral Rehydration Therapy?
	K. Health Education?
	L. Vitamin A
	M. National Immunization Day (NID)
	N. Other_____
	           (Specify)
		YES NO
		FP EDUCATION/COUNSELING .. 1 2
		FAMILY PLANNING SERVICES .. 1 2
		   PILL 1 2
		   IUD INSERTION 1 2
		   INJECTIONS.......................... 1 2
		   CONDOMS 1 2
		MENSTRUAL REGULATION 1 2
		ANTENATAL CARE 1 2
		DELIVERY CARE 1 2
		POSTPARTUM CARE 1 2
		CHILD IMMUNIZATION 1 2
		GROWTH MONITORING............. 1 2
		TREATMENT OF SICK CHILD..... 1 2
		ORAL REHYDRATION 1 2
		HEALTH EDUCATION 1 2
		VITAMIN A 1 2
		NID 1 2
		OTHER 1 2
			
			→127C

128	How far is it from here to the nearest place that provides: a) Child Immunization/EPI? b) ORS Packet? c) Condoms? d) Pill? e) Injectables? f) IUD? g) Vasectomy? h) Tubectomy? i) Other health service IF NEAREST PLACE IS IN VILLAGE/MOHALLA, RECORD '00'. IF DISTANCE DON'T KNOW, RECORD '98'.	MILE .... 1 ☐☐ KILOMETER .... 2 MILE .... 1 ☐☐ KILOMETER .... 2 MILE .... 1 ☐☐ KILOMETER .... 2 MILE .... 1 ☐☐ KILOMETER .... 2 MILE .... 1 ☐☐ KILOMETER .... 2 MILE .... 1 ☐☐ KILOMETER .... 2 MILE .... 1 ☐☐ KILOMETER .... 2 MILE .... 1 ☐☐ KILOMETER .... 2 MILE .... 1 ☐☐ KILOMETER 2	

2. Identification of Health facilities and Pharmacies

Now, I will ask you questions about health facilities that offer health services to the villagers. The purpose of this section is to identify the sources of health services available to the villagers. Please mention all facilities that offer services.

201. HEALTH FACILITY	202. Where is the HEALTH FACILITY located?	203. What is the HEALTH FACILITY's operating authority?	204. How far in miles/kilometers is the HEALTH FACILITY located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	204. How many minutes does it take to go to the FACILITY using the most common type of transportation?	206. When did FACILITY first open?	206A. For how long has HEALTH FACILITY been open?	207. Is HEALTH FACILITY in this District/ Thana/ union?
01A. HOSPITAL (Nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01 NGO...................02 PRIVATE.............03 RELIGIOUS........04 OTHER...............96 DK......................98	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └──► 207 DON'T KNOW .... 9998 └──►206A	YEARS . ☐☐ DON'T KNOW..98	YES ....1→ 02A NO......2→ 01B
01B. HOSPITAL (DISTRICT) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01 NGO...................02 PRIVATE.............03 RELIGIOUS........04 OTHER...............96 DK......................98	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └──► 207 DON'T KNOW .... 9998 └──►206A	YEARS . ☐☐ DON'T KNOW..98	
02A. MATERNAL AND CHILD WELFARE CENTER (MCWC) (nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └──► 207 DON'T KNOW .... 9998 └──►206A	YEARS . ☐☐ DON'T KNOW..98	YES ....1→ 03A NO......2→ 02B
02B. MATERNAL AND CHILD WELFARE CENTER (MCWC) (DISTRICT) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └──► 207 DON'T KNOW .... 9998 └──►206A	YEARS . ☐☐ DON'T KNOW..98	
03A. THANA HEALTH CENTER (THC) (nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └──► 207 DON'T KNOW .... 9998 └──►206A	YEARS . ☐☐ DON'T KNOW..98	YES ....1→ 04A NO......2→ 03B

201. HEALTH FACILITY	202. Where is the HEALTH FACILITY located?	203. What is the HEALTH FACILITY's operating authority?	204. How far in miles/kilometers is the HEALTH FACILITY located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	204. How many minutes does it take to go to the FACILITY using the most common type of transportation?	206. When did FACILITY first open?	206A. For how long has HEALTH FACILITY been open?	207. Is HEALTH FACILITY in this District/ Thana/ union?
03B. THANA HEALTH CENTER (THC) (THANA) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └→ 207 DON'T KNOW .... 9998 └→206A	YEARS . ☐☐ DON'T KNOW.98	
04A. FAMILY WELFARE CENTER (FWC) (nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └→ 207 DON'T KNOW .... 9998 └→206A	YEARS . ☐☐ DON'T KNOW.98	YES ....1→ 05A NO ......2→ 04B
04B. FAMILY WELFARE CENTER (FWC) (UNION) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └→ 207 DON'T KNOW .... 9998 └→206A	YEARS . ☐☐ DON'T KNOW.98	
05A. RURAL DISPENSARY (RD) (nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └→ 207 DON'T KNOW .... 9998 └→206A	YEARS . ☐☐ DON'T KNOW.98	YES ....1→ 05A NO ......2→ 04B
05B. RURAL DISPENSARY (RD) (UNION) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └→ 207 DON'T KNOW .... 998 └→206A	YEARS . ☐☐ DON'T KNOW.98	

