

Uzbekistan

Demographic and Health Survey 1996



Institute of Obstetrics and Gynecology
Ministry of Health of the Republic of Uzbekistan



Demographic and Health Surveys
Macro International Inc.

World Summit for Children Indicators: Uzbekistan 1996

| | | Value |
|---|--|-----------------------------|
| BASIC INDICATORS | | |
| Childhood mortality | Infant mortality rate | 49 per 1,000 |
| | Under-five mortality rate | 59 per 1,000 |
| Maternal mortality | Maternal mortality ratio | 39 per 100,000 ¹ |
| Childhood undernutrition | Percent stunted (of children under 3 years) | 31.3 |
| | Percent wasted (of children under 3 years) | 11.6 |
| | Percent underweight (of children under 3 years) | 18.8 |
| Clean water supply | Percent of households within 15 minutes of a safe water supply ² | 84.8 |
| Sanitary excreta disposal | Percent of households with flush toilets or VIP latrines | 22.6 |
| Basic education | Percent of women 15-49 with completed primary education | 99.2 |
| | Percent of men 15-49 with completed primary education | 99.5 |
| | Percent of girls 6-12 attending school | 78.6 |
| | Percent of boys 6-12 attending school | 75.6 |
| | Percent of women 15-49 who are literate | 99.8 |
| Children in especially difficult situations | Percent of children who are orphans (both parents dead) | 0.1 |
| | Percent of children who do not live with their natural mother | 1.7 |
| | Percent of children who live in single adult households | 1.9 |
| SUPPORTING INDICATORS | | |
| Women's Health | | |
| Birth spacing | Percent of births within 24 months of a previous birth ³ | 29.5 |
| Safe motherhood | Percent of births with medical prenatal care | 95.0 |
| | Percent of births with prenatal care in first trimester | 72.7 |
| | Percent of births with medical assistance at delivery | 97.5 |
| | Percent of births in a medical facility | 94.1 |
| | Percent of births at high risk | 42.7 |
| Family planning | Contraceptive prevalence rate (any method, married women) | 55.6 |
| | Percent of currently married women with an unmet demand for family planning | 13.7 |
| | Percent of currently married women with an unmet need for family planning to avoid a high-risk birth | 10.7 |
| Nutrition | | |
| Maternal nutrition | Percent of mothers with low BMI | 7.7 |
| Low birth weight | Percent of births at low birth weight (of those reporting numeric weight) | 4.3 |
| Breastfeeding | Percent of children under 4 months who are exclusively breastfed | 4.0 |
| Iodine | Percent of households with iodised salt | 16.7 |
| Child Health | | |
| Diarrhea control | Percent of children with diarrhea in preceding 2 weeks who received oral rehydration therapy (sugar-salt-water solution) | 37.1 |
| Acute respiratory infection | Percent of children with acute respiratory infection in preceding 2 weeks who were seen by medical personnel | 87.1 |

¹ Data from the Ministry of Health

² Piped, well, and bottled water

³ First births are excluded.

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Institute of Obstetrics and Gynecology
Ministry of Health of the Republic of Uzbekistan
Tashkent City, Uzbekistan

Macro International Inc.
Calverton, Maryland USA

September 1997

This report summarizes the findings of the 1996 Uzbekistan Demographic and Health Survey (UDHS) conducted by the Institute of Obstetrics and Gynecology, Ministry of Health of the Republic of Uzbekistan. Macro International Inc. provided technical assistance. Funding was provided by the U.S. Agency for International Development.

The UDHS is part of the worldwide Demographic and Health Surveys (DHS) program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information about the Uzbekistan survey may be obtained from the Institute of Obstetrics and Gynecology, 132 A H. Abdullaev Ave., Tashkent City, Uzbekistan 700124 (Telephone: (7312) 637830; Fax: (7312) 638483). Additional information about the DHS program may be obtained by writing to: DHS, Macro International Inc., 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (Telephone: 301-572-0200; Fax: 301-572-0999).

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SUMMARY OF FINDINGS

Shavkat I. Karimov

The 1996 Uzbekistan Demographic and Health Survey (UDHS) is a nationally representative survey of 4,415 women age 15-49. Fieldwork was conducted from June to October 1996. The UDHS was sponsored by the Ministry of Health (MOH), and was funded by the United States Agency for International Development. The Institute of Obstetrics and Gynecology implemented the survey with technical assistance from the Demographic and Health Surveys (DHS) program.

PURPOSE

The purpose of the UDHS was to provide data to the MOH on factors which determine the health status of women and children such as fertility, contraception, induced abortion, maternal care, infant mortality, and nutritional status.

Some statistics presented in this report are currently available to the MOH from other sources. For example, the MOH collects and regularly publishes information on fertility, contraception, induced abortion and infant mortality. However, the survey presents information on these indices in a manner which is not currently available, i.e., by population subgroups such as those defined by age, marital duration, education, ethnicity. Additionally, the survey provides statistics on some issues not previously available in Uzbekistan: for example, breastfeeding practices and anemia status of women and children. Thus, existing MOH data and the UDHS data are complementary. When considered together, they provide a more complete picture of the health conditions in Uzbekistan than was previously available.

FERTILITY

Fertility Rates. Survey results indicate a total fertility rate (TFR) for all of Uzbekistan of 3.3 children per woman. Fertility levels differ for different population groups. The TFR for women living in urban areas (2.7 children per woman) is substantially lower than for women living in rural areas (3.7). The TFR for Uzbeki women (3.5 children per woman) is higher than for women of other ethnicities (2.5). Among the regions of Uzbekistan, the TFR is lowest in Tashkent City (2.3 children per woman).

Time Trends. The UDHS data show that fertility has declined in Uzbekistan in recent years. For example, fertility among 25-29 year-olds has fallen by one-third over the past 20 years. The declining trend in fertility can be seen by comparing the completed family size of women near the end of their childbearing years with the current TFR. Completed family size among women 45-49 is 4.6 children which is one child more than the current TFR (3.3).

Birth Intervals. Overall, one-third of nonfirst births (30 percent) in Uzbekistan take place within 24 months of the previous birth. The median birth interval is 2.5 years.

Age at Onset of Childbearing. The median age at which women in Uzbekistan begin childbearing has been holding steady at about 21.5. Most women have their first birth while in their early twenties, although about one-quarter of women give birth before age 20.

One-half of married women in Uzbekistan (51 percent) do not want to have more children, and a large majority of women (75 percent) want either to delay their next birth by at least two years (24 percent) or to stop childbearing altogether. These are the women who are potentially in need of some method of family planning.

FAMILY PLANNING

Knowledge. Knowledge of contraceptive methods is high among women in Uzbekistan. Knowledge of at least one method is 89 percent. High levels of knowledge are the norm for women of all ages, all regions of the country, all educational levels, and all ethnicities. However, knowledge of sterilization was low; only 27 percent of women reported knowing of this method.

Ever Use. Among currently married women, 68 percent report having used a method of contraception at some time. The women most likely to have ever used a method of contraception are those age 30 and above.

Current Use. Overall, among currently married women, 56 percent report that they are currently using a contraceptive method. More than half (51 percent) are using a modern method of contraception and another 4 percent are using a traditional method. The IUD is by far the most commonly used method; almost half of currently married women (46 percent) are using the IUD. Other modern methods of contraception account for only a small amount of use among currently married women: pills and condoms (2 percent each), and injectables and female sterilization (1 percent each). Thus, the practice of family planning in Uzbekistan places high reliance on a single method, the IUD, although the pill, condom and injectables are widely known.

Source of Methods. The vast majority of women obtain their contraceptives through the public sector (98 percent): 55 percent from a government hospital, and 18 percent from a women's consulting center. The source of supply of the method depends on the method being used. For example, most women using IUDs obtain them at hospitals (58 percent) or women's consulting centers (19 percent). Government pharmacies supply 26 percent of pill users and 90 percent of condom users. Pill users also obtain supplies from women's consulting centers or polyclinics (24 percent). Private sector provision of contraceptives is a relatively new phenomenon in Uzbekistan. The survey found that private pharmacies accounted for only 3 percent of pill supplies. However, the private sector is expected to become increasingly important.

Fertility Preferences. A majority of women in Uzbekistan (51 percent) indicated that they desire no more children. Among women age 30 and above, the proportion that want no more children increases to 75 percent. Thus, many women come to the preference to stop childbearing at relatively young ages—when they have 20 or more potential years of childbearing ahead of them. For some of these women, the most appropriate method of contraception may be a long-acting method such as female sterilization. However, there is a deficiency of both knowledge and use of this method in Uzbekistan. In the interest of providing couples with a broad choice of safe and effective methods, information about this method and access to it should be made available so that informed choices about its suitability can be made by individual women and couples.

INDUCED ABORTION

Abortion Rates. From the UDHS data, the total abortion rate (TAR)—the number of abortions a woman will have in her lifetime based on the currently prevailing abortion rates—was calculated. For Uzbekistan, the TAR for the period from mid-1993 to mid-1996 is 0.7 abortions per woman. As expected, the TAR for Uzbekistan is substantially lower than recent estimates of the TAR for other areas of the former Soviet Union such as Kazakhstan (1.8), Romania (3.4 abortions per woman), and Yekaterinburg and Perm in Russia (2.3 and 2.8, respectively).

The TAR is higher in urban areas (1.0 abortions per woman) than in rural areas (0.5). The TAR in Tashkent City is 1.3 which is two to three times higher than in other regions of Uzbekistan. Additionally the TAR is substantially lower among ethnic Uzbek women (0.5) than among women of other ethnicities (1.0).

Time Trends. During the recent five-year period, the abortion rate in Uzbekistan has declined by 31 percent according to the UDHS data and by 43 percent according to the Ministry of Health data. Thus, the recourse to the practice of abortion is declining in Uzbekistan.

INFANT MORTALITY

In the UDHS, infant mortality data were collected based on the international definition of a live birth which, irrespective of the duration of pregnancy, is a birth that breathes or shows any sign of life (United Nations, 1992).

Mortality Rates. For the five-year period before the survey (i.e., approximately mid-1992 to mid-1996), infant mortality in Uzbekistan is estimated at 49 infant deaths per 1,000 births. The estimates of neonatal and postneonatal mortality are 23 and 26 per 1,000.

The MOH publishes infant mortality rates annually but the definition of a live birth used by the MOH differs from that used in the survey. As is the case in most of the republics of the former Soviet Union, a pregnancy that terminates at less than 28 weeks of gestation is considered premature and is classified as a late miscarriage even if signs of life are present at the time of delivery. Thus, some events classified as late miscarriages in the MOH system would be classified as live births and infant deaths according to the definitions used in the UDHS.

Time Trends. Over the period from 1986 to 1995, the MOH has reported a steady declining trend in the annual infant mortality rate from 46.3 to 26.0 per 1,000. The average of the annual rates for the 10-year period is 37 per 1,000. This corresponds to the UDHS rate for the same time period of 44 per 1,000. Thus, the rates of infant mortality based on MOH data are lower than the estimates derived from the survey by 16 percent, no doubt due in some part to definitional differences.

MATERNAL AND CHILD HEALTH

Uzbekistan has a well-developed health system with an extensive infrastructure of facilities that provide maternal care services. This system includes special delivery hospitals, the obstetrics and gynecology departments of general hospitals, women's consulting centers, and doctor's assistant/midwife posts (FAPs). There is an extensive network of FAPs throughout rural areas.

Delivery. Virtually all births in Uzbekistan (94 percent) are delivered at health facilities: 94 percent in delivery hospitals and less than 1 percent in either general hospitals or FAPs. Only 6 percent of births are delivered at home. Almost all births (98 percent) are delivered under the supervision of medically trained persons: 94 percent by a doctor and 4 percent by a nurse or midwife.

Antenatal Care. As expected, the survey data indicate that a high proportion of respondents (95 percent) receive antenatal care from professional health providers: the majority from a doctor (85 percent) and a significant proportion from a nurse or midwife (10 percent). The general pattern in Uzbekistan is that women seek antenatal care early and continue to receive care throughout their pregnancies. The median number of antenatal care visits reported by respondents is 8.

Immunization. Information on vaccination coverage was collected in the UDHS for all children under three years of age. In Uzbekistan, child health cards are maintained in the local health care facilities or day care centers rather than in the homes of respondents. The vaccination data were obtained from the health cards in the health facilities or day care centers.

In Uzbekistan, the percentage of children 12-23 months of age who have received all World Health Organization (WHO) recommended vaccinations is high (85 percent). BCG vaccination is usually given in delivery hospitals and was nearly universal (98 percent). Almost all children (100 percent) have received

the first doses of polio and DPT/DT. Coverage for the second doses of polio and DPT/DT is also nearly universal (98 percent). The third doses of polio and DPT/DT have been received by more than 94 percent of children. This represents a dropout rate of only 3 and 5 percent for the polio and DPT/DT vaccinations, respectively. A high proportion of children (92 percent) have received the measles vaccine.

NUTRITION

Breastfeeding. Breastfeeding is almost universal in Uzbekistan; 96 percent of children born in the three years preceding the survey are breastfed. Overall, 19 percent of children are breastfed within an hour of delivery and 40 percent within 24 hours of delivery. The median duration of breastfeeding is lengthy (17 months). However, durations of exclusive breastfeeding, as recommended by WHO, are short (0.4 months).

Supplementary feeding. Supplementary feeding starts early in Uzbekistan. At age 0-3 months, a significant proportion of breastfeeding children are given infant formula (12 percent) and powdered or evaporated milk (23 percent). By 4-7 months of age, 19 percent of breastfeeding children are given foods high in protein (meat, poultry, fish, and eggs) and 35 percent are given fruits or vegetables.

Nutritional Status. In the UDHS, the height and weight of children under three years of age were measured. These data are used to determine the proportion of children who are stunted (short for their age, a condition which may reflect chronic undernutrition) and the proportion who are wasted (underweight according to their height, a condition which may reflect an acute episode of undernutrition resulting from a recent illness).

In a well-nourished population of children, it is expected that about 2.3 percent of children will be measured as moderately or severely stunted or wasted. For all of Uzbekistan, the survey found that 31 percent of children are severely or moderately stunted and 12 percent are severely or moderately wasted.

PREVALENCE OF ANEMIA

Testing of women and children for anemia was one of the major efforts of the 1996 UDHS. Anemia has been considered a major public health problem in Uzbekistan for decades. Nevertheless, this was the first anemia study in Uzbekistan done on a national basis. The study involved hemoglobin (Hb) testing for anemia using the Hemocue system.

Women. Sixty percent of the women in Uzbekistan suffer from some degree of anemia. The great majority of these women have either mild (45 percent) or moderate anemia (14 percent). One percent have severe anemia.

Children. Sixty-one percent of children under the age of three suffer from some degree of anemia. Twenty-six percent have moderate anemia. One percent of children are severely anemic. More than half of the children (53 percent) living in region, which includes Karakalpakstan, are diagnosed as having moderate or severe anemia. In Tashkent City, the prevalence of moderate anemia among children is relatively low (7 percent), while no cases of severe anemia are diagnosed.

A certain relationship was observed between the prevalence of anemia among mothers and their children. Among children of mothers with moderate anemia, 3 percent have severe anemia and 38 percent have moderate anemia. The prevalence of moderate anemia among these children is more than twice as high as among children of non-anemic mothers.



UZBEKISTAN

KAZAKHSTAN

KYRGYZSTAN

TAJIKISTAN

AFGHANISTAN

Republic of
Karakalpakstan

Aral Sea

Navoiyskaya
Oblast

Khorezmskaya
Oblast

Bukharskaya
Oblast

Kashkadaryinskaya
Oblast

**TASHKENT
CITY**

Tashkentskaya
Oblast

Namanganskaya
Oblast

Andizhanskaya
Oblast

Aidarkul Lake

Syrdaryinskaya
Oblast

Ferganskaya
Oblast

Dzhizakskaya
Oblast
Samarkandskaya
Oblast

Surkhandaryinskaya
Oblast

АИХХ

CHAPTER 1

INTRODUCTION

Shavkat I. Karimov

1.1 Geography and Population

Located in the middle of Central Asia between the two major rivers of Amudarya and Syrdarya, the Republic of Uzbekistan is a region with favorable climatic and geographical conditions. The territory of Uzbekistan is 447,400 square kilometers. The country borders Kazakstan to the north, Kyrgyzstan and Tajikistan to the south and east, Afghanistan to the south, and Turkmenistan to the west.

Uzbekistan's landscape is a unique combination of plains and mountains. The western part of Uzbekistan consists of plains, Kizilkum deserts and lowland areas, such as Fergana Valley, Tashkent and the Hunger Steppe, and the Sanzaro-Nuratin, Samarkand, Kashkadarya and Surkhandarya lowlands. The mountains in Uzbekistan, which are branches of the West Tien-Shan and Gissaro-Alay ranges, cover about one-third of the country's territory and are located mainly in the south and southeast of Uzbekistan.

Uzbekistan consists of 12 administrative regions (*oblasts*) and the Autonomous Republic of Karakalpakstan. Each region is further broken down into administrative areas called *raions*. There are 157 *raions* in Uzbekistan.

With a population of 22.5 million, Uzbekistan is the third most populous country in the former Soviet Union after Russia and the Ukraine. Approximately 61 percent of the population resides in rural areas. The country is characterized by a high rate of population growth which is mainly due to the high birth rate (29.4 per 1,000 population) and relatively low death rate (6.6 per 1,000 population) (Goskompromnozstat, 1995). With an average annual population growth rate in excess of 2.5 percent, the population in Uzbekistan has increased by 12 million during the last three decades (Akhmedov, 1993). As a result of high fertility and population growth rates, Uzbekistan has a young population: 41 percent of the population are children under 15 years of age, while the population over 65 years of age is relatively small at less than 5 percent (Ministry of Health, 1995).

The population density of Uzbekistan is 47 persons per square kilometer. However, the population is unevenly distributed among the different regions. The population is mainly concentrated in the grasslands and in the industrialized urban areas. Five *oblasts* of Uzbekistan have population densities of more than 150 per square kilometer, while in areas such as Karakalpakstan and Navoi *oblast*, which consist mainly of deserts, the population density is very low at 8 and 6 per square kilometer, respectively (Akhmedov, 1993). The most industrially developed region of Uzbekistan, Tashkent *oblast*, has a population density of 278 per square kilometer. The capital of Uzbekistan, Tashkent City, with a population of more than 2 million, is the largest city in Central Asia.

Uzbekistan is a multinational country. According to the 1989 Population Census, people of more than 130 nationalities live in Uzbekistan. The majority of the population are Uzbeks, constituting more than 71 percent of the population. Other significant ethnic groups are Russians, Tajik, Kazaks and Tatars (Akhmedov, 1993). The Uzbek culture is influenced by the religion of Islam, and the language belongs to the Turkik group of languages. Family ties are strong, especially among Uzbeks living in rural areas, and this plays an important role in the formation of their values, attitudes, behavior, and goals.

1.2 History of Uzbekistan

People who lived in the territory of Uzbekistan in ancient times were mainly nomadic and involved in primitive agriculture and cattle breeding. Nevertheless, as early as the fifth and sixth centuries B.C., centralized states were established throughout the territory of Uzbekistan: Bactria (Southern Uzbekistan), Khorezm (Aral Sea Region), and Sogd (Zaravshan Valley and Kashkadarya Region). During that time, the large cities of Samarkand, Kyuzelgir and Kalagyr were built.

During the sixth century, the territory of Uzbekistan was conquered by Turkik tribes who introduced their language and culture. Arab invasions in the seventh and eighth centuries brought Islam, which unified many settled and seminomadic Turkik speaking tribes of Fergana Valley, Tashkent and Khorezm Regions and completed the formation of the Uzbek nation. The period between the ninth and 13th centuries is characterized as the epoch of renaissance in Uzbekistan. Trade, craftsmanship, construction, science and poetry became well developed.

In the beginning of the 13th century, Central Asia was invaded by Genghis Khan who initially destroyed the cities and then established his ruling dynasty which dominated Central Asia for several centuries. In 1370, Tamerlan (Timur), one of the Genghis Khan's descendants (Genghizid), came to power. He created an empire which became one of the most powerful forces in Asia. It extended from the Middle East to India and from Caucasus to Russia. Despite being brutal, Tamerlan promoted fine art and architecture. Such masterpieces of Uzbek architecture as Gur-Emir, Shaki-Zinda, and Biby-Khanym in the capital city of Samarkand were built during Tamerlan's reign. Tamerlan established Timurids dynasty which successfully ruled in many regions of Central Asia even after the collapse of his empire. One of the Timurids, Emir Ulugbek, became famous as a scientist-astronomist. He shaped the borders of his state, which eventually became the borders of Uzbekistan.

After the collapse of the Timurids dynasty in the 18th century, three states were established in the territory of Uzbekistan: Bukhara Emirate, Kokand Khanate and Khiva Khanate. In the second half of the 19th century, the Russian Empire established a protectorate over Khiva Khanate and Bukhara Emirate and incorporated Kokand Khanate as part of its Turkestan regional administrative unit. The Russian conquest played a positive role in cultural and economic development by breaking the region's economic isolation and introducing industries, technology and advanced culture.

The First Russian Revolution in 1905-1907 had a tremendous political impact in the Turkestan Region initiating a nationalistic movement which later became a major force against Russian Tzarism in the area. After the 1917 Bolshevik Revolution, several autonomous states were established in Central Asia. In 1924, the Soviet Government granted Uzbekistan the status of Soviet Socialist Republic incorporating the Republic to the Soviet Union. This event became a landmark in the economic and social reconstruction of Uzbekistan and led to industrial development, eradication of illiteracy, the granting of women's rights, and the introduction of a Western health care system. The system of compulsory secondary education was introduced during the Soviet era and this created a skilled labor force which became the keystone of the Republic's development.

During World War II, many industries were evacuated from Russia and other European parts of the former Soviet Union and brought to Uzbekistan. These industries became the principal basis for the postwar economic development of Uzbekistan. As a Soviet republic, Uzbekistan for many years relied on a planned economic system, which was tightly controlled, but on the other hand, generously supported by the central Soviet Government.

With the collapse of the former Soviet Union in 1991, Uzbekistan was granted independence and became a sovereign republic. The country opened its doors to the world community and became a member of the United Nations as well as other international organizations. Under transition from a centrally planned economy to a market economy, Uzbekistan is now experiencing rapid social and economic changes. The process to date has produced disruption in most sectors of the economy, causing economic decline, inflation, and instability of the new national currency. In order to stabilize the economy, the Government of Uzbekistan has taken a number of steps to restructure the economy by attracting foreign investments and rebuilding economic relations with the other former Soviet republics.

1.3 Economy

Uzbekistan is self-sufficient in terms of agricultural production. However, during the Soviet era, cotton production became the number one priority in order to meet the strategic objectives of the former Soviet Government. In some areas of Uzbekistan, this policy required that 85-90 percent of the arable land be devoted to cotton production (Akhmedov, 1993). This has had a tremendously negative impact on the other sectors of agriculture. Currently, the Government of Uzbekistan is reconsidering this policy and is promoting the development of livestock farming, production of crops, grapes, melons, silkworm breeding, etc.

Uzbekistan is rich in mineral resources, such as copper, gold, lead, zinc, and bauxite. The country also has substantial energy resources, such as oil and gas. During the last two decades, Uzbekistan developed national industries in copper, machinery, chemical fertilizers, and construction of oil, gas and hydroelectric plants. Under the new economic policy of attracting foreign investments, several joint enterprises with Korean, Italian, Turkish, American and other firms have been established during the last few years.

1.4 Health Care System

The health care system in Uzbekistan was developed as part of the Soviet-planned system and was intended to provide adequate access to health services to all citizens and to maintain a focus on prevention. With these goals, a nationwide network of over 6,000 primary, secondary and tertiary health care facilities was created under the auspices of the Ministry of Health. The health care system in Uzbekistan is state-owned and almost all health personnel, of which more than 70,000 are physicians and 240,000 are mid-level professionals, are government employees (Ministry of Health, 1995). Throughout all regions of Uzbekistan, health services, including antenatal care, delivery assistance, neonatal care, pediatric services, immunizations, family planning, outpatient services and specialized health care, are provided free of charge.

Primary health care in Uzbekistan is provided in such institutions as polyclinics, outpatient clinics (ambulatories), doctor's assistant/midwife posts (FAPs), primary health facilities at large enterprises, women's consulting centers (which are a primary source of family planning services in urban areas) and delivery hospitals. The main focus of the health services in these institutions is disease prevention (for example, immunization against infectious diseases), and providing antenatal care services, delivery assistance and family planning services.

On the secondary level, health services are provided by specialized dispensaries, departments of polyclinics and hospitals in which screening programs are carried out to identify individuals with early manifestations of disease and to prevent disease progression.

Tertiary health services in Uzbekistan are provided within the departments of regional, municipal and district general hospitals, specialized hospitals and dispensaries, and clinical research institutes. The clinical treatment offered at these facilities is aimed at minimizing the effect of disease and disability.

Maternal and child health services in Uzbekistan are mostly provided through primary health care institutions. Almost all deliveries occur at the delivery hospitals and, in rare cases, at regular hospitals or, in rural areas, FAPs. Antenatal care is provided mainly by doctors at the women's consulting centers (parts of urban polyclinics), rural hospitals and rural ambulatories, or by the doctors' assistants at the FAPs. Antenatal care starts early in pregnancy (usually during the first trimester of pregnancy) and continues on a monthly basis throughout the pregnancy.

One of the procedures that is used during antenatal care is to identify early complications of pregnancy and extragenital diseases. Pregnant women who have developed such conditions usually receive special attention from health personnel and may be treated further and hospitalized at the institutions of the secondary and tertiary levels. In certain cases, a woman is encouraged to postpone her next pregnancy by using contraception. The Ministry of Health of Uzbekistan promotes greater access of women to various methods of contraception, providing a better chance for safe motherhood. Sometimes when pregnancy complications or extragenital diseases are severe and threaten the outcome of pregnancy, a woman may be counseled by a doctor to terminate her pregnancy. After pregnancy termination, women are offered special rehabilitation courses to ensure that the next pregnancy will be safe.

Child health services in Uzbekistan include neonatal care, which is usually provided within the first week after delivery while a woman and her newborn stay in the delivery hospital, and other pediatric services at older ages. After discharge from the delivery hospital, a child is visited by a patronage nurse who provides the mother with general counseling on child care and carries out a physical examination of the child. Pediatric services are mainly provided by the institutions of primary health care. A mother is required to bring her child in for a regular checkup and vaccination at the polyclinic or outpatient clinic several times during the first two years of life. A doctor in the polyclinic can refer the child to a specialized pediatrician in case the child develops disease or other conditions that require special care or hospitalization.

The child vaccination schedule in Uzbekistan requires that BCG and oral polio vaccines are given in the delivery hospital during the first 3-4 days of life. Revaccinations with oral polio vaccine are usually done at 2, 3, 4, 16, and 18 months and 6-7 years of the child's life. The vaccination schedule for diphtheria, pertussis and tetanus toxoid (DPT or DT) is similar to the schedule for the polio vaccination, except that the first DPT vaccine is given at the age of 2 months. Measles vaccinations are given at 9 and 16 months of age (Ministry of Health, 1993).

The vaccination schedule is controlled throughout childhood by several mechanisms. During the first two years of life, the patronage nurse is responsible for maintaining vaccination records and ensuring that the child receives vaccinations at the appropriate time. After that period, the vaccination schedule may still be under the control of the pediatric department staff of polyclinics or the records can be transferred to a day care center if the child attends one. In the latter case, vaccination is coordinated by the day care nurse. Finally, when the child starts to attend primary school at the age of seven, the school nurse becomes responsible for the child's vaccinations.

The system of maternal and child health care has proven efficient and successful in providing adequate services for the majority of the population of Uzbekistan, including those who reside in rural and remote areas. However, maintaining such a system requires substantial and continuous budgetary support and enormous resources of manpower and managerial skill.

The challenge for the Uzbekistan Government is to reform the health system in such a way that it will be both financially viable and provide comprehensive service to the population. This can be

accomplished by preserving and improving the existing primary health care system, promoting new mechanisms of healthcare financing and focusing on emerging health issues. The Ministry of Health has developed the top priorities of health care reform, which can be outlined as follows:

- reorganize the network of public health institutions and the distribution of health manpower in order to provide better control, management and quality of health services on each level of health care;
- focus on maternal and child health by integrating forces of health institutions, public and community based services, religious organizations, and attracting state legislative and executive power to protect and strengthen the health of mothers and children;
- reform the health care financing system by using a long-term approach with the focus on individual community members instead of a curative approach which is oriented to cover hospital bed spending;
- focus on disease prevention and promote outpatient medical services by introducing new efficient forms of preventive and curative medicine, such as day hospitals, home medical care, centers of outpatient surgery, specialized health complexes providing ambulatory treatment, and community health centers; and make the best use of local, regional, and national resources, and potential community-based services;
- optimize the distribution and relative size of health facilities in terms of their capacity and optimal staffing requirements and reduce the number of hospital beds;
- improve the quality of health services in rural areas, and provide adequate access for people living in rural areas to the primary, secondary and tertiary levels of health services;
- reform the medical education system by optimizing the medical training curricula with a focus on training general practitioners; and reconsider the capacity of the national medical training system to train only the required number of health professionals;
- develop the national pharmaceutical and medical industry to meet the country's requirements in supply of medicine and medical equipment; promote research and development in the area of medicine and medical technology; attract foreign investments and resources of other sectors of the medical industry;
- assign top priority to efforts to identify the most frequent and serious conditions affecting the health of community members; develop and implement programs addressing socioeconomic, environmental and other causes of these conditions; develop vertical programs to prevent tuberculosis, cancer, viral hepatitis, HIV infection, drug abuse, sexually transmitted diseases, etc.;
- develop and introduce new forms and principles of health care financing and management based on fee-for-services, market orientation and private competition.

1.5 Family Planning Policies and Programs

For many years, the Government of Uzbekistan promoted policies to encourage women to have more children. Women in Uzbekistan who, in the past, had seven or more children were traditionally glorified and recognized as "mother-heroes" and were provided with a number of benefits, including bonuses, housing assistance, extensive paid maternity leave, child benefits, support for day care, etc.

The Ministry of Health has revised this pronatalist policy and is now promoting family planning services to improve reproductive health. The Ministry of Health is responsible for providing family planning services throughout the country. The main goal of the family planning policy is to ensure low risk pregnancy and safe motherhood, to reduce complications due to inadequately spaced pregnancies and to reduce the incidence and prevalence of pregnancy complications and extragenital diseases among women of reproductive age.

The Ministry of Health manages a broad spectrum of activities including intensive family planning education of the population and supplying contraceptives throughout the country. The private sector is also involved in marketing contraceptives. While promoting awareness of family planning and access of women to a variety of contraceptives, the Ministry also is concerned with the quality, safety and effectiveness of contraceptive methods. In order to control family planning services, the Ministry of Health considers them as part of maternal and child health care and requires that adequate counseling on the selection and use of contraceptive methods be done by health professionals with skills in obstetrics and gynecology.

In Uzbekistan, one of the primary methods of birth control is induced abortion which is usually done at the outpatient departments of general hospitals or at delivery hospitals. Induced abortion is legal in Uzbekistan if done during the first 12 weeks of pregnancy. In some cases induced abortion can be performed after 12 weeks if certain medical or social conditions exist. These cases require strong supervision of qualified medical personnel in a hospital setting (Ministry of Health, 1996). Abortion can be done free of charge, but lately fee-for-services facilities became available to perform mini-abortions by the vacuum aspiration technique. Despite some indications that the number of induced abortions has declined in recent years, the abortion issue remains a great public health concern in Uzbekistan due to the prevalence of complications and the overall adverse effects on women's health.

Due to the policy of promoting use of safe methods of family planning, a strong trend of substituting contraception for abortion has been observed in Uzbekistan during the last several years. Among the most popular methods of contraception is the intrauterine device. Traditionally, many women continue to rely on the intrauterine device as a convenient and safe method. For many years oral contraceptives were much less available in Uzbekistan because of a document, *On the side effects and complications of oral contraceptives*, published by the Ministry of Health of the former Soviet Union in 1974 which practically banned the distribution and use of oral contraceptives (United Nations, 1995). Women in Uzbekistan now have broad access to a variety of methods of contraception including oral contraceptives, injectables, etc. They are distributed centrally through government pharmacies and women's consulting centers and privately via private pharmacies.

Decreasing maternal mortality from a rate of 65 per 100,000 live births in 1991 to 39 in 1994 in part resulted from improved access of women to family planning services in Uzbekistan (Ministry of Health, 1995). In order to support this trend an International Charity Fund "Soglom Avlod Uchum" (For a Healthy Generation) has been established in Uzbekistan. The fund will coordinate multidisciplinary and international efforts to protect and improve the health of the mothers and children of Uzbekistan.

1.6 Demographic and Health Data Collection System in Uzbekistan

The demographic and health data collection system in Uzbekistan is based on the registration of events and periodic censuses. The data on births, deaths, marriages, and divorces are registered at the local administrative level of an internal passport control system. These data are then forwarded to the State Committee on Statistics and Analysis ("Goskomprognozstat") through the *raion* and *oblast* level statistical offices. Goskomprognozstat is responsible for conducting censuses and maintaining this registration system. The last census in Uzbekistan was conducted in 1989, and the census results were published in 1990

(Goskomprognozstat, 1990). In addition, Goskomprognozstat is responsible for tabulating and publishing an annual report of demographic data generated by the registration system.

Collection of health data is a primary responsibility of the Statistical Department of the Ministry of Health. Health information is generated by staff at the facilities delivering services and then sent to the Statistical Department through the *raion* and *oblast* level health departments. The Statistical Department of the Ministry of Health compiles and analyzes these data and issues annual reports entitled *Health of the Population of the Republic of Uzbekistan and Health Services*.

