Bangladesh

Demographic and Health Survey 1996-1997

National Institute of Population Research and Training (NIPORT)
Ministry of Health and Family Welfare

Mitra and Associates

Demographic and Health Surveys
Macro International Inc.

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World Summit for Children Indicators: Bangladesh 1996-97

		Value
BASIC INDICATORS		
Infant mortality	Infant mortality rate	82 per 1,000
	Under-five mortality rate	116 per 1,000
Childhood undernutrition	Percent stunted	54.6
	Percent wasted	17.7
	Percent underweight	56.3
Clean water supply	Percent of households with a safe water supply[1]	97.4
Sanitary excreta disposal	Percent of households with flush toilets or VIP latrines	30.5
Basic education	Percent of women 15-49 with completed primary education	35.2
	Percent of men 15-49 with completed primary education	47.8
	Percent of girls 6-12 attending school	76.3
	Percent of boys 6-12 attending school	74.8
	Percent of women 15-49 who are literate	36.4
Children in especially difficult situations	Percent of children who live in single-adult households	3.3
SUPPORTING INDICATORS		
Women's Health		
Birth spacing	Percent of births within 24 months of a previous birth	17.7
Safe motherhood	Percent of births with medical prenatal care	26.4
	Percent of births with prenatal care in first trimester	12.1
	Percent of births with medical assistance at delivery	8.1
	Percent of births in a medical facility	4.1
	Percent of births at high risk	58.0
Family planning	Contraceptive prevalence rate (any method, married women)	49.2
	Percent of currently married women with an unmet demand for family planning	15.8
	Percent of currently married women with an unmet need for family planning to avoid a high-risk birth	12.4
Nutrition		
Maternal nutrition	Percent of mothers with low BMI	52.0
Breastfeeding	Percent of children under 4 months who are exclusively breastfed	50.9
Child Health		
Vaccinations	Percent of children whose mothers received tetanus toxoid vaccination during pregnancy	74.7
	Percent of children 12-23 months with measles vaccination	69.9
	Percent of children 12-23 months fully vaccinated	54.1
Diarrhea control	Percent of children with diarrhea in preceding 2 weeks who received oral rehydration therapy (sugar-salt-water solution)	61.0
Acute respiratory infection	Percent of children with acute respiratory infection in preceding 2 weeks who were seen by medical personnel	32.9

[1] Piped, well, and bottled water

Bangladesh Demographic and Health Survey 1996-1997

S. N. Mitra
Ahmed Al-Sabir
Anne R. Cross
Kanta Jamil

National Institute of Population Research and Training (NIPORT)
Dhaka, Bangladesh

Mitra and Associates
Dhaka, Bangladesh

Macro International Inc.
Calverton, Maryland USA

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The Bangladesh Demographic and Health Survey (BDHS) is part of the worldwide Demographic and Health Surveys program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information about the BDHS may be obtained from the Mitra and Associates at 2/17 Iqbal Road, Block A, Mohammadpur, Dhaka, Bangladesh (Telephone: 818-065; Fax: c/o 832-915) or from NIPORT, Azimpur, Dhaka, Bangladesh (Telephone: 507-866 and Fax: 863-362). Additional information about the DHS project may be obtained by writing to : DHS, Macro International Inc., 11785 Beltsville Drive, Calverton, MD 20705 (Telephone: 301-572-0200 and Fax: 301-572-0999).

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

FOREWORD

The 1996-97 Bangladesh Demographic and Health Survey (BDHS) is a nationally representative sample survey designed to provide information on basic national indicators of social progress including fertility, childhood mortality, contraceptive knowledge and use, maternal and child health, nutritional status of mothers and children and awareness of AIDS.

BDHS data indicate decline in fertility and infant and child mortality and steady increase in contraceptive use. Despite the relatively high and increasing level of contraceptive use, BDHS data indicate that unplanned pregnancies are still common. If unplanned births could be eliminated altogether, the total fertility rate in Bangladesh would reach the replacement level of 2.1 births per woman instead of actual level of 3.3.

The findings of this report together with other national surveys are very important in assessing the achievements of Family Planning and Health Programmes. Information obtained from the 1996-97 BDHS can be used to review the progress of Health and Family Planning Programmes, and to improve future policies and programmes.

The need, however, for further detailed analysis of BDHS data remains. It is hoped that such analysis will be carried out by the academicians, researchers and programme personnel to provide more in-depth knowledge for future direction and effective implementation of a national Health and Family Planning Programme.

In conclusion, I would like to thank NIPORT, Mitra and Associates and Macro International Inc. for their efforts in conducting the 1996-97 BDHS. USAID/Dhaka also deserve thanks for their financial assistance that helped ensure the ultimate success of this important undertaking.

(Muhammed Ali)

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

PREFACE

The 1996-97 Bangladesh Demographic and Health Survey (BDHS) is the second of this kind of survey conducted in Bangladesh. The BDHS was implemented through a collaborative effort of NIPORT, Mitra and Associates, and Macro International Inc. The financial support for the survey was made by the United States Agency for International Development (USAID)/Dhaka.

The main objective of the 1996-97 BDHS is to provide policy-makers and programme managers in population and health with detailed information on fertility and family planning, childhood mortality, and maternal and child health. The content of the 1996-97 BDHS has been significantly expanded from the previous survey to include two new modules on nutritional status of mothers and children and awareness of AIDS.

The Technical Review Committee (TRC) consisted of experts from government, non-government and international organization as well as researchers and professionals working in health and population sector put forth their valuable opinion in major phases of the survey. In addition, a Technical Task Force (TTF) was formed with the representatives from NIPORT, Mitra and Associates, USAID/Dhaka, ICDDR,B, Population Council/Dhaka and Macro International Inc. for designing and implementing the survey. I would like to extend my gratitude and appreciation to the members of the TRC and TTF for their contributions at different phases of the survey.

The preliminary results of the 1996-97 BDHS, with its major findings, were officially announced through a press conference and a dissemination seminar was held in June 1997. The final report supplements the preliminary report released earlier. I hope that the survey results would be useful for monitoring as well as development of national health and family planning programmes.

I express my heartfelt thanks to the professionals of Macro International Inc., professionals and staff of Mitra and Associates and professionals of research unit of NIPORT for their sincere efforts in successful completion of the survey.

(Anil Chandra Singha)

SUMMARY OF FINDINGS

The 1996-97 Bangladesh Demographic and Health Survey (BDHS) is a nationally-representative survey of 9,127 ever-married women age 10-49 and 3,312 currently married men age 15-59. The BDHS was designed to provide information on levels and trends of fertility, family planning knowledge and use, infant and child mortality, and maternal and child health and nutrition. Fieldwork for the BDHS took place from early November 1996 to mid-March 1997.

Survey data generally confirm patterns observed in the 1993-94 BDHS, showing increasing contraceptive use and declining childhood mortality; however, many challenges still await.

FERTILITY

Fertility Decline. The BDHS data indicate that there has been an imperceptibly small decline in fertility since the 1993-94 survey. The total fertility rate has declined from 3.4 births per woman in the period 1991-93 to 3.3 births for the period 1994-96. Although such an apparently abrupt halt in the previously rapid fertility decline is difficult to explain, the results from the 1996-97 survey confirm that fertility is now at a low level.

Fertility Differentials. Although the *rate* of fertility decline has been generally uniform across groups, significant differences in fertility *levels* still exist. For example, fertility is considerably higher in Sylhet and Chittagong Divisions (with total fertility rates of more than 4 births per woman), than in Rajshahi and Khulna Divisions (with rates of 2.8 and 2.5 births per woman, respectively). Barisal and Dhaka Divisions have intermediate levels of fertility (3.3 and 3.2 births per woman, respectively). Moreover, fertility is about 60 percent higher in rural areas than in urban areas, a pattern that has persisted in various censuses and demographic surveys that have been carried out in the country.

Fertility levels are closely related to women's education. Women with no formal education give birth to an average of 3.9 children in their lifetime, compared with 2.1 for women with at least some secondary education, a difference of 86 percent. Women with either incomplete primary or complete primary education have intermediate fertility rates.

Small Family Norm. The 1996-97 BDHS data confirm that Bangladeshi couples have accepted the small family norm. Sixty percent of ever-married women prefer a two-child family, and another 21 percent consider a three-child family ideal, while less than 1 percent of respondents say they would choose to have six or more children. Overall, the mean ideal family size among married women is 2.5 children, identical to the mean found in 1993-94. BDHS data also indicate a high degree of agreement between women and men as to fertility preferences.

The proportion of women who want to stop childbearing has increased substantially in Bangladesh over the past decade. For example, the percentage of women with two children who want no more children has risen from only 39 percent in 1991 to 50 percent in 1996-97. Almost half of all currently married women age 10-49 in Bangladesh say they want no more children and 9 percent have been sterilized. An additional 22 percent say they would like to wait two or more years before having their next birth. Thus, the vast majority of women want either to space their next birth or to limit childbearing altogether. These women can be considered to be potentially in need of family planning services.

Unplanned Fertility. Despite the relatively high and increasing level of contraceptive use, BDHS data indicate that unplanned pregnancies are still common. Overall, about one-third of births in the three years prior to the survey were reported to be unplanned; 20 percent were mistimed (wanted later) and 11 percent were unwanted. If unwanted births could be eliminated altogether, the total fertility rate in Bangladesh would reach the replacement level of 2.1 births per woman instead of the actual level of 3.3.

FAMILY PLANNING

Increasing Use of Contraception. A major cause of declining fertility in Bangladesh has been the steady increase in contraceptive use over the last two decades. The contraceptive prevalence rate has increased sixfold since 1975, from 8 to 49 percent of married women. Use of modern methods has grown even faster. Between 1993-94 and 1996-97, contraceptive use increased from 45 to 49 percent of married women and use of modern methods rose from 36 to 42 percent. Overall, there has been a steady growth in the contraceptive prevalence rate with an average increase of almost two percentage points a year.

Pill-Dominated Method Mix. In terms of "method mix," the dominant change since the late 1980s has been the large increase in the number of couples using oral contraception. The proportion of married women relying on the pill quadrupled in the last 11 years, from 5 percent in 1985 to 21 percent in 1996-97 and the pill now accounts for 42 percent of all contraceptive use. Conversely, use of female and male sterilization has stagnated or declined slightly since 1989 and now accounts for only 18 percent of all contraceptive use. This shift away from permanent methods to modern reversible methods has important implications for the family planning program in terms of costs, supply logistics, and method efficacy and is especially important given the increasing proportion of women who say they want no more children.

Aside from the pill and sterilization, use of injectables, condoms, and periodic abstinence (rhythm method) have increased since 1993-94, while use of IUDs and withdrawal have declined slightly.

Differentials in Family Planning Use. Differentials in current use of family planning in the six administrative divisions of the country are large and indicate that Sylhet Division is lagging behind the rest of the country. Sixty-two percent of married women in Khulna Division and 59 percent of those in Rajshahi Division are current users. In contrast, only 20 percent of the married women in Sylhet Division and 37 percent of those in Chittagong Division are using a method of contraception. Intermediate are Dhaka and Barisal Divisions with contraceptive prevalence rates of around 50 percent. Urban-rural gaps in contraceptive use are large (62 vs. 48 percent, respectively) and increasing.

Knowledge of Contraception. Knowledge of contraceptive methods and supply sources has been almost universal in Bangladesh for some time and the BDHS results indicate that 100 percent of currently married women age 10-49 know at least one method of family planning. More than 9 in 10 married women know the pill, IUD, injectables, condom, and female sterilization, while about 8 in 10 know male sterilization and menstrual regulation. Considering traditional methods, periodic abstinence is more widely known than withdrawal (68 vs. 50 percent of currently married women).

Unmet Need for Family Planning. Unmet need for family planning services has declined since 1993-94. Data from the 1993-94 BDHS show that 19 percent of currently married women were in need of services, compared with 16 percent in the 1996-97 BDHS. Half of the unmet need is comprised of women who want to space their next birth, while just under half is for women who do not want any more children (limiters). If all women who say they want to space or limit their children were to use methods, the contraceptive prevalence rate could be increased from 49 percent to 67 percent of married women. Currently, 76 percent of this "total demand" for family planning is being met.

Discontinuation Rates. One challenge for the family planning program is to reduce the high levels of contraceptive discontinuation. BDHS data indicate that almost half of contraceptive users in Bangladesh stop using within 12 months of starting; one-fifth of those who stop do so as a result of side effects or health concerns with the method. Discontinuation rates vary by method. Not surprisingly, the rates for the condom (65 percent) and withdrawal (60 percent) are considerably higher than for the IUD and periodic abstinence (both 41 percent) and the pill (44 percent). However, discontinuation rates for injectables are relatively high, considering that one dose is usually effective for three months. Fifty-one percent of injection users discontinue within one year of starting, a rate that is higher than for the pill.

Availability of Services. Health and family planning services are widely available in Bangladesh. BDHS data indicate that 97 percent of ever-married women live in areas covered by family planning fieldworkers and the vast majority also have health workers and satellite clinics available.

Social Marketing. After a decline between 1989 and 1991 in the proportion of both pill and condom users supplied through the Social Marketing Company, market share has been increasing slightly for pills and substantially for condoms. In 1996-97, 19 percent of pill users were using social marketing brands, up from 1993-94. The proportion of condom users using social marketing brands dropped from 62 percent in 1989 to 41 percent in 1991, rebounded to 52 percent in 1993-94, and increased further to 58 percent in 1996-97.

Family Planning Fieldworkers. Fieldworkers are providing a slightly smaller share of family planning services now than in 1993-94—39 percent of modern method users in 1996-97 vs. 42 percent in 1993-94. This has occurred in spite of the fact that much of the increase in modern method use since 1993-94 is due to increased use of the pill, which is distributed predominantly by fieldworkers, as well as the fact that fieldworkers have been increasingly used to distribute other methods such as injectables and IUDs. The proportion of supply provided through the private sector—most notably pharmacies—has increased from 10 to 15 percent since 1993-94.

Fieldworker Visitation. Despite the impressive coverage in placement of family planning fieldworkers, survey data show a slight decrease in fieldworker visitation rates since 1993-94. In 1996-97, 35 percent of currently married women said they had been visited by a family planning fieldworker in the previous six months, down from 38 percent in 1993-94. Some women are more likely than others to have been visited by a fieldworker. Younger and older women are less likely to have been visited, presumably because they are either more likely to want to get pregnant or to be either infecund or sterilized. Women in Chittagong and Sylhet Divisions are less likely and those in Rajshahi and Khulna Divisions more likely to have been visited by a fieldworker than women in Barisal or Dhaka Divisions.

MATERNAL AND CHILD HEALTH

Declining Childhood Mortality. Survey results confirm the improvement in child survival since the early 1980s. Under-five mortality declined from 133 deaths per 1,000 births in 1989-93 to 116 for the period 1992-96. The infant mortality rate declined over the same period (from 87 to 82 per 1,000 births). Although encouraging, the BDHS rates show that almost 1 in 9 children born in Bangladesh dies before reaching the fifth birthday, an indication that there is still much improvement to be made. The data also show that early childbearing (under age 18) increases the risk of childhood mortality.

Childhood Vaccination Coverage. The 1996-97 BDHS results show that 54 percent of children 12-23 months are fully vaccinated, a decline from 59 percent in 1993-94. However, closer examination of the data by vaccine reveals that this trend is entirely due to a decline in the proportion receiving the third dose of polio vaccine (from 67 to 62 percent). Coverage of all other vaccines has increased slightly since 1993-94.

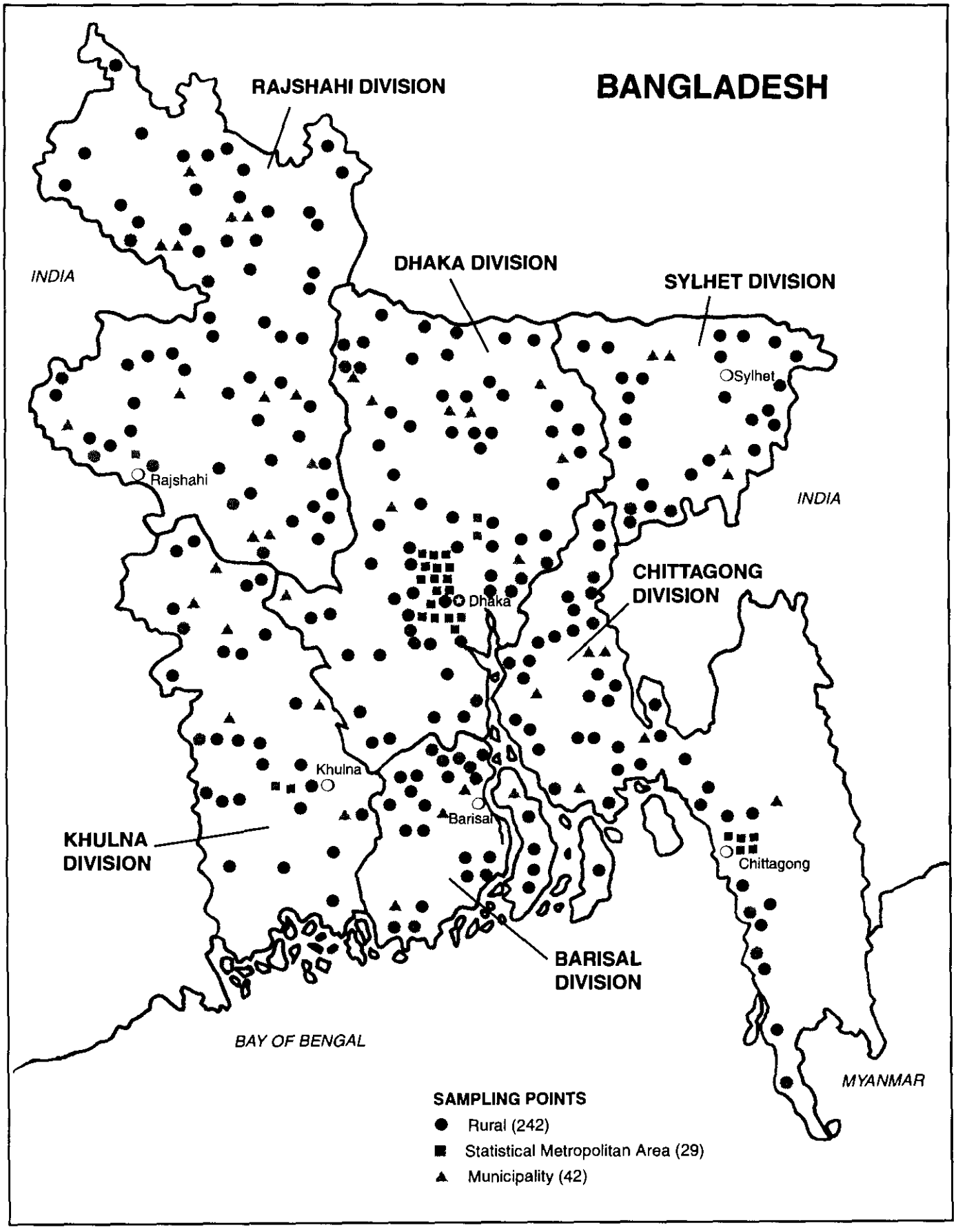
Childhood Health. The BDHS provides some data on childhood illness and treatment. Approximately 1 in 3 children under age five had a fever and 13 percent had respiratory illness in the two weeks before the survey. Of these, one-third were taken to a health facility for treatment. Eight percent of children under five were reported to have had diarrhea in the two weeks preceeding the survey. The fact that three-quarters of children with diarrhea received some type of oral rehydration therapy (fluid made from an ORS packet, recommended homemade fluid, or increased fluids) is encouraging. Also notable is the fact that two-thirds of children under five received a vitamin A capsule in the six months prior to the survey.

Breastfeeding Practices. The BDHS results document an exceptionally long duration of breastfeeding, with a median duration of 33 months. Although breastfeeding has beneficial effects on both the child and the mother, BDHS data indicate that supplementation of breastfeeding with other liquids and foods occurs too early in Bangladesh. For example, among newborns less than two months of age, 30 percent were already receiving supplemental foods or liquids.

Maternal Health Care. BDHS data point to several areas regarding maternal health care in which improvements could be made. Results show that most Bangladeshi mothers do not receive antenatal care. Among births that occurred in the five years before the survey, almost three-quarters received no antenatal care during pregnancy. Moreover, 95 percent of births in Bangladesh are delivered at home and 57 percent are assisted by untrained traditional birth attendants. Only 8 percent of births are assisted by medically trained personnel, with another 8 percent assisted by trained traditional birth attendants. Proper medical attention during pregnancy and hygienic conditions during delivery can reduce the risk of complications and infections that can cause death or serious illness for either the mother or the newborn. Somewhat more encouraging is the fact that tetanus toxoid coverage is relatively widespread in Bangladesh. For three-quarters of births, the mothers received a tetanus toxoid injection during pregnancy.

Nutritional Status of Children and Mothers. Unlike the 1993-94 BDHS, the 1996-97 survey included an anthropometric component in which all children under five and their mothers were weighed and measured. Results show that malnutrition is a serious problem in Bangladesh. Over half of children under five (55 percent) show evidence of chronic malnutrition or stunting, while 18 percent are acutely malnourished (wasted). The situation is also serious among women—17 percent of mothers of children under five are less than 145 cm in height, an indication of malnutrition. Over half have a body mass index (BMI) below 18.5, indicating that they are acutely malnourished.

Awareness of AIDS. The BDHS results indicate that awareness of AIDS is low in Bangladesh. Only 19 percent of ever-married women and 33 percent of currently married men had ever heard of the disease. Of those who had heard of it, only small percentages could name a means of avoiding getting AIDS.


BANGLADESH
RAJSHAHI DIVISION
DHAKA DIVISION
SYLHET DIVISION
CHITTAGONG DIVISION
KHULNA DIVISION
BARISAL DIVISION
INDIA
INDIA
MYANMAR
BAY OF BENGAL
Rajshahi
Dhaka
Sylhet
Khulna
Barisal
Chittagong
SAMPLING POINTS
Rural (242)
Statistical Metropolitan Area (29)
Municipality (42)

CHAPTER 1

INTRODUCTION

1.1 Geography and Economy

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

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

The climate of Bangladesh is dominated by seasonal monsoons. It 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 flood, cyclone, tidal-bore and drought.

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

Agriculture is the most important sector of the nation's economy. It accounts for 30 percent of the gross domestic product (GDP) and provides employment to 64 percent of the workforce (BBS, 1997a:270,159). Jute is the main non-food crop and the main cash crop of Bangladesh. Less than 20 percent of the cropped land area is used for crops other than jute and rice (BBS, 1997a:187,188). Industry, though small, is increasing in importance as a result of foreign investments. Prospects for mineral resources, gas, coal, and oil, appear to be bright. However, the per capita income is only US$210 and half of Bangladesh's population entered the 1990s with incomes below the poverty line (GOB, 1994:2; World Bank, 1995:xvii). Unemployment/underemployment is a serious problem, and pressure on the land in rural areas has led to influx of people from rural to urban areas.

1.2 Population

The population of the area which now constitutes Bangladesh has grown from about 42 million in 1941 to about 120 million in 1995 (BBS, 1997a:149,140), making it the ninth most populous country in the world and one of the most densely populated. The intercensal population growth rate peaked in the early 1970s at around 2.5 percent per annum, followed by a decline to 2.2 percent during the 1981-91 period (BBS, 1997a:149). The relatively young age structure of the population indicates continued rapid population growth in the future; according to the 1991 census, 45 percent of the population is below 15 years of age, 52 percent are between 15 and 64 years and 3 percent are age 65 or over (BBS, 1997a:139). This young age structure constitutes a built-in "population momentum," which will continue to generate population increases well into the future, even in the face of rapid fertility decline. For example, in 1992 Bangladesh had around

[1] The sixth division, Sylhet, was created in 1994 by subdividing the former Chittagong Division.

22 million married women in the reproductive ages; by the year 2001, this number is projected to rise to 31 million (GOB, 1994:8). Even if replacement level fertility is achieved by the year 2005—as targeted by government policy—the population will continue to grow for 40 to 60 years later. One projection suggests that the population of Bangladesh may stabilize at 211 million by the year 2056.

Bangladesh has undergone a remarkable demographic transition over the last two decades. The total fertility rate has declined from about 6.3 in the early 1970s (MOHPC, 1978:73) to 3.4 in the early 1990s (Mitra et al., 1994:27). The crude death rate has also fallen dramatically, from about 19 per 1,000 population in 1975 to 8 in 1995 (GOB, 1994:4; BBS, 1997a:144). Although infant and under-five mortality rates are declining, they are still high. The infant mortality rate was 150 deaths per 1,000 live births in 1975 and fell to 87 in 1989-93 (GOB, 1994:5; Mitra et al., 1994:92). Maternal mortality has come down from 6.2 deaths per 1,000 births in 1982 to 4.4 in 1995. This small but important decline is mainly attributed to increased availability of family planning and immunization services, improved antenatal and delivery care, and a reduction in the number of births to high-risk mothers (GOB, 1994:5; BBS, 1997a:144). Because of the mortality decline, there is evidence of modest improvement in life expectancy during the past decade. Life expectancy at birth was 46 years for males and 47 years for females in 1974 (UN, 1981:60). It increased to 59 years for men and 58 years for women in 1995 (BBS, 1997a:145).

Striking changes have also been observed in the fertility preferences of married Bangladeshi women. In 1975, when married women were asked how many children they would ideally like to have, the response was an average of 4.1 children (Huq and Cleland, 1990:53,54). By 1993-94, the mean ideal family size had dropped to 2.5 (Mitra et al., 1994:88).

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

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

The policy to reduce fertility rates has been repeatedly reaffirmed since liberation in 1971. The First Five-Year Plan (1973-78) of Bangladesh amplified "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 fifteen 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 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 population policy and programs have evolved through a series of development phases and have undergone changes in terms of strategies, structure, contents, and goals. In the mid-1970s, the government instituted the deployment of full-time, local Family Welfare Assistants (FWAs)—community-based family planning motivators and distributors who currently number almost 24,000. A social marketing program to promote the sale of pills and condoms was also initiated in the mid-1970s. Another characteristic of the population program is the involvement of more than 200 non-governmental organizations.

Since 1980, the program has stressed functionally integrated health and family planning programs. The goal is to provide an essential package of high quality, client-centered, reproductive and child health care, family planning, communicable disease control and limited curative services at a one-stop service point. Currently, the government's most important objectives in the area of health and population are the reduction of infant mortality and morbidity, reduction of maternal mortality and morbidity, improvement of nutrition, and reduction of fertility to replacement level by 2005.

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 promoting health as an integral part of overall socioeconomic development. Although no comprehensive health policy has ever been formulated since independence, development of such a policy is a high priority of the current administration. Private sector involvement in both health and population services is being encouraged.

Numerous factors have contributed to the increase in contraceptive use over the past 20 years. The elements identified as having contributed to the success of the program are: (1) strong political commitment to family planning programs by successive governments, (2) successful promotion of a small family norm through information and education 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 government's efforts, (5) flexibility to make policy and programmatic adjustments in response to emerging needs, and (6) strong support of the program by the international aid community (GOB, 1994:36).

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

1.4 Organization of the 1996-97 Bangladesh Demographic and Health Survey

Survey Objectives and Implementing Organizations

The 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, and
- advance survey methodology.

More specifically, the objective of the BDHS 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 1996-97 BDHS was conducted under the authority of the National Institute for Population Research and Training (NIPORT) of the Ministry of Health and Family Welfare. The survey was implemented by Mitra and Associates, a Bangladeshi research firm located in Dhaka. Macro International Inc. of Calverton, Maryland provided technical assistance to the project as part of its international Demographic and Health Surveys program, while financial assistance was provided by the U.S. Agency for International Development (USAID)/Bangladesh.

Sample Design

Bangladesh is divided into six administrative divisions, 64 districts (*zillas*), and 490 *thanas*. In rural areas, thanas are divided into unions and then *mauzas*, a land administrative unit. Urban areas are divided into wards and then *mahallas*. The 1996-97 BDHS employed a nationally-representative, two-stage sample that was selected from the Integrated Multi-Purpose Master Sample (IMPS) maintained by the Bangladesh Bureau of Statistics. Each division was stratified into three groups: 1) statistical metropolitan areas (SMAs)[2], 2) municipalities (other urban areas), and 3) rural areas.[3] In the rural areas, the primary sampling unit was the *mauza*, while in urban areas, it was the *mahalla*. Because the primary sampling units in the IMPS were selected with probability proportional to size from the 1991 Census frame, the units for the BDHS were subselected from the IMPS with equal probability so as to retain the overall probability proportional to size. A total of 316 primary sampling units were utilized for the BDHS (30 in SMAs, 42 in municipalities, and 244 in rural areas). In order to highlight changes in survey indicators over time, the 1996-97 BDHS utilized the same sample points (though not necessarily the same households) that were selected for the 1993-94 BDHS, except for 12 additional sample points in the new division of Sylhet. Fieldwork in three sample points was not possible (one in Dhaka Cantonment and two in the Chittagong Hill Tracts), so a total of 313 points were covered.

Since one objective of the BDHS is to provide separate estimates for each division as well as for urban and rural areas separately, it was necessary to increase the sampling rate for Barisal and Sylhet Divisions and for municipalities relative to the other divisions, SMAs and rural areas. Thus, the BDHS sample is not self-weighting and weighting factors have been applied to the data in this report.

Mitra and Associates conducted a household listing operation in all the sample points from 15 September to 15 December 1996. A systematic sample of 9,099 households was then selected from these lists. Every second household was selected for the men's survey, meaning that, in addition to interviewing all ever-married women age 10-49, interviewers also interviewed all currently married men age 15-59. It was expected that the sample would yield interviews with approximately 10,000 ever-married women age 10-49 and 3,000 currently married men age 15-59.

Questionnaires

Four types of questionnaires were used for the BDHS: a Household Questionnaire, a Women's Questionnaire, a Men's Questionnaire and a Community Questionnaire. The contents of these questionnaires were based on the DHS Model A Questionnaire, which is designed for use in countries with relatively high levels of contraceptive use. These model questionnaires were adapted for use in Bangladesh during a series of meetings with a small Technical Task Force that consisted of representatives from NIPORT, Mitra and Associates, USAID/Bangladesh, the International Centre for Diarrhoeal Disease Research, Bangladesh

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[2] SMAs are extensions of the four original division headquarters (Dhaka, Chittagong, Khulna, and Rajshahi cities) and include rural areas.

[3] In the original IMPS (and therefore in the BDHS subsample), urban areas were confined to the urban parts of SMAs and other municipalities as defined in 1991. Subsequent definitions of urban have included all 490 thana headquarters, new growth centers, and peripheral areas of SMAs and yield estimates of about 20 percent urban (Hossain, 1997).

(ICDDR,B), Population Council/Dhaka, and Macro International Inc (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 for list of members). The questionnaires were developed in English and then translated into and printed in Bangla (see Appendix E for final version in English).

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 the individual interview. In addition, information was collected about the dwelling itself, such as the source of water, type of toilet facilities, materials used to construct the house, and ownership of various consumer goods.

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

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

The Men's Questionnaire was used to interview currently married men age 15-59. It was similar to that for women except that it omitted the sections on reproductive history, antenatal and delivery care, breastfeeding, vaccinations, and height and weight. The Community Questionnaire was completed for each sample point and included questions about the existence in the community of income-generating activities and other development organizations and the availability of health and family planning services.

Training and Fieldwork

The BDHS questionnaires were pretested in July 1996. 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 Task Force. Altogether, 300 Women's and 90 Men's Questionnaires were completed. Based on observations in the field and suggestions made by the pretest field teams, the Task Force made revisions in the wording and translations of the questionnaires.

In October 1996, candidates for field staff positions for the main survey were recruited. Recruitment criteria included educational attainment, maturity, ability to spend one month in training and at least four months in the field and experience in other surveys. Training for the main survey was conducted at the office of Mitra and Associates for four weeks (5-31 October 1996). 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 1 male supervisor, 1 female field editor, 5 female interviewers, 2 male interviewers, 1 porter for the anthropometric

equipment, and 1 cook, for a total of 132 field staff. In addition, Mitra and Associates fielded four quality control teams of two persons each to check on the field teams. In order to monitor the quality of the data collection, officials from the Ministry of Health and Family Welfare, NIPORT, USAID/Bangladesh, Population Council/Bangladesh, and Macro visited selected sample points. Fieldwork commenced on 2 November 1996 and was completed on 11 March 1997. The distribution of interviews with individual women was roughly: November (24 percent); December (26 percent); January (26 percent); February (19 percent); and March (6 percent).

Data Processing

All questionnaires for the BDHS were returned to Dhaka for data processing at Mitra and Associates. The processing operation consisted of office editing, coding of open-ended questions, data entry, and editing inconsistencies found by the computer programs. The data were processed on 5 microcomputers working in double shifts. The DHS data entry and editing programs were written in ISSA (Integrated System for Survey Analysis). Data processing commenced in mid-November 1996 and was completed by mid-April 1997.

Response Rates

Table 1.1 shows response rates for the survey and reasons for nonresponse. A total of 9,099 households was selected for the sample, of which 8,682 were successfully interviewed. The shortfall is primarily due to dwellings that were vacant or in which the inhabitants had left for an extended period at the time they were visited by the interviewing teams. Of the 8,762 households occupied, 99 percent were successfully interviewed. In these households, 9,335 women were identified as eligible for the individual interview (i.e., ever-married and age 10-49) and interviews were completed for 9,127 or 98 percent of them. In the half of the households that were selected for inclusion in the men's survey, 3,611 eligible ever-married men age 15-59 were identified, of whom 3,346 or 93 percent were interviewed.[4]

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 refusal rate was low.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, Bangladesh 1996-97

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households sampled	1,462	7,637	9,099
Households occupied	1,369	7,393	8,762
Households interviewed	1,355	7,327	8,682
Household response rate	99.0	99.1	99.1
Individual interviews			
Number of eligible women	1,494	7,841	9,335
Number of eligible women interviewed	1,449	7,678	9,127
Eligible woman response rate	97.0	97.9	97.8
Household interviews			
Households sampled	737	3,837	4,574
Households occupied	688	3,714	4,402
Households interviewed	679	3,681	4,360
Household response rate	98.7	99.1	99.0
Individual interviews			
Number of eligible men	589	3,022	3,611
Number of eligible men interviewed	535	2,811	3,346
Eligible man response rate	90.8	93.0	92.7

[4] The intent of the survey was to collect data on *currently married* men. However, the Household Questionnaire followed the same format as for women and required all *ever-married* men be identified for interview. One of the first questions in the Men's Questionnaire concerned current marital status, at which point, interviewers stopped interviewing all formerly married men. Thus, although 3,346 ever-married men were interviewed, completed questionnaires are available only for the 3,312 currently married men.

CHAPTER 2

CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

The purpose of this chapter is to provide a short descriptive summary of some socioeconomic characteristics of the household population and the individual survey respondents, such as: age, sex, residence and educational level. Also examined are environmental conditions such as housing facilities and household characteristics. This information on the characteristics of the households and the individual women and men interviewed is essential for the interpretation of survey findings and can provide an approximate indication of the representativeness of the survey.

2.1 Characteristics of the Household Population

In the BDHS, information was collected about all usual residents and visitors who had spent the previous night in the selected household. This approach makes it possible to distinguish between the *de jure* population (those usually resident in the household) and the *de facto* population (those who spent the night before the interview in the household). A household is defined as a person or group of people who live together and share food.

Age and Sex

The distribution of the household population in the BDHS is shown in Table 2.1 by five-year age groups, according to sex and urban-rural residence. Because of relatively high levels of fertility in the past,

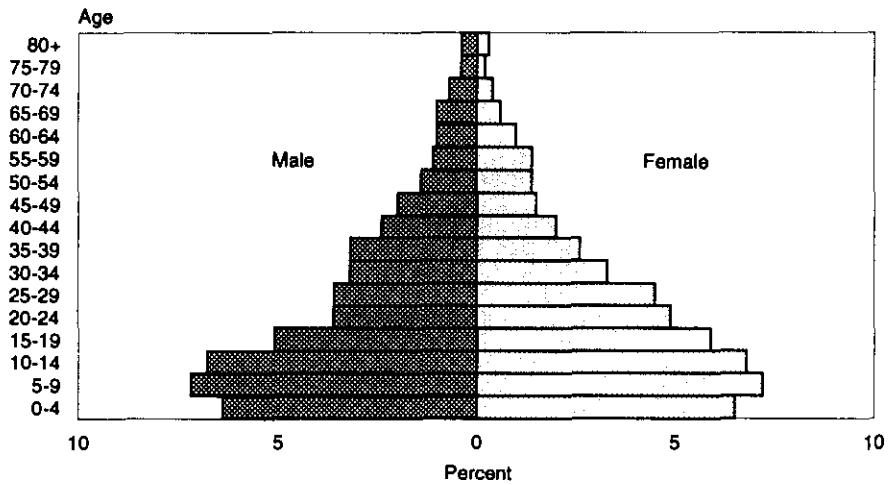
Table 2.1 Household population by age, residence and sex

Percent distribution of the de facto household population by five-year age groups, according to urban-rural residence and sex, Bangladesh 1996-97

Age group	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	10.2	10.2	10.2	13.3	13.2	13.2	12.9	12.8	12.9
5-9	11.7	11.8	11.8	15.0	14.6	14.8	14.6	14.3	14.5
10-14	13.1	13.9	13.5	13.9	13.5	13.7	13.8	13.5	13.7
15-19	10.9	12.6	11.8	10.2	11.5	10.9	10.3	11.6	11.0
20-24	8.4	11.9	10.2	7.1	9.4	8.3	7.3	9.7	8.5
25-29	9.7	11.0	10.4	7.0	8.6	7.8	7.3	8.9	8.1
30-34	8.0	7.6	7.8	6.3	6.3	6.3	6.5	6.5	6.5
35-39	8.4	5.1	6.8	6.3	5.2	5.7	6.5	5.2	5.8
40-44	5.9	4.5	5.2	4.6	3.9	4.2	4.8	4.0	4.4
45-49	4.0	2.2	3.1	4.0	3.1	3.6	4.0	3.0	3.5
50-54	3.1	2.5	2.8	2.8	2.7	2.8	2.8	2.7	2.8
55-59	1.7	2.2	2.0	2.3	2.8	2.6	2.3	2.8	2.5
60-64	1.6	1.9	1.7	2.0	2.1	2.1	2.0	2.1	2.0
65-69	1.4	0.8	1.1	2.0	1.2	1.6	1.9	1.2	1.5
70-74	1.0	0.6	0.8	1.5	0.8	1.2	1.4	0.8	1.1
75-79	0.5	0.4	0.5	0.8	0.3	0.5	0.7	0.3	0.5
80+	0.2	0.6	0.4	0.9	0.6	0.7	0.8	0.6	0.7
Missing/ Don't know	0.0	0.1	0.1	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	2,554	2,614	5,168	19,519	19,912	39,431	22,073	22,526	44,599

Bangladesh has a larger proportion of its population in the younger age groups than in the older age groups. Evidence of recent declines in fertility is reflected in the fact that there is a smaller proportion of children under age five than age 5 to 9, which confirms recent declines in fertility (see Figure 2.1).

Figure 2.1
Population Pyramid, Bangladesh 1996-97



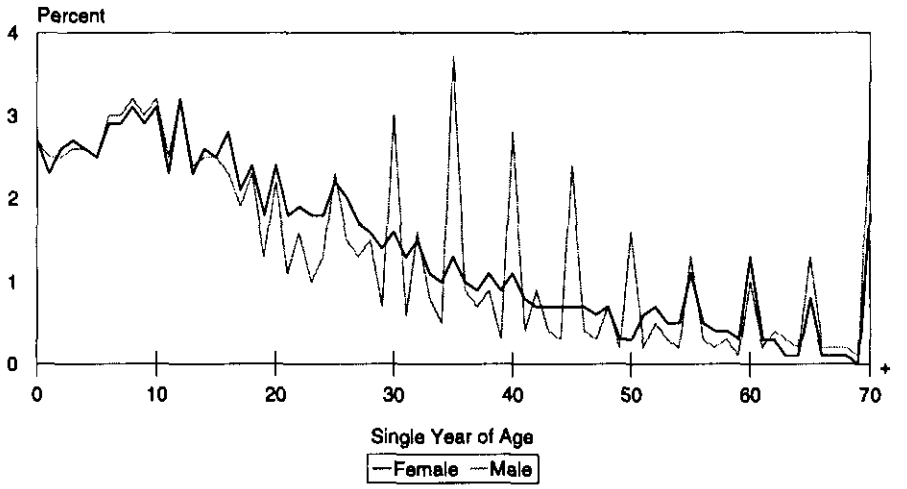
BDHS 1996-97

Urban areas have relatively fewer people under age 15 than rural areas (36 vs. 42 percent). Another indication of the 'older' age of the urban population is the fact that the largest age group is 10-14, as opposed to 5-9 in rural areas.

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

Figure 2.2 presents the distribution of the male and female household population by single year of age (see also Appendix Table C.1). The data show evidence of a preference for reporting ages that end in zero or five (age "heaping" or digit preference) that is common in countries where ages are not well known. Digit preference is considerably more pronounced for men than for women. This is probably due to the fact that many of the women were individually interviewed and their ages probed in detail, while many of the men's ages were provided by proxy. Women also provided a detailed history of all their births, which is likely to have resulted in more accurate reporting of their own ages due to probing the dates of birth of their children.

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



BDHS 1996-97

Table 2.2 compares the broad age structure of the population from the 1989 Bangladesh Fertility Survey (BFS), the 1989 and 1991 Contraceptive Prevalence Surveys (CPS), and the 1993-94 and 1996-97 Bangladesh Demographic and Health Surveys (BDHS). There has been a decline in the proportion of population less than 15 years of age and an increase in the proportion ages 15-59. Although this pattern is consistent with a decline in fertility, the slight decline since 1993-94 in the proportion age 60 and above is less explicable.

Table 2.2 Population by age from selected sources

Percent distribution of the de facto population by age group, selected sources, Bangladesh, 1989-97

Age group	1989 BFS	1989 CPS	1991 CPS	1993-94 BDHS	1996-97 BDHS
<15	43.2	43.2	42.7	42.6	41.0
15-59	50.9	50.9	51.2	51.2	53.1
60+	5.9	5.9	6.0	6.2	5.9
Total	100.0	100.0	100.0	100.0	100.0
Median age	U	U	U	18.4	18.8

U = Unknown (not available)
Source: Huq and Cleland, 1990:28; Mitra et al., 1993:14; Mitra et al., 1994: 11

Household Composition

Table 2.3 shows that a small minority of households in Bangladesh are headed by females (9 percent), with more than 90 percent headed by males. Female-headed households are equally uncommon in rural and urban areas. The average household size in Bangladesh is 5.3 persons, with no variation between rural and urban areas. Single-person households are rare in both rural and urban areas.

Table 2.3 Household composition

Percent distribution of households by sex of head of household and household size, according to urban-rural residence, Bangladesh 1996-97

Characteristic	Residence		
	Urban	Rural	Total
Household headship			
Male	90.6	90.8	90.7
Female	9.4	9.2	9.3
Number of usual members			
1	0.9	1.5	1.5
2	6.2	6.3	6.3
3	13.0	14.8	14.6
4	20.6	19.5	19.6
5	20.2	18.8	19.0
6	15.2	14.7	14.7
7	9.5	9.6	9.6
8	6.2	6.1	6.1
9+	8.2	8.7	8.6
Total	100.0	100.0	100.0
Mean size	5.3	5.3	5.3

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

Education

Education is a key determinant of the life style and status an individual enjoys in a society. It affects almost all aspects of human life, including demographic and health behavior. Studies have consistently shown that educational attainment has strong effects on reproductive behavior, contraceptive use, fertility, infant and child mortality, morbidity and issues related to family health and hygiene. Table 2.4 provides data on educational attainment of the household population listed in the 1996-97 BDHS.

Education has become more widespread over time in Bangladesh. This is apparent from the differences in levels of educational attainment by age groups. A steadily decreasing percentage of both males and females have never attended school in each younger age group. For men, the proportion who have never attended school decreases from 52 percent in the oldest age group (65 years or more) to 17 percent among those age 10-14; for women the decline is more striking: from 87 percent to 17 percent (see Figure 2.3).

Despite this improvement in the spread of education, levels of educational attainment still remain low in Bangladesh, with a strong differential persisting between males and females. One-third of men (33 percent) and 44 percent of women age six years and above, have not received any formal education. The median number of years of schooling is 1.7 for men and less than one full year for women.[1] In almost every age group there are smaller proportions of men than women with no education and more men than women with secondary education. However, over time, the sex differential is narrowing. For example, at age group 10-14, differences in educational attainment between boys and girls are insignificant (see Figure 2.3).

Substantial urban-rural gaps in educational attainment persist. Over one-third of rural men (35 percent) have never attended school, compared with less than one-fifth of urban men (17 percent). The differences are also striking for women—46 percent of rural women have never attended school, compared with only 30 percent of urban women. Conversely, the proportions of men and women with some secondary education are twice as high in urban as in rural areas

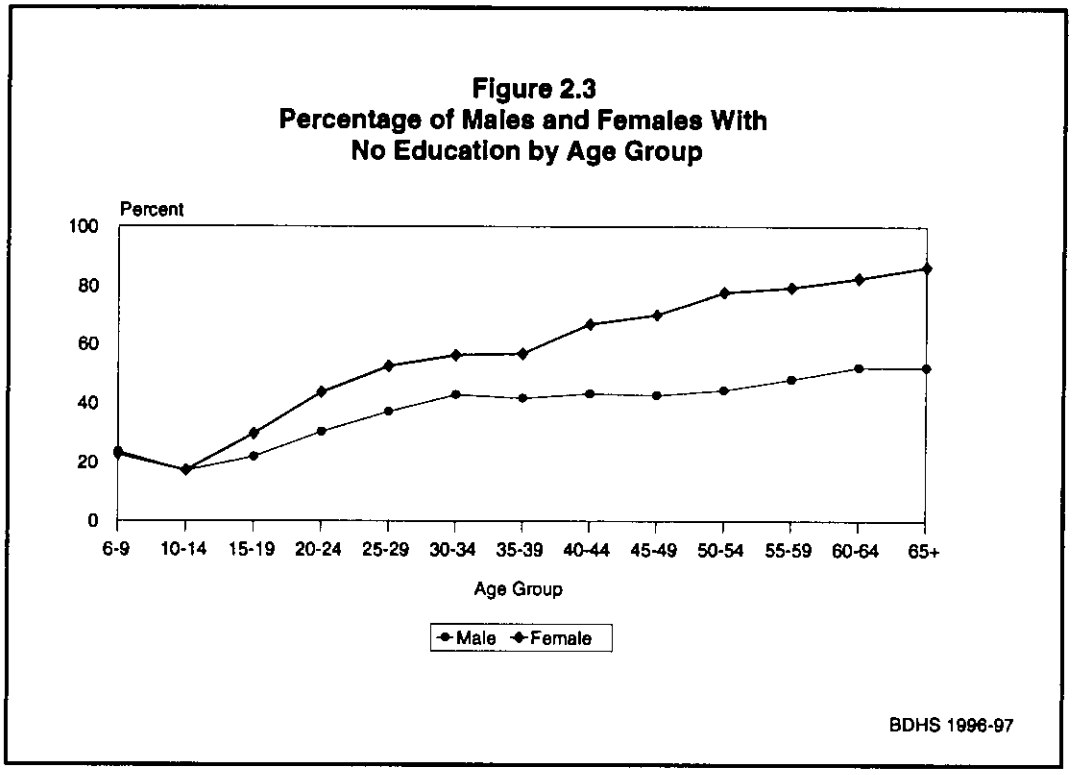
[1] Comparison with data from the 1993-94 BDHS is made difficult due to an error in the earlier survey in which the levels of schooling were mislabeled and the median years of schooling were overestimated. This accounts for the apparent decline in median years of schooling between the two surveys.

Table 2.4 Educational level of the female and male household population

Percent distribution of the de facto female and male household population age six and over by highest level of education attended, and median number of years of schooling, according to selected background characteristics, Bangladesh 1996-97

Background characteristic	No education	Primary incomplete	Primary complete	Secondary+	Don't know/ Missing	Total	Number	Median years of schooling
				FEMALE				
Age[1]								
6-9	22.6	77.1	0.1	0.2	0.0	100.0	2,670	0.0
10-14	17.1	54.4	8.0	20.5	0.0	100.0	3,045	2.4
15-19	29.6	18.8	11.9	39.7	0.0	100.0	2,623	4.1
20-24	43.7	15.4	10.8	30.1	0.0	100.0	2,185	2.1
25-29	52.5	16.9	9.2	21.4	0.0	100.0	1,996	0.0
30-34	56.2	17.5	9.0	17.3	0.0	100.0	1,458	0.0
35-39	56.7	18.6	8.3	16.3	0.1	100.0	1,163	0.0
40-44	66.9	13.8	8.9	10.3	0.0	100.0	894	0.0
45-49	70.2	15.5	7.1	7.2	0.0	100.0	683	0.0
50-54	77.9	12.1	4.4	5.5	0.1	100.0	610	0.0
55-59	79.5	11.8	5.0	3.6	0.1	100.0	622	0.0
60-64	82.7	9.8	4.5	2.7	0.3	100.0	464	0.0
65+	86.5	7.9	3.0	2.2	0.3	100.0	657	0.0
Residence								
Urban	30.3	24.2	6.9	38.6	0.0	100.0	2,289	3.2
Rural	45.8	31.4	7.6	15.1	0.0	100.0	16,790	0.0
Division								
Barisal	26.8	38.8	12.8	21.6	0.1	100.0	1,271	2.2
Chittagong	41.8	28.5	8.5	21.3	0.0	100.0	4,251	0.5
Dhaka	45.9	29.1	6.2	18.8	0.0	100.0	5,897	0.0
Khulna	39.6	34.5	6.8	19.1	0.1	100.0	2,236	0.7
Rajshahi	48.5	30.7	7.1	13.6	0.1	100.0	4,284	0.0
Sylhet	52.7	28.1	7.9	11.4	0.0	100.0	1,141	0.0
Total	44.0	30.6	7.5	17.9	0.0	100.0	19,080	0.0
				MALE				
Age[1]								
6-9	23.5	75.7	0.6	0.2	0.1	100.0	2,683	0.0
10-14	17.0	55.9	7.7	19.2	0.1	100.0	3,052	2.4
15-19	21.8	20.9	8.5	48.6	0.1	100.0	2,269	4.7
20-24	30.3	14.7	9.7	45.1	0.1	100.0	1,602	4.5
25-29	37.1	14.8	8.2	39.7	0.2	100.0	1,622	3.5
30-34	42.9	15.6	7.1	34.3	0.1	100.0	1,442	2.1
35-39	41.8	17.4	8.5	32.0	0.2	100.0	1,442	1.9
40-44	43.3	15.4	8.1	32.7	0.5	100.0	1,050	1.5
45-49	42.8	16.7	9.2	30.6	0.8	100.0	877	1.8
50-54	44.5	14.5	11.2	29.6	0.2	100.0	624	1.8
55-59	48.2	17.7	11.3	22.5	0.2	100.0	500	0.0
60-64	52.2	16.6	8.9	21.5	0.8	100.0	436	0.0
65+	52.2	17.0	9.5	20.0	1.2	100.0	1,078	0.0
Residence								
Urban	16.8	22.9	5.8	54.1	0.3	100.0	2,243	5.6
Rural	34.8	32.8	7.7	24.5	0.3	100.0	16,440	1.3
Division								
Barisal	20.6	37.9	9.0	32.4	0.1	100.0	1,152	2.8
Chittagong	27.7	32.9	8.4	30.9	0.2	100.0	3,967	2.3
Dhaka	34.7	29.4	6.7	28.9	0.3	100.0	5,821	1.4
Khulna	30.0	33.3	6.5	29.7	0.4	100.0	2,308	2.1
Rajshahi	37.0	30.6	6.8	25.2	0.3	100.0	4,304	1.1
Sylhet	40.2	32.3	10.5	16.7	0.2	100.0	1,132	0.5
Total	32.6	31.6	7.4	28.0	0.3	100.0	18,684	1.7

[1] Excludes 10 women and 8 men for whom an age was not reported



As for differences by division, both men and women in Barisal Division have higher educational attainment than residents of other divisions. The proportion of the population with no education is lower and the proportion with some secondary education is higher in this division than in the other divisions. Men and women in Sylhet Division are the most educationally disadvantaged.

Table 2.5 presents enrollment rates by age, sex and residence of the population age 6-24 years. Of every ten children age 6-15 years, seven (71 percent) are enrolled in school. But enrollment drops substantially after age 15; only about one-third of older teenagers (32 percent) are still in school and only 1 out of 7 in their early 20s (14 percent) are still in school. The substantial decline after age 15 may be partly due to the fact that many families need their grown children (age 16-24) for work or do not have the means to bear their educational expenses.

Table 2.5 School enrollment

Percentage of the de facto household population age 6-24 years enrolled in school, by age group, sex, and urban-rural residence, Bangladesh 1996-97

	Male			Female			Total		
Age group	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10	80.4	74.8	75.3	77.9	76.1	76.3	79.1	75.5	75.8
11-15	65.9	65.8	65.8	62.3	65.8	65.4	64.0	65.8	65.6
6-15	73.1	70.7	71.0	69.9	71.4	71.2	71.4	71.1	71.1
16-20	52.0	37.9	39.7	38.3	22.5	24.5	44.6	29.6	31.5
21-24	36.0	19.0	21.3	26.6	6.9	9.8	30.2	11.8	14.4

Table 2.6 Housing characteristics

Percent distribution of households by housing characteristics, according to urban-rural residence, Bangladesh 1996-97

Characteristic	Residence		
	Urban	Rural	Total
Electricity			
Yes	79.5	15.1	22.4
No	20.0	83.9	76.7
Don't know/Missing	0.5	1.0	0.9
Total	100.0	100.0	100.0
Source of drinking water			
Piped into residence	32.1	0.4	4.0
Piped outside residence	7.1	0.3	1.1
Tube well	60.0	94.0	90.2
Surface well	0.2	2.2	2.0
Pond/lake	0.4	2.3	2.1
River/stream	0.1	0.5	0.5
Other	0.1	0.2	0.2
Total	100.0	100.0	100.0
Sanitation facility			
Septic tank, modern	50.8	4.3	9.6
Water sealed/slab latrine	26.6	20.2	20.9
Traditional pit toilet	5.6	13.6	12.7
Open latrine	11.4	26.6	24.9
Hanging latrine	1.4	6.1	5.5
No facility/bush	4.2	29.1	26.3
Other	0.1	0.2	0.2
Total	100.0	100.0	100.0
Roof material			
Katcha (bamboo/thatch)	9.2	31.8	29.2
Tin	53.7	59.3	58.7
Cement/concrete	34.5	2.0	5.7
Other	2.6	6.9	6.4
Total	100.0	100.0	100.0
Wall material			
Jute/bamboo/mud	33.9	75.2	70.6
Wood	0.8	2.6	2.4
Brick/cement	56.3	6.6	12.3
Tin	7.3	12.2	11.7
Other	1.7	3.3	3.1
Total	100.0	100.0	100.0
Floor material			
Earth/bamboo	39.9	94.9	88.7
Wood	1.5	0.2	0.3
Cement/concrete	58.5	4.7	10.8
Other	0.0	0.2	0.2
Total	100.0	100.0	100.0

It is encouraging that urban-rural gaps in enrollment of children have become virtually nonexistent, with 71 percent of both urban and rural children age 6-15 currently enrolled in school. In fact, a slightly higher proportion of rural than urban children age 11-15 years are enrolled in school. However, rural enrollment rates still lag far behind urban rates among children older than 15. At ages 16-20 years, only 30 percent of rural adolescents are still in school, compared with 45 percent of urban youth; at ages 21-24 years, only 12 percent of rural young adults are in school, compared with 30 percent in urban areas.

The sex differential in school enrollment also seems to be disappearing, at least among younger children. At ages 6-15, the proportions of boys and girls enrolled are indistinguishable. However, by ages 16-20 years, men are much more likely than women to be enrolled (40 vs. 25 percent), presumably due to early marriage or social seclusion, which cause young women to drop out of school.

2.2 Housing Characteristics

Socioeconomic conditions were assessed by asking respondents questions about their household environment. This information is summarized in Table 2.6.

As the table shows, only 22 percent of households in Bangladesh have electricity. Electricity is much more common in urban areas; 4 in 5 urban households have electricity, compared with 15 percent of rural households. The proportion of households with electricity has increased from 18 percent in 1993-94 to 22 percent in 1996-97.

Tubewells are the major source of drinking water in Bangladesh. Overall, 9 in 10 households obtain their drinking water from tubewells. Only 5 percent depend on surface water such as surface wells, ponds and rivers/streams. Piped water is available mostly in urban areas. Among urban households, 32 percent have water piped into the residence, 7 percent obtain drinking water from taps (public or private) outside the residence, and 60 percent get their drinking water from tubewells. In rural areas, tubewells are the only major source of drinking water; 94 percent of rural households obtain their drinking water from tubewells. There has been little change in sources of drinking water since 1993-94.

The majority (74 percent) of households in Bangladesh have sanitation facilities; however, only 43 percent have hygienic toilets (septic tank/modern toilets, water-sealed/slab latrines and pit toilets), while 26 percent have no facility at all. As expected, sanitation facilities vary between rural and urban areas. In rural areas, only 38 percent of households have hygienic toilets, compared with 83 percent of urban households. Moreover, 29 percent of rural households have no facility at all, compared with only 4 percent of urban households.

Tin is the most common roofing material in Bangladesh, accounting for over half of both urban and rural households. However, urban and rural households vary widely in the use of other types of roofs. In urban areas, 34 percent of households live in dwellings with cement or concrete roofs, while in rural areas, bamboo or thatch (32 percent) is the most common roofing material after tin.

Seven in ten households in Bangladesh live in structures with walls made of natural materials such as jute, bamboo or mud. Twelve percent live in houses with brick or cement walls and the same proportion live in houses with tin walls. Urban households live in more solid dwellings than rural households. Over half of urban households live in structures with brick or cement walls, compared with only 7 percent of rural households.

Overall, 9 out of 10 households in Bangladesh live in residences with floors made of earth (89 percent). However, almost 6 in 10 urban households have cement or concrete flooring in their residences. Earth flooring is almost universal in rural areas (95 percent).

Household Possessions

Respondents were asked about ownership of selected durable goods and agricultural land. The information was collected primarily as socioeconomic indicators of the population. Results are shown in Table 2.7.

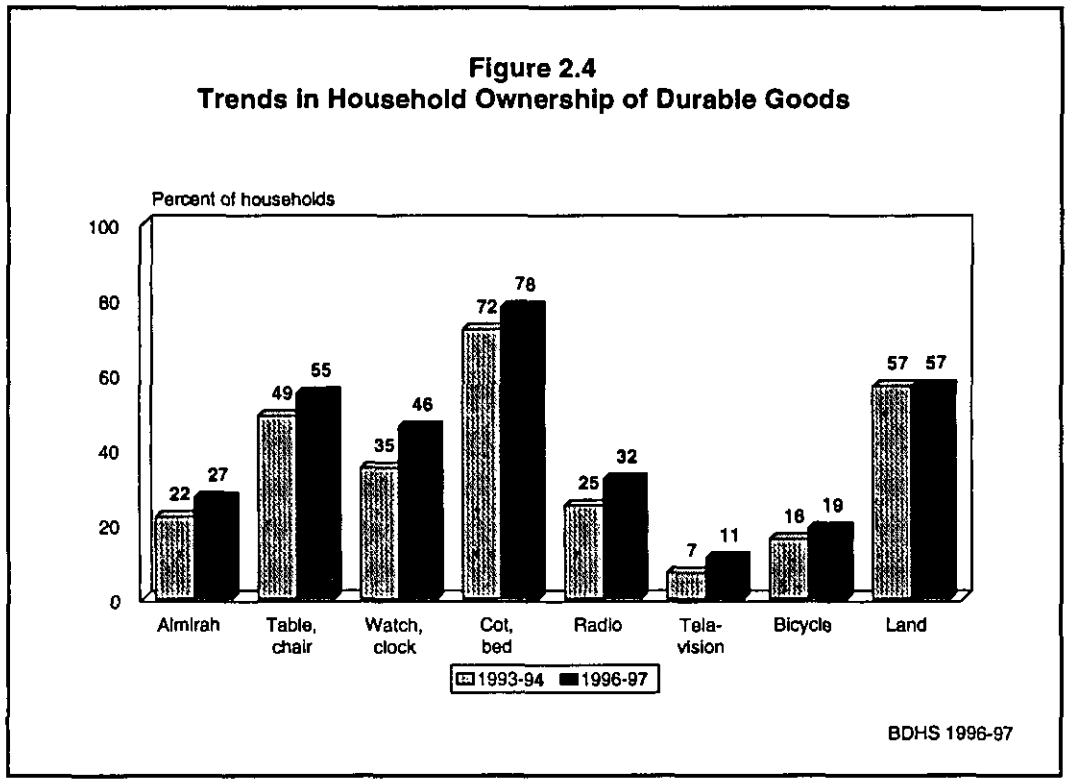
Table 2.7 Household possessions

Percentage of households possessing various consumer durable goods, according to urban-rural residence, Bangladesh 1996-97

	Residence		
Durable good	Urban	Rural	Total
Almirah	60.0	22.6	26.8
Table/chair/bench	74.5	52.2	54.7
Watch/clock	76.7	41.6	45.6
Cot/bed	93.0	75.9	77.9
Radio	51.5	29.1	31.6
Television	48.6	5.8	10.6
Bicycle	18.4	19.4	19.3
None of the above	4.2	17.4	15.9
Agricultural land	39.2	58.7	56.5
Number of households	984	7,698	8,682

Possession of household durable goods is not very common in Bangladesh, since many families cannot afford them. Nationally, 78 percent of households own a cot or bed, 55 percent a table, chair, or bench, 46 percent a watch or clock, and only 27 percent an *almirah* (wardrobe). As for more valuable items, 32 percent of households possess radios, 19 percent own bicycles, and only 11 percent possess televisions. One in six households owns none of the items asked about. More urban than rural households possess every durable good asked about except bicycles, which reflects, among other things, the relatively better economic conditions in urban areas. There is also evidence that the socioeconomic status of Bangladeshi households has improved over time, since there has been an increase since 1993-94 in the proportion of households owning all the durable goods asked about (Mitra et al., 1994:18)(Figure 2.4).

Just over half of households in Bangladesh own agricultural land. This indicates that a large number of Bangladeshi families live in poverty, given that Bangladesh's economy is largely dependent on agriculture. Two-fifths of households in rural areas are without agricultural land (41 percent); as expected, households without agricultural land are more common in urban areas (61 percent).



Health Care

The 1996-97 BDHS included a question as to whether anyone in the interviewed household had been to a health facility, a doctor, or a nurse in the two weeks prior to the survey and, if so, where he or she went and the purpose of the visit. Answers to these questions can provide a picture of the health-care-seeking behavior of the population.

As shown in Table 2.8, almost one in four households reported that a member of the household had recently sought medical care. Differences in health-care-seeking behavior by urban-rural residence and division are not large, although households in Chittagong appear to have higher levels than those in other divisions. Private doctors and clinics and traditional doctors provide almost half of the health care visits reported by households, with another 19 percent provided by pharmacies. Only 20 percent of health care visits are provided by government facilities, with roughly equal proportions visiting a hospital or medical college, a thana health complex, and a family welfare center. Urban households are more likely to report visits to private doctors and clinics, while rural households are more likely to report visits to traditional doctors. Although urban and rural households in which a member recently sought health care are almost equally likely to report visits to government facilities (20 percent), urban households are more likely than rural households to have visited a hospital or medical college, presumably because they are more common in urban areas, while rural households are more likely than urban households to report visits to thana health complexes or family welfare centers. Differences in sources of health care by division are not great. It is interesting that households in Barisal Division are more likely to report visits to satellite or immunization clinics and less likely than households in other divisions to have visited traditional doctors. Households in Rajshahi Division are most likely to report visits to traditional doctors. By far the most common reason for seeking health care is illness.

Table 2.8 Health-care-seeking behavior

Percentage of households in which someone visited a health facility or a doctor or nurse in the 2 weeks preceding the survey and, of these households, the percent distribution by type of place visited and reason for visit, Bangladesh 1996-97

Place visited/ reason	Residence		Division						
	Urban	Rural	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Total
Percentage of households seeking health care	29.2	23.0	19.0	32.6	23.7	23.1	19.2	19.9	23.7
Place visited									
Hospital/medical college	15.5	5.8	8.6	6.7	9.5	9.5	2.4	6.5	7.2
Family welfare center	2.3	5.6	4.5	6.3	4.3	4.2	4.9	7.6	5.1
Thana health complex	2.0	6.7	8.9	6.1	5.2	2.8	7.1	12.4	6.0
Satellite/EPI clinic	0.2	1.5	8.3	1.3	0.6	1.3	0.5	1.9	1.3
Private clinic/doctor	43.5	21.1	26.8	22.2	26.3	34.0	18.1	19.6	24.2
Traditional doctor	4.1	28.5	12.9	27.4	18.9	23.3	35.9	27.0	25.1
Pharmacy	20.6	18.5	17.2	18.5	22.8	12.5	17.7	15.1	18.8
Shop	1.2	3.3	3.8	1.1	3.4	3.9	4.6	0.6	3.0
Friends/relatives	0.4	0.3	0.6	0.5	0.4	0.4	0.0	0.0	0.3
Fieldworker, FWA	0.9	0.8	0.0	1.1	1.3	0.0	0.7	0.0	0.8
Other	7.9	6.6	7.8	7.8	5.2	6.8	7.3	8.8	6.8
Does not know	0.2	0.4	0.0	0.3	0.4	0.4	0.5	0.0	0.4
Missing	1.3	0.9	0.6	0.8	1.6	0.9	0.2	0.6	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Reason for the visit									
Immunization	2.2	2.7	11.7	2.4	1.7	1.5	2.0	5.2	2.6
Family planning	0.6	1.3	1.9	0.5	1.3	2.0	1.2	1.9	1.2
Antenatal checkup	2.6	0.8	1.3	1.1	0.9	1.0	0.9	2.5	1.1
Illness	85.5	88.8	78.2	88.8	87.9	88.0	92.7	81.6	88.3
Accident	3.2	1.6	3.2	1.0	2.6	1.3	1.3	1.9	1.8
Other	6.0	4.4	3.1	5.9	4.8	6.2	1.6	6.3	4.6
Missing	0.0	0.5	0.6	0.3	0.7	0.0	0.2	0.6	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households with a visit	287	1,771	107	540	661	243	413	94	2,058

EPI = Expanded Programme on Immunization
FWA = Family Welfare Assistant

2.3 Background Characteristics of Women and Men Respondents

General Characteristics

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

The age distribution of ever-married women is very similar to that found in the 1993-94 BDHS, with the majority (54 percent) of ever-married women age 15-29 years. The currently married men interviewed are older than the ever-married women, in large part because men marry at older ages than women.

Table 2.9 Background characteristics of respondents

Percent distribution of ever-married women and currently married women and men by selected background characteristics, Bangladesh 1996-97

Background characteristic	Ever-married women			Currently married women			Currently married men		
		Number of women			Number of women			Number of men	
	Weighted percent	Weighted	Un-weighted	Weighted percent	Weighted	Un-weighted	Weighted percent	Weighted	Un-weighted
Age									
10-14	1.6	145	146	1.7	143	144	NA	NA	NA
15-19	14.3	1,301	1,272	14.8	1,252	1,223	0.7	23	23
20-24	18.9	1,727	1,716	19.6	1,655	1,644	5.9	194	190
25-29	20.9	1,905	1,921	21.4	1,812	1,828	14.7	487	469
30-34	15.4	1,402	1,412	15.3	1,297	1,307	18.7	620	619
35-39	12.4	1,128	1,144	12.2	1,031	1,046	18.8	621	627
40-44	9.4	861	867	8.8	740	745	14.8	492	491
45-49	7.2	658	649	6.2	520	513	11.2	371	383
50-54	NA	NA	NA	NA	NA	NA	8.2	272	281
55-59	NA	NA	NA	NA	NA	NA	7.0	231	229
Marital status									
Currently married	92.6	8,450	8,450	100.0	8,450	8,450	100.0	3,312	3,312
Widowed	4.3	391	389	NA	NA	NA	NA	NA	NA
Divorced	3.1	286	288	NA	NA	NA	NA	NA	NA
Residence									
Urban	11.7	1,063	1,449	11.5	968	1,328	12.1	400	532
Rural	88.3	8,064	7,678	88.5	7,482	7,122	87.9	2,912	2,780
Division									
Barisal	6.5	598	937	6.6	560	879	6.0	199	315
Chittagong	20.1	1,836	1,359	20.1	1,701	1,259	17.6	584	411
Dhaka	31.6	2,882	2,529	31.4	2,656	2,334	31.9	1,056	950
Khulna	12.1	1,107	1,084	12.1	1,024	1,003	12.9	428	406
Rajshahi	24.1	2,198	2,314	24.2	2,049	2,154	26.5	877	934
Sylhet	5.5	506	904	5.4	460	821	5.1	168	296
Education									
No education	54.6	4,983	4,899	53.3	4,502	4,422	42.0	1,390	1,376
Primary incomplete	17.2	1,572	1,602	17.4	1,470	1,497	22.6	750	734
Primary complete	10.0	913	928	10.2	862	881	6.2	204	210
Secondary+	18.2	1,659	1,698	19.1	1,615	1,650	29.2	968	992
Religion									
Islam	89.5	8,168	8,109	89.3	7,549	7,493	87.5	2,897	2,871
Hinduism	9.9	906	975	10.1	851	916	12.1	401	428
Buddhism	0.4	36	28	0.4	36	27	0.1	4	4
Christianity	0.1	14	13	0.1	13	12	0.2	6	6
Other	0.0	2	2	0.0	2	2	0.1	3	3
Total	100.0	9,127	9,127	100.0	8,450	8,450	100.0	3,312	3,312

NA = Not applicable

Twelve percent of respondents live in urban areas, with 88 percent in rural areas. This is a lower proportion urban than the 20-22 percent currently quoted. The major reason for the discrepancy is the definition of urban (see Footnote 3).

Almost one-third of female and male respondents live in Dhaka Division, while roughly one-quarter live in Rajshahi Division and one-fifth in Chittagong Division. About 12 percent of respondents live in Khulna Division, 6-7 percent in Barisal Division, and 5-6 percent in Sylhet Division. The distribution of ever-married women by division is very similar to that in the 1993-94 BDHS (Mitra et al., 1994:19).

The majority (55 percent) of ever-married women have never attended school. Only 28 percent have completed primary school and only 18 percent have secondary education. Nevertheless, the data show some improvement in female education since 1993-94, with the proportion of ever-married women with no formal education declining from 58 to 55 percent and the proportion with secondary education increasing from 15 to 18 percent (Mitra et al., 1994:19). In general, married men are better educated than women, with the majority having some education and 29 percent having some secondary school, compared with only 18 percent of ever-married women.

About 9 in 10 respondents are Muslim, with most of the remainder being Hindu. The composition by religion is similar to that reported in the 1993-94 BDHS (Mitra et al., 1994:19).

Because the married men interviewed in the BDHS were selected from a subsample of households in which ever-married women were interviewed, it is possible to match male respondents with their wives to obtain a dataset of matched couples. Table 2.10 shows husband-wife differentials in age and education for 3,028 couples. For almost all married couples, the husband is older than the wife—generally 5 to 14 years older. The mean age difference is 9 years.

Regarding educational differences, in about one-third of married couples, neither the husband nor the wife has any education, while in another third, both have some education. For the remaining one-third of couples, the proportion in which the husband has some education and the wife has none is twice that in which the wife is educated and the husband is not (22 vs. 10 percent).

Table 2.10 Differentials in age and education

Percent distribution of couples by differences between spouses in age and level of education, Bangladesh 1996-97

Characteristic	Percent	Number of couples
Age (husband's age minus wife's age)		
Wife older	1.3	40
0-4 years	12.9	392
5-9 years	42.1	1,273
10-14 years	31.3	947
15 years +	12.4	376
Mean age difference (years)	9.4	3,028
Education		
Both husband and wife not educated	32.4	981
Wife educated, husband not	9.9	301
Husband educated, wife not	21.5	651
Both husband and wife educated	36.2	1,095
Total	100.0	3,028

Differential Education

Tables 2.11.1 and 2.11.2 present the distribution of women and men by education, according to selected characteristics. Among ever-married women, education is inversely related to age, that is, older women are less educated than younger women. For instance, 41 percent of ever-married women age 15-19 years have never attended school, compared with 71 percent of those age 45-49. Among currently married men, the distribution by education level is more uniform across age groups.

Among both women and men, urban residents have more education than rural residents. For example, 57 percent of rural women have had no education at all, compared with 36 percent of urban women. In contrast, while about 4 in 10 urban women (42 percent) have attended secondary school, only 15 percent of rural women have done so.

Women and men in Barisal, Chittagong, and Khulna Divisions appear to be more educated than those in the other divisions. For example, less than half the ever-married women in Barisal and Khulna have no education, compared with about 60 percent or more in Rajshahi and Sylhet. Women in Barisal and Chittagong Divisions are also more likely than women in the other divisions to complete primary school and to attend secondary school.

Table 2.11.1 Level of education by background characteristics: women

Percent distribution of ever-married women by highest level of education attended, according to age, residence, and division, Bangladesh 1996-97

Background characteristic	Level of education: No educ.	Primary incomplete	Primary complete	Secon-dary+	Total	Number of women
Age						
10-14	42.0	27.2	16.1	14.7	100.0	145
15-19	40.8	20.6	13.8	24.8	100.0	1,301
20-24	49.8	16.2	10.7	23.3	100.0	1,727
25-29	54.9	16.9	9.6	18.6	100.0	1,905
30-34	56.7	17.8	8.8	16.6	100.0	1,402
35-39	57.4	18.1	8.4	16.1	100.0	1,128
40-44	66.6	13.7	8.5	11.1	100.0	861
45-49	71.0	14.1	7.7	7.1	100.0	658
Residence						
Urban	35.5	13.1	9.2	42.2	100.0	1,063
Rural	57.1	17.8	10.1	15.0	100.0	8,064
Division						
Barisal	30.0	29.2	18.5	22.2	100.0	598
Chittagong	51.0	14.1	11.8	23.2	100.0	1,836
Dhaka	57.6	14.8	8.8	18.8	100.0	2,882
Khulna	47.9	23.7	9.2	19.3	100.0	1,107
Rajshahi	61.0	17.2	8.6	13.1	100.0	2,198
Sylhet	66.5	14.3	8.0	11.2	100.0	506
Total	54.6	17.2	10.0	18.2	100.0	9,127

Table 2.11.2 Level of education by background characteristics: men

Percent distribution of currently married men by highest level of education attended, according to age, residence, and division, Bangladesh 1996-97

Background characteristic	Level of education: No educ.	Primary incomplete	Primary complete	Secon-dary+	Total	Number of men
Age						
15-19	49.1	22.1	6.1	22.7	100.0	23
20-24	46.3	26.3	6.1	21.2	100.0	194
25-29	43.8	18.2	7.9	30.1	100.0	487
30-34	38.9	24.8	4.4	31.8	100.0	620
35-39	42.8	22.5	6.0	28.7	100.0	621
40-44	37.9	22.0	5.1	35.0	100.0	492
45-49	41.6	21.2	8.7	28.5	100.0	371
50-54	43.7	24.2	5.2	26.9	100.0	272
55-59	46.6	25.3	7.0	21.1	100.0	231
Residence						
Urban	20.8	13.2	4.1	61.9	100.0	400
Rural	44.9	23.9	6.4	24.8	100.0	2,912
Division						
Barisal	30.5	23.7	6.7	39.2	100.0	199
Chittagong	34.9	27.9	5.7	31.5	100.0	584
Dhaka	43.0	19.4	6.1	31.5	100.0	1,056
Khulna	38.9	25.3	5.3	30.5	100.0	428
Rajshahi	48.0	21.6	6.1	24.3	100.0	877
Sylhet	49.7	22.2	9.9	18.3	100.0	168
Total	42.0	22.6	6.2	29.2	100.0	3,312

Access to Media

Female and male respondents were asked in the BDHS if they usually read a newspaper, listen to the radio or watch television at least once a week. This information is of use in planning the dissemination of family planning and health messages. The data indicate that of the three media, radio is by far the most widespread and that men are more likely than women to access all three media. For example, Table 2.12 shows that two-fifths (40 percent) of ever-married women listen to the radio weekly, compared with two-thirds of men. Only 27 percent of women watch television at least once a week, compared with more than half of the men. And while less than 1 in 10 women reads a newspaper, one-quarter of men report doing so. Consequently, half of women report having weekly exposure to none of the three media, compared with only one-quarter of men.