201. HEALTH FACILITY	202. Where is the HEALTH FACILITY located?	203. What is the HEALTH FACILITY's operating authority?	204. How far in miles/kilometers is the HEALTH FACILITY located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	204. How many minutes does it take to go to the FACILITY using the most common type of transportation?	206. When did FACILITY first open?	206A. For how long has HEALTH FACILITY been open?	207. Is HEALTH FACILITY in this District/ Thana/ union?
06A. COMMUNITY CLINIC (nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW . 98	YES ....1→ 07A NO ......2→ 06B
06B. COMMUNITY CLINIC (UNION) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW . 98	
07A. SATELLITE CLINIC (nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01 NGO ....02 PRIVATE ....03 RELIGIOUS........04 OTHER...............96 DK 98	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW . 98	YES ....1→ 08A NO ......2→ 07B
07B. SATELLITE CLINIC (UNION) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01 NGO ....02 PRIVATE ....03 RELIGIOUS........04 OTHER...............96 DK 98	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW . 98	
08A. NGO CLINIC (nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	NGO 02	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW . 98	YES ....1→ 09A NO ......2→ 08B
08B. NGO CLINIC (UNION) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	NGO 02	MILES .... 1 ☐☐ KILOMETERS... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW . 98	

201. HEALTH FACILITY	202. Where is the HEALTH FACILITY located?	203. What is the HEALTH FACILITY's operating authority?	204. How far in miles/kilometers is the HEALTH FACILITY located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	204. How many minutes does it take to go to the FACILITY using the most common type of transportation?	206. When did FACILITY first open?	206A. For how long has HEALTH FACILITY been open?	207. Is HEALTH FACILITY in this District/ Thana/ union?
09A. PRIVATE CLINIC (nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	PRIVATE ....03 RELIGIOUS ....04 OTHER ....96 DK 98	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW.98	YES ....1→ 10A NO ......2→ 09B
09B. PRIVATE CLINIC (UNION) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	PRIVATE ....03 RELIGIOUS ....04 OTHER ....96 DK 98	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW.98	
10A. PHARMACY (nearest) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01 NGO ....02 PRIVATE ....03 RELIGIOUS ....04 OTHER ....96 DK 98	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW.98	YES ....1→ 11A NO ......2→ 10B
10B. PHARMACY (UNION) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01 NGO ....02 PRIVATE ....03 RELIGIOUS ....04 OTHER ....96 DK 98	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW.98	
11. OTHER HEALTH CENTER (UNION) NAME:_____ DON'T KNOW NONE	DISTRICT: _____ THANA: _____ LOCATION: _____	GOVERNMENT..01 NGO ....02 PRIVATE ....03 RELIGIOUS ....04 OTHER ....96 DK 98	MILES .... 1 ☐☐ KILOMETERS ... 2 ☐☐ DON'T KNOW 998	MINUTES ☐☐☐ DON'T KNOW......... 998	MINUTES ☐☐☐☐ └─► 207 DON'T KNOW .... 9998 └─►206A	YEARS . ☐☐ DON'T KNOW.98	

3: List of the Health and Family Planning Workers. Please provide us the name of all fieldworkers working in this cluster/village