The health data collected and published by the Statistical Department consist of the following major categories: 1) morbidity specified by type of disease (infectious and non-infectious); 2) mortality specified by causes of death; 3) infant deaths, including data on antenatal, perinatal, and early neonatal deaths; 4) maternal mortality specified by causes of maternal death; 5) data on maternal and child health, including antenatal care and delivery assistance, contraceptive clients, induced abortion rates, pediatric services, etc; 6) number of health facilities, medical personnel, hospital beds, and length of average stay in the hospital; and 7) health data specified by type of medical services including medical care for patients with cancer, tuberculosis, mental disorders, drug abuse, and sexually transmitted diseases. These data are usually tabulated at the national and *oblast* levels, and for some categories, by the age groups 0-14 and 15 or more years.

1.7 Objectives and Organization of the Survey

The purpose of the 1996 Uzbekistan Demographic and Health Survey (UDHS) was to provide an information base to the Ministry of Health for the planning of policies and programs regarding the health of women and their children. The UDHS collected data on women's reproductive histories, knowledge and use of contraception, breastfeeding practices, and the nutrition, vaccination coverage, and episodes of illness among children under the age of three. The survey also included, for all women of reproductive age and for children under the age of three, the measurement of the hemoglobin level in the blood to assess the prevalence of anemia and measurements of height and weight to assess nutritional status.

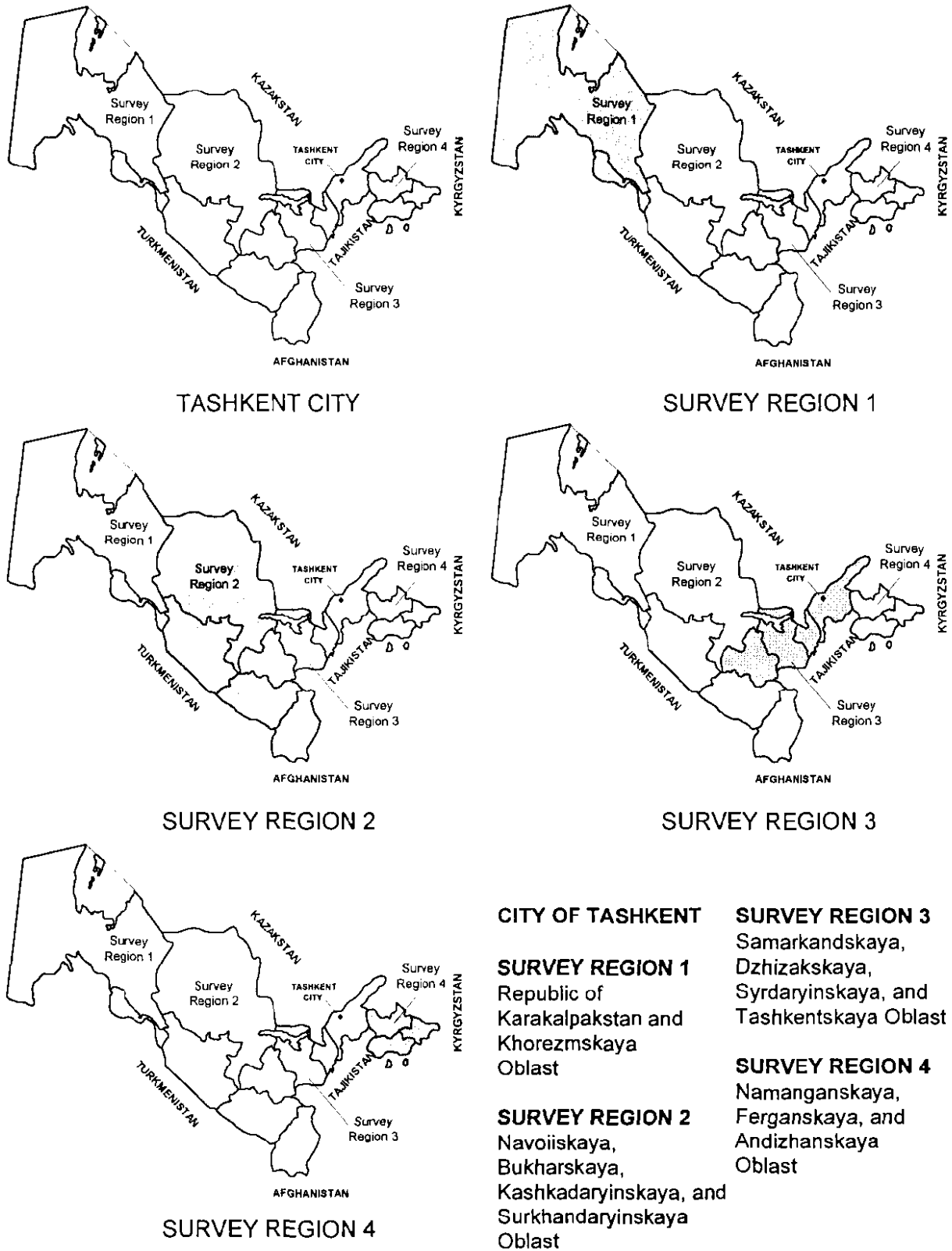
A secondary objective of the survey was to enhance the capabilities of institutions in Uzbekistan to collect, process and analyze population and health data so as to facilitate the implementation of future surveys of this type.

The 1996 UDHS was the first national-level population and health survey in Uzbekistan. It was implemented by the Research Institute of Obstetrics and Gynecology of the Ministry of Health of Uzbekistan. The 1996 UDHS was funded by the United States Agency for International Development (USAID) and technical assistance was provided by Macro International Inc. (Calverton, Maryland USA) through its contract with USAID.

1.7.1 Sample Design and Implementation

The UDHS employed a nationally representative probability sample of women aged 15 to 49, representative of 98.7 percent of the country. Seven *raions* were excluded from the survey because they were considered too remote and sparsely inhabited. These *raions* are: Kungradskiyi, Muyinakskiyi, and Takhtakupyrskiyi in Karakalpakstan; Uchkudukskiyi, Tamdinskiyi, and Kanimekhskiyi in Navoiiskaya; and Romitanskiyi in Bukharaksya *oblast*. The remainder of the country was divided into five survey regions (Figure 1.1). Tashkent City constituted a survey region by itself while the remaining four survey regions consisted of groups of contiguous *oblasts*. The five survey regions were defined as follows:

Figure 1.1
OBLAST COMPOSITION OF REGIONS IN UZBEKISTAN, 1996



| | |
|------------------|--|
| Survey Region 1: | Karakalpakstan and Khorezmskaya <i>oblast</i> . |
| Survey Region 2: | Navoiiskaya, Bukharskaya, Kashkadaryinskaya, and Surkhandaryinskaya <i>oblasts</i> . |
| Survey Region 3: | Samarkandskaya, Dzhizaksкая, Syrdaryinskaya, and Tashkentskaya <i>oblasts</i> . |
| Survey Region 4: | Namanganskaya, Ferganskaya, and Andizhanskaya <i>oblasts</i> . |
| Survey Region 5: | Tashkent City. |

In the rural areas, the primary sampling units (PSUs) were the *raions* which were selected with probability proportional to size, the size being the population size as published by Gozkomprognozstat in 1994. At the second stage, one village was selected in each selected *raion*. This resulted in 64 rural sample clusters. A complete listing of households in the selected clusters was carried out. The lists of households served as the frame for third-stage sampling; i.e., the selection of the households to be visited by the UDHS interviewing teams. In each selected household, women age 15-49 were eligible to be interviewed.

In the urban areas, the PSUs were the cities and towns themselves. In the second stage, one health block was selected from each town except in self-representing cities (large cities that were selected with certainty), where more than one health block was selected. In total, 104 urban health blocks were selected. The selected health blocks were segmented prior to the household listing operation which provided the household lists for the third stage selection of households.

On average, 21 households were selected in each urban cluster, and 27 households in each rural cluster. It was expected that the sample would yield interviews with approximately 4,000 women between the ages of 15 and 49. Because of the non-proportional distribution of the sample to the different survey regions, sampling weights have been applied to the data in this report.

Details of the UDHS sample design are given in Appendix A and the estimation of sampling errors for selected variables is given in Appendix B.

1.7.2 Questionnaires

Two questionnaires were used for the UDHS: the Household Questionnaire and the Individual Questionnaire. The questionnaires were based on the model survey instruments developed in the DHS program. The questionnaires were adapted to the data needs of Uzbekistan during consultations with specialists in the areas of reproductive health and child health in Uzbekistan. Both questionnaires were developed in English and then translated into Russian and Uzhek. A pretest was conducted in March-April 1996. Based on the pretest experience, the questionnaires were further modified.

The Household Questionnaire was used to enumerate all usual members and visitors in a sample household and to collect information relating to the characteristics of the dwelling unit. In the first part of the Household Questionnaire, information was collected on age, sex, educational attainment, and relationship to the head of household of each person listed as a household member or visitor. The primary objective of collecting this information was to identify women who were eligible for the individual interview. In the second part of the Household Questionnaire, questions were included on the dwelling unit, such as number of rooms, flooring material, source of water, type of toilet facilities, and on the availability of a variety of consumer goods.

The Individual Questionnaire was used to collect information from women age 15-49. These women were asked questions on the following major topics:

- Background characteristics

- Pregnancy history
- Pregnancy outcome and antenatal care
- Child health and nutrition practices
- Child immunization and episodes of diarrhea and respiratory illness
- Knowledge and use of contraception
- Marriage and fertility preferences
- Husband's background and woman's work experience
- Maternal and child anthropometry
- Hemoglobin measurement of women and children

One of the major efforts of the UDHS was testing women and children for anemia. Testing was done by measuring hemoglobin levels in the blood, using a portable machine called a Hemocue. Before collecting the blood sample, women were asked to sign a consent form, giving permission for the collection of a blood droplet from herself and her children. Results of anemia testing were kept confidential (as are all UDHS data); however, strictly with the consent of respondents, local health care facilities were informed of women who had severely low levels of hemoglobin (less than 7 g/dl).

1.7.3 Training and Fieldwork

The UDHS questionnaires were pretested in March-April 1996. Eight interviewers were trained over a two-week period at the Institute of Obstetrics and Gynecology. The pretest included one week of interviewing in an urban area (Tashkent City) and one week in a rural area. A total of 120 women were interviewed. Pretest interviewers were retained to serve as supervisors and field editors for the main survey.

Staff members of the Institute of Obstetrics and Gynecology and female nursing students of the National Medical College were recruited as field supervisors, editors, interviewers and medical technicians for the main survey. A total of 50 people were trained for three weeks during June 1996. Training consisted of in-class lectures and practice, as well as conducting practice interviewing in the field. Interviewers were selected based on their performance during the training period.

The UDHS data collection was carried out by five teams. Each team consisted of eight members: the team supervisor, one editor, one household interviewer, four individual women interviewers, and one medical technician (responsible for height and weight measurement and anemia testing). All interviewers were female, while most of the supervisors and technicians were males.

All five interviewing teams began work in Region 5 (Tashkent City) on June 24. After three weeks of interviewing in Tashkent City, four survey teams were assigned to the remaining survey regions and fieldwork started in Regions 1 through 4 on July 14. One team continued data collection in Tashkent City. Data collection was completed on October 12, 1996.

1.7.4 Data Processing

Questionnaires were returned to the Institute of Obstetrics and Gynecology in Tashkent for data processing. The office editing staff checked that questionnaires for all selected households and eligible respondents were returned from the field. The few questions which had not been precoded (e.g., occupation, type of chronic disease) were coded at this time. Data were then entered and edited on microcomputers using the ISSA (Integrated System for Survey Analysis) package, with the data entry software translated into Russian. Office editing and data entry activities began on August 5, and were completed on October 31, 1996.

1.7.5 Response Rates

Table 1.1 presents information on the coverage of the UDHS sample including household and individual response rates. A total of 3,945 households were selected in the sample, of which 3,763 were occupied at the time of conducting fieldwork. The main reason for the difference was that some dwelling units which were occupied at the time of the household listing operation were either vacant or members of the household were away for an extended period at the time of interviewing. Of the 3,763 occupied households, 3,703 were interviewed, yielding a household response rate of 98 percent.

In the interviewed households, 4,544 women were eligible for the individual interview (i.e., all women 15-49 years of age who were either usual residents or visitors who had spent the previous night in the household). Interviews were completed with 4,415 of these women, yielding a response rate of 97 percent. The principal reason for nonresponse was a failure to find an eligible woman at home after repeated visits to the household. The overall response rate for the survey, the product of the household and the individual response rates, was 96 percent.

| <u>Table 1.1 Results of the household and individual interviews</u> | | | |
|--|-----------|-------|-------|
| Number of households, number of interviews and response rates, Uzbekistan 1996 | | | |
| Result | Residence | | Total |
| | Urban | Rural | |
| Household interviews | | | |
| Households sampled | 2,228 | 1,717 | 3,945 |
| Households found | 2,099 | 1,664 | 3,763 |
| Households interviewed | 2,062 | 1,641 | 3,703 |
| Household response rate | 98.2 | 98.6 | 98.4 |
| Individual interviews | | | |
| Number of eligible women | 2,388 | 2,156 | 4,544 |
| Number of eligible women interviewed | 2,306 | 2,109 | 4,415 |
| Eligible woman response rate | 96.6 | 97.8 | 97.2 |

CHAPTER 2

CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

Damin A. Asadov and Mila A. Li

Data pertaining to the background characteristics of household members and respondents to the Woman's Questionnaire are presented in this chapter. Since demographic and health parameters are influenced by sociobiological factors, this information is important in interpreting results. Moreover, data on characteristics of households and respondents can serve as an indicator of the representativeness of the sample and of the quality of the data obtained.

This chapter includes three sections: characteristics of the household population (household structure, age-sex characteristics and level of education of the household members); housing characteristics (presence of electricity, source of drinking water, sanitation, etc.) and background characteristics of respondents to the Woman's Questionnaire (residence, age, ethnicity, marital status, occupation, etc.).

2.1 Household Population

The UDHS Household Questionnaire collected data on the sociodemographic characteristics of the members and visitors in each sampled household. A household was defined as a person or group of persons usually living and eating together and jointly running the household's economy (de jure population). Visitors were persons who were not household members but had spent the night before the interview in a sampled household. All female household members and visitors 15-49 years of age were eligible as respondents for the individual interview. The total de facto population in the selected households was 19,028 people.

2.1.1 Sex and Age Composition

Table 2.1 presents the distribution of the de facto household population by five-year age groups according to sex and residence. Almost one-third of the population consists of children under 14 years of age (38 percent), with the proportion of children in rural areas being higher than in urban areas (41 and 34 percent, respectively). Starting from age group 10-14, there is a gradual decrease in the proportion of the population in subsequent age groups. In urban areas, the number of women exceeds the number of men, while in rural areas the opposite is true—the number of men exceeds the number of women. Almost 50 percent of the de facto household population are women 15-49 years of age who are the main UDHS respondents.

As seen in Figure 2.1, the age-sex structure of the Uzbekistan population has the form of a pyramid with a wide base, gradually tapering to a sharp peak. The relatively small size of the male and female population in the age interval 50-54 is a reflection of the low birth rates during World War II (i.e., 50 to 55 years prior to the UDHS).

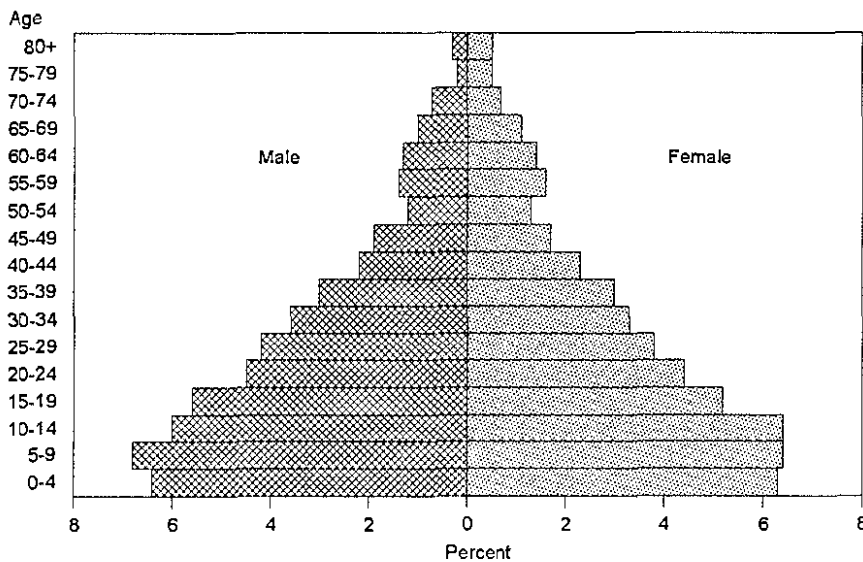
The percent distribution of the UDHS population by broad age groups is presented in Table 2.2. Thirty-eight percent of the population of Uzbekistan are people under 15 years of age, 57 percent are 15-64 years of age, and 5 percent are 65 and older. The dependency ratio, calculated as the ratio of persons under 15 and age 65 and over to persons age 15-64, is 74 percent.

Table 2.1 Household population by age, residence and sex

Percent distribution of the de facto household population by age, according to sex and residence, Uzbekistan 1996

| Age | Urban | | | Rural | | | Total | | |
|------------------------|-------|--------|-------|-------|--------|--------|-------|--------|--------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 0-4 | 11.5 | 11.1 | 11.3 | 13.4 | 13.5 | 13.4 | 12.7 | 12.5 | 12.6 |
| 5-9 | 11.8 | 11.1 | 11.5 | 14.5 | 14.1 | 14.3 | 13.5 | 12.9 | 13.2 |
| 10-14 | 11.4 | 10.7 | 11.1 | 12.2 | 14.4 | 13.3 | 11.9 | 12.9 | 12.4 |
| 15-19 | 10.1 | 9.2 | 9.7 | 11.7 | 11.2 | 11.5 | 11.1 | 10.4 | 10.8 |
| 20-24 | 9.2 | 9.1 | 9.1 | 8.8 | 8.5 | 8.7 | 8.9 | 8.8 | 8.8 |
| 25-29 | 8.8 | 7.7 | 8.2 | 8.0 | 7.5 | 7.8 | 8.3 | 7.6 | 8.0 |
| 30-34 | 7.5 | 7.1 | 7.3 | 7.0 | 6.4 | 6.7 | 7.2 | 6.7 | 6.9 |
| 35-39 | 6.5 | 6.1 | 6.3 | 5.6 | 6.0 | 5.8 | 5.9 | 6.1 | 6.0 |
| 40-44 | 4.4 | 5.5 | 5.0 | 4.5 | 4.0 | 4.3 | 4.5 | 4.6 | 4.6 |
| 45-49 | 4.5 | 4.2 | 4.3 | 3.3 | 2.8 | 3.1 | 3.8 | 3.4 | 3.6 |
| 50-54 | 2.8 | 3.1 | 3.0 | 2.1 | 2.2 | 2.2 | 2.4 | 2.6 | 2.5 |
| 55-59 | 3.5 | 4.1 | 3.8 | 2.4 | 2.5 | 2.5 | 2.8 | 3.1 | 3.0 |
| 60-64 | 2.9 | 3.4 | 3.2 | 2.2 | 2.4 | 2.3 | 2.5 | 2.8 | 2.7 |
| 65-69 | 2.5 | 2.7 | 2.6 | 1.6 | 1.9 | 1.7 | 1.9 | 2.2 | 2.1 |
| 70-74 | 1.3 | 2.1 | 1.7 | 1.5 | 0.9 | 1.2 | 1.5 | 1.4 | 1.4 |
| 75-79 | 0.5 | 1.3 | 0.9 | 0.5 | 0.8 | 0.6 | 0.5 | 1.0 | 0.7 |
| 80+ | 0.6 | 1.4 | 1.0 | 0.5 | 0.8 | 0.7 | 0.6 | 1.0 | 0.8 |
| Missing/ Don't know | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 3,606 | 3,816 | 7,422 | 5,921 | 5,686 | 11,606 | 9,527 | 9,502 | 19,028 |

**Figure 2.1
Population Pyramid of Uzbekistan**



UDHS 1996

Table 2.2 Population by age

Percent distribution of the de jure population by age group, Uzbekistan 1996

| Age | Percent |
|------------------|---------|
| <15 | 37.7 |
| 15-64 | 57.3 |
| 65+ | 4.9 |
| Total | 100.0 |
| Median age | 20.6 |
| Dependency ratio | 74.3 |

2.1.2 Household Composition

Table 2.3 presents information on the size and composition of households according to urban-rural residence. The head of household (as recognized by other members) and the relationship of each household member to the head was determined in each household. In general, heads of households are mainly males (78 percent). In urban areas the proportion of households headed by men (64 percent) is less than in rural areas (88 percent).

About 41 percent of households consist of between one and four members, with the average size of a household in Uzbekistan being 5.2 members. There are significant differences in the household size between urban and rural areas, with the average urban household consisting of 4.6 members compared to 5.7 in rural households. Only 1 percent of households include a child under 15 neither of whose parents were household members.

Table 2.4 presents information on children under age 15 by survival status of the parents according to selected sociobiological factors.

Ninety-three percent of children under age 15 live with both parents. As children get older, fewer of them live with both parents; 97 percent of children in the age group 0-2 live with both parents, compared to 90 percent in the age group 12-14 years. Rural children are more likely than urban children to live with both parents. Five percent of children under 15 are living with only their mother; of these, 2 percent have lost their fathers and 3 percent have fathers who are still alive.

Regarding orphanhood, about 2 percent of children under age 15 have fathers who have died, and less than 1 percent have mothers who have died, while an insignificant proportion (0.1 percent) have lost both parents.

Table 2.3 Household composition

Percent distribution of households by sex of head of household, household size, and percentage of households with foster children, according to residence, Uzbekistan 1996

| Characteristic | Residence | | Total |
|------------------------------|-----------|-------|-------|
| | Urban | Rural | |
| Household headship | | | |
| Male | 64.4 | 88.4 | 77.8 |
| Female | 35.6 | 11.6 | 22.2 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of members | | | |
| 1 | 9.4 | 2.0 | 5.3 |
| 2 | 13.3 | 4.5 | 8.4 |
| 3 | 13.2 | 8.3 | 10.5 |
| 4 | 17.3 | 15.8 | 16.5 |
| 5 | 14.7 | 19.0 | 17.1 |
| 6 | 12.4 | 17.1 | 15.0 |
| 7 | 8.1 | 13.8 | 11.3 |
| 8 | 4.8 | 8.5 | 6.9 |
| 9+ | 6.5 | 11.0 | 9.0 |
| Total | 100.0 | 100.0 | 100.0 |
| Mean size | 4.6 | 5.7 | 5.2 |
| Percent with foster children | 1.0 | 0.9 | 0.9 |

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

Table 2.4 Fosterhood and orphanhood

Percent distribution of de facto children under age fifteen by their living arrangement and survival status of parents, according to child's age, sex, residence, and region, Uzbekistan 1996

| Background characteristic | Living with both parents | Living with mother but not father | | Living with father but not mother | | Not living with either parent | | | Missing info. on father/mother | Total | Number of children | |
|---------------------------|--------------------------|-----------------------------------|-------------|-----------------------------------|-------------|-------------------------------|-------------------|-------------------|--------------------------------|-------|--------------------|-----------|
| | | Father alive | Father dead | Mother alive | Mother dead | Both alive | Father only alive | Mother only alive | | | | Both dead |
| Age | | | | | | | | | | | | |
| 0-2 | 96.6 | 2.6 | 0.5 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,360 |
| 3-5 | 95.0 | 3.2 | 1.1 | 0.1 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,549 |
| 6-8 | 93.2 | 3.3 | 1.7 | 0.2 | 0.8 | 0.6 | 0.0 | 0.0 | 0.0 | 0.2 | 100.0 | 1,486 |
| 9-11 | 91.3 | 3.3 | 2.8 | 0.4 | 1.2 | 0.4 | 0.0 | 0.1 | 0.0 | 0.4 | 100.0 | 1,494 |
| 12-14 | 89.5 | 3.5 | 3.6 | 0.7 | 0.9 | 1.4 | 0.1 | 0.1 | 0.2 | 0.1 | 100.0 | 1,382 |
| Sex | | | | | | | | | | | | |
| Male | 93.1 | 3.0 | 2.0 | 0.3 | 0.9 | 0.4 | 0.0 | 0.0 | 0.1 | 0.1 | 100.0 | 3,631 |
| Female | 93.2 | 3.4 | 1.8 | 0.2 | 0.4 | 0.7 | 0.0 | 0.1 | 0.0 | 0.1 | 100.0 | 3,639 |
| Residence | | | | | | | | | | | | |
| Urban | 89.7 | 5.5 | 2.8 | 0.1 | 0.5 | 0.8 | 0.0 | 0.1 | 0.1 | 0.4 | 100.0 | 2,509 |
| Rural | 94.9 | 2.0 | 1.5 | 0.4 | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 4,761 |
| Region | | | | | | | | | | | | |
| Region 1 | 91.1 | 2.3 | 3.7 | 0.6 | 1.0 | 0.9 | 0.2 | 0.1 | 0.1 | 0.0 | 100.0 | 992 |
| Region 2 | 94.8 | 2.5 | 1.6 | 0.0 | 0.4 | 0.5 | 0.0 | 0.0 | 0.0 | 0.1 | 100.0 | 1,952 |
| Region 3 | 94.1 | 2.5 | 1.8 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.1 | 0.4 | 100.0 | 1,812 |
| Region 4 | 93.3 | 3.4 | 1.4 | 0.3 | 1.1 | 0.4 | 0.0 | 0.1 | 0.1 | 0.0 | 100.0 | 2,050 |
| Tashkent City | 86.1 | 9.5 | 1.9 | 0.1 | 0.4 | 1.4 | 0.0 | 0.0 | 0.1 | 0.4 | 100.0 | 466 |
| Total | 93.1 | 3.2 | 1.9 | 0.3 | 0.7 | 0.6 | 0.0 | 0.0 | 0.1 | 0.1 | 100.0 | 7,271 |

Note: By convention, *foster* children are those who are not living with either parent. This includes *orphans*, i.e., children both of whose parents are dead.

2.1.3 Educational Level of Household Members

Uzbekistan's primary and secondary educational system has three levels: primary (classes 1-4, age 6/7 - 10/11 years); principal (classes 5-9, age 11-15 years); secondary (classes 10-11, age 16-17 years). The primary and principal education levels are compulsory. Those who leave after the principal level of education (9 classes) may continue in secondary-special (vocational) education. Those who finish all three levels of primary/secondary school can continue their education at a higher level—at universities or academic training institutes.

The secondary-special (vocational) educational system in Uzbekistan provides a combination of general education and technical skills to students age 15-20 during 2-4 years of schooling. The number of years in the secondary-special schools depends on the curriculum under study.

The UDHS confirms the high educational level of the Uzbekistan population. As can be seen in Table 2.5, 96 percent of women have had at least some education. A high percentage of the women have secondary-special and higher education, especially those in the 20-49 age group. Overall, the median years of schooling for women age 7 and above is 10 years. The educational level of urban women is higher than for rural women. There are also educational differences between women in Tashkent City and other regions.

Table 2.5. Educational level of the female household population

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

| Background characteristic schooling | Level of education | | | | | Total | Number | Median years of |
|-------------------------------------|--------------------|--------------------|-------------------|--------|---------|-------|--------|-----------------|
| | No education | Primary/ Secondary | Secondary-Special | Higher | Missing | | | |
| Age | | | | | | | | |
| 7-9 | 17.7 | 82.3 | 0.0 | 0.0 | 0.0 | 100.0 | 754 | 2.0 |
| 10-14 | 0.0 | 99.8 | 0.1 | 0.0 | 0.0 | 100.0 | 1,225 | 6.5 |
| 15-19 | 0.5 | 81.7 | 15.0 | 2.7 | 0.2 | 100.0 | 989 | 10.3 |
| 20-24 | 0.7 | 58.8 | 29.2 | 11.4 | 0.0 | 100.0 | 833 | 10.7 |
| 25-29 | 0.5 | 57.4 | 30.6 | 11.5 | 0.0 | 100.0 | 722 | 10.6 |
| 30-34 | 0.3 | 56.7 | 29.0 | 14.0 | 0.0 | 100.0 | 634 | 10.7 |
| 35-39 | 0.3 | 60.8 | 25.3 | 13.6 | 0.0 | 100.0 | 578 | 10.7 |
| 40-44 | 0.7 | 57.4 | 26.5 | 15.3 | 0.1 | 100.0 | 441 | 10.7 |
| 45-49 | 0.6 | 60.1 | 21.5 | 17.8 | 0.0 | 100.0 | 322 | 10.7 |
| 50-54 | 2.3 | 73.9 | 16.0 | 7.7 | 0.0 | 100.0 | 244 | 10.3 |
| 55-59 | 3.4 | 76.0 | 11.2 | 8.6 | 0.9 | 100.0 | 296 | 10.1 |
| 60-64 | 6.7 | 81.0 | 6.6 | 4.6 | 1.1 | 100.0 | 268 | 8.1 |
| 65+ | 17.4 | 74.0 | 3.5 | 4.3 | 0.8 | 100.0 | 535 | 5.6 |
| Residence | | | | | | | | |
| Urban | 3.2 | 62.4 | 21.8 | 12.5 | 0.2 | 100.0 | 3,244 | 10.3 |
| Rural | 3.9 | 80.7 | 11.6 | 3.8 | 0.1 | 100.0 | 4,598 | 10.0 |
| Region | | | | | | | | |
| Region 1 | 4.5 | 66.0 | 22.1 | 7.4 | 0.2 | 100.0 | 988 | 10.1 |
| Region 2 | 3.2 | 77.4 | 14.2 | 5.1 | 0.1 | 100.0 | 1,967 | 10.1 |
| Region 3 | 3.8 | 76.2 | 13.4 | 6.2 | 0.4 | 100.0 | 2,002 | 10.0 |
| Region 4 | 3.8 | 77.4 | 12.9 | 5.9 | 0.1 | 100.0 | 2,153 | 10.1 |
| Tashkent City | 2.5 | 50.0 | 26.8 | 20.7 | 0.0 | 100.0 | 732 | 10.7 |
| Total | 3.6 | 73.1 | 15.8 | 7.4 | 0.2 | 100.0 | 7,842 | 10.1 |

Data in Table 2.6 show that men in Uzbekistan also have a high educational level. Thirty percent of men have secondary-special and higher education, and in certain age groups, the proportion is about 42 percent. The proportion of men with higher education is greater in urban than in rural areas (16 and 10 percent, respectively) and greater in Tashkent City (27 percent) than in the other regions (7 to 15 percent).

To predict a general educational level of the population of the country, it is important to have information about school enrollment of the children and young people under age 24. As can be seen in Table 2.7 and Figure 2.2, 83 percent of children age 7-17 were enrolled in school, with only slight differences by residence and sex.

Not everyone continues studying in secondary-special and higher educational institutions after secondary school. Only one in six of those age 18-20 and only one in 12 of those age 21-24 are enrolled in school. Enrollment rates among women and men are about the same except for the age group 21-24 for which enrollment among men is higher than among women.

Table 2.6 Educational level of the male household population

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

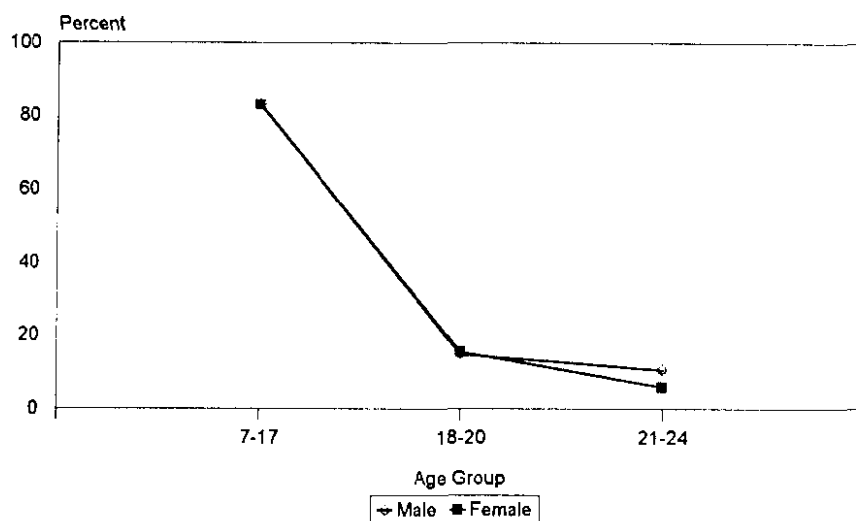
| Background characteristic schooling | Level of education | | | | | Total | Number | Median years of schooling |
|-------------------------------------|--------------------|--------------------|-------------------|--------|---------|-------|--------|---------------------------|
| | No education | Primary/ Secondary | Secondary-Special | Higher | Missing | | | |
| Age | | | | | | | | |
| 7-9 | 16.4 | 83.4 | 0.1 | 0.0 | 0.0 | 100.0 | 736 | 1.9 |
| 10-14 | 0.5 | 99.5 | 0.0 | 0.0 | 0.0 | 100.0 | 1,137 | 6.4 |
| 15-19 | 0.4 | 85.0 | 11.7 | 2.8 | 0.0 | 100.0 | 1,058 | 10.3 |
| 20-24 | 0.1 | 58.4 | 25.7 | 15.8 | 0.0 | 100.0 | 850 | 10.7 |
| 25-29 | 0.2 | 49.5 | 31.2 | 19.1 | 0.0 | 100.0 | 792 | 10.8 |
| 30-34 | 0.3 | 46.5 | 33.6 | 19.5 | 0.0 | 100.0 | 685 | 10.8 |
| 35-39 | 0.0 | 45.6 | 31.6 | 22.8 | 0.0 | 100.0 | 565 | 10.8 |
| 40-44 | 0.0 | 46.0 | 31.3 | 22.8 | 0.0 | 100.0 | 427 | 10.8 |
| 45-49 | 0.0 | 40.7 | 30.2 | 29.1 | 0.0 | 100.0 | 359 | 11.0 |
| 50-54 | 0.0 | 52.9 | 21.4 | 25.8 | 0.0 | 100.0 | 228 | 10.8 |
| 55-59 | 1.0 | 63.8 | 13.8 | 21.0 | 0.5 | 100.0 | 271 | 10.6 |
| 60-64 | 3.0 | 73.0 | 12.2 | 10.7 | 1.2 | 100.0 | 238 | 9.5 |
| 65+ | 7.3 | 76.4 | 7.7 | 8.2 | 0.4 | 100.0 | 421 | 7.8 |
| Residence | | | | | | | | |
| Urban | 2.3 | 61.8 | 20.1 | 15.6 | 0.1 | 100.0 | 3,008 | 10.4 |
| Rural | 2.3 | 71.0 | 16.4 | 10.2 | 0.0 | 100.0 | 4,760 | 10.2 |
| Region | | | | | | | | |
| Region 1 | 3.4 | 65.0 | 20.9 | 10.6 | 0.1 | 100.0 | 965 | 10.3 |
| Region 2 | 2.6 | 60.9 | 21.7 | 14.7 | 0.0 | 100.0 | 1,942 | 10.3 |
| Region 3 | 2.1 | 67.9 | 18.2 | 11.6 | 0.3 | 100.0 | 2,030 | 10.3 |
| Region 4 | 2.0 | 78.7 | 12.0 | 7.3 | 0.0 | 100.0 | 2,187 | 10.2 |
| Tashkent City | 1.3 | 51.4 | 20.6 | 26.6 | 0.0 | 100.0 | 645 | 10.9 |
| Total | 2.3 | 67.5 | 17.9 | 12.3 | 0.1 | 100.0 | 7,768 | 10.3 |

Table 2.7 School enrollment

Percentage of the de facto household population age 7-24 years enrolled in school, by age, sex, and residence, Uzbekistan 1996

| Age | Male | | | Female | | | Total | | |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| | Urban | Rural | Total | Urban | Rural | Total | Urban | Rural | Total |
| 7-17 | 82.7 | 83.5 | 83.2 | 84.8 | 82.2 | 83.1 | 83.7 | 82.8 | 83.1 |
| 18-20 | 18.4 | 12.6 | 14.9 | 16.7 | 14.9 | 15.6 | 17.5 | 13.7 | 15.3 |
| 21-24 | 10.3 | 10.9 | 10.7 | 7.7 | 5.0 | 6.1 | 9.0 | 8.0 | 8.4 |

Figure 2.2
School Enrollment by Age and Sex



UDHS 1996

2.2 Housing Characteristics

In order to assess the socioeconomic conditions of respondents, appropriate information on housing was collected. Table 2.8 presents the data on availability of electricity, source of drinking water, sanitation facilities, type of floor and persons per sleeping room, all of which are determinants of the health status of household members, particularly of children.