Table 2.12 Access to mass media

Percentage of ever-married women who usually read a newspaper once a week, watch television once a week, or listen to radio daily, by selected background characteristics and percentage of men who carry out these activities, Bangladesh 1996-97

		Mass media				
Background characteristic	No mass media	Read news-paper weekly	Watch tele-vision weekly	Listen to radio daily	All three media	Number of women/ men
Age						
10-14	48.2	6.7	19.9	45.8	1.7	145
15-19	45.2	9.4	28.2	44.9	4.7	1,301
20-24	47.2	9.4	28.9	43.3	6.1	1,727
25-29	48.2	9.7	30.6	41.9	6.8	1,905
30-34	53.1	7.4	27.7	36.4	4.1	1,402
35-39	54.4	9.0	25.5	36.9	6.5	1,128
40-44	57.8	7.5	21.7	33.4	4.4	861
45-49	62.2	5.8	18.7	30.4	4.1	658
Residence						
Urban	16.9	29.4	76.1	52.5	21.5	1,063
Rural	55.5	5.9	20.5	37.9	3.3	8,064
Division						
Barisal	54.4	10.5	21.6	41.0	7.0	598
Chittagong	48.5	10.5	29.7	41.0	6.5	1,836
Dhaka	49.8	10.4	32.1	37.8	6.8	2,882
Khulna	50.1	7.2	28.6	40.3	4.4	1,107
Rajshahi	50.9	5.8	21.5	42.3	3.3	2,198
Sylhet	66.2	5.2	14.3	29.1	2.6	506
Education						
No education	66.5	0.0	14.8	27.4	0.0	4,983
Primary incomplete	48.5	2.0	25.2	42.9	1.1	1,572
Primary complete	35.6	9.5	34.8	52.4	5.2	913
Secondary+	15.6	40.2	61.0	66.0	25.7	1,659
All women	51.0	8.6	27.0	39.6	5.4	9,127
All men	26.1	25.1	52.7	63.8	18.3	3,312

Differentials in exposure to media are shown only for ever-married women. They indicate that younger women are somewhat more likely than older women to listen to the radio. Exposure to all three media is higher among urban and more educated women. For example, the proportion of women who watch television at least once a week ranges from 15 percent of those with no education to 61 percent of those with some secondary school. Differentials by division are not large, except that women in Sylhet Division have less exposure to all three media than women in other divisions.

It is interesting to note that, while women's access to radio and newspapers has hardly changed since 1993-94, television-viewing has increased considerably. For example, the proportion of ever-married women who read newspapers weekly has increased from 7 percent in 1993-94 to 9 percent in 1996-97, while the proportion who listen to the radio has increased from 39 to 40 percent. The proportion who watch television weekly, however, has increased from 18 to 27 percent (Mitra et al., 1994:21).

Employment and Occupation

In the 1996-97 BDHS, information was collected about current employment. Although data were collected from ever-married female and currently married male respondents, the analysis in this section concentrates on women.

Data in Table 2.13 indicate that 63 percent of ever-married women report being unemployed and 37 percent employed at the time of the survey. Most employed women work all year, with a minority working seasonally. The proportion unemployed is higher among younger women, urban women, and better educated women. Women in Rajshahi Division are more likely to be employed than women in the other divisions. Rural women are more likely to be employed seasonally than urban women, presumably as agricultural laborers.

Women who reported themselves as employed at the time of the survey were asked if they worked for a member of their family, for someone else, or if they were self-employed. They were also asked if they earned cash for their work (Table 2.14). Roughly one-quarter of working women are self-employed, while 20 percent work for others and 54 percent work in a family business. Sixty-two percent of employed women earn cash for their work. Rural working women are more likely than urban women to work in a family business, while urban women are more likely to work for others. Urban women who work are also much more likely than rural women to receive cash earnings (88 vs. 60 percent).

Divisional differences show that women in Barisal Division are more likely to be self-employed, less likely to work for relatives, and more likely to earn cash than women in other divisions, while working women in Sylhet are less likely to be self-employed and less likely to be paid in cash. Differences by education level in type of employment and form of payment are not large.

Table 2.15.1 indicates the types of occupations in which working women are engaged. Almost half of employed women are manual laborers, with 41 percent engaged in skilled labor and 8 percent in unskilled labor. Another 46 percent are employed in agricultural jobs, with the vast majority working on other people's land. Only 4 percent of working women are employed in professional, technical, or managerial jobs. As expected, agricultural jobs are more common among rural women, while urban women are more likely to be employed in manual labor. Women in Khulna Division are more likely and those in Dhaka Division less likely to be employed in agriculture; conversely, women in Dhaka Division are more likely to be employed in manual jobs. As expected, women with no education are more likely to be employed in the agriculture sector, while those with some secondary school are more likely to have skilled manual labor.

Table 2.13 Employment

Percent distribution of ever-married women by employment status and continuity of employment, according to background characteristics, Bangladesh 1996-97

Background characteristic	Not employed	Currently employed: Work all year	Currently employed: Work season-ally	Currently employed: Work occasion-ally	Missing	Total	Number of women
Age							
10-14	80.8	12.4	6.8	0.0	0.0	100.0	145
15-19	75.8	14.1	9.5	0.4	0.1	100.0	1,301
20-24	66.7	20.3	11.9	0.8	0.3	100.0	1,727
25-29	59.8	27.0	12.5	0.7	0.1	100.0	1,905
30-34	57.0	30.7	12.0	0.3	0.0	100.0	1,402
35-39	56.2	31.2	11.4	1.2	0.0	100.0	1,128
40-44	56.6	27.8	14.4	0.9	0.3	100.0	861
45-49	64.0	20.6	14.3	1.1	0.0	100.0	658
Residence							
Urban	72.1	23.9	3.4	0.4	0.3	100.0	1,063
Rural	61.6	24.4	13.1	0.7	0.1	100.0	8,064
Division							
Barisal	72.7	19.6	6.1	1.3	0.3	100.0	598
Chittagong	69.1	18.9	11.5	0.4	0.1	100.0	1,836
Dhaka	64.7	24.7	9.7	0.7	0.1	100.0	2,882
Khulna	61.1	23.8	14.3	0.6	0.2	100.0	1,107
Rajshahi	51.4	32.4	15.3	1.0	0.1	100.0	2,198
Sylhet	71.7	14.0	14.2	0.1	0.0	100.0	506
Education							
No education	58.9	27.0	13.3	0.7	0.1	100.0	4,983
Primary incomplete	63.1	23.5	13.0	0.3	0.1	100.0	1,572
Primary complete	68.1	20.2	10.2	1.4	0.1	100.0	913
Secondary+	71.6	19.5	8.0	0.6	0.3	100.0	1,659
Total	62.9	24.4	12.0	0.7	0.1	100.0	9,127

Table 2.15.2 presents similar data for currently married men. It shows that only a fraction of men are not currently working. Almost half of men work in agriculture, mostly on their own land. One-quarter of men have professional, technical or managerial jobs, while another quarter work as manual laborers.

Women who said they were paid in cash for their work were asked whether they themselves or someone else usually decides how the money they earn is used. As shown in Table 2.16, more than 2 in 5 employed women decide for themselves how to spend their cash earnings, while almost half say they decide with someone else how to spend their money. Nine percent of working women say that someone else decides how to spend their earnings. Older women, urban women, women in Barisal Division, and those who are not currently married are more likely than other women to decide for themselves how to spend their earnings.

In the survey, all employed women who had a child under age six living at home were asked who cared for the child while the mother was working. Less than half of working women (45 percent) have a child under age six (data not shown). The vast majority of these women (69 percent) say they look after their own children while at work, while 14 percent leave the child in the care of older children and 12 percent use other relatives as caretakers. Very few employed mothers leave their young children with their husbands, with neighbors or friends, with servants, or with child care institutions. Urban working women are less likely than rural women to have a child under six and when they do, they are also less likely to care for their children themselves while at work.

Table 2.14 Employer and form of earnings

Percent distribution of currently employed women by employer and form of earnings, according to background characteristics, Bangladesh 1996-97

Background characteristic	Self-employed		Employed by a nonrelative		Employed by a relative		Missing	Total	Number of women
	Earns cash	Does not earn cash	Earns cash	Does not earn cash	Earns cash	Does not earn cash			
Age									
10-14	(21.8)	(0.0)	(8.3)	(0.0)	(13.9)	(56.0)	(0.0)	100.0	28
15-19	18.3	7.7	11.6	4.0	21.3	36.4	0.7	100.0	314
20-24	17.3	5.1	14.3	4.3	27.9	30.2	0.9	100.0	573
25-29	20.4	5.6	17.6	4.7	27.8	23.7	0.2	100.0	766
30-34	23.4	6.6	17.0	3.5	27.7	21.5	0.4	100.0	603
35-39	25.3	3.9	15.2	3.4	29.6	22.4	0.1	100.0	494
40-44	15.4	5.1	17.4	6.9	25.7	28.9	0.6	100.0	374
45-49	15.5	5.4	11.0	8.8	22.6	36.8	0.0	100.0	236
Residence									
Urban	25.8	1.8	39.6	2.4	22.4	7.1	0.8	100.0	297
Rural	19.5	5.9	13.2	4.9	27.2	29.1	0.4	100.0	3,090
Division									
Barisal	33.7	3.7	15.1	5.5	23.9	18.0	0.0	100.0	161
Chittagong	17.8	6.5	7.6	6.2	29.8	31.5	0.6	100.0	567
Dhaka	24.2	4.5	16.7	3.5	26.6	24.1	0.4	100.0	1,016
Khulna	15.5	6.3	20.9	6.1	23.3	27.4	0.5	100.0	430
Rajshahi	18.1	5.9	15.3	4.0	28.9	27.3	0.4	100.0	1,069
Sylhet	12.5	5.8	23.3	5.8	12.6	40.0	0.0	100.0	143
Education									
No education	19.1	5.7	16.4	5.7	27.8	25.0	0.3	100.0	2,046
Primary incomplete	21.7	6.3	10.3	4.7	25.9	30.5	0.5	100.0	580
Primary complete	22.0	4.1	10.2	2.2	27.2	34.0	0.4	100.0	291
Secondary+	21.3	4.8	20.8	1.6	22.7	27.8	0.9	100.0	471
Total	20.1	5.5	15.5	4.6	26.7	27.1	0.4	100.0	3,387

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

Table 2.15.1 Occupation: women

Percent distribution of currently employed women by occupation and type of agricultural land worked or type of nonagricultural employment, according to background characteristics, Bangladesh 1996-97

Background characteristic	Agricultural			Nonagricultural				Missing	Total	Number of women
	Own land	Rented land	Other's land	Prof./ tech./ manag.	Skilled manual	Unskilled manual	Other			
Age										
10-14	(12.1)	(0.0)	(27.1)	(0.0)	(60.2)	(0.7)	(0.0)	(0.0)	100.0	28
15-19	10.8	2.1	33.2	1.0	47.3	4.7	0.1	0.7	100.0	314
20-24	9.7	1.2	34.6	2.6	42.1	7.9	0.7	1.1	100.0	573
25-29	9.2	0.8	36.3	3.2	40.8	8.5	0.7	0.4	100.0	766
30-34	7.4	2.0	35.6	5.5	38.4	9.7	1.1	0.4	100.0	603
35-39	7.0	2.1	37.9	4.6	37.2	8.7	2.3	0.2	100.0	494
40-44	8.1	3.4	32.7	3.3	40.3	9.9	0.9	1.5	100.0	374
45-49	10.5	4.4	28.9	2.6	44.2	7.2	2.1	0.2	100.0	236
Residence										
Urban	0.7	0.2	11.0	6.3	57.7	19.8	3.0	1.3	100.0	297
Rural	9.6	2.1	37.1	3.2	39.4	7.2	0.9	0.6	100.0	3,090
Division										
Barisal	2.0	0.0	39.0	4.4	41.4	9.6	0.6	3.0	100.0	161
Chittagong	15.3	3.5	36.1	3.9	33.1	5.2	2.3	0.6	100.0	567
Dhaka	3.9	0.5	31.5	3.0	48.2	11.7	0.7	0.5	100.0	1,016
Khulna	21.8	2.5	40.6	3.6	22.1	7.3	1.2	1.0	100.0	430
Rajshahi	2.6	1.2	37.5	3.8	47.3	6.4	0.7	0.4	100.0	1,069
Sylhet	32.5	11.2	11.2	1.2	30.9	11.3	1.5	0.0	100.0	143
Education										
No education	6.5	2.3	36.9	4.1	36.6	12.2	0.9	0.4	100.0	2,046
Primary incomplete	12.8	1.6	38.8	2.1	38.7	3.9	1.1	1.1	100.0	580
Primary complete	11.9	1.3	37.0	3.9	41.9	2.7	0.7	0.6	100.0	291
Secondary+	11.9	0.8	19.6	1.9	62.6	0.2	1.8	1.1	100.0	471
Total	8.8	1.9	34.8	3.5	41.0	8.3	1.1	0.6	100.0	3,387

Note: The "professional, technical, managerial" category includes professional, technical, clerical and managerial occupations. Figures in parentheses are based on 25-49 unweighted cases.

Table 2.15.2 Occupation: men

Percent distribution of currently married men by occupation and type of agricultural land worked or type of nonagricultural employment, according to background characteristics, Bangladesh 1996-97

Background characteristic	Not currently employed	Agricultural			Nonagricultural				Missing	Total	Number of men
		Own land	Rented land	Other land	Prof./ tech./ manag.	Skilled manual	Unskilled manual	Other			
Age											
15-19	(3.4)	(27.9)	(0.0)	(35.6)	(1.8)	(8.6)	(22.7)	(0.0)	(0.0)	100.0	23
20-24	3.7	26.0	10.0	15.4	14.2	12.3	14.9	1.4	2.1	100.0	194
25-29	1.0	18.9	8.1	14.7	25.6	12.7	18.2	0.6	0.1	100.0	487
30-34	0.5	22.2	6.9	13.2	27.3	13.7	14.9	0.7	0.6	100.0	620
35-39	0.2	23.5	8.5	13.8	25.9	13.9	13.6	0.4	0.2	100.0	621
40-44	0.1	23.6	7.7	13.6	32.9	10.7	10.8	0.2	0.4	100.0	492
45-49	2.9	25.6	8.7	16.1	24.5	10.5	11.7	0.0	0.0	100.0	371
50-54	1.7	25.8	12.8	14.5	22.6	12.8	7.8	1.0	1.0	100.0	272
55-59	7.3	39.0	9.3	13.7	22.3	4.0	4.2	0.0	0.3	100.0	231
Residence											
Urban	1.7	2.3	0.2	0.8	48.4	29.5	15.6	1.5	0.0	100.0	400
Rural	1.5	27.3	9.6	16.2	22.5	9.5	12.5	0.3	0.5	100.0	2,912
Division											
Barisal	0.1	16.9	7.5	10.6	37.6	11.3	11.9	0.7	3.4	100.0	199
Chittagong	3.4	13.6	11.6	8.6	32.1	13.9	15.7	0.9	0.0	100.0	584
Dhaka	1.4	25.1	7.3	13.3	24.7	14.2	13.1	0.5	0.4	100.0	1,056
Khulna	1.4	31.1	6.7	13.5	25.7	9.7	11.5	0.4	0.0	100.0	428
Rajshahi	0.5	28.6	8.9	19.6	20.5	9.8	11.6	0.2	0.3	100.0	877
Sylhet	2.5	25.0	8.7	19.9	21.1	8.2	13.8	0.4	0.4	100.0	168
Education											
No education	0.9	20.6	11.5	25.6	13.0	8.2	19.7	0.4	0.2	100.0	1,390
Primary incomplete	1.0	29.3	10.7	11.7	22.2	10.2	13.8	0.2	0.8	100.0	750
Primary complete	1.1	33.9	8.6	8.4	26.8	12.8	7.3	0.6	0.6	100.0	204
Secondary+	2.9	23.6	2.4	1.6	46.0	18.5	3.7	0.7	0.5	100.0	968
Total	1.5	24.3	8.5	14.4	25.6	11.9	12.9	0.5	0.5	100.0	3,312

Note: The "professional, technical, managerial" category includes professional, technical, clerical and managerial occupations. Figures in parentheses are based on 25-49 unweighted cases

Table 2.16 Decisions on use of earnings

Percent distribution of women receiving cash earnings by person who decides how earnings will be used, according to background characteristics, Bangladesh 1996-97

Background characteristic	Person who decides how earnings will be used: Self only	Jointly with someone else	Someone else	Missing	Total	Number of women
Age						
10-19	32.2	53.9	13.8	0.0	100.0	174
20-24	35.2	55.7	9.0	0.0	100.0	341
25-29	43.0	50.3	6.7	0.0	100.0	504
30-34	43.9	47.9	8.1	0.0	100.0	412
35-39	42.5	48.3	8.8	0.4	100.0	347
40-44	47.2	41.7	11.1	0.0	100.0	220
45-49	49.8	39.1	11.1	0.0	100.0	116
Residence						
Urban	60.5	36.3	3.2	0.0	100.0	263
Rural	39.1	51.0	9.8	0.1	100.0	1,851
Division						
Barisal	56.6	34.7	8.7	0.0	100.0	117
Chittagong	46.1	43.4	10.5	0.0	100.0	313
Dhaka	42.9	50.0	6.9	0.2	100.0	688
Khulna	44.2	43.6	12.1	0.0	100.0	257
Rajshahi	34.3	55.9	9.8	0.0	100.0	669
Sylhet	48.1	47.6	4.3	0.0	100.0	69
Education						
No education	41.1	50.0	9.0	0.0	100.0	1,298
Primary incomplete	38.5	49.8	11.7	0.0	100.0	337
Primary complete	43.3	49.6	7.1	0.0	100.0	173
Secondary+	47.3	45.0	7.3	0.4	100.0	306
Marital status						
Currently married	35.1	55.3	9.5	0.1	100.0	1,819
Not married	82.8	11.3	5.8	0.0	100.0	295
Total	41.8	49.2	9.0	0.1	100.0	2,114

CHAPTER 3

FERTILITY

3.1 Introduction

The measurement of fertility levels, differentials and determinants was a major objective of the 1996-97 BDHS. Interest in the fertility data was particularly keen, given the fact that the 1993-94 BDHS estimated a very low fertility rate that engendered some skepticism.

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

The above information is analyzed in the following sections to provide fertility levels and trends; fertility differentials by residence, division, and education; information on length of interval between births; age at first birth; and the extent of childbearing among adolescents. A brief discussion of the quality of the BDHS fertility data appears in Appendix C.2.

Table 3.1 Current fertility rates

Age-specific and cumulative fertility rates and the crude birth rate for the three years preceding the survey, by urban-rural residence, Bangladesh 1996-97

	Residence		
Age group	Urban	Rural	Total
15-19	88	155	147
20-24	140	200	192
25-29	99	158	150
30-34	53	102	96
35-39	28	46	44
40-44	12	19	18
45-49	(0)	7	6
TFR 15-49	2.10	3.43	3.27
TFR 15-44	2.10	3.40	3.24
GFR	86	135	129
CBR	22.6	30.2	29.4

Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation. Rates in parentheses are based less than 250 woman-years of exposure.
TFR: Total fertility rate, expressed per woman
GFR: General fertility rate (births divided by number of women 15-44), expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population

3.2 Fertility Levels

Table 3.1 gives the reported age-specific fertility rates for the three-year period preceding the survey per 1,000 women.[1] The sum of the age-specific fertility rates (known as the total fertility rate) is a useful means of summarizing the level of fertility. It can be interpreted as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the currently observed age-specific rates. The general fertility rate represents the annual number of births in a

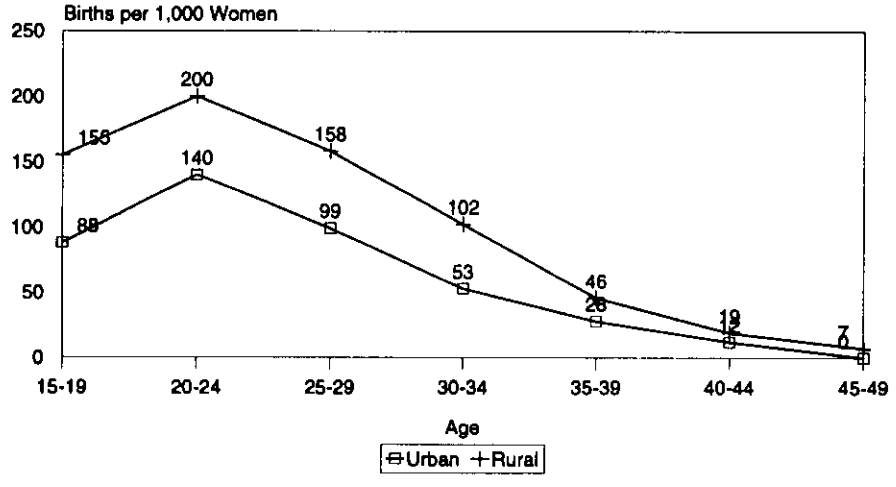
[1] Numerators of the age-specific fertility rates are calculated by summing the number of live births that occurred in the period 1-36 months preceding the survey (determined by the date of interview and the date of birth of the child), and classifying them by the age (in five-year groups) of the mother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

population per 1,000 women age 15-44. The crude birth rate is the annual number of births in a population per 1,000 people. Both these measures are calculated using the birth history data for the three-year period before the survey and the age and sex distribution of the household population.

The total fertility rate for the three years before the survey (approximately 1994 through 1996) is 3.3 children per woman. This represents a statistically insignificant decline in fertility over the 3-year period since the 1993-94 BDHS (see section 3.4). The age-specific rates indicate a pattern of early childbearing, with a peak at age group 20-24. Three-quarters of childbearing occurs before age 30. The crude birth rate for the whole country is 29 births per 1,000 population. This is unchanged from the level measured in the 1993-94 BDHS, but is somewhat higher than the rate of 27 reported both by the government's sample vital registration system for 1995 (BBS, 1997:144) and by the Health and Demographic Survey for 1995 (BBS, 1995:2).

Fertility is higher in rural areas than in urban areas (see Figure 3.1), a pattern that has persisted in various censuses and demographic surveys that have been carried out in Bangladesh (Huq and Cleland, 1990:106; Mitra et al., 1994:24). The difference is especially large at younger ages, which probably reflects longer education and later marriage of women in urban areas. The total fertility rate is estimated at 3.4 in rural areas and has more or less reached replacement level in urban areas (2.1).

Figure 3.1
Age-Specific Fertility Rates by Residence



BDHS 1996-97

3.3 Fertility Differentials

Table 3.2 and Figure 3.2 show differentials in fertility by administrative division of residence and education. Fertility is highest in Sylhet and Chittagong Divisions, with total fertility rates of 4.2 and 4.1 children per woman, respectively. Fertility is lowest in Khulna (2.5) and Rajshahi (2.8) Divisions. Barisal

and Dhaka Divisions have intermediate levels of fertility, with total fertility rates of 3.3 and 3.2 children per woman, respectively. This pattern is similar to that found in the 1993-94 BDHS.

Female education is strongly related to fertility levels. At current rates, women with no formal education would give birth to an average of 3.9 children in their lifetime, compared with 2.1 for women with at least some secondary education, a difference of 46 percent. Women with either incomplete primary or complete primary education have intermediate fertility rates between these two extremes.

One way of examining trends in fertility over time is to compare the total fertility rates for the three years preceding the survey with the average number of children ever born to women who are now at the end of their childbearing period, age 40-49. The former is a measure of current fertility, while the latter is a measure of past or completed fertility. The data in Table 3.2 indicate that there has been a decline of about three children over the past 10 to 20 years in Bangladesh, from 6.0 to 3.3 births per woman. The decline has occurred across all divisions and all education levels, although it has been greater for women in Khulna and Rajshahi Divisions where the current total fertility rates are less than half the average number of children ever born to women now in their 40s. Fertility declines have also been large among women in all education groups.

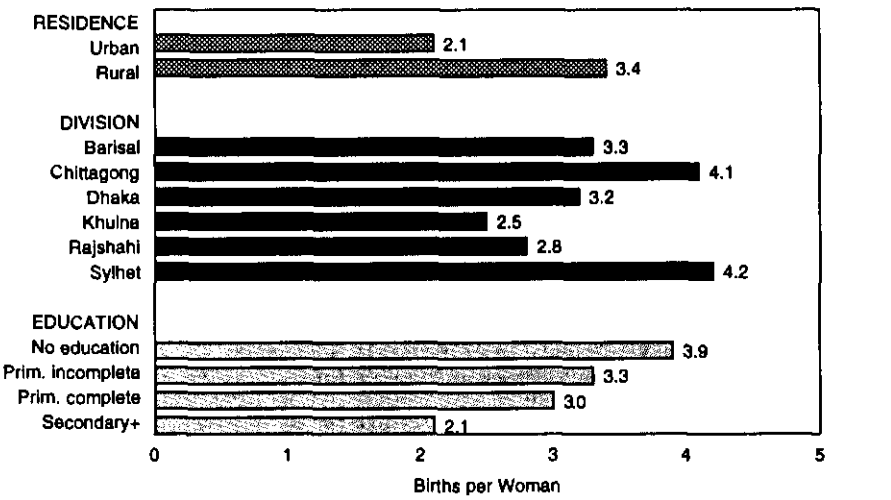
Table 3.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey and mean number of children ever born to women age 40-49, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Total fertility rate[1]	Mean number of children ever born to women age 40-49
Residence		
Urban	2.10	4.61
Rural	3.43	6.13
Division		
Barisal	3.31	5.81
Chittagong	4.06	6.58
Dhaka	3.18	5.77
Khulna	2.52	5.68
Rajshahi	2.78	5.73
Sylhet	4.20	6.40
Education		
No education	3.93	6.14
Primary incomplete	3.27	5.86
Primary complete	3.01	6.27
Secondary+	2.12	4.56
Total	3.27	5.97

[1] Women age 15-49 years

Figure 3.2
Total Fertility Rates by Selected Background Characteristics



BDHS 1996-97

3.4 Fertility Trends

Fertility in Bangladesh has declined extremely rapidly over the past 20 years, from 6.3 births per woman in the mid-1970s to 3.3 births for the period 1994-96 (Table 3.3 and Figure 3.3). This is truly an exceptionally steep decline. However, although few would deny that fertility has fallen rapidly, the various data sources show rather different pictures of fertility trends, especially when examined by calendar year (see Figure 3.4). The rates from the 1989 BFS and the 1991 CPS are generally consistent, while the data from the Bangladesh Bureau of Statistics' sample registration system are initially implausibly low and therefore show a more moderate decline over time. The rate of 3.4 from the 1993-94 BDHS (which is placed in 1992, the midpoint of the 3-year reference period) is considerably lower than rates from the other sources, while the rate from the 1996-97 BDHS (plotted at 1995) is more in line. Moreover, the total fertility rate for the period 1991-93 constructed from the retrospective birth histories in the 1996-97 BDHS data (3.8) is higher than the rate of 3.4 derived from the 1993-94 survey itself for the same period. This is a curious finding, given that a 1994 study appeared to validate the 1993-94 estimates of fertility.[2] Investigation of the age pattern of fertility shows no anomalies; the decline since the mid-1980s has been generally uniform over all age groups of women except those 45-49, for whom there has been no change (Figure 3.5).[3] However, data

Table 3.3 Trends in current fertility rates

Age-specific and total fertility rates, selected sources, Bangladesh, 1975 to 1996-97

	Survey and approximate time period				
	1975 BFS	1989 BFS	1991 CPS	1993-94 BDHS	1996-97 BDHS
Age group	1971-75	1984-88	1989-91	1991-93	1994-96
15-19	109	182	179	140	147
20-24	289	260	230	196	192
25-29	291	225	188	158	150
30-34	250	169	129	105	96
35-39	185	114	78	56	44
40-44	107	56	36	19	18
45-49	35	18	13	14	6
Total fertility rate	6.3	5.1	4.3	3.4	3.3

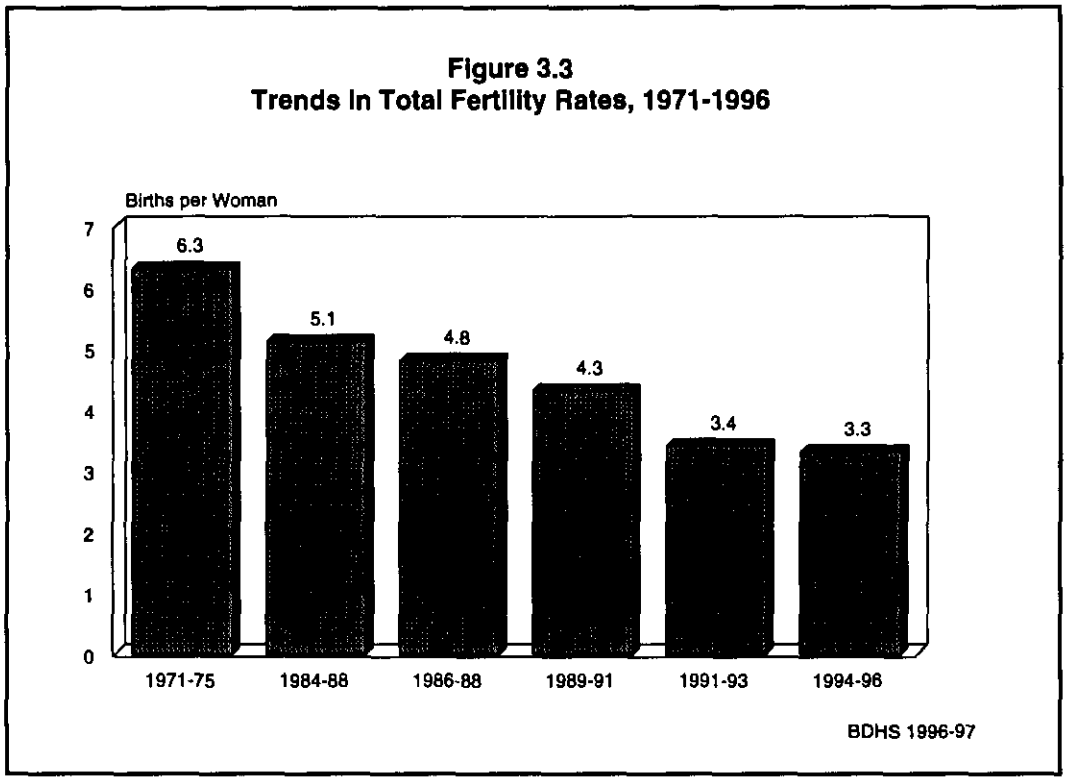
Note: For the 1975 and 1989 BFSs, the rates refer to the 5-year period preceding the survey; for the other surveys, the rates refer to the 3-year period preceding the survey. The two BFSs and BDHSs utilized full birth histories, while the 1991 CPS used an 8-year truncated birth history.

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

[2] The study was implemented in Matlab thana by the International Centre for Diarrhoeal Disease Research, Bangladesh (Bairagi, et al., 1995). The study involved conducting a BDHS-type survey in a sample of about 3,000 households. The data were then compared with those from the ICDDR, B continuous surveillance system. The fact that the fertility rates from the two sources were almost identical lent support to the BDHS fertility data.

[3] Because the surveys were based on ever-married women only and weights were used to inflate results to reflect fertility rates for all women, data for the youngest age group (15-19) are particularly unstable due to fluctuations of the weighting factors. This may account for the inconsistent trend in fertility rates for this age group.

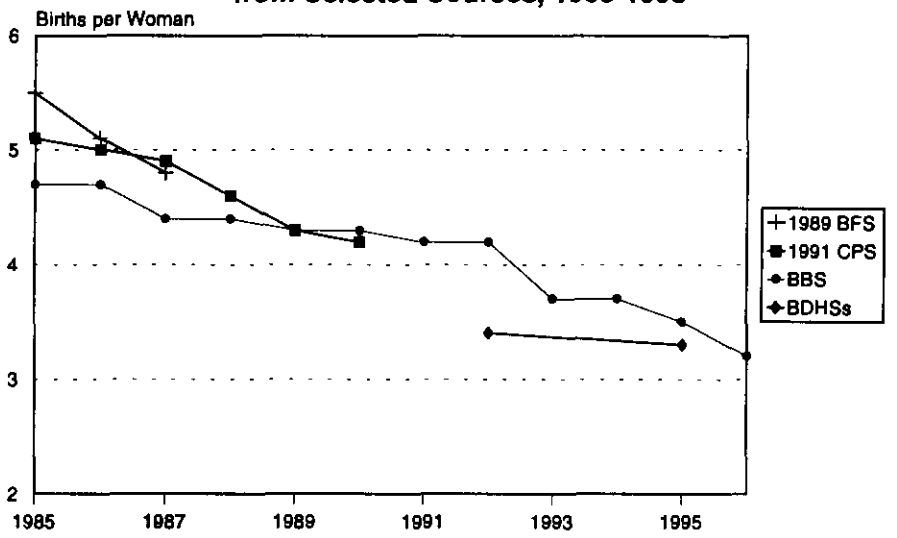
from the 1996 Health and Demographic Survey conducted by the Bangladesh Bureau of Statistics show a very different age pattern of fertility, having much lower rates for younger women and much higher rates for older women (BBS, 1997b:20).



Another source of fertility data comes from ICDDR,B's surveillance system in Matlab thana. Unlike survey data, the data are collected in a surveillance system in which women are interviewed by field workers every two weeks. Thus, the data are less likely than survey data to suffer from recall error or problems in remembering or reporting dates. The demographic surveillance system covers a population of approximately 100,000 each in a "treatment" area, in which an intensive maternal and child health and family planning program has been in effect and a "comparison" area in which the residents receive the normal government and private health care (ICDDR,B, 1994:2). Although data from Matlab are not nationally representative and therefore not comparable to data from the other sources, they do provide evidence of the unprecedented decline in fertility that has taken place in Bangladesh. Estimates for 1995 put the total fertility rate at 3.0 for the treatment area and 3.6 for the comparison area, down from 3.4 and 5.0 prevailing in 1990 (Mostafa, et al., 1996:40).

Results show that the recent declines in fertility have occurred throughout the country. Because of changes in division boundaries, it is necessary to recalculate fertility rates for the former four divisions of the country. Table 3.4 and Figure 3.6 show that all divisions in Bangladesh experienced recent declines in fertility of similar magnitude. Although Chittagong/Sylhet Division had the highest fertility in the mid-1980s and still does today, the rate of decline in fertility is almost identical with that of the other divisions.

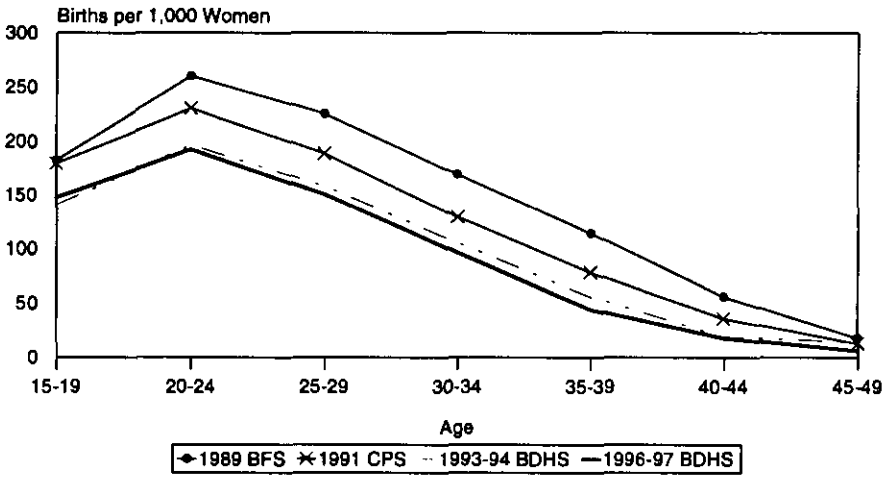
Figure 3.4
Trends in Total Fertility Rates by Calendar Year from Selected Sources, 1985-1995



Note: Rates are based on 3-year moving averages, except BDHS rates which refer to a 3-year reference period and BBS data for 1994-96 which are from the Health and Demographic Surveys.

BDHS 1996-97

Figure 3.5
Age-Specific Fertility Rates 1989, 1991, 1993-94 and 1996-97



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

BDHS 1996-97

Table 3.4 Trends in fertility by division

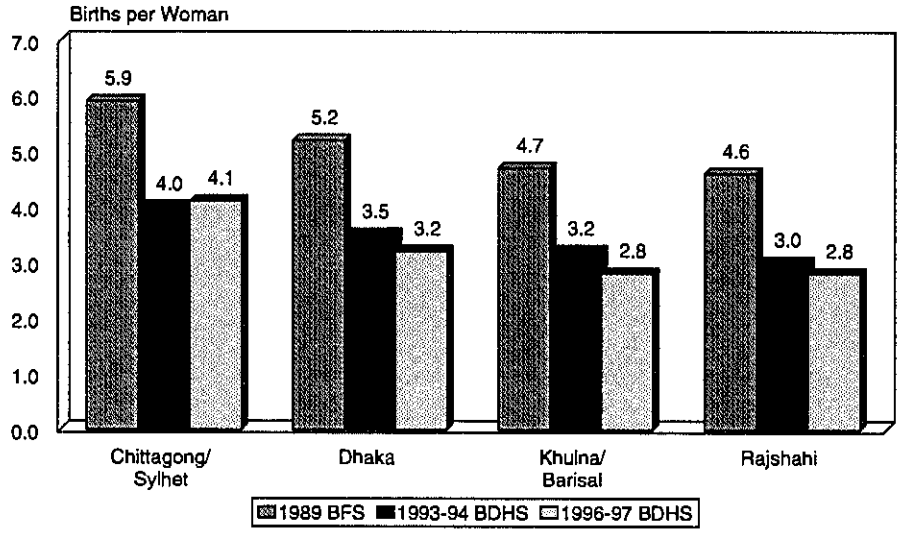
Total fertility rates by division and percent change from the period 1984-88 to 1994-96, Bangladesh, 1989 BFS, 1993-94 BDHS, and 1996-97 BDHS

Division	1989 BFS 1984-88	1993-94 BDHS 1991-93	1996-97 BDHS 1994-96	Percent change 1984-96
Chittagong[1]	5.94	3.95	4.10	-31
Dhaka	5.18	3.45	3.18	-39
Khulna[1]	4.71	3.20	2.80	-41
Rajshahi	4.60	3.03	2.78	-40

Note: Rates for the 1989 BFS refer to the 5-year period preceding the survey, while those for the BDHSs refer to the 3-year period preceding the surveys. Rates are calculated for women age 15-49.
[1] Refers to the former boundaries prior to the creation of Barisal and Sylhet Divisions.

Source: Huq and Cleland, 1990:106; Mitra et al, 1994:30

Figure 3.6
Trends in Fertility by Division



BDHS 1996-97

Table 3.5 Percent pregnant

Percentage of currently married women who were pregnant at the time of interview, by age group, selected sources, Bangladesh, 1975-1997

Age group	1975 BFS	1989 BFS	1991 CPS	1993-94 BDHS	1996-97 BDHS
15-19	15.2[a]	14.7[a]	19.6	17.1	14.7
20-24	15.5	13.3	16.2	13.0	10.3
25-29	14.9	10.4	11.2	9.0	8.9
30-34	11.2	8.3	7.1	7.0	5.1
35-39	10.7	4.8	4.2	2.7	3.4
40-44	U	U	1.5	0.8	1.3
45-49	U	U	0.2	0.0	0.0
Total	12.5	9.3	10.7	8.7	7.7

U = Unknown (not available)
[a] Currently married women less than 20 years

Source: 1975 BFS and 1989 BFS (Cleland et al., 1994:21); 1991 CPS (Mitra et al., 1993:39)

Table 3.5 shows trends in the proportion of currently married women who reported that they were pregnant at the time of the survey, according to age group. Reports on current pregnancy are almost surely underestimates, since many women may be pregnant but not yet aware of their status. However, the data are useful because, while fertility rates depend to some extent on accurate reporting of dates of events, the proportion pregnant is a "current status" indicator. Change over time in the percentage pregnant is an independent indicator of fertility change. In Bangladesh, the proportion pregnant has generally declined over time, although not in a steady fashion. In the 1975 BFS, 13 percent of currently married women reported themselves as pregnant at the time of the survey. By 1989, this proportion had declined to 9 percent; it then increased to 11 percent in 1991, again declined to 9 percent in the 1993-94 BDHS and then to 8 percent in 1996-97. Although it is entirely possible that such fluctuations are real, misreporting may also be a factor.

Table 3.6 provides further insights into the fertility decline discussed above. The table gives the age-specific fertility rates for five-year periods preceding the survey, using data from respondents' birth histories.

Table 3.6 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by women's age at the time of birth, Bangladesh 1996-97

Woman's age at birth	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
15-19	157	211	243	246
20-24	198	255	287	291
25-29	153	218	251	272
30-34	101	151	193	[246]
35-39	53	100	[167]	-
40-44	20	[70]	-	-
45-49	[7]	-	-	

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

Figures in brackets represent partial fertility rates due to truncation; women 50 years of age and older were not included in the survey and the further back into time rates are calculated, the more severe is the truncation. For example, rates cannot be calculated for women age 45-49 for the period 5-9 years before the survey because those women would have been over age 50 at the time of the survey and thus were not interviewed. The data show generally declining fertility experienced by women in most age groups during the last two decades. The decline from the period 5-9 to 0-4 years before the survey was much larger than the decline from 10-14 to 5-9 years before the survey, implying that the fertility decline has increased substantially in recent years. However, trends in fertility rates calculated from retrospective birth histories must be viewed with caution, since they may suffer from errors due to age and date misreporting.

Table 3.7 presents fertility rates for ever-married women by duration (years) since first marriage for five-year periods preceding the survey. It is analogous to Table 3.6, but is confined to ever-married women and replaces age with duration since first marriage. The data show that the decline in fertility is apparent for all marriage durations in the two decades preceding the survey, with the exception of those married 0-4 years. This pattern implies that fertility control tends to be practiced later in marriage and that newly married couples continue to have children at more or less the same rate as before.

Table 3.7 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 1996-97

Marriage duration	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
0-4	255	262	260	234
5-9	226	278	300	306
10-14	158	220	257	279
15-19	111	175	213	[253]
20-24	66	119	[185]	-
25-29	31	[85]	-	-

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

3.5 Children Ever Born

The distribution of all women and currently married women by age and number of children ever born is presented in Table 3.8. The table also shows the mean number of children ever born to women in each five-year age group, an indicator of the momentum of childbearing. The data indicate that almost one-third (31 percent) of all women age 15-19 years have given birth.

On average, women have given birth to three children by their late 20s and over six children by the end of their childbearing years. 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.

Table 3.8 Children ever born and living

Percent distribution of all women and of currently married women age 15-49 by number of children ever born (CEB) and mean number ever born and living, according to five-year age groups, Bangladesh 1996-97

Age group	Number of children ever born (CEB)											Total	Number of women	Mean no. of CEB	Mean no. of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	69.0	24.1	6.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,592	0.39	0.35
20-24	27.6	24.1	28.4	14.3	4.6	0.9	0.1	0.0	0.0	0.0	0.0	100.0	2,087	1.47	1.29
25-29	8.0	12.2	25.0	24.8	16.8	7.7	3.5	1.5	0.4	0.1	0.0	100.0	1,973	2.78	2.40
30-34	2.4	5.5	15.6	19.4	22.6	14.6	11.2	5.5	2.1	0.8	0.3	100.0	1,409	3.91	3.28
35-39	1.9	3.5	9.7	15.4	15.5	17.5	13.3	10.1	7.9	2.8	2.3	100.0	1,129	4.82	3.95
40-44	1.9	3.1	5.4	10.3	15.1	13.0	14.8	13.9	9.0	7.1	6.5	100.0	861	5.60	4.48
45-49	1.3	1.6	3.7	6.3	8.7	14.3	16.3	14.3	11.7	10.3	11.5	100.0	658	6.44	5.07
Total	24.3	14.2	15.4	12.9	10.4	7.3	5.7	4.1	2.6	1.6	1.5	100.0	10,707	2.76	2.30
CURRENTLY MARRIED WOMEN															
15-19	37.5	48.3	12.9	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,252	0.78	0.70
20-24	11.9	28.5	34.8	17.8	5.7	1.1	0.1	0.0	0.1	0.0	0.0	100.0	1,655	1.81	1.59
25-29	3.9	11.5	26.0	26.2	18.1	8.4	3.7	1.6	0.4	0.1	0.0	100.0	1,812	2.94	2.55
30-34	1.3	4.3	14.5	19.6	23.8	15.6	11.6	5.7	2.2	0.9	0.3	100.0	1,297	4.05	3.40
35-39	1.3	2.6	8.8	15.4	15.9	18.5	12.9	10.7	8.5	3.0	2.4	100.0	1,031	4.96	4.07
40-44	1.7	2.3	4.4	8.5	15.6	13.0	14.8	14.6	10.1	7.6	7.4	100.0	740	5.82	4.68
45-49	0.9	1.4	3.1	5.8	7.7	14.5	15.8	15.0	12.6	10.2	12.9	100.0	520	6.63	5.22
Total	9.5	16.8	18.5	15.5	12.7	8.8	6.6	4.8	3.2	1.8	1.8	100.0	8,307	3.30	2.76

The percentage of women in their 40s who have never had children provides an indicator of the level of *primary infertility*—the proportion of women who are unable to bear children at all. Since voluntary childlessness is rare in Bangladesh, it is likely that married women with no births are unable to bear children. The BDHS results suggest that primary infertility is low, less than 2 percent. It should be noted that this estimate of primary infertility does not include women who may have had one or more births but who are unable to have more (*secondary infertility*).

A comparison of the mean number of children ever born reported in the 1996-97 BDHS and various other surveys is presented in Table 3.9. The comparison does not highlight recent changes in fertility, but

Table 3.9 Trends in children ever born

Mean number of children ever born by age group, selected sources, Bangladesh, 1975-1996

Age group	1975 BFS	1981 CPS	1983 CPS	1985 CPS	1989 BFS	1989 CPS	1991 CPS	1993-94 BDHS	1996-97 BDHS
15-19	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.3	0.4
20-24	2.3	2.0	2.2	2.0	1.7	1.8	1.7	1.6	1.5
25-29	4.2	3.7	3.8	3.6	3.1	3.3	3.2	2.9	2.8
30-34	5.7	5.4	5.5	5.1	4.7	4.7	4.5	4.1	3.9
35-39	6.7	6.4	6.5	6.5	5.9	5.9	5.7	5.2	4.8
40-44	7.1	7.3	7.4	7.4	6.6	7.0	6.7	6.4	5.6
45-49	6.7	7.6	7.5	7.2	7.3	7.5	7.4	6.9	6.4
Total	U	U	U	U	U	U	3.5	3.0	2.8

U = Unknown (not available)

Source: 1983 and 1985 CPSs (Kantner and Frankenberg, 1988:21); 1991 CPS (Mitra et al., 1993:31); 1993-94 BDHS (Mitra et al., 1994:33); all others (Cleland et al., 1994:11)

rather is an indication of the cumulative changes in fertility over the decades prior to the surveys. Despite the fluctuations between surveys, the data generally show only modest declines until the mid-1980s. Between 1985 and 1989, the decline in mean number of children ever born was substantial in all but the youngest and oldest age groups. Although there was then little change between 1989 and 1991, the rates again decline considerably between 1991 and 1993-94, especially among women age 25 and above and show further decline between 1993-94 and 1996-97 at all ages except 15-19.

3.6 Birth Intervals

Information on birth intervals provides insight into birth-spacing patterns which have far-reaching impact on both fertility and child mortality levels. Research has shown that children born too soon after a previous birth are at increased risk of dying at an early age. Table 3.10 shows the percent distribution of non-first births that occurred in the five years before the BDHS by the number of months since the previous birth.

The data show that birth intervals are generally long in Bangladesh. Over half (52 percent) of non-first births occur three or more years after the previous birth, while almost one-third take place 24-35 months after the previous birth. Fewer than 1 in 5 births occurs after an interval of less than 24 months. The median birth interval is 37 months. This is slightly longer than the median birth interval of 35 months reported in the 1993-94 BDHS (Mitra et al., 1994:34).

As expected, younger women have shorter birth intervals than older women, presumably because they are more fecund and want to build their families. The median birth interval for women age 15-19 is 25 months, compared with 44 months for women over age 40. A shorter median interval also prevails for children whose preceding sibling has died, compared with those whose prior sibling is alive. This pattern presumably reflects a shortened breastfeeding period due to the death of the prior sibling, as well as minimal use of contraceptives.

3.7 Age at First Birth

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

Table 3.11 presents the percent distribution of women by age at first birth according to current age.[4] For women age 20 and over, the median age at first birth is presented in the last column of the table. Childbearing begins early in Bangladesh, with the large majority of women becoming mothers before they reach the age of 20. The median age at first birth is between 17 and 18. The data show that the median age at first birth has increased slightly from around 17 for older women to around 18 for women in their early 20s. This slight change to later age at first birth is reflected in the smaller proportion of younger women whose first births occurred before age 15; about 20 percent of women in their 40s report having had their first birth before age 15, compared with only 9 percent of women age 15-19.

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

Table 3.10 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since previous birth, according to demographic and socioeconomic characteristics, Bangladesh 1996-97

Characteristic	Number of months since previous birth					Total	Median number of months since previous birth	Number of births
	7-17	18-23	24-35	36-47	48+			
Age of mother								
15-19	23.3	19.9	36.7	13.3	6.8	100.0	25.3	194
20-29	6.8	11.3	31.6	24.2	26.0	100.0	36.1	2,857
30-39	5.9	8.1	26.9	22.8	36.3	100.0	40.0	1,287
40 +	4.1	6.4	27.5	18.7	43.3	100.0	44.4	212
Birth order								
2-3	6.6	10.4	28.1	23.5	31.4	100.0	37.8	2,456
4-6	7.3	10.3	31.9	22.6	27.9	100.0	36.1	1,541
7 +	9.3	11.6	35.7	22.9	20.4	100.0	33.4	553
Sex of prior birth								
Male	6.8	10.6	29.2	23.7	29.6	100.0	37.1	2,231
Female	7.5	10.5	31.4	22.5	28.2	100.0	36.2	2,319
Survival of prior birth								
Living	4.8	9.3	30.2	24.5	31.2	100.0	37.9	3,876
Dead	20.3	17.5	31.2	15.4	15.5	100.0	26.8	675
Residence								
Urban	8.6	8.2	20.2	19.4	43.6	100.0	43.2	356
Rural	7.0	10.8	31.2	23.4	27.6	100.0	36.3	4,194
Division								
Barisal	5.8	10.2	30.5	22.6	30.9	100.0	36.7	298
Chittagong	7.5	10.6	36.8	22.4	22.6	100.0	34.4	1,174
Dhaka	6.8	9.8	28.3	23.4	31.7	100.0	37.7	1,387
Khulna	6.9	11.7	25.7	20.6	35.1	100.0	38.8	406
Rajshahi	6.7	10.2	27.3	23.4	32.4	100.0	38.1	943
Sylhet	9.8	13.3	29.7	27.1	20.0	100.0	35.1	341
Education								
No education	7.5	10.3	32.2	23.4	26.6	100.0	36.0	2,874
Primary incomplete	6.7	11.9	28.3	23.5	29.6	100.0	37.1	752
Primary complete	6.4	11.3	28.9	21.9	31.4	100.0	37.3	402
Secondary+	6.6	9.6	23.8	21.8	38.2	100.0	41.3	522
Total	7.1	10.6	30.3	23.1	28.9	100.0	36.6	4,550

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

Comparisons with data from other sources confirm that the age at which women in Bangladesh have their first child has increased steadily over time, in line with increases in age at marriage, with the exception of the past few years. For example, in 1975, the median age at first birth among women age 20-24 was 16.8; in 1989, it had risen to 18.0 and by 1996-97, to 18.4 (Huq and Cleland, 1990:92). However, comparison of data from the 1993-94 and 1996-97 BDHSs shows a slight decline in the overall median age at first birth among women age 20-49, from 17.7 to 17.4. This may signal a plateau in the trend towards later age at first birth.

Table 3.11 Age at first birth

Percent distribution of women 15-49 by age at first birth, according to current age, Bangladesh 1996-97

Current age	Women with no births	Age at first birth <15	15-17	18-19	20-21	22-24	25+	Total	Number of women	Median age at first birth
15-19	69.0	9.2	18.9	3.0	NA	NA	NA	100.0	2,592	a
20-24	27.6	14.7	31.8	16.8	6.5	2.6	NA	100.0	2,087	18.4
25-29	8.0	16.0	41.0	17.8	8.9	6.3	2.0	100.0	1,973	17.4
30-34	2.4	15.9	45.7	17.1	8.5	6.5	3.9	100.0	1,409	17.2
35-39	1.9	19.3	39.9	18.3	8.4	7.3	4.8	100.0	1,129	17.3
40-44	1.9	20.9	48.5	14.7	6.0	5.2	2.8	100.0	861	16.6
45-49	1.3	18.7	45.6	18.4	8.6	4.3	3.0	100.0	658	16.9

NA = Not applicable
[a] Omitted because less than 50 percent of the women in the age group *x* to *x+4* have had a birth by age *x*

Differentials in median age at first birth as reported in the 1996-97 BDHS are shown in Table 3.12. Urban women start childbearing later than rural women; the median age at first birth is 18.9 for urban women and 17.2 for rural women age 20-49. Women in Sylhet Division consistently have higher median ages at first birth than women in the other divisions, while women in Rajshahi Division generally have the lowest median ages at first birth. Women with secondary education start child-bearing later than those with less or no education. Among women age 25-49, the median age at first birth is 16.8 for women with no education and 19.3 for women with at least some secondary education.

Table 3.12 Median age at first birth

Median age at first birth among women age 20-49 years, by current age and selected background characteristics, Bangladesh 1996-97

Background characteristic	Current age 20-24	25-29	30-34	35-39	40-44	45-49	Ages 20-49	Ages 25-49
Residence								
Urban	23.6	18.6	17.9	18.3	17.5	19.0	18.9	18.2
Rural	18.1	17.3	17.1	17.2	16.5	16.8	17.2	17.0
Division								
Barisal	18.4	17.3	17.3	17.7	16.7	17.9	17.5	17.3
Chittagong	19.4	17.9	17.6	17.3	17.3	17.4	17.9	17.6
Dhaka	18.5	17.3	17.2	16.9	16.8	16.9	17.4	17.1
Khulna	18.4	17.4	17.0	17.2	16.1	16.2	17.2	16.9
Rajshahi	17.0	16.8	16.7	17.4	15.8	16.2	16.7	16.7
Sylhet	a	19.6	18.3	17.9	17.4	18.2	18.9	18.4
Education								
No education	17.0	16.8	16.9	16.9	16.6	16.7	16.8	16.8
Primary incomplete	17.0	16.8	16.9	17.0	16.0	17.1	16.9	16.8
Primary complete	18.2	17.7	17.4	17.4	16.2	17.6	17.5	17.3
Secondary+	a	20.3	19.0	19.0	18.2	18.6	a	19.3
Total	18.4	17.4	17.2	17.3	16.6	16.9	17.4	17.2

Note: The medians for cohort 15-19 could not be determined because half the women have not yet had a birth.
[a] Medians were not calculated for these cohorts because less than 50 percent of women in the age group *x* to *x+4* had a birth by age *x*.

3.8 Teenage Fertility

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

Table 3.13 Adolescent pregnancy and motherhood

Percentage of women 15-19 who are mothers or pregnant with their first child, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Percentage who are: Mothers	Pregnant with first child	Percentage who have begun child-bearing	Number of women
Age				
15	8.5	5.5	14.1	540
16	23.5	5.2	28.7	635
17	32.6	3.7	36.4	478
18	43.2	4.7	48.0	525
19	54.6	3.1	57.7	414
Residence				
Urban	20.3	4.5	24.8	329
Rural	32.2	4.5	36.7	2,291
Division				
Barisal	28.4	5.1	33.5	185
Chittagong	27.4	3.8	31.1	599
Dhaka	31.7	3.6	35.3	769
Khulna	30.9	5.2	36.1	296
Rajshahi	37.9	5.9	43.8	598
Sylhet	18.6	5.5	24.1	140
Education				
No education	48.2	5.8	54.0	767
Primary incomplete	33.7	5.2	38.8	494
Primary complete	35.8	3.7	39.5	317
Secondary+	15.1	3.6	18.7	1,024
Total	31.0	4.6	35.6	2,592

Table 3.13 shows the percentage of teenagers age 15-19 who are mothers or pregnant with their first child, according to various background characteristics. Thirty-one percent of teenage women in Bangladesh are mothers and another 5 percent are pregnant with their first child. Thus, 36 percent of teenage women have begun childbearing. There has been a slight increase in this proportion since the 1993-94 BDHS, which indicated that 33 percent of women age 15-19 had begun childbearing (27 percent had delivered a child and 6 percent were pregnant with their first child) (Mitra et al., 1994:37). While this trend may signal an increase in early childbearing, the differences are not large and they are highly dependent on the sensitive inflation factors used to estimate the total number of women (see Footnote 1).

As expected, the proportion of women who have begun childbearing rises rapidly with age, from 14 percent of those age 15 to 58 percent of those age 19 (see Table 3.13). Those residing in rural areas and especially those residing in Rajshahi Division are also more likely than others to have begun childbearing, while girls in Sylhet Division are the least likely to have started childbearing. Education is strongly related to early childbearing. Girls with no education are far more likely to have begun childbearing than those with primary and especially those with some secondary education.

CHAPTER 4

FERTILITY REGULATION

4.1 Knowledge of Contraception

In the BDHS, knowledge of contraceptive methods was assessed through a series of questions combining spontaneous recall and prompting procedures. Female and male respondents were first asked to name the ways or methods by which a couple could delay or avoid pregnancy. Interviewers then asked about specific methods not mentioned spontaneously by the respondent. The ability to name or recognize the name of a family planning method is a nominal test of respondents' knowledge and not a measure of how much they might know about the method. However, knowledge of specific methods is a precondition for their use.

In the 1996-97 BDHS, information was sought about seven modern methods—the pill, IUD, injection, Norplant, condom, and female and male sterilization—as well as two traditional methods, periodic abstinence (safe period or rhythm method) and withdrawal. Other methods mentioned by the respondent, such as herbs or breastfeeding, were also recorded. It should be noted that information about Norplant was not sought in the 1993-94 BDHS.

Table 4.1 shows the percentage of ever-married women, currently married women and currently married men who have heard about specific methods of family planning. Although the data are given separately for ever-married and currently married women, ever-married women are not included in the discussion of knowledge of family planning methods because there is virtually no difference in the proportion knowing a method between ever-married and currently married women.

Table 4.1 Knowledge of contraceptive methods

Percentage of ever-married and currently married women and of currently married men who know any contraceptive methods, by specific methods, Bangladesh 1996-97

Contraceptive method	Ever-married women	Currently married women	Currently married men
Any method	100.0	100.0	99.9
Any modern method	100.0	100.0	99.8
Pill	99.9	99.9	99.7
IUD	91.4	91.8	68.1
Injectables	98.0	98.2	92.7
Condom	91.0	91.6	97.1
Female sterilization	98.9	98.9	98.5
Male sterilization	83.4	83.8	90.0
Norplant	26.5	27.0	13.7
Any traditional method	76.6	77.4	79.8
Periodic abstinence	68.2	68.9	70.4
Withdrawal	49.8	50.9	49.2
Other	9.9	10.2	9.2
Number of women/men	9,127	8,450	3,312
Mean number of methods	8.0	8.0	7.4

Knowledge of at least one family planning method is universal among married Bangladeshi women and men. More importantly, virtually all respondents who know at least one method know a modern method. Traditional methods are considerably less widely known than modern methods, probably because traditional methods are not included in the organized family planning program efforts. In addition, learning of these methods through informal channels is not easy in a society like that in Bangladesh where matters relating to sex are not freely discussed.

With regard to knowledge of specific methods, virtually all currently married women have heard about the pill, injectables, and female sterilization and 92 percent know about the IUD and condom. Other methods recognized by at least half of all currently married women are male sterilization (84 percent), periodic abstinence (safe period or calendar rhythm —69 percent), and withdrawal (51 percent). Only about 1 in 4 currently married women has heard of Norplant. Ten percent of women mentioned methods that were not on the list, mostly traditional methods like ayurvedic methods, plants and herbs.

As among currently married women, the pill and female sterilization are universally known among currently married men. There is also virtually no difference between currently married women and men in knowledge of periodic abstinence and withdrawal. However, for the remaining methods, men are less likely to know about female methods, such as the IUD, injectables, and Norplant, while they are more likely to have heard about male methods, namely, condoms and male sterilization. For example, only 68 percent of currently married men have heard about the IUD, compared with 92 percent of currently married women and the proportion knowing condoms was higher for men (97 percent) than for women (92 percent).

Trends in Knowledge of Family Planning Methods

Trends in knowledge of family planning methods are shown in Table 4.2 in terms of the proportion of ever-married women who have heard of specific methods. The proportion of women of reproductive age who know of at least one family planning method has been extremely high in Bangladesh (99 percent) since the early 1980s. However, knowledge of specific methods has become more widespread since then. For example, the proportion of ever-married women who have heard of the IUD has more than doubled since 1983, from 42 to 91 percent in 1996-97. Knowledge of injectables and condoms also increased significantly over the same period. Although the largest increases in knowledge levels occurred between 1975 and 1983 for most modern methods, it is notable that awareness of all modern methods increased between 1993-94 and 1996-97. Knowledge of periodic abstinence and condoms increased the most between these two recent surveys.

The 1996-97 BDHS data confirm the findings of the 1993-94 BDHS, indicating that contraceptive knowledge is widespread among subgroups in the country. Knowledge of at least one method, particularly a modern method, is universal among both women and men in all age groups, in both urban and rural areas, in all the divisions and across all categories of educational attainment (data not shown). The high level of knowledge found in every subgroup indicates the success of program efforts to disseminate contraceptive information to all eligible couples. However, there is still scope to increase the amount of information that is known about specific methods of contraception.

Table 4.3 shows the correspondence in knowledge of family planning methods between husbands and wives interviewed in the 1996-97 BDHS. Generally, there is a high degree of correspondence between spouses; if one partner knows a method, the other is likely to know it as well, or, if one partner does not know a method, the other is also likely not to know it. However, there is less consistency for female methods such as the IUD, Norplant, and periodic abstinence, and for male methods such as condoms and male sterilization; wives are generally more likely to know the female methods than their husbands, while husbands are more likely to know the male methods than their wives.

Table 4.2 Trends in knowledge of family planning methods

Percentage of ever-married women age 10-49 who know specific family planning methods, selected sources, Bangladesh, 1975-1996

Method	1975 BFS	1983 CPS	1985 CPS	1989 CPS	1989 BFS[1]	1991 CPS	1993-94 BDHS	1996-97 BDHS
Any method	81.8	98.6	99.6	99.9	100.0	99.9	99.7	100.0
Any modern method	80.0	98.4	99.5	99.9	99.0	99.8	99.7	100.0
Pill	63.9	94.1	98.6	99.0	99.0	99.7	99.5	99.9
IUD	40.1	41.6	65.4	80.4	78.0	88.9	89.4	91.4
Injectables	U	61.8	74.1	87.5	81.0	95.2	96.3	98.0
Vaginal methods	10.0	19.4	26.3	25.8	24.0	U	U	U
Condom	21.1	59.0	75.5	76.9	83.0	85.6	86.6	91.0
Female sterilization	53.1	95.5	97.8	99.2	98.0	99.4	98.8	98.9
Male sterilization	51.4	72.9	84.3	84.0	87.0	87.4	82.9	83.4
Any traditional method	49.0	54.8	62.8	71.7	U	83.3	75.0	76.6
Periodic abstinence	28.0	26.4	41.2	40.1	46.0	68.0	64.0	68.2
Withdrawal	15.1	19.8	20.8	14.4	30.0	48.6	49.0	49.8
Number of women	6,515	8,523	8,541	10,293	11,907	10,573	9,640	9,127

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

Source: 1975 BFS (MHPC, 1978:A245 and Vaessen, 1980:16); 1983 CPS (Mitra and Kamal, 1985:85, 89); 1985 CPS (Mitra, 1987:67, 70); 1989 CPS (Mitra et al., 1990:81, 84); 1989 BFS (Huq and Cleland, 1990:60); 1991 CPS (Mitra et al., 1993:42); 1993-94 BDHS (Mitra et al., 1994:40)

Table 4.3 Knowledge of contraceptive methods among couples

Percent distribution of couples by contraceptive knowledge, according to specific methods, Bangladesh 1996-97

Contraceptive method	Both know method	Only husband knows method	Only wife knows method	Neither knows method	Total
Any method	99.9	0.0	0.1	0.0	100.0
Any modern method	99.8	0.0	0.2	0.0	100.0
Pill	99.6	0.1	0.3	0.0	100.0
IUD	65.4	3.4	27.1	4.2	100.0
Injectables	91.5	1.2	6.9	0.4	100.0
Condom	89.8	7.2	2.2	0.8	100.0
Female sterilization	97.6	0.9	1.5	0.0	100.0
Male sterilization	78.3	12.2	6.9	2.6	100.0
Norplant	6.3	7.5	21.6	64.7	100.0
Any traditional method	65.4	14.6	14.6	5.4	100.0
Periodic abstinence	52.0	18.4	19.7	9.9	100.0
Withdrawal	29.7	19.7	22.3	28.3	100.0
Other	2.4	6.9	8.1	82.6	100.0

Note: Figures are based on 3,028 couples.

4.2 Ever Use of Contraception

Both women and men interviewed in the 1996-97 BDHS who said that they had heard of a method of family planning were asked if they had ever used the method, that is, if they had used it at least once. Ever use of family planning methods thus refers to use of a method at any time without making a distinction between past and current use. Collection and analysis of ever use data has special significance for family planning programs. These data indicate the proportion of the population having exposure to contraceptive use at least once. Therefore, data on ever use indicate the success of programs in promoting use of family planning methods among eligible couples. In addition, data on ever use—together with data on current use—are valuable for studying couples who discontinue use.

Table 4.4 shows the percentage of ever-married women, currently married women and currently married men who have ever used specific family planning methods. The data for women are given by age group. Among ever-married women, almost 7 in 10 (69 percent) have ever used a method and nearly 6 in 10 (63 percent) have used a modern method, while only a quarter (23 percent) reported having ever used a traditional method. The pill has, as expected, by far the highest ever use rate, having been used by half (49 percent) of ever-married women. The next most common ever used methods are periodic abstinence (17 percent), injectables (16 percent) and condoms (15 percent), followed by withdrawal (10 percent), female

Table 4.4 Ever use of contraception

Percentage of ever-married and currently married women and currently married men who have ever used any contraceptive method, by specific method and age, Bangladesh 1996-97

		Modern method									Traditional method				
Age	Any method	Any modern method	Pill	IUD	Inject-ables	Condom	Female sterili-zation	Male sterili-zation	Nor-plant	Menstrual regu-lation	Any trad. method	Periodic abstin-ence	With-drawal	Other method	Number of respon-dents
EVER-MARRIED WOMEN															
10-14	24.5	18.7	12.7	0.4	0.7	7.5	0.0	0.0	0.0	0.0	9.6	7.3	6.3	0.8	145
15-19	52.9	46.9	38.7	1.6	6.9	14.0	0.1	0.1	0.2	1.5	14.8	9.7	7.6	0.6	1,301
20-24	68.6	62.3	53.2	4.9	15.3	16.1	1.6	0.4	0.2	2.1	19.9	13.4	9.5	1.0	1,727
25-29	78.0	73.0	60.3	9.0	21.0	18.5	4.5	1.0	0.2	4.9	24.2	17.2	11.4	2.4	1,905
30-34	81.9	76.9	61.7	11.2	22.2	19.2	10.7	0.9	0.5	5.3	28.6	20.8	11.4	3.2	1,402
35-39	76.4	70.0	49.4	9.8	19.1	14.2	15.4	1.9	0.0	4.5	29.8	23.0	9.4	4.8	1,128
40-44	67.3	60.5	37.8	5.7	13.1	9.2	18.0	3.3	0.0	2.9	25.1	19.0	8.7	4.2	861
45-49	50.3	39.4	19.9	4.7	5.8	5.3	14.9	2.6	0.0	1.6	21.3	17.3	5.7	1.9	658
Total	69.2	63.0	48.9	6.9	15.7	15.0	7.6	1.2	0.2	3.4	23.0	16.7	9.5	2.4	9,127
CURRENTLY MARRIED WOMEN															
10-14	24.7	18.9	12.8	0.4	0.7	7.5	0.0	0.0	0.0	0.0	9.7	7.4	6.3	0.8	143
15-19	54.4	48.2	39.8	1.7	7.2	14.4	0.0	0.1	0.2	1.6	15.3	10.1	7.8	0.7	1,252
20-24	70.2	63.9	54.5	5.1	15.7	16.8	1.7	0.4	0.2	2.2	20.4	13.7	9.8	1.0	1,655
25-29	79.9	74.7	62.0	9.4	22.0	18.9	4.5	1.0	0.2	5.1	24.8	17.6	11.6	2.5	1,812
30-34	85.5	80.7	65.1	11.9	23.8	20.4	11.1	0.8	0.5	5.7	29.9	21.7	12.1	3.5	1,297
35-39	80.4	74.0	52.4	10.3	20.0	15.2	15.9	2.0	0.0	4.8	31.1	23.9	9.7	5.2	1,031
40-44	73.8	66.8	42.2	6.5	15.1	10.4	19.0	3.6	0.0	3.2	27.7	20.9	9.3	4.6	740
45-49	55.9	44.6	22.7	5.9	6.7	5.9	16.2	3.3	0.0	2.0	23.4	18.8	6.3	2.4	520
Total	72.2	66.0	51.5	7.3	16.7	15.9	7.6	1.2	0.2	3.6	24.0	17.3	9.9	2.6	8,450
CURRENTLY MARRIED MEN															
Total	81.3	73.5	59.9	7.5	15.8	30.1	8.1	1.6	0.1	4.8	39.5	33.6	11.0	2.8	3,312

sterilization (8 percent) and the IUD (7 percent). A negligible 1 percent report use of male sterilization and very few women report ever use of the newest method, Norplant. As expected, currently married women are more likely than ever-married women to say they have ever used a family planning method.

Ever use rates are higher among men than among women for every contraceptive method inquired about. Eighty-one percent of currently married men, compared with 72 percent of currently married women, report having ever used a method. Differences are strikingly large in the case of condom use; 30 percent of currently married men have ever used condoms, compared with only 16 percent for currently married women.

Ever use rates vary with age of women, being lowest among the youngest women. However, the fact that more than half (54 percent) of currently married women age 15-19 have used a contraceptive method at some time and nearly half (48 percent) have used a modern method indicates that women in Bangladesh have begun to understand the advantages of practicing family methods early in their reproductive careers. The level of ever use rises to a high of 86 percent for currently married women age 30-34, then declines to 56 percent among those age 45-49. Ever use of modern methods by age of women follows a similar pattern.

There has been a steady increase in the level of ever use of family planning over the past two decades in Bangladesh. In 1975, only 14 percent of ever-married women of reproductive age had ever used a family planning method, compared with 69 percent in 1996-97, a fivefold increase (Table 4.5). For modern methods, the increases have been even steeper, with ever use of the pill increasing the most rapidly. Ever use of both female and male sterilization, as well as of periodic abstinence and withdrawal appears to have either reached a plateau or declined in recent years.

Table 4.5 Trends in ever use of family planning methods

Percentage of ever-married women age 10-49 who have ever used specific family planning methods, selected sources, Bangladesh, 1975-1996

Method	1975 BFS	1983 CPS	1985 CPS	1989 CPS	1989 BFS[1]	1991 CPS	1993-94 BDHS	1996-97 BDHS
Any method	13.6	33.4	32.5	44.2	45.0	59.0	63.1	69.2
Any modern method	U	23.8	25.9	37.5	U	49.2	56.4	63.0
Pill	5.0	14.1	14.3	23.3	22.0	34.1	42.0	48.9
IUD	0.9	2.2	2.7	4.6	4.0	6.2	7.3	6.9
Injectables	U	1.2	1.3	2.8	2.0	6.6	11.0	15.7
Vaginal methods	0.5	2.2	1.6	2.4	1.0	2.9	U	U
Condom	4.8	7.1	5.7	9.3	6.0	13.4	13.9	15.0
Female sterilization	0.3	5.8	7.4	8.7	9.0	8.0	7.9	7.6
Male sterilization	0.4	1.4	1.6	1.6	1.0	1.4	1.4	1.2
Any traditional method	U	17.3	11.9	15.3	U	29.6	24.0	23.0
Periodic abstinence	4.5	11.0	7.8	9.7	13.0	21.5	16.5	16.7
Withdrawal	2.6	5.3	2.9	3.6	7.0	11.1	10.1	9.5
Number of women	6,515	8,523	8,541	10,293	11,907	10,573	9,640	9,127

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

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

4.3 Knowledge and Ever Use of Menstrual Regulation

Respondents in the 1996-97 BDHS were also asked if they knew about or had ever used menstrual regulation (MR). Results shown in Table 4.6 indicate that almost 4 in 5 ever-married and currently married women know about MR, in contrast to only half of currently married men. Ever use of the method is negligible, however, with only 3-4 percent of women and about 5 percent of men saying they had ever used MR. Levels of ever use are highest among respondents who are currently in their late 20s and 30s.

Table 4.6 Menstrual regulation

Percentage of ever-married and currently married women and of currently married men who know of menstrual regulation and the percentage who have ever used menstrual regulation by age group, Bangladesh 1996-97

Age group	Ever-married women	Currently married women	Currently married men
Know of menstrual regulation	78.2	78.9	52.1
Ever used menstrual regulation			
10-14	0.0	0.0	-
15-19	1.5	1.6	-
20-24	2.1	2.2	-
25-29	4.9	5.1	-
30-34	5.3	5.7	-
35-39	4.5	4.8	-
40-44	2.9	3.2	-
45-49	1.6	2.0	-
Total	3.4	3.6	4.8

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

4.4 Current Use of Contraception

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

Overall, 49 percent of currently married women are using a contraceptive method, with 42 percent using a modern method. Although modern methods account for 85 percent of overall use, there is still a substantial 8 percent of currently married women who rely on traditional methods. These figures are very similar to the contraceptive prevalence rate of 49 reported in the 1995 Health and Demographic Survey, which also recorded that 42 percent of married women were using modern methods (BBS, 1997b:23).

The most popular method by far is the pill, which is used by 21 percent of currently married women. Use of the pill accounts for 42 percent of all contraceptive use in Bangladesh. Other commonly used methods are female sterilization (8 percent), injectables (6 percent), periodic abstinence (5 percent), and condoms (4 percent). The IUD, male sterilization, and withdrawal are each used by less than 2 percent of currently married women.

Table 4.7 Current use of contraception

Percent distribution of currently married women and men by contraceptive method currently used, according to age, Bangladesh 1996-97

		Modern method								Traditional method							
Age	Any method	Any modern method	Pill	IUD	Inject-ables	Condom	Female sterili-zation	Male sterili-zation	Nor-plant	Menstrual regu-lation	Any trad. method	Periodic abstin-ence	With-drawal	Other method	Not currently using	Total	Number of respon-dents
CURRENTLY MARRIED WOMEN																	
10-14	15.6	9.1	4.8	0.0	0.3	3.9	0.0	0.0	0.0	0.0	6.5	3.5	2.3	0.8	84.4	100.0	143
15-19	32.9	27.8	17.9	1.0	4.4	4.3	0.0	0.1	0.2	0.0	5.0	3.2	1.7	0.1	67.1	100.0	1,252
20-24	43.1	37.6	24.2	1.5	6.4	3.2	1.7	0.4	0.2	0.0	5.5	3.0	2.0	0.4	56.9	100.0	1,655
25-29	52.5	46.0	25.2	2.4	8.5	4.3	4.5	1.0	0.2	0.0	6.5	3.9	1.8	0.7	47.5	100.0	1,812
30-34	63.1	54.0	26.9	2.4	7.8	5.2	11.1	0.5	0.1	0.0	9.0	6.0	2.2	0.8	36.9	100.0	1,297
35-39	63.9	51.9	20.8	1.9	7.1	4.1	15.9	1.9	0.0	0.1	11.9	9.2	1.6	1.1	36.1	100.0	1,031
40-44	54.7	42.7	12.1	1.4	3.9	2.8	19.0	3.5	0.0	0.0	12.0	8.0	1.9	2.2	45.3	100.0	740
45-49	35.1	27.6	3.8	1.2	1.7	1.6	16.2	3.0	0.0	0.0	7.5	4.9	1.6	1.0	64.9	100.0	520
Total	49.2	41.6	20.8	1.8	6.2	3.9	7.6	1.1	0.1	0.0	7.7	5.0	1.9	0.8	50.8	100.0	8,450
CURRENTLY MARRIED MEN																	
15-19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	100.0	23
20-24	42.6	33.5	20.1	1.6	4.3	6.9	0.0	0.0	0.6	0.0	9.1	7.5	1.1	0.5	57.4	100.0	194
25-29	48.5	38.3	24.7	1.8	6.8	4.8	0.0	0.2	0.0	0.0	10.2	8.3	1.6	0.3	51.5	100.0	487
30-34	59.3	50.4	31.0	1.8	6.3	7.0	3.5	0.7	0.0	0.0	8.9	7.4	0.9	0.6	40.7	100.0	620
35-39	63.1	54.0	30.0	1.1	8.9	6.1	7.1	0.7	0.0	0.0	9.1	6.7	1.6	0.9	36.9	100.0	621
40-44	70.2	56.7	26.4	2.6	9.0	6.5	10.9	1.3	0.0	0.0	13.5	10.5	1.3	1.6	29.8	100.0	492
45-49	69.1	56.6	25.2	1.5	7.9	6.7	13.3	1.8	0.0	0.0	12.5	8.8	1.9	1.9	30.9	100.0	371
50-54	65.4	47.8	11.5	2.0	4.3	3.1	19.5	7.4	0.0	0.0	17.7	12.1	3.1	2.5	34.6	100.0	272
55-59	46.2	35.2	6.4	1.2	5.2	1.5	17.4	3.4	0.0	0.0	11.0	9.0	0.6	1.4	53.8	100.0	231
Total	59.6	48.5	24.5	1.7	7.1	5.7	7.9	1.6	0.0	0.0	11.1	8.5	1.5	1.1	40.4	100.0	3,312

Note: An asterisk indicates fewer than 25 unweighted cases.