Title and Name of the worker	301 What name he/she is known?	302: Does he/she live in this locality?	303a. Does he/she live?	303b. How frequent does he/she visit this village/mohalla?	304. What type of services does he/she provide?
01. Is there any a government family planning worker (FWA) in this village/mohalla? YES...................... 1 NAME: _____ NO........................ 2 → NEXT	Known as: _____	YES .... 1 (GO TO 304)◄─┘ NO.................................... 2	DISTRICT _____ THANA _____ UNION_____ VILLAGE _____	ONCE A WEEK................1 ONCE IN 15 DAYS ....2 ONCE A MONTH ....3 LESS THAN A MONTH....4 ALMOST NEVER.............5 DON'T KNOW..................8	HEALTH ....1 FAMILY PLANNING ......2 BOTH ....3 DON'T KNOW 8
02. Is there any government health assistance (HA) in this village/mohalla? YES...................... 1 NAME: _____ NO........................ 2 → NEXT	Known as: _____	YES .... 1 (GO TO 304)◄─┘ NO.................................... 2	DISTRICT _____ THANA _____ UNION_____ VILLAGE _____	ONCE A WEEK................1 ONCE IN 15 DAYS ....2 ONCE A MONTH ....3 LESS THAN A MONTH....4 ALMOST NEVER.............5 DON'T KNOW..................8	HEALTH ....1 FAMILY PLANNING ......2 BOTH ....3 DON'T KNOW 8
03A. Is there any non-government health/family planning worker in this village/mohalla? YES...................... 1 NAME: _____ NO........................ 2 → NEXT	Known as: _____	YES .... 1 (GO TO 304)◄─┘ NO.................................... 2	DISTRICT _____ THANA _____ UNION_____ VILLAGE _____	ONCE A WEEK................1 ONCE IN 15 DAYS ....2 ONCE A MONTH ....3 LESS THAN A MONTH....4 ALMOST NEVER.............5 DON'T KNOW..................8	HEALTH ....1 FAMILY PLANNING ......2 BOTH ....3 DON'T KNOW 8
03B. Is there any other non-government health/family planning worker in this village/mohalla? YES...................... 1 NAME: _____ NO........................ 2 → 401	Known as: _____	YES .... 1 (GO TO 304)◄─┘ NO.................................... 2	DISTRICT _____ THANA _____ UNION_____ VILLAGE _____	ONCE A WEEK................1 ONCE IN 15 DAYS ....2 ONCE A MONTH ....3 LESS THAN A MONTH....4 ALMOST NEVER.............5 DON'T KNOW..................8	HEALTH ....1 FAMILY PLANNING ......2 BOTH ....3 DON'T KNOW 8

4: Availability of Doctors (allopathic, homeopathic) and Pharmacies
Please tell us about the doctors and pharmacies working in this village/mohalla.

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
401	Are there any allopathic/MBBS doctors in this village/mohalla?	YES ....1 NO 2	→ 403
402	How many allopathic/MBBS doctors are in this village/mohalla?	NUMBER ....☐☐ DON'T KNOW ....98 **PLEASE COMPLETE THE LIST OF DOCTORS IN NEXT PAGE**	
403	How far away is the nearest allopathic/MBBS doctor?	MILE ....1 KILOMETER ....2 ☐☐ DK ....998 ENTER 'OO' IF IN THIS VILLAGE/ MOHALLA	
404	Are there any homeopathic doctors in this village/mohalla?	YES ....1 NO 2	→ 406
405	How many homeopathic doctors are in this village/mohalla?	NUMBER ....☐☐ DON'T KNOW 98	
406	How far away is the nearest homeopathic doctor?	MILE ....1 KILOMETER ....2 ☐☐ DK ....998 ENTER 'OO' IF IN THIS VILLAGE/ MOHALLA	
407	Are there any ayurvedic/unani doctors in this village/mohalla?	YES ....1 NO 2	→ 409
408	How many ayurvedic/unani doctors are in this village/mohalla?	NUMBER ....☐☐ DON'T KNOW 98	
409	How far away is the nearest ayurvedic/unani doctor?	MILE ....1 KILOMETER ....2 ☐☐ DK ....998 ENTER 'OO' IF IN THIS VILLAGE/ MOHALLA	
410	Are there any pharmacies in this village/mohalla?	YES ....1 NO 2	→ 412
411	How many pharmacies are in this village/mohalla?	NUMBER ....☐☐ DON'T KNOW 98	
412	How far away is the nearest pharmacy?	MILE ....1 KILOMETER ....2 ☐☐ DK ....998 ENTER 'OO' IF IN THIS VILLAGE/ MOHALLA	

5: List of doctors (allopathic).

501. Please provide us the name of all doctors working in this village/mohalla.

1 NAME OF DOCTOR (known as)	TYPE OF DOCTOR	Is the (NAME) qualified doctor?
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
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NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
NAME _____	ALLOPATHIC .... 1 HOMEOPATHIC............................. 2 AYURVEDIC/UNANI...................... 3	HAVE A CERTIFICATE ....1 HAVE A CERTIFICATE (PALLI DOCTOR) 2 NO CERTIFICATE 3
ENDING TIME		HOUR.................... ☐☐ MINUTES .... ☐☐