As can be seen from Table 2.8 and Figure 2.3, virtually all sampled households are supplied with electricity. The source of drinking water usually determines its quality. Seventy-eight percent of households in Uzbekistan have piped water, mostly piped into the residence. Most other households use well water. Almost all urban households use piped water (93 percent), almost all of which have the pipes inside. In rural areas, 66 percent of households have piped water, while more than one-fifth of the population uses water from wells. Almost 90 percent of households in Uzbekistan are within 15 minutes of the source of their water.

One indicator of sanitary conditions is the type of toilet in a household. In Uzbekistan, a majority of households (77 percent) have pit toilets (latrines) and 21 percent have flush toilets. In urban areas, 46 percent of households have flush toilets, while in rural areas, 97 percent have pit toilets.

During the interview, interviewers noted the type of material from which the floor in each household was made. As can be seen from the data, 74 percent of households have a wooden floor, 15 percent of households use earth and 8 percent of households use linoleum. In rural areas, floors are mainly made from wood (71 percent) and in urban areas, along with wood, people use linoleum (15 percent).

Table 2.8 Housing characteristics

Percent distribution of households by housing characteristics, according to residence, Uzbekistan 1996

| Characteristic | Residence | | Total |
|--|-----------|-------|-------|
| | Urban | Rural | |
| Electricity | | | |
| Yes | 100.0 | 99.3 | 99.6 |
| No | 0.0 | 0.7 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 |
| Source of drinking water | | | |
| Piped into residence | 87.4 | 37.8 | 59.7 |
| Public tap | 5.8 | 27.7 | 18.0 |
| Well in residence | 5.5 | 16.7 | 11.7 |
| Public well | 0.7 | 6.2 | 3.7 |
| Spring | 0.0 | 1.0 | 0.5 |
| River/stream | 0.4 | 5.7 | 3.4 |
| Pond/lake | 0.0 | 0.1 | 0.1 |
| Rainwater | 0.1 | 0.3 | 0.2 |
| Tanker truck | 0.2 | 4.0 | 2.3 |
| Bottled water | 0.0 | 0.5 | 0.3 |
| Total | 100.0 | 100.0 | 100.0 |
| Time to water source (in minutes) | | | |
| <15 minutes | 97.2 | 79.3 | 87.2 |
| Median time to source | 0.5 | 0.9 | 0.7 |
| Sanitation facility | | | |
| Own flush toilet | 45.6 | 0.8 | 20.7 |
| Shared flush toilet | 2.1 | 1.7 | 1.9 |
| Traditional pit toilet | 52.2 | 97.3 | 77.3 |
| Ventilated improved pit latrine | 0.1 | 0.1 | 0.1 |
| No facility/bush | 0.0 | 0.1 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 |
| Floor material | | | |
| Earth/sand | 1.9 | 24.8 | 14.7 |
| Tezek | 0.1 | 0.6 | 0.4 |
| Wood planks | 77.0 | 70.7 | 73.5 |
| Straw/sawdust | 1.4 | 1.1 | 1.2 |
| Parquet/polished wood | 4.6 | 0.2 | 2.1 |
| Linoleum/asphalt | 14.5 | 1.9 | 7.5 |
| Ceramic tiles | 0.0 | 0.1 | 0.0 |
| Cement | 0.3 | 0.6 | 0.4 |
| Carpet | 0.0 | 0.1 | 0.0 |
| Other | 0.1 | 0.0 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 |
| Persons per sleeping room | | | |
| 1-2 | 81.1 | 65.1 | 72.2 |
| 3-4 | 16.4 | 28.8 | 23.3 |
| 5-6 | 1.7 | 4.7 | 3.4 |
| 7+ | 0.3 | 1.1 | 0.7 |
| | 0.4 | 0.3 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 |
| Mean persons per sleeping room | 2.1 | 2.6 | 2.4 |
| Number of households | 1,639 | 2,064 | 3,703 |

An important indicator of housing conditions is the level of crowding, which was estimated by the number of persons sleeping in one room and the average number of persons per sleeping room. The average number of persons per sleeping room is significantly higher in rural areas than in urban areas (2.6 and 2.1 percent, respectively).

2.2.1 Household Durable Goods

One criterion of the socioeconomic well-being of a household is ownership of various durable goods (radio, television, telephone, and refrigerator), and means of transport (bicycle, motorcycle, and private car). The presence of a radio and television set in a household is also an indicator of the availability of information to household members.

Table 2.9 shows that urban households are more likely than rural households to have these durable goods, especially radios, telephones, television sets, and refrigerators. An approximately equal proportion of urban and rural households own bicycles and private vehicles. The higher proportion of rural than urban households owning a motorcycle is due to the greater need for transport in rural areas. Urban areas are served by excellent public transport systems and, in Tashkent City, there is an extensive subway system. Overall, 91 percent of households in Uzbekistan have television, and 68 percent have refrigerators. Sixty-two percent of households have radios and 29 percent have telephones. More than one in five households owns a car.

2.3 Characteristics of Survey Respondents

2.3.1 Background Characteristics

The information in this section is important for the interpretation of the results of the study. Table 2.10 presents the percent distribution of women 15-49 by age, marital status, residence, region, educational level, religion, and ethnicity.

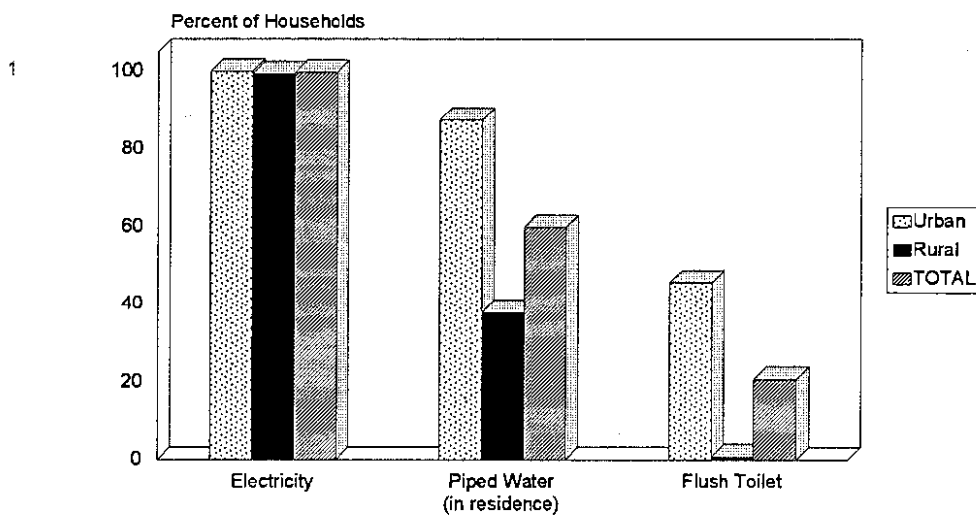
To obtain the age of a respondent, the UDHS Woman's Questionnaire included two questions: "In what month and year were you born?" and "How old were you at your last birthday?" Special attention was given to these questions during the training of

Table 2.9 Household durable goods

Percentage of households possessing various durable consumer goods, by residence, Uzbekistan 1996

| Durable goods | Residence | | Total |
|----------------------|-----------|-------|-------|
| | Urban | Rural | |
| Radio | 67.6 | 57.6 | 62.0 |
| Television | 95.7 | 86.8 | 90.7 |
| Telephone | 50.0 | 12.7 | 29.2 |
| Refrigerator | 88.1 | 52.2 | 68.1 |
| Bicycle | 16.7 | 22.5 | 20.0 |
| Motorcycle | 4.7 | 14.6 | 10.2 |
| Private car | 23.4 | 19.4 | 21.2 |
| None of the above | 1.3 | 7.6 | 4.8 |
| Number of households | 1,639 | 2,064 | 3,703 |

**Figure 2.3
Housing Characteristics by Residence**



UDHS 1996

the interviewers. Interviewers learned how to use probing techniques for situations in which respondents did not know their date of birth.

As shown in Table 2.10, the number of female respondents declines in a steady manner from ages 15-19 to 45-49. The majority of the women are married or living with a man (70 percent), but a significant proportion are never-married (25 percent), or are widowed, divorced, or separated (5 percent). More than half of women age 15-49 live in rural areas (62 percent). All women have at least some education and 36 percent have secondary-special or higher education. Ten percent are still in school.

Ninety-five percent of the female respondents are Muslim, while a small proportion are Christian (5 percent).

Table 2.11 shows the distribution of women 15-49 by ethnicity, religion, and residence according to region. Eighty-three percent of respondents are ethnic Uzbeks.

2.3.2 Educational Level of the Respondents

Table 2.12 shows the percent distribution of women by the highest level of education attended according to background characteristics. As will be seen later in the report, differences in the reproductive health of the women in many respects are related to differences in the level of education.

Sixty-four percent of respondents have attended primary/secondary schools, 26 percent have attended secondary-special schools, and 11 percent have reached higher education schools. There are significant differences in education between urban and rural areas and between regions. The proportion of respondents with higher education in urban areas is twice that in rural areas, and almost three times more in Tashkent City than in the other regions. There is a strong relationship between level of education and ethnicity. Sixty-eight percent of Uzbek women have primary/secondary education, 23 percent

Table 2.10 Background characteristics of respondents

Percent distribution of women 15-49 by selected background characteristics, Uzbekistan 1996

| Background characteristic | Weighted percent | Number of women | |
|-----------------------------------|------------------|-----------------|-------------|
| | | Weighted | Un-weighted |
| Age | | | |
| 15-19 | 22.2 | 981 | 943 |
| 20-24 | 18.3 | 806 | 816 |
| 25-29 | 16.1 | 710 | 700 |
| 30-34 | 14.1 | 624 | 619 |
| 35-39 | 12.7 | 561 | 576 |
| 40-44 | 9.6 | 422 | 437 |
| 45-49 | 7.0 | 310 | 324 |
| Marital status | | | |
| Never married | 24.9 | 1,099 | 1,100 |
| Married | 69.2 | 3,057 | 2,996 |
| Living together | 1.0 | 46 | 71 |
| Widowed | 1.8 | 80 | 90 |
| Divorced | 2.7 | 121 | 139 |
| Not living together | 0.3 | 13 | 19 |
| Residence | | | |
| Urban | 38.3 | 1,693 | 2,306 |
| Rural | 61.7 | 2,722 | 2,109 |
| Region | | | |
| Region 1 | 10.7 | 471 | 982 |
| Region 2 | 24.0 | 1,060 | 936 |
| Region 3 | 28.3 | 1,249 | 755 |
| Region 4 | 27.9 | 1,231 | 914 |
| Tashkent City | 9.2 | 404 | 828 |
| Education | | | |
| Primary/secondary | 63.8 | 2,817 | 2,525 |
| Secondary-special | 25.5 | 1,127 | 1,304 |
| Higher | 10.7 | 471 | 586 |
| Respondent still in school | | | |
| Yes | 9.9 | 439 | 474 |
| No | 90.1 | 3,976 | 3,941 |
| Religion | | | |
| Muslim | 94.5 | 4,173 | 4,048 |
| Christian | 4.6 | 205 | 307 |
| Other | 0.1 | 3 | 6 |
| Not religious | 0.7 | 30 | 46 |
| Don't know | 0.1 | 4 | 8 |
| Ethnicity | | | |
| Uzbek | 82.6 | 3,647 | 3,347 |
| Russian | 4.2 | 185 | 285 |
| Kazak | 3.5 | 155 | 256 |
| Tadzhik | 3.2 | 139 | 118 |
| Tatar | 2.0 | 87 | 106 |
| Karakalpak | 1.7 | 75 | 158 |
| Ukrainian | 0.2 | 9 | 13 |
| Other | 2.7 | 117 | 132 |
| Total | 100.0 | 4,415 | 4,415 |

Table 2.11 Ethnicity, religion and residence by region

Percent distribution of women 15-49 by ethnicity, religion and residence, according to region, Uzbekistan 1996

| Background characteristic | Region | | | | | Total |
|---------------------------|----------|----------|----------|----------|---------------|-------|
| | Region 1 | Region 2 | Region 3 | Region 4 | Tashkent City | |
| Ethnicity | | | | | | |
| Uzbek | 58.6 | 84.4 | 84.2 | 94.9 | 63.2 | 82.6 |
| Russian | 1.2 | 3.0 | 3.3 | 1.1 | 22.8 | 4.2 |
| Kazak | 20.8 | 1.1 | 3.2 | 0.1 | 1.1 | 3.5 |
| Tadzhik | 0.0 | 8.2 | 2.1 | 1.9 | 0.7 | 3.2 |
| Tatar | 1.1 | 1.3 | 3.1 | 0.7 | 5.2 | 2.0 |
| Karakalpak | 15.8 | 0.1 | 0.0 | 0.0 | 0.0 | 1.7 |
| Ukrainian | 0.2 | 0.0 | 0.2 | 0.1 | 1.0 | 0.2 |
| Other | 2.1 | 1.9 | 3.8 | 1.3 | 6.0 | 2.7 |
| Religion | | | | | | |
| Muslim | 97.6 | 96.8 | 94.9 | 98.6 | 71.3 | 94.5 |
| Christian | 1.0 | 3.2 | 4.3 | 1.1 | 24.6 | 4.6 |
| Other | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.1 |
| Not religious | 1.3 | 0.0 | 0.8 | 0.3 | 2.7 | 0.7 |
| Don't know | 0.1 | 0.0 | 0.0 | 0.1 | 0.7 | 0.1 |
| Residence | | | | | | |
| Urban | 39.4 | 27.4 | 33.9 | 31.5 | 100.0 | 38.3 |
| Rural | 60.6 | 72.6 | 66.1 | 68.5 | 0.0 | 61.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 471 | 1,060 | 1,249 | 1,231 | 404 | 4,415 |

Table 2.12 Level of education

Percent distribution of women by the highest level of education attended, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Highest level of education | | | Total | Number of women |
|---------------------------|----------------------------|-------------------|--------|-------|-----------------|
| | Primary/Secondary | Secondary-special | Higher | | |
| Age | | | | | |
| 15-19 | 82.2 | 15.2 | 2.6 | 100.0 | 981 |
| 20-24 | 58.8 | 30.3 | 11.0 | 100.0 | 806 |
| 25-29 | 56.9 | 31.8 | 11.3 | 100.0 | 710 |
| 30-34 | 56.4 | 29.9 | 13.6 | 100.0 | 624 |
| 35-39 | 61.8 | 24.7 | 13.4 | 100.0 | 561 |
| 40-44 | 58.1 | 27.0 | 14.9 | 100.0 | 422 |
| 45-49 | 60.8 | 22.1 | 17.2 | 100.0 | 310 |
| Residence | | | | | |
| Urban | 48.6 | 33.6 | 17.8 | 100.0 | 1,693 |
| Rural | 73.2 | 20.5 | 6.2 | 100.0 | 2,722 |
| Region | | | | | |
| Region 1 | 51.7 | 37.0 | 11.3 | 100.0 | 471 |
| Region 2 | 69.2 | 22.9 | 7.9 | 100.0 | 1,060 |
| Region 3 | 69.0 | 21.8 | 9.2 | 100.0 | 1,249 |
| Region 4 | 68.2 | 23.1 | 8.7 | 100.0 | 1,231 |
| Tashkent City | 34.3 | 38.0 | 27.7 | 100.0 | 404 |
| Ethnicity | | | | | |
| Uzbek | 67.9 | 23.2 | 8.8 | 100.0 | 3,647 |
| Other | 44.2 | 36.4 | 19.4 | 100.0 | 768 |
| Total | 63.8 | 25.5 | 10.7 | 100.0 | 4,415 |

have secondary-special education, and 9 percent have higher education. Among women of other ethnic groups, more than one-third have attained a secondary-special level of education, and 19 percent have attained higher education.

2.3.3 School Attendance and Reasons for Leaving School

Because of the association between education and many other demographic and health indicators, it is interesting to analyze the reasons why women leave school. As shown in Table 2.13, 24 percent of women age 15-24 currently attend school. The main reasons for leaving school are marriage and the perceived sufficiency of the obtained education. Four percent of the women declare that they left school in order to earn money.

2.3.4 Access to Mass Media

During the UDHS interviews, women were asked about their exposure to the mass media which is an indicator of their access to information about health and family planning.

Table 2.14 shows that 94 percent of women watch TV weekly, while 57 percent read a newspaper at least once a week. Daily radio listening is also widespread at 56 percent. There is little difference by age in access to the mass media. Women in Tashkent City and Region 4 have more access to all three types of mass media (58 and 56 percent, respectively) than women in the Region 3 (25 percent). It is notable that there is an association between the availability of mass media and respondents' educational level; the higher the educational level, the more often women watch TV, read newspapers, and listen to the

Table 2.13. School attendance and reasons for leaving school

Percent distribution of women 15 to 24 by whether attending school and reason for leaving school, according to highest level of education attended and residence, Uzbekistan 1996

| Reason for leaving school | Educational attainment | | | Total |
|-------------------------------|------------------------|--------------------|--------|-------|
| | Incomplete secondary | Complete secondary | Higher | |
| TOTAL | | | | |
| Currently attending | 45.7 | 13.4 | 62.0 | 24.2 |
| Got pregnant | 0.0 | 0.1 | 0.0 | 0.1 |
| Got married | 6.3 | 9.0 | 0.0 | 7.8 |
| Take care of younger children | 0.2 | 1.3 | 0.4 | 1.0 |
| Family need help | 5.0 | 2.3 | 0.0 | 2.8 |
| Need to earn money | 3.3 | 4.6 | 1.4 | 4.1 |
| Graduated/Enough school | 28.7 | 62.1 | 34.9 | 52.4 |
| Did not pass exams | 0.8 | 2.9 | 1.2 | 2.3 |
| Did not like school | 7.2 | 2.5 | 0.0 | 3.5 |
| School not accessible | 0.2 | 0.2 | 0.0 | 0.2 |
| Applying for school | 1.3 | 1.1 | 0.0 | 1.1 |
| Other | 0.5 | 0.0 | 0.0 | 0.1 |
| Don't know/missing | 0.5 | 0.4 | 0.0 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 427 | 1,247 | 114 | 1,787 |
| URBAN | | | | |
| Currently attending | 43.8 | 14.5 | 59.6 | 26.5 |
| Got pregnant | 0.0 | 0.3 | 0.0 | 0.2 |
| Got married | 7.3 | 9.4 | 0.0 | 8.0 |
| Take care of younger children | 0.6 | 1.4 | 0.8 | 1.1 |
| Family need help | 4.5 | 1.6 | 0.0 | 2.2 |
| Need to earn money | 3.2 | 4.4 | 0.0 | 3.6 |
| Graduated/Enough school | 29.8 | 59.4 | 37.4 | 49.6 |
| Did not pass exams | 0.8 | 4.9 | 2.3 | 3.6 |
| Did not like school | 7.7 | 2.8 | 0.0 | 3.8 |
| School not accessible | 0.0 | 0.1 | 0.0 | 0.1 |
| Applying for school | 0.6 | 0.9 | 0.0 | 0.7 |
| Other | 0.3 | 0.0 | 0.0 | 0.1 |
| Don't know/missing | 1.4 | 0.3 | 0.0 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 165 | 406 | 61 | 632 |
| RURAL | | | | |
| Currently attending | 47.0 | 12.8 | 64.9 | 22.9 |
| Got pregnant | 0.0 | 0.0 | 0.0 | 0.0 |
| Got married | 5.7 | 8.8 | 0.0 | 7.7 |
| Take care of younger children | 0.0 | 1.3 | 0.0 | 0.9 |
| Family need help | 5.3 | 2.7 | 0.0 | 3.1 |
| Need to earn money | 3.4 | 4.8 | 3.0 | 4.4 |
| Graduated/Enough school | 28.0 | 63.5 | 32.1 | 54.0 |
| Did not pass exams | 0.8 | 1.9 | 0.0 | 1.6 |
| Did not like school | 6.9 | 2.4 | 0.0 | 3.3 |
| School not accessible | 0.4 | 0.2 | 0.0 | 0.3 |
| Applying for school | 1.8 | 1.1 | 0.0 | 1.2 |
| Other | 0.7 | 0.0 | 0.0 | 0.2 |
| Don't know/missing | 0.0 | 0.5 | 0.0 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 262 | 840 | 52 | 1,155 |

Table 2.14 Access to mass media

Percentage of women who usually read a newspaper once a week, watch television once a week, or listen to radio daily, by selected background characteristics, Uzbekistan 1996

| Background characteristic | No mass media | Mass media | | | All three media | Number of women |
|---------------------------|---------------|-----------------------|-------------------------|-----------------------|-----------------|-----------------|
| | | Read newspaper weekly | Watch television weekly | Listen to radio daily | | |
| Age | | | | | | |
| 15-19 | 2.8 | 61.3 | 95.1 | 56.4 | 41.1 | 981 |
| 20-24 | 4.5 | 57.5 | 92.7 | 53.6 | 37.4 | 806 |
| 25-29 | 4.6 | 56.2 | 92.7 | 54.4 | 37.6 | 710 |
| 30-34 | 3.9 | 54.0 | 94.1 | 54.6 | 35.1 | 624 |
| 35-39 | 1.7 | 56.5 | 95.6 | 57.1 | 40.1 | 561 |
| 40-44 | 2.7 | 55.3 | 96.5 | 58.9 | 38.7 | 422 |
| 45-49 | 2.1 | 56.9 | 95.7 | 63.3 | 41.0 | 310 |
| Residence | | | | | | |
| Urban | 1.3 | 70.4 | 97.1 | 60.3 | 48.0 | 1,693 |
| Rural | 4.6 | 49.1 | 92.7 | 53.5 | 32.8 | 2,722 |
| Region | | | | | | |
| Region 1 | 2.8 | 60.6 | 95.2 | 45.5 | 32.2 | 471 |
| Region 2 | 4.6 | 46.4 | 92.5 | 55.5 | 30.5 | 1,060 |
| Region 3 | 5.5 | 41.1 | 91.9 | 49.8 | 24.9 | 1,249 |
| Region 4 | 1.3 | 74.9 | 96.9 | 62.6 | 55.7 | 1,231 |
| Tashkent City | 0.2 | 78.0 | 98.3 | 70.0 | 58.0 | 404 |
| Education | | | | | | |
| Primary/Secondary | 4.5 | 48.3 | 92.9 | 51.5 | 32.1 | 2,817 |
| Secondary-special | 2.0 | 66.5 | 96.4 | 62.0 | 44.8 | 1,127 |
| Higher | 0.1 | 88.8 | 98.2 | 69.6 | 63.3 | 471 |
| Ethnicity | | | | | | |
| Uzbek | 3.1 | 55.1 | 94.7 | 55.5 | 37.8 | 3,647 |
| Other | 4.6 | 67.6 | 92.8 | 59.4 | 42.7 | 768 |
| Total | 3.4 | 57.2 | 94.4 | 56.1 | 38.6 | 4,415 |

radio. Women of other ethnicities are somewhat more likely than Uzbek women to avail themselves of all three media.

2.3.5 Women's Employment Status

Table 2.15 presents information on women's employment status according to age, residence, region, educational level, and ethnicity.

Overall, 56 percent of women age 15-49 are not currently employed and 47 percent have not been employed for the last 12 months. Unemployment is more common among younger women, those living in rural areas, in Regions 2 and 3, those with a lower educational level, and Uzbek women. Almost 6 percent of the employed women work for less than five days a week and 7 percent of the women are employed only seasonally or occasionally.

Table 2.15 Employment

Percent distribution of women by whether currently employed and distribution of employed women by continuity of employment, according to background characteristics, Uzbekistan 1996

| Background characteristic | Not currently employed | | Currently employed | | | | Total | Number |
|---------------------------|--------------------------------|--------------------------|--------------------|------------------|------------|--------------|--------------|--------------|
| | Did not work in last 12 months | Worked in last 12 months | All year | | Seasonally | Occasionally | | |
| | | | 5+ days per week | <5 days per week | | | | |
| Age | | | | | | | | |
| 15-19 | 82.2 | 1.2 | 9.8 | 1.6 | 5.0 | 0.1 | 100.0 | 981 |
| 20-24 | 52.2 | 15.3 | 23.3 | 3.8 | 5.2 | 0.1 | 100.0 | 806 |
| 25-29 | 37.4 | 18.1 | 32.8 | 6.7 | 4.8 | 0.1 | 100.0 | 710 |
| 30-34 | 29.7 | 12.4 | 41.8 | 8.1 | 7.9 | 0.1 | 100.0 | 624 |
| 35-39 | 25.3 | 5.6 | 49.5 | 6.9 | 12.5 | 0.1 | 100.0 | 561 |
| 40-44 | 31.0 | 1.0 | 50.1 | 10.4 | 7.5 | 0.0 | 100.0 | 422 |
| 45-49 | 41.8 | 0.3 | 42.3 | 9.1 | 6.1 | 0.3 | 100.0 | 310 |
| Residence | | | | | | | | |
| Urban | 44.1 | 9.2 | 37.5 | 7.7 | 1.3 | 0.3 | 100.0 | 1,693 |
| Rural | 49.0 | 8.2 | 28.1 | 4.6 | 10.0 | 0.0 | 100.0 | 2,722 |
| Region | | | | | | | | |
| Region 1 | 40.7 | 14.2 | 39.1 | 3.8 | 2.2 | 0.0 | 100.0 | 471 |
| Region 2 | 55.0 | 5.3 | 29.2 | 6.7 | 3.8 | 0.0 | 100.0 | 1,060 |
| Region 3 | 50.7 | 9.9 | 28.9 | 3.3 | 7.2 | 0.0 | 100.0 | 1,249 |
| Region 4 | 40.9 | 7.1 | 31.9 | 7.9 | 12.1 | 0.0 | 100.0 | 1,231 |
| Tashkent City | 42.0 | 11.0 | 37.4 | 6.8 | 1.4 | 1.3 | 100.0 | 404 |
| Education | | | | | | | | |
| Primary/Secondary | 57.4 | 5.3 | 23.3 | 4.3 | 9.6 | 0.1 | 100.0 | 2,817 |
| Secondary-special | 30.1 | 15.1 | 43.6 | 9.0 | 1.9 | 0.3 | 100.0 | 1,127 |
| Higher | 26.7 | 12.4 | 53.6 | 6.8 | 0.5 | 0.0 | 100.0 | 471 |
| Ethnicity | | | | | | | | |
| Uzbek | 48.5 | 8.6 | 29.4 | 5.9 | 7.6 | 0.0 | 100.0 | 3,647 |
| Other | 40.6 | 8.4 | 42.8 | 5.4 | 2.2 | 0.6 | 100.0 | 768 |
| Total | 47.1 | 8.6 | 31.7 | 5.8 | 6.7 | 0.1 | 100.0 | 4,415 |

2.3.6 Employer

Table 2.16 shows the percent distribution of currently employed women by type of employer, according to background characteristics. Ninety-five percent of employed women work in state enterprises. Only 1 percent of women work in private firms. This type of employment is popular among women who live in urban areas and especially among women living in Tashkent City.

2.3.7 Occupation

The agrarian sector is the most important sector in the Uzbekistan economy. Twenty-eight percent of employed women work in agriculture (Table 2.17) and the majority of them work on state land. Women in Regions 2, 3 and 4 are more likely to be working in agriculture mostly on state land.

Seventy-two percent of employed women are not engaged in agriculture. Almost half work in professional, technical, and managerial occupations, 7 percent in sales and trade, and 18 percent in manual labor. These parameters differ by age, residence, region, and respondent's ethnicity. Significant differences are also seen by educational level—women with higher education are engaged mainly in professional and technical fields, with few employed in manual labor.

Table 2.16 Employer

Percent distribution of currently employed women by employer, according to background characteristics, Uzbekistan 1996

| Background characteristic | Employer | | | | | Total | Number |
|---------------------------|--------------------------------|----------------------|----------------------|---------------|---------|-------|--------|
| | Government or State enterprise | Family, own business | Private firm, person | Self-employed | Missing | | |
| Age | | | | | | | |
| 15-19 | 91.8 | 1.7 | 0.9 | 5.5 | 0.0 | 100.0 | 163 |
| 20-24 | 92.3 | 2.5 | 2.3 | 3.0 | 0.0 | 100.0 | 262 |
| 25-29 | 94.9 | 1.3 | 1.1 | 2.5 | 0.1 | 100.0 | 315 |
| 30-34 | 95.8 | 1.5 | 0.7 | 2.0 | 0.0 | 100.0 | 361 |
| 35-39 | 95.0 | 1.8 | 1.5 | 1.7 | 0.0 | 100.0 | 388 |
| 40-44 | 96.5 | 0.7 | 1.0 | 1.7 | 0.2 | 100.0 | 287 |
| 45-49 | 94.2 | 1.3 | 0.8 | 3.0 | 0.8 | 100.0 | 180 |
| Residence | | | | | | | |
| Urban | 90.9 | 1.8 | 2.7 | 4.4 | 0.2 | 100.0 | 791 |
| Rural | 97.2 | 1.4 | 0.2 | 1.2 | 0.0 | 100.0 | 1,164 |
| Region | | | | | | | |
| Region 1 | 97.1 | 1.6 | 0.2 | 0.6 | 0.4 | 100.0 | 212 |
| Region 2 | 97.8 | 0.8 | 0.0 | 1.4 | 0.0 | 100.0 | 421 |
| Region 3 | 94.0 | 4.2 | 0.0 | 1.5 | 0.3 | 100.0 | 492 |
| Region 4 | 97.2 | 0.0 | 0.4 | 2.4 | 0.0 | 100.0 | 640 |
| Tashkent City | 78.1 | 1.3 | 10.8 | 9.8 | 0.0 | 100.0 | 190 |
| Education | | | | | | | |
| Primary/Secondary | 94.8 | 2.1 | 0.5 | 2.5 | 0.1 | 100.0 | 1,050 |
| Secondary-special | 93.8 | 1.3 | 1.5 | 3.2 | 0.2 | 100.0 | 618 |
| Higher | 95.9 | 0.0 | 3.1 | 1.0 | 0.0 | 100.0 | 287 |
| Ethnicity | | | | | | | |
| Uzbek | 95.8 | 1.7 | 0.5 | 1.8 | 0.1 | 100.0 | 1,563 |
| Other | 89.9 | 1.0 | 3.9 | 5.1 | 0.1 | 100.0 | 392 |
| Total | 94.6 | 1.5 | 1.2 | 2.5 | 0.1 | 100.0 | 1,955 |

Table 2.17. Occupation

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

| Background characteristic | Agricultural | | | Nonagricultural | | | | Total | Number of women |
|---------------------------|--------------|-------------|-------------|--------------------|----------------|----------------|------------------|--------------|-----------------|
| | Family land | Rented land | State land | Prof./tech./manag. | Sales/services | Skilled manual | Unskilled manual | | |
| Age | | | | | | | | | |
| 15-19 | 0.0 | 0.0 | 43.4 | 24.6 | 5.1 | 20.4 | 6.5 | 100.0 | 163 |
| 20-24 | 0.2 | 0.4 | 28.0 | 51.4 | 5.4 | 9.7 | 4.9 | 100.0 | 262 |
| 25-29 | 0.2 | 0.0 | 24.3 | 50.2 | 5.2 | 10.4 | 9.8 | 100.0 | 315 |
| 30-34 | 0.3 | 0.3 | 26.8 | 48.7 | 6.3 | 10.9 | 6.8 | 100.0 | 361 |
| 35-39 | 0.4 | 0.4 | 29.0 | 43.7 | 9.5 | 7.3 | 9.9 | 100.0 | 388 |
| 40-44 | 0.2 | 0.0 | 23.3 | 51.8 | 7.0 | 8.1 | 9.7 | 100.0 | 287 |
| 45-49 | 0.0 | 0.0 | 22.3 | 58.2 | 6.9 | 7.2 | 5.4 | 100.0 | 180 |
| Residence | | | | | | | | | |
| Urban | 0.1 | 0.0 | 1.6 | 65.6 | 10.4 | 14.7 | 7.6 | 100.0 | 791 |
| Rural | 0.3 | 0.3 | 45.0 | 35.4 | 4.2 | 6.8 | 8.1 | 100.0 | 1,164 |
| Region | | | | | | | | | |
| Region 1 | 1.2 | 1.0 | 18.6 | 53.1 | 6.8 | 10.5 | 8.9 | 100.0 | 212 |
| Region 2 | 0.3 | 0.3 | 29.6 | 51.2 | 5.0 | 5.3 | 8.3 | 100.0 | 421 |
| Region 3 | 0.0 | 0.0 | 28.8 | 46.7 | 5.9 | 10.9 | 7.7 | 100.0 | 492 |
| Region 4 | 0.0 | 0.0 | 36.0 | 40.6 | 4.6 | 11.0 | 7.7 | 100.0 | 640 |
| Tashkent City | 0.0 | 0.0 | 0.0 | 59.6 | 19.3 | 13.9 | 7.2 | 100.0 | 190 |
| Education | | | | | | | | | |
| Primary/Secondary | 0.3 | 0.3 | 47.6 | 20.2 | 6.8 | 12.4 | 12.4 | 100.0 | 1,050 |
| Secondary-special | 0.2 | 0.0 | 5.3 | 72.2 | 8.5 | 10.0 | 3.9 | 100.0 | 618 |
| Higher | 0.0 | 0.0 | 1.3 | 95.1 | 2.3 | 1.1 | 0.2 | 100.0 | 287 |
| Ethnicity | | | | | | | | | |
| Uzbek | 0.1 | 0.0 | 31.8 | 44.6 | 5.6 | 10.0 | 7.8 | 100.0 | 1,563 |
| Other | 0.4 | 0.9 | 10.0 | 59.7 | 11.1 | 9.8 | 8.1 | 100.0 | 392 |
| Total | 0.2 | 0.2 | 27.4 | 47.6 | 6.7 | 10.0 | 7.9 | 100.0 | 1,955 |

Note: Professional, technical, managerial includes professional, technical, clerical and managerial occupations.