Men are more likely than women to report that they are currently using a family planning method—60 versus 49 percent among currently married men and women, respectively. Such a large discrepancy may be due to overreporting by men, either to appease the interviewer or because they were embarrassed to admit that they were not practicing family planning. It could also be due to underreporting by women who were using a family planning method but were too shy to report that they were. Although there is no clear basis to discard the information given by either women or men as unreliable, it seems that women are more likely to be the reliable reporters of contraceptive use as they are the actual users in most cases. Although men report higher use than women for all methods except withdrawal and the IUD, the largest differences are for the pill and periodic abstinence. The latter has been found in other DHS surveys and may be due to men's misunderstanding of the difference between periodic abstinence and abstinence for other reasons.

Contraceptive use varies considerably by age. Women are most likely to use contraception when they are in their 30s. Almost two-thirds of currently married women age 30-39 report they are currently using a family planning method. The drop in current use among older women may reflect their declining fecundity—whether real or perceived—while lower levels of use among younger women probably are due to an unwillingness to use a method until they have a certain number of children or a desired sex composition. However, it is impressive that 1 in 3 married women age 15-19 is using a method, providing clear evidence that younger women have begun to appreciate the advantages of deliberately controlling childbirth early in marriage. Since 1993-94, contraceptive use has increased much more rapidly among women 15-19 than others, by 33 percent, from 25 to 33 percent in the 1996-97 BDHS.

There are also variations by age in the methods that women use. The pill is by far the most popular method among married women under age 20 and among women in their 20s and 30s as well. Among women in their 20s, injectables are the second most popular method after the pill. But with a gradual shift to long-term methods among older women, the popularity of female sterilization increases, becoming second to the pill by age 30-34 and the most widely used method among women in their 40s.

Trends in Current Use of Family Planning

The contraceptive prevalence rate has increased sixfold since 1975, from 8 to 49 percent of married women (Table 4.8 and Figure 4.1). In the three years since the 1993-94 BDHS, contraceptive use has increased by an impressive 10 percent, from 45 to 49 percent of married women, with the use of modern methods rising from 36 to 42 percent. Overall, there has been a steady growth in the contraceptive prevalence rate since 1975 with an average increase of about two percentage points a year.

In terms of specific family planning methods, the dominant change in Bangladesh since the late 1980s has been a large increase in the number of couples using oral contraception. The proportion of married women relying on the pill increased considerably in the last five years, from 14 percent in 1991 to 21 percent in 1996-97 (Figure 4.2). Use of short-term methods like injectables and condoms has also increased, while use of long-term methods such as sterilization and the IUD has declined. Among traditional methods, use of periodic abstinence has hardly changed since 1993-94, while use of withdrawal has declined slightly during the same period. Thus, 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 42 percent of all contraceptive use, compared with 39 percent in 1993-94 and 35 percent in 1991 (Figure 4.3). On the other hand, the share contributed by female sterilization has dropped from 23 percent in 1991 to 18 percent in 1993-94 and 15 percent in 1996-97.

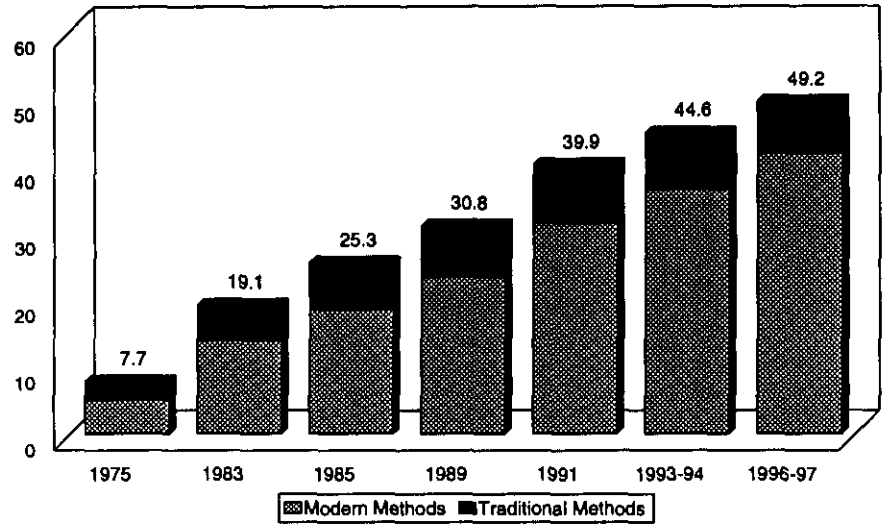
Table 4.8 Trends in current use of contraceptive methods

Percentage of currently married women age 10-49 who are currently using specific contraceptive methods, selected sources, Bangladesh, 1975-1996

Method	1975 BFS	1983 CPS	1985 CPS	1989 BFS	1991 CPS	1993-94 BDHS	1996-97 BDHS
Any method	7.7	19.1	25.3	30.8	39.9	44.6	49.2
Any modern method	5.0	13.8	18.4	23.2	31.2	36.2	41.6
Pill	2.7	3.3	5.1	9.6	13.9	17.4	20.8
IUD	0.5	1.0	1.4	1.4	1.8	2.2	1.8
Injectables	U	0.2	0.5	0.6	2.6	4.5	6.2
Vaginal methods	0.0	0.3	0.2	0.1	U	U	U
Condom	0.7	1.5	1.8	1.8	2.5	3.0	3.9
Female sterilization	0.6	6.2	7.9	8.5	9.1	8.1	7.6
Male sterilization	0.5	1.2	1.5	1.2	1.2	1.1	1.1
Any traditional method	2.7	5.4	6.9	7.6	8.7	8.4	7.7
Periodic abstinence	0.9	2.4	3.8	4.0	4.7	4.8	5.0
Withdrawal	0.5	1.3	0.9	1.8	2.0	2.5	1.9
Other traditional methods	1.3	1.8	2.2	1.8	2.0	1.1	0.8
Number of women	U	7,662	7,822	10,907	9,745	8,980	8,450

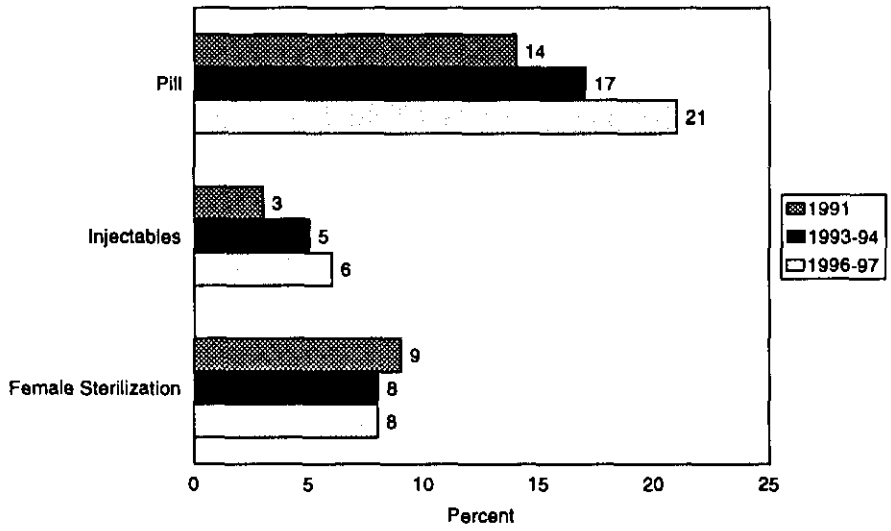
U = Unknown (no information)
Source: 1975 BFS (Islam and Islam, 1993:43); 1983 CPS (Mitra and Kamal, 1985:159); 1985 CPS (Mitra, 1987:147); 1989 BFS (Huq and Cleland, 1990:64); 1991 CPS (Mitra et al., 1993:53); 1993-94 BDHS (Mitra et al., 1994:45)

Figure 4.1
Trends in Contraceptive Use
Among Currently Married Women 10-49

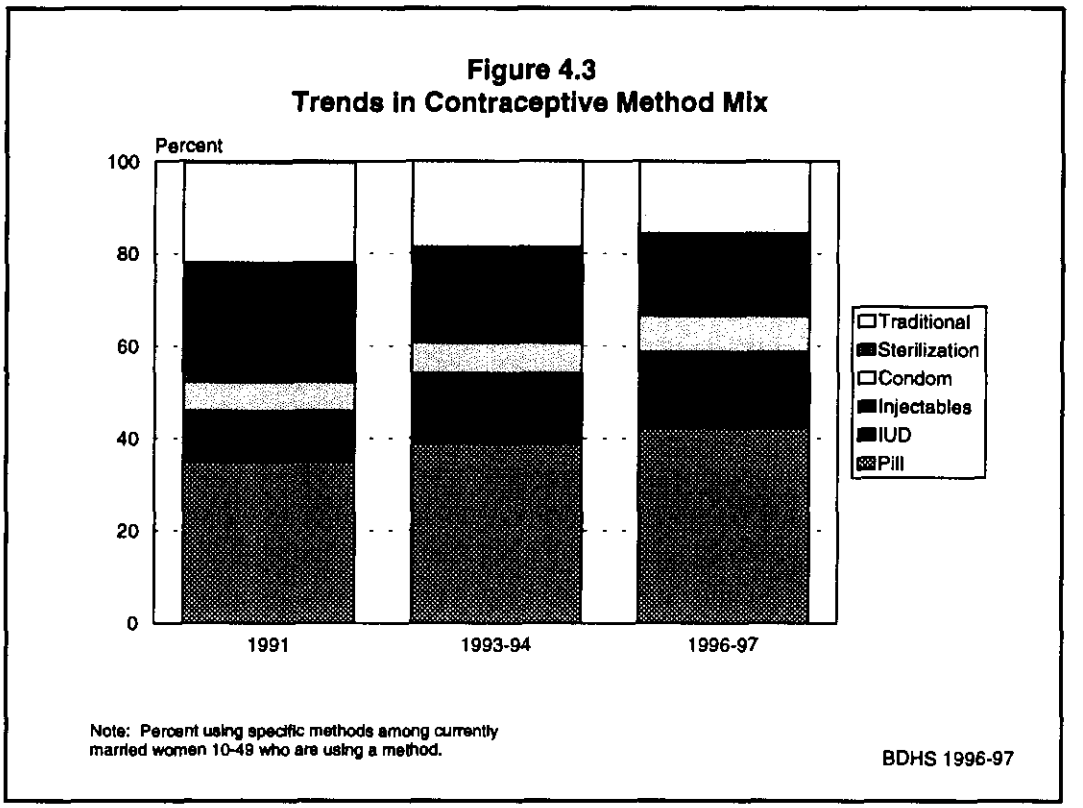


BDHS 1996-97

Figure 4.2
Trends in Use of Specific Contraceptive Methods
Among Currently Married Women Age 10-49



BDHS 1996-97



Differentials in Current Use of Family Planning

Differentials in current use of family planning by selected background characteristics are shown in Table 4.9 and Figure 4.4. They are useful to identify, among other things, the subgroups of the population that may be in need of more care and attention in the delivery of family planning services.

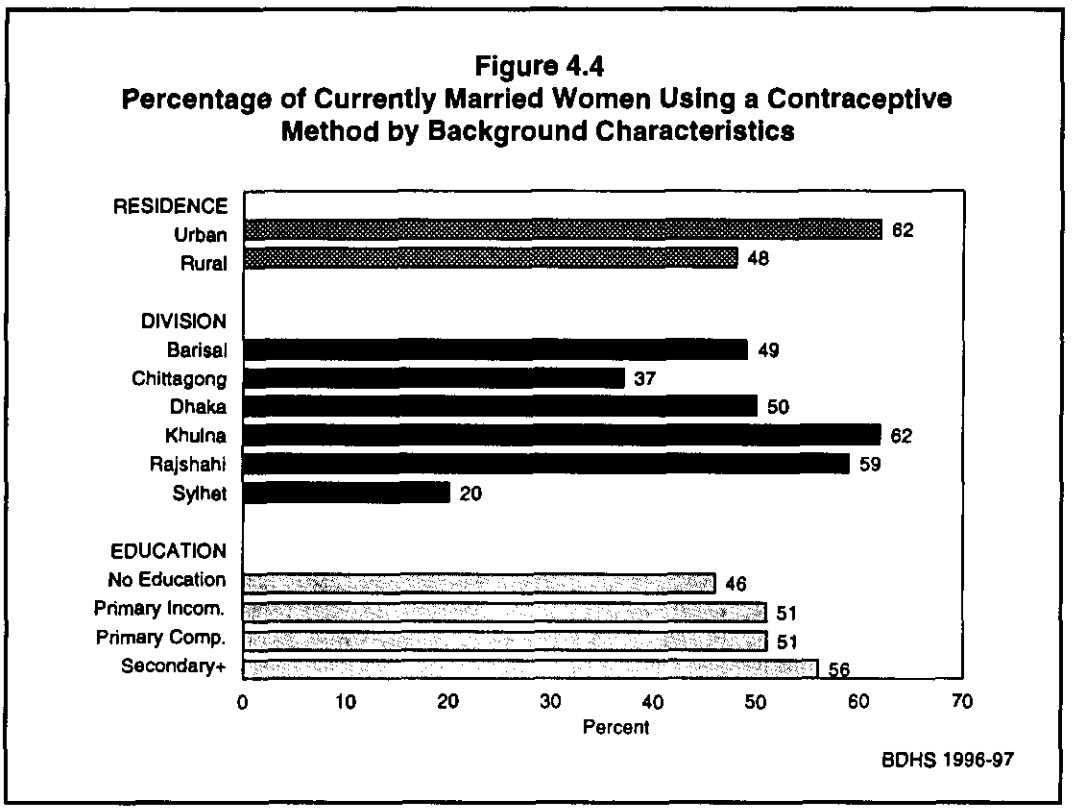
The level of current contraceptive use is higher in urban than in rural areas (62 vs. 48 percent among women). The urban-rural gap has widened since 1993-94, with contraceptive use having increased more in urban than rural areas. The pill is the most popular method among both urban and rural women. The condom is the next most widely used method among urban couples, while female sterilization is the second most popular method for rural women. There is a sharp difference in condom use between urban (13 percent) and rural (3 percent) couples, probably reflecting wider availability and easier access to the method in the urban than rural areas.

Differentials in current use of family planning by the six administrative divisions of the country are large. Sixty-two percent of married women in Khulna Division and 59 percent in Rajshahi Division are using a family planning method, compared with only 20 percent of women in Sylhet Division. Intermediate levels of use are reported for women in Dhaka (50 percent), Barisal (49 percent), and Chittagang (37 percent). There are no marked variations in the relative popularity of methods by division, except that injectables are more widely used in Khulna and Barisal Divisions than elsewhere. In all divisions, use of modern methods accounts for at least 80 percent of all use.

Table 4.9 Current use of contraception by background characteristics

Percent distribution of currently married women and men by contraceptive method currently used, according to selected background characteristics, Bangladesh 1996-97

Background characteristic	Any method	Modern method: Any modern method	Pill	IUD	Injectables	Condom	Female sterilization	Male sterilization	Norplant	Traditional method: Any trad. method	Periodic abstinence	Withdrawal	Other method	Not currently using	Total	Number of respondents
CURRENTLY MARRIED WOMEN																
Residence																
Urban	62.1	52.6	22.2	2.8	5.7	13.2	7.9	0.7	0.0	9.5	5.0	3.5	1.0	37.9	100.0	968
Rural	47.6	40.1	20.6	1.7	6.3	2.7	7.6	1.2	0.1	7.4	5.0	1.7	0.7	52.4	100.0	7,482
Division																
Barisal	49.4	41.0	20.8	2.1	7.0	3.8	6.1	1.2	0.0	8.3	4.6	2.6	1.2	50.6	100.0	560
Chittagong	37.2	30.8	13.1	2.6	5.5	3.2	5.8	0.5	0.0	6.4	4.2	1.1	1.2	62.8	100.0	1,701
Dhaka	49.8	42.1	21.9	1.2	5.2	5.0	8.0	0.6	0.1	7.8	4.9	2.1	0.7	50.2	100.0	2,656
Khulna	61.9	51.0	26.6	2.4	9.1	3.8	7.7	1.2	0.2	10.9	7.0	3.3	0.5	38.1	100.0	1,024
Rajshahi	58.6	51.0	26.3	1.5	6.8	3.6	10.1	2.4	0.2	7.6	5.3	1.6	0.7	41.4	100.0	2,049
Sylhet	20.1	16.0	5.4	1.5	5.1	1.4	2.6	0.0	0.0	4.1	3.7	0.4	0.0	79.9	100.0	460
Education																
No education	45.8	39.5	18.3	1.3	7.0	1.6	9.7	1.4	0.1	6.4	4.3	1.0	1.0	54.2	100.0	4,502
Primary incomp.	51.2	43.9	22.5	1.2	8.3	2.7	7.9	1.3	0.0	7.3	4.4	2.3	0.6	48.8	100.0	1,470
Primary complete	51.1	41.9	23.7	2.6	4.8	4.9	4.8	1.0	0.0	9.1	6.8	1.7	0.8	48.9	100.0	862
Secondary+	56.0	45.1	24.7	3.1	3.0	10.7	3.1	0.2	0.2	10.8	6.6	3.9	0.4	44.0	100.0	1,615
Number of living children																
None	16.4	11.3	5.8	0.0	0.0	4.2	0.2	1.0	0.0	5.2	3.3	1.7	0.2	83.6	100.0	1,006
1	42.3	35.6	22.5	1.9	5.0	4.5	1.5	0.1	0.1	6.7	4.2	2.1	0.3	57.7	100.0	1,631
2	58.1	50.9	27.4	2.2	7.1	5.4	7.6	1.1	0.2	7.2	4.2	2.5	0.5	41.9	100.0	1,803
3	59.5	51.0	24.0	2.2	8.0	3.7	12.0	1.0	0.1	8.4	5.7	2.0	0.8	40.5	100.0	1,423
4+	54.6	45.4	19.3	1.9	7.9	2.5	11.9	1.8	0.1	9.2	6.4	1.3	1.4	45.4	100.0	2,588
Total	49.2	41.6	20.8	1.8	6.2	3.9	7.6	1.1	0.1	7.7	5.0	1.9	0.8	50.8	100.0	8,450
CURRENTLY MARRIED MEN																
Residence																
Urban	70.7	57.2	26.7	2.2	4.7	14.8	8.3	0.4	0.0	13.5	10.0	2.6	0.9	29.3	100.0	400
Rural	58.1	47.3	24.2	1.6	7.4	4.5	7.9	1.7	0.0	10.8	8.3	1.3	1.1	41.9	100.0	2,912
Division																
Barisal	59.0	47.1	26.3	1.0	7.8	5.1	4.7	2.1	0.0	11.9	8.9	1.6	1.4	41.0	100.0	199
Chittagong	54.7	40.6	17.3	2.7	7.8	4.6	7.4	0.7	0.0	14.1	11.7	0.4	2.0	45.3	100.0	584
Dhaka	60.5	49.7	27.6	0.9	6.1	6.7	7.6	0.6	0.1	10.8	8.8	1.2	0.9	39.5	100.0	1,056
Khulna	68.1	54.8	28.9	2.8	8.7	5.5	7.3	1.7	0.0	13.3	8.6	4.1	0.5	31.9	100.0	428
Rajshahi	64.2	55.3	26.4	1.5	7.5	6.1	10.6	3.2	0.0	8.9	6.3	1.5	1.1	35.8	100.0	877
Sylhet	26.3	19.2	6.7	2.5	3.0	3.2	3.0	0.7	0.0	7.1	6.4	0.4	0.4	73.7	100.0	168
Education																
No education	53.3	44.4	20.8	0.8	8.2	2.8	9.8	2.1	0.0	8.9	7.2	0.9	0.8	46.7	100.0	1,390
Primary incomp.	59.7	48.2	24.6	1.8	8.5	4.7	7.1	1.4	0.2	11.5	8.5	1.0	2.0	40.3	100.0	750
Primary complete	56.9	47.3	26.8	2.0	6.5	2.2	8.0	1.8	0.0	9.6	6.9	1.9	0.8	43.1	100.0	204
Secondary+	69.2	55.0	29.3	3.0	4.4	11.5	5.9	0.9	0.0	14.2	10.8	2.5	0.9	30.8	100.0	968
Number of living children																
None	27.4	17.7	10.3	0.3	0.2	6.6	0.0	0.3	0.0	9.7	8.1	1.3	0.3	72.6	100.0	333
1	53.7	43.5	26.2	2.1	6.1	7.7	1.3	0.0	0.2	10.2	8.7	1.3	0.2	46.3	100.0	618
2	66.2	54.4	30.1	1.4	7.1	6.7	7.6	1.4	0.0	11.8	8.9	2.5	0.5	33.8	100.0	679
3	69.6	58.9	27.3	2.3	9.2	6.3	11.3	2.4	0.0	10.7	8.1	1.3	1.4	30.4	100.0	574
4+	63.4	51.7	23.0	1.8	8.5	3.5	12.4	2.4	0.0	11.7	8.5	1.1	2.1	36.6	100.0	1,108
Total	59.6	48.5	24.5	1.7	7.1	5.7	7.9	1.6	0.0	11.1	8.5	1.5	1.1	40.4	100.0	3,312



Current use differs by educational level of women, although the differentials are not as pronounced as in many countries. Forty-six percent of women with no formal education are currently using a method, compared with 51 percent of women with either incomplete or complete primary school and 56 percent of those with least some secondary education. Educational differentials in contraceptive use have narrowed since 1993-94, with no increase among women with secondary education and almost equal percentage point increases for women in all other educational categories.

Method mix also varies by educational level. Among women in all educational categories, the pill is the most widely used method. The second most popular method among women with no education is female sterilization; among those with some primary education it is injectables; among those with completed primary education it is periodic abstinence; and among those with secondary education, the condom is the second most widely used method. It is interesting to note that more educated women are more likely to use traditional methods. These patterns are no doubt influenced by the fact that the more educated women tend to be younger and of lower parity than less educated women and therefore presumably less motivated to control their family size.

Contraceptive use rates are also related to family size. As expected, fewer women use contraception before having a child. After the first child, contraceptive use increases sharply, reaching 60 percent among women with 3 children. Thereafter, use declines slightly to 55 percent of women with four or more children, possibly because of women's actual or perceived infecundity at higher parities.

Differentials in contraceptive use as reported by currently married men mirror those reported by married women, except that the levels of use are generally higher. As mentioned above, men are more likely than women to report use of the pill and periodic abstinence. A more precise way to compare discrepancies in contraceptive use reporting between men and women is to compare husbands and wives (see discussion of Table 4.11 below).

Table 4.10 indicates that differentials in contraceptive use by division are beginning to narrow somewhat, at least according to the old divisional boundaries.[1] Contraceptive use has increased steadily in all divisions since 1983; however, since 1993-94, it has increased *relatively* more rapidly in the combined divisions of Chittagong and Sylhet (formerly Chittagong Division) and in Dhaka Division than in Khulna/Barisal and Rajshahi Divisions (Figure 4.5). In Chittagong/Sylhet, contraceptive use increased by 15 percent, while the increase was 12 percent for Dhaka Division, 9 percent for Khulna/Barisal Division and only 7 percent for Rajshahi Division. Of course, the creation of Sylhet Division, which isolates the sections of the former Chittagong Division that have the lowest contraceptive use levels, results in wider divisional differences than existed previously.

Table 4.10 Trends in current use of family planning methods by division

Percentage of currently married women age 10-49 who are currently using any method, any modern method, or any traditional method of family planning, by division, selected sources, Bangladesh, 1983-1996

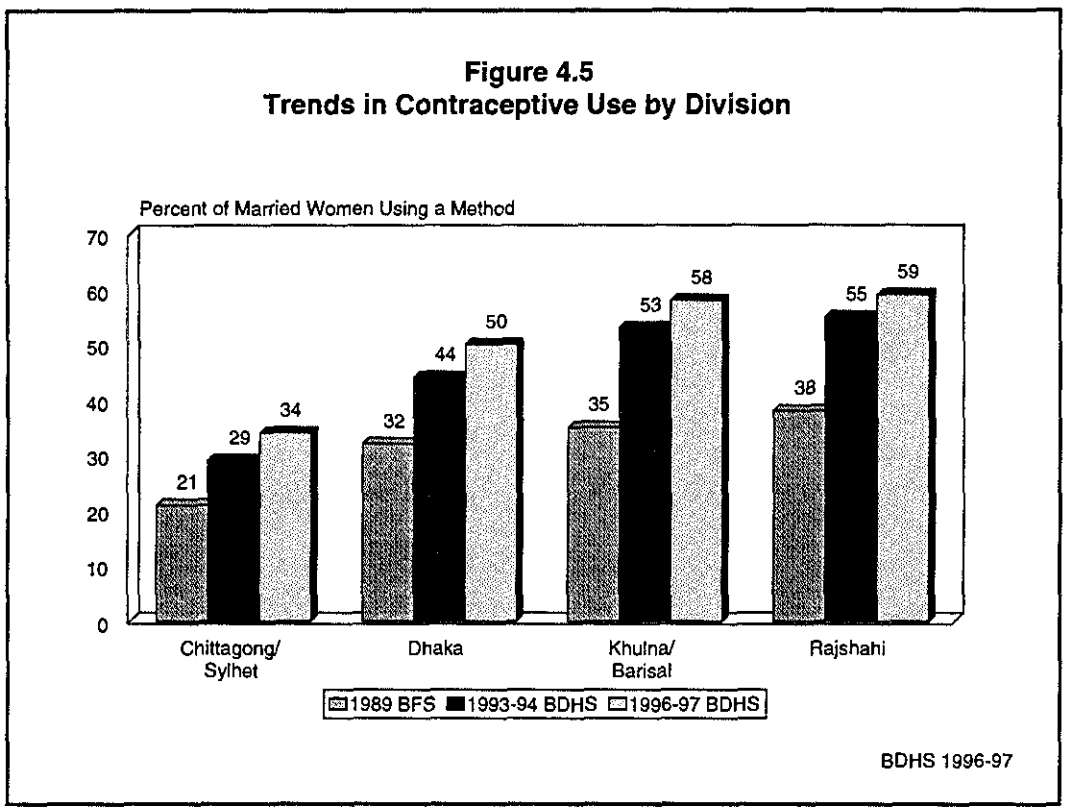
Type of method/ Division	1983 CPS	1985 CPS	1989 CPS	1989 BFS[1]	1991 CPS	1993-94 BDHS	1996-97 BDHS
Any method							
Chittagong/Sylhet	12.6	16.1	19.8	21.0	27.1	29.3	33.6
Dhaka	20.5	26.0	34.5	32.0	41.7	44.3	49.8
Khulna/Barisal	20.7	28.2	36.6	35.0	45.7	52.8	57.5
Rajshahi	22.6	30.3	34.7	38.0	46.1	54.8	58.6
Any modern method							
Chittagong/Sylhet	8.7	11.5	15.3	U	20.5	23.4	27.6
Dhaka	15.5	19.9	27.6	U	32.9	36.3	42.1
Khulna/Barisal	14.2	20.0	27.9	U	34.6	41.1	47.5
Rajshahi	16.1	21.5	26.7	U	37.2	45.9	51.0
Any traditional method							
Chittagong/Sylhet	3.9	4.7	4.5	U	6.6	5.9	5.9
Dhaka	5.0	6.1	6.9	U	8.9	8.0	7.8
Khulna/Barisal	6.5	8.2	8.7	U	11.1	11.7	10.0
Rajshahi	6.5	8.8	8.0	U	8.8	8.9	7.6

Note: Data from the 1993-94 and 1996-97 BDHS were recategorized to represent the previous four divisions.
U = Unknown (no information)
[1] Published data were presented in whole numbers; the decimal was added to balance the table.

Source: 1983 CPS (Mitra and Kamal, 1985:188); 1985 CPS (Mitra, 1987:166); 1989 CPS (Mitra et al., 1990:113); 1989 BFS (Huq and Cleland, 1990:68); 1991 CPS (Mitra et al., 1993:56)

In fact, the most important issue emerging from this analysis of family planning use is the extremely low level of contraceptive use in Sylhet Division. Further studies need be undertaken to investigate the reasons for low use of family planning in Sylhet in order to assist in designing program interventions to bring the division in line with the rest of the country.

[1] Because Sylhet and Barisal are relatively new divisions, the table is structured according to the original four divisions.



Contraceptive Use Reporting Among Married Couples

It was pointed out above that the contraceptive prevalence rate among currently married men (60 percent) is considerably higher than that for currently married women (49 percent). Part of the discrepancy could be due to contraceptive use with non-marital partners, which is presumably higher among men than women. Another explanation could be marriages in which the spouses are not currently co-habiting, thus reducing the need for contraceptive use. Such a situation is likely to be more common among women than men, for example when men work overseas on a labor contract. However, misreporting and lack of communication between spouses is also a possible explanation. Fortunately, it is possible to link wives and husbands who were both interviewed and compare their individual responses about contraceptive use. Table 4.11 shows the extent of agreement (shown in italics on the diagonal) in reporting of contraceptive use between husbands and wives.

Among the matched couples, 60 percent of husbands report that they are using a family planning method, compared with only 55 percent of their wives. The discrepancy is mostly observed in reporting of the use of the pill, condoms and periodic abstinence. Most of the discrepancy for these methods is due to couples in which the husbands say they are using these methods while their wives say they are not using any method at all. While at least some of the discrepancies between husbands and wives in reporting of contraceptive use could be due to extra-marital use, some may be due to misunderstanding of the method. For example, higher reporting of periodic abstinence use among men than women has been observed in many countries and may be due to confusion between periodic and long-term abstinence. Finally, underreporting of contraceptive use among women because of embarrassment or ignorance (e.g., condom use by husband without her knowledge) is also a possible explanation for the discrepancy.

Table 4.11 Comparison of reported contraceptive use by spouses

Percent distribution of couples according to wife's and husband's reported current contraceptive use status, Bangladesh 1996-97

	Wife: current contraceptive method										
Husband: current contraceptive method	Pill	IUD	Inject-ables	Condom	Female sterili-zation	Male sterili-zation	Periodic abstin-ence	With-drawal	Other method	Not using	Total
Pill	***21.7***	0.1	0.3	0.1	0.0	0.0	0.4	0.3	0.0	2.3	25.2
IUD	0.0	***1.5***	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.7
Injectables	0.2	0.1	***6.2***	0.0	0.1	0.0	0.0	0.0	0.1	0.8	7.5
Condom	0.2	0.0	0.0	***3.5***	0.0	0.0	0.6	0.2	0.0	1.0	5.6
Female sterilization	0.0	0.0	0.1	0.0	***7.7***	0.0	0.0	0.0	0.0	0.3	8.0
Male sterilization	0.0	0.0	0.0	0.0	0.2	***1.3***	0.0	0.0	0.0	0.1	1.6
Periodic abstinence	0.6	0.1	0.1	0.1	0.0	0.0	***3.2***	0.5	0.0	3.8	8.3
Withdrawal	0.0	0.0	0.0	0.1	0.0	0.0	0.2	***0.8***	0.0	0.2	1.4
Other	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***0.6***	0.4	1.1
Not using	0.7	0.1	0.3	0.3	0.2	0.0	1.2	0.4	0.2	***36.1***	39.5
Total	23.5	1.9	7.1	4.1	8.1	1.4	5.7	2.2	1.0	45.1	100.0

4.5 Number of Children at First Use

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 4.12 shows the distribution of ever-married women by the number of living children they had when they first used a method, according to five-year age group. These data enable the examination of both periodic and cohort changes in the timing of the initiation of contraceptive use during the family building process.

Table 4.12 Number of children at first use of contraception

Percent distribution of ever-married women by number of living children at the time of first use of contraception, and median number of children at first use, according to current age, Bangladesh 1996-97

		Number of living children at time of first use of contraception								
Current age	Never used contra-ception	0	1	2	3	4+	Missing	Total	Number of women	Median number of children at first use
10-14	75.5	21.5	3.0	0.0	0.0	0.0	0.0	100.0	145	0.0
15-19	47.1	27.8	21.8	3.2	0.0	0.0	0.1	100.0	1,301	0.0
20-24	31.4	19.2	31.7	12.8	4.4	0.5	0.0	100.0	1,727	0.5
25-29	22.0	12.6	26.7	20.5	11.8	6.4	0.1	100.0	1,905	1.0
30-34	18.1	9.3	18.0	16.9	17.3	20.4	0.0	100.0	1,402	1.8
35-39	23.6	5.8	10.0	13.3	16.1	31.3	0.0	100.0	1,128	2.6
40-44	32.7	3.8	7.2	8.7	10.0	37.7	0.0	100.0	861	3.4
45-49	49.7	2.3	5.6	5.7	5.3	31.3	0.1	100.0	658	3.9
Total	30.8	13.2	19.8	12.6	9.3	14.2	0.0	100.0	9,127	1.1

Overall, 46 percent of women initiated contraceptive use when they had fewer than three living children, with 13 percent initiating use before having the first child, 20 percent after having the first child and 16 after having the second child. Younger cohorts of women have a tendency to initiate family planning use at lower parities than the older cohorts. For example, while less than 16 percent of women age 35 and older initiated family planning use before having two children, the proportion rises with younger cohorts, reaching 50 percent among women age 15-24 years. This probably reflects the fact that young women are more likely to use family planning to space births, while older women are more likely to initiate family planning use to limit births. This trend toward initiating family planning use at lower parities can also be seen by comparing data from the 1993-94 and 1996-97 BDHSs. For example, in 1993-94, 39 percent of women reported initiating contraceptive use when they had fewer than three children, compared with 46 percent in 1996-97.

4.6 Problems with Current Method

Problems experienced in using family planning methods may reduce the effectiveness with which they are used or even lead to termination of use. An understanding of the problems users experience is, therefore, important in efforts to improve family planning service delivery in Bangladesh. In order to elicit information about problems associated with use of methods, women who were currently using modern family planning methods were asked if they were experiencing any problems in using their current method, and if so, what problems they were experiencing (Table 4.13).

Table 4.13 Problems with current method of contraception

Percentage of current users of family planning who are having problems with their method of contraception, by specific method and type of problem, Bangladesh 1996-97

	Contraceptive method						
Problem	Pill	IUD	Inject-ables	Condom	Female sterili-zation	Male sterili-zation	Total
Any problem	23.2	20.2	34.2	2.9	32.8	13.1	24.4
Specific problem							
Weight gain	0.1	0.8	0.1	0.0	0.3	0.0	0.2
Weight loss	1.4	0.4	2.2	0.4	5.8	3.5	2.3
Excessive bleeding	0.9	8.5	3.1	0.0	2.4	0.0	1.7
Hypertension	0.4	0.0	0.7	0.4	0.1	0.0	0.3
Headache	16.1	2.3	11.7	0.1	8.7	1.3	11.6
Nausea	6.1	0.0	2.6	0.0	0.8	0.0	3.6
No menstruation	0.9	1.0	17.7	0.0	0.9	0.0	3.3
Weak/tired	12.6	8.3	14.2	0.4	18.3	7.0	12.5
Dizziness	3.7	1.4	3.7	0.0	6.9	0.0	3.8
Husband disapproves	0.1	0.0	0.0	0.4	0.2	1.1	0.2
Other relative disapproves	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Religion disapproves	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Inconvenient to use	0.0	0.0	0.5	0.4	0.2	0.0	0.1
Sterilized, wants children	0.0	0.0	0.0	0.0	0.9	1.6	0.2
Abdominal pain	2.7	6.5	3.1	0.9	18.8	1.3	5.8
Other	3.4	5.4	7.0	1.5	5.9	2.2	4.3
Number of women	1,759	150	526	329	691	93	3,561

Note: Total includes 10 Norplant users and 1 menstrual regulation user.

A sizeable proportion of women using injectables, female sterilization, the pill, and the IUD reported having problems with their methods. Common complaints are feeling weak or tired and having headaches or abdominal pain. For pill users the most commonly reported problem is headaches, while the most commonly reported problems among sterilized women are abdominal pain and feeling weak or tired. Injectable users cite amenorrhea (no menstruation) and feeling weak or tired as problems, while IUD users tend to complain of excessive bleeding, feeling weak or tired, and abdominal pain. Problems were rare among users of condoms and male sterilization, while non-health problems were rarely reported for any method.

There has apparently been a decline in reported health problems with methods between the 1993-94 and 1996-97 BDHSs. Differences may be due to the use of slightly different questions in the two surveys, but they may also indicate that there has been at least some improvement in the quality of care in the delivery of family planning services.

4.7 Reasons for Selecting Methods

Family planning methods vary in their effectiveness, side effects, convenience of use, and availability/accessibility, as well as in their suitability for an individual couple. A couple may elect to use a method because it is more effective in averting unwanted births and/or more convenient to use and/or for some other reasons. It is therefore useful to know why couples choose to use a particular method as opposed to another, in order to understand the relative advantages of the different methods. More importantly, the information is useful to understand why oral contraceptives have become the predominant method in recent years in Bangladesh. Reasons women give may also provide important insights into the process couples undergo in deliberately controlling fertility. These data are of particular importance in Bangladesh where women have at least heard about most of the methods (see Table 4.1) and thus are more able to make informed choices. Table 4.14 shows the distribution of current users of specific methods by the reasons they gave for choosing that method.

Table 4.14 Reason for using current method of contraception

Percentage of current users of modern contraceptive methods citing various reasons they decided to use the method, by specific methods, Bangladesh 1996-97

Reason	Pill	IUD	Inject-ables	Condom	Female sterili-zation	Male sterili-zation	Total
FP worker recommended	8.1	15.7	12.2	3.3	13.5	9.7	9.7
Friend/relative recommended	7.1	8.4	9.8	3.1	10.1	17.4	8.1
Side effect of other methods	35.2	43.7	48.4	54.0	14.9	5.6	34.4
Method easy to use	41.2	33.4	38.0	34.2	6.0	4.7	31.8
Access/availability	21.5	7.6	17.3	10.0	3.1	1.3	15.1
Cost	8.1	8.1	4.7	4.7	2.1	2.9	6.0
Wanted permanent method	1.8	12.9	6.6	1.4	77.1	47.9	18.9
Husband preferred	26.8	13.3	16.8	53.5	27.7	66.2	28.5
Wanted more effective method	3.4	27.9	13.2	1.4	11.0	10.3	7.4
Fieldworker came to house	35.3	3.1	16.5	12.6	0.3	0.0	21.2
Other	4.6	6.0	4.1	6.0	10.0	6.9	5.9
Number of users	1,759	150	526	329	691	93	3,561

Note: Total includes 10 Norplant users and 1 menstrual regulation user.

The primary reason given for choosing the pill—the most popular method of contraception—is that it is easy to use; two-fifths (41 percent) of pill users reported this reason. Two other predominant answers were that the fieldworker delivered the pill to their home (given by 35 percent of pill users) and that side effects of other methods caused them to choose oral contraception (also 35 percent of pill users). Other common reasons cited for pill users are husband's preference for the method (27 percent) and availability of the method (22 percent).

The main reasons users of the IUD and injection selected their method are the side effects of other methods and the ease of using the method. Although a majority of condom users say that the possible side effects of other methods drew them to use condoms, husband's preference was an equally important reason. Not surprisingly, women who have been sterilized are most likely to say they chose the method because it was a permanent method; husband's preference is the next most common reason for women undergoing sterilization. However, for women whose husbands have been sterilized, the most frequently given response for choosing the method is husband's preference for the method, followed by the desire for a permanent method.

The data suggest that substantial proportions of contraceptive users choose their method not so much because of the advantages of that method, but because of the problems they perceive or experience with other methods. For these women, selection of a method becomes a process of eliminating the other choices. Ease of use is, of course, another major criterion in method selection. The fact that husband's preference is also commonly cited indicates that husbands have an important role in making decisions about family planning use.

4.8 Use of Social Marketing Brands

Bangladesh has an active contraceptive social marketing program that distributes pills, condoms, and oral rehydration salts through a network of some 140,000 retail outlets (pharmacies, small shops, and kiosks) throughout the country. The Social Marketing Company carries several brands of oral contraceptives, namely *Maya, Ovacon, Norquest,* and *Nordette*[2]. To obtain information on the number of users purchasing the social marketing brands, BDHS interviewers asked all respondents who were current pill users to show them 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 the major pill brands and asked the user to identify which brand she was currently using.

Overall, 19 percent of pill users are using social marketing brands (Table 4.15). Almost 70 percent of pill users are using government-supplied brands—either *Shuki* or *Combination-5*—which are provided free of charge through government fieldworkers and clinics and at a nominal charge from the non-governmental service providers. Urban pill users are far less likely than rural users to use the government brands and more likely to use one of the social marketing brands; one-third of urban women using pills are using one of the social marketing brands.

The percentage of pill users using a brand provided by government or non-governmental organizations (NGOs) has decreased substantially in the past few years, from 78 percent in 1993-94 to 69 percent in 1996-97 (Figure 4.6). The social marketing program's market share increased from 14 to 19 percent over the same time period.

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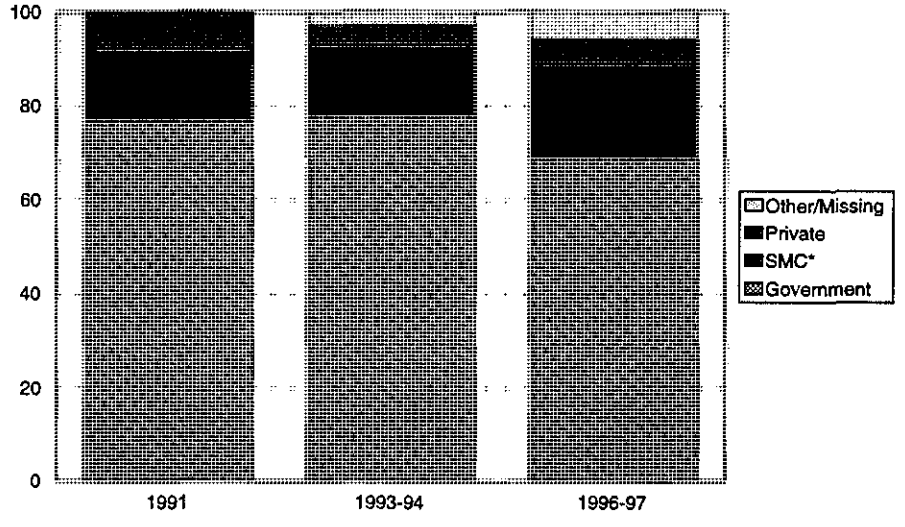
[2] The first three brands listed have been discontinued; however, it is possible that stocks still remain in retail outlets.

Table 4.15 Use of pill brands

Percent distribution of current pill users by brand of pill used, according to urban-rural residence, Bangladesh 1996-97

Pill brand	Residence		
	Urban	Rural	Total
Government			
Combination-5	9.0	6.6	6.9
Shuki	35.2	65.9	62.2
Social marketing			
Maya	10.2	4.9	5.6
Nordette	12.7	3.4	4.6
Ovacon	7.3	8.5	8.3
Norquest	2.4	0.5	0.7
Private			
Marvelon	6.7	0.6	1.3
Ovostat	8.9	3.7	4.3
Other			
Lyndiol	1.8	0.3	0.5
Ovral	1.3	1.0	1.0
Noriday	0.6	0.5	0.5
Other brand	3.5	2.2	2.4
Don't know/Missing	0.5	1.9	1.7
Total	100.0	100.0	100.0
Number of pill users	215	1,544	1,759

Figure 4.6
Trends in Use of Types of Pill Brands, 1991-1997



* Social Marketing Company

BDHS 1996-97

As mentioned above, 4 percent of currently married women in Bangladesh are using condoms as a method of family planning (see Table 4.7). To measure the impact of the social marketing program on condom use, women who said that they and their husbands used condoms were shown a chart depicting all the major condom brands and were asked which brand of condom they used. Men would presumably be a more reliable source of data on condom brands; however, due to the larger sample of women than men in the BDHS, and the fact that a major source of condoms is fieldworkers who may give them to the wife instead of the husband, the data shown in Table 4.16 are derived from women.

Table 4.16 Use of condom brands

Percent distribution of current condom users by brand of condom used, according to urban-rural residence, Bangladesh 1996-97

Condom brand	Residence		Total
	Urban	Rural	
Raja[1]	13.5	27.6	22.1
Panther[1]	44.1	25.4	32.7
Sensation[1]	6.0	2.0	3.6
Majestic	0.4	0.0	0.1
Carex	4.4	1.8	2.8
Circle rubber	0.0	0.6	0.4
Sultan	2.8	1.8	2.2
Other government	10.1	16.5	14.0
Other	13.8	18.6	16.7
Don't know	4.9	5.7	5.4
Total	100.0	100.0	100.0
Number of users	128	201	329

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

It is apparent that condoms sold by the Social Marketing Company enjoy a high market share. The three social marketing brands together account for 58 percent of the condom market, with *Panther* alone accounting for 33 percent and *Raja* for an additional 22 percent. When women who could not name the brand of condom are excluded, the social marketing brands account for 62 percent of the market. The *Panther* brand of condom appears to be more popular among urban users, while *Raja* predominates among rural users.

The proportion of overall condom use that is supplied through the Social Marketing Company has fluctuated over time, increasing from 64 percent in 1983 to 73 percent in 1986, then declining to 62 percent in 1989 and to 41 percent in 1991 before climbing again to 61 percent in 1993-94 and 62 percent in 1996-97 (omitting the "Don't know/Missing" category) (Mitra et al., 1993:72-74; Mitra et al., 1994:57).

4.9 Age at Sterilization and Sterilization Regret

Table 4.17 shows the distribution of sterilized women by the age at which they had the procedure, according to the number of years prior to the survey the procedure was done. The information is useful in understanding when a Bangladeshi woman is likely to accept sterilization. It should be noted that since data on age at sterilization were derived from a question on the month and year of the operation, it is possible that the data are distorted by some systematic error in reporting, either the date of the operation or the date of birth and/or age of the woman.

Table 4.17 Timing of sterilization

Percent distribution of sterilized women by age at the time of sterilization, according to the number of years since the operation, Bangladesh 1996-97

Years since operation	Age at time of sterilization						Number of women	Median age[1]
	<25	25-29	30-34	35-39	40-44	Total		
<2	(34.4)	(26.5)	(13.0)	(26.0)	(0.0)	100.0	29	(26.8)
2-3	(22.2)	(48.1)	(16.8)	(6.1)	(6.8)	100.0	39	(28.1)
4-5	37.9	29.0	22.8	8.7	1.6	100.0	82	26.6
6-7	38.4	29.9	21.5	10.2	0.0	100.0	107	26.3
8-9	47.6	18.0	22.1	12.3	0.0	100.0	91	26.1
10+	38.1	34.9	20.4	6.5	0.0	100.0	343	a
Total	38.4	31.6	20.6	8.9	0.6	100.0	691	26.7

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

The data indicate that women deciding to have female sterilization generally have the procedure early in their reproductive years. Over two-thirds of sterilized women had the operation before age 30, while over one-third of the women were sterilized before age 25. Few sterilized women had the procedure when they were in their 40s. The median age at sterilization is 27. There has not been any significant change since 1993-94 in the median age at which women have the operation.

Female and male sterilization together now account for 18 percent of all contraceptive use in Bangladesh (see Table 4.7). In the 1996-97 BDHS, as in the 1993-94 BDHS, women who had been sterilized or whose husbands had been sterilized were asked if they regretted having had the operation and, if so, why. The results are presented in Table 4.18. Although a similar question was asked of men, the data are not included here, due to smaller sample sizes.

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 counselled are more likely to regret having the operation (Loaiza, 1995). Overall, 10 percent of women reported that they regretted that they or their husbands had been sterilized. This is considerably lower than the level of 16 percent reported in the 1993-94 BDHS, which implies that there may have been some improvement in the quality of care in providing the procedure. Changes in reporting regret may account for some of the decrease.

Six in 10 women who regret sterilization say the reason is that they or their husbands wanted another child. Sterilization regret is slightly lower among urban than rural women (8 vs. 10 percent). There are also slight variations by administrative division and by education. However, as expected, a woman is more likely to regret having had the procedure if she has fewer children. While only 4 percent of women with four or more living children regret having had the operation, the proportion rises to 20 percent among those having two living children. Of course, the number of living children refers to the current number and not the number at the time of sterilization. Thus, many of those who regret having been sterilized include the unfortunate cases in which couples decide on sterilization and subsequently suffer the loss of one or more of their children.

Table 4.18 Sterilization regret

Percentage of currently married women who are sterilized or whose husbands are sterilized who regret the operation, by reasons for regret and selected background characteristics, Bangladesh 1996-97

Background characteristic	Percentage who regret the operation	Reason for regretting sterilization: Respondent wants another child	Husband wants child	Side effects	Child died	Other reason	Number of women
Residence							
Urban	8.4	5.7	1.3	0.8	0.0	0.6	89
Rural	10.2	5.7	0.5	1.1	1.6	1.3	695
Division							
Barisal	10.4	5.2	0.6	4.6	0.0	0.0	45
Chittagong	11.6	8.5	1.3	0.6	0.0	1.3	116
Dhaka	9.5	6.9	0.0	0.0	1.9	0.7	248
Khulna	8.7	2.7	0.5	0.0	2.2	3.3	98
Rajshahi	10.2	4.6	0.9	1.9	1.5	1.2	265
Sylhet	*	*	*	*	*	*	13
Education							
No education	10.7	5.1	0.8	1.3	1.8	1.6	535
Primary incomplete	9.7	7.9	0.0	1.0	0.8	0.0	141
Primary complete	4.1	2.1	0.0	0.0	0.0	2.0	55
Secondary+	10.1	9.3	0.8	0.0	0.0	0.0	55
Number of living children							
<2	(42.6)	(29.3)	(0.6)	(0.0)	(8.4)	(4.3)	49
2	20.0	11.9	2.4	1.7	2.7	1.3	165
3	5.6	2.2	0.0	1.4	1.2	0.8	195
4+	3.6	1.7	0.1	0.8	0.0	1.0	375
Total	10.0	5.7	0.6	1.1	1.4	1.2	785

Note: Figures in parentheses are based on 25 to 49 women. An asterisk indicates fewer than 25 unweighted women.

4.10 Cost of Contraceptive Methods

Although family planning services have been available free of charge from public sources for some time, there is increasing emphasis on ways to recoup program costs and move clients who can afford to pay into private services so as to maximize the sustainability of the program. In order to gauge current costs of contraceptive use, women who were either sterilized or were using pills, IUDS, or injectables were asked in the 1996-97 BDHS how much they paid for their method. For pills and injectables, the question referred to the cost of one packet (cycle) of pills and one injection, respectively. Table 4.19 shows the percent distribution of users by the amount paid according to method.

Although the majority of users of all four methods obtained the method free of charge, the proportion of pill users obtaining free packets is lower (63 percent) than the proportion of IUD users (89 percent), injectable users (84 percent), or sterilization users (94 percent). Pill users are somewhat more likely to pay for their method now than in 1993-94; the proportion who received free packets has declined from 68 percent in 1993-94 to 63 percent in 1996-97.

Table 4.19 Cost of methods

Percent distribution of current users of pill, IUD, injectables, and sterilization by cost of method, Bangladesh 1996-97

Cost	Pill	IUD	Inject-ables	Sterili-zation
Free	63.0	89.0	84.1	93.7
< 5 taka	10.3	0.0	4.8	0.0
5 - 49 taka	23.2	7.0	10.3	0.3
50 - 99 taka	0.7	0.0	0.3	0.0
100+ taka	0.0	2.6	0.4	2.3
Don't know	2.7	1.4	0.2	2.6
Total	100.0	100.0	100.0	100.0
Mean cost (takas) for those paid	12.0	6.6	10.3	(686.2)
Number of users	1,759	150	526	785

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

4.11 Source of Family Planning Services

Sources of family planning methods play an important role in the promotion and maintenance of contraceptive use levels in the population. In order to ascertain the relative importance of different sources in Bangladesh, current users of modern methods of family planning were asked to report the place from which they most recently obtained their methods. Since women often do not know into which category the source they use falls (e.g., hospital, thana health complex, family welfare center, private clinic, etc.), interviewers were instructed to write the name of the source in the questionnaire. Team supervisors were instructed to verify that the name and the type of source coded were consistent.

Sources of family planning methods in Bangladesh are classifiable into five major categories: government facilities (including thana health complexes, family welfare centers, clinics, and hospitals), private medical sources (including private clinics, doctors, and pharmacies), other private sources, fieldworkers (which may be either government or non-government), and clinics run by non-governmental organizations. Table 4.20 and Figure 4.7 show the percentage of current users of modern methods who obtained their method from a specific source.

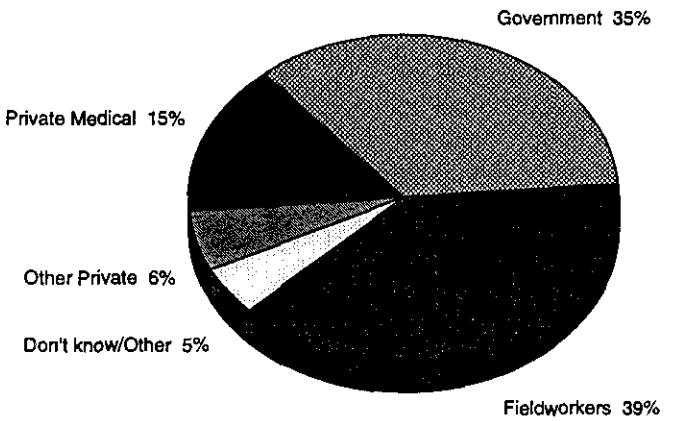
Table 4.20 Source of supply for modern contraceptive methods

Percent distribution of current users of modern contraceptive methods by most recent source of supply or information, according to specific methods, Bangladesh 1996-97

	Contraceptive method						
Source of supply	Pill	IUD	Inject-ables	Con-dom	Female sterili-zation	Male sterili-zation	All modern methods
Public	6.1	78.7	56.5	4.9	89.8	91.6	35.2
Government hospital	0.2	16.0	3.6	1.3	30.4	43.7	8.6
Family welfare center	4.4	39.8	34.4	2.4	19.0	13.3	13.3
Thana health complex	1.1	18.0	8.8	1.2	40.3	34.6	11.5
Satellite/EPI clinic	0.4	4.8	9.8	0.0	0.0	0.0	1.8
Medical private	20.9	2.5	2.9	36.7	2.4	0.0	14.7
Private clinic/doctor	0.1	2.5	0.5	0.7	2.4	0.0	0.8
Traditional doctor	0.3	0.0	1.4	0.4	0.0	0.0	0.4
Pharmacy	20.5	0.0	1.0	35.6	0.0	0.0	13.6
Other private	8.8	0.0	0.6	20.1	0.0	0.0	6.3
Shop	6.7	0.0	0.3	19.4	0.0	0.0	5.2
Friends/relatives	2.1	0.0	0.3	0.7	0.0	0.0	1.1
Fieldworker/FWA[1]	61.4	9.9	33.9	30.3	0.0	0.0	38.6
NGO clinic	0.4	3.1	1.3	0.4	2.0	0.0	1.0
Other	1.5	5.8	4.6	2.1	5.4	2.6	3.0
Don't know	0.8	0.0	0.0	5.0	0.4	5.8	1.1
Missing	0.1	0.0	0.2	0.4	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	1,759	150	526	329	691	93	3,559

Note: Total includes 10 Norplant users.
[1]FWA = Family Welfare Assistant (Government-sponsored fieldworker)

Figure 4.7
Distribution of Current Users of Contraception by Source of Supply



BDHS 1996-97

Fieldworkers remain the largest source of family planning methods, followed by government facilities. Thirty-nine percent of current users of modern methods obtain their method from fieldworkers, while 35 percent obtain their method from government facilities, including government hospitals (9 percent), family welfare centers (13 percent), thana health complexes (12 percent), and satellite clinics (2 percent). Fifteen percent of modern method users get their methods from private medical sources such as pharmacies and private doctors and clinics, while 6 percent use non-medical private sources such as shops and friends. Only one percent of users rely on non-governmental clinics.

Since 1993-94, there has been a slight decline in the proportions of users obtaining methods from fieldworkers and government facilities, with more couples procuring their methods from commercial sources, like pharmacies and shops. The proportion of users who buy their methods from pharmacies and shops rose to 19 percent in 1996-97 from 15 percent in 1993-94. This finding indicates that the number of users willing to pay for family planning supplies or services has been rising, which has beneficial implications for strategies aimed at achieving financial sustainability. The slight decline in the proportion of users who obtain their method from fieldworkers (from 42 percent in 1993-94 to 39 percent in 1996-97) is probably related to the slight decline in the coverage of fieldworkers' home visits (see Table 4.26).

The source a woman uses to obtain contraceptive methods is related to the type of method she is using. The vast majority (61 percent) of pill users still receive their pills from fieldworkers, although an increasing proportion (27 percent) obtain supplies from pharmacies and shops, compared with 1993-94 (20 percent). On the other hand, most IUD users (79 percent) obtained their method from government facilities, such as family welfare centers and thana health complexes. Most users of injectables are served by government facilities (57 percent)—especially family welfare centers—although fieldworkers evidently supply one-third of injectables users. More than half (55 percent) of condom users say their method is obtained from pharmacies and shops, while just under one-third (30 percent) obtain condoms from fieldworkers. As expected, both female and male sterilizations are mainly performed in government facilities.

4.12 Contraceptive Discontinuation

A key concern for family planning programs is the rate at which users discontinue use of contraception and the reasons for such discontinuation. Life table contraceptive discontinuation rates based on information collected in the 5-year, month-by-month calendar in the BDHS questionnaire are presented in Table 4.21. All episodes of contraceptive use between April 1991 (the first month of the Bengali year 1398) and the date of interview were recorded in the calendar, along with the main reason for any discontinuation of use during this period.

Table 4.21 Contraceptive discontinuation rates

First-year contraceptive discontinuation rates due to method failure, desire for pregnancy, health reasons, or other reasons, according to specific methods, Bangladesh 1996-97

	Reason for discontinuation				
Method	Method failure	To become pregnant	Side effects/ Health	All other reasons[1]	All reasons
Pill	2.9	7.0	24.2	10.3	44.4
IUD	0.0	2.5	35.5	3.4	41.3
Injectables	1.3	5.1	35.6	9.0	51.0
Condom	6.4	10.3	11.4	36.7	64.8
Periodic abstinence	9.9	10.0	0.1	21.4	41.4
Withdrawal	4.8	10.3	16.6	28.4	60.0
Total	3.8	7.1	21.5	14.5	46.9

[1] Includes discontinuations with missing reasons

The discontinuation rates presented here are based on all segments of use that started between April 1991 and three months prior to the date of interview, covering 3-62 months before the interview date for each woman. A segment is an uninterrupted period of use of a particular contraceptive method. Segments of use that began before the five-year period are excluded from computations of discontinuation rates, since inclusion of such segments complicates the analyses; moreover, their omission has little effect on discontinuation rates for short durations of less than two years. The month of interview and the two preceding months are ignored in order to avoid the bias likely to be introduced by an unrecognized pregnancy.

The rates presented in Table 4.21 are cumulative one-year discontinuation rates and represent the proportion of users who discontinue use by 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). The reasons are classified into four mutually exclusive and exhaustive categories: method failure (pregnancy), desire to become pregnant, side effects/health reasons, and all other reasons.

Discontinuation rates are generally high in Bangladesh. According to the estimates computed for all reversible methods combined, nearly half (47 percent) of users stop using within 12 months of starting use. Not surprisingly, discontinuation rates for the condom (65 percent) and withdrawal (60 percent) are considerably higher than for injectables (51 percent), the pill (44 percent) and the IUD (41 percent). Discontinuation rates for periodic abstinence are relatively low (41 percent).

Overall, 4 percent of users stop using due to method failure (pregnancy), 7 percent because they want to become pregnant, 22 percent as a result of side effects or health concerns, and 15 percent because of other reasons. Side effects of the method or other health reasons are by far the most commonly reported reasons for discontinuing the pill, the IUD, and injectables. However, users of condoms and withdrawal are considerably less likely and users of periodic abstinence are completely unlikely to discontinue their method because of side effects or other health reasons. Other reasons are the main cause of discontinuation for these methods. Although discontinuation rates due to method failure appear generally low, women are more likely to become accidentally pregnant while using condoms, periodic abstinence and withdrawal than when using pills, IUDs, and injectables. Ten percent of women using periodic abstinence become pregnant within 12 months of starting the method. Discontinuation of use in order to become pregnant is also more common among users of the condom, periodic abstinence and withdrawal than among users of other methods.

There has been little improvement in discontinuation rates since 1993-94. The rate for all reversible methods combined remained almost constant between 1993-94 (48 percent) and 1996-97 (47 percent), reflecting only slight changes in the rates for users of the pill, the IUD, periodic abstinence, and withdrawal. However, there has been some slight decline in discontinuation rates for injectables and condoms (from 58 to 51 for injectables and from 72 to 65 for condoms).

Further information on reasons for contraceptive discontinuation is presented in Table 4.22. 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. For all reversible methods combined, side effects (37 percent) stands out as the most common reason for discontinuation, followed by the desire to get pregnant (21 percent). Method failure ranks third with about 1 in 10 segments of use being reported as interrupted due to accidental pregnancies.

Looking at the patterns for specific methods, side effects is the most common reason for discontinuing use of the pill, IUD, and injectables. As expected, side effects is less frequently mentioned as a reason of discontinuation of condom and withdrawal use. Desire to become pregnant is an important reason for discontinuation for every reversible method and accounts for more discontinuations among users of the periodic abstinence, withdrawal, and condoms than any other reason. Husband's disapproval is a common reason for discontinuing use of the condom and withdrawal. It is also notable that 1 in 10 discontinuations of condoms is due to inconvenience in using the method. Method failure is an important reason for discontinuation of periodic abstinence, withdrawal, and condoms, accounting for 24 percent of discontinuations of periodic abstinence, 14 percent of withdrawal and 12 percent of condoms. Similarly, the desire to use more effective methods accounted for a not insignificant proportion of discontinuations of these methods.

4.13 Nonuse of Family Planning

Future Use

Intention to use contraception in the future provides an indication of potential demand for family planning services, and acts as a convenient summary indicator of disposition towards contraception among current nonusers. Intention not to use contraception in the future is useful in identifying "hard core" targets of the program. Thus, to obtain information about potential demand for family planning services, all currently married respondents who were not using contraception at the time of the survey were asked if they intended to use a method at any time in the future. Table 4.23 shows the distribution of the women and men by their intention to use in the future. For women, the distribution is given according to the number of living children.

Table 4.22 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the last five years by main reason for discontinuation, according to specific methods, Bangladesh 1996-97

Reason for discontinuation	Method							Total
	Pill	IUD	Inject-ables	Condom	Periodic absti-nence	With-drawal	Other	
Became pregnant	6.9	0.0	1.8	11.7	24.0	14.0	(49.3)	9.0
To become pregnant	23.2	9.2	14.1	19.3	30.3	22.9	(8.6)	21.4
Husband disapproved	1.1	2.5	0.8	13.7	6.4	15.6	(0.0)	3.9
Side effects	43.5	68.3	58.7	11.6	0.5	17.4	(4.7)	36.7
Health concerns	4.9	7.6	6.2	5.5	0.3	2.5	(1.4)	4.7
Access/Availability	1.8	0.5	5.0	1.3	0.2	0.0	(4.4)	1.9
More effective method	1.6	0.7	0.2	9.0	14.4	10.5	(6.8)	4.1
Inconvenient to use	1.1	1.1	0.4	10.3	2.0	3.5	(0.0)	2.3
Infrequent sex	4.7	0.0	2.6	5.3	4.7	2.8	(2.6)	4.2
Cost	0.3	0.0	0.1	0.3	0.0	0.0	(2.3)	0.2
Fatalistic	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0
Menopause	0.3	0.5	0.3	0.0	1.3	0.0	(0.0)	0.4
Marital dissolution	1.0	0.0	0.3	0.2	0.5	0.0	(0.0)	0.6
Other	6.2	8.5	6.1	9.4	8.7	6.2	(9.6)	7.0
Missing	3.3	0.9	3.2	2.5	6.7	4.6	(10.4)	3.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	2,750	217	714	628	524	262	48	5,153

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

Table 4.23 Future use of contraception

Percent distribution of currently married women and men who are not currently using a contraceptive method, by intention to use in the future, according to number of living children, Bangladesh 1996-97

Future intentions	Number of living children[1]					Total for women	Total for men
	0	1	2	3	4+		
Intend to use in next 12 months	19.3	46.5	49.9	51.8	39.3	41.9	40.0
Intend to use later	53.2	33.5	22.0	19.1	7.6	24.6	21.5
Unsure as to timing	2.6	1.9	2.2	1.3	0.8	1.7	2.2
Unsure as to intention	10.4	5.3	4.4	2.7	3.2	4.9	4.5
Do not intend to use	13.8	12.5	21.3	24.4	48.5	26.5	29.8
Missing	0.7	0.2	0.2	0.7	0.4	0.4	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women/men	623	1,007	774	641	1,243	4,289	1,337

More than 2 in 3 (68 percent) currently married female nonusers say that they intend to use family planning in the future, with 42 percent saying they intend to use within the next 12 months and 25 percent saying they intend to use later; 2 percent were not sure when they would start using contraception. Twenty-seven percent of female nonusers say they do not intend to practice family planning in the future, while 5 percent are unsure. Compared with women, intention to use family planning is only slightly less common among men, with 64 percent of currently married male nonusers saying they intend to use family planning in the future. Variations between women and men in the timing of intended use are also slight.

There has been little change since 1993-94 in intention to use in the future, either for the proportion intending to use or the timing of intended use. For example, the proportion of female nonusers intending to use in the future increased only slightly between 1993-94 (66 percent) and 1996-97 (68 percent). Similarly, the proportion who say they intend to use within the next 12 months has remained unchanged at 42 percent.

The proportion intending to use family planning peaks at 82 percent among female nonusers with one child, dropping among nonusers with more children. The timing of the intention to use also varies with the number of living children. For example, the proportion of female nonusers who intend to use within the next 12 months is considerably lower among those with no living children than among those with children, while the proportion who say they intend to use after 12 months is highest among women with no children and declines steadily with the number of living children.

Reasons for Nonuse

Currently married respondents who were not using family planning at the time of the survey and who said that they did not intend to use it in the future were asked why they were not using. Table 4.23 presents data on the main reasons for not using family planning. Infecundity appears to be the primary reason for nonuse of contraception among women; 33 percent of female nonusers say they do not intend to use because of infecundity (either "menopausal", "had hysterectomy" or "subfecund"). The desire to have children is the next most common reason for nonuse (cited by 11 percent of nonusers), followed by infrequent sexual relations (10 percent), religious reasons (9 percent), husband's opposition to family planning (9 percent), and side effects and other health concerns (7 percent). There are no significant variations in reasons for nonuse between the 1993-94 and 1996-97 BDHSs; apparent declines in the proportion of women citing "infecundity" as the main reason for nonuse are probably due to changes in the wording of the codes between the two surveys.

There are significant differences in reasons for nonuse between women under age 30 and those 30 and above. The desire to have children (27 percent), husband's opposition (22 percent), and religion (17 percent) are the major reasons for younger women not intending to use contraception in the future. Older women usually cite reasons such as being menopausal or infecund (42 percent).

There are no marked variations in the major reasons for nonuse among women and men, except that men are more likely than women to cite religion and the desire to have children as reasons for not intending to use contraception. Although men are also more likely to cite infecundity as a reason for nonuse, they are less likely than women to cite menopause or hysterectomy; consequently, there is little difference between women and men in the overall proportion who give inability to become pregnant as a reason for nonuse.

Preferred Method

Nonusers who said they intended to use family planning in the future were asked which method they preferred to use. The pill is the most popular method, with half (49 percent) of nonusers who intend to use in the future saying they would choose the pill (data not shown). One in 5 nonusers (21 percent) intend to use injectables. A substantial proportion of nonusers—nearly 1 out of 5 (19 percent)—were uncertain which method they would prefer to use. Compared with the 1993-94 BDHS, there have been no changes in method preferences, confirming the continuing dominance of the pill and injectables in the delivery of family planning services in Bangladesh.

Table 4.24 Reasons for not using contraception

Percent distribution of currently married women and men who are not using a contraceptive method and who do not intend to use in the future, by main reason for not using, according to age, Bangladesh 1996-97

Reason for not using contraception	Women			Men		
	Age			Age		
	10-29	30-49	Total	15-29	30-54	Total
Infrequent sex	2.7	12.7	10.4	(0.0)	7.9	7.3
Menopausal/hysterectomy	0.0	30.0	23.4	(0.0)	15.7	14.4
Subfecund/infecund	1.4	12.3	9.9	(0.0)	23.6	21.6
Want children	26.6	7.1	11.4	(54.9)	11.8	15.4
Respondent opposed	8.4	3.5	4.6	(7.9)	4.6	4.9
Partner opposed	22.0	5.3	9.0	(0.0)	0.8	0.7
Others opposed	0.2	0.2	0.2	(0.0)	0.0	0.0
Religion	16.9	7.3	9.4	(23.3)	19.9	20.2
Knows no method	0.0	0.2	0.2	(0.0)	1.2	1.1
Knows no source	0.0	0.3	0.2	(0.0)	0.9	0.8
Health concerns	3.1	3.3	3.3	(0.0)	1.1	1.0
Side effects	5.3	3.7	4.0	(2.5)	3.2	3.1
Inconvenient	0.2	0.1	0.2	(0.0)	0.3	0.3
Interferes with body	0.4	1.9	1.6	(0.0)	1.6	1.4
Other	11.2	11.3	11.3	(5.0)	6.9	6.8
Don't know	0.7	0.4	0.4	(6.4)	0.0	0.5
Missing	0.9	0.4	0.5	(0.0)	0.5	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women/men	252	885	1,137	34	365	399

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

4.14 Family Planning Messages

In order to gauge the extent of family planning information and education activities, respondents in the 1996-97 BDHS were asked if they had heard or seen a message about family planning on the radio, television, newspaper or magazine, or a billboard or poster in the month before the survey. Table 4.25 presents the distribution of ever-married women and currently married men who had heard such a message, according to background characteristics.

As might be expected in the sociocultural context of Bangladesh, more men than women are exposed to family planning messages through the mass media. Nearly 70 percent of men and slightly over 40 percent of women reported that they had heard or seen a family planning message in one or more of the four media. For women, radio is a more effective means of receiving family planning messages than television, newspapers, or billboards. This is hardly surprising given the limited electric coverage and low female literacy in the country. More than one-third (36 percent) of women said they had heard a family planning message on the radio in the month before the interview, compared with 1 in 5 (20 percent) who had seen a message on television. Only 5 percent of women reported having read a family planning message in a newspaper or magazine, while 6 percent reported having seen a message on a billboard or poster in the month prior to the interview.

Table 4.25 Exposure to family planning messages

Percent distribution of ever-married women 10-49 and currently married men 15-59 by exposure to family planning (FP) messages in the media (heard/saw a message about family planning) during the month preceding the interview, according to selected background characteristics, Bangladesh 1996-1997

Background characteristic	Type of media				At least one FP message	None	Total	Number of women/ men
	Radio	Television	Newspaper/ magazine	Billboard/ poster				
EVER-MARRIED WOMEN								
Age								
10-14	39.2	12.0	2.4	4.8	40.4	59.6	100.0	145
15-19	42.2	20.0	4.6	5.2	48.9	51.1	100.0	1,301
20-24	41.3	23.3	4.9	6.3	47.6	52.4	100.0	1,727
25-29	37.5	22.4	6.7	6.5	43.8	56.2	100.0	1,905
30-34	35.0	21.3	5.1	5.9	41.5	58.5	100.0	1,402
35-39	33.7	17.8	6.5	6.0	39.0	61.0	100.0	1,128
40-44	29.0	16.0	4.9	3.6	35.1	64.9	100.0	861
45-49	24.2	11.5	2.9	2.1	26.7	73.3	100.0	658
Residence								
Urban	44.9	56.4	20.7	18.5	66.5	33.5	100.0	1,063
Rural	35.2	15.1	3.3	3.8	39.0	61.0	100.0	8,064
Division								
Barisal	39.1	18.2	6.6	4.6	42.2	57.8	100.0	598
Chittagong	40.4	24.5	6.8	7.9	48.1	51.9	100.0	1,836
Dhaka	34.0	22.7	6.8	5.9	41.6	58.4	100.0	2,882
Khulna	35.8	18.8	3.7	5.1	40.7	59.3	100.0	1,107
Rajshahi	37.4	15.6	3.1	4.0	41.4	58.6	100.0	2,198
Sylhet	27.7	10.9	2.7	3.3	30.6	69.4	100.0	506
Education								
No education	25.0	9.2	0.2	1.3	28.2	71.8	100.0	4,983
Primary incomplete	39.5	17.3	1.2	3.7	44.7	55.3	100.0	1,572
Primary complete	46.9	25.8	4.3	6.5	55.4	44.6	100.0	913
Secondary+	61.4	51.5	25.1	19.3	74.5	25.5	100.0	1,659
Total	36.3	19.9	5.3	5.5	42.2	57.8	100.0	9,127
CURRENTLY MARRIED MEN								
Age								
15-19	*	*	*	*	*	*	100.0	23
20-24	66.9	53.1	13.2	29.3	73.8	26.2	100.0	194
25-29	67.1	53.7	18.1	35.1	77.2	22.8	100.0	487
30-34	60.3	51.9	21.7	34.8	71.8	28.2	100.0	620
35-39	57.7	47.0	19.1	33.5	70.0	30.0	100.0	621
40-44	60.2	46.0	23.3	34.5	70.9	29.1	100.0	492
45-49	53.4	38.0	19.3	31.2	61.5	38.5	100.0	371
50-54	49.5	33.0	20.7	30.2	59.3	40.7	100.0	272
55-59	41.2	26.2	15.2	21.1	53.5	46.5	100.0	231
Residence								
Urban	69.3	74.2	50.9	59.3	85.7	14.3	100.0	400
Rural	56.6	41.6	15.3	28.7	66.3	33.7	100.0	2,912
Division								
Barisal	67.5	43.5	23.1	40.5	76.2	23.8	100.0	199
Chittagong	55.2	46.6	21.2	44.3	72.4	27.6	100.0	584
Dhaka	59.1	47.8	24.7	32.1	68.8	31.2	100.0	1,056
Khulna	67.2	54.4	20.2	38.3	75.7	24.3	100.0	428
Rajshahi	55.7	41.6	13.4	23.2	64.8	35.2	100.0	877
Sylhet	39.9	28.4	8.4	16.2	48.1	51.9	100.0	168
Education								
No education	45.2	28.7	0.5	15.5	54.1	45.9	100.0	1,390
Primary incomplete	56.0	42.5	7.4	26.7	68.1	31.9	100.0	750
Primary complete	63.9	52.8	17.7	25.6	75.3	24.7	100.0	204
Secondary+	77.0	70.6	56.7	62.5	88.7	11.3	100.0	968
Total	58.1	45.6	19.6	32.4	68.7	31.3	100.0	3,312

Note: An asterisk indicates fewer than 25 unweighted men.

Men were much more likely than women to receive family planning messages through any of the mass media, although there is no difference between men and women in the order of importance of the various media. Fifty-eight percent of men had heard a family planning message on the radio in the month prior to the survey, while 46 percent had seen a message on television. Even billboards and newspapers and magazines are important means of communicating to men, with 1 in 3 men having received family planning messages from the former and 1 in 5 from the latter.

Although high, family planning communication coverage appears to have declined somewhat. In the 1993-94 BDHS, 47 percent of ever-married women reported having received family planning messages through the media in the month before the interview. By 1996-97, this proportion had declined to 42 percent, with relatively fewer women reporting having heard family planning messages on the radio than in 1993-94 (36 vs. 42 percent). Exposure to family planning messages through the other media has only changed slightly. Exact comparison of data from the two surveys is complicated by the fact that the 1993-94 survey did not inquire specifically about newspapers and magazines.

Exposure to family planning messages through the mass media varies by background characteristics of respondents. Generally, exposure to messages on family planning decreases with age among both men and women. Urban respondents are more likely to have been exposed to a media message than their rural counterparts. For example, only 39 percent of rural women saw or heard a message, compared with 67 percent of urban women. Higher urban than rural exposure is true for all four types of media. Differences in media exposure by division are not large, except for Sylhet, where both men and women have significantly less exposure to mass media messages on family planning than their counterparts in the other divisions. As expected, exposure to family planning messages through the mass media is positively correlated with educational level. Only 28 percent of uneducated women and 54 percent of uneducated men reported having heard a family planning message, compared with 75 percent of women and 89 percent of men who had secondary education.