Bangladesh Demographic and Health Survey

Indicator	1993-1994	1996-1997	1999-2000	2004
Fertility				
Total fertility rate (TFR) 15-49	3.4	3.3	3.3	3.0
Contraceptive Prevalence Rate				
Any method	44.6	49.2	53.8	58.1
Any modern method	36.2	41.6	43.4	47.3
Pill	17.4	20.8	23.0	26.2
IUD	2.2	1.8	1.2	0.6
Injection	4.5	6.2	7.2	9.7
Condom	3.0	3.9	4.3	4.2
Female Sterilization	8.1	7.6	6.7	5.2
Male Sterilization	1.1	1.1	0.5	0.6
Norplant	-	0.1	0.5	0.8
Any traditional method	8.4	7.7	10.3	10.8
Contraceptive Use among Married Adolescent				
Percent of currently married adolescent girls using a modern contraceptive method				
Age 10-14	10.5	9.1	16.1	21.9
Age 15-19	19.6	27.8	31.2	34.1
Unmet Need for Family Planning				
Percentage of currently married women under age 50 with unmet need for family planning	19.4	15.8	15.3	11.3
Field worker visit				
Percentage of currently married women who reported having been visited by a family planning fieldworker in the six months prior to the survey	43.0	35.2	21.2	18.2
Antenatal Coverage Percentage of last live births in the five years preceding the survey for which women received at least one ANC from a medically trained provider	-	29.0	33.3	48.7
Skilled Assistance at Delivery Percentage of births in the five years preceding the survey attended by medically trained provider	9.5[1]	8.0	12.1	13.4
Postnatal Care Percentage of last live births where the mother received PNC from a trained provider within 42 days of delivery	-	-	13.7	17.8
Percentage of last live births in the five years preceding the survey where the child received PNC from a trained provider within 42 days of delivery	-	-	-	17.5

	1993-1994	1996-1997	1999-2000	2004
Childhood mortality				
Neonatal Mortality	52	48	42	41
Post-neonatal Mortality	35	34	24	24
Infant Mortality Rate	87	82	66	65
Child Mortality Rate	50	37	30	24
Under 5 Mortality Rate	133	116	94	88
Vaccination Coverage				
Percentage of children age 12-23 months who received specific vaccines at any time before the survey				
BCG	85.4	86.2	91.0	93.4
DPT3	66.0	69.3	72.1	81.0
Polio3	66.8	62.3	70.8	82.3
Measles	68.9	69.9	70.8	75.7
All vaccines	58.9	54.1	60.4	73.1
Vitamin A Supplementation				
Percentage of children (9-59 months) receiving vitamin-A capsules in the 6 months preceding the survey	-	-	80.4	81.8
Treatment for Diarrhea				
Percentage of children under five years of age with diarrhea s treated with				
ORT (ORS or home made solution)	58.3[2]	61.0	73.6	74.6
Increased Fluid intake	50.9[2]	55.7	49.7	52.3
Treatment for ARI				
Percentage of children under five years of age with symptoms of ARI seeking care from a trained provider	28.0[2]	32.9	27.2	20.3

Indicator	1993-1994	1996-1997	1999-2000	2004
Nutritional Status of Children				
Percentage of children under five years of age considered malnourished according to three anthropometric indices of nutritional status				
Height-for-age (stunting)				
Severe	-	28.0	18.3	16.9
Moderate or severe	-	54.6	44.7	43.0
Weight for-height (wasting)				
Severe	-	3.7	1.1	1.3
Moderate or severe	-	17.7	10.3	12.8
Weight-for-age (underweight)				
Severe	-	20.6	12.9	12.8
Moderate or severe	-	56.3	47.7	47.5
Knowledge of HIV/AIDS				
Percentage of women/men who have heard of HIV/AIDS	-			
Ever-married women	-	18.7	30.8	60.0
Currently married men	-	33.1-	50.2	78.0
Never married men			-	89.3
Percentage of women/men who know at least two correct ways to avoid HIV/AIDS				
Ever-married women	-	-	7.2	29.7
Currently married men	-	-	18.0	45.3
Never married men	-	-	-	58.8
Sanitary excreta disposal				
Percent of households with flush toilets, pit toilets/latrines	40.7	43.2	54.1	58.6
Education				
Percent of females 15-19 with completed primary education	33.1	51.6	62.9	70.4
Percent of males 15-19 with completed primary education	43.3	57.2	65.2	66.7
Percent of females 20-24 with completed secondary education	9.0	13.1	16.7	16.4
Percent of males 20-24 with completed secondary education	20.9	22.7	22.7	23.8

Breastfeeding Percent of children under 6 months who are exclusively breastfed (based on 24 hour recall)	45.9	45.1	46.1	42.2
Percent of children under 6 months who are exclusively breastfed (based on 7 days recall)	--	--	--	36.4
Percent of children age 6-9 months receiving breast milk and complementary food (based on 24 hour recall)	28.5	28.4	58.9	62.3
Percent of children age 6-9 months receiving breast milk and complementary food (based on 7 days recall)	--	--	--	69.2
Maternal nutrition Percent of mothers under age 50 who have children under 5 years with low BMI(<18.5)	--			
Percent of ever married women under age 50 with low BMI		52.0	45.4	37.9
	--	--	--	34.3

[1]Rate refer to births in the three years preceding the survey
[2] Rate refers to children under three years of age