2.3.8 Decisions on Use of Earnings

When the status of women is assessed, their independence in making decisions on the use of their earnings is a valuable indicator. Table 2.18 shows that almost 27 percent of employed women make their own decisions on the use of their earnings, while 49 percent decide together with their husband or partner, and 3 percent make decisions jointly with someone other than a husband. Twelve percent of women report that their husbands alone decide how to spend their earnings. Independent decision making on use of earnings tends to be higher among women in urban areas, especially Tashkent City, and among unmarried women.

| Background characteristic | Person who decides how earnings are used | | | | | Total | Number |
|---------------------------|--|-----------------|------------------------------|--------------|----------------------|--------------|--------------|
| | Self only | Husband/partner | Jointly with husband/partner | Someone else | Jointly with someone | | |
| Age | | | | | | | |
| 15-19 | 34.9 | 1.3 | 5.0 | 42.2 | 16.5 | 100.0 | 153 |
| 20-24 | 29.3 | 13.4 | 34.9 | 15.0 | 7.5 | 100.0 | 247 |
| 25-29 | 25.4 | 10.8 | 50.1 | 11.0 | 2.0 | 100.0 | 293 |
| 30-34 | 26.9 | 12.5 | 56.4 | 3.4 | 0.8 | 100.0 | 336 |
| 35-39 | 19.9 | 13.9 | 63.5 | 1.9 | 0.7 | 100.0 | 363 |
| 40-44 | 25.7 | 13.8 | 59.8 | 0.5 | 0.2 | 100.0 | 270 |
| 45-49 | 39.1 | 13.6 | 46.4 | 0.6 | 0.3 | 100.0 | 172 |
| Residence | | | | | | | |
| Urban | 38.6 | 6.4 | 45.9 | 5.9 | 3.2 | 100.0 | 755 |
| Rural | 19.3 | 15.9 | 51.5 | 10.2 | 3.0 | 100.0 | 1,079 |
| Region | | | | | | | |
| Region 1 | 29.0 | 3.4 | 42.4 | 24.1 | 0.2 | 100.0 | 209 |
| Region 2 | 23.6 | 4.4 | 67.8 | 2.2 | 0.0 | 100.0 | 421 |
| Region 3 | 32.9 | 0.7 | 53.5 | 7.4 | 0.4 | 100.0 | 479 |
| Region 4 | 15.7 | 34.0 | 38.0 | 10.9 | 0.0 | 100.0 | 535 |
| Tashkent City | 51.6 | 4.7 | 36.0 | 0.8 | 0.0 | 100.0 | 189 |
| Education | | | | | | | |
| Primary/Secondary | 22.9 | 12.6 | 50.4 | 10.8 | 0.2 | 100.0 | 958 |
| Secondary-special | 31.0 | 12.3 | 46.6 | 6.7 | 0.1 | 100.0 | 594 |
| Higher | 33.8 | 9.3 | 50.6 | 3.9 | 2.3 | 100.0 | 282 |
| Ethnicity | | | | | | | |
| Uzbek | 22.6 | 14.4 | 50.7 | 9.1 | 3.0 | 100.0 | 1,447 |
| Other | 44.5 | 2.9 | 43.3 | 6.0 | 3.3 | 100.0 | 387 |
| Marital status | | | | | | | |
| Not married | 66.1 | 0.0 | 0.8 | 21.6 | 0.0 | 100.0 | 413 |
| Currently married | 15.9 | 15.5 | 63.2 | 4.6 | 0.2 | 100.0 | 1,420 |
| Total | 27.2 | 12.0 | 49.2 | 8.4 | 3.0 | 100.0 | 1,833 |

2.3.9 Child Care While Working

Preschool age children in the family pose employment obstacles, since child care requires significant time and energy. When child care is provided completely by the mother, her work possibilities are limited.

As Table 2.19 shows, less than half of employed women have a child under age six at home. It is notable that the likelihood of a working woman having a child under six years is greater in rural areas (48 percent), the Region 4 (49 percent) and among Uzbeks (44 percent). Among employed women with young

children, only 6 percent care for the children themselves, 2 percent are cared for by the husband or partner, and 23 percent are cared for by relatives.

One-third of employed women with young children use preschool child care institutions despite the mass shutdown during recent years. Use of institutional child care is greatest in urban areas (53 percent), Tashkent City (65 percent), and among women with higher education (49 percent).

When other children are used as child care providers, the caretaker is much more likely to be a sister (12 percent) than a brother (4 percent). The role of other people (neighbors, servants) in providing child care is not significant.

Table 2.19 Child care while working

Percent distribution of currently employed women by whether they have a child under six years of age, and the percent distribution of employed mothers who have a child under six at home by person who cares for child while mother is at work, according to background characteristics, Uzbekistan 1996

| Background characteristic | Employed women with: | | Child's caretaker while mother is at work | | | | | | | | | | | Number of employed women | |
|---------------------------|----------------------------|--|---|-----------------|----------------|----------|---------------------|--------------------|--------------------|------------------|-----------------------|-------------------------------------|---------------|--------------------------|-------|
| | No child under six at home | One or more children under six at home | Respondent | Husband/partner | Other relative | Neighbor | Servants/Hired help | Institutional care | Other female child | Other male child | Child lives elsewhere | Not worked since birth ¹ | Other/Missing | | Total |
| | | | | | | | | | | | | | | | |
| Residence | | | | | | | | | | | | | | | |
| Urban | 70.0 | 30.0 | 5.3 | 2.2 | 17.6 | 0.4 | 3.1 | 53.4 | 5.6 | 1.1 | 3.8 | 1.7 | 5.7 | 100.0 | 791 |
| Rural | 52.4 | 47.6 | 6.6 | 2.2 | 25.1 | 1.3 | 2.1 | 28.2 | 14.3 | 5.8 | 5.1 | 3.2 | 6.2 | 100.0 | 1,164 |
| Education | | | | | | | | | | | | | | | |
| Primary/Secondary | 58.0 | 42.0 | 8.2 | 1.9 | 22.6 | 1.1 | 1.5 | 28.7 | 15.1 | 6.1 | 4.1 | 3.6 | 7.1 | 100.0 | 1,050 |
| Secondary-special | 60.3 | 39.7 | 4.5 | 2.5 | 24.4 | 1.4 | 3.6 | 42.6 | 7.4 | 2.0 | 6.0 | 1.4 | 4.1 | 100.0 | 618 |
| Higher | 63.6 | 36.4 | 2.0 | 2.6 | 20.2 | 0.0 | 3.3 | 49.3 | 7.1 | 2.6 | 4.5 | 2.2 | 6.2 | 100.0 | 287 |
| Work status | | | | | | | | | | | | | | | |
| For family member | 38.7 | 61.3 | 24.1 | 0.0 | 25.7 | 0.0 | 0.0 | 20.1 | 9.9 | 9.9 | 7.5 | 2.8 | 0.0 | 100.0 | 30 |
| For someone else | 87.3 | 12.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 24 |
| Self-employed | 68.1 | 31.9 | 53.6 | 2.8 | 3.1 | 0.0 | 0.0 | 9.1 | 19.7 | 0.0 | 0.0 | 0.0 | 11.7 | 100.0 | 49 |
| Missing | 81.5 | 18.5 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2 |
| Region | | | | | | | | | | | | | | | |
| Region 1 | 58.5 | 41.5 | 1.7 | 2.7 | 35.0 | 1.8 | 2.2 | 31.4 | 16.1 | 4.4 | 1.1 | 1.1 | 2.7 | 100.0 | 212 |
| Region 2 | 60.3 | 39.7 | 12.3 | 3.7 | 13.4 | 2.4 | 6.5 | 25.2 | 21.5 | 7.8 | 2.9 | 0.5 | 3.7 | 100.0 | 421 |
| Region 3 | 60.8 | 39.2 | 4.5 | 1.9 | 21.0 | 0.0 | 1.9 | 41.3 | 13.1 | 5.7 | 2.4 | 5.5 | 2.8 | 100.0 | 492 |
| Region 4 | 51.3 | 48.7 | 5.7 | 1.2 | 26.9 | 0.8 | 0.5 | 36.2 | 4.8 | 2.0 | 8.4 | 2.8 | 10.7 | 100.0 | 640 |
| Tashkent City | 83.3 | 16.7 | 3.1 | 4.6 | 10.8 | 0.0 | 3.1 | 64.6 | 6.2 | 1.5 | 3.1 | 1.5 | 1.5 | 100.0 | 190 |
| Ethnicity | | | | | | | | | | | | | | | |
| Uzbek | 55.9 | 44.1 | 6.3 | 2.2 | 22.5 | 1.0 | 2.1 | 35.3 | 11.5 | 4.4 | 5.3 | 2.8 | 6.5 | 100.0 | 1,563 |
| Other | 74.0 | 26.0 | 5.7 | 2.2 | 25.4 | 1.0 | 4.2 | 38.4 | 12.7 | 4.1 | 0.9 | 2.2 | 3.2 | 100.0 | 392 |
| Occupation | | | | | | | | | | | | | | | |
| Agricultural | 51.9 | 48.1 | 6.7 | 2.0 | 27.3 | 1.1 | 1.2 | 24.1 | 19.0 | 7.7 | 4.8 | 2.1 | 4.0 | 100.0 | 544 |
| Nonagricultural | 62.4 | 37.6 | 6.0 | 2.3 | 20.7 | 1.0 | 3.0 | 41.4 | 8.0 | 2.7 | 4.7 | 3.0 | 7.1 | 100.0 | 1,412 |
| Employment status | | | | | | | | | | | | | | | |
| All year, full week | 61.8 | 38.2 | 5.8 | 2.2 | 21.4 | 1.0 | 3.1 | 36.1 | 11.6 | 4.2 | 4.2 | 3.4 | 7.0 | 100.0 | 1,399 |
| All year, part week | 59.9 | 40.1 | 7.2 | 2.0 | 25.7 | 0.0 | 2.3 | 39.4 | 9.3 | 4.0 | 3.8 | 1.5 | 4.9 | 100.0 | 255 |
| Seasonal | 47.9 | 52.1 | 7.1 | 2.4 | 26.2 | 1.9 | 0.0 | 31.6 | 13.5 | 5.3 | 7.1 | 1.2 | 3.6 | 100.0 | 295 |
| Occasional | 81.8 | 18.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 5 |
| Total | 59.5 | 40.5 | 6.2 | 2.2 | 22.8 | 1.0 | 2.4 | 35.7 | 11.7 | 4.4 | 4.7 | 2.7 | 6.1 | 100.0 | 1,955 |

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

¹ Respondent was employed but had not actually worked since the birth; therefore, current caretaker status is not applicable.

2.4 Pensioners

The UDHS Household Questionnaire contained questions to determine the pensioner status of all household members age 50 and over.

Table 2.20 indicates that 58 percent of male and 91 percent of female household members age 50 and over are pensioners. There is a sharp increase in the proportion who are pensioners by age. For females the increase occurs between age groups 50-54 (70 percent) and 55-59 (93 percent). For males the increase occurs between age groups 55-59 (38 percent) and 60-64 (88 percent). Thus, in Uzbekistan almost all females age 55 and over and all males age 60 and over are pensioners. This is true in both urban and rural areas (data not shown).

Table 2.20. Pensioners by age and sex

Household population age 50 and over by age, sex and pensioner status, Uzbekistan 1996

| Age | Household population | | | Pensioners | | | Percent pensioners | | |
|-------|----------------------|--------|-------|------------|--------|-------|--------------------|--------|-------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 50-54 | 405 | 297 | 702 | 66 | 207 | 273 | 16.4 | 69.8 | 38.9 |
| 55-59 | 354 | 319 | 673 | 133 | 295 | 428 | 37.6 | 92.6 | 63.7 |
| 60-64 | 266 | 281 | 547 | 234 | 279 | 513 | 87.7 | 99.5 | 93.8 |
| 65-69 | 181 | 169 | 350 | 170 | 166 | 336 | 94.1 | 98.2 | 96.1 |
| 70-74 | 119 | 133 | 253 | 119 | 133 | 253 | 100.0 | 100.0 | 100.0 |
| 75-79 | 50 | 91 | 141 | 50 | 90 | 140 | 100.0 | 98.5 | 99.0 |
| 80+ | 63 | 118 | 182 | 62 | 115 | 177 | 98.4 | 97.0 | 97.5 |
| Total | 1,439 | 1,409 | 2,847 | 835 | 1,286 | 2,121 | 58.0 | 91.3 | 74.5 |

The UDHS data correspond well with the age requirements for retirement in Uzbekistan, i.e., 55 for females and 60 for males. In the remainder of this section, a simple age criteria with these age cutoffs will be used among the household population to define pensioners.

Overall, the analysis is based on data for 1,792 pensioners. The 1,112 females pensioners exceed the 680 male pensioners by 64 percent. This difference is primarily due to sex differences in the age range which defines pensioners and to a lesser extent because there are more females than males in the older ages. Thus, considering only the population age 60 and over, the 793 females exceed the 680 males by 17 percent.

2.4.1 Composition of Households Containing Pensioners

The welfare of pensioners is potentially influenced by whether or not they reside in a household which includes other adult members who can attend to their health needs and who may be economically active and able to provide monetary support. Table 2.21 shows the distribution of households containing pensioners by the number of nonpensioned household members age 20 and over. Separate distributions are shown for households containing a single pensioner and households containing more than one pensioner. Of 1,792 pensioners, 768 (43 percent) reside in households containing a single pensioner and 1024 (57 percent) reside in households containing more than one pensioner.

Among households with a single pensioner, 82 percent have at least one other household member age 20 or over. Thus, in 18 percent of the households with a single pensioner, the pensioner is without the

benefit of support from an adult household member who is in the economically active age range. The percentage of single pensioner households with no other adult in the household is higher in urban (22 percent) than in rural areas (11 percent). Overall, among all 1,792 pensioners, 8 percent reside in a household where they are the only pensioner and there is no other adult household member.

Table 2.21 Composition of households with pensioners

Percent distribution of households with one pensioner and with two or more pensioners by number of nonpensioned household members age 20 and over by residence and region, Uzbekistan 1996

| Background characteristic | Households with one pensioner by the number of nonpensioned household members age 20 and over | | | | Total | Number of households | Households with two or more pensioners by the number of nonpensioned household members age 20 and over | | | | Total | Number of households |
|---------------------------|---|------|------|------|-------|----------------------|--|------|------|------|-------|----------------------|
| | 0 | 1 | 2 | 3+ | | | 0 | 1 | 2 | 3+ | | |
| Residence | | | | | | | | | | | | |
| Urban | 22.3 | 17.6 | 33.0 | 27.1 | 100.0 | 440 | 34.5 | 12.9 | 30.9 | 21.7 | 100.0 | 210 |
| Rural | 11.2 | 14.1 | 43.8 | 30.9 | 100.0 | 329 | 17.4 | 14.5 | 39.8 | 28.3 | 100.0 | 285 |
| Region | | | | | | | | | | | | |
| Region 1 | 11.2 | 6.6 | 37.5 | 44.7 | 100.0 | 86 | 7.1 | 11.8 | 37.6 | 43.5 | 100.0 | 48 |
| Region 2 | 9.3 | 15.8 | 40.0 | 34.9 | 100.0 | 155 | 16.3 | 16.4 | 36.4 | 30.9 | 100.0 | 108 |
| Region 3 | 23.7 | 23.7 | 30.1 | 22.4 | 100.0 | 219 | 31.3 | 15.8 | 32.6 | 20.3 | 100.0 | 153 |
| Region 4 | 14.9 | 8.5 | 48.9 | 27.7 | 100.0 | 194 | 26.2 | 9.0 | 41.0 | 23.8 | 100.0 | 133 |
| Tashkent City | 26.0 | 22.1 | 29.9 | 22.1 | 100.0 | 115 | 34.6 | 16.8 | 30.8 | 17.8 | 100.0 | 53 |
| Total | 17.5 | 16.1 | 37.6 | 28.7 | 100.0 | 768 | 24.7 | 13.8 | 36.0 | 25.5 | 100.0 | 495 |

In households containing more than one pensioner, 25 percent have no other household member age 20 or over. The majority of these cases are probably households containing a married couple both of whom receive a pension. The percentage of households with more than one pensioner but no other adult member is higher in urban (35 percent) than rural areas (17 percent).

2.4.2 Housing Characteristics of Households Containing Pensioners

The welfare of pensioners may also be influenced by the characteristics and possessions of the households in which they reside. Table 2.22 shows the distribution of households containing pensioners according to the source of drinking water and sanitation facilities. There is little difference in the sources of drinking water between households with pensioners containing no other adult household member and those with other adult household members. For example, in rural areas, the proportion of households served by piped water is 39 percent for both households with other adult members and for those without other adult household members. The only substantial difference occurs in the case of sanitation facilities. In urban areas, 66 percent of pensioner households which contain no other adult members have a flush toilet while only 31 percent of pensioner households which contain other adult members have a flush toilet.

Table 2.23 shows the percent of households with pensioners which contain specific possessions according to whether or not the household contains other household members age 20 and over. There is little difference between households with or without other adult household members in terms of the percent possessing a radio, a television set, or a refrigerator. However, there are clear and substantial differences with respect to possession of a telephone or means of transport (i.e., a motorcycle or private car). For example, in urban areas, only 4 percent of households with no other adult member, as compared to 27 percent with other adult household members, have a private car. The difference in rural areas is also substantial. The indication is that pensioners living on their own are at a disadvantage in terms of communications and mobility.

Table 2.22 Housing characteristics of households with pensioners

Percent distribution of households with pensioners by housing characteristics according to whether or not the household includes nonpensioned members age 20 and over, Uzbekistan 1996

| Characteristic | Households with pensioners but no nonpensioned household member age 20 and over | | | Households with pensioners and at least one non-pensioned household member age 20 and over | | | All households with pensioners | | |
|---------------------------------|---|-------|-------|--|-------|-------|--------------------------------|-------|-------|
| | Residence | | | Residence | | | Residence | | |
| | Urban | Rural | Total | Urban | Rural | Total | Urban | Rural | Total |
| Source of drinking water | | | | | | | | | |
| Piped into residence | 94.7 | 39.1 | 76.0 | 85.1 | 38.6 | 60.8 | 87.6 | 38.7 | 63.8 |
| Public tap | 2.8 | 23.6 | 9.8 | 7.7 | 28.2 | 18.4 | 6.4 | 27.5 | 16.7 |
| Well in residence | 2.5 | 13.5 | 6.2 | 6.0 | 17.6 | 12.1 | 5.1 | 17.0 | 10.9 |
| Public well | 0.0 | 4.8 | 1.6 | 0.4 | 6.5 | 3.6 | 0.3 | 6.2 | 3.2 |
| Tanker truck | 0.0 | 8.8 | 3.0 | 0.4 | 3.4 | 1.9 | 0.3 | 4.1 | 2.1 |
| Other | 0.0 | 10.1 | 3.4 | 0.5 | 5.8 | 3.0 | 0.3 | 6.8 | 3.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Type of toilet facility | | | | | | | | | |
| Flush toilet | 66.0 | 0.0 | 43.8 | 30.8 | 1.4 | 15.4 | 40.0 | 1.1 | 21.2 |
| Pit toilet | 34.0 | 100.0 | 56.2 | 69.2 | 98.6 | 84.6 | 60.0 | 98.9 | 78.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Main floor material | | | | | | | | | |
| Wood planks | 78.4 | 74.4 | 77.0 | 83.5 | 73.1 | 78.0 | 82.2 | 73.3 | 77.8 |
| Linoleum | 15.1 | 1.8 | 10.6 | 7.8 | 1.0 | 4.3 | 9.7 | 1.1 | 5.6 |
| Earth | 1.0 | 22.0 | 8.1 | 3.5 | 23.8 | 14.1 | 2.9 | 23.6 | 12.9 |
| Parquet, polished wood | 4.2 | 0.0 | 2.8 | 2.6 | 0.4 | 1.5 | 3.1 | 0.3 | 1.7 |
| Other | 1.2 | 1.8 | 1.4 | 2.5 | 1.7 | 2.1 | 2.2 | 1.6 | 1.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of households | 170 | 86 | 257 | 479 | 527 | 1,006 | 649 | 614 | 1,263 |

Table 2.23 Possession of durable goods for households with pensioners

Percentage of households with pensioners by possession of various durable goods according to whether or not the household includes nonpensioned members age 20 and over, Uzbekistan 1996

| Durable goods | Households with pensioners but no nonpensioned household member age 20 and over | | | Households with pensioners and at least one non-pensioned household member age 20 and over | | | All households with pensioners | | |
|----------------------|---|-------|-------|--|-------|-------|--------------------------------|-------|-------|
| | Residence | | | Residence | | | Residence | | |
| | Urban | Rural | Total | Urban | Rural | Total | Urban | Rural | Total |
| Radio | 65.3 | 60.2 | 63.6 | 73.1 | 59.9 | 66.2 | 71.0 | 60.0 | 65.7 |
| Television | 86.7 | 77.9 | 83.8 | 97.7 | 88.7 | 93.0 | 94.8 | 87.1 | 91.1 |
| Telephone | 39.2 | 6.0 | 28.0 | 51.2 | 14.6 | 32.0 | 48.0 | 13.4 | 31.2 |
| Refrigerator | 86.8 | 43.0 | 72.0 | 87.9 | 55.2 | 70.8 | 87.6 | 53.5 | 71.0 |
| Bicycle | 2.8 | 17.2 | 7.7 | 18.0 | 28.1 | 23.3 | 14.0 | 26.6 | 20.1 |
| Motorcycle | 0.8 | 5.3 | 2.3 | 6.7 | 19.9 | 13.6 | 5.1 | 17.8 | 11.3 |
| Private car | 3.5 | 5.3 | 4.1 | 27.2 | 22.4 | 24.7 | 21.0 | 20.0 | 20.5 |
| None of the above | 2.6 | 16.2 | 7.2 | 1.2 | 5.5 | 3.4 | 1.5 | 7.0 | 4.2 |
| Number of households | 170 | 86 | 257 | 479 | 527 | 1,006 | 649 | 614 | 1,263 |

CHAPTER 3

FERTILITY

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A complete pregnancy history was collected from each woman interviewed in the 1996 UDHS. To encourage complete reporting of all pregnancies, respondents were asked separate questions about pregnancies that resulted in live births, induced abortions (including mini-abortions), miscarriages, and stillbirths. Accounting of live births was achieved by asking separately about the number of sons and daughters living with the respondent, the number living elsewhere, and the number who had died. To encourage complete reporting of all pregnancies, all pregnancy intervals of four or more years in duration were additionally probed for intervening pregnancies.

The pregnancy history was collected in reverse chronological order from the most recent to the first pregnancy. Pregnancy outcome (live birth, abortion, miscarriage, or stillbirth) and date (month and year) of termination was recorded for each pregnancy. For each live birth, sex of the child, survival status, and age (for living children) or age at death (for dead children) were also collected.

This chapter presents the findings pertaining to live births. Chapter 5 presents the findings pertaining to pregnancy loss.

3.1 Current Fertility

Table 3.1 and Figure 3.1 present age-specific fertility rates for the three-year period preceding the survey.¹ Rates are expressed per 1,000 women. The sum of the age-specific rates, known as the total fertility rate (TFR), is used to summarize the current level of fertility. The TFR is 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. Two other summary measures are presented in Table 3.1: the general fertility rate (GFR) and the crude birth rate (CBR). The GFR represents the annual number of births in the population per 1,000 women age 15-44. The crude birth rate is the annual number of births in the population per 1,000 population. The latter two measures are calculated from the birth history data for the three-year period preceding the survey, and the age and sex distribution of the household population.

¹ Numerators for age-specific fertility rates are calculated by summing the number of live births which occurred in the 1-36 months preceding the survey (determined from the date of interview and birth date of the child), and classifying them by age (in five-year groups) of the mother at the time of birth (determined from the birth date of the mother). 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.

Table 3.1 Current fertility

Age-specific and cumulative fertility rates and the crude birth rate for the three years preceding the survey, by residence and ethnicity, Uzbekistan 1996

| Age | Residence | | Ethnicity | | Total |
|-----------|-----------|-------|-----------|-------|-------|
| | Urban | Rural | Uzbek | Other | |
| 15-19 | 60 | 62 | 64 | 46 | 61 |
| 20-24 | 218 | 294 | 283 | 171 | 266 |
| 25-29 | 154 | 190 | 183 | 133 | 176 |
| 30-34 | 86 | 132 | 118 | 92 | 114 |
| 35-39 | 22 | 50 | 43 | 26 | 39 |
| 40-44 | 4 | 13 | 3 | 22 | 9 |
| 45-49 | 0 | (6) | 4 | (0) | 3 |
| TFR 15-49 | 2.71 | 3.74 | 3.49 | 2.45 | 3.34 |
| TFR 15-44 | 2.71 | 3.71 | 3.47 | 2.45 | 3.33 |
| GFR | 99 | 137 | 131 | 81 | 123 |
| CBR | 23 | 29 | - | - | 27 |

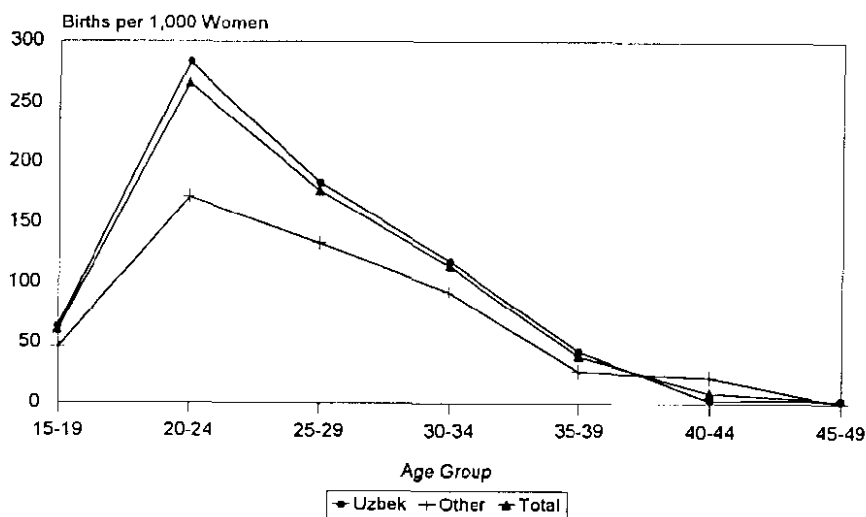
Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation. Rates in parentheses indicate that they are based on fewer than 250 woman-years of exposure.

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

Figure 3.1
Age-specific Fertility Rates by Ethnicity



If fertility were to remain constant at current levels, an Uzbekistani woman would give birth to an average of 3.3 children. This national average is the result of two different levels of fertility. Fertility among rural women is higher than among urban women throughout all the childbearing years, resulting in a TFR among rural women that is one child higher than among urban women. If fertility were to remain constant at current levels, rural women would have 3.7 children, while urban women would have only 2.7 children. Both rural and urban women experience their peak childbearing years during their early twenties (age 20-24).

Ethnic differentials in fertility are of the same order of magnitude as urban/rural differentials. Ethnic Uzbeks achieve a TFR that is one child greater (3.5) than the TFR among women of other ethnicities (2.5). While ethnic Uzbeks and women of other ethnicities both achieve their peak fertility during their early twenties, the age-specific fertility rates (ASFRs) of ethnic Uzbeks are higher than those among women of other ethnicities at nearly every age.

Table 3.2 and Figure 3.2 present TFRs for the three years preceding the survey by background characteristics. Fertility levels are remarkably similar (at about 3.4) across four out of the five regions of Uzbekistan. Only Tashkent City varies from the norm, with a TFR which is one child fewer than in the rest of the country.

Women in Uzbekistan exhibit a childbearing pattern, observed in many societies, of decreasing fertility with increasing education. The TFR declines from 3.5 children per woman among women with primary or secondary schooling to 3.1 among women with secondary-special schooling and then down to 2.8 children per woman among those with higher education.

A crude assessment of trends in fertility over time can be made by comparing the TFR (a measure of current fertility) with the mean number of children ever born (CEB) to women age 40-49 (a measure of completed fertility). If there had been no change in fertility for three or more decades prior to the survey, the TFR and CEB would be nearly the same. The fact that the TFR (3.3 children per woman) is lower than the CEB (4.6) indicates that fertility has declined in Uzbekistan over the past three decades. The TFR is lower than the CEB among both rural and urban women, and in every region, every educational level, and among ethnic Uzbeks and women of other ethnicities. The largest regional decline seems to have occurred in Region 1, which has the highest number of CEB, but a TFR on par with Regions 2 through 4.

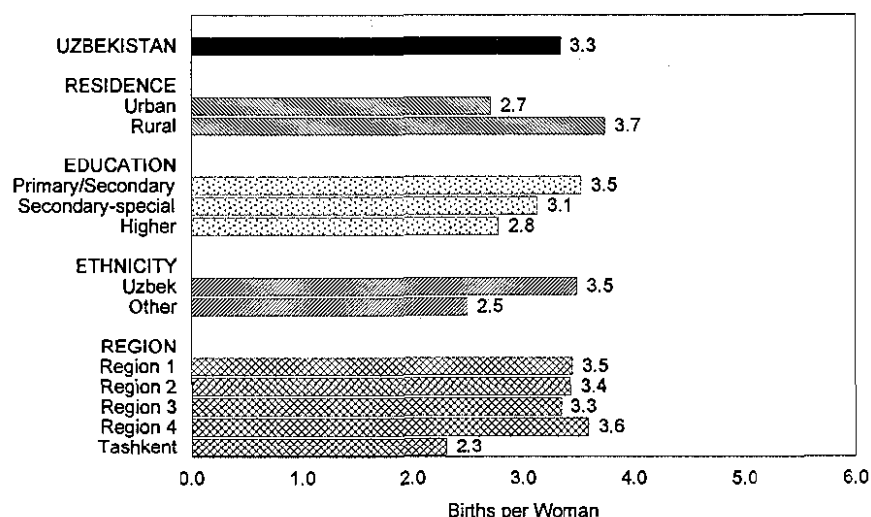
Table 3.2 Fertility by background characteristics

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

| Background characteristic | Total fertility rate ¹ | Percentage currently pregnant ¹ | Mean number of children ever born to women age 40-49 |
|---------------------------|-----------------------------------|--|--|
| Residence | | | |
| Urban | 2.71 | 6.91 | 3.60 |
| Rural | 3.74 | 6.94 | 5.45 |
| Region | | | |
| Region 1 | 3.45 | 6.98 | 5.78 |
| Region 2 | 3.43 | 7.08 | 5.25 |
| Region 3 | 3.34 | 8.25 | 4.50 |
| Region 4 | 3.59 | 6.00 | 4.65 |
| Tashkent City | 2.30 | 5.19 | 2.80 |
| Education | | | |
| Primary/Secondary | 3.53 | 6.50 | 5.27 |
| Secondary-special | 3.13 | 7.05 | 3.77 |
| Higher | 2.78 | 9.16 | 3.42 |
| Ethnicity | | | |
| Uzbek | 3.49 | 7.24 | 4.97 |
| Other | 2.45 | 5.44 | 3.61 |
| Total | 3.34 | 6.93 | 4.61 |

¹ Women age 15-49 years

Figure 3.2
Total Fertility Rate by Background Characteristics



UDHS 1996

Table 3.2 also presents the percent of women who report themselves to be currently pregnant. Because women at early stages of pregnancy may not yet know they are pregnant, this proportion may be underestimated. Percentages look generally reasonable for the given levels of fertility.

The level of fertility ascertained by the UDHS is very much in accordance with the Ministry of Health's reported levels of current fertility. Table 3.3 compares the 1994 ASFRs reported by the Ministry of Health with the UDHS rates. The agreement of these two independent data sources lends credence to both sources, and their estimates of a TFR of 3.3.