4.15 Family Planning Outreach Services

A crucial element of the Bangladesh family planning program is its universal system of fieldworkers. Some 40,000 village-level fieldworkers—supported by government (Family Welfare Assistant or FWA) and non-governmental organizations—visit couples in their homes to provide contraceptive information, supplies and referrals. This approach was necessitated by the fact that many women are restricted by custom to their homes or the nearby area. Fieldworkers supply both pills and condoms.

In part to increase the accessibility of other, more clinical methods, the government implemented a system of satellite clinics. Under this system, staff from the health centers at the union headquarters visit selected villages at pre-scheduled times to set up temporary clinics. The clinics include basic health services, such as health and nutrition education, antenatal care, screening for high-risk pregnancies, and family planning advice and supplies. A key staff person in this system is the Family Welfare Visitor (FWV), who is able to give contraceptive injections and insert IUDs.

In order to assess the extent of coverage of both fieldworkers and satellite clinics, the BDHS included questions about both services. Although satellite clinics have a clear name in English, there is no easy term to use in Bangla and interviewers therefore tried to describe the clinic. Thus, the quality of the data depend on the ability of respondents to understand the definition. In the 1996-97 BDHS, women were asked whether they had been visited by a family planning fieldworker in the six months prior to the survey and if not, whether they had had any contact with a fieldworker. Table 4.25 shows the results for currently married women. The table also shows, for women visited, the mean number of visits they received in the six-month period. The percentage of visited women who received supplies or methods is also given in the table.

Table 4.26 Contact with family planning fieldworkers

Percentage of currently married women who reported being visited by or having contact with a family planning (FP) fieldworker in the six months prior to the survey, and, of those, the mean number of times visited and the percentage who received supplies, by selected background characteristics and contraceptive use status, Bangladesh 1996-97

	Percentage of currently married women who had contact with a family planning fieldworker			Among currently married women who had contact with a FP fieldworker:		
Background characteristic	Visited in last 6 months	Not visited, but contact	Number of women	Mean number of visits	Percent who received supplies	Number of women
Age						
10-14	12.7	0.9	143	*	*	19
15-19	29.7	3.1	1,252	2.6	38.9	411
20-24	36.6	2.5	1,655	2.8	43.4	647
25-29	43.3	3.4	1,812	2.8	45.7	845
30-34	42.2	4.3	1,297	2.9	49.9	602
35-39	37.0	2.7	1,031	3.0	47.3	410
40-44	24.9	1.2	740	3.2	34.5	193
45-49	15.8	1.0	520	2.8	22.7	87
Residence						
Urban	37.2	2.9	968	2.7	35.3	389
Rural	34.9	2.8	7,482	2.9	45.1	2,825
Division						
Barisal	36.3	3.2	560	3.1	40.6	221
Chittagong	28.1	3.0	1,701	2.7	31.3	530
Dhaka	33.5	2.7	2,656	2.8	44.2	963
Khulna	42.1	3.5	1,024	2.8	50.0	466
Rajshahi	42.9	2.7	2,049	3.0	49.5	933
Sylhet	20.2	1.8	460	2.7	35.5	101
Education						
No education	32.8	2.9	4,502	2.8	46.4	1,607
Primary incomplete	37.6	3.0	1,470	2.9	45.0	598
Primary complete	38.2	3.2	862	3.1	43.8	357
Secondary+	38.1	2.4	1,615	2.8	37.0	653
Number of living children						
None	15.8	0.7	1,006	2.5	22.8	166
1	34.6	3.2	1,631	2.7	40.6	616
2	41.3	4.0	1,803	2.8	47.5	816
3	42.2	2.8	1,423	2.8	46.2	639
4+	35.0	2.7	2,588	3.0	45.2	977
Contraceptive use status						
Using any method	48.1	4.3	4,161	2.9	60.3	2,181
Pill	66.9	5.0	1,759	2.9	78.5	1,266
IUD	39.6	4.7	150	2.9	10.7	67
Injectables	55.3	9.8	526	2.9	57.7	343
Condom	50.0	3.0	329	3.1	48.9	174
Female sterilization	13.0	1.5	643	3.0	1.3	93
Male sterilization	13.6	0.0	93	*	*	13
Periodic abstinence	33.9	1.6	425	2.9	12.4	151
Withdrawal	30.0	3.4	158	2.8	16.4	53
Other	27.1	2.5	77	*	*	23
Not using any method	22.7	1.4	4,289	2.7	9.5	1,033
Total	35.2	2.8	8,450	2.8	43.9	3,214

Note: An asterisk indicates fewer than 25 unweighted women.

One in 3 currently married women (35 percent) reported having been visited by a fieldworker in the six months preceding the survey, while an additional 3 percent said they had contact with a fieldworker. Thus, 38 percent of women had either been visited or had contact with a fieldworker. The mean number of fieldworker visits in the six months was 3. Of those visited, 44 percent said they had received family planning supplies.

The fact that only one-third of married women are being visited by fieldworkers is cause for concern, since virtually the entire country is covered by fieldworkers. Moreover, although questions about fieldworkers' home visits were asked in slightly differing ways in the 1993-94 and 1996-97 BDHSs, there is clear evidence that fieldworker coverage has deteriorated. In the 1993-94 BDHS, 38 percent of women reported having been visited by a fieldworker in the six months prior to the survey to talk about family planning or to give them methods. This proportion dropped to 35 percent in 1996-97.

Fieldworkers are less likely to visit young women (age under 20) and older women (age 40 and above), presumably because they are either more likely to want to get pregnant or to be either infecund or sterilized. Urban women are only slightly more likely than rural women to have been visited in the previous six months. Fieldworker visitation coverage varies significantly by division. Only 20 percent of women in Sylhet Division and fewer than 30 percent of those in Chittagong Division reported having been visited by a fieldworker, compared with around 34-36 percent of women in Dhaka and Barisal Divisions and 42-43 percent of those in Khulna and Rajshahi Divisions. Differences by education of women are small; however, a smaller proportion of women with no children reported that they had been visited by a family planning fieldworker in the six months before the survey, implying that fieldworkers target women with more children. As might be expected, women who were using contraception were substantially more likely than nonusers to be visited by a fieldworker (48 vs. 23 percent). Although fieldworkers are instructed to visit all the households in their assigned area, it is likely that many nonusers are either pregnant, attempting to get pregnant, opposed to family planning, or menopausal, and thus, do not present as urgent a need as others. Among users, coverage is higher for users of the pill, injection, and condoms, while it is understandably lower for those who have been sterilized.

Among women who were visited by a fieldworker, there are minimal differences in either the mean number of visits over the six months prior to the survey or in the proportion who received family planning supplies, except that women in Rajshahi and Khulna Divisions are more likely to receive supplies than women in other divisions, as are women who are using supply methods such as the pill, injectables, and condoms.

Table 4.27 presents data on the extent of recognition of satellite clinics and their coverage. Seven in 10 ever-married women interviewed in the 1996-97 BDHS said that there was a satellite clinic in their community, while more than half (57 percent) of those reporting a clinic said that they had ever visited the clinic. Almost all of these women (94 percent) were aware that the clinic provided immunization services for children; but only 19 percent said that the clinic provided family planning methods and only 6 percent said it provided child growth monitoring. A high 77 percent mentioned other services. It is possible that, instead of reporting all the services that the satellite clinic provided, the women mistakenly reported only the service for which they attended the clinic.

Since 1993-94, both awareness and coverage of satellite clinics have improved. In 1993-94, only 54 percent of ever-married women reported a satellite clinic in their community, compared with 70 percent in 1996-97. Similarly, among those who reported a satellite clinic, the proportion who ever visited the clinic rose from 49 to 57 percent. There has also been improvement in the awareness of specific services provided at satellite clinics, with the exception of child growth monitoring.

Table 4.27 Satellite clinics

Percentage of ever-married women who reported a satellite clinic in their community in the last three months, the percentage who visited a clinic, and the percentage who reported various types of services provided at the clinic, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Percent reporting a clinic in community	Number of ever-married women	Of those reporting a clinic: Percent who visited clinic	Number of women	Of those who visited a clinic, percent reporting various services: Family planning methods	Immunization	Child growth	Other	Don't know/ Missing	Number of women
Age										
10-14	52.7	145	28.1	76	*	*	*	*	*	21
15-19	67.5	1,301	53.0	878	15.9	92.6	6.0	76.1	0.0	465
20-24	70.6	1,727	69.5	1,220	19.0	94.4	5.0	78.4	0.1	848
25-29	72.4	1,905	68.5	1,379	19.9	94.6	6.6	78.6	0.0	945
30-34	71.7	1,402	58.0	1,004	21.0	93.4	5.8	77.5	0.2	583
35-39	69.4	1,128	47.5	783	19.0	95.2	5.1	75.7	0.0	372
40-44	69.4	861	39.4	597	22.6	87.2	11.1	75.8	0.0	235
45-49	62.4	658	28.3	410	17.4	97.2	6.3	70.6	0.5	116
Residence										
Urban	47.6	1,063	49.3	506	16.5	93.7	6.7	68.1	0.0	250
Rural	72.5	8,064	57.1	5,843	19.5	93.7	6.1	77.9	0.1	3,336
Division										
Barisal	72.2	598	62.2	431	28.9	95.1	5.8	81.2	0.0	268
Chittagong	62.2	1,836	52.3	1,142	19.5	90.7	5.4	69.1	0.0	597
Dhaka	66.5	2,882	54.4	1,916	18.9	94.6	6.9	75.8	0.0	1,043
Khulna	76.1	1,107	61.1	843	14.0	93.6	4.5	80.4	0.4	515
Rajshahi	77.4	2,198	58.5	1,702	19.4	95.2	6.7	80.5	0.0	996
Sylhet	62.3	506	53.0	315	22.2	88.1	5.7	80.1	0.4	167
Education										
No education	70.2	4,983	57.4	3,498	17.1	93.6	5.0	77.2	0.0	2,007
Primary incomplete	73.4	1,572	60.3	1,154	22.6	95.1	6.3	79.0	0.0	696
Primary complete	73.5	913	56.7	671	22.9	94.0	6.5	78.5	0.3	380
Secondary+	61.9	1,659	48.9	1,027	21.1	92.3	10.0	74.2	0.2	502
Total	69.6	9,127	56.5	6,349	19.3	93.7	6.1	77.2	0.1	3,585

Note: An asterisk indicates fewer than 25 unweighted women.

Younger and older women are less likely than women in the middle age groups to know of a satellite clinic in the community and, among those who do know, they are less likely to have visited the facility. Satellite clinics are more common in rural (73 percent) than urban (48 percent) areas; however, among those who know of a satellite clinic in their community, there is less of an urban-rural gap in the likelihood of women visiting the clinic. Clinics are more common in Khulna and Rajshahi Divisions than in the other divisions. Women in these divisions, as well as women in Barisal Division, are also more likely to visit the clinic when they know of it. Surprisingly, women with at least some secondary education are less likely than other women to know of a satellite clinic in the community; moreover, they are less likely to visit such a clinic when they do know of one. This pattern may be due to the fact that more educated women tend to live in urban areas and they are also more likely to have other resources such as private doctors and clinics available to them.

4.16 Couples' Communication and Attitudes Toward Use of Family Planning

While husband-wife communication about family planning and agreement to use contraception is not necessary for adoption of certain methods, its absence may be a serious impediment to use. Interspousal communication is therefore an important intermediate step along the path to eventual adoption and sustained use of contraception. Lack of discussion may reflect a lack of personal interest, hostility to the subject, or a customary reticence in talking about sex-related matters. In order to gain insight about spousal communication regarding family planning, currently married respondents in the 1996-97 BDHS were asked how often they had talked to their spouse about family planning in the three months prior to the survey. Data for currently married, non-sterilized women are shown in Table 4.28.

Table 4.28 Discussion of family planning with husband

Percent distribution of currently married non-sterilized women who know a contraceptive method by the number of times they discussed family planning with their husband in the three months preceding the survey, according to current age, Bangladesh 1996-97

	Number of times family planning discussed					
Age	Never	Once or twice	More than twice	Missing	Total	Number of women
10-14	56.8	29.2	14.0	0.0	100.0	142
15-19	45.5	38.0	16.4	0.1	100.0	1,249
20-24	44.1	34.8	21.0	0.1	100.0	1,619
25-29	42.0	38.0	19.8	0.1	100.0	1,713
30-34	44.9	34.9	20.0	0.1	100.0	1,146
35-39	50.0	34.0	15.5	0.4	100.0	847
40-44	67.9	22.9	9.2	0.0	100.0	574
45-49	84.1	12.8	3.0	0.2	100.0	420
Total	48.8	33.8	17.3	0.2	100.0	7,710

Almost half of women said they had not talked to their husband about family planning in the three months preceding the survey, while one-third had discussed it once or twice, and 17 percent had discussed it more than twice. Older women were least likely to have discussed family planning with their husband.

Use of family planning is facilitated when both husband and wife approve of its use. Table 4.29 shows the percent distribution of couples by approval of family planning, according to selected background characteristics. Overall, in 90 percent of the couples, both husband and wife approve of family planning, and in 1 percent, both disapprove. In 4 percent of couples, the wife approves but the husband does not, while in 3 percent, the husband approves but the wife does not. Variations in the data by background characteristics are small except in Sylhet Division, where couples are far less likely to approve of family planning use (64 percent) and also less likely to agree with each other on the subject. Sylhet is the only division in which wives are substantially more likely to approve of family planning use than their husbands.

Because both men and women interviewed in the BDHS were asked whether they approved of family planning and, if married, whether they thought their spouse approved of family planning, it is possible to examine the extent to which husbands and wives report accurately on each other's attitudes. Table 4.30 shows the percent distribution of couples by husband's and wife's attitude toward family planning, according to their spouse's perception of their attitude.

Table 4.29 Attitudes of couples toward family planning

Percent distribution of couples by approval of family planning, according to age difference between spouses and background characteristics, Bangladesh 1996-97

Age difference/ Background characteristic	Both approve	Both disap-prove	Wife approves, husband dis-approves	Husband approves, wife dis-approves	Don't know/ Missing	Total	Percent in agree-ment	Number of couples
Age difference								
Wife older	(91.9)	(0.0)	(5.6)	(0.0)	(2.5)	100.0	(91.9)	40
Husband 0-4 yrs. older	91.9	1.0	3.7	2.6	0.8	100.0	92.9	392
Husband 5-9 yrs. older	89.9	1.2	2.9	3.4	2.6	100.0	91.1	1,273
Husband 10-14 yrs. older	90.0	1.1	4.3	2.2	2.4	100.0	91.1	947
Husband 15+ yrs. older	84.2	1.9	6.6	3.6	3.7	100.0	86.1	376
Residence								
Urban	95.9	0.2	1.6	1.0	1.3	100.0	96.1	362
Rural	88.6	1.4	4.3	3.2	2.6	100.0	90.0	2,666
Division								
Barisal	89.8	0.9	4.6	2.2	2.6	100.0	90.7	186
Chittagong	84.0	1.4	5.1	5.1	4.3	100.0	85.5	536
Dhaka	90.7	0.7	3.7	2.7	2.2	100.0	91.4	948
Khulna	94.4	0.0	2.0	2.0	1.6	100.0	94.4	394
Rajshahi	94.4	0.4	1.9	1.6	1.8	100.0	94.8	801
Sylhet	64.0	10.8	15.6	6.8	2.7	100.0	74.9	163
Education								
Both spouses uneducated	84.7	2.4	5.3	4.0	3.7	100.0	87.0	981
Wife educated, husband none	90.4	0.7	4.2	2.3	2.4	100.0	91.1	301
Husband educated, wife none	87.0	1.1	5.0	3.5	3.3	100.0	88.1	651
Both have some education	95.0	0.4	2.0	1.8	0.8	100.0	95.4	1,095
Total	89.5	1.2	3.9	2.9	2.4	100.0	90.7	3,028

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

The data indicate that when husbands and wives report that their spouse approves of family planning, they are generally accurate. For example, in 97 percent of cases in which wives reported that their husband approved of family planning, the husbands also said they approved. Similarly, in 96 percent of the couples in which the husband said his wife approved of family planning, she also said she approved. However, when husbands and wives report that their spouse disapproved of family planning, in 70 to 73 percent of cases, the opposite is true, that is, the spouse actually approves of family planning. Caution should be used in drawing a conclusion from these data that there is a considerable lack of communication between spouses about attitudes towards family planning. It is likely that at least some respondents report more favorable attitudes toward family planning than they in fact hold, perhaps in an attempt to please the interviewer or to appear more sophisticated.

Table 4.30 Perception of spouse's attitude toward family planning

Percent distribution of couples by husband's and wife's actual attitude toward family planning, according to their spouse's perception of their attitude, Bangladesh 1996-97

Perception	Spouse's actual attitude			Total	Number of couples
	Approves	Disap-proves	Unsure		
Wife's perception of husband's attitude					
Approves	96.5	3.0	0.5	100.0	2,605
Disapproves	73.3	22.7	4.1	100.0	298
Don't know	79.4	15.0	5.5	100.0	124
Total	93.5	5.5	1.0	100.0	3,028
Husband's perception of wife's attitude					
Approves	96.1	2.8	1.1	100.0	2,728
Disapproves	69.7	24.3	6.0	100.0	150
Don't know	82.9	12.2	4.9	100.0	150
Total	94.1	4.4	1.5	100.0	3,028

CHAPTER 5

OTHER PROXIMATE DETERMINANTS OF FERTILITY

5.1 Introduction

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

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

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

5.2 Current Marital Status

Data on the marital status of female respondents at the time of the survey are shown in Table 5.1. Overall, 34 percent of women age 10-49 have never married, 62 percent are currently married, and 5 percent are either widowed or divorced. The proportion who have never married falls sharply from 95 percent of women age 10-14 to less than 1 percent of women over age 30.

As expected, the proportion widowed increases with age of women; 12 percent of women age 40-44 and 18 percent of those 45-49 are widowed. The proportion divorced is low and relatively even across age groups (2-4 percent).

Table 5.2 shows the trend in the proportion of women reported as never married by age group from previous surveys in Bangladesh. It is evident that the proportion of women under age 25 who have never married has increased. Since 1975, the proportion of women age 15-19 who have not yet married has increased from 30 to 50 percent (Figure 5.1). The proportion never married at ages 20-24 also rose from 5 to 17 percent. The proportion never married above age 25 is so small that changes over time are difficult to detect.

Table 5.1 Current marital status

Percent distribution of women by current marital status, according to age, Bangladesh 1996-97

Age	Current marital status: Never married	Married	Widowed	Divorced	Total	Number
10-14	95.2	4.7	0.0	0.1	100.0	3,035
15-19	49.8	48.3	0.2	1.7	100.0	2,592
20-24	17.2	79.3	0.9	2.6	100.0	2,087
25-29	3.4	91.9	1.6	3.0	100.0	1,973
30-34	0.5	92.0	3.6	3.9	100.0	1,409
35-39	0.0	91.3	5.7	2.9	100.0	1,129
40-44	0.0	86.0	11.5	2.5	100.0	861
45-49	0.0	79.0	18.3	2.7	100.0	658
Total	33.6	61.5	2.8	2.1	100.0	3,743

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

Table 5.2 Trends in proportion never married

Percentage of women who have never married, by age group, as reported in various surveys, Bangladesh 1975-96

Age	1975 BFS	1983 CPS	1985 CPS	1989 BFS	1989 CPS	1991 CPS	1993-94 BDHS	1996-97 BDHS
10-14	91.2	98.0	98.7	96.2	96.4	98.5	95.2	95.2
15-19	29.8	34.2	47.5	49.0	45.8	46.7	50.5	49.8
20-24	4.6	4.0	7.1	12.0	9.3	12.3	12.4	17.2
25-29	1.0	0.7	1.0	2.3	1.6	2.8	2.2	3.4
30-34	0.2	0.4	0.1	0.3	0.5	0.5	0.3	0.5
35-39	0.4	-	-	0.1	0.5	0.1	0.3	0.0
40-44	0.1	0.1	-	0.2	0.2	0.3	0.7	0.0
45-49	0.0	0.1	-	0.1	0.1	-	0.2	0.0

- = Less than 0.1 percent

Sources: 1975 BFS (MHPC, 1978:49); 1983, 1985, 1989 and 1991 CPSs (Mitra et al., 1993:24); 1989 BFS (Huq and Cleland, 1990:43); 1993-94 BDHS (Mitra et al., 1994:72)

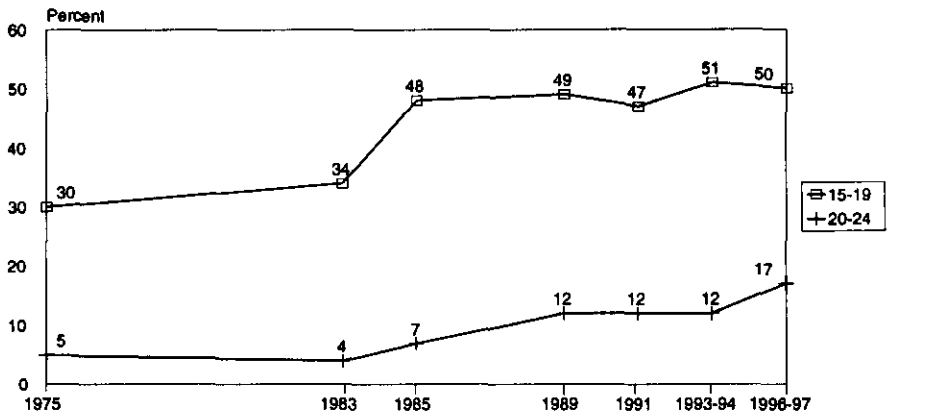
5.3 Age at First Marriage

Table 5.3 shows the percentage of women who have ever been married by exact ages, as well as the median age at first marriage, according to women's current ages. Although the intention was to obtain information on the age at which the respondent started to live with her husband, it is likely that some women, especially older women, reported the age at which they were formally married, which in many cases is several years before cohabitation. To the extent that this occurred, it would lead to underestimates of the age at first cohabitation.

Overall, about 60 percent of Bangladeshi women were married by the time they were age 15. The median age at first marriage among women 20-49 is 14 years. Data in the last column of Table 5.3 imply there has been a slow but steady increase over the past 25 years in the age at which Bangladeshi women first marry. The median age at marriage has increased from 13.3 among women currently age 45-49 to 15.3 for

those age 20-24 years. However, comparison of data from the 1993-94 and 1996-97 BDHS surveys show that the median age at marriage among women has remained constant at 14. Since data from the Bangladesh Bureau of Statistics also show a steady rise in the *mean* age at marriage over the past 15 years (BBS, 1997a:143), it is likely that fluctuations in the reported age at marriage in one or both BDHS surveys have masked the upward trend.

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



BDHS 1996-97

Table 5.3 Age at first marriage

Percentage of women who were first married by specific exact age and median age at first marriage, according to current age, Bangladesh 1996-97

Current age	Percentage who were first married by exact age: 12	15	18	20	22	25	Percentage who have never married	Number of women	Median age at first marriage
15-19	3.1	33.1	NA	NA	NA	NA	49.8	2,592	a
20-24	5.4	46.8	68.5	77.1	NA	NA	17.2	2,087	15.3
25-29	9.1	57.2	81.4	88.3	91.6	94.9	3.4	1,973	14.5
30-34	12.8	62.6	86.4	92.4	95.9	98.6	0.5	1,409	14.1
35-39	14.0	69.7	89.5	94.2	96.2	99.0	0.0	1,129	13.7
40-44	23.3	73.5	93.6	96.7	98.3	99.2	0.0	861	13.4
45-49	27.7	76.9	92.7	96.7	98.3	99.4	0.0	658	13.3
Median for women 20-49	12.5	60.5	82.3	88.5	91.6	93.8	5.4	8,116	14.2
Median for women 25-49	15.0	65.3	87.0	92.5	95.1	97.6	1.2	6,029	13.9

NA = Not applicable
[a] Omitted because less than 50 percent of the women in the age group *x* to *x+4* were first married by age *x*.

Table 5.4 presents the median age at first marriage by selected background characteristics for women age 20-49 years. The table shows large differentials in marriage behavior patterns. It can be seen that in each age group, urban women marry later than their rural counterparts, with an overall difference of two years in the median age at marriage among women 20-49 (16 vs. 14, respectively). Women in Rajshahi and Khulna Divisions have relatively early median ages at marriage, while those in Sylhet and Chittagong Divisions marry the latest. A woman's age at marriage is highly correlated with her education level. The median age at marriage increases with the level of education for all age groups of women in Bangladesh. For example, the median age at first marriage for women age 20-49 increases steadily from 13.6 among women with no education to 17.7 for women with some secondary education. These findings correspond to those from the 1993-94 BDHS (Mitra et al., 1994:75).

Table 5.4 Median age at first marriage

Median age at first marriage among women age 20-49 years, by selected age groups, and selected background characteristics, Bangladesh 1996-97

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	19.0	16.0	15.2	14.7	14.7	14.9	16.0	15.3
Rural	15.0	14.3	14.0	13.6	13.3	13.2	14.0	13.8
Division								
Barisal	15.9	15.0	14.9	14.2	13.9	14.2	14.8	14.6
Chittagong	16.9	15.1	14.8	14.0	14.0	13.7	15.1	14.5
Dhaka	15.2	14.3	13.8	13.5	13.2	13.1	14.0	13.7
Khulna	15.0	14.2	13.7	13.5	13.1	13.1	13.9	13.7
Rajshahi	13.9	13.7	13.6	13.6	12.9	12.5	13.6	13.5
Sylhet	17.6	16.2	15.3	14.5	14.5	13.9	15.5	15.1
Education								
No education	14.1	13.8	13.7	13.5	13.2	12.9	13.6	13.5
Primary incomplete	14.3	14.1	13.8	13.4	13.3	13.6	13.8	13.7
Primary complete	15.0	14.9	14.5	14.5	13.6	14.6	14.6	14.5
Secondary+	19.6	17.8	16.6	15.8	15.6	15.8	17.7	16.7
All women	15.3	14.5	14.1	13.7	13.4	13.3	14.2	13.9

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

5.4 Postpartum Amenorrhea and Insusceptibility

The risk of pregnancy following 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). Protection can also be prolonged by delaying the resumption of sexual relations. Women are defined as insusceptible if they are not exposed to the risk of pregnancy, either because they are amenorrheic or abstaining following a birth.

The percentage of children whose mothers are postpartum amenorrheic, abstaining, and postpartum insusceptible is shown in Table 5.5 by the number of months since birth. These distributions are based on current status data, i.e., on the proportion of births occurring x months before the survey for which mothers

are still amenorrheic, abstaining or insusceptible. The estimates of the median and mean durations shown in Tables 5.5 and 5.6 are calculated from the current status proportions at each time period. The data are grouped in two-month intervals to minimize fluctuations in the estimates.

The period of postpartum amenorrhea is considerably longer than the period of postpartum abstinence and is by far the major determinant of the length of postpartum insusceptibility to pregnancy. By 6-7 months following birth, 56 percent of women are still amenorrheic, while only 7 percent are still abstaining. Similarly, at 12-13 months postpartum, 37 percent of women are amenorrheic, compared with 2 percent still abstaining. The mean duration of postpartum amenorrhea is 11 months; that of postpartum abstinence is 4 months. The combination of these two factors means that Bangladeshi women are insusceptible to the risk of pregnancy—either due to amenorrhea or to abstinence—for an average of 12 months after giving birth. There may have been a slight decline in the duration of amenorrhea over the last few years; the mean length of postpartum amenorrhea fell from 12 as calculated from the 1989 BFS, the 1991 CPS and the 1993-94 BDHS data to 11 in the 1996-97 BDHS (Huq and Cleland, 1990:87; Mitra et al., 1993:97; Mitra et al., 1994:77).

Table 5.5 Postpartum amenorrhea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Bangladesh 1996-97

Months since birth	Amenorrheic	Abstaining	Insusceptible	Number of births
< 2	97.3	81.3	98.7	190
2-3	78.9	22.4	81.2	263
4-5	65.9	7.0	66.8	196
6-7	56.3	6.8	58.3	180
8-9	49.6	4.0	50.4	185
10-11	44.2	6.3	47.5	224
12-13	36.5	2.4	37.4	224
14-15	26.7	3.8	29.5	257
16-17	23.8	3.9	27.1	176
18-19	14.1	1.1	15.2	165
20-21	12.0	2.6	14.6	166
22-23	9.6	1.9	11.2	180
24-25	4.6	3.7	7.8	275
26-27	4.4	1.9	5.8	224
28-29	3.5	0.5	4.0	169
30-31	1.2	2.2	3.4	170
32-33	1.2	2.3	3.5	177
34-35	2.6	3.1	5.7	215
Total	30.4	8.9	32.4	3,637
Median	8.4	1.9	9.0	-
Mean	10.9	3.5	11.6	-
Prevalence/ Incidence mean[1]	10.8	3.1	11.5	-

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

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

Table 5.6 Median duration of postpartum insusceptibility by background characteristics

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insuscep-tibility	Number of women
Age				
<30	8.1	1.9	8.6	2,894
30+	10.0	2.3	10.3	744
Residence				
Urban	5.6	1.8	5.7	328
Rural	8.8	1.9	9.4	3,309
Division				
Barisal	7.0	2.1	8.0	239
Chittagong	8.0	2.0	8.9	911
Dhaka	7.5	1.9	7.7	1,124
Khulna	7.1	1.9	8.0	346
Rajshahi	9.3	1.8	9.5	766
Sylhet	11.0	2.3	11.6	250
Education				
No education	10.6	2.1	10.8	2,051
Primary incomplete	7.6	1.7	8.0	608
Primary complete	5.5	1.8	6.1	364
Secondary+	6.7	1.9	7.0	614
Total	8.4	1.9	9.0	3,637

Note: Medians are based on current status.

CHAPTER 6

FERTILITY PREFERENCES

Several questions were asked in the BDHS concerning women's and men's fertility preferences. The aim of this part of the interview was to determine how many children respondents would prefer to have and to establish the extent of unmet need for contraception and the number of unwanted or mistimed births. The BDHS questionnaire included questions on:

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

The usefulness of data on fertility preferences has been controversial. Critics consider the data misleading because of the fact that information gathered from individual respondents does not take into account the effect of social pressures or attitudes of other family members, particularly the husband or wife, whose opinions on reproductive behavior may be very influential. Another objection expressed by critics is that fertility preferences may change with time. Others maintain that results obtained from these questions are important for assessing the extent to which unwanted or mistimed pregnancies occur and the effect of prevention of such pregnancies. Data on fertility preferences can provide an indication of the direction of future fertility to the extent that individuals and couples will act so as to achieve their preferred family sizes.

6.1 Desire for More Children

In the BDHS, currently married women and men were asked "Would you like to have (a/another) child or would you prefer not to have any (more) children?" Interviewers were instructed to use the words in parentheses depending on whether the respondent had children or not. Pregnant respondents were asked if they wanted another child after the one they were expecting. Respondents who said they did want to have another child were then asked how long they would like to wait before the birth of the next child.

Table 6.1 shows the percent distribution of currently married women and men by desire for another child, according to the number of living children. Almost half (49 percent) of currently married women age 10-49 in Bangladesh say they want no more children, and an additional 9 percent have been sterilized (Table 6.1 and Figure 6.1). Thirty-six percent of women want to have a child at some time in the future; however, the vast majority of these women (22 percent of all married women) say they would like to wait two or more years before having their next birth. Only 13 percent of women say they want to have a child soon and 3 percent are undecided about whether they want another. Thus, the vast majority of women want either to space their next birth or to limit childbearing altogether. These women can be considered to be potentially in need of family planning services. Results for currently married men are similar to those for women.

Not surprisingly, the desire for additional children drops progressively as the number of living children increases (Table 6.1 and Figure 6.2). Sixty percent of married women with no children want to have a child within two years, compared with no respondents with six or more children. Conversely, the percentage of women who want no more children or who are sterilized rises from 3 percent for women with no children to 86 percent for those with six or more children.

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women age 10-49 and currently married men age 15-59 by desire for more children, according to number of living children, Bangladesh 1996-97

Desire for children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
WOMEN								
Have another soon[2]	59.5	20.6	8.0	4.7	1.0	1.6	0.0	12.5
Have another later[3]	29.2	63.0	20.4	8.0	2.7	2.0	0.4	21.7
Have another, undecided when	3.5	3.6	2.1	1.1	0.7	0.5	0.1	1.8
Undecided	2.1	1.7	4.2	3.0	2.4	1.9	1.8	2.6
Want no more	1.8	8.3	55.1	68.1	73.8	73.1	76.5	49.1
Sterilized	1.5	1.6	8.6	12.5	15.8	14.5	9.5	8.7
Declared infecund	2.3	1.1	1.5	2.7	3.6	6.3	11.7	3.4
Missing	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	788	1,697	1,821	1,487	1,110	671	876	8,450
MEN								
Have another soon[2]	52.4	20.1	8.1	4.7	3.2	1.9	0.8	12.2
Have another later[3]	40.6	58.9	18.9	9.8	3.2	1.8	0.3	21.3
Have another, undecided when	3.8	5.2	3.3	2.0	1.1	0.4	0.3	2.6
Undecided	1.7	3.0	5.3	3.4	3.5	5.9	3.3	3.8
Want no more	0.5	10.2	54.9	65.6	69.7	70.3	76.5	48.7
Sterilized	0.3	1.3	9.0	13.8	17.4	14.9	11.7	9.5
Declared infecund	0.6	1.4	0.4	0.7	2.0	4.8	6.9	2.0
Missing	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	333	618	679	574	458	284	366	3,312

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

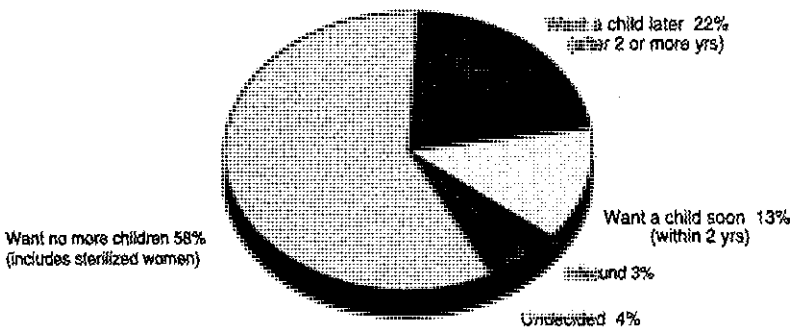
The desire for additional children declined noticeably in Bangladesh over the past decade. In 1991, 45 percent of married women with two children wanted to have another child in the future (Mitra et al., 1993:84); in the 1996-97 BDHS the proportion is only 31 percent. Conversely, the percentage of women with two children who want no more children or are sterilized has risen from 48 percent in 1991 to 64 percent in 1996-97. Recently, changes in fertility preferences have been less pronounced. Overall, the proportion of married women who want no more children or are sterilized increased from 57 percent in 1993-94 to 58 percent in 1996-97.

Table 6.2 shows the percent distribution of currently married women by desire for children according to age. As expected, the proportion of women who want no more children increases with age. Ten percent of women age 15-19 want no more children or have been sterilized, compared with 72 percent of women age 45-49 years. In contrast, the proportion who want to delay their next birth declines with age, as does the proportion of women who want the next birth within two years. The proportion who report themselves to be unable to have more children (infecund) is 1 percent or less among women under 35, but rises to over one-quarter of women age 45-49.

It is possible to compare the fertility preferences of husbands and wives to assess the extent to which they agree. For the 3,028 matched couples in which both the wife and her husband were interviewed in the BDHS, the data show that the vast majority of married couples agree on whether or not they want to have more children. As shown in Figure 6.3, in over half of the couples, both the wife and husband say they want

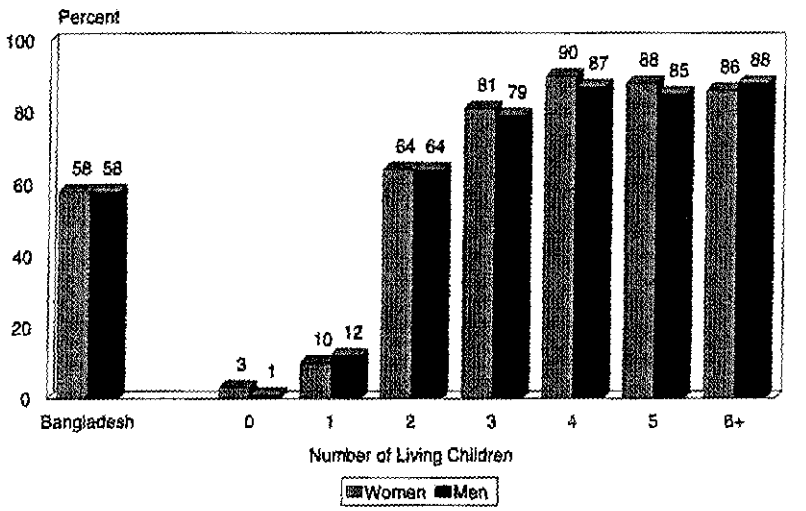
no more children, while in 28 percent, they both say they do want more children. Among couples who disagree, the proportion in which the husband wants more and his wife doesn't (6 percent) is almost equal to the proportion in which the husband does not want more and his wife does (5 percent).

Figure 6.1
Fertility Preferences Among Currently Married Women 10-49



BDHS 1996-97

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



Note: Includes sterilized women and men

BDHS 1996-97

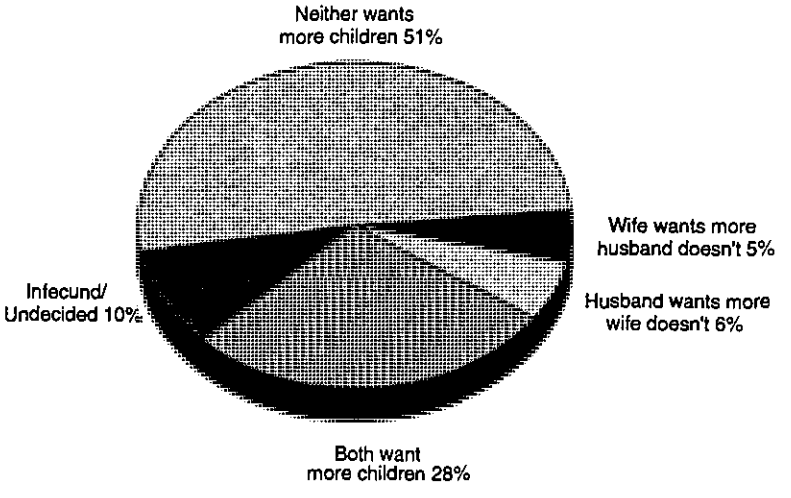
Table 6.2 Fertility preferences by age

Percent distribution of currently married women age 10-49 by desire for more children, according to age, Bangladesh 1996-97

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]	35.7	24.0	17.0	13.4	7.9	4.9	3.0	0.8	12.5
Have another later[2]	49.3	60.1	39.5	15.8	4.7	1.1	0.4	0.0	21.7
Have another, undecided when	4.4	3.5	2.5	1.9	1.3	1.1	0.2	0.0	1.8
Undecided	7.2	2.3	3.5	3.8	1.9	2.0	1.2	0.4	2.6
Want no more	2.5	10.1	35.2	59.4	71.6	69.0	60.5	52.8	49.1
Sterilized	0.0	0.1	2.1	5.5	11.6	17.8	22.5	19.2	8.7
Declared infecund	0.0	0.0	0.0	0.3	1.0	4.0	12.2	26.7	3.4
Missing	0.9	0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	143	1,252	1,655	1,812	1,297	1,031	740	520	8,450

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

Figure 6.3
Fertility Preferences Among Married Couples



BDHS 1996-97

The proportion of women who want no more children is an important and easily understood measure of fertility preference. Table 6.3 and Figure 6.4 show the percentage of currently married women who want no more children by number of living children and selected background characteristics. Urban women are slightly more likely than rural women to want to limit family size at lower parities. For example, 68 percent of urban women with two children say that they do not want another child, compared with 63 percent of rural women. However, differences are not large and the urban-rural differential in desire for more children seems to have narrowed since 1993-94.

Table 6.3 Desire to limit childbearing

Percentage of currently married women age 10-49 who want no more children, by number of living children and selected background characteristics, Bangladesh 1996-97

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	1.6	15.8	67.7	86.8	94.3	91.0	83.5	57.9
Rural	3.5	9.0	63.1	79.7	89.0	87.4	86.1	57.8
Division								
Barisal	0.0	10.1	64.4	77.7	89.9	88.5	91.4	57.6
Chittagong	3.0	4.1	46.8	68.2	86.3	83.4	89.2	55.4
Dhaka	4.2	12.6	65.7	82.2	90.4	87.7	84.1	58.8
Khulna	4.3	12.7	72.1	85.7	93.3	93.6	89.5	60.6
Rajshahi	2.5	9.7	71.1	90.8	93.6	94.0	86.1	60.3
Sylhet	3.7	6.2	40.0	58.7	72.4	77.0	72.5	44.7
Education								
No education	6.2	11.6	64.6	79.0	88.1	85.4	84.3	63.3
Primary incomplete	3.0	8.6	61.3	80.7	93.5	90.0	92.3	58.1
Primary complete	1.2	7.0	54.3	80.3	86.2	(91.4)	88.5	51.2
Secondary+	1.0	9.4	68.3	86.3	93.6	96.7	82.6	45.9
Total	3.3	9.9	63.8	80.5	89.6	87.6	85.9	57.8

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

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

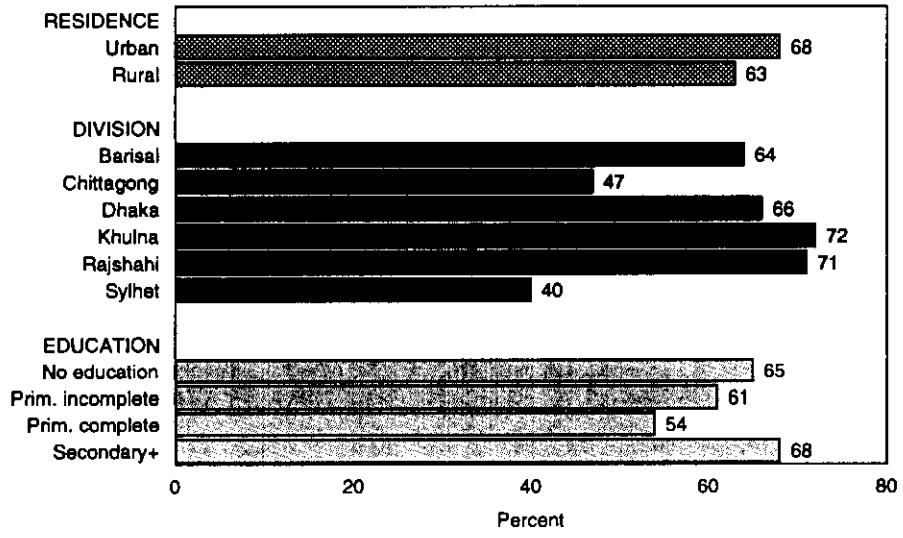
6.2 Need for Family Planning Services

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

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

need constitute the *total demand* for family planning. Table 6.4 presents data on unmet need, met need, and total demand for family planning, according to whether the need is for spacing or limiting births.

Figure 6.4
Percentage of Married Women with Two Children Who Want No More Children by Background Characteristics



BDHS 1996-97

One in 6 married women (16 percent) in Bangladesh has an unmet need for family planning services (see Table 6.4, column 3)—8 percent for spacing purposes and 8 percent for limiting births. Combined with the 49 percent of married women who are currently using a contraceptive method, the total demand for family planning comprises two-thirds of married women in Bangladesh. Therefore, if all women who say they want to space or limit their children were to use methods, the contraceptive prevalence rate would be increased from 49 to 67 percent of married women. Currently, 76 percent of the demand for family planning is being met (see Table 6.4, next-to-last column).

As expected, unmet need for spacing purposes is higher among younger women, while unmet need for limiting childbearing is higher among older women. The net result is that, except among the oldest age groups, unmet need varies little by age. The level of unmet need among rural women (17 percent) is higher than that of urban women (10 percent). It is highest among women in Chittagong and Sylhet Divisions (21 percent each), intermediate in Barisal (18 percent) and Dhaka (17 percent) Divisions, and lowest in Khulna and Rajshahi Divisions (11 percent each). Unmet need is slightly lower among women with some secondary schooling than among less educated or uneducated women.

Unmet need has declined recently, from 19 percent of currently married women in 1993-94 to 16 percent in 1996-97 (Mitra et al., 1994:86). The decline has been largest in Chittagong/Sylhet Division where it decreased from 27 percent of women in 1993-94 to 21 percent in 1996-97 (see Figure 6.5).

In addition to the data on unmet need, one of the more striking findings in Table 6.4 is the variations in the percentage of the total demand that is being satisfied by current use. In Sylhet Division, only half of

the potential total demand is currently being satisfied, compared with 86 percent in Khulna Division. Another way of looking at this is to say that in Sylhet Division, the level of unmet need is as large as the level of current contraceptive use, while in Khulna Division, not only is the level of unmet need relatively small, but the family planning use rate is high.

Table 6.4 Need for family planning services

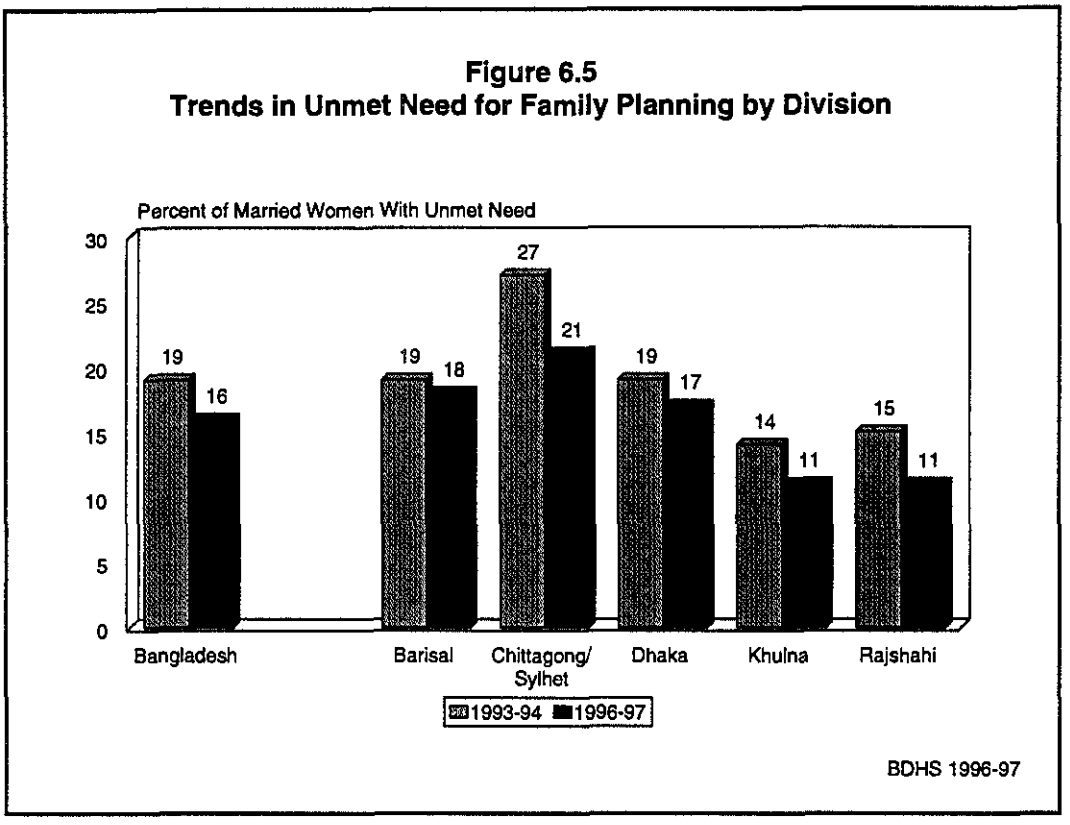
Percentage of currently married women with unmet need for family planning, met need for family planning, and the total demand for family planning services, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning[3]			Percentage of demand satis-fied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
10-14	21.3	0.8	22.1	14.8	0.8	15.6	37.5	1.6	39.1	43.6	143
15-19	17.8	0.9	18.7	29.6	3.3	32.9	49.0	4.4	53.4	65.0	1,252
20-24	13.5	3.9	17.4	24.4	18.7	43.1	39.5	22.9	62.4	72.2	1,655
25-29	7.1	11.3	18.4	13.0	39.5	52.5	21.2	51.5	72.7	74.7	1,812
30-34	3.3	12.5	15.8	3.7	59.4	63.1	7.5	73.5	81.0	80.5	1,297
35-39	1.5	12.4	13.9	1.5	62.4	63.9	3.0	75.6	78.5	82.2	1,031
40-44	0.5	9.9	10.3	0.2	54.4	54.7	0.7	64.6	65.3	84.2	740
45-49	0.2	4.5	4.6	0.0	35.1	35.1	0.2	39.5	39.7	88.3	520
Residence											
Urban	5.2	4.7	9.9	18.9	43.2	62.1	25.0	48.3	73.3	86.5	968
Rural	8.3	8.3	16.6	12.2	35.4	47.6	21.4	44.3	65.7	74.8	7,482
Division											
Barisal	9.3	9.0	18.3	14.6	34.8	49.4	24.8	44.4	69.2	73.6	560
Chittagong	10.6	10.6	21.2	8.7	28.5	37.2	20.2	40.2	60.4	64.9	1,701
Dhaka	7.6	8.9	16.5	13.5	36.4	49.8	21.6	45.6	67.2	75.4	2,656
Khulna	5.9	4.6	10.6	16.7	45.2	61.9	23.4	50.2	73.7	85.6	1,024
Rajshahi	6.2	4.9	11.2	15.5	43.1	58.6	23.2	48.9	72.1	84.5	2,049
Sylhet	10.1	11.2	21.4	3.9	16.2	20.1	14.8	27.5	42.3	49.6	460
Education											
No education	6.9	9.6	16.5	8.3	37.6	45.8	16.2	48.0	64.1	74.3	4,502
Primary incomplete	8.6	7.7	16.4	13.7	37.5	51.2	23.0	45.8	68.7	76.2	1,470
Primary complete	9.5	6.3	15.8	18.0	33.1	51.1	28.0	39.6	67.6	76.7	862
Secondary+	9.2	4.3	13.4	22.7	33.3	56.0	33.0	37.9	70.9	81.1	1,615
Total	7.9	7.9	15.8	13.0	36.3	49.2	21.8	44.8	66.6	76.2	8,450

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

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

[3] Total demand includes pregnant or amenorrheic women who became pregnant while using a method (method failure); they account for 1.5 percent of currently married women.



6.3 Ideal Family Size

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

The data in Table 6.5 indicate that the vast majority of respondents were able to give a numeric answer to this question. Only 6 percent of ever-married women and 7 percent of currently married men gave a non-numeric answer such as "it is up to God," "any number," or "don't know." Those who gave numeric responses generally want to have small families. Among ever-married women, 60 percent prefer a two-child family and another 21 percent consider a three-child family ideal, while less than 1 percent said they would choose to have six or more children. Data are similar for married men. These results are evidence of how widespread the two-child norm has become in Bangladesh. Among women and men with two or fewer children, 70 percent say they think two children are ideal.

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

Table 6.5 Ideal and actual number of children

Percent distribution of ever-married women and currently married men by ideal number of children, and mean ideal number of children for ever-married women and for currently married women and men, according to number of living children, Bangladesh 1996-97

Ideal number of children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
WOMEN								
0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	2.9	4.6	1.3	1.1	0.8	0.5	0.4	1.9
2	70.9	72.7	69.8	51.5	54.0	44.4	33.4	59.5
3	12.8	13.6	19.3	30.8	17.3	29.3	27.1	20.8
4	6.0	4.4	5.3	11.1	20.9	13.0	22.0	10.5
5	0.2	0.7	0.4	1.0	0.9	4.1	1.2	1.0
6+	0.0	0.2	0.2	0.3	0.3	0.3	2.4	0.5
Non-numeric response	7.1	3.8	3.7	4.1	5.9	8.3	13.5	5.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	906	1,864	1,938	1,576	1,163	723	957	9,127
Mean ideal number for:								
Ever-married women	2.2	2.2	2.3	2.6	2.7	2.8	3.0	2.5
Number of women	842	1,794	1,867	1,512	1,095	663	827	8,600
Currently married women	2.2	2.2	2.3	2.6	2.7	2.8	3.0	2.5
Number of women	738	1,636	1,754	1,430	1,044	616	758	7,975
MEN								
1	2.0	6.6	2.1	3.5	1.6	1.3	0.9	2.9
2	69.2	67.0	68.3	49.9	53.8	38.1	33.3	56.5
3	18.9	18.1	23.1	32.2	24.5	32.6	32.8	25.4
4	3.6	4.2	3.0	7.8	10.3	12.8	15.9	7.4
5	0.2	0.4	0.2	0.4	1.8	3.6	1.6	0.9
6+	0.0	0.3	0.2	0.2	0.5	0.0	1.3	0.3
Non-numeric response	6.0	3.3	3.2	5.9	7.5	11.7	14.2	6.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	333	618	679	574	458	284	366	3,312
Mean ideal number for:								
Currently married men	2.3	2.2	2.3	2.5	2.6	2.8	2.9	2.4
Number of men	313	597	657	540	424	251	314	3,096

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

Although there was a distinct downward trend in the preferred family sizes during the late 1970s and 1980s, there has been little change in recent years. The mean ideal family size declined from 4.1 among currently married women in 1975, to 2.9 in 1989 (Huq and Cleland, 1990:53) and to 2.5 in 1993-94 (Mitra et al., 1994:88). However, it has remained constant at 2.5 between 1993-94 and 1996-97.

As expected, the ideal number of children increases with the number of living children, from 2.2 among childless women to 3.0 among women with six or more children and from 2.3 among childless men to 2.9 among those with six or more children. There are several possible explanations for the relationship between ideal and actual number of children. First, to the extent that they are able to implement their preferences, respondents who want larger families will tend to actually have them. Second, those who have larger families may tend to rationalize their family size by reporting their actual number of children as their ideal number. Finally, respondents with larger families, being older, on average, than those with smaller families, may have larger ideal family sizes, because of attitudes they acquired 20 to 30 years ago.

Despite the likelihood that some rationalization of large families occurs, it is common for respondents to report ideal family sizes lower than their actual number of children. For example, 72 percent of women with four children report fewer than four children as their ideal number and 87 percent of those with 5 children state an ideal number of children less than five. These proportions are similar to those reported for 1993-94.

Table 6.6 shows the mean ideal number of children for ever-married women interviewed in the 1996-97 BDHS by age group and selected background characteristics. The mean ideal number of children increases with age from 2.1 among women age 10-14 to 2.8 among women age 45-49. Rural women have slightly higher family size norms than urban women; this differential is reflected in every age group. Regionally, the largest mean ideal family size is found among women in Sylhet Division (2.9 children); this is also true at every age group. Women in Chittagong Division have ideal family size desires only slightly lower than in Sylhet Division. Women in Khulna and Rajshahi Divisions have the lowest mean ideal family size (2.3 children). Ideal family size is correlated with the level of education attained. Women with no education want the largest families (2.6 children), while women with some secondary education want the smallest (2.2 children); this is true for every age group, though the differences are small for some age groups.

Table 6.6 Mean ideal number of children by background characteristics

Mean ideal number of children for ever-married women, by age and selected background characteristics, Bangladesh 1996-97

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

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

6.4 Fertility Planning

There are two ways of estimating levels of unwanted fertility from the BDHS data. One is based on responses to a question as to whether each birth in the five years before the survey was planned (wanted then), mistimed (wanted, but at a later time), or unwanted (wanted no more children). These data are likely to result in underestimates of unplanned childbearing, since women may rationalize unplanned births and declare them as planned once they are born. Another way of measuring unwanted fertility utilizes the data

on ideal family size to calculate what the total fertility rate would be if all unwanted births were avoided. This measure may also suffer from underestimation to the extent that women are unwilling to report an ideal family size lower than their actual family size. Data using these two approaches are presented below.

Table 6.7 shows the percent distribution of births in the five years before the survey by whether the birth was wanted then, wanted later, or not wanted. Overall, about one-third of births in Bangladesh can be considered as unplanned—20 percent as mistimed (wanted later) and 11 percent as unwanted (Figure 6.6). The proportion of unplanned births increases directly with the birth order of the child. Almost half of all fourth and higher order births were unplanned, with more than one-quarter being unwanted at the time of conception. Similarly, a much larger proportion of births to older women are found to be unplanned—well over half of births among women in their late 30s and 40s.

Table 6.7 Fertility planning status

Percent distribution of births in the five years preceding the survey and current pregnancies, by fertility planning status, according to birth order and mother's age, Bangladesh 1996-97

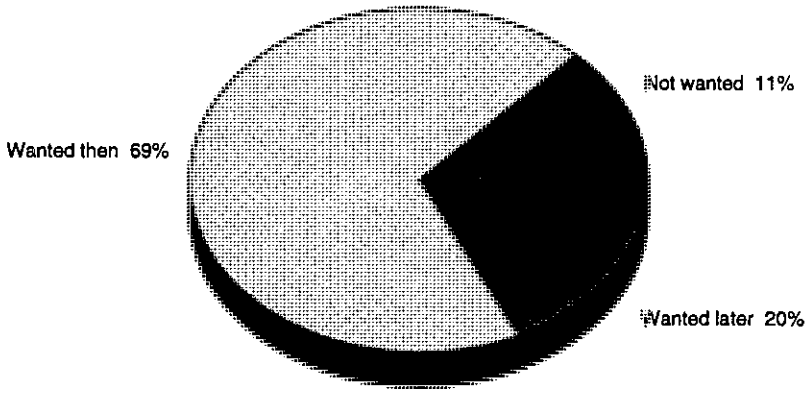
Birth order and mother's age	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Not wanted	Missing		
Birth order						
1	84.2	15.3	0.2	0.3	100.0	1,874
2	75.3	23.4	1.2	0.2	100.0	1,597
3	68.2	22.5	9.0	0.3	100.0	1,110
4+	52.2	19.3	28.2	0.4	100.0	2,298
Age at birth						
<20	78.7	20.0	1.0	0.3	100.0	2,199
20-24	72.0	22.1	5.6	0.3	100.0	2,217
25-29	62.1	18.8	18.8	0.3	100.0	1,403
30-34	54.4	17.1	28.2	0.3	100.0	673
35-39	45.6	11.2	43.0	0.2	100.0	293
40-49	41.5	13.2	45.3	0.0	100.0	95
Total	68.9	19.7	11.2	0.3	100.0	6,880

Note: Birth order includes current pregnancy.

Table 6.8 presents "wanted" fertility rates calculated using the second approach to measuring unwanted fertility. The wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. For this purpose, unwanted births are defined as those which exceed the number considered ideal by the respondent. (Women who do not report a numeric ideal family size are assumed to want all their births.) This rate represents the level of fertility that would have prevailed in the three years preceding the survey if all unwanted births had been prevented. A comparison of the total wanted fertility rate and the actual fertility rate suggests the potential demographic impact of the elimination of unwanted births.

The wanted fertility rate in Bangladesh as a whole is 2.1 births per woman, 1.2 children less than the actual total fertility rate of 3.3. This implies that the total fertility rate is almost 60 percent higher than it would be if unwanted births were avoided. The gap between the wanted and actual total fertility rates is slightly larger among rural than urban women. There is also a larger gap between the wanted and actual fertility rates for women with no education or only primary education than for those with secondary education. It is interesting to note that if women's fertility desires could be met, the total fertility rate in all divisions except Chittagong and Sylhet would be below the replacement level of 2.1 children per woman.

Figure 6.6
Percentage of Births by Planning Status



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

BDHS 1996-97

Table 6.8 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	1.5	2.1
Rural	2.2	3.4
Division		
Barisal	2.0	3.3
Chittagong	2.6	4.1
Dhaka	2.0	3.2
Khulna	1.8	2.5
Rajshahi	1.8	2.8
Sylhet	2.9	4.2
Education		
No education	2.5	3.9
Primary incomplete	2.1	3.3
Primary complete	2.1	3.0
Secondary+	1.6	2.1
Total	2.1	3.3

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

CHAPTER 7

INFANT AND CHILD MORTALITY

7.1 Introduction

Rates of infant and child mortality reflect a country's level of socioeconomic development and quality of life. This chapter examines the mortality of children under five in Bangladesh. Specifically, information is provided regarding levels, trends, and differentials in neonatal, postneonatal, infant, and child mortality, as well as information on patterns of fertility associated with high mortality risk. Mortality estimates are disaggregated by sex, socioeconomic and demographic characteristics, division, and other factors in order to identify segments of the population requiring special attention. This information is useful for monitoring and evaluating population and health programs and policies.

Estimates of childhood mortality are based on information from the birth history section of the questionnaire administered to individual women. The section began with questions about the aggregate childbearing experience of respondents (i.e., the number of sons and daughters who live with the mother, the number who live elsewhere and the number who have died). For each of these births, information was then collected on the sex, the month and year of birth, survivorship status and current age, or, if the child had died, the age at death.

This information is used to directly estimate mortality rates. In this report, mortality in early childhood is measured using the following five rates:

Neonatal mortality: the probability of dying within the first month of life;

Postneonatal mortality: the difference between infant and neonatal mortality;

Infant mortality: the probability of dying before the first birthday;

Child mortality: the probability of dying between the first and fifth birthday;

Under-five mortality: the probability of dying between birth and fifth birthday.

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age. Examination of data relating to child mortality does not indicate that there are any serious biases in reporting (Appendix Tables C.5 and C.6).

7.2 Levels and Trends in Infant and Child Mortality

Neonatal, postneonatal, infant, child, and under-five mortality rates are shown in Table 7.1 for five-year periods preceding the survey. Under-five mortality for the most recent five-year period (which roughly corresponds to the years 1992-1996) is 116 per 1,000 births. This means that 1 in 9 children born in Bangladesh dies before reaching the fifth birthday. The infant mortality rate is 82 deaths per 1,000 births and the child mortality rate is 37 per 1,000 children age one year. During infancy, the risk of death in the first month of life (48 per 1,000) is greater than in the next 11 months (34 per 1,000).

Table 7.1 Infant and child mortality

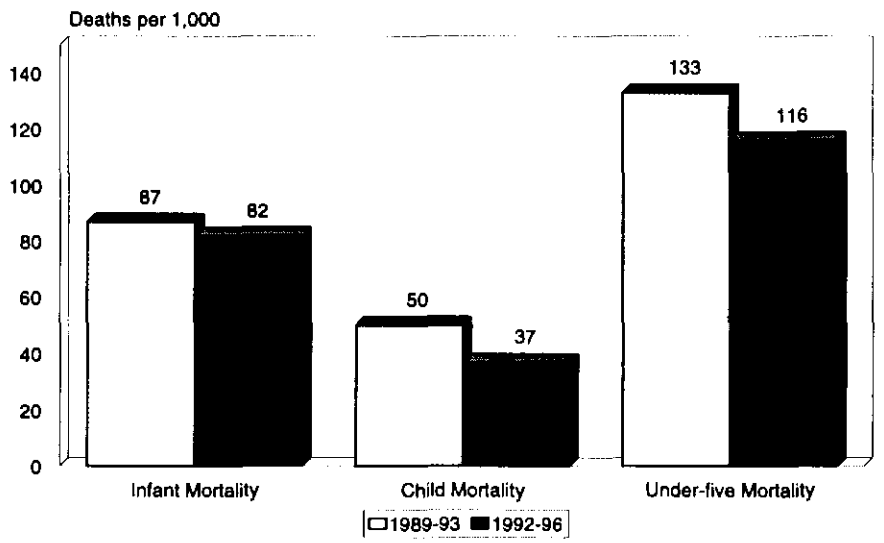
Infant and child mortality rates by five-year periods preceding the survey, Bangladesh 1996-97

Years preceding survey	Approximate reference period	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality** (${}_1q_0$)	Child mortality (${}_4q_1$)	**Under-five mortality** (${}_5q_0$)
0-4	1992-96	48.4	33.8	82.2	36.5	115.7
5-9	1987-91	60.2	35.9	96.0	47.2	138.7
10-14	1982-86	74.5	42.1	116.6	63.4	172.6

The estimates in Table 7.1 suggest that child survival in Bangladesh has improved since the mid-1980s. Under-five mortality has declined by one-third from 173 deaths per 1,000 births in the period 10-14 years before the survey (approximately 1982-86) to 116 for the period 0-4 years before the survey. The pace of decline was faster for child mortality than for infant mortality; the child mortality rate declined by 42 percent (from 63 per 1,000 births 10-14 years before the survey to 37 per 1,000 during the period 0-4 years before the survey), while the infant mortality rate declined by 30 percent over the same period (from 117 to 82 per 1,000 births). It is interesting to note that neonatal mortality rates have fallen more sharply than postneonatal mortality in the recent past.

Further evidence of a decline in childhood mortality comes from a comparison of these data with rates from the 1993-94 BDHS (Figure 7.1). The comparison shows that the under-five mortality rate has declined by 13 percent, from 133 for the period 1989-93 to 116 for the period 1992-96 (Mitra et al., 1994:92). Over the same period, infant mortality has declined by six percent, from 87 to 82.

Figure 7.1
Trends in Infant and Child Mortality
1989-93 to 1992-1996



BDHS 1996-97

Additional data sources can be called upon to establish the overall quality and consistency of the 1996-97 BDHS estimates. Table 7.2 and Figure 7.2 show infant mortality rates from the two BDHSs, the 1989 Bangladesh Fertility Survey (BFS), and the vital registration system for the period 1985 to 1995. Infant mortality rates have declined from around 110 or more per 1,000 births in the mid-1980s to 82 in the five years before the 1996-97 BDHS. The vital registration system data suggest slightly lower infant mortality rates (less than 80 per 1000) for 1994 and 1995. While estimates fluctuate somewhat, this comparison indicates an unambiguous and steady improvement in infant survival over the last decade.

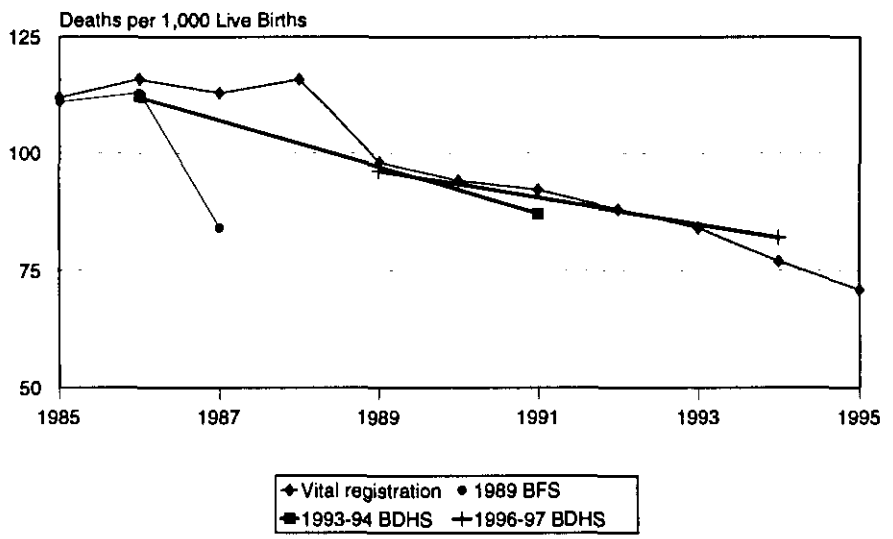
Table 7.2 Trends in infant mortality

Infant mortality rates from selected sources, Bangladesh, 1985-95

Data source	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
1996-97 BDHS [1]	-	-	-	-	96	-	-	-	-	82	-
1993-94 BDHS [1]	-	112	-	-	-	-	87	-	-	-	-
1989 BFS	111	113	84	-	-	-	-	-	-	-	-
Vital registration (BBS)	112	116	113	116	98	94	92	88	84	77	71

[1] Estimates placed in year representing mid-point of 5-year estimate
Source: Huq and Cleland, 1990: 116: Mitra et al, 1994: 93; BBS, 1997: 144

Figure 7.2
Infant Mortality Rates from Selected Sources, 1985-1995



BDHS 1996-97

Consistent with the national experience, the Matlab area of Bangladesh has also enjoyed a decline in childhood mortality. Between 1987-91 and 1992-95, under-five mortality fell from about 138 to 124 per 1,000 in the comparison area [1] of Matlab (ICDDR,B, 1995:7), a less rapid decline than that observed at the national level using the BDHS data (i.e. from 139 to 116 per 1,000).

7.3 Socioeconomic Differentials in Infant and Child Mortality

The risk of early childhood death is higher in some subgroups of the population than in others. Differentials in childhood mortality rates by selected background characteristics are presented in Table 7.3. The table focuses on basic socioeconomic characteristics, including urban-rural residence, administrative division of the country, and mother's educational level. A 10-year period is used to calculate the mortality estimates in order to have a sufficient number of cases in each category.

Table 7.3 Infant and child mortality by background characteristics

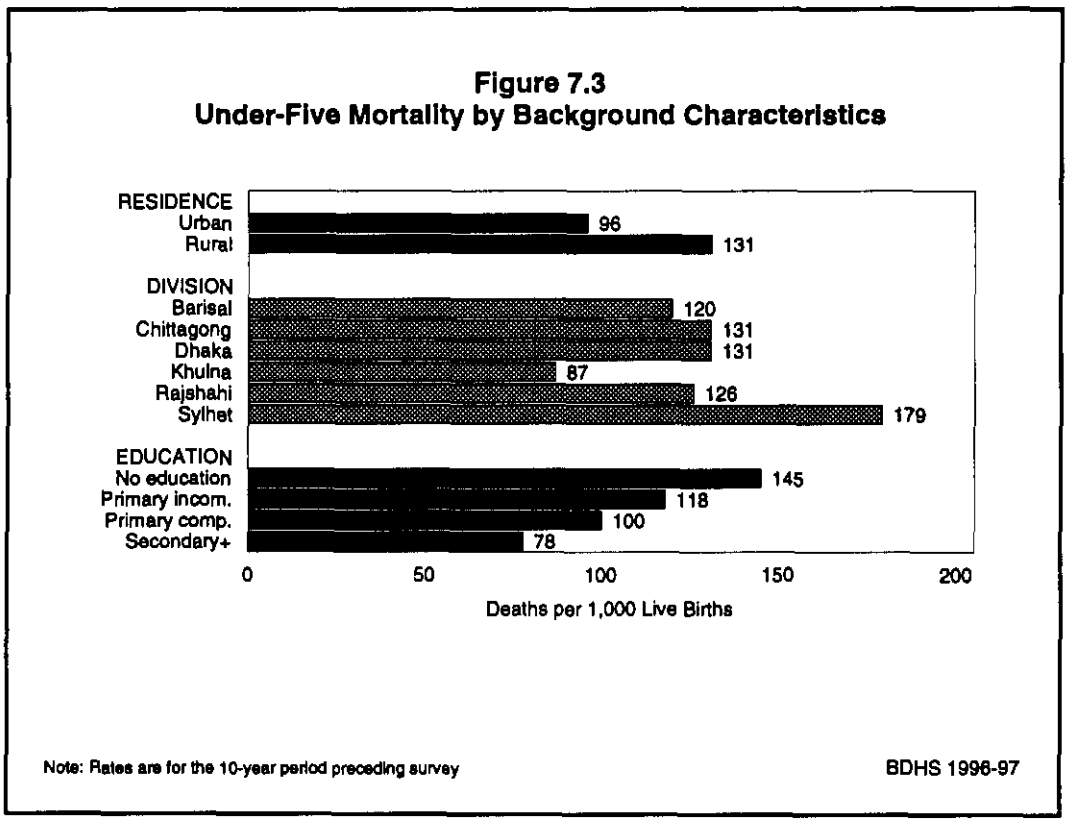
Infant and child mortality rates for the 10-year period preceding the survey, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality** (${}_1q_0$)	Child mortality (${}_4q_1$)	**Under-five mortality** (${}_5q_0$)
Residence					
Urban	40.6	32.1	72.7	25.3	96.2
Rural	56.0	35.2	91.2	43.7	130.9
Division					
Barisal	53.1	33.1	86.3	36.4	119.5
Chittagong	42.0	34.7	76.8	59.0	131.3
Dhaka	52.0	38.8	90.8	43.8	130.7
Khulna	51.8	23.3	75.2	12.5	86.8
Rajshahi	64.3	30.3	94.6	34.9	126.2
Sylhet	85.2	52.7	138.0	47.8	179.1
Education					
No education	57.8	40.2	98.0	51.6	144.5
Primary incomplete	56.3	31.2	87.5	33.9	118.4
Primary complete	44.9	28.3	73.1	29.0	100.0
Secondary+	45.0	19.9	64.8	14.5	78.3
Medical maternity care[1]					
No antenatal or delivery care	52.6	37.3	89.9	-	-
Either antenatal or delivery care from a doctor or nurse	33.7	27.3	61.0	-	-
Both antenatal and delivery care from a doctor or nurse	(27.3)	(24.0)	(51.3)	-	-
Total	54.6	34.9	89.6	41.9	127.8

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

Children in the rural areas of Bangladesh experience a 36 percent higher risk of dying before age five than urban children (131 vs. 96 per 1,000 births, respectively—see Figure 7.3). The urban-rural differential is greatest at ages 1 to 4 years and smallest during the postneonatal period. Infant mortality rates are 73 per 1,000 live births in urban areas and 91 in rural areas.

[1] For a description of ICDDR,B's demographic surveillance system, see Section 3.4.



Differences in under-five mortality by division are marked, from a high of 179 per 1,000 in Sylhet to 87 per 1,000 in Khulna. Much of the variation in under-five risk stems from varying rates during the 1- to 4-year age period. For example, Khulna and Chittagong Divisions have almost identical infant mortality levels but after the first birthday mortality is nearly 5 times higher in Chittagong. Sylhet and Dhaka Divisions also have child mortality rates exceeding 40 per 1,000. On the other hand, Sylhet's exceptionally high under-five mortality rate is largely due to poor survival during the neonatal period (85 per 1,000) and postneonatal period (53 per 1,000).

Differences in early childhood mortality by education of the mother are large. Children born to mothers who have no education are almost twice as likely to die before their fifth birthday as those born to mothers who have at least some secondary education (145 vs. 78 per 1,000 births, respectively). This educational advantage is most pronounced at ages 1 to 4 years and least apparent during the neonatal period.

Table 7.3 also shows the relationship between antenatal care and delivery assistance by a trained medical person, on one hand, and infant mortality on the other. Mortality among children whose mothers had neither antenatal care nor assistance at the time of delivery is noticeably highest (90 per 1,000), followed by mortality among children whose mothers received either antenatal or delivery care (61 per 1,000). As expected, infant mortality is lowest (51 per 1,000) for the small proportion of children whose mothers received antenatal care and were assisted at delivery by a trained medical professional (doctors, nurses, midwives and family welfare visitors).

7.4 Demographic Differentials in Infant and Child Mortality

The relationship between early childhood mortality and various demographic variables is examined in Table 7.4 and Figure 7.4 for the 10-year period preceding the survey. The results show that, as expected, male children are more likely to die in infancy than female children (95 for males vs. 84 for females). The

difference is especially pronounced in the neonatal period, whereas postneonatal mortality rates are almost identical for males and females. The gender differential reverses during ages 1 to 4 years, so that female mortality exceeds male mortality by some 27 percent. This pattern suggests that there may be gender-related differences in child rearing practices or in treatment of illnesses during childhood that favor boys over girls (Hill and Upchurch, 1995).

Table 7.4 Infant and child mortality by demographic characteristics

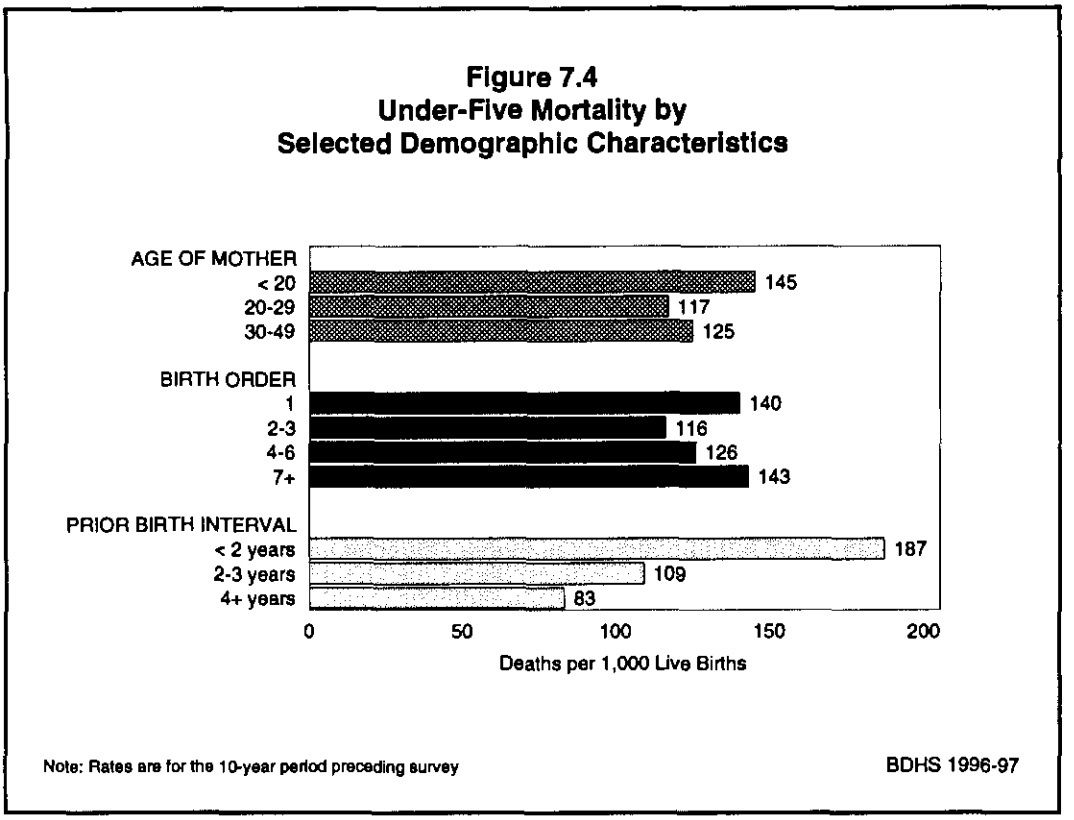
Infant and child mortality rates for the 10-year period preceding the survey, by selected demographic characteristics, Bangladesh 1996-97

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	**Infant mortality** (${}_1q_0$)	Child mortality (${}_4q_1$)	**Under-five mortality** (${}_5q_0$)
Sex of child					
Male	60.3	34.7	95.0	36.9	128.4
Female	49.0	35.2	84.2	47.0	127.2
Age of mother at birth					
< 20	70.2	35.9	106.1	43.6	145.0
20-29	46.6	32.7	79.3	41.2	117.2
30-49	47.3	39.9	87.2	41.1	124.7
Birth order					
1	73.4	34.9	108.4	35.9	140.4
2-3	49.8	29.0	78.8	40.7	116.2
4-6	46.2	36.2	82.4	47.2	125.7
7+	47.5	54.0	101.5	46.2	143.0
Previous birth interval					
< 2 yrs	75.6	60.5	136.1	59.1	187.2
2-3 yrs	40.7	29.7	70.4	41.9	109.4
4 yrs +	36.1	19.4	55.5	29.4	83.3

The relationship between infant mortality and mother's age at birth shows the expected U-shaped pattern with higher mortality for children of younger and older mothers. For example, the infant mortality rate for children of mothers who were less than age 20 at the time of the child's birth (106 per 1,000) is one-third higher than the rate for children whose mothers were 20-29 at the time they gave birth (79 per 1,000). Among the children of mothers age 30-49, the infant mortality rate is again high (87 per 1,000). This pattern is limited to risk during infancy; mortality during ages 1 to 4 years is apparently not associated with mother's age at birth.

Birth order is closely linked with mother's age so it is not surprising that mortality risks are elevated among first births (which are predominantly to younger mothers) and births of order seven or higher (which are generally to older mothers). Data from the 1996-97 BDHS show that the under-five mortality rate is 140 per 1,000 live births for first births, 116 for second and third births, 126 for birth orders 4-6, and 143 for seventh and higher births.

The most striking finding is seen in the relationship between mortality rates and the length of the interval between births. The data show that short birth intervals significantly reduce a child's chances of survival. Under-five mortality is 2.2 times higher for children with a preceding birth interval of less than 2 years than for children with a preceding interval of four years or more (187 compared with 83 per 1,000). This relationship persists in all the age groups examined, but is most pronounced during the postneonatal period. This finding supports the importance of child-spacing practices as a means of reducing mortality of young children.



7.5 High-Risk Fertility Behavior

Certain patterns of childbearing are associated with elevated levels of infant and child mortality. Typically, infants and children have a greater probability of dying early if they are born to mothers who are especially young or old, if they are born after a short birth interval, or if they are of high birth order. Data to examine these relationships are presented in Table 7.5, which shows the distribution of births in the five years preceding the survey and of currently married women according to these categories of increased risk. In this analysis, a mother is classified as "too young" if she is less than 18 years of age and "too old" if she is over 34 years of age. A "short birth interval" is defined as a birth occurring less than 24 months after a previous birth, and a child is of "high birth order" if the mother had previously given birth to three or more children (i.e., if the child is of birth order 4 or higher). First births, although often at increased risk, are not placed in a high-risk category since they are not considered an avoidable risk.

Table 7.5 is further divided into two categories, with births falling into single high-risk categories (such as those born to mothers below the age of 18 or over the age of 34, those born within 24 months of a previous birth and those of birth order higher than three) and those falling into multiple high-risk categories (e.g., those born within 24 months of a previous birth to mothers who are below the age of 18, or children of birth order greater than 3 who are born to mothers who are over 34 years, etc.).

The results indicate that well over half (58 percent) of children born in the five years before the survey have an elevated risk of dying; 45 percent of births are in a single high-risk category, while 13 percent are in a multiple high-risk category. The results also show that the most common high-risk category is high birth order. Looking at the single-risk categories, 23 percent of children are at increased risk because they are fourth births or higher, while 17 percent are born to mothers younger than 18 years and 5 percent are born less than two years after a prior birth. Among multiple risk categories, 6 percent of children are of birth order 4 or higher and were born less than two years after a previous birth.

Table 7.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality, and the percent distribution of currently married women at risk of conceiving a child with an elevated risk of mortality, by category of increased risk, Bangladesh 1996-97

Risk category	Births in 5 years preceding the survey		Percentage of currently married women[a]
	Percentage of births	Risk ratio	
Not in any high-risk category	30.0	1.00	28.3
Unavoidable risk: first births	12.1	1.21	5.6
Single high-risk category			
Mother's age < 18	17.4	1.44	6.0
Mother's age > 34	0.2	*	2.4
Birth interval < 24 months	4.8	1.37	7.5
Birth order > 3	22.7	1.12	19.4
Subtotal	45.1	1.28	35.2
Multiple high-risk category			
Age <18 & birth interval <24[c] mo	1.8	2.26	2.2
Age >34 & birth interval <24 mo	0.1	*	0.0
Age >34 & birth order >3	4.7	1.26	19.6
Age >34 & birth interval <24 & birth order >3	0.5	(3.10)	1.4
Birth interval <24 & birth order >3	5.7	2.23	7.7
Subtotal	12.8	1.90	30.9
In any high-risk category	58.0	1.42	66.1
Total	100.0	-	100.0
Number	6,230	-	8,450

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

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

[b] Includes sterilized women

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

The second column of Table 7.5 indicates the relative risk of mortality of children born in the five years before the survey by comparing the proportion dead in each high-risk category with the proportion dead among children not in any high-risk category. Young age at birth is a significant risk factor, especially when coupled with a short birth interval (multiple-risk ratio of 2.26). High birth order also raises mortality risk substantially when combined with a short birth interval (multiple-risk ratio of 2.23). Fortunately, however, only a small proportion of recent births falls into this multiple-risk category, so that even though the fertility behavior results in much higher risk of death for the child, few children are subject to that higher risk. Of greater practical importance is that 19 percent of births in Bangladesh are exposed to a higher risk of death because the mother is under 18 years. Delays in marriage and childbearing could lead to improved child survival prospects.

Column 3 of Table 7.5 shows the distribution of currently married, non-sterilized women by risk category into which a currently conceived birth would fall. Two in 3 (66 percent) currently married women are at risk of conceiving a child with an elevated risk of dying. Three in 10 women are at risk due to multiple risk factors while 35 percent are at risk due to a single factor. The most likely risks are due to high birth order (19 percent), giving birth after a short interval (8 percent) or at a young age (6 percent). The table also indicates that 20 percent of women are potentially at risk of having a child of high birth order when they are over age 34, which places the child at a 26 percent increased risk of early death.

CHAPTER 8

MATERNAL AND CHILD HEALTH

This chapter presents findings on various issues related to maternal and child health (MCH); including antenatal care and delivery assistance, immunization, childhood illnesses and their treatment. This information can be used to identify groups of women and children who are "at risk" because of nonuse of MCH services. The information will assist policy-makers in the planning of appropriate strategies to improve the health of this most vulnerable population group. The findings presented here are based on data obtained from women who had had a live birth in the five years preceding the BDHS survey.

8.1 Antenatal Care

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

Prevalence and Source of Antenatal Care

Table 8.1 shows the percent distribution of births in the five years preceding the survey by source of antenatal care received during pregnancy, according to maternal and background characteristics. Interviewers were instructed to record all persons a woman may have seen for care, but in this report, only the provider with the highest qualifications is considered if more than one person was seen.

The data indicate that many mothers in Bangladesh do not receive antenatal care. For births that occurred in the five years before the survey, nearly three-quarters (71 percent) of mothers received no antenatal care during pregnancy (Figure 8.1). Those who do receive care tend to receive it from doctors (20 percent) or nurses, midwives, and family welfare visitors (7 percent). Less than 1 percent of pregnant women receive antenatal care from traditional birth attendants (*dai*).

The survey results show that there are sharp differences in antenatal care coverage among subgroups in Bangladesh. Antenatal care is much more common for births to younger women and those of lower birth order. The urban-rural differential in the percentage of births for which the mother had at least one antenatal care visit is quite large. Fifty-eight percent of urban births had received antenatal care from a medically trained person, compared with only 23 percent of rural births. Differences in antenatal care coverage by division are small. Mothers in Sylhet Division are the least likely to receive antenatal care; for only 18 percent of births did mothers have at least one antenatal care visit. However, differences by education level of the mother are substantial: while only 16 percent of births to women with no education receive care during pregnancy, the level increases to 61 percent of births for women with at least some secondary school.

Doctors are the most common antenatal care providers among younger women, mothers with lower birth order, respondents who live in urban areas, and those with some secondary education. On the other hand, antenatal care is uncommon for births to older women, higher-order births, and rural births.

The level of antenatal care coverage in Bangladesh has remained virtually unchanged since the 1993-94 BDHS when mothers of 26 percent of births received antenatal care from a medically trained person.

Table 8.1 Antenatal care

Percent distribution of live births in the five years preceding the survey by source of antenatal care during pregnancy, according to selected background characteristics, Bangladesh 1996-97

Background characteristic	Antenatal care provider[1]					Total	Number of births
	Doctor	Nurse/ Trained midwife[2]	Birth attendant[3]	Other/ Missing	No one		
Mother's age at birth							
< 20	20.4	6.8	0.2	1.9	70.7	100.0	1,997
20-34	19.8	6.7	0.3	2.1	71.1	100.0	3,890
35+	12.4	7.4	0.0	2.2	78.0	100.0	343
Birth order							
1	28.2	7.0	0.2	1.9	62.7	100.0	1,677
2-3	20.2	7.7	0.2	2.3	69.7	100.0	2,459
4-5	15.0	5.5	0.2	2.4	76.9	100.0	1,187
6+	8.2	5.5	0.2	1.3	84.7	100.0	907
Residence							
Urban	48.9	9.1	0.5	4.6	36.9	100.0	557
Rural	16.7	6.6	0.2	1.8	74.8	100.0	5,673
Division							
Barisal	19.2	7.2	0.3	1.8	71.4	100.0	408
Chittagong	22.7	8.3	0.4	1.4	67.2	100.0	1,541
Dhaka	21.1	5.0	0.0	1.5	72.3	100.0	1,902
Khulna	20.1	7.0	0.4	2.7	69.8	100.0	614
Rajshahi	15.2	8.6	0.2	3.1	72.9	100.0	1,331
Sylhet	15.0	2.8	0.0	2.5	79.7	100.0	434
Mother's education							
No education	10.1	5.7	0.2	2.0	82.0	100.0	3,591
Primary incomplete	17.9	8.0	0.1	2.4	71.7	100.0	1,053
Primary complete	28.0	5.9	0.4	1.8	63.9	100.0	618
Secondary+	51.3	10.1	0.2	2.1	36.3	100.0	968
Total	19.6	6.8	0.2	2.0	71.4	100.0	6,230

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

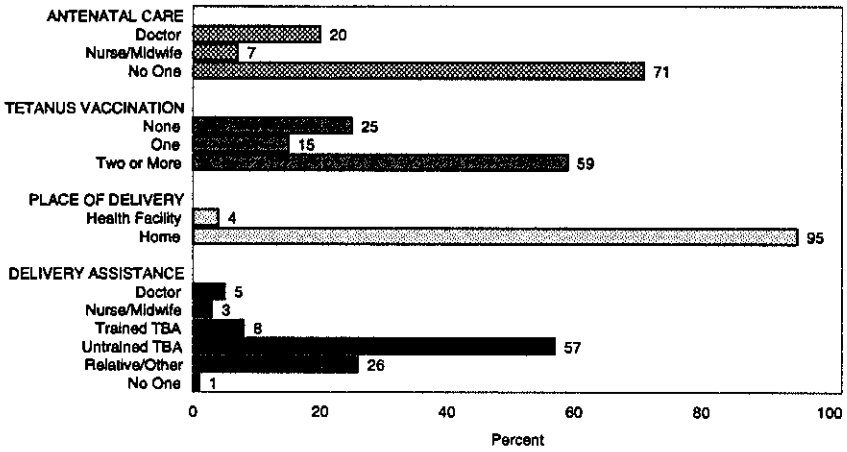
Attitudes Towards Antenatal Care

In an attempt to identify whether ignorance of the importance of antenatal care is a factor in the low levels of use in Bangladesh, ever-married women interviewed in the 1996-97 BDHS were asked whether they thought that women should have a medical checkup when they are pregnant, even if they are not sick. The vast majority of women appear to recognize that antenatal care is beneficial; 85 percent answered the question affirmatively (Table 8.2). Older women, rural women, those who live in Sylhet Division, and less educated women are slightly less likely to see the advantages of antenatal care. These results imply that some other factor—perhaps cost or accessibility of services—accounts for the low antenatal care coverage.

Number and Timing of Antenatal Visits

Antenatal care is important to both the mother and child. The number and timing of antenatal care visits are considered to be important in preventing an adverse pregnancy outcome. Care is most effective if the visits are started early during pregnancy and continue at regular intervals throughout the pregnancy.

Figure 8.1
Percent Distribution of Births by Antenatal and Delivery Care



Note: Based on births in the five years preceding the survey;
TBA = traditional birth attendant

BDHS 1996-97

Table 8.2 Opinion on medical checkups

Percent distribution of ever-married women age 10-49 by whether they think pregnant women should have medical checkups, according to background characteristics, Bangladesh 1996-97

Background characteristic	Medical checkups needed? Yes	No	Don't know/ Missing	Total	Number of women
Age					
< 20	85.5	11.8	2.6	100.0	3,197
20-34	85.3	10.9	3.7	100.0	5,442
35+	79.0	15.3	5.6	100.0	488
Residence					
Urban	94.2	4.4	1.3	100.0	1,063
Rural	83.9	12.4	3.7	100.0	8,064
Division					
Barisal	85.0	11.5	3.4	100.0	598
Chittagong	82.5	13.8	3.7	100.0	1,836
Dhaka	85.7	10.1	4.2	100.0	2,882
Khulna	83.3	12.9	3.8	100.0	1,107
Rajshahi	89.6	8.1	2.2	100.0	2,198
Sylhet	75.0	21.8	3.1	100.0	506
Education					
No education	80.1	14.9	4.9	100.0	4,983
Primary incomplete	86.9	9.8	3.2	100.0	1,572
Primary complete	89.2	9.5	1.3	100.0	913
Secondary+	95.8	3.6	0.6	100.0	1,659
Total	85.1	11.4	3.4	100.0	9,127

It is generally recommended that antenatal care visits be made monthly for the first 7 months, fortnightly in the 8th month, and then weekly until birth. If the first visit is made at the third month of pregnancy, this schedule translates to a total of about 12 to 13 visits.

Data on the number and timing of visits made by pregnant women are given in Table 8.3. As mentioned above, for a large majority of births, mothers do not obtain any antenatal care. Among those who do obtain care, the median number of visits is only 1.7, far fewer than the recommended 12 visits. On average, pregnant women who seek antenatal care do so initially shortly before the fifth month of pregnancy. Still, for roughly one-quarter of women who do receive antenatal care, the first visit occurs in the sixth month of pregnancy or later—too late to receive the full benefits of the services.

Table 8.3 Number of antenatal care visits and stage of pregnancy

Percent distribution of live births in the five years preceding the survey by number of antenatal care visits, and by the stage of pregnancy at the time of the first visit, Bangladesh 1996-97

Characteristic	Percent
Number of visits	
0	71.4
1	8.8
2-3	13.6
4+	5.8
Don't know/missing	0.4
Total	100.0
Median number of visits	1.7
Number of months pregnant at time of first visit	
No antenatal care	71.4
<6 months	20.4
6-7 months	5.8
8+ months	2.1
Don't know/missing	0.3
Total	100.0
Median number of months pregnant at first visit	4.9
Number of births	6,230

Note: Figures are for births in the period 0-59 months preceding the survey.

Tetanus Toxoid Vaccinations

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

The data indicate that tetanus toxoid coverage is relatively widespread in Bangladesh. Overall, 59 percent of births in the five years before the survey were to mothers who received two or more tetanus toxoid injections during pregnancy, while 15 percent were to mothers who received one injection. One-fourth of births did not benefit from any tetanus toxoid vaccination during pregnancy.

Tetanus toxoid coverage is lower for births to older mothers (age 35 and over), births of higher order, births in rural areas, births in Sylhet Division, and births to less educated women. It is highest for births to women with at least some secondary education and women in urban areas. Higher coverage for lower order births and for younger mothers may be explained, in part, by the fact that higher parity mothers and older mothers may have received all the required doses of the toxoid during previous pregnancies. Differentials by division show that coverage is highest in Khulna Division and lowest in Sylhet Division. There is a strong positive relationship between the mother's education and tetanus toxoid coverage. The proportion of births whose mothers received two or more tetanus toxoid doses during pregnancy increases from 53 percent among women with no education to 76 percent among those with secondary school.

Table 8.4 Tetanus toxoid vaccinations and medical testing

Percent distribution of live births in the five years preceding the survey by number of tetanus toxoid injections during pregnancy and percentage for which the mother had her blood pressure checked and urine tested during pregnancy, according to background characteristics, Bangladesh 1996-97

Background characteristic	Number of tetanus toxoid injections				Total	Blood pressure taken	Urine tested	Number of births
	None	One dose	Two doses or more	Don't know/ Missing				
Mother's age at birth								
< 20	20.7	12.7	66.4	0.2	100.0	24.3	13.5	1,997
20-34	25.4	16.9	57.4	0.3	100.0	25.1	14.0	3,890
35+	45.9	12.3	41.6	0.2	100.0	15.4	8.4	343
Birth order								
1	17.2	9.9	72.6	0.3	100.0	31.4	19.9	1,677
2-3	20.7	18.3	60.8	0.2	100.0	26.5	14.3	2,459
4-5	32.2	16.7	50.7	0.4	100.0	18.5	8.6	1,187
6+	41.7	15.4	42.7	0.2	100.0	12.8	6.2	907
Residence								
Urban	10.4	15.7	73.9	0.0	100.0	55.3	42.7	557
Rural	26.4	15.3	58.0	0.3	100.0	21.2	10.7	5,673
Division								
Barisal	23.4	18.0	58.0	0.6	100.0	22.6	13.3	408
Chittagong	26.8	16.9	55.8	0.5	100.0	26.9	12.9	1,541
Dhaka	26.0	13.3	60.5	0.2	100.0	24.1	15.4	1,902
Khulna	14.7	18.2	66.4	0.7	100.0	27.0	14.5	614
Rajshahi	22.7	14.5	62.8	0.0	100.0	23.1	12.1	1,331
Sylhet	37.3	13.9	48.5	0.3	100.0	17.2	11.2	434
Mother's education								
No education	32.5	14.1	53.1	0.3	100.0	14.4	6.6	3,591
Primary incomplete	21.9	19.0	58.8	0.3	100.0	22.9	9.8	1,053
Primary complete	14.0	14.7	71.1	0.2	100.0	32.8	17.4	618
Secondary+	7.6	16.2	76.0	0.2	100.0	57.3	40.8	968
Total	25.0	15.3	59.4	0.3	100.0	24.3	13.5	6,230

Note: Figures are for births in the period 0-59 months preceding the survey.

Although there has been no change in recent years in antenatal care coverage, the proportion of pregnant women receiving tetanus toxoid injections has risen substantially. For births occurring in roughly 1991-93, 66 percent of the mothers received at least one tetanus toxoid injection during pregnancy (Mitra et al., 1994:102), while by 1992-96, the proportion had increased to 75 percent.

Table 8.4 also shows that for nearly 1 in 4 births, the mother's blood pressure was taken during pregnancy. For 14 percent of births, a sample of the mother's urine was taken for analysis.

8.2 Delivery Care

An important element in reducing health risks for mothers and children is to increase the proportion of babies that are delivered in health facilities under medical supervision. Proper medical attention and hygienic conditions during delivery can reduce the risk of infections and facilitate management of

complications that can cause death or serious illness for the mother or the newborn. In this section, two topics related to delivery are discussed—place of delivery and type of assistance during delivery.

Place of Delivery

Table 8.5 presents the distribution of births in the five years prior to the survey by place of delivery. Almost all births (95 percent) in Bangladesh occur at home. However, use of health facilities for delivery is much more common in urban areas (23 percent of births), among mothers with some secondary education (17 percent), and among mothers who received at least four antenatal care visits (34 percent). Differentials by age of the mother, birth order, and division are small.

Table 8.5 Place of delivery

Percent distribution of births in the five years preceding the survey by place of delivery, according to selected background characteristics, Bangladesh 1996-97

Background characteristic	Place of delivery: Health facility	At home	Don't know/ Missing	Total	Number of births
Mother's age at birth					
< 20	3.4	95.4	1.1	100.0	1,997
20-34	4.5	94.6	1.0	100.0	3,890
35+	3.3	96.6	0.1	100.0	343
Birth order					
1	7.8	90.9	1.4	100.0	1,677
2-3	3.6	95.4	1.1	100.0	2,459
4-5	2.0	97.2	0.8	100.0	1,187
6+	1.3	98.5	0.2	100.0	907
Residence					
Urban	23.0	74.4	2.5	100.0	557
Rural	2.2	97.0	0.8	100.0	5,673
Division					
Barisal	3.5	95.1	1.3	100.0	408
Chittagong	2.5	96.2	1.3	100.0	1,541
Dhaka	6.5	92.3	1.2	100.0	1,902
Khulna	6.2	93.1	0.7	100.0	614
Rajshahi	2.3	97.2	0.4	100.0	1,331
Sylhet	2.0	97.6	0.5	100.0	434
Mother's education					
No education	1.2	98.0	0.8	100.0	3,591
Primary incomplete	2.0	96.9	1.1	100.0	1,053
Primary complete	4.4	94.6	1.0	100.0	618
Secondary+	16.8	82.0	1.2	100.0	968
Antenatal care visits					
None	1.1	98.4	0.5	100.0	4,446
1-3 visits	5.5	93.3	1.2	100.0	1,396
4 or more visits	34.1	63.4	2.6	100.0	364
Total	4.1	95.0	1.0	100.0	6,230

Note: Figures are for births in the period 0-59 months preceding the survey. Total includes 24 births for which antenatal care data are missing.

Assistance During Delivery

Table 8.6 shows the percent distribution of births in the five years before the survey by type of assistance during delivery, according to background characteristics. If the mother was assisted by more than one type of provider, only the most qualified person is recorded in the table. Sixty-five percent of births in Bangladesh are assisted by traditional birth attendants (*dai*), with 8 percent being assisted by trained dais and 57 percent by untrained dais. Another one-fourth of births are assisted by relatives and friends.[1] Eight percent of births are assisted by medically trained personnel—either doctors (5 percent) or nurses, midwives and family welfare visitors (3 percent).

Table 8.6 Assistance during delivery

Percent distribution of births in the five years preceding the survey by type of assistance during delivery, according to selected background characteristics, Bangladesh 1996-97

Background characteristic	Assistance during delivery								
	Doctor	Nurse/ Trained midwife	Trained TBA[1]	Untrained TBA[1]	Relative/ Other	No one	Don't know/ Missing	Total	Number of births
Mother's age at birth									
< 20	4.8	2.6	7.0	56.7	28.0	0.6	0.2	100.0	1,997
20-34	5.6	2.9	7.9	57.2	24.8	1.5	0.2	100.0	3,890
35+	3.8	3.1	5.8	60.1	23.3	3.9	0.0	100.0	343
Birth order									
1	9.8	4.5	7.9	53.8	23.3	0.5	0.2	100.0	1,677
2-3	4.5	2.8	8.2	55.0	28.2	1.1	0.2	100.0	2,459
4-5	3.0	1.6	6.5	59.7	27.3	1.6	0.4	100.0	1,187
6+	1.8	1.5	6.0	65.9	21.4	3.3	0.2	100.0	907
Residence									
Urban	24.1	10.6	9.6	41.1	14.3	0.2	0.0	100.0	557
Rural	3.4	2.1	7.3	58.7	26.9	1.5	0.2	100.0	5,673
Division									
Barisal	5.7	2.8	11.5	60.3	18.5	0.7	0.5	100.0	408
Chittagong	2.9	4.9	8.5	66.9	15.9	0.6	0.3	100.0	1,541
Dhaka	7.2	1.9	7.3	54.7	27.2	1.5	0.2	100.0	1,902
Khulna	10.3	4.0	4.0	56.0	24.9	0.5	0.4	100.0	614
Rajshahi	3.2	1.7	7.3	46.6	38.6	2.6	0.0	100.0	1,331
Sylhet	3.6	1.6	6.1	64.4	23.0	1.1	0.3	100.0	434
Mother's education									
No education	1.8	1.1	5.2	61.6	28.3	1.8	0.2	100.0	3,591
Primary incomplete	3.4	2.0	10.5	55.7	27.5	0.6	0.2	100.0	1,053
Primary complete	6.5	3.9	7.6	58.6	21.9	1.2	0.2	100.0	618
Secondary+	19.0	9.6	12.6	41.4	17.0	0.4	0.1	100.0	968
Antenatal care visits									
None	1.9	0.9	5.6	61.1	28.9	1.5	0.0	100.0	4,446
1-3 visits	7.5	6.4	12.7	53.2	19.2	1.0	0.0	100.0	1,396
4 or more visits	37.3	12.7	10.3	25.9	13.2	0.6	0.0	100.0	364
Total	5.2	2.8	7.5	57.2	25.7	1.3	0.2	100.0	6,230

Note: Figures are for births in the period 0-59 months preceding the survey. If the respondent mentioned more than one attendant, only the most qualified attendant was considered in this table. Total includes 24 births for which antenatal care data are missing.
[1] Traditional birth attendant

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

There are only minor differences in the type of assistance at delivery according to the age of the mother and the birth order of the child. As might be expected, births in urban areas are more likely to be assisted by medical personnel (doctors, nurses, midwives, or family welfare visitors) than rural births (35 vs. 6 percent). Similarly, a higher proportion of births to women with at least some secondary school are assisted by medical personnel (29 percent) than births to women with no education (3 percent). Not surprisingly, the more antenatal visits a woman makes when pregnant, the greater the likelihood that her baby will be delivered with assistance from medically trained staff. For mothers who received no antenatal care, only 3 percent of their births were supervised by doctors, nurses, midwives, or family welfare visitors, compared with 50 percent of mothers who had four or more antenatal visits. Also of interest in Table 8.6 is the relatively high proportion of births in Khulna Division that are assisted by doctors, nurses, midwives, or family welfare visitors.

There has been little change over time in the proportion of births assisted by medical personnel. Data from the 1993-94 BDHS show that about 10 percent of births were assisted at delivery by a doctor, nurse or midwife (Mitra et al.,1994:105). According to 1996-97 BDHS, the analogous figure is about 8 percent.

8.3 Childhood Vaccination

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

In the BDHS, mothers were asked to show the interviewer the health cards of all children born in the five years before the survey. The interviewer copied from the card the date each vaccine was received. If a child never received a health card or if the mother was unable to show the card to the interviewer, the mother was asked to recall whether the child had received BCG, polio, DPT (including the number of doses for polio and DPT), and measles vaccinations. Mothers were able to produce health cards for only 42 percent of children age 12-23 months, which represents a small decline from the level of 46 percent obtained in the 1993-94 BDHS.

Vaccination Coverage

Information on vaccination coverage is presented in Table 8.7, according to the source of information used to determine coverage, i.e., the vaccination card or mother's report. Data are presented for children age 12-23 months, thereby including only those children who have reached the age by which they should be fully vaccinated. The first indicator shows the proportion of these children who had been vaccinated at any age up to the time of the survey. These results are presented according to the source of the information used to determine coverage, i.e., vaccination record or mother's report. The second indicator shows the proportion of children who had been vaccinated by age 12 months, the age at which vaccination coverage should be complete.

According to information from both the vaccination records and mothers' recall, only 54 percent of Bangladeshi children 12-23 months can be considered to be fully immunized. Although the level of coverage for BCG and the first two doses of DPT and polio exceeds 80 percent, the proportion who go on to receive the third dose of these two vaccines falls off sharply, to 69 percent for the third dose of the DPT vaccine and

to only 62 percent for the third dose of the polio vaccine (Figure 8.2); dropout rates[2] between the first and third doses of DPT and of polio are thus 18 and 28 percent, respectively. Seventy percent of children age 12-23 months have received the measles vaccine. Only 12 percent have received no vaccinations.

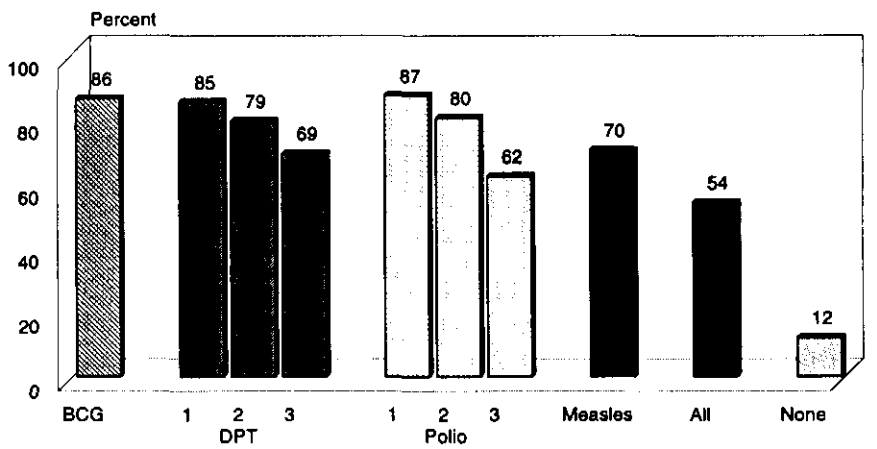
Table 8.7 Vaccinations by source of information

Percentage of children 12-23 months who had received specific vaccines at any time before the survey, by whether the information was from a vaccination card or from the mother, and the percentage vaccinated by 12 months of age, Bangladesh 1996-97

Background characteristic	Percentage of children who received:										Number of children
	BCG	DPT1	DPT2	DPT3	Polio1	Polio2	Polio3	Measles	All[1]	None	
Vaccinated at any time before the survey											
Vaccination card	42.1	42.2	40.0	37.1	42.1	40.0	37.5	35.5	34.0	0.0	457
Mother's report	44.1	42.7	39.2	32.2	44.9	40.4	24.8	34.4	20.1	11.9	625
Either source	86.2	84.9	79.2	69.3	86.9	80.4	62.3	69.9	54.1	12.0	1,082
Vaccinated by 12 months of age	84.2	82.6	77.1	66.5	84.3	78.1	60.1	61.2	46.9	14.0	1,082

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

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



Note: Based on health cards information and mothers' reports

BDHS 1996-97

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

As mentioned earlier, it is recommended that children complete the schedule of immunizations during their first year of life, i.e., by 12 months of age. Table 8.7 shows that, among children age 12-23 months at the time of interview, 47 percent had been fully vaccinated before their first birthday. With regard to specific vaccines, children were least likely to have received the third doses of polio and the measles vaccine by age 12 months.

Differentials in Vaccination Coverage

Table 8.8 shows vaccination coverage rates among children age 12-23 months by selected background characteristics, including the child's sex and birth order, urban-rural residence, division, and the mother's education level. The figures refer to the proportion of children receiving the vaccinations at any time up to the date of the survey and they are based on information from both the vaccination records and mothers' reports. The table includes information on the proportion of children for whom a vaccination record was shown to the interviewer.

Table 8.8 Vaccinations by background characteristics

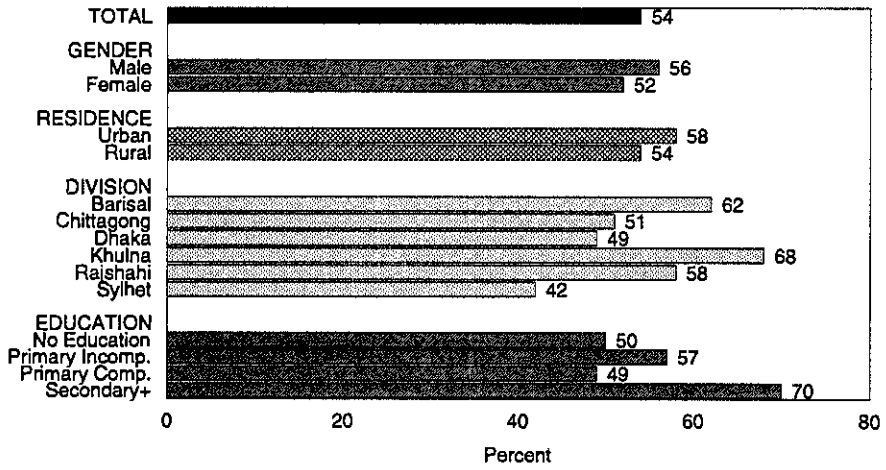
Percentage of children 12-23 months who had received specific vaccines by the time of the survey (according to the vaccination card or the mother's report) and the percentage with a vaccination card, by selected background characteristics, Bangladesh 1996-97

Background characteristics	Percentage of children who received:										Percent with vaccination card	Number of children
		DPT			Polio							
	BCG	1	2	3+	1	2	3+	Measles	All[1]	None		
Sex												
Male	87.0	86.0	81.2	70.4	88.2	82.9	64.7	71.9	55.8	10.7	43.1	563
Female	85.3	83.7	77.0	68.1	85.6	77.7	59.8	67.8	52.2	13.3	41.3	520
Birth order												
1	89.4	88.5	81.2	72.7	89.6	84.2	65.4	73.6	55.8	9.2	49.3	321
2-3	86.8	86.6	79.7	69.5	88.5	79.6	63.0	70.1	55.4	11.2	43.6	451
4-5	85.2	83.6	81.1	72.0	84.3	79.0	59.7	67.8	52.5	13.6	36.2	174
6+	77.9	72.7	70.3	57.0	78.8	75.9	56.3	63.3	47.9	19.0	28.6	136
Residence												
Urban	91.9	91.0	88.1	75.0	92.8	86.2	65.2	79.7	58.2	6.7	47.3	83
Rural	85.7	84.4	78.4	68.8	86.4	79.9	62.1	69.1	53.7	12.4	41.8	999
Division												
Barisal	91.1	91.1	86.6	76.4	93.8	86.6	71.8	77.5	62.4	6.2	53.3	75
Chittagong	82.2	81.2	75.0	63.8	82.8	74.2	58.7	65.5	51.0	15.5	37.1	258
Dhaka	82.7	81.4	75.4	65.9	84.0	78.4	60.1	64.8	49.3	14.9	38.2	316
Khulna	96.9	95.7	92.8	85.5	96.9	95.9	74.0	87.1	68.3	3.1	59.5	122
Rajshahi	91.2	89.3	83.7	74.1	91.4	84.8	64.9	74.9	58.0	7.3	42.5	236
Sylhet	76.5	75.2	65.7	53.8	76.3	65.2	47.8	56.0	41.5	22.4	36.9	75
Mother's education												
No education	80.0	78.9	72.8	62.7	81.2	74.0	57.2	63.2	49.7	17.3	35.8	624
Primary incomplete	93.0	92.1	86.6	75.3	94.0	87.9	66.0	76.1	56.6	5.9	54.4	191
Primary complete	94.0	89.8	81.9	68.9	93.2	86.3	64.8	69.2	49.1	5.3	40.3	96
Secondary+	96.8	95.9	92.3	86.7	96.2	91.8	75.6	87.8	70.1	3.2	53.1	171
All children	86.2	84.9	79.2	69.3	86.9	80.4	62.3	69.9	54.1	12.0	42.2	1,082

Note: The DPT coverage rate for children without a written record is assumed to be the same as that for polio vaccine since mothers were specifically asked whether the child had received polio vaccine.
[1] Children who are fully vaccinated (i.e., those who have received BCG, measles and three doses of DPT and polio).

The data indicate that boys are somewhat more likely than girls to receive basic immunizations. For most vaccinations, the difference is small, with about 2-5 percent more boys than girls receiving the immunization. Overall, 56 percent of boys receive all of the recommended immunizations, compared with 52 percent of girls (Figure 8.3).

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



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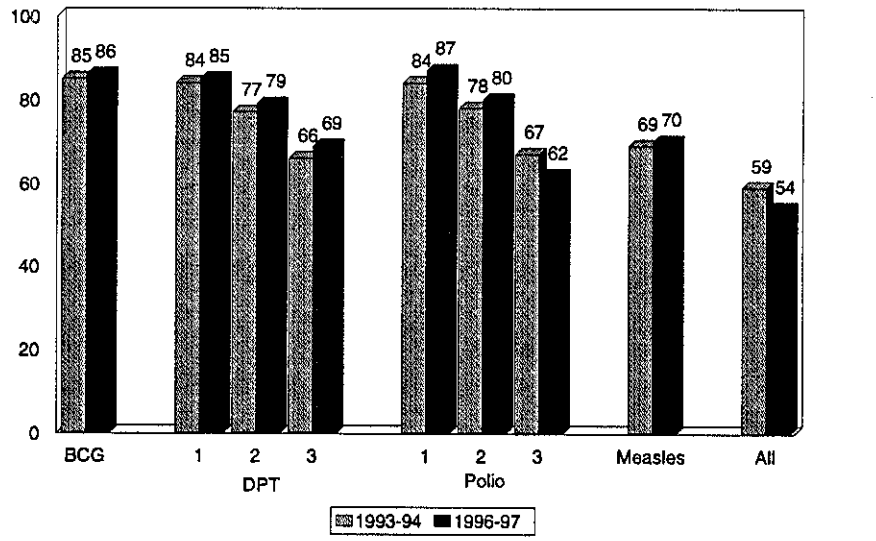
Children of birth order 6 and above are less likely than children of lower birth orders to receive the basic childhood immunizations. The difference is particularly wide for the third dose of DPT which is given to about 57 percent of children of birth order 6 and above, compared with 73 percent of first-born children. The vaccination program has been more successful in urban areas, even though more than half of the children in rural areas have been fully immunized.

There are sharp differences in vaccination coverage by division. Children in Khulna and Barisal Divisions are more likely to be fully immunized than children in other divisions, whereas those in Dhaka and Sylhet Divisions lag behind the national average. Only 42 percent of the children in Sylhet Division are fully immunized, compared with 68 percent of those in Khulna Division. Although some of the regional differences are due to lower proportions of children in Dhaka and Sylhet Divisions receiving initial vaccinations such as BCG and the first dose of DPT, much of the difference is due to higher dropout rates between the first and third doses of DPT and polio and especially to lower proportions who receive the measles vaccine. As expected, the proportion of children who receive all the recommended vaccinations increases with the education level of the mother, from 50 percent among children of mothers with no education to 70 percent among those whose mothers have at least some secondary education.

Trends in Vaccination Coverage

The current survey collected vaccination data using the same methodology used in the 1993-94 BDHS, providing an ideal opportunity to look at trends in coverage over the last three years. Comparison of vaccination coverage levels estimated from the two surveys suggests a slight worsening in recent years. The proportion fully immunized among children age 12-23 months has declined from 59 percent in 1993-94 to 54 percent in 1996-97. However, a more detailed examination of the data by vaccine type indicates that this trend is entirely due to a decline in the proportion receiving the third dose of polio vaccine—from 67 percent in 1993-94 to 62 percent in 1996-97 (Figure 8.4). Coverage for all other vaccines has increased slightly since 1993-94 (Mitra et al.,1994:108).

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



BDHS 1996-97

The 1996-97 BDHS data on vaccination can also be compared with similarly collected data from the Health and Demographic Survey (DHS) fielded in 1995 (BBS, 1997b:22). The DHS data show that 65 percent of children aged 12-23 months were fully vaccinated, significantly higher than the 54 percent from the 1996-97 BDHS. Although the two surveys show almost identical levels of coverage for the first two doses of DPT and polio, the DHS reports much higher coverage for the third doses of these two vaccines, as well as for BCG and measles. It is unclear what might cause these discrepancies.

8.4 Childhood Illness and Treatment

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

Acute Respiratory Infection

Acute respiratory infection (ARI) is one of the major causes of morbidity and mortality among children in Bangladesh. A follow-up study on causes of death of children identified in the 1993-94 BDHS found that 23 percent of infant deaths and 25 percent of deaths among children age 1-4 years were attributable to ARI (Baqui, et al. 1997). Common symptoms associated with severe respiratory infection include fever, cough, and difficult or rapid breathing. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths from respiratory infections.

The prevalence of symptoms of ARI was estimated in the BDHS by asking mothers if their children under age five had been ill with coughing accompanied by short, rapid breathing[3] during the two weeks preceding the survey. Mothers whose children had experienced these symptoms were asked what they had done to treat the illness. It bears mentioning that reports of disease prevalence are inherently imprecise, since they are based on a mother's subjective assessment. Information on the prevalence and treatment of ARI is presented in Table 8.9.

The BDHS results indicate that almost 1 in 3 children under five were reported to have been ill with a fever during the two weeks preceding the survey, with prevalence peaking at age group 6-23 months. Differentials by background characteristics are small.

Altogether, 13 percent of children under five years had a cough with rapid breathing in the two weeks before the survey. ARI is most common under age one and diminishes in prevalence with increasing age, from about 18 percent at 0-11 months to just 7 percent at age 48-59 months. There are only minimal differences in reported ARI prevalence by other background and demographic factors.

Overall, one-third (33 percent) of children who have symptoms of ARI are taken to a health facility for treatment.[4] Younger children are more likely than older children to be taken to a health facility when ill with ARI, as are boys rather than girls. Children of educated mothers are more likely to be taken to a health facility when sick with ARI than those whose mothers had less education. Likewise, children in Rajshahi Division who have symptoms of ARI are more likely to be taken to a health facility than those in Sylhet Division.

Looking only at children under three, the prevalence of respiratory illness has declined from 24 percent in 1993-94 (Mitra et al., 1994:111) to 15 percent in 1996-97. The proportion taken to a health facility has increased from 28 percent in 1993-94 to 36 percent in 1996-97.

Childhood Diarrhea

Dehydration as a result of diarrhea is a frequent cause of death in young children. The administration of oral rehydration therapy (ORT) is a simple means of countering the effects of dehydration. ORT involves giving the child a solution prepared by mixing water with commercially prepared packets of

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[3] Cough and short, rapid breathing are signs and symptoms of pneumonia. The BDHS estimate of ARI prevalence corresponds to an estimate of the prevalence of children who need treatment for presumed pneumonia and does not include other ARI-related conditions (coughs and colds, wheezing, ear infection, and streptococcal sore throat) covered under the WHO guidelines for ARI case management.

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

Table 8.9 Prevalence and treatment of acute respiratory infection

Percentage of children under five years who were ill with a fever or with a cough accompanied by rapid breathing during the two weeks preceding the survey, and the percentage of those with a cough who were taken to a health facility, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Percentage of children with fever	Percentage of children with cough and rapid breathing	Of those with cough, percentage taken to a health facility or provider[1]	Number of children
Child's age				
< 6 months	33.0	17.5	42.0	621
6-11 months	41.9	17.8	39.1	560
12-23 months	38.7	14.8	34.0	1,082
24-35 months	31.1	12.9	30.3	1,123
36-47 months	24.9	11.1	32.2	1,156
48-59 months	22.8	7.4	16.8	1,111
Sex				
Male	30.7	13.3	36.6	2,821
Female	31.2	12.3	29.0	2,833
Birth order				
1	31.8	13.6	39.2	1,508
2-3	32.2	13.2	29.1	2,260
4-5	28.7	10.7	29.0	1,082
6+	29.0	13.0	35.8	804
Residence				
Urban	31.3	11.8	44.9	516
Rural	30.9	12.9	31.8	5,138
Division				
Barisal	28.0	10.4	32.7	367
Chittagong	35.7	15.2	35.5	1,403
Dhaka	28.7	12.9	30.6	1,729
Khulna	24.9	12.5	30.2	567
Rajshahi	34.1	11.8	37.0	1,213
Sylhet	25.2	9.5	21.1	376
Mother's education				
No education	30.5	12.5	27.3	3,220
Primary incomplete	30.5	13.5	31.6	952
Primary complete	31.9	15.6	39.7	572
Secondary+	32.3	11.5	50.2	910
Total	30.9	12.8	32.9	5,654

[1] Includes government hospital, family welfare center, thana health complex, satellite clinic, community health worker, private doctor, and private clinic.

oral rehydration salts (ORS—also called *khabar* or packet saline) or a homemade solution made from sugar, salt and water (also called *labon gur*). Oral rehydration therapy was developed in Bangladesh over 30 years ago by what is now called the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B). ORS packets are currently available through health facilities and at shops and pharmacies in Bangladesh, many of which are distributed by the Social Marketing Company.

In the BDHS, mothers of children under age five were asked if their children had had diarrhea in the two-week period before the survey. If the child had had diarrhea, the mother was asked about what she had done to treat the diarrhea, if anything. Since the prevalence of diarrhea varies seasonally, the results pertain only to the pattern during the period November-March when the BDHS interviewing took place.

Table 8.10 indicates that 8 percent of children under five years of age were reported as having had diarrhea in the two weeks prior to the BDHS interview. Only 1 percent of children under five had bloody diarrhea (a sign of dysentery) in the two weeks prior to the survey.

Table 8.10 Prevalence of diarrhea

Percentage of children under five years who had diarrhea and diarrhea with blood in the two weeks preceding the survey, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Diarrhea in the preceding 2 weeks		Number of children
	All diarrhea	Diarrhea with blood	
Child's age			
< 6 months	4.2	0.6	621
6-11 months	14.0	2.1	560
12-23 months	11.6	1.7	1,082
24-35 months	7.6	1.6	1,123
36-47 months	6.3	1.3	1,156
48-59 months	3.9	1.3	1,111
Sex			
Male	7.5	1.3	2,821
Female	7.8	1.5	2,833
Birth order			
1	8.7	1.6	1,508
2-3	7.7	1.5	2,260
4-5	7.5	1.4	1,082
6+	5.4	1.1	804
Residence			
Urban	8.0	0.6	516
Rural	7.6	1.5	5,138
Division			
Barisal	3.1	0.6	367
Chittagong	8.7	1.7	1,403
Dhaka	7.7	1.3	1,729
Khulna	8.7	1.5	567
Rajshahi	7.0	1.4	1,213
Sylhet	7.8	2.1	376
Mother's education			
No education	6.9	1.3	3,220
Primary incomplete	10.1	2.1	952
Primary complete	6.9	1.0	572
Secondary+	8.1	1.7	910
Total	7.6	1.4	5,654

Note: Figures are for children born in the period 0-59 months preceding the survey.

Diarrhea is more common among children age 6-23 months than among older or younger children. 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 to the immature immune system of children in this age group. Differences in the prevalence of diarrhea according to other background characteristics are small.

Treatment of Diarrhea

Twenty-two percent of children under five whose mothers reported that they had had diarrhea in the two weeks before the survey were taken to a health facility for consultation (Table 8.11). Nearly half (48

Table 8.11 Treatment of diarrhea

Among children under five years who had diarrhea in the two weeks preceding the survey, the percentage taken for treatment to a health facility or provider, the percentage who received oral rehydration therapy (either solution prepared from ORS packets or recommended home fluids) and increased fluids, the percentage who received neither oral rehydration therapy nor increased fluids, and the percentage receiving other treatments, by background characteristics, Bangladesh 1996-97

Background characteristic	Percentage taken to a health facility or provider[1]	Oral rehydration therapy (ORT)					Other treatments					Number of children
		ORS packets	RHF	ORS or RHF	Increased fluids	Neither ORT nor increased fluids	Pill or syrup	Injection	Home remedy/ Other	No treatment	Missing	
Child's age												
< 6 months	*	*	*	*	*	*	*	*	*	*	*	26
6-11 months	24.5	30.3	19.6	42.6	45.1	37.4	35.1	1.3	15.7	12.7	0.0	78
12-23 months	28.0	60.8	37.8	74.8	59.6	16.7	46.5	2.8	6.4	4.5	0.5	126
24-35 months	20.5	48.0	30.5	64.9	60.6	22.4	30.1	1.4	8.1	6.4	0.7	85
36-47 months	10.4	44.6	17.0	52.1	56.4	27.7	25.7	2.2	6.5	4.5	1.6	72
48-59 months	(19.3)	(50.8)	(33.9)	(65.7)	(63.1)	(20.9)	(34.1)	(0.0)	(5.7)	(8.0)	(2.9)	43
Sex												
Male	24.1	50.3	27.1	60.9	55.5	26.3	35.0	1.0	10.9	6.9	1.4	210
Female	20.3	46.1	29.0	61.0	55.8	24.7	34.2	2.3	8.6	9.0	0.3	220
Birth order												
1	22.3	44.3	31.4	59.3	56.9	27.0	34.4	1.7	8.7	9.8	1.3	132
2-3	24.7	50.6	27.6	62.8	56.1	23.1	39.4	2.0	9.2	4.3	1.1	175
4-5	21.7	50.2	25.4	59.7	58.8	26.2	27.1	0.0	9.5	13.3	0.0	81
6+	(12.7)	(46.1)	(24.9)	(60.9)	(44.3)	(29.0)	(29.5)	(3.7)	(15.4)	(7.4)	(0.0)	43
Residence												
Urban	26.4	71.2	17.1	76.5	62.3	16.4	24.6	0.0	10.7	1.6	4.4	41
Rural	21.7	45.7	29.3	59.3	54.9	26.4	35.7	1.9	9.6	8.6	0.5	389
Division												
Barisal	*	*	*	*	*	*	*	*	*	*	*	11
Chittagong	21.5	48.2	30.5	65.6	54.6	27.5	39.6	1.2	11.7	10.8	0.0	121
Dhaka	22.6	48.8	26.6	55.3	57.1	25.7	31.3	0.9	8.4	7.9	2.2	134
Khulna	(22.0)	(51.4)	(27.4)	(67.8)	(49.4)	(25.6)	(29.6)	(0.0)	(9.2)	(9.8)	(0.0)	49
Rajshahi	24.8	46.7	29.8	61.6	58.7	20.4	35.8	4.8	10.8	3.6	0.0	85
Sylhet	16.9	46.6	23.0	52.7	52.0	31.1	37.2	2.0	6.7	4.7	2.0	29
Mother's education												
No education	22.3	48.8	22.8	57.5	55.3	28.3	29.4	1.7	8.4	9.6	0.8	222
Primary incomplete	23.0	42.0	38.3	63.1	51.5	24.9	39.9	2.7	9.3	4.3	1.8	96
Primary complete	(31.7)	(43.8)	(27.4)	(61.4)	(59.6)	(25.3)	(38.2)	(2.6)	(12.1)	(10.4)	(0.0)	39
Secondary+	15.6	56.4	31.2	68.3	60.0	17.7	41.5	0.0	13.2	6.5	0.0	73
Total	22.2	48.1	28.1	61.0	55.7	25.5	34.6	1.7	9.7	8.0	0.8	431

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates that the number is based on fewer than 25 children and has been suppressed.
ORS = Oral rehydration salts
RHF = Recommended home fluid (*laban gur*)
[1] Includes government hospital, family welfare center, thana health complex, satellite clinic, community health worker, private doctor, and private clinic.

percent) were given solution made from ORS packets, while 28 percent were given a recommended homemade fluid (RHF or *labon gur*), and more than half (56 percent) were given more fluids than usual. If oral rehydration therapy is defined broadly to include ORS, *labon gur*, and increased fluids, then 74 percent of children with diarrhea received some sort of oral rehydration treatment, while 26 percent received neither ORS, *labon gur*, nor increased fluids. Thirty-five percent of children with diarrhea were given some kind of pill or syrup to treat the disease, while 10 percent were given home remedies or herbs. About 1 in 12 children with diarrhea was given nothing to treat the diarrhea.

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

The data indicate important differences in the treatment of diarrhea cases by urban-rural residence. Not only are urban children with diarrhea more likely than rural children to be taken to a health facility, but they are also more likely to be treated with ORS packets and increased fluids of any kind. Recommended homemade fluid or *labon gur*—presumably more accessible for rural households—is given to rural children (29 percent) more often than their urban counterparts (17 percent).

Differences in the treatment of diarrhea by division are small. The proportion of children with diarrhea who are taken to a health facility is highest in Rajshahi Division (25 percent) and lowest in Sylhet Division (17 percent). Recommended homemade fluid for treating diarrhea appears to be used more commonly in Chittagong and Rajshahi Divisions (30-31 percent) than in the other divisions (23-27 percent).

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

The BDHS also directly investigated the extent to which mothers made changes in the amount of fluids that a child received during a diarrheal episode. To obtain these data, mothers who had a child under age five with diarrhea during the two-week period prior to the survey were asked whether they had changed the amount that the child was given to drink during the diarrheal episode. The data indicate that 31 percent of children with diarrhea were given the same amount of fluids as usual and 56 percent received more fluids than usual; 11 percent received less fluids than usual (data not shown). These results suggest that, although the benefit of increasing fluid intake during a diarrheal episode is quite widely understood in Bangladesh, about 1 in 9 mothers still engages in the dangerous practice of curtailing fluid intake when their children have diarrhea.

In order to obtain an idea of trends in the prevalence of diarrhea and use of ORS, it is necessary to compare children under age three, since the 1993-94 BDHS only asked these questions for children under three. The data show a slight decline in the prevalence of diarrhea (13 percent of children under three in 1993-94 and 9 percent in 1996-97) and virtually no change in the use of ORS (50 percent in 1993-94 and 49 percent in 1996-97). Using data from the national level Diarrheal Morbidity and Treatment Survey, Mitra and Islam (1996:13) also reported a decline in prevalence of diarrhea among children under five children—from 23 percent in 1987-88 to 20 percent in 1994-95 among rural children and from 24 to 16 percent among urban children.

Men's Perceived Need to Use Health Services for Diarrhea or Cough in Children

In many households, men are significant players in the decision to take a sick child for treatment. In the BDHS, all male respondents with a child under five were asked what signs or symptoms of diarrhea or cough would indicate that a child should be taken to a health facility or health worker. This information can be used to identify appropriate communication materials that can be used to reach men.

Overall, the large majority (88 percent) of men report that 'repeated watery stools' is the major sign of severe diarrhea, followed by 'repeated vomiting' (73 percent) (Table 8.12). One in 6 men reported 'any watery stool', 'fever', and 'getting sicker' as signs that would prompt a visit to a health care provider.

Table 8.12 Men who report signs and symptoms of disease

Percentage of currently married men age 15-59 with a child born in the five years before the survey who report that specific signs or symptoms of diarrhea or cough indicate that a child should be taken to a health facility or health worker, by residence and education, Bangladesh 1996-97

	Residence		Education				
Signs/symptoms	Urban	Rural	No education	Primary incomplete	Primary complete	Secondary+	Total
Diarrhea signs							
Repeated watery stools	91.0	87.6	88.1	87.0	87.7	88.5	87.9
Any watery stools	13.7	17.2	15.4	20.0	17.2	18.3	16.8
Repeated vomiting	73.5	72.4	71.9	75.2	68.5	74.0	72.5
Any vomiting	10.2	9.3	8.8	8.4	9.2	12.5	9.4
Blood in stools	1.7	2.4	2.6	2.6	1.7	1.4	2.3
Fever	17.0	16.6	17.7	13.9	15.4	16.1	16.6
Marked thirst	10.8	9.1	9.2	8.3	9.3	10.3	9.3
Not eating/drinking	7.9	7.1	7.2	6.0	10.0	7.1	7.2
Getting sicker/sick	25.3	15.5	17.4	12.2	19.2	16.3	16.5
Not getting better	1.7	1.0	1.1	0.5	2.0	1.2	1.1
Other	8.1	6.3	6.4	5.5	9.0	6.3	6.5
Does not know	0.8	0.4	0.3	0.2	0.8	0.7	0.4
Cough signs							
Rapid breathing	23.7	29.5	29.4	29.7	28.8	26.6	28.9
Difficult breathing	37.2	34.6	36.6	30.3	32.5	35.2	34.9
Noisy breathing	26.0	23.3	21.1	25.4	28.8	27.5	23.6
Fever	74.2	74.3	74.6	73.0	71.3	76.3	74.3
Unable to drink	4.3	5.4	5.1	6.6	5.0	4.9	5.3
Not eating/drinking	16.5	12.6	12.6	11.8	16.3	13.9	13.0
Getting sicker/sick	29.4	21.9	23.7	18.6	24.2	22.7	22.7
Not getting better	0.2	1.9	2.2	0.6	0.8	1.5	1.7
Number of men	203	1,736	1,105	326	182	327	1,939

Three-fourths of men reported 'fever' and one-third of men reported 'difficult breathing' as signs or symptoms of the severity of a cough, while one-fourth of men reported 'rapid breathing', 'noisy breathing', and 'sickness' as the sign of cough that would indicate use of health services.

Vitamin A Supplementation

Vitamin A deficiency is the leading cause of preventable childhood blindness, as well as being a major contributing factor to the severity of several other childhood causes of morbidity and mortality. Moreover, vitamin A has been found to be essential to the proper functioning of the immune system. In Bangladesh, over one million children have clinically evident vitamin A deficiency (ICDDR,B, 1995). Research has concluded that the provision of sufficient vitamin A in a deficient population can reduce child deaths by 23 percent (HKI, 1995). Deficiency of this crucial micronutrient can be avoided by giving children supplements of vitamin A by capsule, usually every six months. In an effort to address the chronic lack of vitamin A in the population, the government of Bangladesh since 1973 has conducted a national, high-dose capsule-distribution program for all children age 6-71 months (HKI, 1995). The capsules are distributed twice a year (in April-May and October-November) by government and non-government organizations. In addition, during specified National Immunization Days, vitamin A capsules are given to children age 1 to

5 years. In the 1996-97 BDHS, mothers of children under age five were asked if their children had taken a vitamin A capsule in the past 6 months; in any case of confusion, interviewers showed mothers a sample of a vitamin A capsule.

The BDHS data indicate that two-thirds of children under five had received at least one capsule of vitamin A in the six months before the survey (Table 8.13). Differences by background characteristics are minimal, except that children living in Sylhet Division were less likely, while those living in Barisal Division were more likely to have received a vitamin A supplement.

In order to obtain an assessment of trends in vitamin A supplementation coverage it is necessary to focus on children under age three, since the 1993-94 BDHS only asked the question for children under three years of age. The data show a large increase in coverage—from 49 percent of children under three in 1993-94 to 68 percent in 1996-97. Helen Keller International's Nutritional Surveillance Project confirms the rapid expansion of vitamin A supplementation; data show a rise in the proportion of children age 1-4 years who received a capsule in the previous six months from around 50 percent in the early 1990s to 88 percent in June 1995 (HKI, 1995). Given that the latter figure excludes children under age one and refers to a point in time some 18 months before the BDHS data, the two results are not necessarily inconsistent.

Table 8.13 Treatment with vitamin A capsules

Percentage of children under five years who received a vitamin A capsule in the six months preceding the survey, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Received vitamin A capsule	Number of children
Child's age		
<6 months	27.5	621
6-11 months	64.6	560
12-23 months	73.0	1,082
24-35 months	75.3	1,123
36-47 months	71.6	1,156
48-59 months	70.1	1,111
Sex		
Male	67.2	2,821
Female	66.3	2,833
Birth order		
1	66.0	1,508
2-3	68.7	2,260
4-5	63.8	1,082
6+	66.6	804
Residence		
Urban	71.9	516
Rural	66.2	5,138
Division		
Barisal	77.8	367
Chittagong	66.5	1,403
Dhaka	62.7	1,729
Khulna	68.2	567
Rajshahi	73.7	1,213
Sylhet	50.8	376
Mother's education		
No education	63.9	3,220
Primary incomplete	66.6	952
Primary complete	74.9	572
Secondary+	71.7	910
Total	66.8	5,654

CHAPTER 9

INFANT FEEDING, CHILDHOOD AND MATERNAL NUTRITION

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

9.1 Breastfeeding and Supplementation

Infant feeding has an impact on both the child and the mother. Feeding practices are important determinants of children's nutritional status, and many studies have shown the beneficial effects of breastfeeding on nutritional status, morbidity, and mortality of young infants. Exclusive breastfeeding (i.e., only breast milk) is recommended during the first 4-6 months of a child's life because it limits exposure to disease agents as well as providing all of the nutrients a baby requires. Breastfeeding also has an indirect effect on the postpartum fecundity of mothers. In particular, more frequent breastfeeding is associated with longer periods of postpartum amenorrhea, which in turn are related to longer birth intervals, and thus lower fertility levels.

Prevalence of Breastfeeding

Table 9.1 shows the proportion of children born in the five years before the survey who were ever breastfed and the percentage who started breastfeeding within one hour and one day of birth. Almost all Bangladeshi children (97 percent) are breastfed for some period of time, regardless of background characteristics of the child or the mother. Previous research confirms the universality of breastfeeding in Bangladesh (Mitra et al., 1994:116).

An important dimension related to breastfeeding is the timing of its initiation. Early initiation of breastfeeding is beneficial for mothers and children. From the mother's perspective, early suckling stimulates the release of a hormone that helps the uterus to contract. From the child's perspective, the first breast milk (colostrum) is important, since it is rich in antibodies. In Bangladesh, although almost all babies are breastfed at some time, only 13 percent are put to the breast within one hour of birth and less than half (45 percent) of children are put to the breast within the first day of life. Infants born to urban mothers, those in Sylhet Division, those whose mothers have some secondary education, and those born in a health facility with medically trained assistance have a slightly greater chance of receiving breast milk within the first day of life.

Timing of Introduction of Supplementary Foods

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

Table 9.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and the percentage who started breastfeeding within one hour of birth and within one day of birth, by selected background characteristics, Bangladesh 1996-97

Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding: Within 1 hour of birth	Within 1 day of birth	Number of children
Sex				
Male	95.8	14.0	46.3	3,108
Female	97.5	12.5	43.5	3,122
Residence				
Urban	96.4	19.1	55.3	557
Rural	96.7	12.7	43.8	5,673
Division				
Barisal	97.2	9.7	49.5	408
Chittagong	97.8	12.0	47.2	1,541
Dhaka	96.0	14.1	44.3	1,902
Khulna	96.4	10.5	40.1	614
Rajshahi	96.1	13.9	40.4	1,331
Sylhet	96.5	19.0	54.8	434
Mother's education				
No education	96.6	11.3	41.5	3,591
Primary incomplete	96.2	13.6	45.2	1,053
Primary complete	96.5	15.5	49.1	618
Secondary/Higher	97.3	18.5	54.1	968
Assistance at delivery				
Health professional	94.5	21.8	62.1	503
Traditional midwife	96.9	12.3	44.7	4,027
Other or none	96.7	13.0	40.6	1,687
Place of delivery				
Health facility	93.1	23.3	63.4	253
At home	96.8	12.9	44.1	5,917
All children	96.6	13.2	44.8	6,230

Note: Total includes 13 children for whom information on assistance at delivery is missing and 60 children for whom information on place of delivery is missing.

Mothers were asked about the current breastfeeding status of all children under age five and, if the child was being breastfed, whether various types of liquid or solid foods had been given to the child "yesterday" or "last night." Children who are *exclusively* breastfed are defined as receiving breast milk only, while *full* breastfeeding is defined as receiving breast milk and plain water only.

The results shown in Table 9.2 indicate that babies are breastfed for a long time; even among children 12-13 months old, 97 percent are still receiving breast milk. However, the data indicate that supplementation of breast milk with other liquids and foods begins early in Bangladesh. Among newborns less than two months of age, most are either exclusively breastfed (57 percent) or fully breastfed (12 percent); however, 30 percent of these very young babies are already receiving complementary foods or liquids. Among those age 2-3 months, one-third are being given supplements.

Table 9.2 Breastfeeding status

Percent distribution of living children by current breastfeeding status, according to child's current age in months, Bangladesh 1996-97

	Percentage of living children who are:					
			Breastfeeding and:			
Age in months	Not breast-feeding	Exclusively breast-fed	Plain water only	Supple-ments	Total	Number of living children
0-1	1.1	57.0	12.3	29.6	100.0	185
2-3	0.5	46.4	19.5	33.6	100.0	252
4-5	0.6	31.3	12.8	55.2	100.0	184
6-7	2.3	9.0	17.4	71.2	100.0	168
8-9	2.1	7.2	23.5	67.2	100.0	179
10-11	2.6	4.3	17.3	75.8	100.0	213
12-13	2.7	2.7	11.2	83.4	100.0	202
14-15	3.3	2.2	10.3	84.2	100.0	235
16-17	6.0	0.0	7.4	86.7	100.0	171
18-19	6.7	0.4	5.7	87.2	100.0	153
20-21	5.1	0.7	3.5	90.8	100.0	157
22-23	15.4	0.0	6.0	78.6	100.0	164
24-25	24.3	0.5	4.2	71.0	100.0	250
26-27	34.0	0.6	1.3	64.1	100.0	204
28-29	33.6	0.8	1.7	63.9	100.0	155
30-31	43.5	0.0	1.3	55.1	100.0	159
32-33	41.3	0.4	1.3	57.0	100.0	160
34-35	44.8	0.0	2.5	52.7	100.0	197
36-37	64.7	0.0	0.5	34.8	100.0	253
38-39	72.6	0.5	0.6	26.3	100.0	209
40-41	84.1	0.0	0.0	15.9	100.0	161
0-3 months	0.8	50.9	16.4	31.9	100.0	437
4-6 months	1.1	24.8	14.6	59.5	100.0	276
7-9 months	2.2	6.8	21.4	69.6	100.0	255

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

Among older children, it is the lack of complementary feeding that is a problem. Among children age 10-11 months—when supplements other than breast milk are generally considered necessary for adequate nutrition—the data show that one-fifth of children are being given only breast milk or breast milk and water.

Duration of Breastfeeding

Data on the median duration and frequency of breastfeeding are presented in Table 9.3. The estimates of mean and median duration of breastfeeding are based on current status data, that is, the proportion of children born in the four years before the survey who were being breastfed at the time of the survey, as opposed to retrospective data on the length of breastfeeding of older children who are no longer breastfed. The prevalence/incidence mean is also provided for possible comparison with other data sources.

The median duration of breastfeeding in Bangladesh is 33 months, with no major variations by background characteristics (Figure 9.1). The only exception is that babies in Chittagong Division are breastfed for shorter durations (median of 25 months) than those in Khulna and Rajshahi Divisions (36 and 35 months, respectively).

Table 9.3 Median duration and frequency of breastfeeding

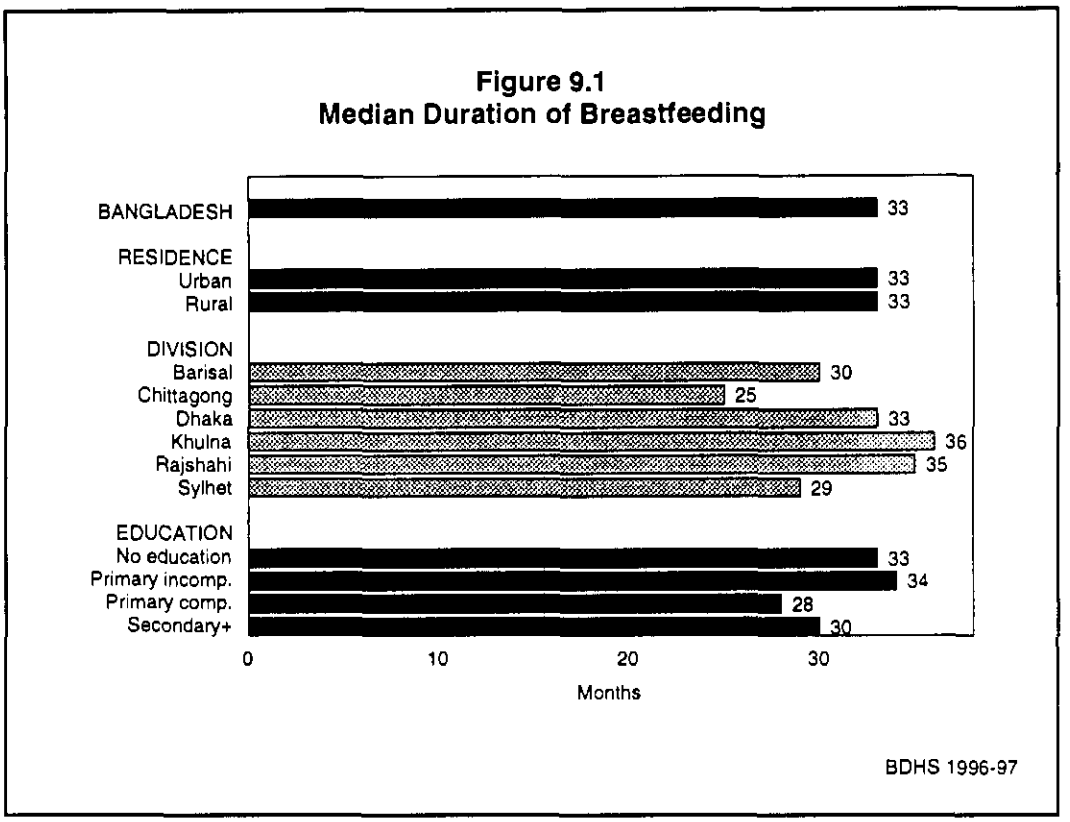
Median duration of any breastfeeding, exclusive breastfeeding, and full breastfeeding among children under four years of age, and the percentage of children under six months of age who were breastfed six or more times in the 24 hours preceding the interview, according to background characteristics, Bangladesh 1996-97

Background characteristic	Median duration in months[1]			Number of children under 4 years of age	Children under 6 months	
	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding[2]		Breastfed 6+ times in preceding 24 hours	Number of children
Sex						
Male	33.7	1.4	3.3	2,173	97.0	319
Female	31.7	1.6	4.3	2,204	97.3	302
Residence						
Urban	32.8	1.5	3.5	387	94.2	69
Rural	32.8	1.5	3.8	3,990	97.5	552
Division						
Barisal	29.6	0.7	1.7	286	95.2	42
Chittagong	24.6	2.8	5.1	1,080	99.4	179
Dhaka	33.0	0.7	3.0	1,351	97.5	188
Khulna	35.5	0.6	0.7	423	95.3	46
Rajshahi	35.4	2.5	3.5	925	95.6	126
Sylhet	29.0	1.9	4.3	311	95.1	40
Education						
No education	33.4	1.9	4.4	2,481	97.1	334
Primary incomplete	34.0	1.8	3.1	735	98.4	109
Primary complete	27.6	0.7	1.0	445	100.0	57
Secondary+	29.5	1.2	3.6	717	94.9	122
Assistance at delivery						
Health professional	31.1	0.5	0.6	364	95.2	50
Traditional midwife	32.5	1.7	3.7	2,831	97.4	428
Other or none	33.5	1.9	4.5	1,178	97.7	142
Total	32.8	1.5	3.7	4,377	97.2	621
Mean	29.9	3.7	6.6	-	-	-
Prevalence/Incidence[3]	24.9	2.7	5.3	-	-	-

[1] Medians and means are based on current status
[2] Either exclusive breastfeeding or breastfeeding and plain water only
[3] Prevalence-incidence mean

There has been an apparent decline in the median duration of breastfeeding since 1993-94 when it was over 36 months (Mitra et al., 1994:120). It should be noted that although the medians are calculated from smoothed data, they are still dependent on the point at which the proportions breastfeeding dip below 50 percent and are therefore somewhat volatile. Thus, although some decline in breastfeeding duration is no doubt real, it may not be as rapid as it appears.

The early introduction of supplements is reflected in the short duration of exclusive breastfeeding (median duration of 2 months). Few children who are supplemented receive only plain water in addition to breast milk and thus, the median duration of full breastfeeding is also quite short (4 months).



The duration of postpartum amenorrhea is affected by both the length of time spent breastfeeding and the frequency of breastfeeding. The child's health and nutritional status are also affected by the frequency of breastfeeding. Almost all children under the age of six months (97 percent) were reported to have been breastfed at least six times in the 24 hours preceding the survey. Differences among subgroups are minor.

9.2 Children's Nutritional Status

In addition to questions about breastfeeding and weaning foods, the 1996-97 BDHS included an anthropometric component, in which all children under five and their mothers were both weighed and measured. Each interviewing team carried two scales and one measuring board. The scales were lightweight, bathroom-type scales with a digital screen designed and manufactured under the authority of UNICEF, which generously assisted the survey organizers with their importation into Bangladesh. The boards were manufactured in Dhaka with assistance from staff at the Dhaka office of Helen Keller International. Children younger than 24 months were measured lying down on the board (recumbent length), while standing height was measured for older children.

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

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

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

Each of these indices gives different information about growth and body composition that can be used to assess nutritional status.

Height-for-age is a measure of linear growth. A child who is below minus two standard deviations (-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 minus three standard deviations (-3 SD) from the reference median, then the child is considered to be severely stunted. A child between -2 SD 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.

Weight-for-height measures body mass in relation to body length and describes current nutritional status. A child who is below minus two standard deviations (-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 more than three standard deviations below the reference mean. Severe wasting is closely linked to an elevated risk of mortality. Prevalence of wasting may vary considerably by season; data from Helen Keller International indicate that acute malnutrition is most pronounced in August-October in Bangladesh and least severe in December-February, just after the main harvest (HKI, n.d.).

Weight-for-age is a composite index of height-for-age and weight-for-height and, thus, does not distinguish between acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for his age because he is stunted, wasted or both. Weight-for-age is a useful tool in clinical settings for continuous assessment of nutritional progress and growth. Children whose weight-for-age is below minus two standard deviations from the median of the reference population are classified as *underweight*. In the reference population, only 2.3 percent of children fall below minus two standard deviations (-2 SD) for each of these three indices.

In the survey, all surviving children born since April 1991 were eligible for height and weight measurement. Of the 5,654 children eligible for measurement (age 0-59 months at the time of the survey), 85 percent were weighed and measured. The reason most commonly reported for not measuring a child was that the child was not at home. Of the children who were both weighed and measured, 6 percent were considered to have implausibly low or high values for height-for-age or weight-for-height. The following analysis focuses on the 4,787 children age 0-59 months for whom complete and plausible anthropometric data were collected. Table 9.4 shows the percentage of children who are classified as malnourished according to height-for-age, weight-for-height, and weight-for-age indices, by the child's age and selected background characteristics.