3.2 Fertility Trends

To examine fertility trends more directly, it is possible to look at the ASFRs over time. Age-specific fertility rates can be calculated for the preceding 20 years

Table 3.3 Age-specific fertility rates from other sources

Age-specific fertility rates as reported by the Ministry of Health for 1994 and the UDHS three-year rate

| Age of woman | MOH 1994 | UDHS 1993-95 |
|--------------|-------------|--------------|
| 15-19 | 73 | 61 |
| 20-24 | 282 | 266 |
| 25-29 | 173 | 176 |
| 30-34 | 95 | 114 |
| 35-39 | 30 | 39 |
| 40-44 | 5 | 9 |
| 45-49 | 0 | 3 |
| TFR | 3.31 | 3.34 |

Note: Age-specific fertility rates are per 1,000 women. The MOH rate is a one-year rate, while the UDHS rates are for the period 1-36 months preceding the survey (mid-1993 to mid-1996).

Table 3.4 Trends in age-specific fertility rates

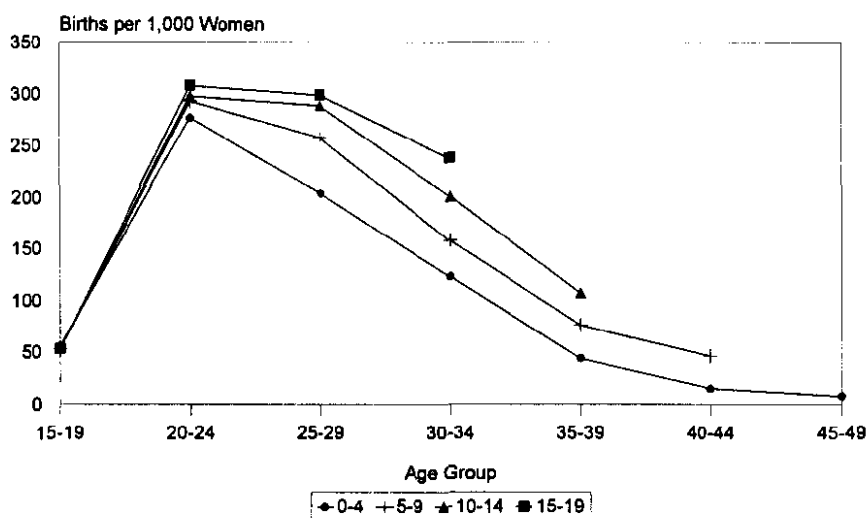
Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of birth, Uzbekistan 1996

| Mother's age | Number of years preceding the survey | | | |
|--------------|--------------------------------------|------|-------|-------|
| | 0-4 | 5-9 | 10-14 | 15-19 |
| 15-19 | 56 | 53 | 53 | 53 |
| 20-24 | 277 | 293 | 298 | 308 |
| 25-29 | 204 | 258 | 289 | 299 |
| 30-34 | 123 | 158 | 201 | [238] |
| 35-39 | 44 | 76 | [107] | - |
| 40-44 | 15 | [46] | - | - |
| 45-49 | [8] | - | - | - |

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

from the UDHS data.² Table 3.4 presents age-specific fertility rates for five-year periods preceding the survey using data on live births from respondents' pregnancy histories. With the exception of 15-19 year-olds, there is evidence of a decline in fertility for all cohorts for which rates can be calculated. The decline in fertility from 5-9 to 0-4 years prior to the survey increases from a 5 percent decline among 20-24 year-olds to a 42 percent decline among 35-39 year-olds. The UDHS data indicate that fertility among 25-29 year-olds has fallen by one-third over the past 20 years. Figure 3.3 shows a graphical representation of these declines.

Figure 3.3 Trends in Age-specific Fertility Rates



UDHS 1996

² Truncation progressively limits how far into the past fertility rates can be calculated. For example, rates cannot be calculated for women age 40-44 for the period 10-14 years before the survey because these women would have been over age 50 years at the time of the survey and therefore not interviewed. Partial rates (based on partial exposure time) can be calculated for women age 40-44 for the period 5-9 years before the survey because some of these women were age 45-49 at the time of the survey, and therefore included for interview. Partial rates which are subject to truncation are shown in brackets in Table 3.3.

Table 3.5 Trends in fertility by marital duration

Fertility rates for ever-married women by duration (years) since first marriage for five-year periods preceding the survey, Uzbekistan 1996

| Marriage duration at birth | Number of years preceding the survey | | | |
|----------------------------|--------------------------------------|-----|-------|-------|
| | 0-4 | 5-9 | 10-14 | 15-19 |
| 0-4 | 346 | 378 | 382 | 382 |
| 5-9 | 210 | 243 | 293 | 300 |
| 10-14 | 99 | 158 | 204 | 267 |
| 15-19 | 49 | 94 | 137 | * |
| 20-24 | 15 | 53 | * | - |
| 25-29 | 11 | * | - | - |

Note: Duration-specific fertility rates are per 1,000 women. An asterisk indicates that a rate is based on fewer than 125 unweighted years of exposure and has been suppressed.

Table 3.5 presents fertility rates for ever-married women by duration since first marriage for five-year periods preceding the survey. The decline in fertility has occurred at all marital durations; however, the decline is greatest among women with longer marital durations. Fertility within the first several years of marriage typically remains less resistant to change, even when fertility is declining, because fertility decline usually begins among older women who want to stop their childbearing and not by young couples postponing births. Table 3.5 shows dramatic declines in fertility for all marital durations of five or more years.

The UDHS data allow calculation of the crude birth rate (CBR) and general fertility rate (GFR). As an additional indicator of fertility trends, Table 3.6 presents the CBRs and GFRs reported by the Ministry of Health. The UDHS data are consistent with the trend of decreasing fertility over the past decade.

3.3 Children Ever Born and Living

Table 3.7 presents the distribution of all women and currently married women by number of children ever born. The greatest difference between the data for currently married women and the total sample occurs among young women, due to the large number of unmarried young women with minimal fertility. Differences at older ages reflect the general fertility-reducing impact of marital dissolution (divorce or widowhood). The table also shows the mean number of children ever born by five-year age group of the mother. It is apparent that the distribution of women by CEB is fairly spread out; in other words, while the mean number of children ever born is 3.1, one cannot conclude that the average Uzbekistani family has three children (there are nearly as many women who have had four children as have had three). The modal number of children among currently married women tends to increase by one with every increase in age group. In other words, most 20-24 year-olds have one or two children, most 25-29 year-olds have two or three children, and so on, concluding with the largest proportion of 45-49 year-olds having five children. This is reflected in the ever increasing mean number of children ever born, which increases steadily from 1.2 among married 20-24 year-olds to 4.9 among 45-49 year-olds.

A cursory view of the survival status of children can be made by comparing the mean number of children ever born to the mean number surviving, also shown in Table 3.7. Overall, 94 percent of all children born had survived to the time of the survey, and the proportion surviving does not vary greatly by age of the mother.

Table 3.6 Trends in birth and fertility rates

Crude birth rates and general fertility rates as reported by the Ministry of Health

| Year | GFR | CBR |
|------------------|------------|-------------|
| 1985 | 141 | 37.4 |
| 1990 | 141 | 33.7 |
| 1991 | 141 | 33.8 |
| 1992 | 139 | 32.9 |
| 1993 | 131 | 31.0 |
| 1994 | 126 | 29.4 |
| 1996 UDHS | 123 | 26.7 |

GFR: General fertility rate, expressed per 1,000 women

CBR: Crude birth rate, expressed per 1,000 population

Note: The MOH GFRs are calculated as the number of births divided by the number of women 15-49. The UDHS rate is calculated as births divided by the number of women 15-44, and pertains to the three-year period preceding the survey.

3.4 Birth Intervals

The length of birth intervals is an important component of childbearing. Research has shown that children born too close to a previous birth have an increased risk of dying, especially when the interval between births is less than 24 months. Table 3.8 presents the percent distribution of second- and higher-order births in the five years prior to the survey by the number of months since the previous birth. The median birth interval length is 30.6 months or about 2.5 years. Overall, 30 percent of births occur within 24 months of the previous birth (see Figure 3.4).

Table 3.7. 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, Uzbekistan 1996

| 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 | 93.8 | 5.5 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 981 | 0.07 | 0.07 |
| 20-24 | 40.4 | 30.5 | 25.9 | 2.7 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 806 | 0.92 | 0.88 |
| 25-29 | 11.3 | 15.9 | 33.9 | 27.1 | 9.4 | 2.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 100.0 | 710 | 2.15 | 2.02 |
| 30-34 | 4.2 | 6.9 | 20.1 | 28.4 | 24.4 | 10.5 | 5.2 | 0.0 | 0.2 | 0.1 | 0.0 | 100.0 | 624 | 3.16 | 3.00 |
| 35-39 | 2.3 | 4.7 | 11.2 | 20.1 | 20.6 | 20.3 | 12.7 | 5.1 | 2.4 | 0.3 | 0.3 | 100.0 | 561 | 4.08 | 3.82 |
| 40-44 | 1.9 | 4.8 | 11.4 | 14.5 | 18.2 | 19.2 | 10.9 | 11.4 | 4.1 | 2.2 | 1.3 | 100.0 | 422 | 4.52 | 4.23 |
| 45-49 | 2.8 | 7.2 | 11.8 | 11.5 | 13.8 | 16.7 | 13.4 | 10.0 | 5.0 | 4.5 | 3.5 | 100.0 | 310 | 4.73 | 4.41 |
| Total | 31.3 | 11.9 | 16.5 | 13.7 | 10.4 | 7.4 | 4.3 | 2.5 | 1.1 | 0.6 | 0.4 | 100.0 | 4,415 | 2.26 | 2.12 |
| CURRENTLY MARRIED WOMEN | | | | | | | | | | | | | | | |
| 15-19 | 52.7 | 41.7 | 4.1 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 125 | 0.54 | 0.49 |
| 20-24 | 22.0 | 38.9 | 34.9 | 3.7 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 599 | 1.22 | 1.16 |
| 25-29 | 5.1 | 15.6 | 36.6 | 29.5 | 10.4 | 2.5 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 100.0 | 640 | 2.33 | 2.18 |
| 30-34 | 2.0 | 5.2 | 19.7 | 29.4 | 26.3 | 11.4 | 5.7 | 0.0 | 0.2 | 0.1 | 0.0 | 100.0 | 572 | 3.32 | 3.15 |
| 35-39 | 0.6 | 3.4 | 10.5 | 20.0 | 22.0 | 21.5 | 13.5 | 5.5 | 2.3 | 0.4 | 0.4 | 100.0 | 520 | 4.25 | 3.98 |
| 40-44 | 1.2 | 3.2 | 10.6 | 15.1 | 18.9 | 19.4 | 11.4 | 12.5 | 3.9 | 2.4 | 1.5 | 100.0 | 383 | 4.66 | 4.35 |
| 45-49 | 1.2 | 6.0 | 10.6 | 11.5 | 14.8 | 18.2 | 13.7 | 9.5 | 5.6 | 5.2 | 3.7 | 100.0 | 264 | 4.94 | 4.62 |
| Total | 8.1 | 14.9 | 22.0 | 18.5 | 14.4 | 10.2 | 5.9 | 3.3 | 1.4 | 0.8 | 0.6 | 100.0 | 3,102 | 3.06 | 2.87 |

Three-quarters of closely spaced births occur to women in their twenties. As many as 41 percent of births to women in their twenties were born within 24 months of the previous birth. Because these are young women, the lowest birth orders (2 or 3 births) also show the greatest likelihood of being born soon after the previous birth. Births which occur after a prior death are twice as likely as births following a living child to be born within 24 months. Aside from age of the mother, parity, and survival status of the previous birth, the distribution of birth interval lengths is fairly similar across the other background characteristics shown in the table.

It should be noted that while births to mothers in Tashkent City exhibit the longest median birth interval length of all the regions, these births are no less likely than births in other regions to be born within 24 months of the previous birth. The longer median interval is due to more births in Tashkent City occurring at the longest interval lengths (four or more years), than at intermediate lengths (two or three years), but not, however, due to fewer births being born at the shortest durations (32 percent of births to mothers in Tashkent City were born within 24 months of the previous birth).

3.5 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. Early initiation into childbearing is generally associated with large family size and rapid population growth when family planning is not widely practiced.

Table 3.8 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, Uzbekistan 1996

| 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 | * | * | * | * | * | 100.0 | * | 9 |
| 20-29 | 16.3 | 24.5 | 35.7 | 14.9 | 8.6 | 100.0 | 25.9 | 901 |
| 30-39 | 6.1 | 10.3 | 31.0 | 19.2 | 33.3 | 100.0 | 37.4 | 712 |
| 40 + | 2.2 | 8.8 | 26.5 | 15.0 | 47.5 | 100.0 | 40.9 | 82 |
| Birth order | | | | | | | | |
| 2-3 | 13.8 | 22.2 | 32.4 | 15.6 | 16.0 | 100.0 | 28.1 | 1,104 |
| 4-6 | 7.8 | 11.0 | 34.0 | 18.1 | 29.1 | 100.0 | 35.0 | 520 |
| 7 + | 5.7 | 4.6 | 35.9 | 21.4 | 32.4 | 100.0 | 38.7 | 80 |
| Sex of prior birth | | | | | | | | |
| Male | 9.1 | 16.1 | 34.9 | 17.7 | 22.3 | 100.0 | 32.4 | 826 |
| Female | 13.9 | 19.6 | 31.4 | 15.6 | 19.4 | 100.0 | 29.4 | 878 |
| Survival of prior birth | | | | | | | | |
| Living | 10.2 | 17.7 | 33.8 | 16.9 | 21.4 | 100.0 | 31.1 | 1,599 |
| Dead | 32.4 | 21.6 | 22.5 | 12.7 | 10.9 | 100.0 | 22.3 | 105 |
| Residence | | | | | | | | |
| Urban | 14.3 | 15.3 | 29.8 | 15.6 | 25.1 | 100.0 | 31.7 | 504 |
| Rural | 10.4 | 19.0 | 34.5 | 17.1 | 19.0 | 100.0 | 30.3 | 1,200 |
| Region | | | | | | | | |
| Region 1 | 17.3 | 15.3 | 35.1 | 14.8 | 17.5 | 100.0 | 29.3 | 196 |
| Region 2 | 12.4 | 17.5 | 35.3 | 15.5 | 19.2 | 100.0 | 29.7 | 412 |
| Region 3 | 12.0 | 19.9 | 31.5 | 16.1 | 20.5 | 100.0 | 29.4 | 511 |
| Region 4 | 7.1 | 17.8 | 33.9 | 19.3 | 21.9 | 100.0 | 32.4 | 492 |
| Tashkent City | 17.4 | 14.7 | 23.2 | 14.2 | 30.5 | 100.0 | 33.0 | 93 |
| Education | | | | | | | | |
| Primary/Secondary | 10.7 | 18.7 | 33.9 | 17.0 | 19.8 | 100.0 | 30.3 | 1,088 |
| Secondary-special | 14.2 | 16.1 | 33.8 | 15.4 | 20.5 | 100.0 | 30.5 | 462 |
| Higher | 10.1 | 17.7 | 25.2 | 18.2 | 28.8 | 100.0 | 34.5 | 155 |
| Ethnicity | | | | | | | | |
| Uzbek | 11.7 | 17.9 | 33.1 | 16.1 | 21.3 | 100.0 | 30.5 | 1,502 |
| Other | 10.3 | 18.4 | 33.3 | 20.9 | 17.1 | 100.0 | 32.0 | 202 |
| Total | 11.6 | 17.9 | 33.1 | 16.6 | 20.8 | 100.0 | 30.6 | 1,704 |

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

Table 3.9 presents the percent distribution of women by age at first birth according to current age. The median age at which women begin childbearing has been holding steady at about 21.5. Most women have their first birth while in their early twenties, although about one-quarter of women give birth before age 20.

While the median age at first birth is close to 21.5 years for most age cohorts, there is some variability by background characteristics of respondents. Table 3.10 presents the median age at first birth for cohorts age 25 and above across background characteristics. Urban women have a median age at first birth (22.2 years) that is one year older than rural women (21.2 years). Women in Regions 1, 2, and 3 all exhibit similar median ages, while women in Region 4 have the lowest median age (21 years), and women in Tashkent City the highest (22.5 years). The educational differentials are as one would expect—women initiate childbearing later as their educational level increases. The median age at first birth increases successively by one year as education rises from primary/secondary to secondary-special and on to higher levels.

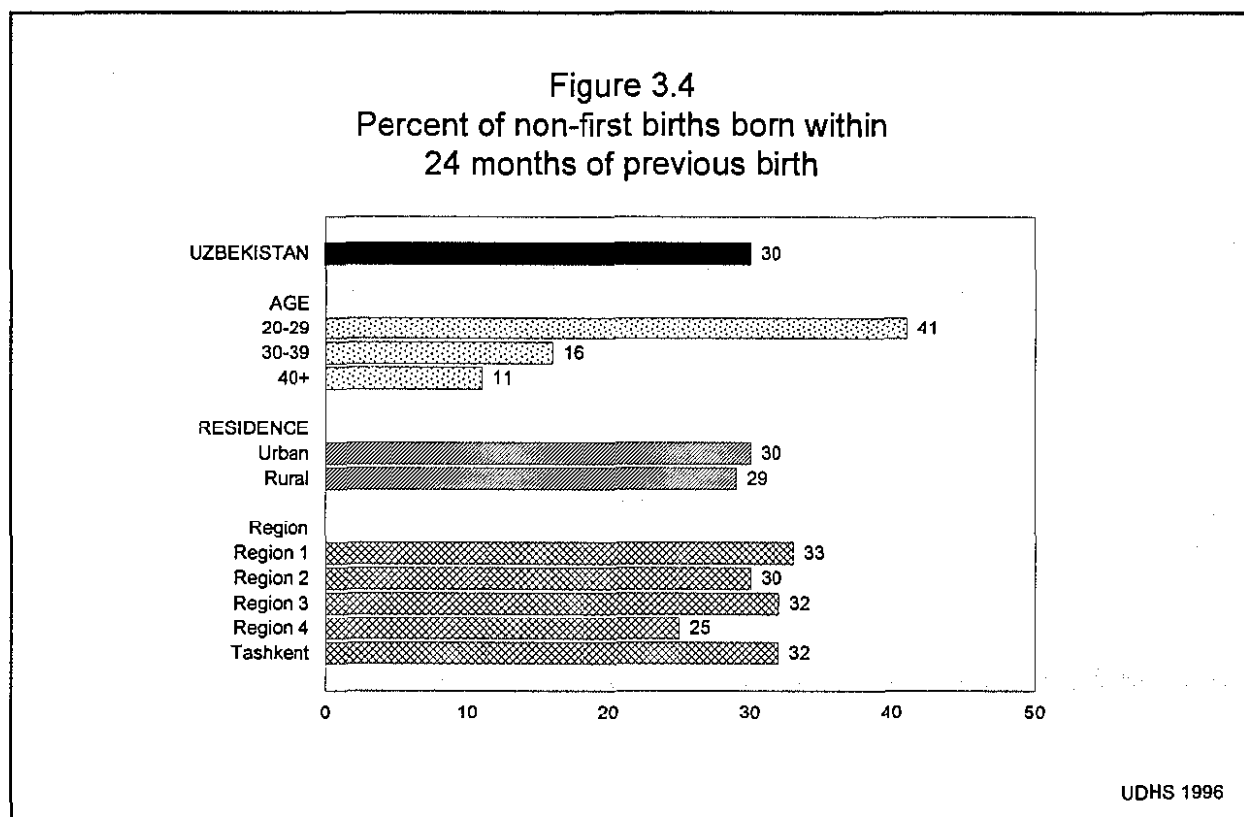


Table 3.9 Age at first birth

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

| Current age | Women with no births | Age at first birth | | | | | | Total | Number of women | Median age at first birth |
|-------------|----------------------|--------------------|-------|-------|-------|-------|------|-------|-----------------|---------------------------|
| | | <15 | 15-17 | 18-19 | 20-21 | 22-24 | 25+ | | | |
| 15-19 | 93.8 | 0.0 | 2.3 | 3.9 | NA | NA | NA | 100.0 | 981 | a |
| 20-24 | 40.4 | 0.0 | 2.6 | 22.7 | 27.7 | 6.6 | NA | 100.0 | 806 | a |
| 25-29 | 11.3 | 0.3 | 1.9 | 25.2 | 33.4 | 24.9 | 3.1 | 100.0 | 710 | 21.4 |
| 30-34 | 4.2 | 0.0 | 2.6 | 20.3 | 28.6 | 31.5 | 12.7 | 100.0 | 624 | 21.9 |
| 35-39 | 2.3 | 0.3 | 2.7 | 23.1 | 31.9 | 29.3 | 10.4 | 100.0 | 561 | 21.5 |
| 40-44 | 1.9 | 0.0 | 4.7 | 24.0 | 31.7 | 25.4 | 12.4 | 100.0 | 422 | 21.3 |
| 45-49 | 2.8 | 0.0 | 3.9 | 18.0 | 27.7 | 23.3 | 24.3 | 100.0 | 310 | 22.0 |

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

3.6 Pregnancy and Motherhood Among Women Age 15-19

Fertility among women age 15-19 warrants special attention because young mothers at this age as well as their children are at high risk of encountering social and health problems. There has been much research done on this topic, but the causality of the problems has proven difficult to identify. Children born to young mothers are associated with higher levels of illness and mortality during childhood than are children born to older mothers.

Table 3.10 Median age at first birth

Median age at first birth among women age 25-49 years, by current age and selected background characteristics, Uzbekistan 1996

| Background characteristic | Current age | | | | | Ages 25-49 |
|---------------------------|-------------|-------|-------|-------|-------|------------|
| | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Residence | | | | | | |
| Urban | 21.8 | 22.4 | 22.4 | 21.9 | 22.9 | 22.2 |
| Rural | 21.1 | 21.6 | 21.0 | 20.9 | 21.0 | 21.2 |
| Region | | | | | | |
| Region 1 | 21.9 | 21.9 | 21.5 | 21.6 | 20.2 | 21.6 |
| Region 2 | 21.9 | 21.8 | 21.8 | 21.1 | 22.2 | 21.7 |
| Region 3 | 21.3 | 21.9 | 21.4 | 22.0 | 23.3 | 21.7 |
| Region 4 | 21.0 | 21.5 | 20.9 | 20.6 | 21.0 | 21.0 |
| Tashkent City | 21.8 | 22.8 | 22.5 | 23.0 | 22.8 | 22.5 |
| Education | | | | | | |
| Primary/Secondary | 21.0 | 21.2 | 20.9 | 20.7 | 20.9 | 21.0 |
| Secondary-special | 21.7 | 22.1 | 22.3 | 22.1 | 23.3 | 22.1 |
| Higher | 23.0 | 24.0 | 23.5 | 23.2 | 23.9 | 23.5 |
| Ethnicity | | | | | | |
| Uzbek | 21.3 | 21.7 | 21.4 | 21.0 | 21.6 | 21.4 |
| Other | 22.7 | 23.0 | 22.4 | 22.6 | 23.3 | 22.7 |
| Total | 21.4 | 21.9 | 21.5 | 21.3 | 22.0 | 21.6 |

Note: The medians for cohorts 15-19 and 20-24 could not be determined because half the women had not had a birth before reaching age 15 and age 20, respectively.

Table 3.11 presents the percentage of women age 15-19 who are mothers or are pregnant with their first child. Early childbearing is not very prevalent in Uzbekistan; 10 percent of women age 15-19 have begun childbearing (have already given birth, or are pregnant with their first child at the time of the survey). However, giving birth at age 19 is not at all uncommon; nearly one-third (31 percent) of women age 19 have given birth or are pregnant with their first child.

Table 3.11 Pregnancy and motherhood among women age 15-19

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

| Background characteristic | Percentage who are: | | Percentage who have begun child-bearing | Number of women |
|---------------------------|---------------------|---------------------------|---|-----------------|
| | Mothers | Pregnant with first child | | |
| Age | | | | |
| 15 | 0.0 | 0.0 | 0.0 | 198 |
| 16 | 0.0 | 0.0 | 0.0 | 217 |
| 17 | 0.3 | 2.9 | 3.2 | 195 |
| 18 | 6.4 | 9.0 | 15.4 | 184 |
| 19 | 26.1 | 5.2 | 31.3 | 187 |
| Residence | | | | |
| Urban | 6.6 | 2.8 | 9.4 | 319 |
| Rural | 6.1 | 3.5 | 9.6 | 662 |
| Region | | | | |
| Region 1 | 4.9 | 3.7 | 8.6 | 105 |
| Region 2 | 5.0 | 2.3 | 7.3 | 266 |
| Region 3 | 7.2 | 3.6 | 10.8 | 280 |
| Region 4 | 6.7 | 3.8 | 10.5 | 262 |
| Tashkent City | 7.1 | 2.9 | 10.0 | 68 |
| Education | | | | |
| Primary/Secondary | 5.9 | 3.4 | 9.3 | 807 |
| Secondary-special | 8.5 | 1.0 | 9.5 | 149 |
| Higher | (3.1) | (12.8) | (15.9) | 26 |
| Ethnicity | | | | |
| Uzbek | 6.5 | 3.3 | 9.8 | 838 |
| Other | 4.5 | 3.2 | 7.7 | 143 |
| Total | 6.2 | 3.3 | 9.5 | 981 |

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

Table 3.12 indicates that 23 percent of women age 19 have one child, and that 4 percent have two or more children.

Table 3.12 Children born to women age 15-19

Percent distribution of women 15-19 by number of children ever born (CEB), according to single year of age, Uzbekistan 1996

| Age | Number of children ever born | | | Total | Mean number of CEB | Number of women |
|--------------|------------------------------|------------|------------|--------------|--------------------|-----------------|
| | 0 | 1 | 2+ | | | |
| 15 | 100.0 | 0.0 | 0.0 | 100.0 | 0.00 | 198 |
| 16 | 100.0 | 0.0 | 0.0 | 100.0 | 0.00 | 217 |
| 17 | 99.7 | 0.3 | 0.0 | 100.0 | 0.00 | 195 |
| 18 | 93.6 | 6.1 | 0.3 | 100.0 | 0.07 | 184 |
| 19 | 73.9 | 22.6 | 3.5 | 100.0 | 0.31 | 187 |
| Total | 93.8 | 5.5 | 0.7 | 100.0 | 0.07 | 981 |

CHAPTER 4

CONTRACEPTION

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A primary function of family planning programs is to advocate conscious entry into parenthood for both men and women, i.e., to grant families the right to define their desired number of children and provide them the means to achieve that goal. Family planning involves the control of reproductive behavior, including conception, preservation of the fetus, and childbearing, as well as prevention of conception and interruption of pregnancy. Family planning not only helps couples to avoid undesired pregnancies, but also allows them to control the timing of their childbearing. By controlling the time they enter into parenthood, the time they stop childbearing, and the intervals between births, couples can achieve their ultimate desired family size. Family planning has positive effects on the overall health of both mother and child, and is also a contributing factor in the reduction of maternal and infant mortality, and secondary sterility. The efficacy of family planning depends on people's knowledge of methods and on the availability of methods to meet the varying needs of a wide spectrum of potential users. Availability of methods, in turn, depends on the quality and quantity of service providers and on available financial and technical resources.

In Uzbekistan as well as in other republics of the former Soviet Union, induced abortion has been for years a primary method of fertility control. Only recently has the Ministry of Health actively engaged in efforts to reduce the heavy reliance upon abortion by providing safe and effective modern contraceptive methods. Family planning is considered as a part of maternal and child health services and is provided by the staff of women's consulting centers as well as obstetricians and gynecologists working in polyclinics and hospitals throughout the country. The Ministry of Health is responsible for the supply of contraceptives which are available free of charge from many government pharmacies, women's consulting centers and hospitals. In addition, in recent years private marketing of contraceptives (mainly oral contraceptives and injectables) through private pharmacies has become a significant source of supply of family planning methods.

Family planning topics addressed in this chapter include knowledge of contraceptive methods, sources of supply, use of methods in the past and present, reasons for nonuse, desire to use in the future, and attitudes and exposure to family planning messages. These data can serve as an information base for the Ministry of Health and family planning organizations to better define the need for contraceptives and better define the allocation of resources.

4.1 Knowledge of Contraceptive Methods

Determining levels of knowledge and use of contraceptive methods was one of the major objectives of the UDHS. Data on contraceptive knowledge were collected by asking the respondent to name ways or methods by which a couple could delay or avoid pregnancy. If the respondent failed to mention a particular method spontaneously, the interviewer described the method and asked if she recognized it. The respondent was also asked whether she had ever used each method. Current use of contraception was determined by asking whether the respondent (or her partner) was currently using a method, and if so, which one.

Contraceptive methods include both modern and traditional methods. Modern methods include the pill, IUD, injectables, female sterilization, and the barrier methods (diaphragm, foam, jelly, and condom). Traditional methods include periodic abstinence (rhythm method), withdrawal, and vaginal douching.

Information on knowledge of contraceptive methods is presented in Table 4.1 for all women interviewed, and separately for currently married women¹ and women who have never had sexual intercourse. The knowledge of at least one method of contraception is high (89 percent). Also, 89 percent of respondents know at least one modern method and 32 percent know at least one traditional method. Women know, on average, four methods of contraception. Currently married women know an average of four methods, while women who have never had sex know on average two methods.

Table 4.1 Knowledge of contraceptive methods

Percentage of all women, of currently married women and of women who have never had sex, who know specific contraceptive methods, by specific methods, Uzbekistan 1996

| Contraceptive method | All women | Currently married women | Women who never had sex |
|------------------------------------|-----------|-------------------------|-------------------------|
| Any method | 88.8 | 95.7 | 69.5 |
| Any modern method | 88.7 | 95.5 | 69.4 |
| Pill | 68.5 | 75.7 | 46.7 |
| IUD | 87.4 | 95.0 | 65.7 |
| Injectables | 55.5 | 63.7 | 31.9 |
| Diaphragm/Foam/Jelly | 15.8 | 18.4 | 6.7 |
| Condom | 48.8 | 54.1 | 32.1 |
| Female sterilization | 22.1 | 26.8 | 8.0 |
| Any traditional method | 32.2 | 39.0 | 10.8 |
| Periodic abstinence | 22.0 | 26.0 | 8.8 |
| Withdrawal | 22.8 | 28.0 | 5.7 |
| Douche | 2.2 | 2.9 | 0.3 |
| Other | 2.0 | 2.3 | 0.3 |
| Any traditional/folk method | 32.4 | 39.2 | 10.8 |
| Number of women | 4,415 | 3,102 | 1,099 |
| Mean number of methods | 3.5 | 3.9 | 2.1 |

Note: All women includes 14 unmarried sexually active women.

The most commonly known method is the IUD (known by 87 percent of all women). The pill, injectables and condom are the next most commonly known methods, known by 69, 56 and 49 percent of women, respectively. The lesser known modern methods are still known by a significant proportion of women—22 percent have knowledge of female sterilization and 16 percent know vaginal barrier methods such as the diaphragm, foam or jelly. The data in Table 4.1 show that knowledge of all methods is higher among currently married women than all women. Two-thirds of women who have never had sex know of the IUD (66 percent), while almost half have heard of the pill. For purposes of communicating family planning information, women of reproductive age who have not yet engaged in sexual intercourse are an equally important audience as are sexually active women because these women are certain to engage in sexual activity in the near future.

Periodic abstinence is known by 26 percent of currently married women and withdrawal is known by 28 percent of these women. Traditional methods are not as commonly known among women who have

never had sex (9 percent have heard of periodic abstinence and 6 percent have heard of withdrawal). Vaginal douche is known to 3 percent of currently married women. Folk methods mentioned by respondents include herbs, segment of a lemon, aspirin, iodine, vinegar, wine and others. They are known to 32 percent of all women, 39 percent of currently married women, and 11 percent of women who never had sex.

Table 4.2 presents the percentage of currently married women who know of at least one method of contraception (modern or traditional) and the percentage who know of at least one modern method, by background characteristics. A high percentage of currently married women in all categories (more than 86 percent) know of at least one modern method of contraception.

¹ The currently married category includes women in both formal unions (civil or religious) and informal unions (living together).

4.2 Ever Use of Contraception

All respondents who had heard of a method of contraception were asked whether they (or a partner) had ever used the method; each method was inquired about separately. Results are presented in Table 4.3 for all women and for currently married women by five-year age groups.

Overall, 68 percent of currently married women have used a method of contraception at some time in their life. Fifty percent of all women age 15-49 have used a method at some time. Levels of ever-use among all women are somewhat lower than among currently married women because the former includes women who are not sexually active; the most significant differential is among 15-19 year-old women. While 16 percent of currently married 15-19 year-olds have ever used a method, only 2 percent of all 15-19 year-olds have done so; however, only 13 percent of all 15-19 year-olds have ever had sex.

The women most likely to have ever used contraception are those age 30-44 among both currently married and all women (74-84 percent have used a method of contraception). These women are also the most likely to have used a modern method of contraception.

By far the most widely ever used method is the IUD. Overall, 43 percent of all women of reproductive age and 59 percent of currently married women have ever used the IUD. More than 70 percent of currently married women 30-39 have used an IUD at some time in their life. Condoms are the next most commonly used modern method with 11 percent of currently married women having used a condom at some time. Pills are the third most commonly tried modern method with 6 percent of currently married women having used them at some time in their life. Other modern methods (injectables, diaphragm and female sterilization) have been used at some time by only 4 percent of currently married women.

While more women have used modern than traditional methods, many women have in fact used a traditional method at some time. Overall, 16 percent of currently married women have ever used a traditional method while 12 percent of all women have done so.

Periodic abstinence and withdrawal are the traditional methods most likely to have been used by women at some time in their life. Six percent of currently married women have used periodic abstinence and 12 percent have used withdrawal. Two percent of currently married women have used vaginal douching as a method of contraception.

Table 4.2 Knowledge of contraceptive methods by background characteristics

Percentage of currently married women who reported having heard of at least one method and at least one modern method by selected background characteristics, Uzbekistan 1996

| Background characteristic | Knowledge of contraception | | Number of women |
|---------------------------|----------------------------|---------------------|-----------------|
| | Knows any method | Knows modern method | |
| Age | | | |
| 15-19 | 85.7 | 85.7 | 125 |
| 20-24 | 93.8 | 93.8 | 599 |
| 25-29 | 95.7 | 95.7 | 640 |
| 30-34 | 97.0 | 96.9 | 572 |
| 35-39 | 97.4 | 97.4 | 520 |
| 40-44 | 97.4 | 96.2 | 383 |
| 45-49 | 95.6 | 95.3 | 264 |
| Residence | | | |
| Urban | 97.2 | 97.0 | 1,168 |
| Rural | 94.7 | 94.5 | 1,935 |
| Region | | | |
| Region 1 | 99.8 | 99.8 | 319 |
| Region 2 | 94.2 | 93.6 | 705 |
| Region 3 | 96.6 | 96.4 | 884 |
| Region 4 | 93.2 | 93.2 | 917 |
| Tashkent City | 99.8 | 99.8 | 278 |
| Education | | | |
| Primary/Secondary | 94.3 | 93.9 | 1,903 |
| Secondary-special | 98.2 | 98.2 | 830 |
| Higher | 97.4 | 97.4 | 366 |
| Ethnicity | | | |
| Uzbek | 95.4 | 95.3 | 2,592 |
| Other | 96.9 | 96.5 | 511 |
| Total | 95.7 | 95.5 | 3,102 |

Note: Total includes four women with no education.

Table 4.3 Ever use of contraception

Percentage of all women and of currently married women who have ever used any contraceptive method, by specific method and age, Uzbekistan 1996

| Age | Modern method | | | | | | | Traditional method | | | | | Any trad./folk method | Number of women | |
|--------------------------------|---------------|-------------------|------|------|-------------|--------|----------------------|--------------------|------------------|---------------------|------------|--------|-----------------------|-----------------|---------------|
| | Any method | Any modern method | Pill | IUD | Injectables | Condom | Female sterilization | Other modern | Any trad. method | Periodic abstinence | Withdrawal | Douche | | | Other methods |
| ALL WOMEN | | | | | | | | | | | | | | | |
| 15-19 | 2.1 | 2.0 | 0.2 | 1.7 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 0.0 | 0.3 | 981 |
| 20-24 | 34.1 | 30.6 | 2.6 | 26.3 | 0.8 | 5.7 | 0.2 | 0.3 | 9.0 | 2.4 | 7.2 | 1.0 | 0.3 | 9.1 | 806 |
| 25-29 | 63.1 | 61.4 | 6.2 | 55.5 | 2.7 | 10.6 | 0.3 | 0.5 | 13.5 | 5.0 | 10.0 | 1.1 | 0.7 | 13.6 | 710 |
| 30-34 | 77.3 | 74.6 | 7.5 | 68.2 | 4.1 | 10.8 | 0.3 | 0.2 | 14.7 | 5.3 | 10.0 | 1.6 | 0.6 | 15.1 | 624 |
| 35-39 | 79.9 | 77.7 | 7.6 | 70.9 | 5.0 | 13.8 | 0.9 | 1.4 | 18.1 | 6.6 | 13.9 | 2.2 | 1.5 | 18.8 | 561 |
| 40-44 | 74.4 | 70.4 | 9.1 | 62.4 | 3.8 | 13.7 | 1.4 | 1.1 | 20.0 | 9.4 | 13.9 | 3.1 | 1.5 | 21.0 | 422 |
| 45-49 | 66.1 | 62.1 | 4.0 | 56.1 | 0.7 | 14.6 | 2.4 | 1.0 | 24.9 | 12.0 | 16.9 | 4.1 | 1.3 | 25.3 | 310 |
| Total | 49.7 | 47.4 | 4.7 | 42.7 | 2.2 | 8.4 | 0.5 | 0.5 | 11.9 | 4.6 | 8.7 | 1.5 | 0.7 | 12.2 | 4,415 |
| CURRENTLY MARRIED WOMEN | | | | | | | | | | | | | | | |
| 15-19 | 16.2 | 15.8 | 1.8 | 12.9 | 0.0 | 1.0 | 0.0 | 0.0 | 2.1 | 0.0 | 2.1 | 0.4 | 0.0 | 2.1 | 125 |
| 20-24 | 45.2 | 40.6 | 3.4 | 35.0 | 0.9 | 7.2 | 0.2 | 0.3 | 11.8 | 3.2 | 9.3 | 1.4 | 0.2 | 11.9 | 599 |
| 25-29 | 68.2 | 66.2 | 6.6 | 60.2 | 2.8 | 11.3 | 0.4 | 0.6 | 14.9 | 5.5 | 11.1 | 1.3 | 0.8 | 15.0 | 640 |
| 30-34 | 81.5 | 78.5 | 7.8 | 72.1 | 4.5 | 11.0 | 0.3 | 0.2 | 14.9 | 5.5 | 10.1 | 1.7 | 0.7 | 15.4 | 572 |
| 35-39 | 83.8 | 81.4 | 7.9 | 74.3 | 5.2 | 13.9 | 1.0 | 1.5 | 18.4 | 6.6 | 14.1 | 2.2 | 1.4 | 19.2 | 520 |
| 40-44 | 78.5 | 74.5 | 9.1 | 66.5 | 4.1 | 13.7 | 1.3 | 1.1 | 21.1 | 10.1 | 14.3 | 3.4 | 1.4 | 22.1 | 383 |
| 45-49 | 66.8 | 64.6 | 2.9 | 59.0 | 0.8 | 13.5 | 2.1 | 1.0 | 23.0 | 10.0 | 15.6 | 4.3 | 1.1 | 23.4 | 264 |
| Total | 67.9 | 64.9 | 6.2 | 58.7 | 3.0 | 10.9 | 0.7 | 0.7 | 15.8 | 6.0 | 11.5 | 2.0 | 0.8 | 16.2 | 3,102 |

4.3 Current Use of Contraception

Table 4.4 presents levels of current use of contraception for all women and for currently married women by five-year age groups. Figure 4.1 shows the distribution of currently married women by method currently used.

More than one out of every three women of reproductive age (37 percent) is currently using a modern method of contraception, while only 3 percent are using a traditional method. Among currently married women more than half (51 percent) are using modern methods of contraception and 4 percent are using traditional methods.

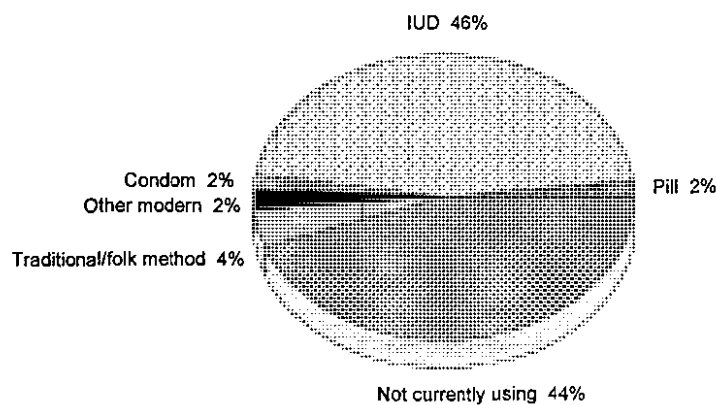
The IUD is by far the most commonly used method—almost half of currently married women are using the IUD (46 percent). Other modern methods of contraception account for only a small amount of use among currently married women: pills and condoms (2 percent each), and injectables and female sterilization (1 percent each). Thus, the practice of family planning in Uzbekistan places high reliance on a single method, the IUD, although the pill, condom and injectables are widely known (each known to more than 50 percent of married women). The situation with respect to female sterilization is distinctly different; i.e., both the level of knowledge (27 percent) and the level of use are low. Since the goal of the family planning program is to provide each woman with a choice of safe and effective methods which are appropriate to her, more effort should be made to provide information about female sterilization to women, especially those who want no more children and wish to avoid any risk of childbearing. This point will be raised again in Chapter 7 where contraception is considered in relation to the fertility desires of women.

Table 4.4 Current use of contraception

Percent distribution of all women and of currently married women who are currently using a contraceptive method by specific method, according to age, Uzbekistan 1996

| Age | Modern method | | | | | | Traditional method | | | | | Not currently using | Total | Number of women |
|--------------------------------|---------------|-------------------|------------|-------------|-------------|------------|----------------------|------------------|---------------------|------------|-----------------------|---------------------|--------------|-----------------|
| | Any method | Any modern method | Pill | IUD | Injectables | Condom | Female sterilization | Any trad. method | Periodic abstinence | Withdrawal | Douche/ other methods | | | |
| ALL WOMEN | | | | | | | | | | | | | | |
| 15-19 | 2.0 | 1.9 | 0.2 | 1.7 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 98.0 | 100.0 | 981 |
| 20-24 | 26.4 | 24.0 | 1.2 | 21.4 | 0.5 | 0.6 | 0.2 | 2.4 | 0.3 | 2.0 | 0.1 | 73.6 | 100.0 | 806 |
| 25-29 | 50.5 | 48.7 | 1.9 | 43.8 | 0.9 | 1.7 | 0.3 | 1.8 | 0.5 | 1.3 | 0.1 | 49.5 | 100.0 | 710 |
| 30-34 | 63.8 | 58.5 | 1.0 | 53.8 | 2.1 | 1.3 | 0.3 | 5.2 | 1.1 | 3.9 | 0.3 | 36.2 | 100.0 | 624 |
| 35-39 | 70.2 | 66.1 | 2.5 | 58.3 | 2.3 | 2.2 | 0.9 | 4.0 | 0.8 | 2.8 | 0.5 | 29.8 | 100.0 | 561 |
| 40-44 | 58.7 | 51.8 | 1.6 | 44.3 | 1.6 | 2.9 | 1.4 | 6.9 | 2.6 | 3.5 | 0.7 | 41.3 | 100.0 | 422 |
| 45-49 | 37.3 | 32.7 | 0.0 | 28.7 | 0.5 | 1.1 | 2.4 | 4.3 | 2.0 | 2.0 | 0.6 | 62.7 | 100.0 | 310 |
| Total | 39.6 | 36.6 | 1.2 | 32.6 | 1.0 | 1.2 | 0.5 | 3.0 | 0.8 | 2.0 | 0.3 | 60.4 | 100.0 | 4,415 |
| CURRENTLY MARRIED WOMEN | | | | | | | | | | | | | | |
| 15-19 | 15.8 | 15.0 | 1.5 | 12.9 | 0.0 | 0.6 | 0.0 | 0.8 | 0.0 | 0.4 | 0.4 | 84.2 | 100.0 | 125 |
| 20-24 | 35.5 | 32.2 | 1.7 | 28.8 | 0.6 | 0.8 | 0.2 | 3.3 | 0.4 | 2.7 | 0.2 | 64.5 | 100.0 | 599 |
| 25-29 | 55.1 | 53.1 | 2.2 | 47.8 | 1.0 | 1.8 | 0.4 | 2.0 | 0.5 | 1.4 | 0.1 | 44.9 | 100.0 | 640 |
| 30-34 | 68.9 | 63.2 | 1.0 | 58.1 | 2.3 | 1.4 | 0.3 | 5.7 | 1.1 | 4.3 | 0.4 | 31.1 | 100.0 | 572 |
| 35-39 | 74.7 | 70.3 | 2.6 | 62.3 | 2.4 | 2.1 | 1.0 | 4.3 | 0.9 | 3.0 | 0.6 | 25.3 | 100.0 | 520 |
| 40-44 | 64.2 | 56.6 | 1.8 | 48.4 | 1.8 | 3.2 | 1.3 | 7.6 | 2.9 | 3.9 | 0.8 | 35.8 | 100.0 | 383 |
| 45-49 | 42.3 | 36.9 | 0.0 | 32.9 | 0.6 | 1.3 | 2.1 | 5.0 | 2.3 | 2.3 | 0.7 | 57.7 | 100.0 | 264 |
| Total | 55.6 | 51.3 | 1.7 | 45.8 | 1.4 | 1.7 | 0.7 | 4.2 | 1.1 | 2.8 | 0.4 | 44.4 | 100.0 | 3,102 |

Figure 4.1
Use of Specific Contraceptive Methods among Currently Married Women



Use of modern methods of contraception increases steadily by age, peaking at age 35-39 (70 percent of currently married women) and then declines. Use of traditional methods remains relatively constant over all ages. Of course, the desire to avoid pregnancy varies greatly over the course of one's reproductive life; use of contraception in relation to the age and fertility preferences of women is discussed in Chapter 7.

Levels of contraceptive use by background characteristics of respondents are presented in Table 4.5 and Figure 4.2 for currently married women. Perhaps the most significant finding of Table 4.5 is that the level of modern contraceptive use observed for the population as a whole is maintained across background characteristics of respondents. Most of the differentials observed in overall levels of use can be attributed to differential levels of use of traditional methods. For example, urban women, women living in Tashkent City, women with higher education and women of other than Uzbek ethnic groups are much more likely to be using a traditional method of contraception than women with other background characteristics.

Approximately half of currently married women living in the Regions 2, 3, and 4 are using a method of contraception, compared to two-thirds of women living in Region 1 and Tashkent City. The correlation of contraceptive use with fertility levels is not very clear by region. For example, a high level of contraceptive use in Tashkent City (65 percent) corresponds with the relatively low fertility rate (the TFR in Tashkent City is 2.3, compared to the national TFR level of 3.3). However, Region 1 with a high fertility rate (TFR is 3.5) also has high contraceptive prevalence (64 percent). A more complete investigation of regional fertility differentials would have to consider factors such as age at marriage, breastfeeding practices, and induced abortion, in addition to the use of contraception.

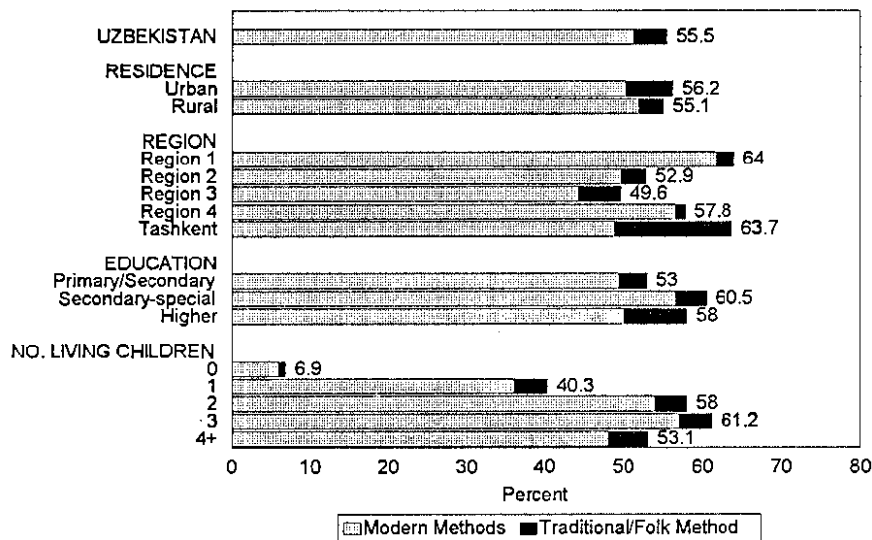
Table 4.5 Current use of contraception by background characteristics

Percent distribution of currently married women by contraceptive method currently used, according to selected background characteristics, Uzbekistan 1996

| Characteristic | Modern method | | | | | | | Traditional method | | | | | Total | Number of women |
|----------------------------------|---------------|-------------------|------|------|-------------|--------|----------------------|--------------------|---------------------|------------|----------------------|---------------------|-------|-----------------|
| | Any method | Any modern method | Pill | IUD | Injectables | Condom | Female sterilization | Any trad. method | Periodic abstinence | Withdrawal | Douche/other methods | Not currently using | | |
| Residence | | | | | | | | | | | | | | |
| Urban | 56.4 | 50.2 | 2.0 | 42.0 | 1.6 | 3.8 | 0.8 | 6.0 | 2.3 | 2.9 | 1.0 | 43.6 | 100.0 | 1,168 |
| Rural | 55.1 | 52.0 | 1.4 | 48.2 | 1.4 | 0.4 | 0.6 | 3.1 | 0.4 | 2.7 | 0.0 | 44.9 | 100.0 | 1,935 |
| Region | | | | | | | | | | | | | | |
| Region 1 | 64.0 | 61.7 | 0.3 | 59.3 | 1.5 | 0.3 | 0.3 | 2.3 | 1.8 | 0.4 | 0.1 | 36.0 | 100.0 | 319 |
| Region 2 | 52.9 | 49.6 | 0.6 | 44.5 | 2.1 | 1.6 | 0.8 | 3.3 | 0.7 | 2.5 | 0.0 | 47.1 | 100.0 | 705 |
| Region 3 | 49.6 | 44.2 | 2.0 | 38.5 | 1.5 | 1.8 | 0.5 | 5.4 | 0.7 | 4.7 | 0.0 | 50.4 | 100.0 | 884 |
| Region 4 | 57.8 | 56.6 | 2.0 | 52.9 | 0.8 | 0.2 | 0.7 | 1.2 | 0.5 | 0.7 | 0.0 | 42.2 | 100.0 | 917 |
| Tashkent City | 64.6 | 48.8 | 3.7 | 34.2 | 1.6 | 8.1 | 1.1 | 14.9 | 4.9 | 6.8 | 4.1 | 35.4 | 100.0 | 278 |
| Education | | | | | | | | | | | | | | |
| Primary/Secondary | 53.0 | 49.4 | 1.1 | 45.3 | 1.5 | 1.1 | 0.4 | 3.6 | 0.4 | 3.2 | 0.1 | 47.0 | 100.0 | 1,903 |
| Secondary-special | 60.7 | 56.6 | 2.8 | 48.6 | 1.7 | 2.3 | 1.2 | 3.9 | 1.1 | 2.2 | 0.8 | 39.3 | 100.0 | 830 |
| Higher | 58.1 | 50.0 | 2.0 | 42.9 | 0.6 | 3.3 | 1.0 | 8.0 | 5.1 | 2.1 | 0.9 | 41.9 | 100.0 | 366 |
| Ethnicity | | | | | | | | | | | | | | |
| Uzbek | 54.9 | 51.2 | 1.4 | 46.6 | 1.3 | 1.1 | 0.7 | 3.6 | 0.6 | 2.8 | 0.2 | 45.1 | 100.0 | 2,592 |
| Other | 59.4 | 51.8 | 2.9 | 41.9 | 2.0 | 4.4 | 0.6 | 7.2 | 3.5 | 2.8 | 1.3 | 40.6 | 100.0 | 511 |
| Number of living children | | | | | | | | | | | | | | |
| 0 | 5.6 | 4.7 | 1.5 | 1.1 | 0.6 | 1.6 | 0.0 | 0.9 | 0.7 | 0.2 | 0.0 | 94.4 | 100.0 | 272 |
| 1 | 35.4 | 31.0 | 2.2 | 26.4 | 0.5 | 1.9 | 0.0 | 4.3 | 0.8 | 2.9 | 0.7 | 64.6 | 100.0 | 496 |
| 2 | 62.5 | 58.2 | 1.8 | 52.1 | 1.3 | 2.1 | 1.0 | 4.0 | 1.6 | 2.0 | 0.7 | 37.5 | 100.0 | 708 |
| 3 | 64.6 | 60.4 | 1.8 | 55.1 | 1.4 | 2.0 | 0.2 | 4.2 | 1.0 | 3.0 | 0.3 | 35.4 | 100.0 | 583 |
| 4+ | 68.5 | 63.3 | 1.3 | 57.4 | 2.2 | 1.2 | 1.2 | 5.1 | 1.1 | 3.9 | 0.2 | 31.5 | 100.0 | 1,043 |
| Total | 55.6 | 51.3 | 1.7 | 45.8 | 1.4 | 1.7 | 0.7 | 4.2 | 1.1 | 2.8 | 0.4 | 44.4 | 100.0 | 3,102 |

Note: Total includes four women with no education.

Figure 4.2
 Current Use of Family Planning by Background Characteristics
 Currently Married Women Age 15-49



Note: Currently married women age 15-49

UDHS 1996

Women with primary or secondary education have lower levels of contraceptive use (53 percent) than do women with secondary-special or higher education (61 and 58 percent, respectively). Uzbek women and women of other ethnicities are equally likely to be using a modern method of contraception (51 and 52 percent, respectively). However, women of other ethnic backgrounds are more likely than Uzbek women to be using a traditional method (7 and 4 percent, respectively) resulting in slightly higher contraceptive use among women of other ethnicities (59 percent versus 55 percent for Uzbek women). The level of contraceptive use increases with an increasing number of living children. Use of contraception among married women with no children is quite low (5 percent are using a modern method and 1 percent are using a traditional method).

Any differentials in the method mix are overshadowed by the heavy reliance on the IUD among women of all background characteristics (the only exception being women with one or no children). However, the broadest method mix is observed among women in Tashkent City. While use of the IUD still predominates (34 percent), use of modern methods other than the IUD is higher in Tashkent City than any other region: condoms (8 percent) and the pill (4 percent). Nevertheless, even with this broader mix of modern methods, withdrawal still ranks as the third most commonly used method (7 percent) among women in Tashkent City. Withdrawal is the second most commonly used method among women in Regions 2 and 3.

In order to gather data on pill brands, users of the pill were asked to present their pill package to the interviewer, who then recorded the brand name of the pills. Overall, 65 percent of pill users were able to present their packets to the interviewer. Respondents who were unable to present the package were asked to report the brand name of their pills. In total, brand information was obtained from 52 respondents.

Table 4.6 presents the distribution of pill users by their brand of pills. The table presents data for all pill users, regardless of marital status. Table 4.6 indicates that nine brands of pills were reported as being used, with the most commonly used brand being Rigevidon (62 percent).

4.4 Number of Children at First Use of Contraception

To make some assessment of the motivations behind using family planning methods, women were asked how many living children they had at the time they first used a method of family planning. Women who use a method before ever having a child presumably want to delay their childbearing to some time in the future. Women who first employ a method after they have had one or two children may either want to delay the next child or limit their childbearing to one or two children. Women who use a method for the first time after having several children are more likely to be using family planning to stop childbearing, rather than simply spacing their childbearing. Table 4.7 presents the percent distribution of all ever-married women by the number of living children they had at the time they first used a method of family planning.

Use of family planning to delay the first pregnancy is uncommon in Uzbekistan (2 percent of women have done so). Three percent of ever-married 20-24 year-olds and more than 1 percent of 15-19 year-olds have used a method before ever having a child. The decreasing median number of living children at time of first use at younger ages also indicates that more women are now acting to delay their first pregnancy than they have in the past. Older women (over the age of 35) had a median of 4.0 children before they first used contraception; younger women have a median of approximately 2.0 children at their first use of contraception.

Table 4.6 Use of pill brands

Percent distribution of pill users by the brand of pills used, Uzbekistan 1996

| Pill brand | Total |
|--------------------|-------|
| Bisecurin | 0.9 |
| Diane-35 | 2.8 |
| Microgynon | 3.0 |
| Non-ovlon | 0.9 |
| Ovidon | 6.2 |
| Postinor | 0.9 |
| Rigevidon | 61.6 |
| Triziston | 0.9 |
| Triquilar ED Fe | 8.0 |
| Don't know/missing | 14.6 |
| Total | 100.0 |
| Number | 52 |

Table 4.7 Number of children at the time of 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, Uzbekistan 1996

| Current age | Never used contraception | Number of living children at time of first use of contraception | | | | | Total | Number of women | Median |
|-------------|--------------------------|---|------|------|------|------|-------|-----------------|--------|
| | | 0 | 1 | 2 | 3 | 4+ | | | |
| 15-19 | 84.1 | 1.4 | 11.3 | 3.3 | 0.0 | 0.0 | 100.0 | 127 | 1.6 |
| 20-24 | 56.0 | 3.4 | 22.8 | 16.6 | 1.0 | 0.1 | 100.0 | 622 | 1.8 |
| 25-29 | 33.4 | 1.4 | 17.0 | 28.7 | 13.6 | 5.8 | 100.0 | 673 | 2.5 |
| 30-34 | 21.2 | 1.3 | 11.3 | 23.1 | 22.7 | 20.3 | 100.0 | 613 | 3.2 |
| 35-39 | 19.1 | 0.9 | 11.2 | 12.4 | 17.8 | 38.7 | 100.0 | 555 | 3.9 |
| 40-44 | 25.3 | 0.9 | 10.1 | 11.5 | 11.8 | 40.5 | 100.0 | 420 | 4.2 |
| 45-49 | 33.0 | 1.0 | 12.9 | 10.9 | 9.3 | 32.9 | 100.0 | 306 | 3.9 |
| Total | 33.9 | 1.6 | 14.6 | 17.9 | 12.5 | 19.6 | 100.0 | 3,316 | 2.9 |

Fifteen percent of ever-married women had one living child at the time they first used a method of contraception; this percent does not change greatly with age, with the exception of 20-24 year-olds and 25-29 year-olds, among whom 23 and 17 percent, respectively, first used a method after having one living child.

4.5 Knowledge of the Fertile Period and of the Contraceptive Effect of Breastfeeding

Knowledge of reproductive physiology is an important prerequisite for effective use of traditional contraceptive methods. To successfully practice periodic sexual abstinence, a woman must know at which point during the ovulation cycle she is most likely to become pregnant. All women were asked whether they thought there was a time during their monthly cycle that they were more likely to become pregnant, and if so, to identify when that was. Table 4.8 presents the percent distribution of all women, women who have ever used any form of periodic abstinence, and women who have specifically ever used the calendar rhythm method by their knowledge of the fertile period.

Only 10 percent of all respondents properly identified the middle of the cycle as the most likely time to become pregnant.

Most of the remaining respondents said either that there is no time which is more likely than another (55 percent of all women), or simply did not know (31 percent of all women). On the other hand, most women who are using either periodic abstinence or the calendar rhythm method know about the varying likelihood to become pregnant. Seventy-four percent of women who are using periodic abstinence and 73 percent of women who are using the calendar method could properly identify the time during which they are most fertile.

Exclusive and frequent breastfeeding can prolong the period of time following a birth during which a woman is amenorrheic (not menstruating) and anovulatory (not ovulating). It has also been shown that even after the resumption of menstruation the probability of pregnancy is lower among women who continue to breastfeed than among women who have stopped (Hobcraft and Guz, 1991; Potts et al., 1985).

Women were asked what effect, if any, breastfeeding has on the risk of pregnancy. Women were also asked whether they have ever relied on breastfeeding as a method of contraception and whether they are currently doing so. These data are shown in Table 4.9 for currently married women.

Only one-sixth of women (16 percent) report that breastfeeding reduces the risk of becoming pregnant. The great majority of women (81 percent) believe that breastfeeding has no effect on the risk of becoming pregnant; this level is maintained across most background characteristics.

Thirteen percent of currently married women have used breastfeeding as a means of contraception at some time in their lives, and 10 percent of women report they are currently doing so. Women in Region 3 and Tashkent City are the most likely to have used breastfeeding for family planning purposes (both 18 percent) and are also the most likely to be current users (15 and 12 percent, respectively).

Table 4.8 Knowledge of the fertile period

Percent distribution of all women and of those who currently use periodic abstinence or the calendar rhythm method, by knowledge of the fertile period during the ovulatory cycle, Uzbekistan 1996

| Perceived fertile period | All women | Current users of: | |
|------------------------------|-----------|---------------------|-----------------|
| | | Periodic abstinence | Calendar rhythm |
| During menstrual period | 0.1 | 0.0 | (0.0) |
| Right after period has ended | 2.6 | 11.3 | (12.0) |
| In the middle of the cycle | 10.3 | 74.4 | (72.9) |
| Just before period begins | 0.2 | 0.0 | (0.0) |
| At any time | 55.4 | 13.0 | (13.8) |
| Other | 0.0 | 0.0 | (0.0) |
| Don't know | 31.3 | 1.3 | (1.3) |
| Total | 100.0 | 100.0 | 100.0 |
| Number | 4,415 | 35 | 33 |

Note: Three respondents reported using the symptothermal method. Figures in parentheses are based on 25-49 unweighted cases.

Table 4.9 Perceived contraceptive effect of breastfeeding

Percent distribution of currently married women by perceived risk of pregnancy associated with breastfeeding and percentage who previously relied on breastfeeding to avoid pregnancy, who currently rely on breastfeeding to avoid pregnancy and who meet lactational amenorrheic method (LAM) criteria, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Perceived risk of pregnancy associated with breastfeeding | | | | | Total | Reliance on breastfeeding to avoid pregnancy | | Meet LAM criteria ¹ | Number of women |
|---------------------------|---|------------|-------------|------------|--------------------|--------------|--|-------------|--------------------------------|-----------------|
| | Un-changed | In-creased | De-creased | Depends | Don't know/missing | | Previ-ously | Cur-rently | | |
| Age | | | | | | | | | | |
| 15-19 | 91.1 | 4.3 | 4.5 | 0.0 | 0.0 | 100.0 | 1.5 | 1.5 | 2.3 | 125 |
| 20-24 | 86.9 | 0.9 | 11.0 | 0.3 | 0.9 | 100.0 | 8.4 | 6.1 | 2.3 | 599 |
| 25-29 | 79.6 | 2.5 | 17.1 | 0.4 | 0.4 | 100.0 | 13.7 | 11.2 | 1.2 | 640 |
| 30-34 | 81.4 | 2.4 | 15.4 | 0.4 | 0.4 | 100.0 | 11.9 | 10.0 | 1.0 | 572 |
| 35-39 | 76.9 | 4.1 | 17.6 | 0.9 | 0.4 | 100.0 | 15.3 | 13.4 | 0.0 | 520 |
| 40-44 | 78.5 | 1.8 | 19.1 | 0.4 | 0.2 | 100.0 | 14.6 | 12.8 | 0.0 | 383 |
| 45-49 | 78.9 | 0.2 | 19.6 | 0.8 | 0.5 | 100.0 | 16.9 | 12.0 | 0.0 | 264 |
| Residence | | | | | | | | | | |
| Urban | 78.4 | 1.6 | 18.6 | 1.0 | 0.4 | 100.0 | 14.6 | 12.2 | 0.7 | 1,168 |
| Rural | 82.9 | 2.6 | 13.9 | 0.2 | 0.5 | 100.0 | 11.2 | 9.1 | 1.1 | 1,935 |
| Region | | | | | | | | | | |
| Region 1 | 79.4 | 0.7 | 19.4 | 0.0 | 0.5 | 100.0 | 12.7 | 9.3 | 1.7 | 319 |
| Region 2 | 81.4 | 5.6 | 12.9 | 0.1 | 0.0 | 100.0 | 9.1 | 8.1 | 0.7 | 705 |
| Region 3 | 76.6 | 1.8 | 20.6 | 0.2 | 1.0 | 100.0 | 17.6 | 14.6 | 0.6 | 884 |
| Region 4 | 89.8 | 0.9 | 8.3 | 0.7 | 0.3 | 100.0 | 8.6 | 7.6 | 1.3 | 917 |
| Tashkent City | 68.6 | 1.6 | 26.8 | 2.5 | 0.5 | 100.0 | 17.7 | 11.6 | 0.7 | 278 |
| Education | | | | | | | | | | |
| Primary/Secondary | 83.0 | 2.3 | 14.4 | 0.2 | 0.2 | 100.0 | 12.0 | 9.8 | 1.1 | 1,903 |
| Secondary-special | 78.8 | 2.3 | 17.1 | 1.0 | 0.7 | 100.0 | 13.7 | 11.2 | 0.7 | 830 |
| Higher | 76.9 | 1.9 | 18.9 | 1.1 | 1.2 | 100.0 | 12.1 | 10.4 | 0.6 | 366 |
| Ethnicity | | | | | | | | | | |
| Uzbek | 81.6 | 2.3 | 15.1 | 0.5 | 0.5 | 100.0 | 12.3 | 10.1 | 0.9 | 2,592 |
| Other | 78.9 | 1.9 | 18.2 | 0.6 | 0.5 | 100.0 | 13.5 | 10.9 | 1.2 | 511 |
| Total | 81.2 | 2.2 | 15.6 | 0.5 | 0.4 | 100.0 | 12.5 | 10.2 | 1.0 | 3,102 |

Note: Total includes four women with no education.

¹ Currently fully breastfeeding, child is less than 6 months old, and mother is postpartum amenorrheic

Table 4.9 also presents the proportion of currently married women who meet the lactational amenorrheic method (LAM) criteria. In order to meet these criteria, a woman must be fully breastfeeding a child who is less than six months old, and she must also be amenorrheic. One percent of women meet the LAM criteria.

4.6 Source of Family Planning Methods

In Uzbekistan, modern methods of contraception, such as the IUD, the pill, condoms, and injectables, are distributed through the public medical sector free of charge. Public sector sources include delivery hospitals, polyclinics, women's consulting centers and pharmacies. Modern contraceptives are also available for a fee at commercial facilities.

All women currently using a modern method were asked where they most recently obtained their method.² Table 4.10 shows the percent distribution of current users of modern contraceptives by the source from which they most recently obtained their method.