Table 9.4 Nutritional status of children by demographic characteristics

Percentage of children under five years of age who are 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 1996-97

Demographic characteristic	Height-for-age (stunting)		Weight-for-height (wasting)		Weight-for-age (underweight)		Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	
Age of child							
< 6 months	2.6	14.0	4.7	11.7	3.8	15.0	477
6-11 months	8.0	30.9	6.3	20.7	16.0	46.7	493
12-23 months	31.8	60.6	6.1	29.4	30.0	64.6	941
24-35 months	34.4	60.2	3.3	15.9	26.2	62.2	953
36-47 months	34.3	65.3	2.2	13.3	19.5	62.2	972
48-59 months	34.7	64.9	1.4	14.0	17.9	62.0	951
Sex of child							
Male	26.7	54.3	3.9	18.6	18.8	54.6	2,383
Female	29.4	55.0	3.5	16.8	22.4	58.0	2,404
Birth order							
1	23.0	48.4	3.6	17.1	17.1	50.9	1,249
2-3	27.9	53.7	2.9	17.2	19.4	55.4	1,914
4-5	29.9	58.6	4.0	18.2	23.0	59.7	934
6+	35.0	63.3	5.5	19.8	27.3	64.4	690
Birth interval							
First birth	23.0	48.4	3.6	17.1	17.1	50.9	1,249
< 24 months	35.4	62.0	3.5	17.1	24.9	62.3	565
24-47	31.7	59.4	3.5	17.9	23.1	60.2	1,909
48+	23.4	49.5	4.2	18.6	18.2	52.7	1,064
All children	28.0	54.6	3.7	17.7	20.6	56.3	4,787

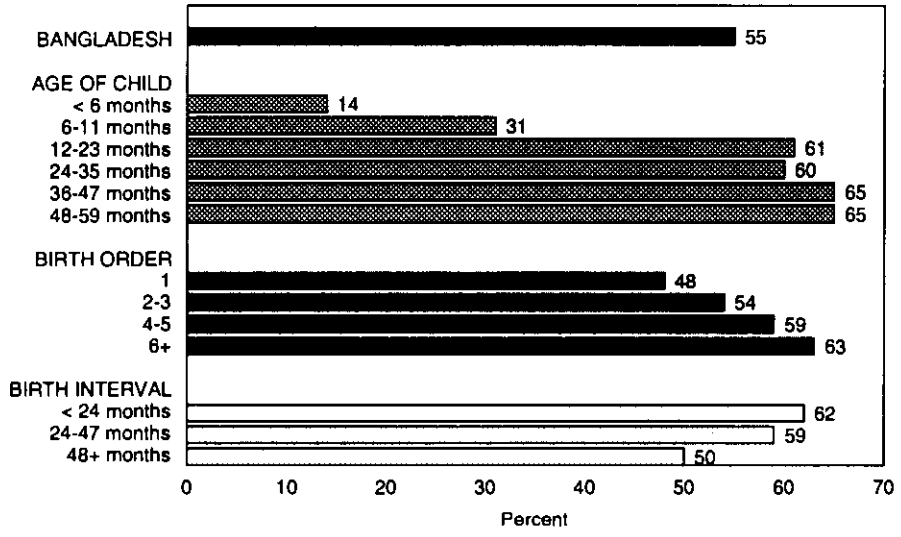
Note: Figures are for children born in the period 0-59 months preceding the survey. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population. Children are classified as malnourished if their z-scores are below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

[1] Includes children who are below -3 SD

Just over half (55 percent) of children under five are considered to be short for their age or stunted, while 28 percent are severely stunted (<-3 SD). The figures are high and suggest chronic food insecurity and/or repeated illnesses. Stunting is evident even among children under age 6 months (14 percent) (Figure 9.2). The prevalence of stunting increases as children get older, up to a high of 65 percent among three- and four-year-old children. Prevalence of stunting varies little by sex of the child; however, it rises with birth order. Stunting is also related to the length of the preceding birth interval; children born less than 24 months after a prior birth are considerably more likely to be stunted (62 percent) than those born after an interval of 48 months or more (50 percent).

Eighteen percent of children under five are underweight for their height, or wasted, and 4 percent are severely wasted. Wasting is highest for children age 12-23 months. Variations in the level of wasting by other demographic characteristics of the child are minimal.

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



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

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Fifty-six percent of the children are considered to be underweight (low weight-for-age) and 21 percent are classified as severely underweight. As with the other two nutrition indicators, children under 6 months are least likely to be underweight, probably due to the positive effects of breastfeeding. After 6 months of age, the proportion of children who are underweight rises substantially to 65 percent among those 12-23 months and remains at 62 percent among older children. The likelihood of being underweight varies little by sex of the child, but rises with birth order and diminishes with length of the previous birth interval.

Data on these same three indicators are presented in Table 9.5 by background characteristics of the children. A much higher percentage of children in rural areas are stunted, wasted, and underweight than in urban areas. For example, 56 percent of rural children are stunted, compared with 39 percent of urban children (Figure 9.3). Differences by division show that children in Sylhet Division are somewhat more likely and those in Khulna Division somewhat less likely to be malnourished. As expected, children of more educated mothers are less likely to be either stunted or underweight; proportions wasted show little difference by education of mother.

Few other sources of nationally representative data on children's nutrition status exist in Bangladesh. Data from the 1992 Child Nutrition Survey show that 46 percent of children age 6-71 months are stunted and 7 percent are wasted; however, it is unclear what definitions were used (BBS, 1997b:22). Data from Helen Keller International's Nutritional Surveillance Project—although not nationally representative—are collected routinely from some 16,000 rural children in 41 *thanas*. In 1996, they show average levels of stunting (i.e., < -2 SD) of 60 percent among rural children age 6-59 months (HKI, 1996). Although this is higher than the level of 56 percent for rural children found in the BDHS, the two sources would be closer if the surveillance data included children under 6 months, who are less likely to be stunted. The average wasting rate from the surveillance project was 11 percent in December 1996, lower than the BDHS level of 18 percent for rural children.

Table 9.5 Nutritional status of children by background characteristics

Percentage of children under five years of age who are 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 1996-97

Background characteristic	Height-for-age (stunting)		Weight-for-height (wasting)		Weight-for-age (underweight)		Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below - 2 SD[1]	
Residence							
Urban	16.9	39.4	1.7	12.8	14.2	41.9	448
Rural	29.2	56.2	3.9	18.2	21.3	57.8	4,339
Division							
Barisal	31.4	59.9	3.7	13.5	18.9	55.4	317
Chittagong	31.5	54.4	5.1	21.3	25.2	60.0	1,175
Dhaka	28.6	55.8	3.3	15.5	21.5	54.8	1,494
Khulna	19.4	46.5	2.3	17.5	15.7	49.8	479
Rajshahi	23.4	53.4	3.0	17.5	16.0	55.5	1,017
Sylhet	37.8	61.4	4.7	20.9	24.1	64.0	305
Mother's education							
No education	33.2	60.8	3.9	19.4	25.0	63.2	2,667
Primary incomplete	28.2	58.7	3.9	15.9	19.4	55.0	831
Primary complete	24.5	52.5	3.7	14.7	16.6	50.9	495
Secondary+	12.7	30.9	2.9	15.9	9.9	38.3	794
Total	28.0	54.6	3.7	17.7	20.6	56.3	4,787

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

9.3 Nutritional Status of Mothers

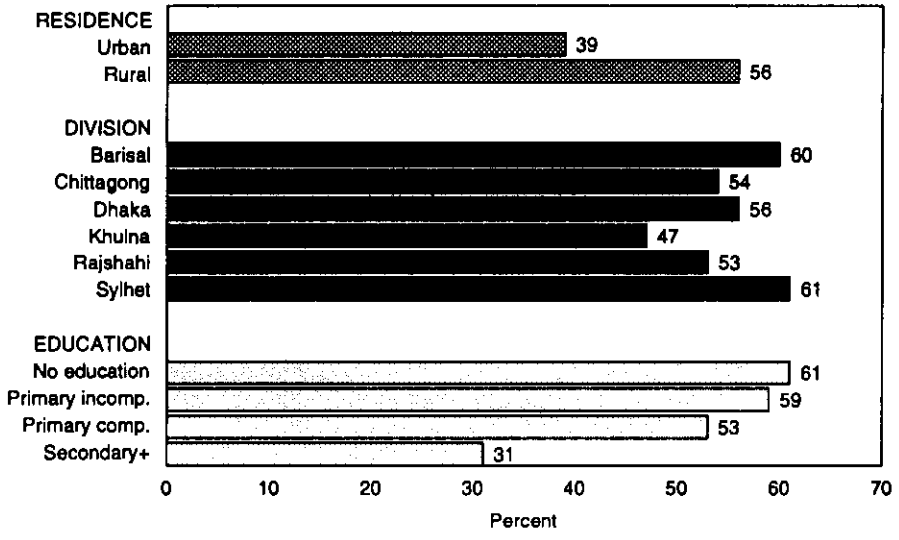
All mothers of children born since April 1991 were also weighed and measured. The objective was to determine the nutritional status of women of reproductive age. However, since weighing and measuring all women would add considerably to the length and cost of the fieldwork, it was decided to limit the anthropometric section to women with young children who would be measured anyway.[1] Women were weighed and measured using the same scales and measuring boards used for the children. The information was used to construct the following indicators of mothers' nutritional status:

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

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

[1] Interviewers were instructed to weigh and measure all women who had a birth since April 1991, regardless of whether or not the child was living.

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



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

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

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

Table 9.6 presents the mean height, body mass index (BMI), and Z-score for mothers by background characteristics. For each indicator, the proportion falling below the cut-off points is also presented. The average height of mothers in Bangladesh, 150 centimeters, is above the cut-off point of 145 centimeters; however, 17 percent of mothers are shorter than the cut-off point. Over half (52 percent) of mothers are acutely malnourished (i.e., BMI < 18.5). There are few differences in these indicators by background characteristics, except that more educated mothers tend to be slightly taller and heavier than less educated mothers. Also, a higher proportion of rural than urban mothers fall below the 18.5 cut-off for BMI.

The fact that half of Bangladeshi mothers can be considered acutely malnourished and almost one-fifth are so short as to increase the risk of difficult childbirth is one of the most disturbing findings from the survey. These levels are far higher than comparable data from other countries (see Figure 9.4).

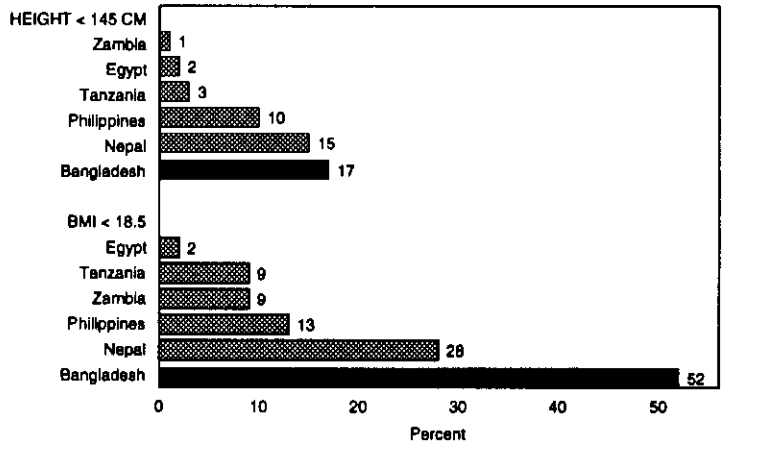
Table 9.6 Nutritional status of mothers by background characteristics

Among mothers of children under five years, mean height and percentage of women shorter than 145 centimeters, mean body mass index (BMI) and the percentage of women whose BMI is less than 18.5 (kg/m^2), by selected background characteristics, Bangladesh 1996-97

Background characteristic	Height			BMI			Z-score		
	Mean	Percent <145 cm	Number of women	Mean	Percent <18.5	Number of women	Mean	Below - 2 SD	Number of women
Age									
15-19	149.9	18.7	762	18.6	50.1	654	-1.5	26.0	647
20-24	150.2	18.3	1,314	18.7	53.6	1,155	-1.5	26.8	1,149
25-29	150.5	15.5	1,238	19.1	49.2	1,079	-1.7	41.4	1,069
30-34	150.4	16.3	642	19.0	53.0	579	-2.0	56.0	570
35-49	149.8	18.3	482	18.6	56.3	440	-2.3	67.3	429
Residence									
Urban	150.7	16.1	438	20.4	35.8	392	-1.2	24.0	385
Rural	150.2	17.4	4,019	18.6	53.8	3,529	-1.8	41.2	3,491
Division									
Barisal	149.9	19.0	304	18.8	52.8	264	-1.7	37.1	262
Chittagong	150.5	15.3	1,012	18.9	52.0	867	-1.7	41.7	857
Dhaka	150.2	17.3	1,395	18.9	51.8	1,229	-1.7	39.4	1,216
Khulna	150.8	15.9	487	19.0	47.6	445	-1.6	34.7	440
Rajshahi	150.0	18.4	985	18.6	52.4	889	-1.7	37.8	879
Sylhet	149.6	21.4	274	18.3	59.6	226	-2.0	50.5	222
Education									
No education	149.8	19.4	2,441	18.4	57.7	2,124	-1.9	46.3	2,090
Primary incomplete	150.2	15.1	764	18.7	49.7	682	-1.7	37.1	676
Primary complete	150.5	18.6	465	18.9	51.4	413	-1.6	33.0	412
Secondary/Higher	151.6	12.0	786	20.0	37.7	701	-1.3	25.3	698
Total	150.2	17.3	4,457	18.8	52.0	3,921	-1.7	39.5	3,877

Note: Table includes only women who had a birth in the five years preceding the survey. The BMI index excludes pregnant women and those who are less than two months postpartum.

Figure 9.4
Percentage of Mothers Shorter Than 145 cm or with Low Body Mass Index (BMI), Selected Countries



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CHAPTER 10

KNOWLEDGE OF AIDS

Although acquired immunodeficiency syndrome (AIDS) is not widespread in Bangladesh, several questions were included in the 1996-97 BDHS to ascertain the level of awareness about this fatal disease. Knowledge of means of avoiding AIDS can help prevent its spread. Both ever-married women and currently married men were asked if they had ever heard of AIDS and, if so, where they had learned the most about AIDS. They were then asked if they knew of anything a person could do to avoid getting AIDS. Finally, respondents were asked whether they thought it was possible for a healthy looking person to have the AIDS virus and whether they thought that people with AIDS almost never, sometimes, or almost always died from the disease.

The vast majority of Bangladeshi adults have evidently never heard of AIDS. Only 19 percent of ever-married women and 33 percent of currently married men had heard of it (Table 10.1 and Figure 10.1). By far the most striking differentials in awareness of AIDS are by urban-rural residence and education. Urban women are four times more likely to have heard of AIDS than their rural counterparts (58 vs. 14 percent), while women with some secondary school are ten times more likely to know of AIDS than uneducated women (59 vs. 6 percent). Similar patterns exist for men.

The major sources of information about AIDS are television and radio, the latter being more prominent among men. Newspapers and friends and relatives are also sources of information.

Respondents who said they had heard of AIDS were asked if there was any way to avoid getting it. As shown in Table 10.2, a substantial proportion of women (41 percent) and men (27 percent) said there is no way to avoid AIDS. Even among those who said there are means of avoiding AIDS, two-thirds of women and half of men say they don't know of any specific ways. Urban respondents are considerably better informed about the disease than rural respondents; however, in general, the data show that little is known about AIDS in Bangladesh. This conclusion is corroborated by results of a 1996 reproductive health study among adolescents age 15-19 in which only 36 percent of respondents could cite one symptom of AIDS (Haider et al., 1997:22). Knowledge of symptoms was considerably lower among currently married women and men than among single respondents.

Surprisingly, respondents appear to be relatively well informed on two other issues concerning AIDS. Over 2 in 3 women and 4 in 5 men who have heard of AIDS know that a healthy-looking person can have AIDS (Table 10.3). Sizeable proportions also realize that AIDS is a fatal disease; 61 percent of women and 69 percent of men say that people with AIDS almost always die of the disease.

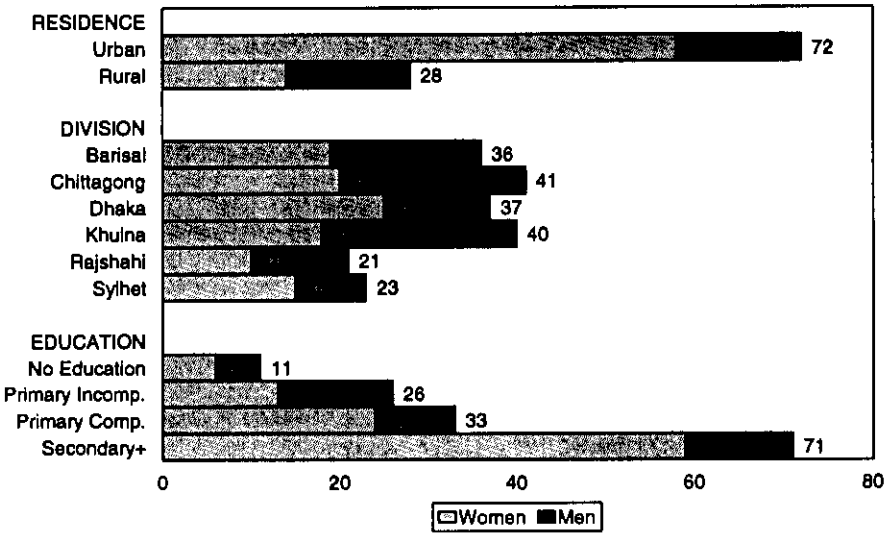
Table 10.1 Knowledge of AIDS and sources of AIDS information: women

Percentage of ever-married women and currently married men who have ever heard of AIDS, percentage who have received information about AIDS from specific sources, and mean number of sources of information about AIDS, by background characteristics, Bangladesh 1996-97

Background characteristic	Ever heard of AIDS	Sources of AIDS information: Radio	TV	News-paper	Pam-phlet	Health worker	Mosque/ church	School	Com-munity meeting	Friend/ Rela-tive	Work place	Other source	Num-ber	Mean number of sources[1]
EVER-MARRIED WOMEN														
Age														
15-19	17.2	7.6	11.7	2.6	0.6	0.4	0.0	0.1	0.1	6.8	0.0	1.5	1,446	1.8
20-24	19.7	8.8	14.4	3.8	1.6	0.6	0.0	0.2	0.1	7.6	0.2	2.2	1,727	2.0
25-29	20.2	9.2	14.5	5.7	1.2	0.6	0.0	0.0	0.2	6.6	0.5	1.8	1,905	2.0
30-39	19.1	7.3	13.0	4.8	0.7	0.9	0.0	0.0	0.1	7.9	0.6	1.4	2,530	1.9
40-49	16.5	7.1	10.8	3.7	1.4	0.2	0.0	0.1	0.0	6.8	0.3	2.3	1,518	2.0
Marital status														
Currently in union	19.1	8.2	13.4	4.5	1.1	0.6	0.0	0.1	0.1	7.3	0.3	1.9	8,450	2.0
Formerly in union	13.7	5.1	8.7	1.6	0.4	0.3	0.0	0.0	0.0	6.4	0.6	0.6	677	1.7
Residence														
Urban	58.4	19.0	51.3	21.0	5.3	1.3	0.0	0.2	0.0	21.2	1.2	4.1	1,063	2.1
Rural	13.5	6.6	8.0	2.1	0.5	0.5	0.0	0.1	0.1	5.3	0.2	1.5	8,064	1.8
Division														
Barisal	19.4	11.5	12.8	4.5	1.1	0.7	0.1	0.1	0.1	4.9	0.3	1.5	598	1.9
Chittagong	20.3	9.0	15.2	4.3	1.0	0.5	0.0	0.1	0.0	7.9	0.3	2.1	1,836	2.0
Dhaka	25.4	9.7	19.2	6.8	1.7	0.7	0.0	0.1	0.1	10.2	0.4	2.3	2,882	2.0
Khulna	17.7	7.1	11.0	2.8	0.7	0.8	0.0	0.0	0.2	7.9	0.5	1.4	1,107	1.8
Rajshahi	9.9	4.8	5.6	2.1	0.6	0.4	0.0	0.1	0.1	3.6	0.3	1.2	2,198	1.9
Sylhet	14.9	6.9	7.4	2.1	0.4	0.9	0.0	0.1	0.2	3.8	0.2	1.6	506	1.6
Education														
No education	6.4	2.0	3.4	0.0	0.0	0.2	0.0	0.0	0.1	3.1	0.1	0.9	4,983	1.5
Primary incomplete	12.8	4.1	6.3	0.3	0.1	0.9	0.0	0.0	0.1	5.5	0.2	2.0	1,572	1.5
Primary complete	23.8	10.4	17.0	2.1	1.0	0.7	0.0	0.0	0.0	8.8	0.1	2.7	913	1.8
Secondary/+	58.6	28.6	46.2	22.0	5.1	1.4	0.0	0.5	0.2	20.1	1.4	3.9	1,659	2.2
Total	18.7	8.0	13.0	4.3	1.1	0.6	0.0	0.1	0.1	7.2	0.3	1.8	9,127	2.0
CURRENTLY MARRIED MEN														
Age														
15-19	*	*	*	*	*	*	*	*	*	*	*	*	23	2.2
20-24	25.0	18.2	15.6	7.8	2.8	1.5	0.0	0.0	0.4	13.1	1.9	2.2	194	2.5
25-29	36.9	25.0	23.7	14.9	5.7	2.2	0.0	0.5	0.0	16.0	3.2	3.5	487	2.6
30-39	35.9	22.7	25.1	16.6	4.3	1.6	0.2	0.0	0.4	15.9	3.7	3.1	1,241	2.6
40-49	33.0	22.9	22.0	16.6	4.2	2.3	0.2	0.0	0.0	13.3	3.9	2.8	863	2.7
50-64	26.3	16.0	16.4	14.3	2.1	0.4	0.0	0.0	0.6	10.4	2.3	2.0	503	2.5
Residence														
Urban	71.6	44.7	58.8	50.4	14.4	1.8	0.3	0.1	0.0	31.5	10.6	4.8	400	3.0
Rural	27.8	18.6	17.1	10.6	2.6	1.7	0.1	0.1	0.3	11.8	2.3	2.6	2,912	2.4
Division														
Barisal	35.7	25.4	19.2	17.0	5.3	3.6	0.3	0.3	1.4	9.3	0.8	1.6	199	2.4
Chittagong	41.3	26.7	29.6	20.3	4.8	2.2	0.0	0.0	0.0	23.3	5.1	5.0	584	2.8
Dhaka	37.0	24.1	25.8	19.9	5.5	1.3	0.2	0.2	0.1	14.8	3.4	3.7	1,056	2.7
Khulna	40.1	27.1	26.0	13.7	2.6	1.7	0.0	0.1	0.8	18.3	6.6	3.3	428	2.5
Rajshahi	20.9	13.8	13.1	8.6	2.5	1.5	0.1	0.0	0.1	7.7	1.5	0.7	877	2.4
Sylhet	22.6	13.6	13.5	7.8	1.7	1.6	0.0	0.0	0.4	7.6	1.1	1.5	168	2.2
Education														
No education	11.0	6.4	5.8	0.2	0.1	0.5	0.1	0.0	0.2	5.3	0.8	0.6	1,390	1.8
Primary incomplete	25.6	15.6	14.5	3.8	0.7	1.3	0.1	0.0	0.2	12.3	1.7	3.1	750	2.1
Primary complete	33.0	17.2	19.0	9.2	1.9	0.8	0.0	0.0	0.0	15.4	3.6	3.6	204	2.1
Secondary+	70.6	49.6	52.1	47.5	12.7	3.9	0.2	0.3	0.4	28.1	8.2	5.7	968	3.0
Total	33.1	21.8	22.1	15.4	4.0	1.7	0.1	0.1	0.3	14.2	3.3	2.8	3,312	2.6

[1] Mean number of sources is based on respondents who have heard of AIDS.

Figure 10.1
Percentage of Women and Men Who Have Ever Heard of AIDS, According to Background Characteristics



BDHS 1996-97

Table 10.2 Knowledge of ways to avoid HIV/AIDS

Percentage of ever-married women and currently married men who have heard of AIDS and who know of specific ways to avoid HIV/AIDS and percentage with misinformation, by background characteristics, Bangladesh 1996-97

Background characteristic	No way to avoid AIDS	Ways to avoid AIDS: Abstain from sex	Use condoms	Have only one sex partner	Avoid sex with prostitutes	Avoid sex with homosexuals	Use sterile syringes	Avoid transfusions	Avoid kissing	Avoid mosquito bites	Other ways	Don't know any way	Percentage with any misinformation[1]	Number of women/men
EVER-MARRIED WOMEN														
Residence														
Urban	34.0	8.2	8.8	20.9	19.4	0.9	13.1	5.9	1.0	1.5	5.5	56.5	2.5	621
Rural	45.3	4.6	5.6	9.3	10.0	0.5	5.4	2.2	0.9	1.1	3.3	76.0	1.9	1,087
Marital status														
Currently married	41.1	6.3	6.8	13.6	13.5	0.6	8.4	3.7	1.0	1.3	3.9	68.6	2.2	1,616
Formerly married	42.0	0.0	6.3	12.6	12.1	0.6	5.1	1.2	0.0	0.5	6.2	74.4	0.5	93
Total	41.2	5.9	6.8	13.5	13.4	0.6	8.2	3.5	0.9	1.3	3.9	68.9	2.1	1,708
CURRENTLY MARRIED MEN														
Residence														
Urban	16.1	4.1	27.5	24.5	59.4	2.8	23.8	11.9	4.5	2.3	18.1	31.2	6.5	286
Rural	31.3	2.0	14.1	13.5	33.3	1.3	8.7	4.3	0.9	2.3	8.8	57.8	2.6	810
Total	27.3	2.6	17.6	16.4	40.1	1.7	12.6	6.3	1.8	2.3	11.2	50.9	3.6	1,096

[1] Includes avoiding mosquito bites and avoiding kissing.

Table 10.3 Awareness of AIDS-related health issues

Percent distribution of ever-married women and currently married men who have heard of AIDS by responses to questions on AIDS-related health issues, Bangladesh 1996-97

Background characteristic	Can a healthy-looking person have the AIDS virus?			Is AIDS a fatal disease?				Total	Number of women/ men
	Yes	No	Don't know/ missing	Almost never	Some-times	Almost always	Don't know/ missing		
Ever-married women	67.8	13.6	18.6	1.1	19.5	60.6	18.8	100.0	1,708
Currently married men	81.5	7.6	10.9	0.4	17.2	68.8	13.6	100.0	1,096

CHAPTER 11

AVAILABILITY OF HEALTH AND FAMILY PLANNING SERVICES

As part of the 1996-97 BDHS, a separate team of interviewers conducted a Service Availability survey in each of the sample points selected for the larger survey. The Service Availability survey was designed to elicit data on background characteristics of the selected sample points (e.g., distance to thana headquarters, distance to schools, post office, etc.), as well as information about the types of family planning and health services that are available either within or near the sample point. The main reason for conducting the Service Availability survey was to be able to distinguish sample points covered by government family planning fieldworkers from those covered by fieldworkers supported by non-governmental organizations. This in turn allows an assessment of the coverage of public versus private fieldworker programs.

As in the 1993-94 BDHS, the 1996-97 survey utilized a questionnaire to collect general information about the sample point (Community Questionnaire), which was administered to a group of residents from the selected sample point. In most cases, informants were members or the chairmen of the union council, village heads, male teachers, imams, and female opinion leaders. A total of 1,458 people were interviewed to collect the community-level data, an average of 4.7 informants per sample point.[1]

Some community characteristics can be expected to have an effect on family planning and health service utilization. Such factors as distance to schools, markets, post offices, and health and family planning centers are ways of measuring the general level of development of the area.

Table 11.1 presents the distribution of ever-married women by distance to various types of schools and services, according to urban-rural residence. Almost half of women live within five miles of the thana headquarters, while only 13 percent live within five miles of the district headquarters. Schools, post offices, markets, and pharmacies are generally widespread; at least 70 percent of women live within one mile of a religious school, a primary school, a high school, a post office, a daily or weekly market, and a pharmacy. Cinemas and rural dispensaries are less widespread, with only about one-quarter of women living within a mile of these services. It is somewhat surprising that health clinics and family welfare centers appear to be more accessible than dispensaries. Forty-three percent of women live within one mile of a family welfare center, while only 20 percent live as close to the much larger thana health complex. Overall, public services appear to be widely available, with urban women living closer to most services than their rural counterparts.

Table 11.2 shows the availability of various income-generating organizations such as mothers clubs, the Grameen Bank, and cottage industries. The availability of these income-generating programs may influence women's reproductive behavior either because they increase the women's socioeconomic status or because they include some family planning component. The data indicate that half of ever-married women in Bangladesh live in communities that have mothers' clubs, whereas only about 1 in 3 women live in communities with a Grameen Bank program. Very few women live in areas with cottage industries, however, 70 percent have co-operative societies in their communities and 59 percent have income-generating projects. Finally, 19 percent of women have access to television in their communities. Mothers' clubs and Grameen Bank programs are less available to urban than to rural women; television sets are, however, more accessible to urban women.

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[1] Three sample points were not covered in the Service Availability Survey, leaving 310 points out of the 313 covered in the main survey.

Table 11.1 Distance to public services

Percent distribution of ever-married women age 10-49 by distance to selected public services, according to urban-rural residence, Bangladesh 1996-97

Type of facility	Number of miles to public service			Don't know/ Missing	Total
	0-1	2-4	5+		
Urban areas					
Thana headquarters	75.7	19.3	5.0	0.0	100.0
District headquarters	45.6	24.4	30.0	0.0	100.0
Religious school	96.3	3.7	0.0	0.0	100.0
Primary school	100.0	0.0	0.0	0.0	100.0
High school	100.0	0.0	0.0	0.0	100.0
Post office	92.4	7.6	0.0	0.0	100.0
Daily market	98.6	1.4	0.0	0.0	100.0
Weekly market	61.7	15.5	4.6	18.2	100.0
Cinema hall	92.9	6.0	1.1	0.0	100.0
Rural dispensary	56.8	9.6	6.2	27.4	100.0
Pharmacy	98.6	1.4	0.0	0.0	100.0
Health clinic	89.3	8.0	2.7	0.0	100.0
Family welfare center	53.4	30.1	16.5	0.0	100.0
Thana health complex	61.9	28.9	9.2	0.0	100.0
Rural areas					
Thana headquarters	10.0	30.3	59.7	0.0	100.0
District headquarters	1.8	4.2	94.0	0.0	100.0
Religious school	85.2	13.6	1.2	0.0	100.0
Primary school	98.5	1.5	0.0	0.0	100.0
High school	70.8	27.2	1.9	0.0	100.0
Post office	68.2	29.8	1.9	0.0	100.0
Daily market	65.3	31.6	3.1	0.0	100.0
Weekly market	76.6	21.3	1.7	0.4	100.0
Cinema hall	15.1	36.4	48.5	0.0	100.0
Rural dispensary	21.0	34.5	22.6	21.9	100.0
Pharmacy	76.5	22.3	1.2	0.0	100.0
Health clinic	46.5	44.8	8.8	0.0	100.0
Family welfare center	41.9	48.6	8.5	1.1	100.0
Thana health complex	14.9	31.8	53.3	0.0	100.0
Total					
Thana headquarters	17.6	29.1	53.3	0.0	100.0
District headquarters	6.9	6.5	86.6	0.0	100.0
Religious school	86.5	12.4	1.1	0.0	100.0
Primary school	98.7	1.3	0.0	0.0	100.0
High school	74.2	24.1	1.7	0.0	100.0
Post office	71.0	27.2	1.7	0.0	100.0
Daily market	69.1	28.1	2.8	0.0	100.0
Weekly market	74.9	20.6	2.0	2.5	100.0
Cinema hall	24.1	32.9	43.0	0.0	100.0
Rural dispensary	25.1	31.6	20.7	22.6	100.0
Pharmacy	79.1	19.8	1.1	0.0	100.0
Health clinic	51.4	40.5	8.1	0.0	100.0
Family welfare center	43.2	46.4	9.4	1.0	100.0
Thana health complex	20.3	31.5	48.2	0.0	100.0

Comparison with data from the 1993-94 BDHS suggest that co-operative societies and income-generating activities have expanded greatly. The former survey found that only 15 percent of ever-married women lived in communities with co-operative societies and 4 percent in areas with income-generating programs. By 1996-97, these proportions had increased to 70 and 59 percent, respectively. Grameen Bank programs have also increased, from covering only 14 percent of women in 1993-94 to 29 percent in 1996-97. Since these increases are so sizeable, it is possible that changes in the wording of the questions and/or misunderstanding on the part of either interviewers or community informants are factors.

Table 11.2 Presence of income-generating organizations in cluster

Percentage of ever-married women age 10-49 by presence of specific income-generating organizations in their communities, and access to television, Bangladesh 1996-97

Organization	Residence		Total
	Urban	Rural	
Mothers' club	45.7	50.6	50.0
Grameen Bank	7.9	31.7	29.0
BSCIC[1]	23.2	4.9	7.0
Co-operative society	87.9	67.5	69.8
NGO income-generating activity	58.9	59.2	59.2
Access to television set	32.0	17.0	18.7

[1]Bangladesh Small Cottage Industry Corporation

Table 11.3 provides information on the presence of health and family planning fieldworkers and their services, based on reports from community informants. Health and family planning services are available to the majority of women in Bangladesh; 95 percent of ever-married women live in communities with family planning fieldworkers, 91 percent live in an area covered by a satellite clinic and 87 percent of women live in communities covered by health workers. Moreover, 53 percent of women are close to a shop that sells family planning methods. Among women for whom a satellite clinic is available, 55 percent live in communities with clinics that provide the pill, 38 percent have clinics that distribute condoms, 17 percent live near clinics that insert IUDs, and 35 percent have injectables. According to the community informants, most satellite clinics provide immunizations, vitamin A supplementation, and tetanus injections. Child growth monitoring, oral rehydration packets (ORS), and antenatal care appear to be either less commonly provided at satellite clinics and/or less likely to be known or reported by the community informants.

Table 11.3 Presence of health and family planning workers and services in the community

Percent of ever-married women age 10-49 living in communities covered by family planning (FP) fieldworkers, satellite clinics, and health workers, according to division and urban-rural residence, Bangladesh 1996-97

Fieldworkers/ Services	Division						Residence		Total
	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Urban	Rural	
Family planning fieldworker in community	96.7	97.9	95.4	92.5	98.2	75.5	98.9	94.7	95.2
Someone who sells FP from home	10.2	2.5	6.3	5.0	6.4	7.0	6.2	5.6	5.7
Shop selling FP in community	47.3	60.3	58.7	76.4	36.3	17.0	82.6	48.7	52.6
Satellite clinic in community	88.3	91.7	87.5	88.4	96.4	95.4	72.3	93.6	91.1
Of those with satellite clinic, percent with clinics supplying:									
Pill	36.8	64.3	49.1	61.1	58.5	46.9	29.4	57.7	55.1
Condom	34.3	37.8	34.1	48.8	39.2	28.2	19.0	39.4	37.5
IUD	21.4	9.1	18.3	16.1	18.9	18.4	3.5	17.8	16.5
Injectables	33.4	33.0	29.0	41.4	44.6	19.9	20.8	36.4	35.0
Immunization	90.9	90.3	92.3	86.8	91.8	92.1	94.1	90.7	91.0
ORS packets	22.5	23.8	17.0	39.0	27.0	20.7	8.9	25.6	24.0
Vitamin A	95.4	84.3	84.3	95.5	89.4	79.1	86.7	87.4	87.3
Weighing children	13.5	8.3	9.5	1.0	14.5	7.7	8.0	9.9	9.7
Checking pregnant women	23.8	50.1	33.7	16.3	41.9	50.7	39.6	37.3	37.5
Tetanus injections	55.6	60.9	66.5	67.3	60.6	67.4	68.9	62.7	63.3
Health worker in community	90.2	85.2	79.8	97.0	91.8	80.6	67.7	89.1	86.6
Number of women	598	1,836	2,831	1,073	2,198	506	1,050	7,991	9,041

Note: Table excludes women in three clusters for which community data are missing

Differences in the availability of these services by division are not large, except for shops that sell family planning. These tend to be more widespread in Khulna, Chittagong, and Dhaka Divisions and scarce in Sylhet Division. Sylhet Division is also disadvantaged in terms of family planning fieldworker coverage; only 75 percent of women live in communities with fieldworkers, compared with 98 percent in Rajshahi and Chittagong Divisions. As expected, shops that sell family planning are more widely available in urban than in rural areas. However, the opposite is true for satellite clinics, which are more common in rural areas.

One of the major reasons for implementing the study on availability of services was to gauge the relative coverage of family planning fieldworkers provided by government versus non-governmental organizations (NGOs). Unlike the 1993-94 BDHS, the 1996-97 survey did not involve interviewing family planning fieldworkers or family welfare visitors. That approach had relied on the ability to classify each sample point as having either government or NGO-supported family planning fieldworkers; however, it was sometimes difficult to know if all the fieldworkers who may be operating in an area were contacted and some areas were classified as having both government and NGO workers. The approach used in the 1996-97 survey was to obtain information from the district family planning offices about the names of the NGOs which operated family planning projects in the district and in which *thanas* they operated. Information was then collected at the *thana*-level family planning office as to whether the specified NGO or any other NGOs were operating and if so, in which unions. Finally, visits were made to the local offices of all NGOs that were identified in order to corroborate the information and determine whether the exact area comprising the specific BDHS sample point was covered by the NGO program. Those sample points which were identified as having NGO family planning activities and which the community informants indicated were covered by family planning fieldworkers were classified as 'NGO fieldworker'. Sample points not covered by NGOs, but with a fieldworker were classified as 'Government fieldworker only'. It is possible that some areas are covered by both government and NGO workers; if so, they are classified as 'NGO fieldworker' in this analysis.

Data in Table 11.4 indicate that government fieldworkers predominate. Seventy-five percent of ever-married women in Bangladesh live in communities in which only a government fieldworker operates, while 21 percent live in communities with an NGO fieldworker and 5 percent live in communities with no fieldworkers. Changes over time are difficult to interpret since in the 1993-94 BDHS, some communities were classified as having both NGO and government fieldworkers. However, it does seem clear that coverage of government fieldworkers has declined. In the 1993-94 survey, 82 percent of women lived in communities covered by only government family planning fieldworkers; by 1996-97, that proportion had dropped to 75 percent (Mitra et al., 1994:132). The proportion of women in areas not covered by any fieldworker has increased from less than 1 percent to about 5 percent.

Table 11.4 Presence of government and non-governmental family planning fieldworkers

Percent distribution of ever-married women age 10-49 by presence of family planning fieldworker supported by government, non-government organizations (NGO), or neither, according to division and urban-rural residence, Bangladesh 1996-97

Type of fieldworker	Division						Residence		Total
	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Urban	Rural	
Government fieldworker only	69.8	75.1	74.3	83.3	75.3	59.8	55.9	77.1	74.6
NGO fieldworker	26.9	22.8	21.2	9.2	22.9	15.8	43.0	17.6	20.6
No fieldworker	3.3	2.1	4.6	7.5	1.8	24.5	1.1	5.3	4.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	598	1,836	2,831	1,073	2,198	506	1,050	7,991	9,041

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APPENDIX A

SAMPLE IMPLEMENTATION

Table A.1.1 Sample implementation: women

Percent distribution of households and eligible women in the DHS sample by results of the interviews and household, eligible women, and overall response rates, according to division and residence, Bangladesh 1996-97

	Division						Residence		
Result	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Urban	Rural	Total
Selected households									
Completed (C)	94.8	94.8	94.7	96.5	96.4	95.1	92.7	95.9	95.4
Household present but	0.4	0.5	0.7	0.6	0.5	0.6	0.4	0.6	0.6
no competent respondent	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
at home (HP)	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Refused (R)	0.0	0.2	0.2	0.4	0.1	0.1	0.5	0.1	0.2
Dwelling not found (DNF)	1.8	1.5	1.4	1.2	1.3	1.8	1.7	1.4	1.4
Household absent (HA)	1.8	2.5	2.2	0.8	1.4	1.8	4.2	1.3	1.8
Dwelling vacant (DV)	1.0	0.2	0.5	0.2	0.2	0.6	0.5	0.4	0.4
Dwelling destroyed (DD)	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.1	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	930	1,292	2,570	1,061	2,350	896	1,462	7,637	9,099
Household response rate (HRR)[1]	99.4	99.0	98.9	98.8	99.3	99.2	99.0	99.1	99.1
Eligible women									
Completed (EWC)	97.7	97.5	98.0	97.7	97.9	97.3	97.0	97.9	97.8
Not at home (EWNH)	2.0	1.8	1.4	1.6	1.4	1.3	2.2	1.4	1.5
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Refused (EWR)	0.0	0.4	0.3	0.3	0.0	0.4	0.2	0.2	0.2
Partly completed (EWPC)	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Incapacitated (EWI)	0.3	0.1	0.2	0.2	0.2	0.5	0.1	0.3	0.2
Other (EWO)	0.0	0.1	0.0	0.2	0.4	0.2	0.3	0.2	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	959	1,394	2,581	1,109	2,363	929	1,494	7,841	9,335
Eligible woman response rate (EWRR)[2]	97.7	97.5	98.0	97.7	97.9	97.3	97.0	97.9	97.8
Overall response rate (ORR)[3]	97.2	96.5	96.9	96.6	97.2	96.5	96.0	97.0	96.9

Note: The household response rate is calculated for completed households as a proportion of the sum of completed households, those with no competent respondent at home, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and woman response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF}$$

[2] Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{EWC}{EWC + EWNH + EWP + EWR + EWPC + EWI + EWO}$$

[3] The overall response rate (ORR) is calculated as:

$$ORR = HRR * EWRR$$

Table A.1.2 Sample implementation: men

Percent distribution of households and eligible men in the DHS sample by results of the interviews and household, eligible men, and overall response rates, according to division and residence, Bangladesh 1996-97

	Division						Residence		
Result	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Sylhet	Urban	Rural	Total
Selected households									
Completed (C)	94.5	94.4	95.1	95.9	96.6	94.2	92.1	95.9	95.3
Household present but no competent respondent	0.4	0.3	0.7	0.6	0.5	0.7	0.3	0.6	0.5
at home (HP)	0.0	0.0	0.2	0.4	0.1	0.0	0.1	0.1	0.1
Refused (R)	0.0	0.3	0.3	0.8	0.1	0.2	0.8	0.2	0.3
Dwelling not found (DNF)	2.8	2.0	1.5	1.3	0.8	2.4	2.6	1.4	1.6
Household absent (HA)	1.5	2.5	1.9	0.8	1.5	2.0	3.7	1.3	1.7
Dwelling vacant (DV)	0.9	0.3	0.5	0.2	0.3	0.4	0.4	0.4	0.4
Dwelling destroyed (DD)	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.1	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	470	647	1,293	532	1,181	451	737	3,837	4,574
Household response rate (HRR)[1]	99.6	99.3	98.8	98.3	99.3	99.1	98.7	99.1	99.0
Eligible men									
Completed (EMC)	92.1	87.2	95.2	90.9	94.3	91.0	90.8	93.0	92.7
Not at home (EMNH)	7.9	10.9	3.8	8.2	5.3	8.4	8.1	6.2	6.5
Postponed (EMP)	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1
Refused (EMR)	0.0	0.0	0.2	0.2	0.1	0.0	0.3	0.1	0.1
Partly completed (EMPC)	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Incapacitated (EMI)	0.0	0.8	0.5	0.4	0.0	0.6	0.7	0.3	0.4
Other (EMO)	0.0	0.8	0.1	0.2	0.2	0.0	0.0	0.3	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	342	476	1,014	452	995	332	589	3,022	3,611
Eligible man response rate (EMRR)[2]	92.1	87.2	95.2	90.9	94.3	91.0	90.8	93.0	92.7
Overall response rate (ORR)[3]	91.7	86.6	94.0	89.4	93.6	90.1	89.6	92.2	91.8

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 a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and man response rates.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF}$$

[2] Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:

$$\frac{EMC}{EMC + EMNH + EMP + EMR + EMPC + EMI + EMO}$$

[3] The overall response rate (ORR) is calculated as:

$$ORR = HRR * EMRR$$

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

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 BDHS to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the BDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the BDHS sample is the result of a two-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the BDHS is the ISSA Sampling Error Module. 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:

$$var(r) = \frac{1-f}{x^2} \sum_{h=1}^{H} \left[\frac{m_h}{m_h - 1} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - r.x_{hi} \ , \ and \ \ z_h = y_h - r.x_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of enumeration areas (EAs) selected in the hth stratum,
y_{hi} is the sum of the values of variable y in the ith EA in the hth stratum,
x_{hi} is the sum of the number of cases in the ith EA in the hth 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 ZDHS, there were 312 non-empty clusters. Hence, 313 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 313 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 312 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 BDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for the six divisions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.10 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant since there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *children ever born to married women aged 15-49*) can be interpreted as follows: the overall average from the national sample is 3.301 and its standard error is .03. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 3.301±2×.03. There is a high probability (95 percent) that the *true* average number of children ever born to all women aged 15 to 49 is between 3.241 and 3.361.

Sampling errors are analyzed for the national 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 percent and 18.2 percent with an average of 3.8 percent; the highest relative standard errors are for estimates of very low values (e.g., *currently using male sterilization* among currently married women who were currently using a contraceptive method). If estimates of very low values (less than 10 percent) were removed, than the average drops to 2.3 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, 2.4 percent. However, for the mortality rates, the average relative standard error is somewhat higher, 5.9 percent.

There are differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *with secondary education or higher*, the relative standard errors as a percent of the estimated mean for the whole country, for the rural areas, and for Chittagong are 3.8 percent, 4.7 percent, and 8.6 percent, respectively.

For the total sample, the value of the design effect (DEFT) averaged over all variables is 1.25, which means that due to multi-stage clustering of the sample variance is increased by a factor of 1.56 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Bangladesh 1996-97

Variable	Description	Base population
WOMEN		
No education	Proportion	Ever-married women 10-49
With secondary education or higher	Proportion	Ever-married women 10-49
Currently married	Proportion	Ever-married women 10-49
Children ever born	Mean	Currently married women 15-49
Children ever born to women over 40	Mean	Currently married women 40-49
Children surviving	Mean	Currently married women 15-49
Knowing any contraceptive method	Proportion	Currently married women 10-49
Knowing any modern contraceptive method	Proportion	Currently married women 10-49
Ever used any contraceptive method	Proportion	Currently married women 10-49
Currently using any method	Proportion	Currently married women 10-49
Currently using a modern method	Proportion	Currently married women 10-49
Currently using pill	Proportion	Currently married women 10-49
Currently using IUD	Proportion	Currently married women 10-49
Currently using injections	Proportion	Currently married women 10-49
Currently using condom	Proportion	Currently married women 10-49
Currently using female sterilization	Proportion	Currently married women 10-49
Currently using male sterilization	Proportion	Currently married women 10-49
Currently using rhythm	Proportion	Currently married women 10-49
Currently using withdrawal	Proportion	Currently married women 10-49
Using public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 10-49
Want to delay at least 2 years	Proportion	Currently married women 10-49
I deal number of children	Mean	Ever-married women 10-49
Mothers received tetanus injection	Proportion	Births in last 3 years
Mothers received medical care at birth	Proportion	Births in last 3 years
Had diarrhea in the last 2 weeks	Proportion	Children under 3
Treated with ORS packets	Proportion	Children under 3 with diarrhea in last 2 weeks
Sought medical treatment	Proportion	Children under 3 with diarrhea in last 2 weeks
Having health card, seen	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT vaccination (3 doses)	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received measles vaccination	Proportion	Children 12-23 months
Fully immunized	Proportion	Children 12-23 months
Weight-for-height (< -2 SD)	Proportion	Children 1-35 months
Height-for-age (< -2 SD)	Proportion	Children 1-35 months
Weight-for-age (< -2 SD)	Proportion	Children 1-35 months
Total fertility rate (3 years)	Rate	Women-years of exposure to child-bearing
Neonatal mortality rate	Rate	Number of births exposed to death
Postneonatal mortality rate	Rate	Number of births exposed to death
Infant mortality rate	Rate	Number of births exposed to death
Child mortality rate	Rate	Number of births exposed to death
Under-five mortality rate	Rate	Number of births exposed to death
MEN		
No education	Proportion	Currently married men 15-59
With secondary education or higher	Proportion	Currently married men 15-59
Knowing any contraceptive method	Proportion	Currently married men 15-59
Knowing any modern contraceptive method	Proportion	Currently married men 15-59
Ever used any contraceptive method	Proportion	Currently married men 15-59
Currently using any method	Proportion	Currently married men 15-59
Currently using a modern method	Proportion	Currently married men 15-59
Currently using pill	Proportion	Currently married men 15-59
Currently using IUD	Proportion	Currently married men 15-59
Currently using injections	Proportion	Currently married men 15-59
Currently using condom	Proportion	Currently married men 15-59
Currently using female sterilization	Proportion	Currently married men 15-59
Currently using male sterilization	Proportion	Currently married men 15-59
Currently using rhythm	Proportion	Currently married men 15-59
Currently using withdrawal	Proportion	Currently married men 15-59
Want no more children	Proportion	Currently married men 15-59
Want to delay at least 2 years	Proportion	Currently married men 15-59
Ideal number of children	Mean	Currently married men 15-59

Table B.2 Sampling errors - National sample, Bangladesh 1996-97

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.546	0.010	9127	9127	1.847	0.018	0.526	0.566
With secondary education or higher	0.182	0.007	9127	9127	1.664	0.038	0.168	0.196
Currently married	0.926	0.003	9127	9127	1.142	0.003	0.920	0.932
Children ever born	3.301	0.030	8306	8307	1.111	0.009	3.241	3.361
Children ever born to women over 40	3.247	0.029	8450	8450	1.077	0.009	3.189	3.305
Children surviving	2.755	0.024	8306	8307	1.118	0.009	2.707	2.803
Knowing any contraceptive method	1.000	0.000	8450	8450	1.117	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	8450	8450	1.117	0.000	1.000	1.000
Ever used any contraceptive method	0.722	0.007	8450	8450	1.404	0.010	0.708	0.736
Currently using any method	0.492	0.008	8450	8450	1.419	0.016	0.476	0.508
Currently using a modern method	0.416	0.007	8450	8450	1.346	0.017	0.402	0.430
Currently using pill	0.208	0.006	8450	8450	1.261	0.029	0.196	0.220
Currently using IUD	0.018	0.002	8450	8450	1.105	0.111	0.014	0.022
Currently using injections	0.062	0.004	8450	8450	1.349	0.065	0.054	0.070
Currently using condom	0.039	0.002	8450	8450	1.143	0.051	0.035	0.043
Currently using female sterilization	0.076	0.004	8450	8450	1.398	0.053	0.068	0.084
Currently using male sterilization	0.011	0.002	8450	8450	1.404	0.182	0.007	0.015
Currently using rhythm	0.050	0.003	8450	8450	1.326	0.060	0.044	0.056
Currently using withdrawal	0.019	0.002	8450	8450	1.056	0.105	0.015	0.023
Using public sector source	0.352	0.010	3552	3561	1.283	0.028	0.332	0.372
Want no more children	0.491	0.006	8450	8450	1.126	0.012	0.479	0.503
Want to delay at least 2 years	0.217	0.005	8450	8450	1.062	0.023	0.207	0.227
Ideal number of children	2.479	0.013	8590	8600	1.526	0.005	2.453	2.505
Mothers received tetanus injection	0.747	0.011	6189	6230	1.727	0.015	0.725	0.769
Mothers received medical care at birth	0.081	0.005	6189	6230	1.316	0.062	0.071	0.091
Had diarrhea in the last 2 weeks	0.076	0.005	5600	5654	1.348	0.066	0.066	0.086
Treated with ORS packets	0.481	0.032	409	431	1.257	0.067	0.417	0.545
Sought medical treatment	0.222	0.019	409	431	0.944	0.086	0.184	0.260
Having health card, seen	0.422	0.019	1080	1082	1.273	0.045	0.384	0.460
Received BCG vaccination	0.862	0.015	1080	1082	1.390	0.017	0.832	0.892
Received DPT vaccination (3 doses)	0.693	0.019	1080	1082	1.344	0.027	0.655	0.731
Received polio vaccination (3 doses)	0.623	0.019	1080	1082	1.302	0.030	0.585	0.661
Received measles vaccination	0.699	0.017	1080	1082	1.236	0.024	0.665	0.733
Fully immunized	0.541	0.019	1080	1082	1.221	0.035	0.503	0.579
Weight-for-height	0.177	0.007	4736	4787	1.200	0.040	0.163	0.191
Height-for-age	0.546	0.008	4736	4787	1.040	0.015	0.530	0.562
Weight-for-age	0.563	0.009	4736	4787	1.165	0.016	0.545	0.581
Total fertility rate (3 years)	3.268	0.078	NA	29225	1.417	0.024	3.112	3.424
Neonatal mortality rate (0-4 years)	48.391	2.894	6402	6440	1.014	0.060	42.603	54.179
Postneonatal mortality rate (0-4 years)	33.836	2.603	6418	6457	1.105	0.077	28.630	39.042
Infant mortality rate (0-4 years)	82.227	3.615	6420	6459	0.997	0.044	74.997	89.457
Child mortality rate (0-4 years)	36.508	2.762	6511	6554	1.115	0.076	30.984	42.032
Under-five mortality rate (0-4 years)	115.733	4.575	6531	6574	1.078	0.040	106.583	124.883
MEN								
No education	0.420	0.012	3312	3312	1.357	0.029	0.396	0.444
With secondary education or higher	0.292	0.011	3312	3312	1.329	0.038	0.270	0.314
Knowing any contraceptive method	0.999	0.001	3312	3312	1.154	0.001	0.997	1.000
Knowing any modern contraceptive method	0.998	0.001	3312	3312	1.135	0.001	0.996	1.000
Ever used any contraceptive method	0.754	0.010	3312	3312	1.298	0.013	0.734	0.774
Currently using any method	0.596	0.011	3312	3312	1.252	0.018	0.574	0.618
Currently using a modern method	0.485	0.010	3312	3312	1.116	0.021	0.465	0.505
Currently using pill	0.245	0.008	3312	3312	1.084	0.033	0.229	0.261
Currently using IUD	0.017	0.002	3312	3312	1.053	0.118	0.013	0.021
Currently using injections	0.071	0.005	3312	3312	1.218	0.070	0.061	0.081
Currently using condom	0.057	0.004	3312	3312	1.084	0.070	0.049	0.065
Currently using female sterilization	0.079	0.006	3312	3312	1.213	0.076	0.067	0.091
Currently using male sterilization	0.016	0.003	3312	3312	1.323	0.188	0.010	0.022
Currently using rhythm	0.085	0.006	3312	3312	1.191	0.071	0.073	0.097
Currently using withdrawal	0.015	0.002	3312	3312	0.897	0.133	0.011	0.019
Want no more children	0.487	0.010	3312	3312	1.095	0.021	0.467	0.507
Want to delay at least 2 years	0.213	0.008	3312	3312	1.087	0.038	0.197	0.229
Ideal number of children	2.447	0.019	3097	3095	1.333	0.008	2.409	2.485

NA = Not applicable

Table B.3 Sampling errors - Urban sample, Bangladesh 1996-97

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.355	0.015	1449	1063	1.207	0.042	0.325	0.385
With secondary education or higher	0.422	0.015	1449	1063	1.127	0.036	0.392	0.452
Currently married	0.910	0.010	1449	1063	1.312	0.011	0.890	0.930
Children ever born	2.664	0.059	1311	956	1.067	0.022	2.546	2.782
Children ever born to women over 40	2.637	0.058	1328	968	1.063	0.022	2.521	2.753
Children surviving	2.340	0.045	1311	956	0.977	0.019	2.250	2.430
Knowing any contraceptive method	1.000	0.000	1328	968	Und	0.000	1.000	1.000
Knowing any modern contracep. method	1.000	0.000	1328	968	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.857	0.012	1328	968	1.290	0.014	0.833	0.881
Currently using any method	0.621	0.016	1328	968	1.175	0.026	0.589	0.653
Currently using a modern method	0.526	0.016	1328	968	1.186	0.030	0.494	0.558
Currently using pill	0.222	0.015	1328	968	1.314	0.068	0.192	0.252
Currently using IUD	0.028	0.004	1328	968	0.955	0.143	0.020	0.036
Currently using injections	0.057	0.009	1328	968	1.477	0.158	0.039	0.075
Currently using condom	0.132	0.012	1328	968	1.258	0.091	0.108	0.156
Currently using female sterilization	0.079	0.009	1328	968	1.179	0.114	0.061	0.097
Currently using male sterilization	0.007	0.002	1328	968	0.938	0.286	0.003	0.011
Currently using rhythm	0.050	0.005	1328	968	0.915	0.100	0.040	0.060
Currently using withdrawal	0.035	0.006	1328	968	1.172	0.171	0.023	0.047
Using public sector source	0.227	0.022	680	514	1.364	0.097	0.183	0.271
Want no more children	0.492	0.015	1328	968	1.123	0.030	0.462	0.522
Want to delay at least 2 years	0.227	0.011	1328	968	0.921	0.048	0.205	0.249
Ideal number of children	2.265	0.022	1419	1045	1.257	0.010	2.221	2.309
Mothers received tetanus injection	0.896	0.014	802	557	1.087	0.016	0.868	0.924
Mothers received medical care at birth	0.348	0.020	802	557	1.038	0.057	0.308	0.388
Had diarrhea in the last 2 weeks	0.080	0.012	738	516	1.182	0.150	0.056	0.104
Treated with ORS packets	0.712	0.056	53	41	0.914	0.079	0.600	0.824
Sought medical treatment	0.264	0.079	53	41	1.337	0.299	0.106	0.422
Having health card, seen	0.473	0.048	128	83	1.022	0.101	0.377	0.569
Received BCG vaccination	0.919	0.027	128	83	1.046	0.029	0.865	0.973
Received DPT vaccination (3 doses)	0.750	0.045	128	83	1.116	0.060	0.660	0.840
Received polio vaccination (3 doses)	0.652	0.049	128	83	1.089	0.075	0.554	0.750
Received measles vaccination	0.797	0.040	128	83	1.052	0.050	0.717	0.877
Fully immunized	0.582	0.052	128	83	1.125	0.089	0.478	0.686
Weight-for-height	0.128	0.016	635	448	1.154	0.125	0.096	0.160
Height-for-age	0.394	0.026	635	448	1.271	0.066	0.342	0.446
Weight-for-age	0.419	0.028	635	448	1.375	0.067	0.363	0.475
Total fertility rate (3 years)	2.105	0.109	NA	3818	1.056	0.052	1.887	2.323
Neonatal mortality rate (0-9 years)	40.646	5.450	1756	1221	1.056	0.134	29.746	51.546
Postneonatal mortality rate (0-9 years)	32.103	5.597	1757	1223	1.137	0.174	20.909	43.297
Infant mortality rate (0-9 years)	72.749	7.652	1757	1223	1.121	0.105	57.445	88.053
Child mortality rate (0-9 years)	25.331	5.184	1768	1228	1.252	0.205	14.963	35.699
Under-five mortality rate (0-9 years)	96.237	9.414	1769	1229	1.189	0.098	77.409	115.065
MEN								
No education	0.208	0.023	532	400	1.285	0.111	0.162	0.254
With secondary education or higher	0.619	0.026	532	400	1.257	0.042	0.567	0.671
Knowing any contraceptive method	1.000	0.000	532	400	Und	0.000	1.000	1.000
Knowing any modern contracep. method	1.000	0.000	532	400	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.870	0.017	532	400	1.170	0.020	0.836	0.904
Currently using any method	0.707	0.025	532	400	1.253	0.035	0.657	0.757
Currently using a modern method	0.572	0.026	532	400	1.198	0.045	0.520	0.624
Currently using pill	0.267	0.023	532	400	1.221	0.086	0.221	0.313
Currently using IUD	0.022	0.006	532	400	0.957	0.273	0.010	0.034
Currently using injections	0.047	0.012	532	400	1.295	0.255	0.023	0.071
Currently using condom	0.148	0.019	532	400	1.237	0.128	0.110	0.186
Currently using female sterilization	0.083	0.015	532	400	1.232	0.181	0.053	0.113
Currently using male sterilization	0.004	0.003	532	400	1.117	0.750	0.000	0.010
Currently using rhythm	0.100	0.013	532	400	0.993	0.130	0.074	0.126
Currently using withdrawal	0.026	0.005	532	400	0.755	0.192	0.016	0.036
Want no more children	0.475	0.027	532	400	1.254	0.057	0.421	0.529
Want to delay at least 2 years	0.266	0.025	532	400	1.306	0.094	0.216	0.316
Ideal number of children	2.218	0.035	519	391	1.311	0.016	2.148	2.288

NA = Not applicable Und = Undefined

Table B.4 Sampling errors - Rural sample, Bangladesh 1996-97

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.571	0.011	7678	8064	1.883	0.019	0.549	0.593
With secondary education or higher	0.150	0.007	7678	8064	1.747	0.047	0.136	0.164
Currently married	0.928	0.003	7678	8064	1.111	0.003	0.922	0.934
Children ever born	3.384	0.033	6995	7350	1.109	0.010	3.318	3.450
Children ever born to women over 40	3.326	0.032	7122	7482	1.072	0.010	3.262	3.390
Children surviving	2.809	0.027	6995	7350	1.126	0.010	2.755	2.863
Knowing any contraceptive method	1.000	0.000	7122	7482	1.090	0.000	1.000	1.000
Knowing any modern contracep. method	1.000	0.000	7122	7482	1.090	0.000	1.000	1.000
Ever used any contraceptive method	0.705	0.008	7122	7482	1.403	0.011	0.689	0.721
Currently using any method	0.476	0.008	7122	7482	1.436	0.017	0.460	0.492
Currently using a modern method	0.401	0.008	7122	7482	1.373	0.020	0.385	0.417
Currently using pill	0.206	0.006	7122	7482	1.255	0.029	0.194	0.218
Currently using IUD	0.017	0.002	7122	7482	1.151	0.118	0.013	0.021
Currently using injections	0.063	0.004	7122	7482	1.323	0.063	0.055	0.071
Currently using condom	0.027	0.002	7122	7482	1.175	0.074	0.023	0.031
Currently using female sterilization	0.076	0.004	7122	7482	1.402	0.053	0.068	0.084
Currently using male sterilization	0.012	0.002	7122	7482	1.390	0.167	0.008	0.016
Currently using rhythm	0.050	0.003	7122	7482	1.348	0.060	0.044	0.056
Currently using withdrawal	0.017	0.002	7122	7482	1.035	0.118	0.013	0.021
Using public sector source	0.373	0.011	2872	3046	1.231	0.029	0.351	0.395
Want no more children	0.491	0.007	7122	7482	1.126	0.014	0.477	0.505
Want to delay at least 2 years	0.216	0.005	7122	7482	1.066	0.023	0.206	0.226
Ideal number of children	2.509	0.015	7171	7555	1.533	0.006	2.479	2.539
Mothers received tetanus injection	0.733	0.012	5387	5673	1.725	0.016	0.709	0.757
Mothers received medical care at birth	0.054	0.005	5387	5673	1.491	0.093	0.044	0.064
Had diarrhea in the last 2 weeks	0.076	0.005	4862	5138	1.344	0.066	0.066	0.086
Treated with ORS packets	0.457	0.034	356	389	1.260	0.074	0.389	0.525
Sought medical treatment	0.217	0.020	356	389	0.896	0.092	0.177	0.257
Having health card, seen	0.418	0.020	952	999	1.274	0.048	0.378	0.458
Received BCG vaccination	0.857	0.016	952	999	1.378	0.019	0.825	0.889
Received DPT vaccination (3 doses)	0.688	0.020	952	999	1.338	0.029	0.648	0.728
Received polio vaccination (3 doses)	0.621	0.020	952	999	1.296	0.032	0.581	0.661
Received measles vaccination	0.691	0.018	952	999	1.224	0.026	0.655	0.727
Fully immunized	0.537	0.020	952	999	1.214	0.037	0.497	0.577
Weight-for-height	0.182	0.007	4101	4339	1.186	0.038	0.168	0.196
Height-for-age	0.562	0.008	4101	4339	1.025	0.014	0.546	0.578
Weight-for-age	0.578	0.009	4101	4339	1.144	0.016	0.560	0.596
Total fertility rate (3 years)	3.433	0.087	NA	25501	1.411	0.025	3.259	3.607
Neonatal mortality rate (0-9 years)	56.016	2.481	11747	12371	1.068	0.044	51.054	60.978
Postneonatal mortality rate (0-9 years)	35.220	2.097	11762	12388	1.139	0.060	31.026	39.414
Infant mortality rate (0-9 years)	91.237	3.131	11764	12390	1.084	0.034	84.975	97.499
Child mortality rate (0-9 years)	43.674	2.624	11850	12484	1.208	0.060	38.426	48.922
Under-five mortality rate (0-9 years)	130.926	4.071	11869	12504	1.195	0.031	122.784	139.068
MEN								
No education	0.449	0.013	2780	2912	1.360	0.029	0.423	0.475
With secondary education or higher	0.248	0.011	2780	2912	1.346	0.044	0.226	0.270
Knowing any contraceptive method	0.999	0.001	2780	2912	1.127	0.001	0.997	1.000
Knowing any modern contracep. method	0.998	0.001	2780	2912	1.108	0.001	0.996	1.000
Ever used any contraceptive method	0.738	0.011	2780	2912	1.296	0.015	0.716	0.760
Currently using any method	0.581	0.012	2780	2912	1.241	0.021	0.557	0.605
Currently using a modern method	0.473	0.010	2780	2912	1.102	0.021	0.453	0.493
Currently using pill	0.242	0.009	2780	2912	1.066	0.037	0.224	0.260
Currently using IUD	0.016	0.003	2780	2912	1.064	0.188	0.010	0.022
Currently using injections	0.074	0.006	2780	2912	1.196	0.081	0.062	0.086
Currently using condom	0.045	0.004	2780	2912	1.064	0.089	0.037	0.053
Currently using female sterilization	0.079	0.006	2780	2912	1.199	0.076	0.067	0.091
Currently using male sterilization	0.017	0.003	2780	2912	1.296	0.176	0.011	0.023
Currently using rhythm	0.083	0.006	2780	2912	1.212	0.072	0.071	0.095
Currently using withdrawal	0.013	0.002	2780	2912	0.933	0.154	0.009	0.017
Want no more children	0.488	0.010	2780	2912	1.069	0.020	0.468	0.508
Want to delay at least 2 years	0.206	0.008	2780	2912	1.054	0.039	0.190	0.222
Ideal number of children	2.481	0.021	2578	2705	1.326	0.008	2.439	2.523

NA = Not applicable

Table B.5 Sampling errors - Barisal, Bangladesh 1996-97

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.300	0.033	937	598	2.173	0.110	0.234	0.366
With secondary education or higher	0.222	0.035	937	598	2.551	0.158	0.152	0.292
Currently married	0.937	0.005	937	598	0.658	0.005	0.927	0.947
Children ever born	3.316	0.123	864	550	1.476	0.037	3.070	3.562
Children ever born to women over 40	3.260	0.121	879	560	1.456	0.037	3.018	3.502
Children surviving	2.782	0.097	864	550	1.416	0.035	2.588	2.976
Knowing any contraceptive method	1.000	0.000	879	560	Und	0.000	1.000	1.000
Knowing any modern contracep. method	1.000	0.000	879	560	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.760	0.027	879	560	1.891	0.036	0.706	0.814
Currently using any method	0.494	0.027	879	560	1.572	0.055	0.440	0.548
Currently using a modern method	0.410	0.028	879	560	1.714	0.068	0.354	0.466
Currently using pill	0.208	0.022	879	560	1.601	0.106	0.164	0.252
Currently using IUD	0.021	0.005	879	560	1.114	0.238	0.011	0.031
Currently using injections	0.070	0.011	879	560	1.250	0.157	0.048	0.092
Currently using condom	0.038	0.009	879	560	1.335	0.237	0.020	0.056
Currently using female sterilization	0.061	0.010	879	560	1.192	0.164	0.041	0.081
Currently using male sterilization	0.012	0.004	879	560	1.066	0.333	0.004	0.020
Currently using rhythm	0.046	0.011	879	560	1.537	0.239	0.024	0.068
Currently using withdrawal	0.026	0.005	879	560	0.854	0.192	0.016	0.036
Using public sector source	0.408	0.043	370	234	1.697	0.105	0.322	0.494
Want no more children	0.503	0.025	879	560	1.488	0.050	0.453	0.553
Want to delay at least 2 years	0.242	0.020	879	560	1.400	0.083	0.202	0.282
Ideal number of children	2.495	0.045	911	580	1.751	0.018	2.405	2.585
Mothers received tetanus injection	0.760	0.036	641	408	1.857	0.047	0.688	0.832
Mothers received medical care at birth	0.085	0.025	641	408	2.103	0.294	0.035	0.135
Had diarrhea in the last 2 weeks	0.031	0.006	575	367	0.799	0.194	0.019	0.043
Treated with ORS packets	0.406	0.108	18	11	0.862	0.266	0.190	0.622
Sought medical treatment	0.178	0.096	18	11	1.049	0.539	0.000	0.370
Having health card, seen	0.533	0.052	115	75	1.114	0.098	0.429	0.637
Received BCG vaccination	0.911	0.040	115	75	1.523	0.044	0.831	0.991
Received DPT vaccination (3 doses)	0.764	0.048	115	75	1.221	0.063	0.668	0.860
Received polio vaccination (3 doses)	0.718	0.040	115	75	0.972	0.056	0.638	0.798
Received measles vaccination	0.775	0.053	115	75	1.367	0.068	0.669	0.881
Fully immunized	0.624	0.045	115	75	1.012	0.072	0.534	0.714
Weight-for-height	0.135	0.023	497	317	1.549	0.170	0.089	0.181
Height-for-age	0.599	0.022	497	317	0.999	0.037	0.555	0.643
Weight-for-age	0.554	0.036	497	317	1.541	0.065	0.482	0.626
Total fertility rate (3 years)	3.314	0.231	NA	1918	1.273	0.070	2.852	3.776
Neonatal mortality rate (0-9 years)	53.136	6.493	1398	892	0.967	0.122	40.150	66.122
Postneonatal mortality rate (0-9 years)	33.115	5.968	1399	892	0.971	0.180	21.179	45.051
Infant mortality rate (0-9 years)	86.252	7.325	1400	893	0.832	0.085	71.602	100.902
Child mortality rate (0-9 years)	36.363	4.260	1406	897	0.881	0.117	27.843	44.883
Under-five mortality rate (0-9 years)	119.478	7.093	1409	899	0.759	0.059	105.292	133.664
MEN								
No education	0.305	0.047	315	200	1.806	0.154	0.211	0.399
With secondary education or higher	0.392	0.058	315	200	2.094	0.148	0.276	0.508
Knowing any contraceptive method	1.000	0.000	315	200	Und	0.000	1.000	1.000
Knowing any modern contracep. method	1.000	0.000	315	200	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.773	0.036	315	200	1.531	0.047	0.701	0.845
Currently using any method	0.590	0.034	315	200	1.228	0.058	0.522	0.658
Currently using a modern method	0.471	0.026	315	200	0.938	0.055	0.419	0.523
Currently using pill	0.263	0.026	315	200	1.042	0.099	0.211	0.315
Currently using IUD	0.010	0.006	315	200	1.051	0.600	0.000	0.022
Currently using injections	0.078	0.016	315	200	1.041	0.205	0.046	0.110
Currently using condom	0.051	0.016	315	200	1.327	0.314	0.019	0.083
Currently using female sterilization	0.047	0.014	315	200	1.173	0.298	0.019	0.075
Currently using male sterilization	0.021	0.009	315	200	1.064	0.429	0.003	0.039
Currently using rhythm	0.089	0.020	315	200	1.268	0.225	0.049	0.129
Currently using withdrawal	0.016	0.008	315	200	1.149	0.500	0.000	0.032
Want no more children	0.541	0.030	315	200	1.071	0.055	0.481	0.601
Want to delay at least 2 years	0.225	0.027	315	200	1.165	0.120	0.171	0.279
Ideal number of children	2.448	0.059	300	189	1.421	0.024	2.330	2.566

NA = Not applicable Und = Undefined

Table B.6 Sampling errors - Chittagong, Bangladesh 1996-97

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.510	0.027	1359	1836	1.975	0.053	0.456	0.564
With secondary education or higher	0.232	0.020	1359	1836	1.757	0.086	0.192	0.272
Currently married	0.927	0.008	1359	1836	1.195	0.009	0.911	0.943
Children ever born	3.685	0.080	1248	1686	1.059	0.022	3.525	3.845
Children ever born to women over 40	3.654	0.075	1259	1701	1.000	0.021	3.504	3.804
Children surviving	3.069	0.057	1248	1686	0.958	0.019	2.955	3.183
Knowing any contraceptive method	0.999	0.001	1259	1701	1.034	0.001	0.997	1.000
Knowing any modern contracep. method	0.999	0.001	1259	1701	1.034	0.001	0.997	1.000
Ever used any contraceptive method	0.637	0.021	1259	1701	1.551	0.033	0.595	0.679
Currently using any method	0.372	0.021	1259	1701	1.509	0.056	0.330	0.414
Currently using a modern method	0.308	0.018	1259	1701	1.359	0.058	0.272	0.344
Currently using pill	0.131	0.013	1259	1701	1.351	0.099	0.105	0.157
Currently using IUD	0.026	0.005	1259	1701	1.006	0.192	0.016	0.036
Currently using injections	0.055	0.008	1259	1701	1.183	0.145	0.039	0.071
Currently using condom	0.032	0.007	1259	1701	1.449	0.219	0.018	0.046
Currently using female sterilization	0.058	0.010	1259	1701	1.458	0.172	0.038	0.078
Currently using male sterilization	0.005	0.002	1259	1701	0.897	0.400	0.001	0.009
Currently using rhythm	0.042	0.006	1259	1701	1.133	0.143	0.030	0.054
Currently using withdrawal	0.011	0.003	1259	1701	1.072	0.273	0.005	0.017
Using public sector source	0.420	0.023	415	532	0.957	0.055	0.374	0.466
Want no more children	0.491	0.016	1259	1701	1.113	0.033	0.459	0.523
Want to delay at least 2 years	0.220	0.012	1259	1701	1.010	0.055	0.196	0.244
Ideal number of children	2.775	0.048	1234	1659	1.778	0.017	2.679	2.871
Mothers received tetanus injection	0.728	0.030	1122	1541	1.883	0.041	0.668	0.788
Mothers received medical care at birth	0.078	0.013	1122	1541	1.519	0.167	0.052	0.104
Had diarrhea in the last 2 weeks	0.087	0.014	1022	1403	1.491	0.161	0.059	0.115
Treated with ORS packets	0.482	0.080	87	121	1.405	0.166	0.322	0.642
Sought medical treatment	0.215	0.034	87	121	0.742	0.158	0.147	0.283
Having health card, seen	0.371	0.039	187	258	1.116	0.105	0.293	0.449
Received BCG vaccination	0.822	0.029	187	258	1.047	0.035	0.764	0.880
Received DPT vaccination (3 doses)	0.638	0.040	187	258	1.158	0.063	0.558	0.718
Received polio vaccination (3 doses)	0.587	0.046	187	258	1.281	0.078	0.495	0.679
Received measles vaccination	0.655	0.041	187	258	1.165	0.063	0.573	0.737
Fully immunized	0.510	0.044	187	258	1.196	0.086	0.422	0.598
Weight-for-height	0.213	0.017	855	1175	1.196	0.080	0.179	0.247
Height-for-age	0.544	0.016	855	1175	0.950	0.029	0.512	0.576
Weight-for-age	0.600	0.017	855	1175	0.977	0.028	0.566	0.634
Total fertility rate (3 years)	4.061	0.175	NA	6233	1.215	0.043	3.711	4.411
Neonatal mortality rate (0-9 years)	42.042	4.877	2382	3255	1.139	0.116	32.288	51.796
Postneonatal mortality rate (0-9 years)	34.742	4.649	2383	3257	1.094	0.134	25.444	44.040
Infant mortality rate (0-9 years)	76.783	6.019	2383	3257	1.036	0.078	64.745	88.821
Child mortality rate (0-9 years)	59.024	6.123	2408	3292	0.997	0.104	46.778	71.270
Under-five mortality rate (0-9 years)	131.276	9.526	2409	3294	1.237	0.073	112.224	150.328
MEN								
No education	0.349	0.033	411	584	1.382	0.095	0.283	0.415
With secondary education or higher	0.315	0.031	411	584	1.352	0.098	0.253	0.377
Knowing any contraceptive method	0.997	0.003	411	584	1.027	0.003	0.991	1.000
Knowing any modern contracep. method	0.997	0.003	411	584	1.027	0.003	0.991	1.000
Ever used any contraceptive method	0.690	0.027	411	584	1.189	0.039	0.636	0.744
Currently using any method	0.547	0.032	411	584	1.305	0.059	0.483	0.611
Currently using a modern method	0.406	0.022	411	584	0.920	0.054	0.362	0.450
Currently using pill	0.173	0.026	411	584	1.393	0.150	0.121	0.225
Currently using IUD	0.027	0.007	411	584	0.899	0.259	0.013	0.041
Currently using injections	0.078	0.014	411	584	1.052	0.179	0.050	0.106
Currently using condom	0.046	0.013	411	584	1.256	0.283	0.020	0.072
Currently using female sterilization	0.074	0.015	411	584	1.185	0.203	0.044	0.104
Currently using male sterilization	0.007	0.004	411	584	1.025	0.571	0.000	0.015
Currently using rhythm	0.117	0.019	411	584	1.173	0.162	0.079	0.155
Currently using withdrawal	0.004	0.003	411	584	0.962	0.750	0.000	0.010
Want no more children	0.473	0.025	411	584	1.031	0.053	0.423	0.523
Want to delay at least 2 years	0.229	0.021	411	584	1.000	0.092	0.187	0.271
Ideal number of children	2.697	0.066	370	522	1.316	0.024	2.565	2.829