Table 4.10 Source of supply for modern contraceptive methods

Percent distribution of current users of modern contraceptive methods by most recent source of supply, according to specific methods, Uzbekistan 1996

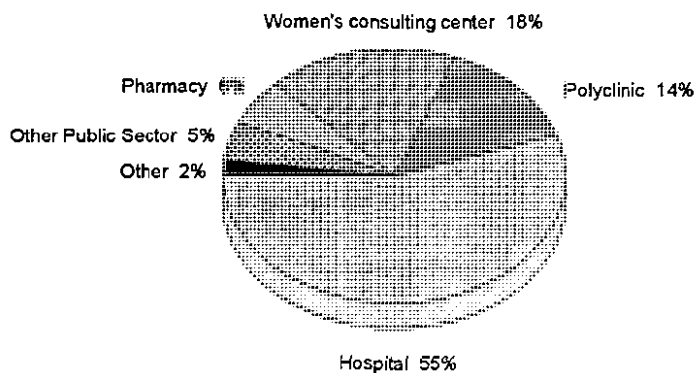
| Source of supply | Method | | | | | Total |
|---------------------------|--------|-------|-------------|--------|----------------------|-------|
| | Pill | IUD | Injectables | Condom | Female sterilization | |
| Public | 88.3 | 98.7 | 100.0 | 96.5 | 100.0 | 98.3 |
| Hospital | 25.3 | 57.8 | 33.0 | 0.0 | 100.0 | 54.8 |
| Polyclinic | 8.6 | 14.5 | 31.5 | 1.8 | 0.0 | 14.2 |
| Women's consulting center | 15.3 | 18.9 | 15.2 | 2.5 | 0.0 | 17.8 |
| Pharmacy | 25.7 | 2.0 | 11.0 | 89.6 | 0.0 | 5.9 |
| Community health worker | 3.5 | 0.5 | 1.1 | 2.6 | 0.0 | 0.7 |
| Other | 10.0 | 5.0 | 8.2 | 0.0 | 0.0 | 5.0 |
| Private medical | 2.8 | 0.2 | 0.0 | 0.9 | 0.0 | 0.3 |
| Pharmacy | 2.8 | 0.0 | 0.0 | 0.9 | 0.0 | 0.2 |
| Other | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 |
| Other | 8.9 | 0.1 | 0.0 | 2.6 | 0.0 | 0.4 |
| Friends/relatives | 6.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| Other | 2.6 | 0.0 | 0.0 | 2.6 | 0.0 | 0.2 |
| Missing | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 52 | 1,440 | 44 | 54 | 24 | 1,614 |

The vast majority of women obtained their contraceptives through the public sector (98 percent). Fifty-five percent obtained their method from a hospital, while 18 percent obtained their method from a women's consulting center. The source of supply of the method depends on the method being used. For example, most women using IUDs obtain them at hospitals (58 percent) or women's consulting centers (19 percent). Government pharmacies supply 26 percent of pill users and 90 percent of condom users. Pill users also use consulting centers or polyclinics to obtain their pills (24 percent), and some obtain their pills from friends or relatives (6 percent). Figure 4.3 summarizes the distribution of current users of modern methods by source of method.

All current users of modern methods were asked whether they know a source for family planning other than the source from which they most recently obtained their method. Women who do know an alternative source were asked to explain the main reason they went to their most recent source instead of the alternative source. Results are presented in Table 4.11 by background characteristics of respondents.

² Data collection included recording of the name of the source so that team supervisors and editors could verify the type of source.

Figure 4.3
Distribution of Current Contraceptive Users
by Source of Supply



UDHS 1996

Eighty-four percent of women went to their current source of supply because they do not know any other source. Among users who do know more than one place to obtain methods, 61 percent went to the place they did because it was closer to home (reason given by 9 percent of all users). Two percent of users chose their source because it had a more competent and friendly staff.

There was some variability by background characteristics of respondents in whether or not users of modern methods know more than one place to obtain methods. Rural women are much more likely than urban women to know only one source of supply (91 and 72 percent, respectively). The greatest differentials are seen across the regions of Uzbekistan. In Tashkent City, only 37 percent of users know only one source to obtain a method, while in Regions 1-4, as many as 86, 97, 83, and 88 percent of women, respectively, know only one source.

4.7 Intention to Use Family Planning Among Nonusers

Intentions of women to use family planning methods in the future provide a basis for forecasting potential requirements of family planning services. The UDHS asked nonusers of contraception whether they intend to use a method at some time in the future, and more specifically, whether they intend to do so within the next 12 months. Table 4.12 presents the results for currently married women according to their past experience with contraception and by the number of living children they have.

Overall, 43 percent of currently married nonusers intend to use a method of family planning at some time in the future; 22 percent intend to use within the next 12 months, 19 percent at some more distant time in the future, and the remaining 2 percent are unsure as to when they would use a method. Thirty-six percent of nonusers who intend to use a method at some time in the future are women who have used a method at some time in the past.

Table 4.11 Satisfaction with current sources of supply for contraceptive methods

Percent distribution of current users of modern contraceptive methods by satisfaction with most recent source of supply, according to selected background characteristics and reason for using a method, Uzbekistan 1996

| Background characteristic | Main reason for using current source of supply | | | | | | | | | | | | | Number of users | |
|---------------------------|--|----------------|----------------|---------------------|---------------------------|------------------|---------------------|----------------------|---------------------------|--------------------------|-------------------|------------|---------------------|-----------------|--------------|
| | Know no other source | Closer to home | Closer to work | Transport available | Staff competent, friendly | Cleaner facility | Offers more privacy | Shorter waiting time | Longer hours of operation | Use other services there | Low cost, cheaper | Other | Don't know/ Missing | | Total |
| Residence | | | | | | | | | | | | | | | |
| Urban | 72.4 | 16.1 | 2.5 | 0.6 | 4.3 | 0.2 | 0.6 | 0.6 | 0.2 | 0.1 | 0.2 | 1.6 | 0.6 | 100.0 | 603 |
| Rural | 90.5 | 5.1 | 0.8 | 0.2 | 1.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.5 | 1.6 | 100.0 | 1,011 |
| Region | | | | | | | | | | | | | | | |
| Region 1 | 86.2 | 7.4 | 0.2 | 0.0 | 0.4 | 0.5 | 0.7 | 0.5 | 0.0 | 0.5 | 0.0 | 3.7 | 0.0 | 100.0 | 200 |
| Region 2 | 96.8 | 1.9 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.4 | 100.0 | 352 |
| Region 3 | 82.6 | 12.1 | 1.5 | 0.0 | 0.5 | 0.0 | 1.2 | 0.3 | 0.0 | 0.0 | 0.3 | 0.7 | 0.8 | 100.0 | 400 |
| Region 4 | 87.6 | 5.4 | 1.8 | 0.3 | 2.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 100.0 | 520 |
| Tashkent City | 36.8 | 35.7 | 4.5 | 2.1 | 15.1 | 0.3 | 0.0 | 0.3 | 0.7 | 0.0 | 0.0 | 3.4 | 1.0 | 100.0 | 142 |
| Education | | | | | | | | | | | | | | | |
| Primary/Secondary | 88.8 | 6.8 | 0.5 | 0.2 | 1.5 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.5 | 1.1 | 100.0 | 948 |
| Secondary-special | 79.4 | 11.2 | 3.0 | 0.6 | 2.3 | 0.2 | 0.8 | 0.0 | 0.1 | 0.2 | 0.0 | 1.2 | 1.0 | 100.0 | 478 |
| Higher | 69.1 | 16.4 | 2.0 | 0.5 | 5.5 | 0.2 | 0.7 | 1.0 | 0.0 | 0.0 | 0.0 | 2.3 | 2.2 | 100.0 | 188 |
| Ethnicity | | | | | | | | | | | | | | | |
| Uzbek | 85.7 | 7.8 | 1.3 | 0.2 | 2.1 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.7 | 1.4 | 100.0 | 1,339 |
| Other | 74.0 | 16.2 | 2.0 | 0.9 | 3.0 | 0.2 | 0.8 | 0.2 | 0.0 | 0.2 | 0.0 | 2.1 | 0.5 | 100.0 | 275 |
| Reason for using | | | | | | | | | | | | | | | |
| To space | 84.5 | 6.8 | 1.2 | 0.2 | 2.1 | 0.1 | 0.6 | 0.3 | 0.0 | 0.1 | 0.0 | 1.3 | 2.7 | 100.0 | 593 |
| To limit | 83.2 | 10.6 | 1.6 | 0.4 | 2.3 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.7 | 0.3 | 100.0 | 1,021 |
| Total | 83.7 | 9.2 | 1.4 | 0.3 | 2.2 | 0.1 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.9 | 1.2 | 100.0 | 1,614 |

Nonusers who intend to use a method later in the future tend to be women with fewer children. While most nonusers with one or no children say they intend to use a method at some time beyond the coming 12 months, most nonusers with two or more children who intend to use a method say they intend to do so within the next 12 months.

Forty-one percent of all currently married nonusers of contraception do not intend to use a method of family planning at any time in the future. The percent who do not intend to use increases as number of children increases; 31 percent of nonusers with one child say they do not intend to use, while 61 percent of nonusers with four or more children say they do not intend to use.

The UDHS results (data not shown) indicate that more than 21 percent of all nonusers of contraception³ visited a health facility at some time in the 12 months prior to the survey but were not spoken to about family planning. This represents a significant lost opportunity on the part of the health community to impart knowledge about family planning to the population. In addition, 66 percent of the nonusers did not visit a health facility within the 12 months prior to the survey; this translates to 88 percent of all nonusers having had no contact with a health professional regarding family planning in the previous 12 months.

³ These data, which are not presented, refer to all nonusers regardless of marital status.

Table 4.12. Future use of contraception

Percent distribution of currently married women who are not using a contraceptive method by past experience with contraception and intention to use in the future, according to number of living children, Uzbekistan 1996

| Past experience with contraception and future intentions | Number of living children ¹ | | | | | Total |
|--|--|-------|-------|-------|-------|-------|
| | 0 | 1 | 2 | 3 | 4+ | |
| Never used contraception | | | | | | |
| Intend to use in next 12 months | 2.5 | 18.9 | 17.0 | 10.1 | 7.0 | 12.4 |
| Intend to use later | 34.0 | 20.8 | 13.5 | 8.8 | 2.2 | 13.6 |
| Unsure as to timing | 1.2 | 3.2 | 1.1 | 0.0 | 0.4 | 1.3 |
| Unsure as to intention | 23.0 | 16.9 | 14.2 | 11.0 | 10.5 | 14.2 |
| Do not intend to use | 35.1 | 28.8 | 23.8 | 30.0 | 37.8 | 30.8 |
| Previously used contraception | | | | | | |
| Intend to use in next 12 months | 1.6 | 2.8 | 12.4 | 15.7 | 12.4 | 9.4 |
| Intend to use later | 2.3 | 3.9 | 7.2 | 9.9 | 3.3 | 5.3 |
| Unsure as to timing | 0.0 | 0.5 | 0.7 | 0.2 | 0.8 | 0.5 |
| Unsure as to intention | 0.4 | 1.8 | 2.5 | 4.8 | 2.8 | 2.6 |
| Do not intend to use | 0.0 | 2.5 | 7.7 | 9.6 | 22.8 | 9.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| All currently married nonusers | | | | | | |
| Intend to use in next 12 months | 4.1 | 21.7 | 29.4 | 25.7 | 19.4 | 21.9 |
| Intend to use later | 36.3 | 24.7 | 20.7 | 18.7 | 5.5 | 18.9 |
| Unsure as to timing | 1.2 | 3.7 | 1.7 | 0.2 | 1.2 | 1.8 |
| Unsure as to intention | 23.4 | 18.6 | 16.7 | 15.8 | 13.3 | 16.8 |
| Do not intend to use | 35.1 | 31.3 | 31.5 | 39.6 | 60.7 | 40.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 126 | 364 | 304 | 230 | 354 | 1,378 |

¹Includes current pregnancy

4.8 Reasons for Nonuse of Contraception

The UDHS asked all nonusers who do not intend to use a method of family planning at any time in the future the reason they do not intend to use. These results are presented for all women in Table 4.13, and for women below and above age 30. Overall, the most common reason given for not using contraception is opposition to family planning on the part of the respondent (29 percent); this was the most common reason for older (34 percent) nonusers compared to younger (19 percent) nonusers. The second most common reason for nonuse was the desire for more children (22 percent of all nonusers); this reason was more common among younger than older nonusers.

4.9 Preferred Method of Contraception for Future Use

Nonusers of contraception who intend to use at some time in the future were asked which method they would prefer to use. Data are presented for currently married women in Table 4.14 according to whether the nonusers intend to use within the next 12 months or later.

Eighty-four percent of nonusers who intend to use report the IUD to be the method they would use. The pill and injectables are the second most commonly reported methods (5 and 4 percent, respectively). Neither the rank order nor the magnitude of reporting varies greatly between nonusers who intend to use soon (within the next 12 months) and nonusers who intend to use at some later date.

4.10 Exposure to Family Planning Messages in the Electronic Media

The mass media provides an opportunity to communicate family planning information to a broad spectrum of the population. Sixty-two percent of the households in Uzbekistan own a radio and 91 percent own a television (see Table 2.9). All UDHS respondents were asked whether they had heard a family planning message on the radio or television in the few months prior to the interview. Results are presented in Table 4.15 by background characteristics of respondents.

While 14 percent of respondents have recently heard or seen a family planning message on both radio and television, television is by far the most common source—56 percent of all respondents have seen a television message and 16 percent have heard a radio message. More than two-thirds of urban dwellers have seen a television message, compared to 47 percent of rural dwellers. As it was presented in Section 2.3.4, television is a more ready source to reach both urban and rural dwellers as 94 percent of all respondents report watching television at least once a week. Ownership of radio and television in urban households is 68 and 96 percent, respectively, while 58 percent of rural households own a radio and 87 percent own a television.

Regional variation in exposure to television messages is greater than the urban/rural differential. Eighty-eight percent of women in Tashkent City and 49, 41, 56, and 61 percent of women in Regions 1, 2, 3, and 4, respectively, have recently seen a television family planning message.

While television messages are available to viewers of all educational levels, the likelihood that a respondent has recently seen a television message increases steadily with increasing education. Forty-eight percent of respondents with primary or secondary education have recently seen a television message, while 67 and 78 percent of women with secondary-special and higher education have seen such a message. Uzbek women are less likely than women of other ethnicities to have recently seen a television message (55 percent and 63 percent, respectively).

Table 4.13 Reasons for not using contraception

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

| Reason for not using contraception | Age | | Total |
|------------------------------------|-------|-------|-------|
| | <30 | 30-49 | |
| Infrequent sex | 2.3 | 7.2 | 5.5 |
| Menopausal/hysterectomy | 0.5 | 20.1 | 13.1 |
| Subfecund/infecund | 5.7 | 9.3 | 8.1 |
| Want children | 51.5 | 6.0 | 22.1 |
| Respondent opposed | 19.2 | 34.0 | 28.7 |
| Husband opposed | 8.1 | 7.9 | 8.0 |
| Religion | 0.8 | 0.0 | 0.3 |
| Knows no method | 5.6 | 1.4 | 2.9 |
| Knows no source | 0.0 | 0.4 | 0.3 |
| Health concerns | 3.0 | 8.8 | 6.8 |
| Side effects | 0.0 | 0.3 | 0.2 |
| Costs too much | 0.0 | 0.4 | 0.2 |
| Inconvenient | 0.0 | 0.1 | 0.1 |
| Interferes with body | 0.2 | 0.1 | 0.2 |
| Other | 0.5 | 1.3 | 1.0 |
| Don't know | 2.6 | 2.6 | 2.6 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 198 | 362 | 559 |

Table 4.14 Preferred method of contraception for future use

Percent distribution of currently married women who are not using a contraceptive method but who intend to use in the future by preferred method, according to whether they intend to use in the next 12 months or later, Uzbekistan 1996

| Preferred method of contraception | Intend to use | | | Total |
|-----------------------------------|-------------------|-----------------|---------------------|-------|
| | In next 12 months | After 12 months | Unsure as to timing | |
| Pill | 5.5 | 4.5 | (7.6) | 5.1 |
| IUD | 81.8 | 86.2 | (78.7) | 83.6 |
| Injectables | 5.9 | 2.3 | (0.0) | 4.0 |
| Diaphragm/Foam/Jelly | 0.0 | 0.2 | (0.0) | 0.1 |
| Condom | 2.1 | 1.7 | (2.0) | 1.9 |
| Periodic abstinence | 1.6 | 1.1 | (0.0) | 1.3 |
| Withdrawal | 1.2 | 0.2 | (0.0) | 0.7 |
| Douche | 0.2 | 0.5 | (0.0) | 0.3 |
| Missing | 1.7 | 3.2 | (11.8) | 2.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 301 | 261 | 25 | 587 |

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

Table 4.15 Heard about family planning on radio and television

Percent distribution of women by whether they have heard a radio or television message about family planning in the last few months prior to the interview, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Heard family planning message on radio or television | | | | Total | Number of women |
|---------------------------|--|------------|-----------------|---------------|-------|-----------------|
| | Heard on neither | Radio only | Television only | Heard on both | | |
| Residence | | | | | | |
| Urban | 28.8 | 1.3 | 52.7 | 17.3 | 100.0 | 1,693 |
| Rural | 50.2 | 2.4 | 34.9 | 12.5 | 100.0 | 2,722 |
| Region | | | | | | |
| Region 1 | 46.5 | 4.3 | 41.4 | 7.8 | 100.0 | 471 |
| Region 2 | 56.9 | 2.0 | 31.9 | 9.1 | 100.0 | 1,060 |
| Region 3 | 42.7 | 1.4 | 47.1 | 8.9 | 100.0 | 1,249 |
| Region 4 | 36.8 | 2.0 | 37.6 | 23.6 | 100.0 | 1,231 |
| Tashkent City | 11.4 | 0.7 | 63.8 | 24.2 | 100.0 | 404 |
| Education | | | | | | |
| Primary/Secondary | 49.9 | 2.1 | 36.3 | 11.7 | 100.0 | 2,813 |
| Secondary-special | 30.7 | 2.0 | 49.8 | 17.4 | 100.0 | 1,127 |
| Higher | 21.2 | 1.0 | 54.8 | 22.9 | 100.0 | 471 |
| Ethnicity | | | | | | |
| Uzbek | 43.5 | 2.0 | 40.3 | 14.3 | 100.0 | 3,647 |
| Other | 34.9 | 2.0 | 48.6 | 14.5 | 100.0 | 768 |
| Total | 42.0 | 2.0 | 41.7 | 14.3 | 100.0 | 4,415 |

Note: Total includes four women with no education. Figures may not add to 100.0 due to rounding.

4.11 Acceptability of Use of Electronic Media to Disseminate Family Planning Messages

In the 1996 UDHS, all respondents were asked if they find it acceptable or not for family planning messages to be broadcast over the radio or television. Results are presented in Table 4.16 by background characteristics of respondents.

Most women (78 percent) find it acceptable to have family planning messages on radio and television. The youngest women (age 15-19) are less likely than older women to say they find broadcast messages acceptable (62 percent) because they are more likely to report being unsure (34 percent). Women in rural areas, women with primary or secondary education, and Uzbek women all have approval levels that are slightly lower than their counterparts, but the overall levels of approval are high (approximately three-quarters of women in these categories approve). Overall, 4 percent of women feel that broadcasting of family planning messages is not acceptable.

4.12 Exposure to Family Planning Messages in Print Media

The high level of literacy in Uzbekistan makes the print media a possible mechanism for communicating family planning information. Fifty-seven percent of all respondents report that they read a newspaper at least once a week. The UDHS asked women whether they saw a message about family planning in a newspaper or magazine, a poster, or a leaflet in the few months preceding the interview. Results are presented in Table 4.17 by background characteristics of respondents.

Table 4.16 Acceptability of media messages on family planning

- Percent distribution of women by acceptability of messages about family planning on the radio or television, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Acceptability of family planning messages on radio or television | | | Total | Number of women |
|---------------------------|--|----------------|--------|-------|-----------------|
| | Acceptable | Not acceptable | Unsure | | |
| Age | | | | | |
| 15-19 | 61.9 | 4.6 | 33.5 | 100.0 | 981 |
| 20-24 | 80.3 | 3.4 | 16.3 | 100.0 | 806 |
| 25-29 | 85.8 | 2.8 | 11.4 | 100.0 | 710 |
| 30-34 | 82.7 | 2.8 | 14.5 | 100.0 | 624 |
| 35-39 | 83.4 | 3.6 | 13.0 | 100.0 | 561 |
| 40-44 | 78.1 | 3.9 | 18.0 | 100.0 | 422 |
| 45-49 | 78.5 | 6.7 | 14.6 | 100.0 | 310 |
| Residence | | | | | |
| Urban | 80.8 | 4.1 | 15.1 | 100.0 | 1,693 |
| Rural | 75.5 | 3.6 | 21.0 | 100.0 | 2,722 |
| Region | | | | | |
| Region 1 | 96.3 | 2.6 | 1.0 | 100.0 | 471 |
| Region 2 | 73.9 | 8.5 | 17.6 | 100.0 | 1,060 |
| Region 3 | 84.6 | 3.0 | 12.4 | 100.0 | 1,249 |
| Region 4 | 64.4 | 0.8 | 34.7 | 100.0 | 1,231 |
| Tashkent City | 82.7 | 4.2 | 13.0 | 100.0 | 404 |
| Education | | | | | |
| Primary/Secondary | 72.1 | 4.1 | 23.7 | 100.0 | 2,813 |
| Secondary-special | 85.8 | 3.2 | 11.0 | 100.0 | 1,127 |
| Higher | 89.7 | 3.2 | 7.0 | 100.0 | 471 |
| Ethnicity | | | | | |
| Uzbek | 76.0 | 3.6 | 20.4 | 100.0 | 3,647 |
| Other | 84.6 | 4.5 | 10.8 | 100.0 | 768 |
| Total | 77.5 | 3.8 | 18.7 | 100.0 | 4,415 |

Note: Total includes four women with no education. Figures may not add to 100.0 due to rounding.

About one-fifth (17 percent) of all respondents have recently seen information about family planning in the print media. Twenty-eight percent of urban women and 10 percent of rural women have recently seen a family planning message in print. More than one-half of women in Tashkent City have recently read a printed family planning message, while 37, 16, 7, and 9 percent of women living in Regions 1, 2, 3 and 4, respectively, have read such a message.

The likelihood that a respondent has recently seen or read a message increases steadily with increasing education. Ten percent of respondents with primary or secondary education have recently read a message, while 25 and 37 percent, respectively, of women with secondary-special and higher education have seen such a message. Women of other ethnicities are more likely than Uzbek women to have recently seen printed information on family planning (35 percent and 13 percent, respectively).

Table 4.17 Family planning messages in print

Percentage of women who received a message about family planning through the print media in the last few months prior to the interview, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Type of print media containing family planning message | | | | Number of women |
|---------------------------|--|--------------------|--------|------------------|-----------------|
| | No source | Newspaper/magazine | Poster | Leaflet/brochure | |
| Residence | | | | | |
| Urban | 71.6 | 23.9 | 6.9 | 6.5 | 1,693 |
| Rural | 90.0 | 8.9 | 1.5 | 1.0 | 2,722 |
| Region | | | | | |
| Region 1 | 63.2 | 33.1 | 8.9 | 3.8 | 471 |
| Region 2 | 84.0 | 13.5 | 2.5 | 2.3 | 1,060 |
| Region 3 | 92.6 | 6.8 | 1.3 | 0.1 | 1,249 |
| Region 4 | 91.2 | 7.8 | 1.1 | 1.4 | 1,231 |
| Tashkent City | 48.4 | 41.5 | 14.5 | 18.8 | 404 |
| Education | | | | | |
| Primary/Secondary | 89.7 | 8.9 | 1.7 | 1.2 | 2,813 |
| Secondary-special | 74.5 | 22.1 | 5.6 | 4.6 | 1,127 |
| Higher | 62.8 | 31.6 | 9.7 | 11.0 | 471 |
| Ethnicity | | | | | |
| Uzbek | 86.8 | 11.3 | 2.5 | 2.2 | 3,647 |
| Other | 64.9 | 30.6 | 8.4 | 7.4 | 768 |
| Total | 83.0 | 14.7 | 3.6 | 3.1 | 4,415 |

Note: Total includes four women with no education.

Newspapers and magazines are the most common printed source in which family planning messages are seen (15 percent), although respondents also get messages from leaflets and brochures (3 percent) and posters (4 percent).

4.13 Attitudes of Couples toward Family Planning

Married women were asked how often they had discussed contraception with their husbands or partners in the previous year. Data are presented in Table 4.18 for currently married women who know of at least one contraceptive method by age.

Overall, about one-fourth of married women (26 percent) have not discussed family planning with their husbands at all in the previous year, one-half have discussed the topic once or twice, and one-fifth have discussed the topic more often. Whether or not a woman spoke with her husband about family planning depends on the age of the woman. The percent of married women who have discussed family planning at least once in the previous year decreases from 65 percent among 45-49 year-olds to 52 percent of 15-19 year-olds.

Currently married women were asked whether they think their husband approves or disapproves of couples using family planning to avoid pregnancy. Table 4.19 presents the results of the wives' perceptions of their husbands' attitudes by background characteristics of respondents.

Table 4.18 Discussion of family planning by couples

Percent distribution of currently married women who know a contraceptive method by the number of times family planning was discussed with their husband in the year preceding the survey, according to current age, Uzbekistan 1996

| Age | Number of times family planning discussed | | | Total | Number of women |
|-------|---|---------------|------------|-------|-----------------|
| | Never | Once or twice | More often | | |
| 15-19 | 47.6 | 42.8 | 9.6 | 100.0 | 108 |
| 20-24 | 35.1 | 45.5 | 19.5 | 100.0 | 561 |
| 25-29 | 22.7 | 53.3 | 24.0 | 100.0 | 610 |
| 30-34 | 19.8 | 54.4 | 25.7 | 100.0 | 553 |
| 35-39 | 17.4 | 54.6 | 27.9 | 100.0 | 502 |
| 40-44 | 25.1 | 53.8 | 21.1 | 100.0 | 368 |
| 45-49 | 34.9 | 48.7 | 16.4 | 100.0 | 246 |
| Total | 25.8 | 51.5 | 22.6 | 100.0 | 2,947 |

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

Perhaps the most interesting finding in Table 4.19 is the fact that women report a lower approval level for their husbands than for themselves across every single background characteristic of respondents. Overall, 91 percent of women report that they approve of contraception, but only 72 percent report that their husbands approve; this translates to 70 percent of all married couples in which both the husband and wife approve of contraception. If there exists a difference of opinion, it is usually that the woman reports that she approves, and that her husband disapproves (although not exclusively). Only 1 percent of women report that both they and their husbands disapprove of family planning.

The percent of couples in which both husband and wife approve of family planning has a pattern by background characteristics which generally mimics the pattern observed in the percent of women currently using family planning.

4.14 Social Marketing of Contraceptives⁴

The Uzbekistan Contraceptive Social Marketing Program began in the cities of Tashkent and Samarkand in September, 1995, in collaboration with the Ministry of Health. Its purpose is to make modern contraceptive choices available to women through commercial pharmacies as an alternative to abortions and government provision of family planning. The program includes five brands of oral contraceptives and two types of injectables.

A "Red Apple" program logo, a symbol of a red apple encircling a man and a woman holding hands, was developed and placed in doctor's offices, pharmacies, clinics and kiosks. The Red Apple logo and information about pills, injectables, and where to buy Red Apple contraceptives have been advertised on television, radio and in newspapers. Advertising was supported by an extensive public relations campaign.

⁴ Written by Ms. Karen Foreit, The Futures Group.

Table 4.19 Wives' perceptions of their husbands' attitude toward family planning

Percent distribution of currently married women who know of a contraceptive method by wife's attitude toward family planning and wife's perception of her husband's attitude toward family planning, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Wife approves of couples using family planning | | | Wife disapproves of couples using family planning | | | Wife unsure | Total | Husband approves ¹ | Wife approves | Number of women |
|---------------------------|--|---------------------|----------------------------|---|------------------|----------------------------|-------------|-------|-------------------------------|---------------|-----------------|
| | Both approve | Husband disapproves | Husband's attitude unknown | Both disapprove | Husband approves | Husband's attitude unknown | | | | | |
| Age | | | | | | | | | | | |
| 15-19 | 43.9 | 16.6 | 31.1 | 0.0 | 0.0 | 0.0 | 8.4 | 100.0 | 44.7 | 91.6 | 108 |
| 20-24 | 56.6 | 8.4 | 24.0 | 0.4 | 2.2 | 1.2 | 7.1 | 100.0 | 57.9 | 89.0 | 561 |
| 25-29 | 73.9 | 6.6 | 12.0 | 1.0 | 0.8 | 0.4 | 5.2 | 100.0 | 75.9 | 92.6 | 610 |
| 30-34 | 75.3 | 6.2 | 12.8 | 1.2 | 1.3 | 0.1 | 3.2 | 100.0 | 78.2 | 94.3 | 553 |
| 35-39 | 79.8 | 5.9 | 8.5 | 0.6 | 1.3 | 1.3 | 2.5 | 100.0 | 81.0 | 94.3 | 502 |
| 40-44 | 73.4 | 4.8 | 10.9 | 0.5 | 2.6 | 1.4 | 6.3 | 100.0 | 77.0 | 89.2 | 368 |
| 45-49 | 60.4 | 8.9 | 15.6 | 0.9 | 1.7 | 4.0 | 8.3 | 100.0 | 64.8 | 84.9 | 246 |
| Residence | | | | | | | | | | | |
| Urban | 72.7 | 7.0 | 12.7 | 0.9 | 1.5 | 0.9 | 4.3 | 100.0 | 74.8 | 92.4 | 1,125 |
| Rural | 67.7 | 7.2 | 15.9 | 0.7 | 1.6 | 1.2 | 5.8 | 100.0 | 70.0 | 90.8 | 1,822 |
| Region | | | | | | | | | | | |
| Region 1 | 82.4 | 5.7 | 9.3 | 0.3 | 0.3 | 0.3 | 1.6 | 100.0 | 83.7 | 97.4 | 318 |
| Region 2 | 64.9 | 8.9 | 16.4 | 1.5 | 3.3 | 0.9 | 4.1 | 100.0 | 67.2 | 90.2 | 658 |
| Region 3 | 65.5 | 4.0 | 20.6 | 0.8 | 1.1 | 1.5 | 6.5 | 100.0 | 67.1 | 90.1 | 849 |
| Region 4 | 69.7 | 10.2 | 11.2 | 0.2 | 1.0 | 1.0 | 6.6 | 100.0 | 72.8 | 91.1 | 848 |
| Tashkent City | 78.7 | 4.3 | 9.6 | 1.1 | 1.2 | 1.1 | 4.1 | 100.0 | 81.0 | 92.5 | 275 |
| Education | | | | | | | | | | | |
| Primary/Secondary | 66.2 | 7.5 | 15.9 | 0.6 | 1.8 | 1.5 | 6.6 | 100.0 | 68.8 | 89.6 | 1,786 |
| Secondary-special | 72.6 | 6.8 | 13.9 | 0.9 | 1.3 | 0.4 | 4.1 | 100.0 | 74.3 | 93.3 | 805 |
| Higher | 80.3 | 5.8 | 10.3 | 1.2 | 0.6 | 0.7 | 1.1 | 100.0 | 81.7 | 96.4 | 353 |
| Ethnicity | | | | | | | | | | | |
| Uzbek | 68.4 | 7.3 | 15.2 | 0.8 | 1.6 | 1.2 | 5.6 | 100.0 | 70.7 | 90.9 | 2,455 |
| Other | 75.6 | 6.0 | 12.4 | 0.7 | 1.2 | 0.4 | 3.6 | 100.0 | 77.8 | 94.0 | 492 |
| Total | 69.6 | 7.1 | 14.7 | 0.8 | 1.5 | 1.1 | 5.2 | 100.0 | 71.8 | 91.4 | 2,947 |

Note: Total includes three women with no education

¹ Includes cases in which the wife is unsure about her own attitude but knows her husband's

In addition to asking respondents if they had heard or seen a family planning message, the UDHS showed women the Red Apple symbol and asked them if they had ever seen it before. Respondents who answered that they had seen the symbol were asked where they had seen it, and what the symbol stood for. To check for false positive recognition, respondents were also shown a symbol of a green pear and asked whether they had seen it, where they had seen it, and what it stood for. Results are presented for Tashkent City, where Social Marketing activities have been strongest.

Ninety-four percent of all women in Tashkent City reported having seen the Red Apple logo, and only three respondents falsely recognized the green pear (Table 4.20). Seventy-two percent of women recognized the Red Apple logo and knew it stood for contraceptives. Most (76 percent) had seen it on television, with another 21 percent reporting that they had seen it in a pharmacy. Recognition was higher among women over the age of 20, and among women who were married or living with a man.

Table 4.20 Knowledge of the Red Apple social marketing logo

Percent distribution of all women in Tashkent City by recognition of the Red Apple symbol, according to selected background characteristics, Uzbekistan 1996

| Characteristic | Knowledge of Red Apple Social Marketing logo | | | Total | Number of women |
|-----------------------|--|-----------------|------------------------------------|-------|-----------------|
| | Never saw logo | Recognized logo | Knew logo stands for contraception | | |
| Age | | | | | |
| 15-19 | 5.7 | 46.4 | 47.9 | 100.0 | 140 |
| 20-24 | 4.9 | 20.8 | 74.3 | 100.0 | 144 |
| 25-29 | 2.4 | 14.2 | 83.5 | 100.0 | 127 |
| 30-34 | 4.8 | 18.1 | 77.1 | 100.0 | 105 |
| 35-39 | 9.2 | 13.3 | 77.5 | 100.0 | 120 |
| 40-44 | 7.1 | 15.2 | 77.8 | 100.0 | 99 |
| 45-49 | 9.7 | 20.4 | 69.9 | 100.0 | 93 |
| Marital status | | | | | |
| Never married | 5.0 | 40.2 | 54.7 | 100.0 | 179 |
| Currently married | 6.1 | 17.0 | 76.8 | 100.0 | 570 |
| Total | 6.0 | 22.0 | 72.0 | 100.0 | 828 |

Note: Total includes previously married women. Figures may not add to 100.0 due to rounding.

Correct knowledge of the Red Apple logo (that is, both recognizing the symbol and stating that it stood for contraceptives) was strongly associated with exposure to family planning messages in the media: 77 percent of women in Tashkent City who reported having seen a family planning message on radio or television also knew that the Red Apple logo stands for contraceptives, compared to only 16 percent of the women who had not seen a family planning message on television (Table 4.21). Women who had seen family planning messages in the newspaper, on posters, or on brochures were also more likely to correctly identify the Red Apple logo, but the differences were not as large. These results suggest that the electronic media were more influential in transmitting the Red Apple image. They also suggest that the high rates of exposure to family planning messages were due in large part to Red Apple advertising and its public relations campaigns.