NA = Not applicable

Table B.7 Sampling errors - Dhaka, Bangladesh 1996-97

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.576	0.018	2529	2882	1.855	0.031	0.540	0.612
With secondary education or higher	0.188	0.009	2529	2882	1.180	0.048	0.170	0.206
Currently married	0.922	0.006	2529	2882	1.073	0.007	0.910	0.934
Children ever born	3.279	0.052	2290	2606	1.036	0.016	3.175	3.383
Children ever born to women over 40	3.220	0.052	2334	2656	1.022	0.016	3.116	3.324
Children surviving	2.723	0.047	2290	2606	1.166	0.017	2.629	2.817
Knowing any contraceptive method	1.000	0.000	2334	2656	Und	0.000	1.000	1.000
Knowing any modern contracep. method	1.000	0.000	2334	2656	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.742	0.011	2334	2656	1.191	0.015	0.720	0.764
Currently using any method	0.498	0.014	2334	2656	1.389	0.028	0.470	0.526
Currently using a modern method	0.421	0.014	2334	2656	1.347	0.033	0.393	0.449
Currently using pill	0.219	0.009	2334	2656	1.089	0.041	0.201	0.237
Currently using IUD	0.012	0.002	2334	2656	0.839	0.167	0.008	0.016
Currently using injections	0.052	0.006	2334	2656	1.238	0.115	0.040	0.064
Currently using condom	0.050	0.004	2334	2656	0.933	0.080	0.042	0.058
Currently using female sterilization	0.080	0.008	2334	2656	1.338	0.100	0.064	0.096
Currently using male sterilization	0.006	0.002	2334	2656	0.939	0.333	0.002	0.010
Currently using rhythm	0.049	0.005	2334	2656	1.158	0.102	0.039	0.059
Currently using withdrawal	0.021	0.003	2334	2656	1.147	0.143	0.015	0.027
Using public sector source	0.328	0.018	1005	1137	1.197	0.055	0.292	0.364
Want no more children	0.501	0.010	2334	2656	0.962	0.020	0.481	0.521
Want to delay at least 2 years	0.210	0.008	2334	2656	0.995	0.038	0.194	0.226
Ideal number of children	2.432	0.021	2400	2731	1.324	0.009	2.390	2.474
Mothers received tetanus injection	0.738	0.020	1665	1902	1.636	0.027	0.698	0.778
Mothers received medical care at birth	0.091	0.007	1665	1902	0.901	0.077	0.077	0.105
Had diarrhea in the last 2 weeks	0.077	0.008	1512	1729	1.212	0.104	0.061	0.093
Treated with ORS packets	0.488	0.050	118	134	1.067	0.102	0.388	0.588
Sought medical treatment	0.226	0.040	118	134	1.000	0.177	0.146	0.306
Having health card, seen	0.382	0.038	275	316	1.298	0.099	0.306	0.458
Received BCG vaccination	0.827	0.035	275	316	1.548	0.042	0.757	0.897
Received DPT vaccination (3 doses)	0.659	0.042	275	316	1.488	0.064	0.575	0.743
Received polio vaccination (3 doses)	0.601	0.038	275	316	1.289	0.063	0.525	0.677
Received measles vaccination	0.648	0.036	275	316	1.254	0.056	0.576	0.720
Fully immunized	0.493	0.038	275	316	1.268	0.077	0.417	0.569
Weight-for-height	0.155	0.011	1306	1494	1.057	0.071	0.133	0.177
Height-for-age	0.558	0.014	1306	1494	0.982	0.025	0.530	0.586
Weight-for-age	0.548	0.018	1306	1494	1.312	0.033	0.512	0.584
Total fertility rate (3 years)	3.177	0.130	NA	9203	1.302	0.041	2.917	3.437
Neonatal mortality rate (0-9 years)	52.008	4.341	3639	4170	1.072	0.083	43.326	60.690
Postneonatal mortality rate (0-9 years)	38.835	3.551	3648	4181	1.046	0.091	31.733	45.937
Infant mortality rate (0-9 years)	90.843	5.396	3648	4181	1.064	0.059	80.051	101.635
Child mortality rate (0-9 years)	43.812	4.172	3675	4212	1.141	0.095	35.468	52.156
Under-five mortality rate (0-9 years)	130.675	6.725	3684	4223	1.159	0.051	117.225	144.125
MEN								
No education	0.430	0.019	950	1056	1.201	0.044	0.392	0.468
With secondary education or higher	0.315	0.018	950	1056	1.225	0.057	0.279	0.351
Knowing any contraceptive method	1.000	0.000	950	1056	Und	0.000	1.000	1.000
Knowing any modern contracep. method	0.999	0.001	950	1056	1.013	0.001	0.997	1.001
Ever used any contraceptive method	0.746	0.020	950	1056	1.416	0.027	0.706	0.786
Currently using any method	0.605	0.021	950	1056	1.327	0.035	0.563	0.647
Currently using a modern method	0.497	0.020	950	1056	1.209	0.040	0.457	0.537
Currently using pill	0.276	0.014	950	1056	0.959	0.051	0.248	0.304
Currently using IUD	0.009	0.003	950	1056	0.872	0.333	0.003	0.015
Currently using injections	0.061	0.010	950	1056	1.336	0.164	0.041	0.081
Currently using condom	0.067	0.008	950	1056	0.945	0.119	0.051	0.083
Currently using female sterilization	0.076	0.011	950	1056	1.253	0.145	0.054	0.098
Currently using male sterilization	0.006	0.003	950	1056	1.013	0.500	0.000	0.012
Currently using rhythm	0.088	0.009	950	1056	1.014	0.102	0.070	0.106
Currently using withdrawal	0.012	0.003	950	1056	0.990	0.250	0.006	0.018
Want no more children	0.480	0.017	950	1056	1.020	0.035	0.446	0.514
Want to delay at least 2 years	0.216	0.016	950	1056	1.162	0.074	0.184	0.248
Ideal number of children	2.448	0.033	883	980	1.330	0.013	2.382	2.514

NA = Not applicable Und = Undefined

Table B.8 Sampling errors - Khulna, Bangladesh 1996-97

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.479	0.014	1084	1107	0.930	0.029	0.451	0.507
With secondary education or higher	0.193	0.015	1084	1107	1.214	0.078	0.163	0.223
Currently married	0.924	0.010	1084	1107	1.230	0.011	0.904	0.944
Children ever born	2.992	0.087	985	1005	1.226	0.029	2.818	3.166
Children ever born to women over 40	2.939	0.088	1003	1024	1.243	0.030	2.763	3.115
Children surviving	2.612	0.074	985	1005	1.218	0.028	2.464	2.760
Knowing any contraceptive method	1.000	0.000	1003	1024	Und	0.000	1.000	1.000
Knowing any modern contracep. method	1.000	0.000	1003	1024	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.807	0.012	1003	1024	0.943	0.015	0.783	0.831
Currently using any method	0.619	0.016	1003	1024	1.059	0.026	0.587	0.651
Currently using a modern method	0.510	0.019	1003	1024	1.203	0.037	0.472	0.548
Currently using pill	0.266	0.019	1003	1024	1.355	0.071	0.228	0.304
Currently using IUD	0.024	0.007	1003	1024	1.421	0.292	0.010	0.038
Currently using injections	0.091	0.011	1003	1024	1.211	0.121	0.069	0.113
Currently using condom	0.038	0.006	1003	1024	0.937	0.158	0.026	0.050
Currently using female sterilization	0.077	0.011	1003	1024	1.299	0.143	0.055	0.099
Currently using male sterilization	0.012	0.004	1003	1024	1.143	0.333	0.004	0.020
Currently using rhythm	0.070	0.012	1003	1024	1.509	0.171	0.046	0.094
Currently using withdrawal	0.033	0.006	1003	1024	1.015	0.182	0.021	0.045
Using public sector source	0.299	0.026	519	529	1.277	0.087	0.247	0.351
Want no more children	0.517	0.015	1003	1024	0.933	0.029	0.487	0.547
Want to delay at least 2 years	0.213	0.012	1003	1024	0.925	0.056	0.189	0.237
Ideal number of children	2.285	0.029	1051	1073	1.323	0.013	2.227	2.343
Mothers received tetanus injection	0.846	0.015	595	614	0.922	0.018	0.816	0.876
Mothers received medical care at birth	0.143	0.017	595	614	1.085	0.119	0.109	0.177
Had diarrhea in the last 2 weeks	0.087	0.009	549	567	0.764	0.103	0.069	0.105
Treated with ORS packets	0.514	0.068	46	49	0.924	0.132	0.378	0.650
Sought medical treatment	0.220	0.063	46	49	1.053	0.286	0.094	0.346
Having health card, seen	0.595	0.056	117	122	1.244	0.094	0.483	0.707
Received BCG vaccination	0.969	0.015	117	122	0.982	0.015	0.939	0.999
Received DPT vaccination (3 doses)	0.855	0.035	117	122	1.102	0.041	0.785	0.925
Received polio vaccination (3 doses)	0.740	0.041	117	122	1.019	0.055	0.658	0.822
Received measles vaccination	0.871	0.028	117	122	0.900	0.032	0.815	0.927
Fully immunized	0.683	0.043	117	122	1.010	0.063	0.597	0.769
Weight-for-height	0.175	0.019	464	479	1.108	0.109	0.137	0.213
Height-for-age	0.465	0.023	464	479	1.002	0.049	0.419	0.511
Weight-for-age	0.498	0.022	464	479	0.939	0.044	0.454	0.542
Total fertility rate (3 years)	2.520	0.130	NA	3453	1.121	0.052	2.260	2.780
Neonatal mortality rate (0-9 years)	51.840	6.405	1314	1357	0.976	0.124	39.030	64.650
Postneonatal mortality rate (0-9 years)	23.325	4.382	1316	1359	1.006	0.188	14.561	32.089
Infant mortality rate (0-9 years)	75.165	7.180	1317	1361	0.924	0.096	60.805	89.525
Child mortality rate (0-9 years)	12.543	2.987	1317	1361	0.952	0.238	6.569	18.517
Under-five mortality rate (0-9 years)	86.765	6.974	1321	1365	0.882	0.080	72.817	100.713
MEN								
No education	0.389	0.021	406	428	0.862	0.054	0.347	0.431
With secondary education or higher	0.305	0.025	406	428	1.073	0.082	0.255	0.355
Knowing any contraceptive method	1.000	0.000	406	428	Und	0.000	1.000	1.000
Knowing any modern contracep. method	1.000	0.000	406	428	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.853	0.017	406	428	0.957	0.020	0.819	0.887
Currently using any method	0.681	0.020	406	428	0.857	0.029	0.641	0.721
Currently using a modern method	0.548	0.023	406	428	0.947	0.042	0.502	0.594
Currently using pill	0.289	0.024	406	428	1.053	0.083	0.241	0.337
Currently using IUD	0.028	0.011	406	428	1.289	0.393	0.006	0.050
Currently using injections	0.087	0.015	406	428	1.093	0.172	0.057	0.117
Currently using condom	0.055	0.011	406	428	0.994	0.200	0.033	0.077
Currently using female sterilization	0.073	0.017	406	428	1.317	0.233	0.039	0.107
Currently using male sterilization	0.017	0.006	406	428	1.023	0.353	0.005	0.029
Currently using rhythm	0.086	0.014	406	428	0.990	0.163	0.058	0.114
Currently using withdrawal	0.041	0.006	406	428	0.651	0.146	0.029	0.053
Want no more children	0.509	0.024	406	428	0.983	0.047	0.461	0.557
Want to delay at least 2 years	0.223	0.015	406	428	0.710	0.067	0.193	0.253
Ideal number of children	2.264	0.054	395	415	1.518	0.024	2.156	2.372

NA = Not applicable Und = Undefined

Table B.9 Sampling errors - Rajshahi, Bangladesh 1996-97

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.610	0.018	2314	2198	1.796	0.030	0.574	0.646
With secondary education or higher	0.131	0.013	2314	2198	1.829	0.099	0.105	0.157
Currently married	0.932	0.005	2314	2198	0.981	0.005	0.922	0.942
Children ever born	3.057	0.055	2111	2006	1.113	0.018	2.947	3.167
Children ever born to women over 40	2.995	0.052	2154	2049	1.055	0.017	2.891	3.099
Children surviving	2.554	0.044	2111	2006	1.079	0.017	2.466	2.642
Knowing any contraceptive method	1.000	0.001	2154	2049	1.038	0.001	0.998	1.000
Knowing any modern contracep. method	1.000	0.001	2154	2049	1.038	0.001	0.998	1.000
Ever used any contraceptive method	0.796	0.012	2154	2049	1.375	0.015	0.772	0.820
Currently using any method	0.586	0.013	2154	2049	1.207	0.022	0.560	0.612
Currently using a modern method	0.510	0.011	2154	2049	1.019	0.022	0.488	0.532
Currently using pill	0.263	0.011	2154	2049	1.152	0.042	0.241	0.285
Currently using IUD	0.015	0.003	2154	2049	1.039	0.200	0.009	0.021
Currently using injections	0.068	0.009	2154	2049	1.570	0.132	0.050	0.086
Currently using condom	0.036	0.004	2154	2049	1.069	0.111	0.028	0.044
Currently using female sterilization	0.101	0.009	2154	2049	1.317	0.089	0.083	0.119
Currently using male sterilization	0.024	0.006	2154	2049	1.700	0.250	0.012	0.036
Currently using rhythm	0.053	0.007	2154	2049	1.381	0.132	0.039	0.067
Currently using withdrawal	0.016	0.002	2154	2049	0.806	0.125	0.012	0.020
Using public sector source	0.348	0.020	1102	1054	1.398	0.057	0.308	0.388
Want no more children	0.478	0.013	2154	2049	1.248	0.027	0.452	0.504
Want to delay at least 2 years	0.226	0.009	2154	2049	1.018	0.040	0.208	0.244
Ideal number of children	2.328	0.018	2266	2152	1.312	0.008	2.292	2.364
Mothers received tetanus injection	0.773	0.016	1396	1331	1.291	0.021	0.741	0.805
Mothers received medical care at birth	0.049	0.008	1396	1331	1.375	0.163	0.033	0.065
Had diarrhea in the last 2 weeks	0.070	0.009	1272	1213	1.254	0.129	0.052	0.088
Treated with ORS packets	0.467	0.063	88	85	1.145	0.135	0.341	0.593
Sought medical treatment	0.248	0.035	88	85	0.765	0.141	0.178	0.318
Having health card, seen	0.425	0.042	251	236	1.325	0.099	0.341	0.509
Received BCG vaccination	0.912	0.026	251	236	1.425	0.029	0.860	0.964
Received DPT vaccination (3 doses)	0.741	0.035	251	236	1.251	0.047	0.671	0.811
Received polio vaccination (3 doses)	0.649	0.040	251	236	1.325	0.062	0.569	0.729
Received measles vaccination	0.749	0.029	251	236	1.037	0.039	0.691	0.807
Fully immunized	0.580	0.033	251	236	1.049	0.057	0.514	0.646
Weight-for-height	0.175	0.014	1070	1017	1.226	0.080	0.147	0.203
Height-for-age	0.534	0.016	1070	1017	1.038	0.030	0.502	0.566
Weight-for-age	0.555	0.016	1070	1017	1.047	0.029	0.523	0.587
Total fertility rate (3 years)	2.784	0.112	NA	6684	1.242	0.040	2.560	3.008
Neonatal mortality rate (0-9 years)	64.349	4.357	3158	3011	0.930	0.068	55.635	73.063
Postneonatal mortality rate (0-9 years)	30.251	4.126	3160	3013	1.291	0.136	21.999	38.503
Infant mortality rate (0-9 years)	94.601	6.178	3160	3013	1.076	0.065	82.245	106.957
Child mortality rate (0-9 years)	34.941	4.516	3184	3034	1.225	0.129	25.909	43.973
Under-five mortality rate (0-9 years)	126.237	7.574	3186	3036	1.121	0.060	111.089	141.385
MEN								
No education	0.480	0.025	934	877	1.512	0.052	0.430	0.530
With secondary education or higher	0.243	0.017	934	877	1.184	0.070	0.209	0.277
Knowing any contraceptive method	1.000	0.000	934	877	Und	0.000	1.000	1.000
Knowing any modern contracep. method	1.000	0.000	934	877	Und	0.000	1.000	1.000
Ever used any contraceptive method	0.829	0.014	934	877	1.113	0.017	0.801	0.857
Currently using any method	0.642	0.017	934	877	1.108	0.026	0.608	0.676
Currently using a modern method	0.553	0.017	934	877	1.059	0.031	0.519	0.587
Currently using pill	0.264	0.012	934	877	0.808	0.045	0.240	0.288
Currently using IUD	0.015	0.004	934	877	0.930	0.267	0.007	0.023
Currently using injections	0.075	0.010	934	877	1.178	0.133	0.055	0.095
Currently using condom	0.061	0.008	934	877	0.993	0.131	0.045	0.077
Currently using female sterilization	0.106	0.010	934	877	1.002	0.094	0.086	0.126
Currently using male sterilization	0.032	0.009	934	877	1.537	0.281	0.014	0.050
Currently using rhythm	0.063	0.011	934	877	1.341	0.175	0.041	0.085
Currently using withdrawal	0.015	0.004	934	877	0.992	0.267	0.007	0.023
Want no more children	0.491	0.020	934	877	1.211	0.041	0.451	0.531
Want to delay at least 2 years	0.198	0.014	934	877	1.097	0.071	0.170	0.226
Ideal number of children	2.311	0.024	911	855	1.102	0.010	2.263	2.359

NA = Not applicable Und = Undefined

Table B.10 Sampling errors - Sylhet, Bangladesh 1996-97

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
No education	0.665	0.033	904	506	2.111	0.050	0.599	0.731
With secondary education or higher	0.112	0.021	904	506	2.046	0.188	0.070	0.154
Currently married	0.909	0.013	904	506	1.351	0.014	0.883	0.935
Children ever born	3.744	0.096	808	453	0.955	0.026	3.552	3.936
Children ever born to women over 40	3.693	0.097	821	460	0.969	0.026	3.499	3.887
Children surviving	2.952	0.076	808	453	0.958	0.026	2.800	3.104
Knowing any contraceptive method	0.997	0.003	821	460	1.464	0.003	0.991	1.000
Knowing any modern contracep. method	0.997	0.003	821	460	1.464	0.003	0.991	1.000
Ever used any contraceptive method	0.360	0.028	821	460	1.687	0.078	0.304	0.416
Currently using any method	0.201	0.024	821	460	1.697	0.119	0.153	0.249
Currently using a modern method	0.160	0.023	821	460	1.805	0.144	0.114	0.206
Currently using pill	0.054	0.011	821	460	1.408	0.204	0.032	0.076
Currently using IUD	0.015	0.005	821	460	1.149	0.333	0.005	0.025
Currently using injections	0.051	0.012	821	460	1.567	0.235	0.027	0.075
Currently using condom	0.014	0.004	821	460	1.105	0.286	0.006	0.022
Currently using female sterilization	0.026	0.011	821	460	1.917	0.423	0.004	0.048
Currently using male sterilization	0.000	0.000	821	460	Und	Und	0.000	0.000
Currently using rhythm	0.037	0.009	821	460	1.406	0.243	0.019	0.055
Currently using withdrawal	0.004	0.002	821	460	0.937	0.500	0.000	0.008
Using public sector source	0.492	0.058	141	75	1.375	0.118	0.376	0.608
Want no more children	0.422	0.019	821	460	1.088	0.045	0.384	0.460
Want to delay at least 2 years	0.191	0.019	821	460	1.393	0.099	0.153	0.229
Ideal number of children	2.883	0.079	728	404	2.051	0.027	2.725	3.041
Mothers received tetanus injection	0.624	0.041	770	434	1.958	0.066	0.542	0.706
Mothers received medical care at birth	0.052	0.012	770	434	1.305	0.231	0.028	0.076
Had diarrhea in the last 2 weeks	0.078	0.012	670	376	1.138	0.154	0.054	0.102
Treated with ORS packets	0.466	0.065	52	29	0.925	0.139	0.336	0.596
Sought medical treatment	0.169	0.072	52	29	1.386	0.426	0.025	0.313
Having health card, seen	0.369	0.050	135	75	1.200	0.136	0.269	0.469
Received BCG vaccination	0.765	0.041	135	75	1.110	0.054	0.683	0.847
Received DPT vaccination (3 doses)	0.538	0.047	135	75	1.083	0.087	0.444	0.632
Received polio vaccination (3 doses)	0.478	0.051	135	75	1.177	0.107	0.376	0.580
Received measles vaccination	0.560	0.059	135	75	1.381	0.105	0.442	0.678
Fully immunized	0.415	0.050	135	75	1.169	0.120	0.315	0.515
Weight-for-height	0.209	0.022	544	305	1.254	0.105	0.165	0.253
Height-for-age	0.614	0.029	544	305	1.352	0.047	0.556	0.672
Weight-for-age	0.640	0.019	544	305	0.906	0.030	0.602	0.678
Total fertility rate (3 years)	4.198	0.246	NA	1770	1.397	0.059	3.706	4.690
Neonatal mortality rate (0-9 years)	85.244	9.769	1612	908	1.206	0.115	65.706	104.782
Postneonatal mortality rate (0-9 years)	52.722	6.114	1613	908	1.046	0.116	40.494	64.950
Infant mortality rate (0-9 years)	137.966	12.203	1613	908	1.301	0.088	113.560	162.372
Child mortality rate (0-9 years)	47.753	6.349	1628	917	1.072	0.133	35.055	60.451
Under-five mortality rate (0-9 years)	179.130	13.518	1629	917	1.312	0.075	152.094	206.166
MEN								
No education	0.497	0.039	296	168	1.342	0.078	0.419	0.575
With secondary education or higher	0.183	0.032	296	168	1.419	0.175	0.119	0.247
Knowing any contraceptive method	0.985	0.010	296	168	1.434	0.010	0.965	1.000
Knowing any modern contracep. method	0.985	0.010	296	168	1.434	0.010	0.965	1.000
Ever used any contraceptive method	0.353	0.039	296	168	1.402	0.110	0.275	0.431
Currently using any method	0.263	0.027	296	168	1.064	0.103	0.209	0.317
Currently using a modern method	0.192	0.029	296	168	1.247	0.151	0.134	0.250
Currently using pill	0.067	0.015	296	168	1.046	0.224	0.037	0.097
Currently using IUD	0.025	0.013	296	168	1.399	0.520	0.000	0.051
Currently using injections	0.030	0.012	296	168	1.238	0.400	0.006	0.054
Currently using condom	0.032	0.015	296	168	1.494	0.469	0.002	0.062
Currently using female sterilization	0.030	0.013	296	168	1.350	0.433	0.004	0.056
Currently using male sterilization	0.007	0.005	296	168	1.078	0.714	0.000	0.017
Currently using rhythm	0.064	0.013	296	168	0.938	0.203	0.038	0.090
Currently using withdrawal	0.004	0.004	296	168	1.049	1.000	0.000	0.012
Want no more children	0.436	0.023	296	168	0.797	0.053	0.390	0.482
Want to delay at least 2 years	0.174	0.022	296	168	1.017	0.126	0.130	0.218
Ideal number of children	2.906	0.103	238	134	1.498	0.035	2.700	3.112

NA = Not applicable Und = Undefined

Table B.11 Sampling errors of differences between contraceptive prevalence rates from the 1993-94 and 1996-97 BDHSs (for the 301 clusters common to both surveys), Bangladesh 1996-97

Variable	Value in 1993-94	Standard error 1993-94	Value in 1996-97	Standard error 1996-97	Coefficient of correlation	Difference (R)	Standard error difference SE	(SE/R)	Confidence interval R-2SE	Confidence interval R+2SE
Currently using a method										
Total	0.446	0.007	0.495	0.008	0.7065	0.049	0.006	0.122	0.037	0.061
Urban	0.544	0.014	0.622	0.016	0.3707	0.078	0.017	0.218	0.044	0.112
Rural	0.433	0.008	0.478	0.009	0.7514	0.045	0.006	0.133	0.033	0.057
Barisal	0.477	0.021	0.494	0.027	0.7152	0.017	0.019	1.118	-0.021	0.055
Chittagong/Sylhet	0.293	0.017	0.345	0.018	0.7428	0.052	0.013	0.250	0.026	0.078
Dhaka	0.443	0.013	0.498	0.014	0.6036	0.055	0.012	0.218	0.031	0.079
Khulna	0.553	0.017	0.619	0.016	0.2005	0.066	0.021	0.318	0.024	0.108
Rajshahi	0.548	0.012	0.586	0.013	0.4216	0.038	0.013	0.342	0.012	0.064
Currently using a modern method										
Total	0.362	0.007	0.418	0.007	0.6629	0.056	0.006	0.107	0.044	0.068
Urban	0.446	0.014	0.527	0.016	0.2753	0.081	0.018	0.222	0.045	0.117
Rural	0.351	0.008	0.404	0.008	0.7188	0.053	0.006	0.113	0.041	0.065
Barisal	0.378	0.021	0.410	0.028	0.6284	0.032	0.022	0.688	-0.012	0.076
Chittagong/Sylhet	0.234	0.016	0.284	0.016	0.7657	0.050	0.011	0.220	0.028	0.072
Dhaka	0.363	0.013	0.421	0.014	0.4987	0.058	0.014	0.241	0.030	0.086
Khulna	0.428	0.022	0.510	0.019	0.4330	0.082	0.022	0.268	0.038	0.126
Rajshahi	0.459	0.012	0.510	0.011	0.4245	0.051	0.012	0.235	0.027	0.075

APPENDIX C

DATA QUALITY TABLES

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Bangladesh 1996-97

	Males		Females			Males		Females	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
<1	592	2.7	610	2.7	37	151	0.7	210	0.9
1	560	2.5	526	2.3	38	208	0.9	240	1.1
2	562	2.5	584	2.6	39	72	0.3	193	0.9
3	563	2.6	598	2.7	40	627	2.8	241	1.1
4	571	2.6	577	2.6	41	81	0.4	172	0.8
5	541	2.5	552	2.5	42	188	0.9	167	0.7
6	652	3.0	662	2.9	43	79	0.4	156	0.7
7	670	3.0	659	2.9	44	74	0.3	159	0.7
8	703	3.2	696	3.1	45	528	2.4	160	0.7
9	658	3.0	653	2.9	46	96	0.4	155	0.7
10	710	3.2	704	3.1	47	70	0.3	139	0.6
11	542	2.5	522	2.3	48	150	0.7	154	0.7
12	709	3.2	721	3.2	49	34	0.2	75	0.3
13	536	2.4	522	2.3	50	358	1.6	76	0.3
14	555	2.5	575	2.6	51	50	0.2	131	0.6
15	552	2.5	570	2.5	52	111	0.5	168	0.7
16	516	2.3	629	2.8	53	56	0.3	121	0.5
17	415	1.9	475	2.1	54	48	0.2	113	0.5
18	500	2.3	547	2.4	55	283	1.3	252	1.1
19	286	1.3	402	1.8	56	57	0.3	123	0.5
20	493	2.2	532	2.4	57	53	0.2	94	0.4
21	243	1.1	411	1.8	58	74	0.3	87	0.4
22	363	1.6	433	1.9	59	33	0.1	65	0.3
23	224	1.0	401	1.8	60	219	1.0	284	1.3
24	279	1.3	409	1.8	61	38	0.2	57	0.3
25	518	2.3	490	2.2	62	82	0.4	63	0.3
26	342	1.5	446	2.0	63	61	0.3	29	0.1
27	278	1.3	392	1.7	64	35	0.2	31	0.1
28	321	1.5	362	1.6	65	294	1.3	178	0.8
29	163	0.7	306	1.4	66	40	0.2	33	0.1
30	673	3.0	369	1.6	67	38	0.2	25	0.1
31	125	0.6	296	1.3	68	38	0.2	19	0.1
32	362	1.6	330	1.5	69	17	0.1	5	0.0
33	170	0.8	240	1.1	70+	650	2.9	396	1.8
34	112	0.5	224	1.0	DK/				
35	820	3.7	299	1.3	missing	8	0.0	10	0.0
36	192	0.9	221	1.0	Total	22,073	100.0	22,526	100.0

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.

Table C.2 Age distribution of eligible and interviewed women

Percent distribution of the de facto household population of women age 5-54, and of interviewed women age 10-49, and the percentage of eligible women who were interviewed (weighted) by five-year age groups, Bangladesh 1996-97

	Household population of women				Women interviewed		
	Total		Ever-married				Percent interviewed (weighted)
Age	Number	Percent	Number	Percent	Number	Percent	
5-9	3,223	-	-	-	-	-	-
10-14	3,045	21.7	130	1.4	127	1.4	98.0
15-19	2,623	18.7	1,305	14.0	1,282	14.0	98.2
20-24	2,185	15.6	1,793	19.2	1,760	19.3	98.2
25-29	1,996	14.2	1,922	20.6	1,894	20.7	98.5
30-34	1,458	10.4	1,447	15.5	1,413	15.5	97.6
35-39	1,163	8.3	1,163	12.5	1,135	12.4	97.6
40-44	894	6.4	893	9.6	867	9.5	97.1
45-49	683	4.9	682	7.3	657	7.2	96.3
50-54	610	-	-	-	-	-	-
10-49	14,047	-	9,335	-	9,134	-	97.8

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Bangladesh 1996-97

Subject	Reference group	Percentage missing information	Number of cases
Birth date	Births in last 15 years		
Month only		0.7	19,674
Month and year		0.0	19,674
Age at death	Deaths to births in last 15 years	0.1	2,670
Age/date at first union[1]	Ever-married women	0.5	9,127
Respondent's education	Ever-married women	0.3	9,127
Anthropometry[2]	Living children age 0-59 months		
Height missing		9.0	5,654
Weight missing		6.4	5,654
Height or weight missing		9.4	5,654
Diarrhea in last 2 weeks	Living children age 0-59 months	0.5	5,654

[1] Both year and age missing
[2] Child not measured

Table C.4 Births by calendar years

Distribution of births by calendar years for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year, Bangladesh 1996-97

	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar ratio[3]			Male			Female		
Year	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T
97	69	4	73	100.0	100.0	100.0	92.9	83.2	92.4	NA	NA	NA	33	2	35	36	2	38
96	1,168	64	1,232	100.0	100.0	100.0	99.7	188.0	102.9	NA	NA	NA	583	42	625	585	22	607
95	1,091	100	1,191	99.9	100.0	99.9	105.1	80.8	102.8	94.9	105.6	95.7	559	45	604	532	55	587
94	1,132	125	1,257	100.0	100.0	100.0	98.0	84.9	96.6	101.3	100.5	101.2	560	57	618	572	68	640
93	1,145	149	1,294	100.0	100.0	100.0	97.2	120.3	99.6	102.5	109.6	103.3	564	81	646	581	67	648
92	1,101	146	1,247	100.0	99.6	100.0	100.1	89.7	98.9	98.0	92.6	97.3	551	69	620	550	77	627
91	1,101	167	1,269	100.0	99.0	99.9	97.8	107.5	99.0	92.3	94.8	92.6	544	87	631	557	81	638
90	1,286	207	1,493	99.4	97.4	99.1	93.1	105.5	94.8	108.7	110.3	108.9	620	106	726	666	101	766
89	1,264	208	1,472	99.3	99.6	99.3	98.1	90.7	97.0	98.4	102.1	98.9	626	99	725	638	109	747
88	1,284	201	1,484	99.3	97.6	99.0	102.7	98.6	102.1	NA	NA	NA	650	100	750	633	101	734
93-97	4,606	442	5,047	100.0	100.0	100.0	99.8	105.7	100.3	NA	NA	NA	2,300	227	2,527	2,305	215	2,520
88-92	6,035	930	6,965	99.6	98.6	99.4	98.3	98.3	98.3	NA	NA	NA	2,991	461	3,452	3,044	469	3,512
83-87	5,532	1,085	6,617	99.2	97.8	98.9	103.0	112.4	104.5	NA	NA	NA	2,807	574	3,381	2,725	511	3,236
78-82	3,927	1,052	4,979	99.1	96.2	98.5	110.5	100.4	108.3	NA	NA	NA	2,061	527	2,589	1,865	525	2,390
< 78	4,499	1,477	5,976	98.8	96.0	98.1	109.6	107.1	109.0	NA	NA	NA	2,353	764	3,117	2,146	713	2,859
All	24,599	4,985	29,584	99.3	97.3	99.0	103.5	104.9	103.8	NA	NA	NA	12,514	2,552	15,066	12,085	2,433	14,518

NA = Not applicable

[1] Both year and month of birth given

[2] $(B_m/B_f)*100$, where B_m and B_f are the numbers of male and female births, respectively

[3] $[2B_x/(B_{x-1}+B_{x+1})]*100$, where B_x is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods preceding the survey, Bangladesh 1996-97

Age at death (in days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	52	80	65	59	256
1	46	67	59	59	231
2	7	22	21	11	61
3	28	37	34	43	142
4	14	15	20	20	68
5	19	20	26	18	83
6	7	19	32	28	87
7	22	41	50	42	154
8	3	15	20	15	54
9	7	20	18	6	50
10	7	14	13	13	47
11	7	10	7	9	33
12	7	15	12	10	45
13	1	5	4	3	13
14	7	9	6	5	28
15	10	12	18	14	53
16	7	3	3	5	17
17	3	6	1	6	16
18	5	7	5	4	21
19	3	1	1	1	6
20	2	6	5	7	21
21	4	4	17	5	29
22	5	2	8	5	20
23	2	0	1	2	5
24	1	0	0	1	1
25	0	1	5	2	8
26	5	1	1	0	6
27	1	3	0	0	5
28	4	1	2	5	12
29	3	1	0	1	6
30	0	1	1	0	2
31+	1	2	5	4	12
Percent early neonatal[1]	60.0	59.4	56.3	59.8	58.7
Total 0-30	288	438	457	398	1,582

[1] (0-6 days/0-30 days) * 100

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods preceding the survey, Bangladesh 1996-97

Age at death (in months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1[a]	288	438	457	398	1,582
1	47	37	53	43	179
2	24	23	31	26	104
3	27	52	47	28	154
4	9	14	15	18	56
5	21	20	26	24	91
6	19	29	25	19	93
7	15	14	20	9	57
8	14	20	8	11	54
9	7	18	11	15	51
10	1	17	12	4	34
11	8	5	8	10	31
12	10	17	26	19	72
13	1	4	3	1	9
14	0	9	3	1	14
15	2	6	1	1	11
16	2	3	5	2	12
17	4	1	2	1	8
18	20	38	38	29	126
19	0	2	3	1	5
20	0	1	0	1	2
21	0	0	0	2	2
22	0	1	1	2	4
23	0	0	1	0	1
24+	0	3	2	7	12
Missing	0	1	0	1	2
1 year	12	15	32	18	78
Percent neonatal[b]	59.9	63.8	64.1	65.9	63.6
Total 0-11	480	687	714	605	2,485

[a] Includes deaths under 1 month reported in days
[b] (Under 1 month/under 1 year) * 100

APPENDIX D

PERSONS INVOLVED IN THE 1996-97 BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY

APPENDIX D

PERSONS INVOLVED IN THE 1996-97 BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY

Mr. Anil Chandra Singha, Director General, NIPORT—Chairman

Technical Review Committee

Mr. A.K.M. Rafiquz Zaman, ex-Director General, NIPORT—Chairman
Mr. Md. Sirajul Islam, Director General, Directorate of Family Planning
Mr. Luqueman Ahmed, Joint Chief (Planning), Ministry of Health and Family Welfare
Mr. M.A. Taher, Director (Administration), Directorate of Family Planning
Mr. Shamsul Alam, Director, MIS, Directorate of Family Planning
Dr. Zakir Hossain, Director (PHC), Directorate of Health Services
Mr. Dabir Uddin Ahmed, Assistant Chief, Population Planning Wing, Planning Commission
Mr. Shahadat Hossain, Project Director, Health and Demographic Survey, Bang. Bureau of Statistics
Mr. A.N.M.A. Salim Khan, Director (Training), NIPORT
Prof. M. Kabir, Department of Statistics, Jahangeernagar University
Prof. Ataharul Islam, Department of Statistics, Dhaka University
Prof. Barkat-e-Khuda, Project Director, MCH-FP Extension Project (Rural), ICDDR,B
Dr. Allen Gray, Program Associate, The Population Council
Dr. M. Alauddin, Country Representative, Pathfinder International
Mr. Khalid Hasan, Research Manager, Social Marketing Company
Mrs. Mofaweza Khan, Executive Director, Concerned Women for Family Planning
Ms. Anne Cross, Demographic and Health Surveys, Macro International Inc., USA
Dr. Syed Jahangeer Haider, Executive Director, Research Evaluation Associates for Development
Md. Najmul Huq, Chairman, Center for Population and Development
Mr. S.N. Mitra, Executive Director, Mitra and Associates
Prof. Abul Barkat, Advisor, University Research Corporation (Bangladesh)
Mr. Alain Mouchiroud, Representative, United Nations Population Fund (UNFPA)
Dr. Gay Alexander, The World Bank/Dhaka
Mr. Habibur Rahman, Associate Advisor (MIOR), GTZ-NIPORT Project
Dr. Mehtabunisa Currey, Health and Pop. Aid Management Office, Overseas Development Admin.
Dr. Nancy Gerein, Director, Canadian Int'l Dev't Agency Monitoring and Technical Advisory Unit
Mr. Sk. Ali Noor, Head, Research and Evaluation, Office of Population and Health, USAID/Bang.
Dr. Kanta Jamil, Demographer, Office of Population and Health, USAID/Bangladesh
Dr. Ahmed Al-Sabir, Director (Research), NIPORT—Member Secretary

Technical Task Force

Dr. Ahmed Al Sabir, Director (Research), NIPORT—Chairman
Dr. Kanta Jamil, Johns Hopkins University and USAID/Bangladesh
Prof. Barkat-e-Khuda, Project Director, MCH-FP (Extension) Project, ICDDR,B
Dr. Allen Gray, Program Associate, The Population Council/Dhaka
Mr. S.N. Mitra, Executive Director, Mitra and Associates
Ms. Anne Cross, Demographic and Health Surveys, Macro International Inc., Maryland, USA

Technical and Administrative Staff

Country Coordinator
Dr. Ahmed Al-Sabir

Associate Coordinator
Mr. Subrata K. Bhadra
Ms. Shahin Sultana

Project Director
Mr. S. N. Mitra

Deputy Project Director
Mr. Shahidul Islam

Assistant Project Directors
Mr. A.B. Siddique Mozumder
Mr. Jahangir Hossain Sharif

Project Managers
Mr. N. C. Barman
Mr. Marful Alam
Mr. S. Fuad Pasha
Ms. Sayera Banu
Ms. Rekha Saha

Macro International Staff
Ms. Annie Cross, Country Monitor
Dr. Tulshi Saha, Country Monitor
Ms. Thanh Le, Sampling Specialist
Mr. Albert Themme, Data Processing Specialist
Mr. Daniel Vadnais, Dissemination Specialist
Dr. Sidney Moore, Editor
Dr. George Bicego, Country Monitor (Report Editor/Reviewer)
Dr. Pav Govindasamy, Country Monitor (Report Reviewer)
Ms. Celia Siebenmann, Document Production Specialist

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Mr. Md. Hafizul Alam, Sylhet

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Mr. Masud Karim Reza
Ms. Nargis Akter
Ms. Nazma Sultana

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Mr. Sankar Chandra Banik
Mr. Habibur Rahamn
Mr. S.M. Hasan-Al Mamun

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Mr. Abdur Rouf
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Mr. Zulfiqarul Islam
Mr. Almas Sikder

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Mr. Monoj Kumer Edbor
Mr. Mainul Morshed
Mr. Habibur Rahman
Mr. Nurul Afsar
Mr. Azherul Islam
Mr. Saiful Islam
Mr. Ishawar Chandra Dhali

Female Supervisors

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Ms. Nahida Akter
Ms. Anjue Ara Khatun
Ms. Farida Yeasmin
Ms. Shahina Akter(1)
Ms. Lutfa Jahan
Ms. Monira Khatun

Ms. Shahina Akter(2)
Ms. Nasima Akter Chowdhury
Ms. Anarkoli
Ms. Moksuda Pervin
Ms. Dolena Begum
Ms. Pala Biswas

Male Interviewers

Mr. Kabir Ahmed
Mr. Abdus Salam Miah
Mr. Alauddin Sikder
Mr. Rabiul Karim
Mr. Habibur Rahman (Kabir)
Mr. Ruhul Amin Mollah
Mr. Sk. Nasiruzzaman
Mr. Anis Ahmed
Mr. Sirajul Islam
Mr. Abu Baker Siddique
Mr. Majedur Rashid
Mr. Gias Uddin
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Mr. Nazmul Karim
Mr. Abdul Majid
Mr. Sutradhar Ranjit Kumer
Mr. Sarker Abdul Alim
Mr. S.M. Hasan-al-Mahmood
Mr. Tarequzzaman
Mr. Abdul Wahab Khan
Mr. Mojibul Azad
Mr. Gofran Uddin Bhuiyan
Mr. Anamul Hoque Alamgir
Mr. Mukter Hossain
Mr. Matiur Rahman

Female Interviewers

Ms. Aloka Rani Adhikary
Ms. Taj Nahar Khanam Amily
Ms. Sultana Rajia
Ms. Shahina Sultana
Ms. Monjuma Akter
Ms. Salma Parveen (Joly)
Ms. Ulfatun Nessa
Ms. Nahida Parveen
Ms. Sanjida Khanam
Ms. Karar Shanaj Pervin
Ms. Salma Pervin
Ms. Farida Akhter
Ms. Nilufa Akter
Ms. Nazma Akhter (Bristi)
Ms. Umme Salma Akhter
Ms. China Khatun
Ms. Susoma Ferdous
Ms. Saleha Khatun
Ms. Shirin Akhter
Ms. Kamrunnahar
Ms. China Akter
Ms. Yeasmin Begum
Ms. Sayda Khatun
Ms. Roushan Jahan
Ms. Hasina Afroj
Ms. Jobeda Nahar
Ms. Sheuly Parveen
Ms. Halima Akter
Ms. Gita Rani Roy
Ms. Monjuara Yesmin
Ms. Majeda Begum
Ms. Ayesa Begum
Ms. Shahanaj Begum
Ms. Nilufa Ferdous (Nila)
Ms. Towhida Akhter
Ms. Khadiza Akter
Ms. Khaleda Parveen
Ms. Saifun Nahar
Ms. Khaleda Ferdous
Ms. Habiba Hawa
Ms. Minara Begum
Ms. Salina Akter
Ms. Kazi Parveen
Ms. Anowara Begum (Moni)
Ms. Rebaka Sultana
Ms. Anjumanara Khanam
Ms. Nibedita Mitra
Ms. Sukla Barua
Ms. Taj Sultana
Ms. Rita Begum
Ms. Mousumi Ahemed
Ms. Mousumi Hafiz
Ms. Rehana Begum
Ms. Dilara Begum
Ms. Kulsum Khanam (Kabita)
Ms. Lutfun Nahar
Ms. Tahmina Jahan
Ms. Fatema Begum

Ms. Jannath Ferdous Begum
Ms. Kazi Ismat Ara
Ms. Amala Biswas
Ms. Rokeya Momotaz
Ms. Rafeza Khatun
Ms. Dulali Biswas
Ms. Nahida Akter
Ms. Rukshana Arifa (Rokxy)
Ms. Shamima Akhter
Ms. Parveen Akter (Shilpi)
Ms. Tanjila Towfiqa Chowdhury
Ms. Ayesha Akter (Bithi)
Ms. Nasima Akhter

Logistical Assistants
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Mr. Alam Hossain
Mr. Harunur Rashid
Mr. Mizanur Rahman
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Mr. Jahangir Hossain
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Mr. Shishir Paul
Mr. Haradhan Sen

Data Entry Operators
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Mr. Chandan Kumer Sen
Mr. Ovizit Kumer Roy
Mr. Shahinur Rahman
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Mr. Amolendu Deb

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Mr. Faisal Ahmed Khan
Mr. Janak Chandra Deb
Mr. Ajoy Datta
Mr. Ashfaqur Rahman

Data Dissemination Staff
Mr. Subrata K. Bhadra
Mr. A.K.M. Abdullah

Administrative Staff
Mr. A.F.M. Salim, Deputy Director (Administration)
Mr. Bimal Chandra Datta, Accounts Officer
Mr. Akram Hossain, Accounts Officer
Mr. Golam Sarwar, Store-keeper
Mr. Aslamuzzaman, Registration Officer
Mr. Jaynal Abdin, Typist
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Mr. Nuruzzaman, Driver

Peon/Messenger
Mr. Wazed Ali
Ms. Rokshana Begum

APPENDIX E

QUESTIONNAIRES

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 1996-97
HOUSEHOLD SCHEDULE

DIVISION _____

DISTRICT _____

THANA _____

UNION/WARD _____

VILLAGE/MOHALLA/BLOCK _____

CLUSTER NUMBER.....

HOUSEHOLD NUMBER.....

DHAKA/CHITTAGONG=1, SMALL CITY=2, TOWN=3, VILLAGE=4.....

NAME OF HOUSEHOLD HEAD _____

IS HOUSEHOLD SELECTED FOR MEN'S SURVEY? (YES=1; NO=2)...

INTERVIEWER VISITS	1	2	3	FINAL VISIT
DATE				DAY MONTH** YR 1 9 9
INTERVIEWER'S NAME				CODE
RESULT *				RESULT
NEXT VISIT: DATE TIME				TOTAL NUMBER OF VISITS

* 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
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL IN HOUSEHOLD

TOTAL ELIGIBLE WOMEN

TOTAL ELIGIBLE MEN

LINE NO. OF RESP. TO HOUSEHOLD SCHEDULE

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY
NAME DATE				

** MONTH: 01 JANUARY, 02 FEBRUARY, 03 MARCH, 04 APRIL, 05 MAY, 06 JUNE, 07 JULY, 08 AUGUST, 09 SEPTEMBER, 10 OCTOBER, 11 NOVEMBER, 12 DECEMBER

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*	RESIDENCE		SEX	AGE	EDUCATION (IF AGED 6 YEARS OR OLDER)			MARITAL STATUS (FOR ALL AGED 10 YEARS OR ABOVE)	WOMAN ELIGIBILITY	HUSBAND'S LINE NUMBER	MAN'S ELIGIBILITY
	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?	Does (NAME) usually live here?	Did (NAME) sleep here last night?	Is (NAME) male or female?	How old is (NAME)?	Has (NAME) ever been to school?	IF ATTENDED SCHOOL: What is the highest level of school (NAME) attended? What is the highest class (NAME) completed at that level?**	IF AGED LESS THAN 25 YEARS: Is (NAME) still in school?	Has (NAME) ever been married?	CIRCLE LINE NUMBER OF ALL EVER-MARRIED WOMEN AGE 10-49 YEARS.	WRITE THE LINE NUMBER OF THE HUSBAND OF THOSE IN (15). IF NOT MARRIED OR IF HUSBAND NOT IN HOUSEHOLD, WRITE '00'.	IF HOUSEHOLD CHOSEN FOR MEN'S SURVEY, CIRCLE LINE NUMBER OF ALL EVER-MARRIED MEN AGE 15-59.
(1)	(2)	(3)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
			YES NO	YES NO	M F	IN YEARS	YES NO	LEVEL CLASS	YES NO	YES NO			
01			1 2	1 2	1 2		1 2		1 2	1 2	01		01
02			1 2	1 2	1 2		1 2		1 2	1 2	02		02
03			1 2	1 2	1 2		1 2		1 2	1 2	03		03
04			1 2	1 2	1 2		1 2		1 2	1 2	04		04
05			1 2	1 2	1 2		1 2		1 2	1 2	05		05
06			1 2	1 2	1 2		1 2		1 2	1 2	06		06
07			1 2	1 2	1 2		1 2		1 2	1 2	07		07
08			1 2	1 2	1 2		1 2		1 2	1 2	08		08
09			1 2	1 2	1 2		1 2		1 2	1 2	09		09
10			1 2	1 2	1 2		1 2		1 2	1 2	10		10

HOUSEHOLD SCHEDULE CONTINUED

(1)	(2)	(3)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
			YES NO	YES NO	M F	IN YEARS	YES NO	LEVEL CLASS	YES NO	YES NO			
11			1 2	1 2	1 2		1 2		1 2	1 2	11		11
12			1 2	1 2	1 2		1 2		1 2	1 2	12		12
13			1 2	1 2	1 2		1 2		1 2	1 2	13		13
14			1 2	1 2	1 2		1 2		1 2	1 2	14		14
15			1 2	1 2	1 2		1 2		1 2	1 2	15		15
16			1 2	1 2	1 2		1 2		1 2	1 2	16		16
17			1 2	1 2	1 2		1 2		1 2	1 2	17		17
18			1 2	1 2	1 2		1 2		1 2	1 2	18		18
19			1 2	1 2	1 2		1 2		1 2	1 2	19		19
20			1 2	1 2	1 2		1 2		1 2	1 2	20		20

TICK HERE IF CONTINUATION SHEET USED ☐

Just to make sure that I have a complete listing:

4) Are there any other persons such as small children or infants that we have not listed? YES ☐ → ENTER EACH IN TABLE NO ☐

5) 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 ☐

6) Do you have any guests or temporary visitors staying here, or anyone else who slept here last night? 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 OR DAUGHTER-IN-LAW
05= GRANDCHILD
06= PARENT
07= PARENT-IN-LAW
08= BROTHER OR SISTER
09= OTHER RELATIVE
10= ADOPTED/FOSTER CHILD
11= NOT RELATED
98= DOES NOT KNOW

** CODES FOR Q.12
LEVEL OF EDUCATION:
1= PRIMARY
2= SECONDARY
3= COLLEGE/UNIVERSITY
8= DOES NOT KNOW

CLASS:
00=LESS THAN 1 YEAR COMPLETED
98=DOES NOT KNOW

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
18	What is the source of water your household uses for dishwashing?	PIPED WATER PIPED INSIDE DWELLING.....11 PIPED OUTSIDE DWELLING.....12 WELL WATER TUBEWELL.....21 SURFACE WELL/OTHER WELL.....22 SURFACE WATER POND/TANK/LAKE.....31 RIVER/STREAM.....32 RAINWATER.....41 OTHER_____96 (SPECIFY)	
19	What is the source of drinking water for members of your household?	PIPED WATER PIPED INSIDE DWELLING.....11 PIPED OUTSIDE DWELLING.....12 WELL WATER TUBEWELL.....21 SURFACE WELL/OTHER WELL.....22 SURFACE WATER POND/TANK/LAKE.....31 RIVER/STREAM.....32 RAINWATER.....41 OTHER_____96 (SPECIFY)	
20	What kind of toilet facility does your household have?	SEPTIC TANK/MODERN TOILET.....11 PIT TOILET/LATRINE WATER SEALED/SLAB LATRINE.....21 PIT LATRINE.....22 OPEN LATRINE.....23 HANGING LATRINE.....24 NO FACILITY/BUSH/FIELD.....31 OTHER _____96 (SPECIFY)	
21	Where do adult women in your household usually defecate?	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)	
22	Where do children in your household usually defecate?	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 CHILDREN.....97	
23	Does your household have electricity?	YES.....1 NO.....2	
24	Does your household have: Almirah (wardrobe)? A table, chair or bench? A watch or clock? A cot or bed? A radio that is working? A television that is working? A bicycle?	YES NO ALMIRAH.....1 2 TABLE/CHAIR/BENCH.....1 2 WATCH/CLOCK.....1 2 COT/BED.....1 2 RADIO.....1 2 TELEVISION.....1 2 BICYCLE.....1 2	
25	Does any member of your household own agricultural land?	YES.....1 NO.....2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
26	In the last 2 weeks, has anyone in your household been to any health facility or been to see a doctor or nurse for any reason?	YES.....1 NO.....2	→29
27	Where did he or she go?	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE/EPI CLINIC.....14 MEDICAL PRIVATE SECTOR PRIVATE CLINIC/DOCTOR.....21 TRADITIONAL DOCTOR.....22 PHARMACY.....23 OTHER PRIVATE SECTOR SHOP.....31 FRIENDS/RELATIVES.....32 FIELDWORKER, FWA.....41 OTHER _____ 96 (SPECIFY) DOES NOT KNOW..... 98	
28	What was the reason for the visit?	PREVENTIVE SERVICES IMMUNIZATION.....11 FAMILY PLANNING.....12 ANTENATAL CHECKUP.....13 CURATIVE SERVICES ILLNESS.....21 ACCIDENT.....22 OTHER _____ 96 (SPECIFY)	
29	MAIN MATERIAL OF THE ROOF. RECORD OBSERVATION.	NATURAL ROOF KATCHA (BAMBOO/THATCH).....11 RUDIMENTARY ROOF TIN.....21 FINISHED ROOF CEMENT/CONCRETE.....31 OTHER _____ 96 (SPECIFY)	
30	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)	
31	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)	
32	IS THIS HOUSEHOLD IN A BOSTI (SLUM)? RECORD OBSERVATION.	YES.....1 NO.....2	

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 1993-94
WOMAN QUESTIONNAIRE

DIVISION _____

DISTRICT _____

THANA _____

UNION _____

VILLAGE/MOHALLA/BLOCK _____

CLUSTER NUMBER.....

HOUSEHOLD NUMBER.....

DHAKA/CHITTAGONG=1, SMALL CITY=2, TOWN=3, VILLAGE=4.....

NAME OF HOUSEHOLD HEAD _____

NAME AND LINE NUMBER OF WOMAN _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY MONTH** YR 1 9 9
INTERVIEWER'S NAME				CODE
RESULT *				RESULT
NEXT VISIT: DATE TIME				TOTAL NUMBER OF VISITS

* RESULT CODES:
1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER _____ (SPECIFY)

NAME DATE	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY

** MONTH:

01 JANUARY	05 MAY	09 SEPTEMBER
02 FEBRUARY	06 JUNE	10 OCTOBER
03 MARCH	07 JULY	11 NOVEMBER
04 APRIL	08 AUGUST	12 DECEMBER

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR..... [ ][ ] MINUTES..... [ ][ ]	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	YEARS..... [ ][ ] ALWAYS.....95 VISITOR.....96	→105
104	Just before you moved here, did you live in a city, in a town, or in the countryside?	CITY.....1 TOWN.....2 COUNTRYSIDE.....3	
105	In what month and year were you born? USE CODES BELOW FOR MONTHS. IF SHE DOES NOT KNOW, WRITE 'D K' IN BOXES.	BENGALI.....1 MONTH *..... [ ][ ] YEAR..... [1][3][ ][ ] ENGLISH.....2 MONTH**..... [ ][ ] YEAR..... [1][9][ ][ ]	
106	How old are you? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS... [ ][ ]	
106A	Are you now married, widowed, or divorced?	MARRIED.....1 WIDOWED.....2 DIVORCED/DESERTED.....3	
107	Have you ever attended school?	YES.....1 NO.....2	→114
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY.....1 SECONDARY.....2 COLLEGE/UNIVERSITY.....3	
109	What is the highest class you completed?	CLASS..... [ ][ ]	
113	CHECK 108: PRIMARY [ ] ↓ SECONDARY OR COLLEGE [ ]		→115
114	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	→116
115	Do you usually read a newspaper or magazine at least once a week?	YES.....1 NO.....2	
116	Do you usually listen to the radio at least once a week?	YES.....1 NO.....2	

* BENGALI MONTHS:

01 BAISHAK	05 BADHRA	09 POUSH
02 JAISTHA	06 ASHWIN	10 MAGH
03 ASHAR	07 KARTIK	11 FALGUN
04 SRABAN	08 AGRAHAYAN	12 CHOITRA

** ENGLISH MONTHS:

01 JANUARY	05 MAY	09 SEPTEMBER
02 FEBRUARY	06 JUNE	10 OCTOBER
03 MARCH	07 JULY	11 NOVEMBER
04 APRIL	08 AUGUST	12 DECEMBER

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
117	Do you usually watch television at least once a week?	YES.....1 NO.....2	
118	What is your religion?	ISLAM.....1 HINDUISM.....2 BUDDHISM.....3 CHRISTIANITY.....4 OTHER_____6 (SPECIFY)	→119A
119	How many times a day do you usually pray? IF NONE, WRITE '0'.	TIMES..... [ ]	
119A	Do you belong to any of the following organizations? Grameen Bank? BRAC? BRDP? Mother's club? Any other organization?	YES NO GRAMEEN BANK.....1 2 BRAC.....1 2 BRDP.....1 2 MOTHER'S CLUB.....1 2 OTHER_____1 2 (SPECIFY)	
120	CHECK Q.7 IN THE HOUSEHOLD QUESTIONNAIRE THE WOMAN INTERVIEWED IS NOT A USUAL RESIDENT [ ] ↓ THE WOMAN INTERVIEWED IS A USUAL RESIDENT [ ]		→201
121	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.....1 SMALL CITY.....2 TOWN.....3 VILLAGE.....4	
122	In which division is that located?	RAJSHAHI.....1 DHAKA.....2 CHITTAGONG.....3 KHULNA.....4 BARISHAL.....5 SYLHET.....6	
123	Now I would like to ask about the household in which you usually live. What is the source of water your household uses for dishwashing?	PIPED WATER PIPED INSIDE DWELLING.....11 PIPED OUTSIDE DWELLING.....12 WELL WATER TUBEWELL.....21 SURFACE WELL/OTHER WELL.....22 SURFACE WATER POND/TANK/LAKE.....31 RIVER/STREAM.....32 RAINWATER.....41 OTHER_____96 (SPECIFY)	
124	What is the source of drinking water for members of your household?	PIPED WATER PIPED INSIDE DWELLING.....11 PIPED OUTSIDE DWELLING.....12 WELL WATER TUBEWELL.....21 SURFACE WELL/OTHER WELL.....22 SURFACE WATER POND/TANK/LAKE.....31 RIVER/STREAM.....32 RAINWATER.....41 OTHER_____96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
125	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)	
126	Where do adult women in your household usually defecate?	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)	
127	Where do children in your household usually defecate?	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 CHILDREN.....97	
128	Does your household have electricity?	YES.....1 NO.....2	
129	Does your household have: Almirah (wardrobe)? A table, chair or bench? A watch or clock? A cot or bed? A radio that is working? A television that is working? A bicycle?	YES NO ALMIRAH.....1 2 TABLE/CHAIR/BENCH.....1 2 WATCH/CLOCK.....1 2 COT/BED.....1 2 RADIO.....1 2 TELEVISION.....1 2 BICYCLE.....1 2	
130	Does any member of your household own agricultural land?	YES.....1 NO.....2	
131	What is the material of the roof of your house?	NATURAL ROOF KATCHA (BAMBOO/THATCH).....11 RUDIMENTARY ROOF TIN.....21 FINISHED ROOF CEMENT/CONCRETE.....31 OTHER _____96 (SPECIFY)	
132	What is the material of the walls of your house?	NATURAL WALLS JUTE/BAMBOO/MUD (KATCHA).....11 RUDIMENTARY WALLS WOOD.....21 FINISHED WALLS BRICK/CEMENT.....31 TIN.....32 OTHER _____96 (SPECIFY)	
133	What is the material of the floor of your house?	NATURAL FLOOR EARTH/BAMBOO (KATCHA).....11 RUDIMENTARY FLOOR WOOD.....21 FINISHED FLOOR (PUKKA) CEMENT/CONCRETE.....31 OTHER _____96	

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 a girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed any sign of life but only survived a few hours or days?	YES.....1 NO.....2	→208
207	In all, how many boys have died? And how many girls have died? IF NONE RECORD '00'.	BOYS DEAD..... [ ][ ] GIRLS DEAD..... [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE RECORD '00'.	TOTAL..... [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL ____ births during your life. Is that correct? YES [ ] ↓ NO [ ] → PROBE AND CORRECT 201-208 AS NECESSARY		
210	CHECK 208: ONE OR MORE BIRTHS [ ] ↓ NO BIRTHS [ ]		→227

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. 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 girl?	215 In what month and year was (NAME) born? WRITE IN EITHER BENGALI OR ENGLISH DATES, BUT NOT BOTH. USE CODES AT BOTTOM OF PAGE FOR MONTHS. BENGALI	ENGLISH	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	218 IF ALIVE Is (NAME) living with you?	219 IF DEAD: How old was (NAME) when he/she died? IF 'ONE YEAR', ASK: How many months old was (NAME)? RECORD DAYS IF UNDER 1 MONTH; MONTHS IF LESS THAN 2 YEARS; OR YEARS.	220 FROM YEAR OF BIRTH OF (NAME) SUBTRACT YEAR OF PREVIOUS BIRTH. IS THE DIFFERENCE 4 OR MORE?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (NEXT BIRTH)	DAYS...1 MONTHS.2 YEARS..3		
02	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS...1 MONTHS.2 YEARS..3	YES...1 NO....2 (NEXT BIRTH)	YES..1 NO...2
03	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS...1 MONTHS.2 YEARS..3	YES...1 NO....2 (NEXT BIRTH)	YES..1 NO...2
04	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS...1 MONTHS.2 YEARS..3	YES...1 NO....2 (NEXT BIRTH)	YES..1 NO...2
05	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS...1 MONTHS.2 YEARS..3	YES...1 NO....2 (NEXT BIRTH)	YES..1 NO...2
06	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS...1 MONTHS.2 YEARS..3	YES...1 NO....2 (NEXT BIRTH)	YES..1 NO...2
07	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS...1 MONTHS.2 YEARS..3	YES...1 NO....2 (NEXT BIRTH)	YES..1 NO...2

212 What name was given to your next baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? WRITE IN EITHER BENGALI OR ENGLISH DATES, BUT NOT BOTH. USE CODES AT BOTTOM OF PAGE FOR MONTHS. BENGALI	ENGLISH	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	218 IF ALIVE Is (NAME) living with you?	219 IF DEAD: How old was (NAME) when he/she died? IF 'ONE YEAR', ASK: How many months old was (NAME)? RECORD DAYS IF UNDER 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	220 FROM YEAR OF BIRTH OF (NAME) SUBTRACT YEAR OF PREVIOUS BIRTH. IS THE DIFFERENCE 4 OR MORE?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and NAME)?
08	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS...1 MONTHS.2 YEARS..3	YES...1 NO....2 (NEXT BIRTH)	YES..1 NO...2
09	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS...1 MONTHS.2 YEARS..3	YES...1 NO....2 (NEXT BIRTH)	YES..1 NO...2
10	SING.1 MULT.2	BOY..1 GIRL.2	1 MONTH YR 1	2 MONTH YR 1 9	YES.1 NO..2 → 219	AGE IN YEARS	YES...1 NO....2 (GO TO 220)	DAYS...1 MONTHS.2 YEARS..3	YES...1 NO....2 (NEXT BIRTH)	YES..1 NO...2

222 FROM YEAR OF INTERVIEW SUBTRACT YEAR OF LAST BIRTH.
IS THE DIFFERENCE 4 YEARS OR MORE?
YES.....1 → GO TO 223
NO.....2 → GO TO 224

223 Have you had any live births since the birth of (NAME OF LAST BIRTH)?
YES.....1
NO.....2

224 COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:

NUMBERS ARE SAME ☐ NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE)

CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED. ☐

FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED. ☐

FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED. ☐

FOR AGE AT DEATH 12 MONTHS OR 1 YR.: PROBE TO DETERMINE EXACT NUMBER OF MONTHS. ☐

225 CHECK 215 AND ENTER THE NUMBER OF BIRTHS SINCE BAISHAK 1398 OR APRIL 1991
IF NONE, RECORD '0'. ☐

226 FOR EACH BIRTH SINCE BAISHAK 1398 (APRIL 1991) ENTER 'B' IN THE MONTH OF BIRTH IN COLUMN 1 OF THE CALENDAR AND 'P' IN EACH OF THE 8 PRECEDING MONTHS. WRITE NAME TO THE LEFT OF THE 'B' CODE.

* BENGALI MONTHS:

01 BAISHAK	05 BADHRA	09 POUSH
02 JAISTHA	06 ASHWIN	10 MAGH
03 ASHAR	07 KARTIK	11 FALGUN
04 SRABAN	08 AGRAHAYAN	12 CHOITRA

** ENGLISH MONTHS:

01 JANUARY	05 MAY	09 SEPTEMBER
02 FEBRUARY	06 JUNE	10 OCTOBER
03 MARCH	07 JULY	11 NOVEMBER
04 APRIL	08 AUGUST	12 DECEMBER

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
227	Are you pregnant now?	YES.....1 NO.....2 UNSURE.....8	→230
228	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. ENTER "P" IN COLUMN 1 OF CALENDAR IN MONTH OF INTERVIEW AND IN EACH PRECEDING MONTH PREGNANT.	MONTHS..... [ ][ ]	
229	At the time you became pregnant, did you want to become pregnant <u>then</u>, did you want to wait until <u>later</u>, or did you <u>not</u> want to become pregnant at all?	THEN.....1 LATER.....2 NOT AT ALL.....3	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES.....1 NO.....2	→236
231	When did the last such pregnancy end? USE CODES BELOW FOR MONTHS.	BENGALI.....1 MONTH *..... [ ][ ] YEAR..... [1][ ][ ][ ] ENGLISH.....2 MONTH**..... [ ][ ] YEAR..... [1][9][ ][ ]	
232	CHECK 231: LAST PREGNANCY ENDED SINCE BAISHAK 1398 OR APRIL 1991 [ ]	LAST PREGNANCY ENDED BEFORE BAISHAK 1398 OR APRIL 1991 [ ]	→236
232A	Was that a stillbirth, a miscarriage, a menstrual regulation, or an abortion?	STILLBIRTH.....1 MISCARRIAGE.....2 MENSTRUAL REGULATION.....3 ABORTION.....4	
233	How many months pregnant were you when the pregnancy ended? ENTER THE APPROPRIATE CODE IN COLUMN 1 OF CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED, AND "P" IN EACH PRECEDING MONTH PREGNANT.	MONTHS..... [ ][ ]	
234	Did you ever have any other such pregnancies?	YES.....1 NO.....2	→236
235	ASK FOR DATES AND DURATIONS OF ANY OTHER PREGNANCIES BACK TO BAISHAK 1398 (APRIL 1991). ENTER THE APPROPRIATE CODE IN COLUMN 1 OF CALENDAR IN MONTH PREGNANCY TERMINATED, AND "P" IN EACH PRECEDING MONTH PREGNANT.		
236	When did your last menstrual period start?	DAYS AGO.....1 [ ][ ] WEEKS AGO.....2 [ ][ ] MONTHS AGO.....3 [ ][ ] YEARS AGO.....4 [ ][ ] IN MENOPAUSE.....994 BEFORE LAST BIRTH.....995 NEVER MENSTRUATED.....996	

* BENGALI MONTHS:

01 BAISHAK	05 BADHRA	09 POUSH
02 JAISTHA	06 ASHWIN	10 MAGH
03 ASHAR	07 KARTIK	11 FALGUN
04 SRABAN	08 AGRAHAYAN	12 CHOITRA

** ENGLISH MONTHS:

01 JANUARY	05 MAY	09 SEPTEMBER
02 FEBRUARY	06 JUNE	10 OCTOBER
03 MARCH	07 JULY	11 NOVEMBER
04 APRIL	08 AUGUST	12 DECEMBER

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.
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?	302 Have you ever heard of (METHOD)?			303 Have you ever used (METHOD)?
		SPONTANEOUS YES	PROBED YES	NO	
01	PILL, MAYA Women can take a pill every day.	1	2	3	YES.....1 NO.....2
02	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	1	2	3	YES.....1 NO.....2
03	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
04	IMPLANT, NORPLANT 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
05	CONDOM, RAJA Men can put a rubber sheath on their penis during sexual intercourse.	1	2	3	YES.....1 NO.....2
06	FEMALE STERILIZATION, TUBAL LIGATION, TL 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
07	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 more children? YES.....1 NO.....2
08	MENSTRUAL REGULATION, MR When a woman's menstrual period does not come on time, she can go to a health centre or to the FWV and have a tube put in her for a short while to bring her period.	1	2	3	YES.....1 NO.....2
09	SAFE PERIOD, COUNTING DAYS, CALENDAR RHYTHM METHOD Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to get pregnant.	1	2	3	YES.....1 NO.....2
10	WITHDRAWAL Men can be careful and pull out before climax.	1	2	3	YES.....1 NO.....2
11	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	1 _____ (SPECIFY) _____ (SPECIFY)		3	YES.....1 NO.....2 YES.....1 NO.....2

304 CHECK 303:

NOT A SINGLE "YES" (NEVER USED) ☐ ▼

AT LEAST ONE "YES" (EVER USED) ☐ → SKIP TO 308

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
305	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES.....1 NO.....2	→307
306	ENTER "0" IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH.		→330F
307	What have you used or done? CORRECT 303 AND 304 (AND 302 IF NECESSARY).		
308	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?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 MENSTRUAL REGULATION.....08 SAFE PERIOD, COUNTING DAYS.....09 WITHDRAWAL.....10 OTHER_____96 (SPECIFY)	
309	How many children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN..... [ ][ ]	
310	CHECK 303: WOMAN NOT STERILIZED [ ] WOMAN STERILIZED [ ]		→314A
311	CHECK 106A: CURRENTLY MARRIED [ ] WIDOWED/ DIVORCED [ ]		→325
312	CHECK 227: NOT PREGNANT OR UNSURE [ ] PREGNANT [ ]		→325
313	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES.....1 NO.....2	→325
314 314A	Which method are you using? CIRCLE '06' FOR FEMALE STERILIZATION.	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 MENSTRUAL REGULATION.....08 SAFE PERIOD, COUNTING DAYS.....09 WITHDRAWAL.....10 OTHER_____96 (SPECIFY)	→317A →317B →317A →317C →318 →325 →323 →324
315	May I see the package of pills you are using now? RECORD NAME OF BRAND IF PACKAGE IS SEEN.	PACKAGE SEEN.....1 BRAND NAME_____ [ ][ ] PACKAGE NOT SEEN.....2	→317

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316	SHOW BRAND CHART FOR PILLS: Please tell me which of these is the brand of pills that you are now using.	BRAND NAME_____ [ ][ ] DOES NOT KNOW.....98	
316A	Why don't you have a package of pills available? CIRCLE ALL MENTIONED.	RAN OUT.....A COST TOO MUCH.....B HUSBAND AWAY.....C HAS MENSTRUAL PERIOD.....D NOT AVAILABLE AT HER SOURCE.....E FWA HAS NOT BROUGHT RESUPPLY....F OTHER_____X (SPECIFY)	
317	How much does one (packet/cycle) of pills cost you?	COST..... [ ][ ] FREE.....96 DOES NOT KNOW.....98	→324
317A	How much did it cost you to have the device put in? FOR IUD USERS AND IMPLANT USERS	COST..... [ ][ ][ ] FREE.....996 DOES NOT KNOW.....998	→324
317B	How much does it cost you to get one injection?	COST..... [ ][ ][ ] FREE.....996 DK.....998	→324
317C	May I see the package of condoms that you are using? RECORD NAME OF BRAND.	PACKAGE SEEN.....1 BRAND NAME_____ [ ][ ] PACKAGE NOT SEEN.....2	→324
317D	Why can't you show me the package of condoms that you are using?	HUSBAND KEEPS.....1 RAN OUT.....2 OTHER_____3 (SPECIFY)	
317E	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	→324
318	Where did the sterilization take place? _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 MEDICAL PRIVATE SECTOR PRIVATE CLINIC/DOCTOR.....21 TRADITIONAL DOCTOR.....22 NGO CLINIC.....42 OTHER _____96 (SPECIFY) DOES NOT KNOW..... 98	
319	Do you regret that (you/your husband) had the operation not to have any more children?	YES.....1 NO.....2	→321
320	Why do you regret it?	RESPONDENT WANTS ANOTHER CHILD..1 PARTNER WANTS ANOTHER CHILD.....2 SIDE EFFECTS.....3 CHILD DIED.....4 OTHER REASON_____6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
321	In what month and year was the sterilization operation performed? USE CODES BELOW FOR MONTHS.	BENGALI.....1 MONTH *..... [ ][ ] YEAR..... [1][ ][ ][ ] ENGLISH.....2 MONTH**..... [ ][ ] YEAR..... [1][9][ ][ ]	
321A	How much did the operation cost you?	COST..... [ ][ ][ ] FREE.....996 DOES NOT KNOW.....998	
322	CHECK 321: STERILIZED BEFORE BAISHAK 1398 [ ] → ENTER CODE FOR STERILIZATION IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND EACH MONTH BACK TO BAISHAK 1398 (APRIL 1991) THEN SKIP TO → 329A STERILIZED AFTER BAISHAK 1398 [ ] → ENTER CODE FOR STERILIZATION IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE OF THE OPERATION. THEN SKIP TO → 325		
323	You told me that you use the safe period (calendar, rhythm) method. Please tell me which days of your monthly cycle are not safe.	DURING HER PERIOD.....1 RIGHT AFTER HER PERIOD ENDS.....2 IN THE MIDDLE OF HER CYCLE.....3 JUST BEFORE HER PERIOD BEGINS...4 OTHER _____ 6 (SPECIFY) DOES NOT KNOW.....8	
324	ENTER METHOD CODE FROM 314 IN CURRENT MONTH IN COLUMN 1 OF CALENDAR. THEN DETERMINE WHEN SHE STARTED USING METHOD THIS TIME. ENTER METHOD CODE IN EACH MONTH OF USE. ILLUSTRATIVE QUESTIONS: · When did you start using continuously? · How long have you been using this method continuously?		
325	I would like to ask you some questions about the times you or your husband 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 BAISHAK 1398 (APRIL 1991). USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. IN COLUMN 1, ENTER CODE IN EACH MONTH OF METHOD USE OR '0' FOR NONUSE. 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 CODES FOR DISCONTINUATION NEXT TO LAST MONTH OF USE. NUMBER OF CODES IN COL.2 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 2: · 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.		

* BENGALI MONTHS:

01 BAISHAK	05 BADHRA	09 POUSH
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03 ASHAR	07 KARTIK	11 FALGUN
04 SRABAN	08 AGRAHAYAN	12 CHOITRA

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04 APRIL	08 AUGUST	12 DECEMBER

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
327	CHECK 314: CIRCLE METHOD CODE:	NOT ASKED.....00 PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 MENSTRUAL REGULATION.....08 SAFE PERIOD/RHYTHM.....09 WITHDRAWAL.....10 OTHER METHOD.....96	→330F →329A →330F →332
328	Where did you obtain (METHOD) the last time? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE/EPI CLINIC.....14 MEDICAL PRIVATE SECTOR PRIVATE CLINIC/DOCTOR.....21 TRADITIONAL DOCTOR.....22 PHARMACY.....23 OTHER PRIVATE SECTOR SHOP.....31 FRIENDS/RELATIVES.....32 FIELDWORKER, FWA.....41 NGO CLINIC.....42 OTHER _____96 (SPECIFY) DOES NOT KNOW..... 98	→328E
328A	CHECK 315: USING PILLS OR CONDOMS ☐ ↓ USING ANOTHER METHOD ☐		→328C
328B	Who obtained the (pills/condoms) the last time you got them?	RESPONDENT.....1 HUSBAND.....2 SON/DAUGHTER.....3 OTHER RELATIVE.....4 OTHER_____6 (SPECIFY)	→329
328C	At the place where you got your method the last time, did anyone there ever tell you about side effects or other problems you might have using this method?	YES.....1 NO.....2 CANNOT REMEMBER.....8	
328D	Did anyone there ever tell you about other methods that you might use?	YES.....1 NO.....2 CANNOT REMEMBER.....8	→329
328E	Did the family planning fieldworker ever tell you about side effects or problems you might have with this (CURRENT METHOD)?	YES.....1 NO.....2 CANNOT REMEMBER.....8	
328F	Did the family planning fieldworker ever tell you about other methods that you might use?	YES.....1 NO.....2 CANNOT REMEMBER.....8	
329	Do you know another place where you could have obtained (CURRENT METHOD) the last time?	YES.....1 NO.....2	→330A
329A	At the time of the sterilization operation, did you know another place where you could have received the operation?		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
330	People select the place where they get family planning services for various reasons. What was the main reason you went to (NAME OF PLACE IN Q.328 OR Q.318) instead of the other place you know about? RECORD RESPONSE AND CIRCLE CODE. _____	ACCESS-RELATED REASONS CLOSER TO HOME.....11 CLOSER TO MARKET/WORK.....12 AVAILABILITY OF TRANSPORT....13 SERVICE-RELATED REASONS STAFF MORE COMPETENT/ FRIENDLY.....21 CLEANER FACILITY.....22 OFFERS MORE PRIVACY.....23 SHORTER WAITING TIME.....24 LONGER HRS. OF OPERATION.....25 USE OTHER SERVICES AT THE FACILITY.....26 LOWER COST/CHEAPER.....31 WANTED ANONYMITY.....41 WORKER SUPPLIED AT HOME.....51 METHOD NOT AVAILABLE ELSEWHERE.61 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
330A	What is the reason you decided to use (CURRENT METHOD) rather than some other method of family planning? Any other reason? CIRCLE ALL MENTIONED.	FAMILY PLAN. WORKER RECOMMENDED.A FRIEND/RELATIVE RECOMMENDED.....B SIDE EFFECTS OF OTHER METHODS...C METHOD EASY TO USE.....D ACCESS/AVAILABILITY.....E COST.....F WANTED PERMANENT METHOD.....G HUSBAND PREFERRED.....H WANTED MORE EFFECTIVE METHOD....I FIELDWORKER CAME TO HOUSE.....J OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
330B	Are you having any problems in using (CURRENT METHOD)?	YES.....1 NO.....2	→334
330C	What problems are you having with using (METHOD)? PROBE: Any other problems? CIRCLE ALL MENTIONED.	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	
330D	When you first started having these problems, did you talk to anyone about these problems?	YES.....1 NO.....2	→334
330E	Who did you talk to about these problems?	FIELDWORKER, FWA.....1 STAFF AT SATELLITE CLINIC.....2 STAFF AT FAMILY WELFARE CLINIC..3 RELATIVE, FRIEND.....4 OTHER_____ 6 (SPECIFY)	→334

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
330F	CHECK 106A: CURRENTLY MARRIED ☐ ▼ WIDOWED/ DIVORCED ☐		→334
331	What is the main reason you are not using a method of contraception to avoid pregnancy?	FERTILITY-RELATED REASONS NOT HAVING SEX.....21 INFREQUENT SEX.....22 MENOPAUSAL/HYSTERECTOMY.....23 SUBFECUND/INFECUND.....24 POSTPARTUM/BREASTFEEDING.....25 WANTS (MORE) CHILDREN.....26 PREGNANT.....27 OPPOSITION TO USE RESPONDENT OPPOSED.....31 HUSBAND OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
332	Do you know where you can obtain a method of family planning?	YES.....1 NO.....2	→334
333	Where is that? _____ (NAME OF PLACE) IF WOMAN SAYS MORE THAN ONE PLACE, ASK FOR THE PLACE SHE WOULD MOST LIKELY USE.	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE/EPI CLINIC.....14 MEDICAL PRIVATE SECTOR PRIVATE CLINIC/DOCTOR.....21 TRADITIONAL DOCTOR.....22 PHARMACY.....23 OTHER PRIVATE SECTOR SHOP.....31 FRIENDS/RELATIVES.....32 FIELDWORKER, FWA.....41 NGO CLINIC.....42 OTHER _____ 96 (SPECIFY) DOES NOT KNOW..... 98	
334	CHECK 328 AND 333: SATELLITE CLINIC/ EPI SITE NOT MENTIONED ☐ ▼ SATELLITE/EPI CLINIC MENTIONED ☐		→336
335	In some places, there is a clinic set up for a day or part of a day in someone's house or in a school. During the past 3 months, was there any such clinic in this village/mohalla?	YES.....1 NO.....2 DOES NOT KNOW.....8	→339 →339
336	Did you ever visit such a temporary health clinic?	YES.....1 NO.....2	→339

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
337	What services did they provide? CIRCLE ALL MENTIONED.	FAMILY PLANNING METHODS.....A IMMUNIZATION.....B CHILD GROWTH MONITORING.....C T.T. FOR PREGNANT WOMEN.....D ANTENATAL CARE.....E OTHER_____X DOES NOT KNOW.....Z	
339	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?	YES.....1 NO.....2 DOES NOT KNOW.....8	 →342 →342
340	How many times did a family planning worker visit you in the last six months?	TIMES..... [ ][ ] DOES NOT KNOW.....98	
341	When was the last visit? IF LESS THAN ONE MONTH AGO, WRITE '00'.	MONTHS AGO..... [ ] DOES NOT KNOW.....8	→344
342	During the last six months have you had any contact with a fieldworker about family planning?	YES.....1 NO.....2 DOES NOT KNOW.....8	 →344 →344
343	When was the last time you had contact with the fieldworker about family planning? IF LESS THAN ONE MONTH AGO, WRITE '00'.	MONTHS AGO..... [ ] DOES NOT KNOW.....8	
344	CHECK 339 AND 342: "YES" IN EITHER HAS BEEN VISITED OR CONTACT WITH FW [ ] "NO" IN BOTH NO VISITS OR CONTACT WITH FIELDWORKER [ ]		→351
345	Did you receive any family planning supplies from the fieldworker during the last visit/contact?	YES.....1 NO.....2	 →348
346	What supplies did you receive?	PILLS.....1 CONDOMS.....2 INJECTION.....3 OTHER_____6	 →348 →348
347	How many cycles/condoms?	CYCLES/CONDOMS..... [ ][ ]	
348	Thinking back to all the contacts you have ever had from family planning workers, which methods of avoiding pregnancy did they discuss with you? CIRCLE ALL MENTIONED.	PILLS.....A IUD.....B INJECTION.....C IMPLANT/NORPLANT.....D CONDOMS.....E FEMALE STERILIZATION.....F MALE STERILIZATION.....G NEVER DISCUSSED.....Y	
349	Did the family planning fieldworker ever refer you to a clinic for any reason?	YES.....1 NO.....2 DOES NOT KNOW.....8	 →351
350	Why did she refer you to a clinic?	FOR STERILIZATION.....11 TO GET AN IUD INSERTED.....12 TO GET INJECTION.....13 TO GET OTHER FP METHODS.....14 FOR TREATMENT OF SIDE EFFECTS..15 FOR OTHER HEALTH REASONS.....16 FOR ANTENATAL CARE.....17 OTHER_____96	
351	Have you ever recommended family planning to a friend, relative, or anyone else?	YES.....1 NO.....2	
352	Do you think that women should have a medical check up when they are pregnant, even if they are not sick?	YES.....1 NO.....2 DOES NOT KNOW.....8	

SECTION 4A. PREGNANCY AND BREASTFEEDING

401	CHECK 215: ONE OR MORE BIRTHS SINCE BAISHAK 1398 (APRIL 1991) ☐	NO BIRTHS SINCE BAISHAK 1398 ☐ → (SKIP TO 501)		
402	ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE BAISHAK 1398 (APRIL 1991) IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE ADDITIONAL FORMS). Now I would like to ask you some more questions about the health of all your children born in the past 5 years. (We will talk about one child at a time.)			
403	LINE NUMBER FROM Q. 212	LAST BIRTH LINE..... ☐☐	NEXT-TO-LAST BIRTH LINE..... ☐☐	SECOND-FROM-LAST BIRTH LINE..... ☐☐
404	FROM Q. 212 AND Q. 216	NAME _____ ALIVE ☐ DEAD ☐	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 or did you want no (more) children at all?	THEN.....1 LATER.....2 NO MORE.....3	THEN.....1 LATER.....2 NO MORE.....3	THEN.....1 LATER.....2 NO MORE.....3
407	When you were pregnant with (NAME), did you see anyone for antenatal care for this pregnancy? IF YES, Whom did you see? Anyone else? RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B FAMILY WELFARE VISITOR..C OTHER PERSON TRAINED TRADITIONAL BIRTH ATTENDANT (DAI)..D UNTRAINED TBA (DAI).....E OTHER_____X (SPECIFY) NO ONE.....Y (SKIP TO 410)	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B FAMILY WELFARE VISITOR..C OTHER PERSON TRAINED TRADITIONAL BIRTH ATTENDANT (DAI)..D UNTRAINED TBA (DAI).....E OTHER_____X (SPECIFY) NO ONE.....Y (SKIP TO 410)	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B FAMILY WELFARE VISITOR..C OTHER PERSON TRAINED TRADITIONAL BIRTH ATTENDANT (DAI)..D UNTRAINED TBA (DAI).....E OTHER_____X (SPECIFY) NO ONE.....Y (SKIP TO 410)
408	How many months pregnant were you when you first saw someone for an antenatal check on this pregnancy?	MONTHS..... ☐☐ DOES NOT KNOW.....98	MONTHS..... ☐☐ DOES NOT KNOW.....98	MONTHS..... ☐☐ DOES NOT KNOW.....98
409	How many times did you receive antenatal care during this pregnancy?	NO. OF TIMES..... ☐☐ DOES NOT KNOW.....98	NO. OF TIMES..... ☐☐ DOES NOT KNOW.....98	NO. OF TIMES..... ☐☐ DOES NOT KNOW.....98
410	When you were pregnant with (NAME) were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES.....1 NO.....2 (SKIP TO 411A) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 411A) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 411A) DOES NOT KNOW.....8
411	During this pregnancy how many times did you get this injection?	TIMES..... ☐ DOES NOT KNOW.....8	TIMES..... ☐ DOES NOT KNOW.....8	TIMES..... ☐ DOES NOT KNOW.....8
411A	When you were pregnant with (NAME), did anyone take your blood pressure (put a cuff on your arm and pump air into it)?	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
411B	When you were pregnant with (NAME), did anyone take your urine for testing?	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8
412	Where did you give birth to (NAME)?	HOME YOUR HOME.....11 OTHER HOME.....12 PUBLIC SECTOR GVT. HOSPITAL.....21 THANA HEALTH COMPLEX...22 PRIVATE SECTOR PVT. HOSPITAL/CLINIC...31 OTHER_____96 (SPECIFY)	HOME YOUR HOME.....11 OTHER HOME.....12 PUBLIC SECTOR GVT. HOSPITAL.....21 THANA HEALTH COMPLEX...22 PRIVATE SECTOR PVT. HOSPITAL/CLINIC...31 OTHER_____96 (SPECIFY)	HOME YOUR HOME.....11 OTHER HOME.....12 PUBLIC SECTOR GVT. HOSPITAL.....21 THANA HEALTH COMPLEX...22 PRIVATE SECTOR PVT. HOSPITAL/CLINIC...31 OTHER_____96 (SPECIFY)
413	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B FAMILY WELFARE VISITOR..C OTHER PERSON TRAINED TBA.....D TBA.....E RELATIVE.....F OTHER_____X (SPECIFY) NO ONE.....Y	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B FAMILY WELFARE VISITOR..C OTHER PERSON TRAINED TBA.....D TBA.....E RELATIVE.....F OTHER_____X (SPECIFY) NO ONE.....Y	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B FAMILY WELFARE VISITOR..C OTHER PERSON TRAINED TBA.....D TBA.....E RELATIVE.....F OTHER_____X (SPECIFY) NO ONE.....Y
414	Around the time of the birth of (NAME), did you have any of the following problems: Long labor, that is, did your regular contractions last more 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 not caused by fever?	YES NO LABOR MORE THAN 12 HOURS..1 2 EXCESSIVE BLEEDING.....1 2 FEVER/BAD SMELLING VAG. DISCHARGE.....1 2 CONVULSIONS.....1 2	YES NO LABOR MORE THAN 12 HOURS..1 2 EXCESSIVE BLEEDING.....1 2 FEVER/BAD SMELLING VAG. DISCHARGE.....1 2 CONVULSIONS.....1 2	YES NO LABOR MORE THAN 12 HOURS..1 2 EXCESSIVE BLEEDING.....1 2 FEVER/BAD SMELLING VAG. DISCHARGE.....1 2 CONVULSIONS.....1 2
419	Has your period returned since the birth of (NAME)?	YES.....1 (SKIP TO 421) NO.....2 (SKIP TO 422)		
420	Did your period return between the birth of (NAME) and your next pregnancy?		YES .....1 NO.....2 (SKIP TO 424)	YES .....1 NO.....2 (SKIP TO 424)
421	For how many months after the birth of (NAME) did you <u>not</u> have a period?	MONTHS..... [ ][ ] DOES NOT KNOW.....98	MONTHS..... [ ][ ] DOES NOT KNOW.....98	MONTHS..... [ ][ ] DOES NOT KNOW.....98
422	CHECK 227: RESPONDENT PREGNANT?	NOT PREGNANT [ ] PREGNANT OR UNSURE [ ] (SKIP TO 424)		
423	Have you resumed sexual relations since the birth of (NAME)?	YES.....1 NO.....2 (SKIP TO 425)		

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
424	For how many months after the birth of (NAME) did you not have sexual relations?	MONTHS..... [ ][ ] DOES NOT KNOW.....98	MONTHS..... [ ][ ] DOES NOT KNOW.....98	MONTHS..... [ ][ ] DOES NOT KNOW.....98
425	Did you ever breastfeed (NAME)?	YES.....1 NO.....2 (SKIP TO 431)	YES.....1 NO.....2 (SKIP TO 431)	YES.....1 NO.....2 (SKIP TO 431)
426	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 [ ][ ]		
426A	Was (NAME) given colostrum (first milk from the breast) to drink?	YES.....1 NO.....2		
426B	Was (NAME) given water or any other liquid to drink soon after birth?	YES.....1 NO.....2		
427	CHECK 216: CHILD ALIVE?	ALIVE [ ] DEAD [ ] (GO TO 429)	ALIVE [ ] DEAD [ ] (GO TO 429)	ALIVE [ ] DEAD [ ] (GO TO 429)
428	Are you still breastfeeding (NAME)?	YES.....1 (SKIP TO 432) NO.....2	YES.....1 (SKIP TO 432) NO.....2	YES.....1 (SKIP TO 432) NO.....2
429	For how many months did you breastfeed (NAME)?	MONTHS..... [ ][ ] DOES NOT KNOW.....98	MONTHS..... [ ][ ] DOES NOT KNOW.....98	MONTHS..... [ ][ ] DOES NOT KNOW.....98
430	Why did you stop breastfeeding (NAME)?	MOTHER ILL/WEAK.....01 CHILD ILL/WEAK.....02 CHILD DIED.....03 NIPPLE/BREAST PROBLEM...04 INSUFFICIENT MILK.....05 MOTHER WORKING.....06 CHILD REFUSED.....07 WEANING AGE.....08 BECAME PREGNANT.....09 STARTED USING CONTRACEPTION.....10 OTHER_____96 (SPECIFY)	MOTHER ILL/WEAK.....01 CHILD ILL/WEAK.....02 CHILD DIED.....03 NIPPLE/BREAST PROBLEM...04 INSUFFICIENT MILK.....05 MOTHER WORKING.....06 CHILD REFUSED.....07 WEANING AGE.....08 BECAME PREGNANT.....09 STARTED USING CONTRACEPTION.....10 OTHER_____96 (SPECIFY)	MOTHER ILL/WEAK.....01 CHILD ILL/WEAK.....02 CHILD DIED.....03 NIPPLE/BREAST PROBLEM...04 INSUFFICIENT MILK.....05 MOTHER WORKING.....06 CHILD REFUSED.....07 WEANING AGE.....08 BECAME PREGNANT.....09 STARTED USING CONTRACEPTION.....10 OTHER_____96 (SPECIFY)
431	CHECK 404: CHILD ALIVE?	ALIVE [ ] DEAD [ ] (GO TO 435) (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 440)	ALIVE [ ] DEAD [ ] (GO TO 435) (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 440)	ALIVE [ ] DEAD [ ] (GO TO 435) (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 440)
432	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER	NUMBER OF NIGHTTIME FEEDINGS [ ][ ]	NUMBER OF NIGHTTIME FEEDINGS [ ][ ]	NUMBER OF NIGHTTIME FEEDINGS [ ][ ]

		LAST BIRTH NAME	NEXT-TO-LAST BIRTH NAME	SECOND-FROM-LAST BIRTH NAME
433	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER	NUMBER OF DAYLIGHT FEEDINGS [ ][ ]	NUMBER OF DAYLIGHT FEEDINGS [ ][ ]	NUMBER OF DAYLIGHT FEEDINGS [ ][ ]
435	At any time yesterday or last night was (NAME) given any of the following?:	YES NO	YES NO	YES NO
	Plain water?	PLAIN WATER..... 1 2	PLAIN WATER..... 1 2	PLAIN WATER..... 1 2
	Sugar water or honey?	SUGAR WATER, HONEY.1 2	SUGAR WATER, HONEY.1 2	SUGAR WATER, HONEY.1 2
	Juice?	JUICE.....1 2	JUICE.....1 2	JUICE.....1 2
	Tea?	TEA.....1 2	TEA.....1 2	TEA.....1 2
	Baby formula?	BABY FORMULA.....1 2	BABY FORMULA.....1 2	BABY FORMULA.....1 2
	Cow's milk?	COW'S MILK.....1 2	COW'S MILK.....1 2	COW'S MILK.....1 2
	Other liquids?	OTHER LIQUIDS.....1 2	OTHER LIQUIDS.....1 2	OTHER LIQUIDS.....1 2
	Meat?	MEAT.....1 2	MEAT.....1 2	MEAT.....1 2
	Other solid or mushy food?	SOLID/MUSHY FOOD...1 2	SOLID/MUSHY FOOD...1 2	SOLID/MUSHY FOOD...1 2
439	GO BACK TO 405 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, GO TO 440.			

440	ENTER THE LINE NUMBER AND NAME OF EACH BIRTH SINCE BAISHAK 1398 (APRIL 1991) IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE ADDITIONAL FORMS).			
		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
441	LINE NUMBER FROM Q. 212	[ ][ ]	[ ][ ]	[ ][ ]
442	FROM Q. 212 AND Q. 216	NAME _____ ALIVE [ ] DEAD [ ] (GO TO 442 IN NEXT COLUMN; IF NO MORE BIRTHS GO TO 501)	NAME _____ ALIVE [ ] DEAD [ ] (GO TO 442 IN NEXT COLUMN; IF NO MORE BIRTHS GO TO 501)	NAME _____ ALIVE [ ] DEAD [ ] (GO TO 442 IN NEXT COLUMN; IF NO MORE BIRTHS GO TO 501)
443	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it, please?	YES, SEEN.....1 (SKIP TO 445) YES, NOT SEEN.....2 (SKIP TO 447) NO CARD.....3	YES, SEEN.....1 (SKIP TO 445) YES, NOT SEEN.....2 (SKIP TO 447) NO CARD.....3	YES, SEEN.....1 (SKIP TO 445) YES, NOT SEEN.....2 (SKIP TO 447) NO CARD.....3
444	Did you ever have a vaccination card for (NAME)?	YES.....1 (SKIP TO 447) NO.....2	YES.....1 (SKIP TO 456) NO.....2	YES.....1 (SKIP TO 456) NO.....2

445 (1) COPY VACCINATION DATES FOR EACH VACCINE FROM THE CARD
(2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE WAS RECORDED.

		DAY	MO	YR	DAY	MO	YR	DAY	MO	YR
BCG	BCG									
DPT 1	D1									
DPT 2	D2									
DPT 3	D3									
POLIO 1	P1									
POLIO 2	P2									
POLIO 3	P3									
MEASLES	MEA									
VITAMIN A	V A									

446	Has (NAME) received any vaccinations that are not recorded on this card? RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, DPT 1-3, POLIO 0-3 AND/OR MEASLES VACCINE(S).	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 445) NO.....2 DOES NOT KNOW.....8 (SKIP TO 449)	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 445) NO.....2 DOES NOT KNOW.....8 (SKIP TO 449)	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 445) NO.....2 DOES NOT KNOW.....8 (SKIP TO 449)
447	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases?	YES.....1 NO.....2 (SKIP TO 449) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 449) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 449) DOES NOT KNOW.....8

		LAST BIRTH NAME	NEXT-TO-LAST BIRTH NAME	SECOND-FROM-LAST BIRTH NAME
448	Has (NAME) received any of the following vaccinations:			
448A	A BCG vaccination against tuberculosis, that is, an injection in the left shoulder that caused a scar?	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8
448B	Polio vaccine, that is, drops in the mouth?	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8
448C	IF YES: How many times?	NUMBER OF TIMES..... [ ]	NUMBER OF TIMES..... [ ]	NUMBER OF TIMES..... [ ]
448D	When was the first polio vaccine given, just after birth or later?	JUST AFTER BIRTH.....1 LATER.....2	JUST AFTER BIRTH.....1 LATER.....2	JUST AFTER BIRTH.....1 LATER.....2
448E	DPT vaccination, that is, an injection usually given at the same time as polio drops?	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8
448F	IF YES: How many times?	NUMBER OF TIMES..... [ ]	NUMBER OF TIMES..... [ ]	NUMBER OF TIMES..... [ ]
448G	An injection to prevent measles?	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8
449	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8
450	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES.....1 NO.....2 (SKIP TO 454) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 454) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 454) DOES NOT KNOW.....8
451	When (NAME) had the illness with a cough, did he/she breathe faster than usual with short, rapid breaths?	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8
452	Did you seek advice or treatment for the cough?	YES.....1 NO.....2 (SKIP TO 454)	YES.....1 NO.....2 (SKIP TO 454)	YES.....1 NO.....2 (SKIP TO 454)
453	Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.	PUBLIC SECTOR GVT. HOSPITAL.....A FAMILY WELFARE CENTER...B THANA HEALTH COMPLEX....C SATELLITE CLINIC.....D EPI CLINIC.....E SATELLITE/EPI CLINIC....F FWV/FIELDWORKER.....G MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....H PHARMACY.....I PRIVATE DOCTOR.....J OTHER PRIVATE SECTOR SHOP.....K TRADITIONAL DOCTOR.....L NGO CLINIC.....M HOMEOPATHIC DOCTOR.....N OTHER_____X (SPECIFY)	PUBLIC SECTOR GVT. HOSPITAL.....A FAMILY WELFARE CENTER...B THANA HEALTH COMPLEX....C SATELLITE CLINIC.....D EPI CLINIC.....E SATELLITE/EPI CLINIC....F FWV/FIELDWORKER.....G MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....H PHARMACY.....I PRIVATE DOCTOR.....J OTHER PRIVATE SECTOR SHOP.....K TRADITIONAL DOCTOR.....L NGO CLINIC.....M HOMEOPATHIC DOCTOR.....N OTHER_____X (SPECIFY)	PUBLIC SECTOR GVT. HOSPITAL.....A FAMILY WELFARE CENTER...B THANA HEALTH COMPLEX....C SATELLITE CLINIC.....D EPI CLINIC.....E SATELLITE/EPI CLINIC....F FWV/FIELDWORKER.....G MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....H PHARMACY.....I PRIVATE DOCTOR.....J OTHER PRIVATE SECTOR SHOP.....K TRADITIONAL DOCTOR.....L NGO CLINIC.....M HOMEOPATHIC DOCTOR.....N OTHER_____X (SPECIFY)

		LAST BIRTH NAME	NEXT-TO-LAST BIRTH NAME	SECOND-FROM-LAST BIRTH NAME
454	Has (NAME) had diarrhea in the last two weeks?	YES.....1 NO.....2 (SKIP TO 464) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 464) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 464) DOES NOT KNOW.....8
455	Was there any blood in the stools?	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8	YES.....1 NO.....2 DOES NOT KNOW.....8
457	Was he/she given the same amount to drink as before the diarrhea, or more, or less?	SAME.....1 MORE.....2 LESS.....3 DOES NOT KNOW.....8	SAME.....1 MORE.....2 LESS.....3 DOES NOT KNOW.....8	SAME.....1 MORE.....2 LESS.....3 DOES NOT KNOW.....8
459	When (NAME) had diarrhea, was he/she given any of the following to drink:	YES NO DK	YES NO DK	YES NO DK
	A fluid made from a special saline packet?	FLUID FROM PACKET..1 2 8	FLUID FROM PACKET..1 2 8	FLUID FROM PACKET..1 2 8
	Home-made sugar-salt-water solution (laban gur)?	LABAN GUR.....1 2 8	LABAN GUR.....1 2 8	LABAN GUR.....1 2 8
	Water?	WATER.....1 2 8	WATER.....1 2 8	WATER.....1 2 8
	Any other liquids?	OTHER LIQUID.....1 2 8	OTHER LIQUID.....1 2 8	OTHER LIQUID.....1 2 8
460	Was anything (else) given to treat the diarrhea?	YES.....1 NO.....2 (SKIP TO 462) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 462) DOES NOT KNOW.....8	YES.....1 NO.....2 (SKIP TO 462) DOES NOT KNOW.....8
461	What was given to treat the diarrhea? Anything else? RECORD ALL MENTIONED.	PILL OR SYRUP.....A INJECTION.....B (I.V.) INTRAVENOUS.....C HOME REMEDIES/HERBS.....D OTHER_____X (SPECIFY)	PILL OR SYRUP.....A INJECTION.....B (I.V.) INTRAVENOUS.....C HOME REMEDIES/HERBS.....D OTHER_____X (SPECIFY)	PILL OR SYRUP.....A INJECTION.....B (I.V.) INTRAVENOUS.....C HOME REMEDIES/HERBS.....D OTHER_____X (SPECIFY)
462	Did you seek advice or treatment for the diarrhea?	YES.....1 NO.....2 (SKIP TO 464)	YES.....1 NO.....2 (SKIP TO 464)	YES.....1 NO.....2 (SKIP TO 464)
463	Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.	PUBLIC SECTOR GVT. HOSPITAL.....A FAMILY WELFARE CENTER...B THANA HEALTH COMPLEX....C SATELLITE CLINIC.....D EPI CLINIC.....E SATELLITE/EPI CLINIC....F FWV/FIELDWORKER.....G MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....H PHARMACY.....I PRIVATE DOCTOR.....J OTHER PRIVATE SECTOR SHOP.....K TRADITIONAL DOCTOR.....L NGO CLINIC.....M HOMEOPATHIC DOCTOR.....N OTHER_____X (SPECIFY)	PUBLIC SECTOR GVT. HOSPITAL.....A FAMILY WELFARE CENTER...B THANA HEALTH COMPLEX....C SATELLITE CLINIC.....D EPI CLINIC.....E SATELLITE/EPI CLINIC....F FWV/FIELDWORKER.....G MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....H PHARMACY.....I PRIVATE DOCTOR.....J OTHER PRIVATE SECTOR SHOP.....K TRADITIONAL DOCTOR.....L NGO CLINIC.....M HOMEOPATHIC DOCTOR.....N OTHER_____X (SPECIFY)	PUBLIC SECTOR GVT. HOSPITAL.....A FAMILY WELFARE CENTER...B THANA HEALTH COMPLEX....C SATELLITE CLINIC.....D EPI CLINIC.....E SATELLITE/EPI CLINIC....F FWV/FIELDWORKER.....G MEDICAL PRIVATE SECTOR PVT. HOSPITAL/CLINIC....H PHARMACY.....I PRIVATE DOCTOR.....J OTHER PRIVATE SECTOR SHOP.....K TRADITIONAL DOCTOR.....L NGO CLINIC.....M HOMEOPATHIC DOCTOR.....N OTHER_____X (SPECIFY)
464	In the past 6 months, has (NAME) taken a Vitamin A capsule? SHOW CAPSULE.	YES.....1 NO.....2 NOT SURE/DOES NOT KNOW..8	YES.....1 NO.....2 NOT SURE/DOES NOT KNOW..8	YES.....1 NO.....2 NOT SURE/DOES NOT KNOW..8

465 GO BACK TO 442 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, GO TO 501

SECTION 5. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
501	Have you been married only once or more than once?	ONCE.....1 MORE THAN ONCE.....2	
502	In what month and year did you get married (for the first time?	BENGALI.....1 MONTH *..... YEAR..... 1 [ ] [ ] [ ] ENGLISH.....2 MONTH**..... YEAR..... 1 9 [ ] [ ]	→504 →504
503	How old were you when you got married?	AGE.....[ ][ ] DOES NOT KNOW AGE.....98	
504	DETERMINE MONTHS MARRIED SINCE BAISHAK 1398. ENTER "X" IN COLUMN 3 OF CALENDAR FOR EACH MONTH MARRIED AND ENTER "0" FOR EACH MONTH NOT MARRIED, SINCE BAISHAK 1398. FOR WOMEN WITH MORE THAN ONE MARRIAGE: PROBE FOR DATE WHEN CURRENT MARRIAGE STARTED AND, IF APPROPRIATE, FOR STARTING AND TERMINATION DATES OF ANY PREVIOUS MARRIAGE. 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.		
505	How long after you were married did you start living with your husband? IF IMMEDIATELY AFTER MARRIAGE, WRITE '00 DAYS'	DAYS.....1 [ ][ ] MONTHS.....2 [ ][ ]	
506	CHECK 106A: CURRENTLY MARRIED [ ] ↓	WIDOWED, DIVORCED [ ]	→509
508	Is your husband living with you now or is he staying elsewhere?	LIVING WITH HER.....1 STAYING ELSEWHERE.....2	
508A	INTERVIEWER: WRITE LINE NUMBER OF HUSBAND FROM THE HOUSEHOLD QUESTIONNAIRE. IF HUSBAND IS NOT LISTED, WRITE '00'.	LINE NUMBER OF HUSBAND.....[ ][ ]	
509	PRESENCE OF OTHERS AT THIS POINT.	YES NO CHILDREN UNDER 10.....1 2 HUSBAND.....1 2 OTHER MALES.....1 2 OTHER FEMALES.....1 2	

* BENGALI MONTHS:

01 BAISHAK	05 BADHRA	09 POUSH
02 JAISTHA	06 ASHWIN	10 MAGH
03 ASHAR	07 KARTIK	11 FALGUN
04 SRABAN	08 AGRAHAYAN	12 CHOITRA

** ENGLISH MONTHS:

01 JANUARY	05 MAY	09 SEPTEMBER
02 FEBRUARY	06 JUNE	10 OCTOBER
03 MARCH	07 JULY	11 NOVEMBER
04 APRIL	08 AUGUST	12 DECEMBER

SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 106A: CURRENTLY MARRIED ☐ NOT CURRENTLY MARRIED ☐		→629
601A	CHECK 314: NEITHER STERILIZED ☐ SHE OR HE STERILIZED ☐		→614
602	CHECK 227: NOT PREGNANT OR UNSURE ☐ 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? PREGNANT ☐ Now I have some questions about the future. After the child you are expecting, 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 OR DOES NOT KNOW.....8	→604
603	CHECK 227: NOT PREGNANT OR UNSURE ☐ How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ How long would you like to wait after the birth of the child you are expecting before the birth of another child?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ SOON/NOW.....994 SAYS SHE CAN'T GET PREGNANT...995 OTHER_____996 (SPECIFY) DOES NOT KNOW.....998	
604	CHECK 227: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→607
605	If you became pregnant in the next few weeks, would you be happy, unhappy, or would it not matter very much?	HAPPY.....1 UNHAPPY.....2 WOULD NOT MATTER.....3	
606	CHECK 313: USING A METHOD? NOT ASKED ☐ NOT CURRENTLY USING ☐ CURRENTLY USING ☐		→614
607	Do you think you will use a method to delay or avoid pregnancy within the next 12 months?	YES.....1 NO.....2 DOES NOT KNOW.....8	→609
608	Do you think you will use a method at any time in the future?	YES.....1 NO.....2 DOES NOT KNOW.....8	→611 →611
609	When you use a method, which method would you prefer to use?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANT.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 MENSTRUAL REGULATION.....08 CALENDAR, COUNTING DAYS.....09 WITHDRAWAL.....10 OTHER_____96 (SPECIFY) UNSURE.....98	→614

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
609A	Where can you get (METHOD MENTIONED IN 609)? _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE CLINIC/EPI.....14 MEDICAL PRIVATE SECTOR TRADITIONAL DOCTOR.....21 QUALIFIED DOCTOR.....22 PHARMACY.....23 OTHER PRIVATE SECTOR SHOP.....31 FRIENDS/RELATIVES.....32 FIELDWORKER, FWA.....41 NGO CLINIC.....42 OTHER _____ 96 (SPECIFY) DOES NOT KNOW..... 98	→614
611	What is the main reason you do not intend to use a method?	FERTILITY-RELATED REASONS INFREQUENT SEX.....22 MENOPAUSAL/HYSTERECTOMY.....23 SUBFECUND/INFECUND.....24 WANTS MORE CHILDREN.....26 OPPOSITION TO USE RESPONDENT OPPOSED.....31 HUSBAND OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 OTHER _____ 96 (SPECIFY) DON'T KNOW.....98	
614	Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE.....1 DISAPPROVE.....2 NO OPINION.....3	
616	In the last month, have you heard or seen a message about family planning on: the radio? television? newspaper or magazine? a poster or billboard?	YES NO RADIO.....1 2 TELEVISION.....1 2 NEWSPAPER/MAGAZINE.....1 2 POSTER/BILLBOARD.....1 2	
617	CHECK 314: RESPONDENT NOT STERILIZED ☐ ↓ RESPONDENT STERILIZED ☐		→620
618	How often have you talked to your husband about family planning in the last three months?	NEVER.....1 ONCE OR TWICE.....2 MORE OFTEN.....3	
619	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	
620	Spouses/partners do not always agree on everything. Now I want to ask you about your husband's views on family planning. Do you think that your husband approves or disapproves of couples using a method to avoid pregnancy?	APPROVES.....1 DISAPPROVES.....2 DON'T KNOW.....8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
621	In the last three months, have you discussed family planning with your friends, neighbors, or relatives?	YES.....1 NO.....2	 →624
622	With whom? Anyone else? RECORD ALL MENTIONED.	HUSBAND/PARTNER.....A MOTHER.....B FATHER.....C SISTER(S)/SISTERS-IN-LAW.....D BROTHER(S)/BROTHERS-IN-LAW.....E DAUGHTER.....F MOTHER-IN-LAW.....G FATHER-IN-LAW.....H FRIENDS/NEIGHBORS.....I OTHER_____ X	
624	Since you have been married, 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	 →626
625	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 OTHER RELATIVES OR FRIENDS.4	
626	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)	→627 →627 →627
626A	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	 →628
627	How frequently do you go outside this village/town/city?	ONCE A MONTH OR MORE.....1 SEVERAL TIMES A YEAR.....2 LESS THAN ONCE A YEAR.....3 NEVER.....4	
628	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)	→629 →629 →629 →629
628A	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	
629	CHECK 216: HAS LIVING CHILD(REN) ☐ → If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILD(REN) ☐ → If you could choose exactly the number of children to have in your whole life, how many would that be? RECORD SINGLE NUMBER OR OTHER ANSWER.	NUMBER..... ☐☐ OTHER ANSWER_____96 (SPECIFY)	
630	How many of these would you like to be boys and how many would you like to be girls?	BOYS..... ☐☐ GIRLS..... ☐☐ EITHER..... ☐☐ UP TO GOD.....95 OTHER_____96	

SECTION 7. HUSBAND'S BACKGROUND, RESIDENCE AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 106A: CURRENTLY MARRIED ☐ ↓ WIDOWED/ DIVORCED/ SEPARATED ☐		→703
702	How old was your husband on his last birthday?	AGE..... ☐☐	
703	Did your (last) husband ever attend school?	YES.....1 NO.....2 DOES NOT KNOW.....8	 →706 →706
704	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY .....1 SECONDARY.....2 HIGHER.....3 DOES NOT KNOW.....8	 →706
705	What was the highest (grade/form/year) he completed?	GRADE..... ☐☐ DOES NOT KNOW.....98	
706	What kind of work does (did) your (last) husband mainly do?	_____ ☐☐ _____	
707	CHECK 706: WORKS (WORKED) IN AGRICULTURE ☐ ↓ DOES (DID) NOT WORK IN AGRICULTURE ☐		→709
708	(Does/did) your husband work mainly on his own land or family land, or (does/did) he rent land, or (does/did) he work on someone else's land?	HIS/FAMILY LAND.....1 RENTED LAND.....2 SOMEONE ELSE'S LAND.....3	
709	Aside from your own housework, are you currently working?	YES.....1 NO.....2	→712
710	As you know, some women take up jobs for which they are paid in cash or in 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? Are you currently doing any of these things or any other work?	YES.....1 NO.....2	 →801
712	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____	
713	CHECK 712: WORKS IN AGRICULTURE ☐ ↓ DOES NOT WORK IN AGRICULTURE ☐		→715

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
714	Do you work mainly on your own land or family land, or do you rent land, or work on someone else's land?	OWN/FAMILY LAND.....1 RENTED LAND.....2 SOMEONE ELSE'S LAND.....3	
715	In your current work, do you 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	
716	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR.....1 ONLY SOME TIMES (SEASONAL).....2 ONCE IN A WHILE.....3	
720	Do you earn cash for this work? PROBE: Do you make money for working?	YES.....1 NO.....2	→723
722	Most of the time when you work for cash, do you decide how the money you earn will be used, or does someone else decide how your earnings are used?	RESPONDENT DECIDES.....1 SOMEONE ELSE DECIDES.....2 JOINTLY.....3	
723	Do you work at home or away from home?	HOME.....1 AWAY.....2	
724	CHECK 217 AND 218: HAS CHILD BORN SINCE BAISHAK 1398 AND LIVING AT HOME?	YES ☐ NO ☐	→801
725	Who usually takes care of (NAME OF YOUNGEST CHILD AT HOME) while you are working?	RESPONDENT.....01 HUSBAND/PARTNER.....02 OLDER CHILD(REN).....03 OTHER RELATIVES.....04 NEIGHBORS.....05 FRIENDS.....06 SERVANTS/HIRED HELP.....07 CHILD IS IN SCHOOL.....08 INSTITUTIONAL CHILDCARE.....09 OTHER_____96 (SPECIFY)	

SECTION 8. AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Have you ever heard of an illness called AIDS?	YES.....1 NO.....2	→809
802	From which sources of information have you learned most about AIDS? Any other sources? RECORD ALL MENTIONED.	RADIO.....A TV.....B NEWSPAPERS/MAGAZINES.....C PAMPHLETS/POSTERS.....D HEALTH WORKERS.....E MOSQUES/CHURCHES.....F SCHOOLS/TEACHERS.....G COMMUNITY MEETINGS.....H FRIENDS/RELATIVES.....I WORK PLACE.....J OTHER_____ X (SPECIFY)	
803	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	→807
804	What can a person do? Any other ways? RECORD ALL MENTIONED.	SAFE SEX.....A ABSTAIN FROM SEX.....B USE CONDOMS.....C HAVE ONLY ONE SEX PARTNER.....D AVOID SEX WITH PROSTITUTES.....E USE STERILE SYRINGES/BUY SYRNGS.F AVOID BLOOD TRANSFUSIONS.....G AVOID KISSING.....H AVOID MOSQUITO BITES.....I AVOID TRADITIONAL DOCTORS.....J OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
805	CHECK 804: MENTIONED SAFE SEX ☐ ↓ DID NOT MENTION SAFE SEX ☐		→807
806	What does "safe sex" mean to you?	ABSTAIN FROM SEX.....B USE CONDOMS.....C HAVE ONLY ONE SEX PARTNER.....D AVOID SEX WITH PROSTITUTES.....E AVOID SEX WITH HOMOSEXUALS.....F OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
807	Is it possible for a healthy-looking person to have the AIDS virus?	YES.....1 NO.....2 DON'T KNOW.....8	
808	Do you think that persons with AIDS almost never die from the disease, sometimes die, or almost always die from the disease?	ALMOST NEVER.....1 SOMETIMES.....2 ALMOST ALWAYS.....3 DON'T KNOW.....8	
809	RECORD THE TIME.	HOUR..... ☐☐ MINUTES..... ☐☐	

SECTION 9. HEIGHT AND WEIGHT

901	CHECK 215:	
	ONE OR MORE BIRTHS BAISHAK 1398 (APRIL 1991) ☐	NO BIRTHS SINCE BAISHAK 1398 (APRIL 1991) ☐ → END

IN 902 (COLUMNS 2 AND 3) RECORD THE LINE NUMBER FOR EACH CHILD BORN SINCE BAISHAK 1398 AND STILL ALIVE. IN 903 AND 904 RECORD THE NAME AND BIRTH DATE FOR THE RESPONDENT AND FOR ALL LIVING CHILDREN BORN SINCE BAISHAK 1398. IN 906 AND 908 RECORD HEIGHT AND WEIGHT OF THE RESPONDENT AND THE LIVING CHILDREN. (NOTE: ALL RESPONDENTS WITH ONE OR MORE BIRTHS SINCE BAISHAK 1398 SHOULD BE WEIGHED AND MEASURED EVEN IF ALL OF THE CHILDREN HAVE DIED. IF THERE ARE MORE THAN 3 LIVING CHILDREN BORN SINCE BAISHAK 1398, USE ADDITIONAL QUESTIONNAIRES).

		1 RESPONDENT	2 YOUNGEST LIVING CHILD	3 NEXT-TO YOUNGEST LIVING CHILD	4 SECOND-TO YOUNGEST LIVING CHILD
902	LINE NO. FROM Q.212		☐☐	☐☐	☐☐
903	NAME FROM Q.212 FOR CHILDREN	(NAME)	(NAME)	(NAME)	(NAME)
904	DATE OF BIRTH FROM Q.215, AND ASK FOR DAY OF BIRTH		DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐
905	BCG SCAR ON TOP OF LEFT SHOULDER**		SCAR SEEN.....1 NO SCAR.....2	SCAR SEEN.....1 NO SCAR.....2	SCAR SEEN.....1 NO SCAR.....2
906	HEIGHT (in centimeters)	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐
907	WAS LENGTH/HEIGHT OF CHILD MEASURED LYING DOWN OR STANDING UP?		LYING.....1 STANDING.....2	LYING.....1 STANDING.....2	LYING.....1 STANDING.....2
908	WEIGHT (in kilograms)	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐
909	DATE WEIGHED AND MEASURED	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐
910	RESULT	MEASURED.....1 NOT PRESENT....3 REFUSED.....4 OTHER.....6 (SPECIFY)	CHILD MEASURED.1 CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)	CHILD MEASURED.1 CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)	CHILD MEASURED.1 CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)

911 NAME OF MEASURER: _____ ☐☐☐ NAME OF ASSISTANT: _____ ☐☐☐

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

_____

_____

_____

_____

32

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
S STILLBIRTHS
M MISCARRIAGES
R MENSTRUAL REGULATION
A ABORTION

0 NO METHOD
1 PILL
2 IUD
3 INJECTIONS
4 IMPLANTS
5 CONDOM
6 FEMALE STERILIZATION
7 MALE STERILIZATION
9 PERIODIC ABSTINENCE/RHYTHM
W WITHDRAWAL
X OTHER_____
(SPECIFY)

COL.2: 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.3: Marriage/Union

X IN UNION (MARRIED OR LIVING TOGETHER)
0 NOT IN UNION

			1	2	3			
	12 CHOITRA	01				03	MAR	1
	11 FALGUN	02				02	FEB	9
	10 MAGH	03				01	JAN	8
	09 POUSH	04				12	DEC	7
	08 AGRAHAYAN	05				11	NOV	
1	07 KARTIK	06				10	OCT	
4	06 ASHWIN	07				09	SEP	
0	05 BADHRA	08				08	AUG	
3	04 SRABAN	09				07	JUL	
	03 ASHAR	10				06	JUN	1
	02 JAISTHA	11				05	MAY	9
	01 BAISHAK	12				04	APR	9
								6
	12 CHOITRA	13				03	MAR	
	11 FALGUN	14				02	FEB	
	10 MAGH	15				01	JAN	
	09 POUSH	16				12	DEC	
	08 AGRAHAYAN	17				11	NOV	
1	07 KARTIK	18				10	OCT	
4	06 ASHWIN	19				09	SEP	
0	05 BADHRA	20				08	AUG	
2	04 SRABAN	21				07	JUL	
	03 ASHAR	22				06	JUN	1
	02 JAISTHA	23				05	MAY	9
	01 BAISHAK	24				04	APR	9
								5
	12 CHOITRA	25				03	MAR	
	11 FALGUN	26				02	FEB	
	10 MAGH	27				01	JAN	
	09 POUSH	28				12	DEC	
	08 AGRAHAYAN	29				11	NOV	
1	07 KARTIK	30				10	OCT	
4	06 ASHWIN	31				09	SEP	
0	05 BADHRA	32				08	AUG	
1	04 SRABAN	33				07	JUL	
	03 ASHAR	34				06	JUN	1
	02 JAISTHA	35				05	MAY	9
	01 BAISHAK	36				04	APR	9
								4
	12 CHOITRA	37				03	MAR	
	11 FALGUN	38				02	FEB	
	10 MAGH	39				01	JAN	
	09 POUSH	40				12	DEC	
	08 AGRAHAYAN	41				11	NOV	
1	07 KARTIK	42				10	OCT	
4	06 ASHWIN	43				09	SEP	
0	05 BADHRA	44				08	AUG	
0	04 SRABAN	45				07	JUL	
	03 ASHAR	46				06	JUN	1
	02 JAISTHA	47				05	MAY	9
	01 BAISHAK	48				04	APR	9
								3
	12 CHOITRA	49				03	MAR	
	11 FALGUN	50				02	FEB	
	10 MAGH	51				01	JAN	
	09 POUSH	52				12	DEC	
	08 AGRAHAYAN	53				11	NOV	
1	07 KARTIK	54				10	OCT	
3	06 ASHWIN	55				09	SEP	
9	05 BADHRA	56				08	AUG	
9	04 SRABAN	57				07	JUL	
	03 ASHAR	58				06	JUN	1
	02 JAISTHA	59				05	MAY	9
	01 BAISHAK	60				04	APR	9
								2
	12 CHOITRA	61				03	MAR	
	11 FALGUN	62				02	FEB	
	10 MAGH	63				01	JAN	
	09 POUSH	64				12	DEC	
	08 AGRAHAYAN	65				11	NOV	
1	07 KARTIK	66				10	OCT	
3	06 ASHWIN	67				09	SEP	
9	05 BADHRA	68				08	AUG	1
8	04 SRABAN	69				07	JUL	9
	03 ASHAR	70				06	JUN	9
	02 JAISTHA	71				05	MAY	1
	01 BAISHAK	72				04	APR	

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 1996-97
MEN'S QUESTIONNAIRE (FOR CURRENTLY MARRIED MEN 15-59)

DIVISION _____

DISTRICT _____

UPAZILA/THANA _____

UNION _____

VILLAGE/MOHALLA/BLOCK _____

CLUSTER NUMBER.....

HOUSEHOLD NUMBER.....

DHAKA/CHITTAGONG=1, SMALL CITY=2, TOWN=3, VILLAGE=4.....

NAME OF HOUSEHOLD HEAD _____

NAME AND LINE NUMBER OF MAN _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY MONTH** YR 1 9 9
INTERVIEWER'S NAME				CODE
RESULT *				RESULT
NEXT VISIT: DATE TIME				TOTAL NUMBER OF VISITS

***RESULT CODES:
1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER _____ (SPECIFY)

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY
NAME DATE				

** MONTH:

01 JANUARY	05 MAY	09 SEPTEMBER
02 FEBRUARY	06 JUNE	10 OCTOBER
03 MARCH	07 JULY	11 NOVEMBER
04 APRIL	08 AUGUST	12 DECEMBER

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR..... [ ][ ] MINUTES..... [ ][ ]	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	YEARS..... [ ][ ] ALWAYS.....95 VISITOR.....96	→105
104	Just before you moved here, did you live in a city, in a town, or in the countryside?	CITY.....1 TOWN.....2 COUNTRYSIDE.....3	
105	In what month and year were you born? USE CODES BELOW FOR MONTHS. IF HE DOES NOT KNOW, WRITE 'D K' IN BOXES.	BENGALI.....1 MONTH *..... [ ][ ] YEAR..... [1][3][ ][ ] ENGLISH.....2 MONTH**..... [ ][ ] YEAR..... [1][9][ ][ ]	
106	How old are you? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS... [ ][ ]	
106A	Are you now married, widowed, or divorced?	NEVER MARRIED.....1 MARRIED.....2 WIDOWED.....3 DIVORCED/DESERTED.....4	→END →END →END
107	Have you ever attended school?	YES.....1 NO.....2	→114
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY.....1 SECONDARY.....2 COLLEGE/UNIVERSITY.....3	
109	What is the highest class you completed?	CLASS..... [ ][ ]	
113	CHECK 108: PRIMARY [ ] ✓ SECONDARY OR COLLEGE [ ]		→115
114	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	→116
115	Do you usually read a newspaper or magazine at least once a week?	YES.....1 NO.....2	
116	Do you usually listen to the radio at least once a week?	YES.....1 NO.....2	

* BENGALI MONTHS:

01 BAISHAK	05 BADHRA	09 POUSH
02 JAISTHA	06 ASHWIN	10 MAGH
03 ASHAR	07 KARTIK	11 FALGUN
04 SRABAN	08 AGRAHAYAN	12 CHOITRA

** ENGLISH MONTHS:

01 JANUARY	05 MAY	09 SEPTEMBER
02 FEBRUARY	06 JUNE	10 OCTOBER
03 MARCH	07 JULY	11 NOVEMBER
04 APRIL	08 AUGUST	12 DECEMBER

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
117	Do you usually watch television at least once a week?	YES.....1 NO.....2	
118	What is your religion?	ISLAM.....1 HINDUISM.....2 BUDDHISM.....3 CHRISTIANITY.....4 OTHER_____5 (SPECIFY)	
119	Are you currently working?	YES.....1 NO.....2	
120	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
121	CHECK 120: WORKS IN AGRICULTURE ☐ ↓	DOES NOT WORK IN AGRICULTURE ☐ UNEMPLOYED ☐	→123 →201
122	Do you work mainly on your own land or family land, or do you rent land, or work on someone else's land?	OWN/FAMILY LAND.....1 RENTED LAND.....2 SOMEONE ELSE'S LAND.....3	
123	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER.....1 FOR SOMEONE ELSE.....2 SELF-EMPLOYED.....3	
124	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR.....1 ONLY SOME TIMES (SEASONAL).....2 ONCE IN A WHILE.....3	
125	Do you earn cash for this work? PROBE: Do you make money for working?	YES.....1 NO.....2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about your childern. I am interested only in the children that are biologically yours. Have you ever had children?	YES.....1 NO.....2	→206
202	Do you have any sons or daughters 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 ENTER '00'.	SONS AT HOME..... [ ][ ] DAUGHTERS AT HOME..... [ ][ ]	
204	Do you have any sons or daughters who 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, ENTER '00'.	SONS ELSEWHERE..... [ ][ ] DAUGHTERS ELSEWHERE..... [ ][ ]	
206	Have you ever had a son or daughter who was born alive but later died?	YES.....1 NO.....2	→208
207	In all, how many boys have died? And how many girls have died? IF NONE ENTER '00'.	BOYS DEAD..... [ ][ ] GIRLS DEAD..... [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE ENTER '00'.	TOTAL..... [ ][ ]	
209	CHECK 207: Just to make sure that I have this right: you have TOTAL ____ children born alive during your life. Is that correct? YES [ ] NO [ ] → PROBE AND CORRECT 201-208 AS NECESSARY		
210	CHECK 208: HAS HAD CHILDREN [ ] HAS NEVER HAD CHILDREN (NONE) [ ]		→301
210A	In what month and year was your last child born?	BENGALI.....1 MONTH..... [ ][ ] YEAR..... [1][3][ ][ ] ENGLISH.....2 MONTH..... [ ][ ] YEAR..... [1][9][ ][ ]	
210B	CHECK 210A: LAST CHILD BORN SINCE BAISHAK 1398 (APRIL 1991) [ ] BORN BEFORE BAISHAK 1398 (APRIL 1991) [ ]		→301
211	When you were expecting your lastborn child, did you want to have the child 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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
212	When one of your children is sick with diarrhea, what signs of illness would tell you that he or she should be taken to a health facility or health worker? CIRCLE ALL MENTIONED.	REPEATED WATERY STOOLS.....A ANY WATERY STOOLS.....B REPEATED VOMITING.....C ANY VOMITING.....D BLOOD IN STOOLS.....E FEVER.....F MARKED THIRST.....G NOT EATING/DRINKING WELL.....H GETTING SICKER/VERY SICK.....I NOT GETTING BETTER.....J OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
213	When one of your children is sick with a cough, what signs of illness would tell you that he or she should be taken to a health facility or health worker? CIRCLE ALL MENTIONED.	RAPID BREATHING.....A DIFFICULT BREATHING.....B NOISY BREATHING.....C FEVER.....D UNABLE TO DRINK.....E NOT EATING/DRINKING WELL.....F GETTING SICKER/VERY SICK.....G NOT GETTING BETTER.....H OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
214A	Do you have any child born since Baishak 1398 (April 1991) who is still alive?	YES.....1 NO.....2	→301
214B	What is the name of your child under age 5?	_____ (NAME)	
215A	Has (NAME) ever been sick?	YES.....1 NO.....2	→301
215B	Have your or your wife ever taken (NAME) to a health facility or health worker or any other place/person for treatment, when he/she was sick?	YES.....1 NO.....2 DOES NOT KNOW.....8	→218 →218
216	The last time (NAME) was taken for treatment, what was his/her illness?	DIARRHEA.....A FEVER.....B COUGH.....C SKIN DISEASE.....D LOSS OF APPETITE.....E OTHER_____X (SPECIFY) CANNOT RECALL.....Z	
217	Who took (NAME) for treatment the last time, yourself or your wife or somebody else?	HIMSELF.....1 HIS WIFE.....2 BOTH.....3 OTHER PERSON_____6 (SPECIFY) CANNOT RECALL.....8	
218	Did you ever bring/buy any medicine for (NAME)?	YES.....1 NO.....2	→301
219	Who bought/brought the medicine?	HIMSELF.....1 HIS WIFE.....2 BOTH.....3 OTHER PERSON_____6 (SPECIFY) CANNOT RECALL.....8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
220	Who gave the medicine to the child, yourself or your wife?	HIMSELF.....1 HIS WIFE.....2 BOTH.....3 OTHER PERSON_____6 (SPECIFY) CANNOT RECALL.....8	
221	Where did you get the medicine?	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 MEDICAL PRIVATE SECTOR PRIVATE CLINIC/DOCTOR.....21 TRADITIONAL DOCTOR.....22 PHARMACY.....23 OTHER_____96 (SPECIFY) DOES NOT KNOW.....98	

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.
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?	302 Have you ever heard of (METHOD)?			303 Have you ever used (METHOD)?
		SPONTANEOUS YES	PROBED YES	NO	
01	PILL, MAYA Women can take a pill every day.	1	2	3	YES.....1 NO.....2
02	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	1	2	3	YES.....1 NO.....2
03	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
04	IMPLANT, NORPLANT 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
05	CONDOM, RAJA Men can put a rubber sheath on their penis during sexual intercourse.	1	2	3	YES.....1 NO.....2
06	FEMALE STERILIZATION, TUBAL LIGATION, TL Women can have an operation to avoid having any more children.	1	2	3	Has your wife had an operation to avoid having any more children? YES.....1 NO.....2
07	MALE STERILIZATION, VASECTOMY Men 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
08	MENSTRUAL REGULATION, MR When a woman's menstrual period does not come on time, she can go to a health centre or to the FWV and have a tube put in her for a short while to bring her period.	1	2	3	YES.....1 NO.....2
09	SAFE PERIOD, COUNTING DAYS, CALENDAR RHYTHM METHOD Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to get pregnant.	1	2	3	YES.....1 NO.....2
10	WITHDRAWAL Men can be careful and pull out before climax.	1	2	3	YES.....1 NO.....2
11	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	1 _____ (SPECIFY) _____ (SPECIFY)		3	YES.....1 NO.....2 YES.....1 NO.....2

304 CHECK 303:

NOT A SINGLE "YES" (NEVER USED) ☐ ↓

AT LEAST ONE "YES" (EVER USED) ☐ → SKIP TO 308

M-7

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
305	Have you or your wife ever used anything or tried in any way to delay or avoid getting pregnant?	YES.....1 NO.....2	→331
307	What have you used or done? CORRECT 303-305 (AND 302 IF NECESSARY).		
308	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?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 MENSTRUAL REGULATION.....08 SAFE PERIOD, COUNTING DAYS.....09 WITHDRAWAL.....10 OTHER_____96 (SPECIFY)	
309	How many living children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN..... [ ][ ]	
310	CHECK 303: MAN NOT STERILIZED [ ] ✓ MAN STERILIZED [ ]		→314A
313	Are you or your wife currently doing something or using any method to delay or avoid getting pregnant?	YES.....1 NO.....2	→331
314 314A	Which method are you using? CIRCLE '07' FOR MALE STERILIZATION.	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 MENSTRUAL REGULATION.....08 SAFE PERIOD, COUNTING DAYS.....09 WITHDRAWAL.....10 OTHER_____96 (SPECIFY)	→328 →318 →318 →328 →330A
317C	Please show me the package of condoms that you are using.	PACKAGE SEEN.....1 BRAND NAME_____ [ ][ ] PACKAGE NOT SEEN.....2	→317F
317D	Why can't you show me the package of condoms that you are using?	WIFE KEEPS.....1 RAN OUT.....2 OTHER_____6 (SPECIFY)	
317E	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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
317F	How much did the condom you last used cost?	COST..... [ ][ ] PARTNER OBTAINED.....95 FREE.....96 DOES NOT KNOW.....98	
317G	Do you use a condom every time that you have sexual intercourse or only sometimes?	EVERY TIME.....1 ONLY SOMETIMES.....2	
317H	How many times have you used condoms during the last one month?	NUMBER OF TIMES..... [ ][ ]	→328
318	Where did the sterilization take place? _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 MEDICAL PRIVATE SECTOR PRIVATE CLINIC/DOCTOR.....21 TRADITIONAL DOCTOR.....22 OTHER _____96 (SPECIFY) DOES NOT KNOW..... 98	
319	Do you regret that (you/your wife) had the operation not to have any more children?	YES.....1 NO.....2	→321
320	Why do you regret it?	RESPONDENT WANTS ANOTHER CHILD.01 PARTNER WANTS ANOTHER CHILD....02 SIDE EFFECTS.....03 CHILD DIED.....04 OTHER REASON_____96	
321	In what month and year was the sterilization operation performed? USE CODES BELOW FOR MONTHS.	BENGALI MONTH *.....1 [ ][ ] YEAR..... [1][ ][ ][ ] ENGLISH MONTH**.....2 [ ][ ] YEAR..... [1][9][ ][ ]	
321A	How much did the operation cost you?	COST..... [ ][ ][ ][ ] FREE.....9996 DOES NOT KNOW.....9998	→329A
328	Where did you obtain (METHOD) the last time? IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE CLINIC.....14 MEDICAL PRIVATE SECTOR PRIVATE CLINIC/DOCTOR.....21 TRADITIONAL DOCTOR.....22 PHARMACY.....23 OTHER PRIVATE SECTOR SHOP.....31 FRIENDS/RELATIVES.....32 FIELDWORKER, FWA.....41 NGO CLINIC.....42 OTHER _____96 DOES NOT KNOW..... 98	→329

* BENGALI MONTHS:

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** ENGLISH MONTHS:

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
328A	CHECK 314: USING PILLS OR CONDOMS ☐ ▼ USING ANOTHER METHOD ☐		→329
328B	Who obtained the (pills/condoms) the last time you got them?	RESPONDENT.....1 WIFE.....2 SON/DAUGHTER.....3 OTHER RELATIVE.....4 OTHER_____6 (SPECIFY)	→329
328C	At the place where you got your method the last time, did anyone there ever tell you about side effects or other problems you might have using this method?	YES.....1 NO.....2 CANNOT REMEMBER.....8	
328D	Did anyone there ever tell you about other methods that you might use?	YES.....1 NO.....2 CANNOT REMEMBER.....8	
329	Do you know another place where you could have obtained (CURRENT METHOD) the last time?	YES.....1 NO.....2	→330A
329A	At the time of the sterilization operation, did you know another place where you could have received the operation?		
330	People select the place where they get family planning services for various reasons. What was the main reason you went to (NAME OF PLACE IN Q.328 OR Q.318) instead of the other place you know about? RECORD RESPONSE AND CIRCLE CODE. _____	ACCESS-RELATED REASONS CLOSER TO HOME.....11 CLOSER TO MARKET/WORK.....12 AVAILABILITY OF TRANSPORT....13 SERVICE-RELATED REASONS STAFF MORE COMPETENT/ FRIENDLY.....21 CLEANER FACILITY.....22 OFFERS MORE PRIVACY.....23 SHORTER WAITING TIME.....24 LONGER HRS. OF OPERATION.....25 USE OTHER SERVICES AT THE FACILITY.....26 LOWER COST/CHEAPER.....31 WANTED ANONYMITY.....41 WORKER SUPPLIED AT HOME.....51 METHOD NOT AVAILABLE ELSEWHERE.61 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
330A	What is the reason you decided to use (CURRENT METHOD) rather than some other method of family planning? Any other reason? CIRCLE ALL MENTIONED.	FAMILY PLAN. WORKER RECOMMENDED.A FRIEND/RELATIVE RECOMMENDED.....B SIDE EFFECTS OF OTHER METHODS...C METHOD EASY TO USE.....D ACCESS/AVAILABILITY.....E COST.....F WANTED PERMANENT METHOD.....G HUSBAND PREFERRED.....H WANTED MORE EFFECTIVE METHOD....I FIELDWORKER CAME TO HOUSE.....J OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
330B	When a couple is making a decision, sometimes the husband has more influence, sometimes the wife has more influence and sometimes other people have more influence In your family, who had the most influence in deciding to use family planning the first time you used a method?	RESPONDENT HAD MORE INFLUENCE...1 WIFE HAD MORE INFLUENCE.....2 BOTH, HUSBAND AND WIFE EQUAL....3 OTHER RELATIVE.....4 OTHER_____6	→334

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
331	What is the main reason you are not using a method of contraception to avoid pregnancy?	FERTILITY-RELATED REASONS NOT HAVING SEX.....21 INFREQUENT SEX.....22 MENOPAUSAL/HYSTERECTOMY.....23 SUBFECUND/INFECUND.....24 POSTPARTUM/BREASTFEEDING.....25 WANTS (MORE) CHILDREN.....26 PREGNANT.....27 OPPOSITION TO USE RESPONDENT OPPOSED.....31 WIFE OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 OTHER_____ 96 (SPECIFY) DOES NOT KNOW.....98	
332	Do you know where you can obtain a method of family planning?	YES.....1 NO.....2	→334
333	Where is that? _____ (NAME OF PLACE) IF HE SAYS MORE THAN ONE PLACE, ASK FOR THE PLACE HE WOULD MOST LIKELY USE.	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE/EPI CLINIC.....14 MEDICAL PRIVATE SECTOR PRIVATE CLINIC/DOCTOR.....21 TRADITIONAL DOCTOR.....22 PHARMACY.....23 OTHER PRIVATE SECTOR SHOP.....31 FRIENDS/RELATIVES.....32 FIELDWORKER, FWA.....41 NGO CLINIC.....42 OTHER _____96 (SPECIFY) DOES NOT KNOW..... 98	
334	CHECK 328 AND 333: SATELLITE CLINIC/ EPI SITE NOT MENTIONED ☐ ↓ SATELLITE/EPI CLINIC MENTIONED ☐		→336
335	In some places, there is a clinic set up for a day or part of a day in someone's house or in a school. During the past 3 months, was there any such clinic in this village/mohalla?	YES.....1 NO.....2 DOES NOT KNOW.....8	→338 →338
336	Did you ever visit such a temporary health clinic?	YES.....1 NO.....2	→338
337	What services did they provide? CIRCLE ALL MENTIONED.	FAMILY PLANNING METHODS.....A IMMUNIZATION.....B CHILD GROWTH MONITORING.....C T.T. FOR PREGNANT WOMEN.....D ANTENATAL CARE.....E OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
338	Have you ever visited a health facility/centre with your wife or your children?	YES.....1 NO.....2	→351

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
339	For what services did you go there? CIRCLE ALL MENTIONED.	FAMILY PLANNING METHODS.....A IMMUNIZATION.....B CHILD GROWTH MONITORING.....C T.T. FOR PREGNANT WOMEN.....D ANTENATAL CARE.....E OTHER_____X (SPECIFY) DOES NOT KNOW.....Z	
351	Have you ever recommended family planning to a friend, relative, or anyone else?	YES.....1 NO.....2	
352	Do you think that women should have a medical check up when they are pregnant, even if they are not sick?	YES.....1 NO.....2 DOES NOT KNOW.....8	
353	CHECK 302 AND 303: HEARD ABOUT MALE STER. BUT DID NOT USE ☐ ▼	OTHER ☐	→357
354A	From where did you hear about male sterilization?	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE/EPI CLINIC.....14 MEDICAL PRIVATE SECTOR PRIVATE CLINIC/DOCTOR.....21 TRADITIONAL DOCTOR.....22 PHARMACY.....23 OTHER PRIVATE SECTOR SHOP.....31 FRIENDS/RELATIVES.....32 FIELDWORKER, FWA.....41 NGO CLINIC.....42 OTHER _____96 (SPECIFY) DOES NOT KNOW..... 98	
354B	Do you know of a place where you can obtain male sterilization?	YES.....1 NO.....2	
355	Has any fieldworker ever discussed with you about male sterilization?	YES.....1 NO.....2	
356	Some people say that vasectomy makes a man weak, while others say that it has no effect. What do you think?	MAKES HIM WEAK.....1 NO EFFECT.....2 DOES NOT KNOW.....8	
357	CHECK 208: HAS LIVING CHILD(REN) ☐ ▼	HAS NO LIVING CHILD(REN) ☐	→401
358	When a couple is making a decision, sometimes the husband has more influence, sometimes the wife has more influence and sometimes other people have more influence In your family, who has the most influence in deciding about the health care of children?	RESPONDENT HAD MORE INFLUENCE...1 WIFE HAD MORE INFLUENCE.....2 BOTH, HUSBAND AND WIFE EQUAL....3 OTHER RELATIVE.....4 OTHER_____6	

SECTION 4. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	WRITE THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR HIS WIFE. IF WIFE DOES NOT LIVE IN THE HOUSEHOLD, WRITE '00'.	[ ][ ]	
401A	Have you been married only once or more than once?	ONCE.....1 MORE THAN ONCE.....2	
402	In what month and year did you start living with your (first) wife?	BENGALI.....1 MONTH *..... [ ][ ] YEAR..... [1][3][ ][ ]	→501
		ENGLISH.....2 MONTH**..... [ ][ ] YEAR..... [1][9][ ][ ]	→501
403	How old were you when you started living with her?	AGE..... [ ][ ] DOES NOT KNOW AGE.....98	

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SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 314: NEITHER STERILIZED ☐ ✓ SHE OR HE STERILIZED ☐		→514
502	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?	HAVE A (ANOTHER) CHILD.....1 NO MORE/NONE.....2 SAYS WIFE CAN'T GET PREGNANT....3 UNDECIDED OR DK.....8	→506
503	How long would you like to wait from now before the birth of a (another) child?	MONTHS.....1 ☐☐ YEARS.....2 ☐☐ SOON/NOW.....995 OTHER _____ 996 (SPECIFY) DK.....998	
506	CHECK 313: USING A METHOD? NOT ASKED ☐ ✓ NOT CURRENTLY USING ☐ ✓ CURRENTLY USING ☐		→514
507	Do you think you will use a method to delay or avoid pregnancy within the next 12 months?	YES.....1 NO.....2 DK.....8	→509
508	Do you intend to use a method at any time in the future?	YES.....1 NO.....2 DK.....8	→511 →511
509	When you use a method, which method would you prefer to use?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANT.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 MENSTRUAL REGULATION.....08 CALENDAR, COUNTING DAYS.....09 WITHDRAWAL.....10 OTHER _____ 96 (SPECIFY) UNSURE.....98	→514
509A	Where can you get (METHOD MENTIONED IN 509)? _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL/MEDICAL COLLEGE.....11 FAMILY WELFARE CENTRE.....12 THANA HEALTH COMPLEX.....13 SATELLITE CLINIC.....14 MEDICAL PRIVATE SECTOR TRADITIONAL DOCTOR.....21 QUALIFIED DOCTOR.....22 PHARMACY.....23 OTHER PRIVATE SECTOR SHOP.....31 FRIENDS/RELATIVES.....32 FIELDWORKER, FWA.....41 NGO CLINIC.....42 OTHER _____ 96 (SPECIFY) DOES NOT KNOW..... 98	→514

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
511	What is the main reason you do not intend to use a method?	FERTILITY-RELATED REASONS INFREQUENT SEX.....22 MENOPAUSAL/HYSTERECTOMY.....23 SUBFECUND/INFECUND.....24 WANTS MORE CHILDREN.....26 OPPOSITION TO USE RESPONDENT OPPOSED.....31 WIFE OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE KNOWS NO METHOD.....41 KNOWS NO SOURCE.....42 METHOD-RELATED REASONS HEALTH CONCERNS.....51 FEAR OF SIDE EFFECTS.....52 LACK OF ACCESS/TOO FAR.....53 COST TOO MUCH.....54 INCONVENIENT TO USE.....55 INTERFERES WITH BODY'S NORMAL PROCESSES.....56 OTHER_____ 96 (SPECIFY) DON'T KNOW.....98	
514	Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE.....1 DISAPPROVE.....2 NO OPINION.....3	
516	In the last month, have you heard or seen a message about family planning on: the radio? television? newspaper or magazine? a poster or billboard?	YES NO RADIO.....1 2 TELEVISION.....1 2 NEWSPAPER/MAGAZINE.....1 2 POSTER/BILLBOARD.....1 2	
518	In the last few months have you discussed family planning with your friends, neighbors, or relatives?	YES.....1 NO.....2	→521
519	With whom? Anyone else? RECORD ALL MENTIONED.	WIFE.....A MOTHER.....B FATHER.....C SISTER(S)/SISTERS-IN-LAW.....D BROTHER(S)/BROTHERS-IN-LAW.....E DAUGHTER.....F MOTHER-IN-LAW.....G FATHER-IN-LAW.....H FRIENDS/NEIGHBORS.....I OTHER_____ X (SPECIFY)	
521	Spouses/partners do not always agree on everything. Now I want to ask you about your wife's views on family planning. Do you think that your wife approves or disapproves of couples using a method to avoid pregnancy?	APPROVES.....1 DISAPPROVES.....2 DON'T KNOW.....8	
522	How often have you talked to your wife about family planning in the past year?	NEVER.....1 ONCE OR TWICE.....2 MORE OFTEN.....3 SOMETIMES.....4	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
523	Do you think your wife wants the same number of children that you want, or does she want more or fewer than you want?	SAME NUMBER.....1 MORE CHILDREN.....2 FEWER CHILDREN.....3 DON'T KNOW.....8	
529	CHECK 216: HAS LIVING CHILD(REN) ☐ → If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILD(REN) ☐ → If you could choose exactly the number of children to have in your whole life, how many would that be? RECORD SINGLE NUMBER OR OTHER ANSWER.	NUMBER..... ☐☐ OTHER ANSWER_____96 (SPECIFY)	
530	How many of these would you like to be boys and how many would you like to be girls?	BOYS..... ☐☐ GIRLS..... ☐☐ EITHER..... ☐☐ UP TO GOD.....95 OTHER_____96 (SPECIFY)	

SECTION 6. AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you ever heard of an illness called AIDS?	YES.....1 NO.....2	→609
602	From which sources of information have you learned most about AIDS? Any other sources? RECORD ALL MENTIONED.	RADIO.....A TV.....B NEWSPAPERS/MAGAZINES.....C PAMPHLETS/POSTERS.....D HEALTH WORKERS.....E MOSQUES/CHURCHES.....F SCHOOLS/TEACHERS.....G COMMUNITY MEETINGS.....H FRIENDS/RELATIVES.....I WORK PLACE.....J OTHER_____ X (SPECIFY)	
603	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	→607
604	What can a person do? Any other ways? RECORD ALL MENTIONED.	SAFE SEX.....A ABSTAIN FROM SEX.....B USE CONDOMS.....C HAVE ONLY ONE SEX PARTNER.....D AVOID SEX WITH PROSTITUTES.....E USE STERILE SYRINGES/BUY SYRNGS.F AVOID BLOOD TRANSFUSIONS.....G AVOID KISSING.....H AVOID MOSQUITO BITES.....I AVOID TRADITIONAL DOCTORS.....J OTHER_____ W (SPECIFY) OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
605	CHECK 604: MENTIONED SAFE SEX ☐ ↓ DID NOT MENTION SAFE SEX ☐		→607
606	What does "safe sex" mean to you?*	ABSTAIN FROM SEX.....B USE CONDOMS.....C HAVE ONLY ONE SEX PARTNER.....D AVOID SEX WITH PROSTITUTES.....E AVOID SEX WITH HOMOSEXUALS.....F OTHER_____ X (SPECIFY) DON'T KNOW.....Z	
607	Is it possible for a healthy-looking person to have the AIDS virus?	YES.....1 NO.....2 DON'T KNOW.....8	
608	Do you think that persons with AIDS almost never die from the disease, sometimes die, or almost always die from the disease?	ALMOST NEVER.....1 SOMETIMES.....2 ALMOST ALWAYS.....3 DON'T KNOW.....8	
609	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

_____

_____

_____

_____

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 1996-97 21/11/96
COMMUNITY QUESTIONNAIRE

DIVISION _____

DISTRICT _____

UPAZILA/THANA _____

UNION _____

VILLAGE/MOHALLA/BLOCK _____

CLUSTER NUMBER.....

DHAKA/CHITTAGONG=1, SMALL CITY=2, TOWN=3, VILLAGE=4..

INTERVIEWER NAME _____

DATE QUESTIONNAIRE IS COMPLETED..... DAY

MONTH**

YEAR 1 9 9

INFORMANTS WHO PROVIDED INFORMATION:
(WRITE POSITION, E.G., VILLAGE LEADER, FWA)

1. _____

2. _____

3. _____

4. _____

5. _____

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY
NAME				
DATE				

** MONTH:

01 JANUARY	05 MAY	09 SEPTEMBER
02 FEBRUARY	06 JUNE	10 OCTOBER
03 MARCH	07 JULY	11 NOVEMBER
04 APRIL	08 AUGUST	12 DECEMBER

NO.	QUESTIONS	CODING CATEGORIES	SKIP TO
1	How far is it from here to the thana headquarters in miles? IF LESS THAN 1 MILE, WRITE '00'.IF 97 MILES OR MORE, WRITE 97 IF UNKNOWN RECORD '98'(BUT TRY TO GET AN ESTIMATE).	MILES..... [ ][ ]	
2	How far is it from here to the district headquarters in miles IF LESS THAN 1 MILE, WRITE '00'.IF 97 MILES OR MORE, WRITE 97 IF UNKNOWN RECORD '98'(BUT TRY TO GET AN ESTIMATE).	MILES..... [ ][ ]	
3	In this village/mohalla, are there any mother's clubs or ladies associations?	YES.....1 NO.....2	
4	In this village/mohalla, is there a Grameen Bank?	YES.....1 NO.....2	
5	In this village/mohalla, are there any cottage industries of BSIC?	YES.....1 NO.....2	
6	In this village/mohalla, is there any cooperative society?	YES.....1 NO.....2	
7	In this village/mohalla, are there any NGOs having income-generating activities?	YES.....1 NO.....2	
8	In this village/mohalla, is there a television for the community?	YES.....1 NO.....2	
9	Please tell me if the following things are in this village/mohalla. Is there a Madrasha here? IF YES, WRITE "00". IF NO, ASK: How far is it to the nearest Madrasha? IF DON'T KNOW, PUT 98. Is there a primary school here in the village/mohalla? Is there a high school here? Is there a post office here? Is there a daily market here? Is there a weekly market here? Is there a cinema here? Is there a rural dispensary (RD) here? Is there a pharmacy here? Is there a government or NGO health clinic here? NOTE: FOR EACH, IF IN VILLAGE/MOHALLA, WRITE "00". IF NOT IN VILLAGE/MOHALLA, ASK HOW FAR. WRITE IN MILES. IF DO NOT KNOW, WRITE "98". IF MORE THAN 97, WRITE "97"	MILES MADRASHA SCHOOL..... [ ][ ] PRIMARY SCHOOL..... [ ][ ] HIGH SCHOOL..... [ ][ ] POST OFFICE..... [ ][ ] DAILY MARKET..... [ ][ ] WEEKLY MARKET..... [ ][ ] CINEMA..... [ ][ ] RD..... [ ][ ] PHARMACY..... [ ][ ] HEALTH CLINIC..... [ ][ ]	

II. COMMUNITY-BASED SERVICES

NO.	QUESTIONS	CODING CATEGORIES	SKIP TO
10	Is there a family planning fieldworker who visits this village/mohalla? PROBE: Does a woman come to visit houses here to talk about family planning?	YES.....1 NO.....2 DOES NOT KNOW.....8	 → 16 → 16
11	What is the name of the family planning fieldworker?	_____ _____ (NAME OF CBD WORKER)	
12	Is there another family planning fieldworker who visits this village/mohalla?	YES.....1 NO.....2 DOES NOT KNOW.....8	 → 14 → 14
13	What is her name?	_____ _____ (NAME OF CBD WORKER)	
16	Is there any health worker working in this village/mohalla? Is there any family planning worker who lives in this village/mohalla?	YES.....1 NO.....2 DOES NOT KNOW.....8 YES.....1 NO.....2 DOES NOT KNOW.....8	 → 18 → 18
18	Is there anyone in this village/mohalla who sells family planning methods from his or her house?	YES.....1 NO.....2 DOES NOT KNOW.....8	 → 19A → 19A
19	Which methods does he/she sell? CIRCLE ALL MENTIONED.	PILL.....A CONDOM.....B IUD.....C OTHER_____D (SPECIFY)	
19A	Is there any shop in this village/mohalla which sells family planning methods?	YES.....1 NO.....2 DOES NOT KNOW.....8	 → 20 → 20
19	Which methods does the shop sell? CIRCLE ALL MENTIONED.	PILL.....A CONDOM.....B IUD.....C OTHER_____D (SPECIFY)	
20	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. Is there a clinic like this held in this village/mohalla in the last 6 months?	YES.....1 NO.....2 DOES NOT KNOW.....8	→ 22
21	Is 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 have the clinic?	YES.....1 NO.....2 DOES NOT KNOW.....8 MILES..... [ ][ ]	 → 24 → 24

NO.	QUESTIONS	CODING CATEGORIES	SKIP TO
22	What services are available from this temporary clinic? CIRCLE ALL MENTIONED.	FAMILY PLANNING PILL.....A CONDOM.....B IUD INSERTIONS.....C FAMILY PLANNING INJECTIONS.....D IMMUNIZATIONS.....E ORAL REHYDRATION PACKETS.....F VITAMIN A CAPSULES.....G WEIGHING CHILDREN.....H CHECKING PREGNANT WOMEN.....I TETANUS INJECTIONS.....J OTHER_____K (SPECIFY)	
23	How frequently are these temporary clinics held?	NO. OF TIMES PER MONTH.....1 [ ][ ] PER YEAR.....2 [ ][ ]	
24	How far away is the nearest Family Welfare Center?	MILES..... [ ][ ]	
25	How far away is the nearest hospital or thana health complex?	MILES..... [ ][ ]	