Table 4.21 Exposure to family planning messages and knowledge of the Red Apple social marketing logo

Percent distribution of all women in Tashkent City by recognition of the Red Apple symbol, according to exposure to family planning messages, Uzbekistan 1996

| Exposure to family planning messages | Knowledge of Red Apple Social Marketing logo | | | Total | Number of women |
|---|--|-----------------|------------------------------------|--------------|-----------------|
| | Never saw logo | Recognized logo | Knew logo stands for contraception | | |
| Heard a family planning message on radio or television | | | | | |
| Heard on neither | 30.9 | 53.2 | 16.0 | 100.0 | 94 |
| Radio only | -- | -- | -- | 100.0 | 6 |
| Television only | 2.8 | 19.9 | 77.3 | 100.0 | 528 |
| Heard on both | 3.0 | 12.0 | 85.0 | 100.0 | 200 |
| Received a family planning message through the print media | | | | | |
| No source | 7.7 | 32.4 | 59.9 | 100.0 | 401 |
| Newspaper/magazine | 4.7 | 12.8 | 82.6 | 100.0 | 344 |
| Poster | 3.3 | 8.3 | 88.3 | 100.0 | 120 |
| Leaflet/brochure | 3.8 | 9.0 | 87.2 | 100.0 | 156 |
| Total | 6.0 | 22.0 | 72.0 | 100.0 | 828 |

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

CHAPTER 5

INDUCED ABORTION

Feruz T. Faizieva, Jeremiah M. Sullivan, and Alisa D. Podporenko

Induced abortion as a means of fertility control has a long history in the republics of the former Soviet Union. Induced abortion was first legalized in the Soviet Union in 1920 but was banned in 1936 as part of a pronatalist policy emphasizing population growth. This decision was reversed in 1955 when abortion for nonmedical reasons was again legalized throughout the former Soviet Union.

The practice of induced abortion can adversely affect a woman's health, reduce her chances for further childbearing, and contribute to maternal and perinatal mortality. The Ministry of Health (MOH) of the Republic of Uzbekistan has been concerned about the impact of abortion and, in particular, the repeat use of abortion on women's health. In an effort to curtail this practice, the MOH is committed to providing the population with a broad choice of modern, safe, and effective contraceptive methods.

International experience with the collection of abortion data in population surveys has been relatively unsuccessful in many populations because of respondent reluctance to report events which are associated with social stigmas. However, in the republics of the former Soviet Union and in many Eastern European countries, induced abortion is an accepted means of fertility control. In several of these countries, household surveys have collected data on this topic with apparent success (IMCHC and CDC, 1995; NIN and MI, 1996; RCPOMR and CDC, 1997). Accordingly, questions on abortion were pretested and included in the final questionnaires for the UDHS.

Information about induced abortion was collected in the reproductive section of the Woman's Questionnaire (Appendix E). The section began with a series of questions to determine the total number of live births, induced abortions, miscarriages and stillbirths that a respondent has had. When reporting the number of abortions, respondents were told to include pregnancies terminated by vacuum aspiration (i.e., mini-abortions).¹ Next, an event-by-event pregnancy history was collected. For each pregnancy, the type of outcome and year and month of termination were recorded.²

5.1 Pregnancy Outcomes

For the three-year period preceding the survey (i.e., from mid-1993 to mid-1996), Table 5.1 shows the percent distribution of pregnancies by outcome for all women 15-49. In Uzbekistan, the great majority of pregnancies—80 percent—end in a live birth and the remaining 20 percent terminate in fetal wastage (i.e.,

¹ The term abortion as used in the remainder of this report includes mini-abortions unless indicated otherwise.

² The pregnancy history was structured to ensure complete reporting of abortions as much as possible, especially for the period immediately prior to the survey. Data were collected in reverse chronological order (i.e., information was first collected about the most recent pregnancy and then about the next-to-last, etc.). This procedure should result in more complete reporting of events for the years immediately prior to the survey compared with a procedure which collects data in chronological order. At the end of a pregnancy history, interviewers were required to check the consistency between the aggregate data collected at the outset of the reproductive section and the number of events reported in the pregnancy history. Finally, interviewers were required to probe pregnancy intervals of four years or more to detect omitted events.

an induced abortion, miscarriage or stillbirth). Induced abortion is the most commonly reported type of fetal wastage, accounting for 14 percent of all pregnancy terminations.

Table 5.1 Pregnancy outcomes by background characteristics

Percent distribution of pregnancies terminating in the three years preceding the survey, by type of outcome, according to selected background characteristics, Uzbekistan 1996

| Background characteristics | Pregnancy outcome | | | | Total | Number of pregnancies |
|----------------------------|-------------------|------------------|--------------|--------------|-------|-----------------------|
| | Live births | Induced abortion | Mis-carriage | Still-births | | |
| Residence | | | | | | |
| Urban | 69.4 | 22.0 | 8.4 | 0.3 | 100.0 | 618 |
| Rural | 85.8 | 9.2 | 4.5 | 0.5 | 100.0 | 1,122 |
| Region | | | | | | |
| Region 1 | 78.9 | 12.6 | 7.0 | 1.4 | 100.0 | 199 |
| Region 2 | 81.1 | 14.1 | 4.2 | 0.7 | 100.0 | 411 |
| Region 3 | 78.4 | 14.8 | 6.5 | 0.4 | 100.0 | 492 |
| Region 4 | 88.0 | 7.6 | 4.4 | 0.0 | 100.0 | 490 |
| Tashkent City | 57.0 | 30.8 | 11.9 | 0.3 | 100.0 | 147 |
| Education | | | | | | |
| Primary/Secondary | 85.3 | 9.7 | 4.4 | 0.6 | 100.0 | 1,043 |
| Secondary-special | 73.7 | 18.5 | 7.5 | 0.3 | 100.0 | 498 |
| Higher | 67.7 | 22.8 | 9.3 | 0.2 | 100.0 | 199 |
| Ethnicity | | | | | | |
| Uzbek | 81.8 | 12.0 | 5.6 | 0.5 | 100.0 | 1,504 |
| Other | 68.1 | 24.4 | 7.3 | 0.2 | 100.0 | 236 |
| Total | 80.0 | 13.7 | 5.9 | 0.5 | 100.0 | 1,740 |

Table 5.1 also shows information on pregnancy terminations by background characteristics of respondents. In urban areas, pregnancies are twice as likely to end in abortion (22 percent) than in rural areas (9 percent). Substantial regional differences are also evident. The proportion of pregnancies ending in abortion is lowest in Region 4 (8 percent), higher in Regions 1, 2, and 3 (between 13 and 15 percent) and highest in Tashkent City (31 percent).

It is worth noting that the ranking of regions by pregnancies ending in abortion is inversely correlated with the fertility levels. As shown in Table 3.2, the total fertility rate for the three years preceding the survey is highest in Region 4 (3.6 children per woman), somewhat lower in Regions 1, 2 and 3 (between 3.3 and 3.5 children per woman) and lowest in Tashkent City (2.3 children per women).

Education and ethnicity are also associated with pregnancy outcome. When progressing from primary/secondary to secondary-special and higher education, the proportion of pregnancies terminating in abortion increases (10, 19 and 23 percent, respectively). Similarly, substantially fewer pregnancies end in abortion among women of Uzbek ethnicity (12 percent) than among women of other ethnicities (24 percent).

5.2 Lifetime Experience with Induced Abortion

Lifetime experience of women with abortion is shown in Table 5.2. It should be noted that the statistics on the proportion of women who have ever had an abortion are based on all women 15-49 irrespective of their exposure to the risk of pregnancy.

Overall, 16 percent of women of reproductive age in Uzbekistan have had at least one abortion. As expected, the percentage who have had an abortion increases rapidly with age from 4 percent of women 20-24 to 34 percent of women 35 and over. Differences are also large by urban/rural residence; experience with abortion being less among rural women (11 percent) compared with urban women (24 percent). Regional differences are even greater with the proportion being lowest in Region 2 (10 percent) and highest in Tashkent City (39 percent).

Table 5.2 also presents information on repeat use of induced abortion. Among the 16 percent of women who have ever had an abortion, about half (49 percent) have had more than one. Among women age 35 or more who have had an abortion, 57 percent have had more than one. Thus, among women who have had an abortion, repeat use has been common.

Table 5.2 Lifetime experience with induced abortion
Percentage of women who have had at least one induced abortion and, among these women, the percent distribution by the number of induced abortions and the mean number of induced abortions according to selected background characteristics, Uzbekistan 1996

| Background characteristics | Percentage of women who had an induced abortion | Number of induced abortions among women who have had an induced abortion | | | | Total | Mean | Number of women |
|------------------------------------|---|--|-------------|-------------|------------|--------------|------------|-----------------|
| | | 1 | 2-3 | 4-5 | 6+ | | | |
| Age | | | | | | | | |
| <20 | 0.0 | * | * | * | * | 100.0 | * | 981 |
| 20-24 | 4.4 | 81.0 | 17.9 | 1.1 | 0.0 | 100.0 | 1.3 | 982 |
| 25-34 | 19.2 | 63.0 | 29.7 | 5.5 | 1.8 | 100.0 | 1.6 | 1,158 |
| 35+ | 33.5 | 42.5 | 39.5 | 13.8 | 4.2 | 100.0 | 2.2 | 1,294 |
| No. of live births | | | | | | | | |
| None | 1.0 | * | * | * | * | 100.0 | * | 1,406 |
| 1 | 12.9 | 56.1 | 28.0 | 12.0 | 4.0 | 100.0 | 2.0 | 560 |
| 2-3 | 23.7 | 52.1 | 36.5 | 6.8 | 4.6 | 100.0 | 2.0 | 1,363 |
| 4-5 | 26.9 | 49.6 | 33.6 | 14.9 | 1.9 | 100.0 | 2.0 | 804 |
| 6+ | 26.3 | 46.2 | 42.8 | 10.3 | 0.7 | 100.0 | 1.9 | 283 |
| Residence | | | | | | | | |
| Urban | 23.7 | 44.7 | 38.6 | 12.1 | 4.6 | 100.0 | 2.2 | 1,693 |
| Rural | 10.9 | 60.3 | 30.4 | 8.0 | 1.3 | 100.0 | 1.8 | 2,722 |
| Region | | | | | | | | |
| Region 1 | 15.7 | 61.2 | 30.4 | 7.7 | 0.7 | 100.0 | 1.7 | 471 |
| Region 2 | 9.9 | 51.5 | 37.6 | 8.7 | 2.2 | 100.0 | 1.9 | 1,060 |
| Region 3 | 17.3 | 53.1 | 33.5 | 10.0 | 3.4 | 100.0 | 2.0 | 1,249 |
| Region 4 | 11.9 | 58.0 | 30.0 | 8.8 | 3.2 | 100.0 | 1.8 | 1,231 |
| Tashkent City | 38.9 | 38.2 | 42.5 | 14.6 | 4.7 | 100.0 | 2.4 | 404 |
| Education | | | | | | | | |
| Primary/Secondary | 10.9 | 57.0 | 32.9 | 8.8 | 1.3 | 100.0 | 1.8 | 2,817 |
| Secondary-special | 22.6 | 50.7 | 31.8 | 12.7 | 4.9 | 100.0 | 2.1 | 1,127 |
| Higher | 29.3 | 40.2 | 46.0 | 9.5 | 4.3 | 100.0 | 2.3 | 471 |
| Ethnicity | | | | | | | | |
| Uzbek | 13.9 | 56.4 | 33.8 | 8.4 | 1.4 | 100.0 | 1.8 | 3,647 |
| Other | 25.1 | 38.3 | 38.4 | 15.4 | 8.0 | 100.0 | 2.6 | 768 |
| Marital status | | | | | | | | |
| Never married | 0.0 | * | * | * | * | 100.0 | * | 1,099 |
| Currently married, living together | 21.0 | 51.1 | 35.9 | 9.9 | 3.2 | 100.0 | 2.0 | 3,102 |
| Ever married | 22.7 | 55.5 | 24.4 | 16.4 | 3.6 | 100.0 | 2.1 | 214 |
| Total | 15.8 | 51.4 | 35.1 | 10.4 | 3.2 | 100.0 | 2.0 | 4,415 |

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

5.3 Rates of Induced Abortion

Rates of abortion for the three-year period prior to the survey (i.e., from mid-1993 to mid-1996) are shown in this section. Age-specific rates represent the probability that a woman of a particular age will have an abortion in a period of one calendar year. These rates are shown per 1,000 women.

Table 5.3 shows age-specific rates of abortion for all Uzbekistan, by urban/rural residence and by ethnicity. The age patterns of the rates are similar in each population group. Rates are very low for women in the age interval 15-19, they increase in the primary years of childbearing to peak at the age intervals 25-29 and 30-34, and decline at the older ages. At the national level, the age-specific abortion rates exceed the corresponding age-specific fertility rates only in the age intervals 40-44 and 45-49 (Figure 5.1). The age-specific data also indicate that for many age intervals abortion rates in urban areas exceed those for rural areas by 50 percent or more.

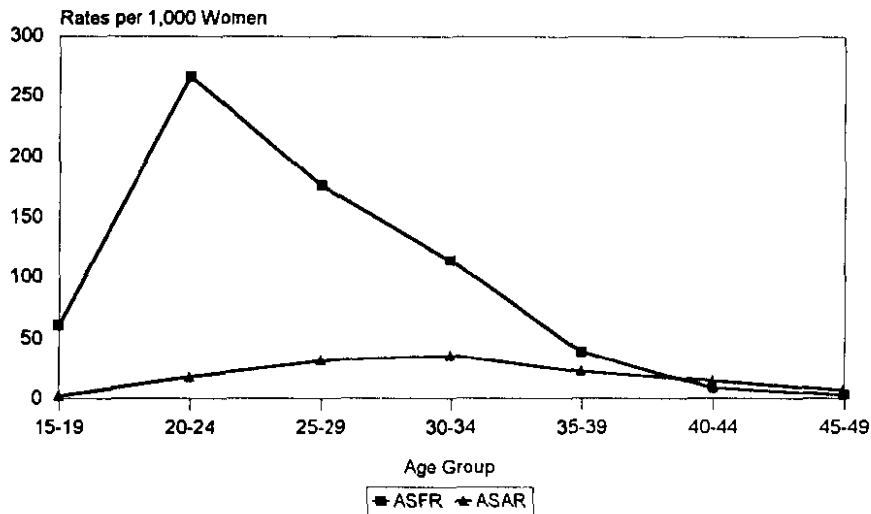
| Age | Residence | | Ethnicity | | Total |
|-----------|-----------|-------|-----------|-------|-------|
| | Urban | Rural | Uzbek | Other | |
| 15-19 | 1 | 2 | 1 | 4 | 2 |
| 20-24 | 38 | 7 | 14 | 40 | 18 |
| 25-29 | 41 | 27 | 31 | 42 | 32 |
| 30-34 | 52 | 26 | 31 | 59 | 36 |
| 35-39 | 38 | 13 | 23 | 22 | 23 |
| 40-44 | 8 | 22 | 19 | 6 | 15 |
| 45-49 | 15 | (0) | 3 | (18) | 7 |
| TAR 15-49 | 0.97 | 0.48 | 0.62 | 1.00 | 0.67 |
| TAR 15-44 | 0.89 | 0.48 | 0.50 | 0.90 | 0.63 |
| GAR | 30 | 14 | 20 | 29 | 20 |

Note: Rates are for the period 1-36 months preceding the survey. Rates in parentheses indicate that they are based on fewer than 250 woman-years of exposure.
TAR: Total abortion rate expressed per woman
GAR: General abortion rate (induced abortions divided by number of women 15-44) expressed per 1,000 women

Age-specific abortion rates can be expressed in a summary index called the total abortion rate (TAR). This rate is expressed on a per woman basis and is interpreted as the number of abortions a woman would have during her lifetime if she experienced the age-specific rates of a specified time period. For Uzbekistan, the total abortion rate for the period from mid-1993 to mid-1996 is 0.7 abortions per woman. As expected, the TAR for Uzbekistan is substantially lower than recent estimates of the TAR for other areas of the former Soviet Union such as Kazakstan (1.8) and Romania (3.4 abortions per woman), and for Yekaterinburg and Perm in Russia (2.3 and 2.8, respectively) (IMCHC and CDC, 1995; NIN and MI, 1996; RCPOMR and CDC, 1997).

Total abortion rates by background characteristics of respondents are shown in Table 5.4 and Figure 5.2. Substantial differences are evident: the TARs differ by approximately a factor of two between urban/rural residence, region, level of education and ethnicity.

Figure 5.1
Age-specific Rates of Fertility (ASFR)
and Induced Abortion (ASAR)



UDHS 1996

5.4 Time Trends in Induced Abortion

An indication of time trends for induced abortion can be obtained by comparing values of the TAR with the mean number of abortions reported by women who are nearing the end of their fertile years (i.e., women age 40-49). Table 5.4 indicates that, for all Uzbekistan, the TAR (0.7 abortions per woman) is marginally less than the mean number of abortions reported by women age 40-49 (0.8 abortions per woman).

For almost all population groups, Table 5.4 shows TARs which are less than the mean number of abortions reported by older women. However, the magnitude of the difference is particularly large for women residing in Tashkent City (1.3 versus 1.8 abortions per woman), women with a higher level of education (1.0 versus 1.4), and women belonging to other ethnicities (1.0 versus 1.3). This implies that the movement away from induced abortion, which is observed at the national level, is primarily concentrated in population groups where abortion was practiced the most in past years.

The UDHS data allow for a more direct assessment of time trends in abortion. Table 5.5 shows age-specific rates of induced abortion for consecutive five-year time periods prior to the survey. The age-specific rates can be summarized in terms of the TAR restricted to women age 15-44. Table 5.5 shows that between the periods 5-9 and 0-4 years before the survey, the TAR declined by approximately 25 percent (i.e., from 1.0 to 0.7 abortions per woman).

5.5 Abortion Rates from the Ministry of Health

The Ministry of Health (MOH) of the Republic of Uzbekistan has collected abortion data since 1978 through a registration system which operates in all of its facilities. The data have been published in a

compendium of health statistics covering the Central Asian Republics of the former Soviet Union (Church and Koutanev, 1995). The published rates are in terms of the annual number of abortions per 1,000 women of childbearing age or the general abortion rate (GAR).

Table 5.6 shows rates of abortion per 1,000 women age 15-44 for the time periods 1986-90 and 1993-95. For the period 1993-95, the rate from the UDHS (20 per 1,000) is somewhat lower than that of the MOH (24 per 1,000), but not greatly so. Given that abortion data collected in most retrospective surveys is of notoriously poor quality, the fact that these rates are of the same order of magnitude tends to substantiate the accuracy of both rates.

The difference between the rates is probably due to some omission of events in the UDHS. For the earlier period of 1986-90, the rate from the UDHS (29 per 1,000) is decidedly lower than that from the MOH (42 per 1,000). Again, the difference is probably due to underreporting in the survey.³

Notwithstanding these differences, an important conclusion to be drawn from Table 5.6 is that recourse to the practice of abortion is declining in Uzbekistan. During the five-year interval between time periods, the GAR declined by 31 percent according to the UDHS data and by 43 percent according to the MOH data.

5.6 Use of Contraception before Abortion

For each pregnancy terminated by abortion in the three years preceding the survey, respondents were asked whether they were using a method of contraception at the time they became pregnant, and if so, what method. Table 5.7 shows the relevant statistics. Twelve percent of abortions are preceded by a contraceptive failure.⁴ Method failure primarily occurs while using the IUD although failure also occurs while using withdrawal, the condom, the pill and injectables. It is clear that the availability of more reliable methods of contraception and greater consistency of method use would reduce the incidence of induced abortion.

Table 5.4. Induced abortion rates by background characteristics

Total induced abortion rates for the three-year period prior to the survey and mean number of induced abortions had by women age 40-49, by selected background characteristics, Uzbekistan 1996

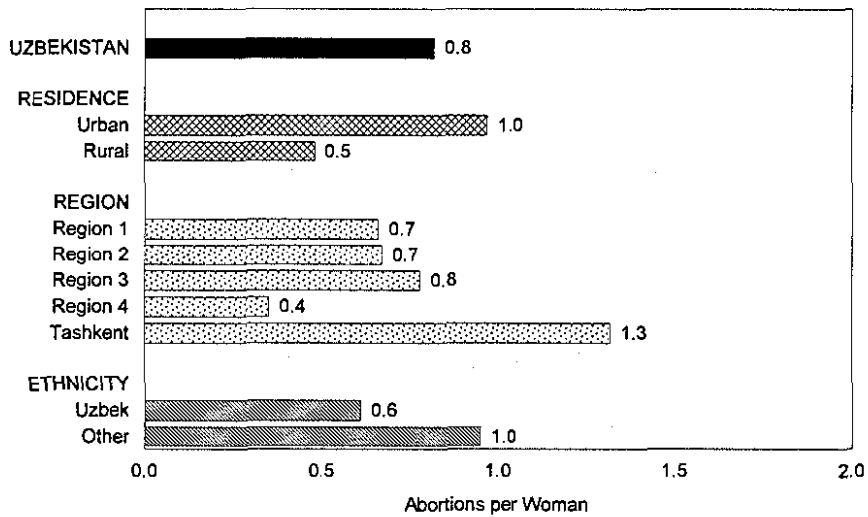
| Background characteristic | Total induced abortion rate ¹ | Mean number of abortions 40-49 |
|---------------------------|--|--------------------------------|
| Residence | | |
| Urban | 0.97 | 1.10 |
| Rural | 0.48 | 0.58 |
| Region | | |
| Region 1 | 0.66 | 0.67 |
| Region 2 | 0.67 | 0.50 |
| Region 3 | 0.78 | 0.94 |
| Region 4 | 0.35 | 0.52 |
| Tashkent City | 1.32 | 1.82 |
| Education | | |
| Primary/Secondary | 0.46 | 0.48 |
| Secondary-special | 0.95 | 1.24 |
| Higher | 1.00 | 1.40 |
| Ethnicity | | |
| Uzbek | 0.61 | 0.65 |
| Other | 0.95 | 1.28 |
| Total | 0.67 | 0.82 |

¹ Women age 15-49

³ In any retrospective survey, underreporting of events is a possibility. Respondent recall is probably less accurate and less complete for time periods which are more distant from the survey date, and that may explain the greater divergency between the GAR of the UDHS and the MOH for the earlier time period.

⁴ A recent study of the reproductive practices among women of reproductive age in Kazakstan found that 23 percent of abortions, which occurred during the time period from mid-1992 to mid-1995, were preceded by contraceptive failure (NIN and MI, 1996).

Figure 5.2
Total Induced Abortion Rate by Background Characteristics



UDHS 1996

Table 5.5 Trends in age-specific induced abortion

Age-specific induced abortion rates for five-year periods preceding the survey, Uzbekistan 1996

| Age | Number of years preceding the survey | | | |
|-------|--------------------------------------|------|-------|-------|
| | 0-4 | 5-9 | 10-14 | 15-19 |
| 15-19 | 2 | 3 | 2 | 2 |
| 20-24 | 21 | 22 | 16 | 24 |
| 25-29 | 34 | 48 | 44 | 40 |
| 30-34 | 42 | 44 | 46 | [73] |
| 35-39 | 25 | 43 | [35] | - |
| 40-44 | 20 | [30] | - | - |
| 45-49 | [6] | - | - | - |
| TAR | 0.72 | 0.95 | - | - |
| GAR | 22 | 29 | - | - |

Note: Age-specific induced abortion rates are per 1,000 women. Estimates in brackets are truncated.
TAR: Total abortion rate expressed per woman
GAR: General abortion rate (induced abortions divided by number of women 15-44) expressed per 1,000 women

5.7 Service Providers and Medical Procedures

All women who had an abortion in the three years prior to the survey were asked where the abortion was performed, who assisted or provided the service, and what method was used. Table 5.8 indicates that virtually all reported abortions are performed in government-operated facilities. The great majority, 87 percent, are performed in a hospital and another 8 percent in a polyclinic. Almost all abortions, 98 percent, are performed under the supervision of a doctor.

Table 5.8 also indicates that most abortions are performed following the dilation and curettage procedure (81 percent) and that vacuum aspiration is used in a minority of cases (9 percent). In both hospitals and polyclinics, approximately 80 percent of abortions are performed by dilation and curettage (statistics not shown).

5.8 Complications of Abortion and Medical Treatment

Respondents who had an abortion in the three years preceding the survey were also asked if they experienced any health problems following the abortion, the type of problem they experienced and if they were hospitalized. Nine percent of respondents report having had health problems. The most common problems are infection, lack of menstruation and excessive bleeding (Table 5.9).

Two percent of women report that they had been hospitalized as a result of health problems following the abortion. The mean length of hospital stay for these women is 12 days. This rate of hospitalization is about what would be expected given that almost all abortions were performed in a hospital under the supervision of a doctor. Although the average length of hospital stay is lengthy, the severity of health problems can not be inferred from this information alone because hospitalization is a common treatment for health problems in Uzbekistan, as it is in most of the republics of the former Soviet Union.

Table 5.6 Comparison of abortion rates

General abortion rates by time period, Ministry of Health and UDHS, 1986-95

| Source | Time period | | Percent decline |
|--------------------|-------------|---------|-----------------|
| | 1986-90 | 1993-95 | |
| Uzbekistan DHS | 29 | 20 | 31 |
| Ministry of Health | 42 | 24 | 43 |

Note: Rates for the UDHS are displaced six months from the dates shown. The UDHS rate for 1993-95 is calculated for the three years preceding the survey, from mid-1993 to mid-1996 (see Table 5.3). Similarly, the rate for 1986-90 is for mid-1986 to mid-1991 (see Table 5.5).

General abortion rate: induced abortions divided by number of women 15-44, expressed per 1,000 women

Sources of MOH rates:

1986-90: Church and Koutanev (1995)

1993-94: Ministry of Health (1995)

1995: Research Institute of Obstetrics and Gynecology (1996)

Table 5.7 Use of contraception prior to pregnancy

Percentage of pregnancies ending during the three years preceding the survey by outcome and use of contraception at the time of conception, Uzbekistan 1996

| Use of contraception | Live births | Induced abortions | All pregnancies ¹ |
|-------------------------------|-------------|-------------------|------------------------------|
| No contraception | 99.3 | 88.3 | 97.5 |
| Any method | 0.7 | 11.7 | 2.5 |
| Any modern method | 0.6 | 9.3 | 1.9 |
| Pill | 0.0 | 0.8 | 0.1 |
| IUD | 0.6 | 7.1 | 1.6 |
| Condom | 0.1 | 1.2 | 0.2 |
| Injectables | 0.0 | 0.2 | 0.0 |
| Any traditional method | 0.1 | 2.5 | 0.5 |
| Periodic abstinence | 0.0 | 0.6 | 0.2 |
| Withdrawal | 0.0 | 1.4 | 0.2 |
| Douche | 0.1 | 0.4 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of pregnancies | 1,392 | 239 | 1,740 |

¹ Includes stillbirths and miscarriages

Table 5.8 Source of services, type of provider, and procedure used for abortion

Percent distribution of induced abortions in the three years preceding the survey by source of services, type of provider, and procedure, Uzbekistan 1996

| Characteristic | Percent |
|-----------------------------|---------|
| Source of services | |
| Public sector | 98.8 |
| Hospital | 86.5 |
| Polyclinic | 8.1 |
| Public, fee for service | 0.6 |
| Other | 3.6 |
| Not stated | 1.2 |
| Type of provider | |
| Doctor | 97.5 |
| Nurse, midwife | 1.3 |
| Not stated | 1.2 |
| Procedure | |
| Dilation and curettage | 80.9 |
| Vacuum aspiration | 8.5 |
| Not stated | 10.6 |
| Total | 100.0 |
| Number of induced abortions | 239 |

Table 5.9 Health problems following abortion

Percentage of induced abortions during the three years preceding the survey which resulted in specific health problems and the percentage requiring hospitalization, Uzbekistan 1996

| Type of health problem | Percent |
|--|---------|
| Specific health problems | |
| Infection | 1.0 |
| Lack of menstruation | 5.8 |
| Excessive bleeding | 4.6 |
| Complications requiring hospitalization | 2.3 |
| Number of induced abortions | 239 |

CHAPTER 6

OTHER PROXIMATE DETERMINANTS OF FERTILITY

Akhror B. Yarkulov, Kia I. Weinstein, Rano M. Usmanova, and Gulistan Bekbaulieva

This chapter addresses the principal factors, other than contraception and abortion, that affect a woman's risk of becoming pregnant. These include nuptiality, sexual activity, postpartum amenorrhea and abstinence from sexual relations. Marriage is an overall indicator of exposure to the risk of pregnancy. More direct measures of exposure relate directly to sexual activity: age at first sexual intercourse and the frequency of intercourse. Postpartum amenorrhea and abstinence affect the interval between births. These factors determine the length and pace of reproductive activity and are, therefore, important in understanding fertility.

6.1 Marital Status

Table 6.1 and Figure 6.1 show the distribution of all women by marital status at the time of the survey. The term "married" refers to legal or formal marriage (civil or religious), while "living together" refers to informal unions. In subsequent tables, these two categories are combined and referred to collectively as "currently married" or "currently in union." Women who are widowed, divorced, and not living together (separated) make up the remainder of the "ever-married" or "ever in union" category.

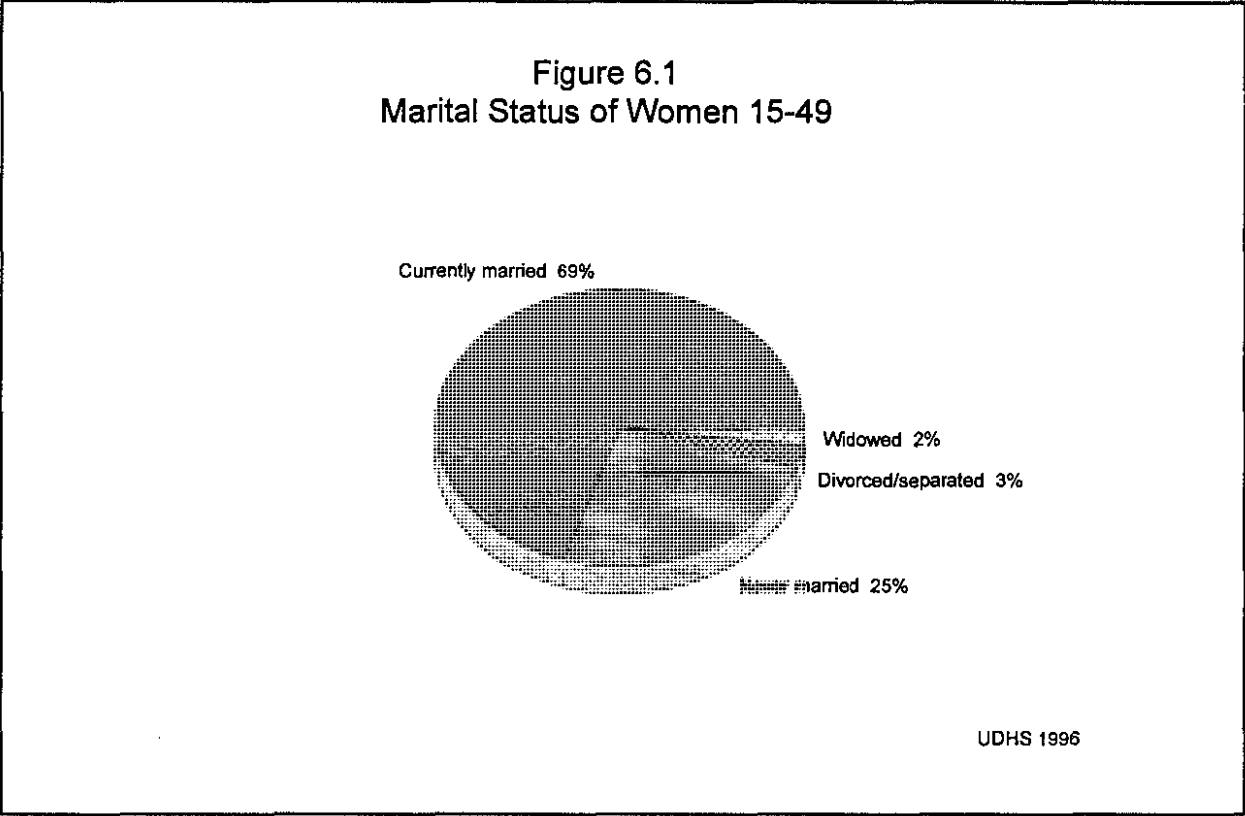
| <u>Table 6.1. Current marital status</u> | | | | | | | | |
|--|----------------|---------|-----------------|---------|----------|---------------------|-------|--------|
| Percent distribution of women by current marital status, according to age, Uzbekistan 1996 | | | | | | | | |
| Age | Marital status | | | | | | Total | Number |
| | Never married | Married | Living together | Widowed | Divorced | Not living together | | |
| 15-19 | 87.0 | 12.7 | 0.1 | 0.0 | 0.2 | 0.0 | 100.0 | 981 |
| 20-24 | 22.8 | 73.4 | 0.9 | 0.2 | 2.5 | 0.2 | 100.0 | 806 |
| 25-29 | 5.2 | 89.4 | 0.7 | 0.3 | 3.8 | 0.7 | 100.0 | 710 |
| 30-34 | 1.9 | 89.2 | 2.4 | 2.6 | 3.9 | 0.1 | 100.0 | 624 |
| 35-39 | 1.2 | 91.0 | 1.6 | 2.8 | 3.2 | 0.1 | 100.0 | 561 |
| 40-44 | 0.4 | 89.7 | 0.9 | 4.7 | 3.6 | 0.6 | 100.0 | 422 |
| 45-49 | 1.4 | 83.6 | 1.4 | 7.8 | 4.9 | 1.0 | 100.0 | 310 |
| Total | 24.9 | 69.2 | 1.0 | 1.8 | 2.7 | 0.3 | 100.0 | 4,415 |

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

Marriage is nearly universal in Uzbekistan. While the vast majority (87 percent) of women age 15-19 have not yet married, three-quarters of women age 20-24 years are married, and nine out of ten women age 25-44 are married. By age 45-49 the percentage of women married begins to decline, as the number of widows begins to increase. Only 3 percent of women are divorced or separated. Overall, 70 percent of women of reproductive age are currently married.

In many societies, marriage is not a sufficiently exact measure of exposure to the risk of pregnancy; therefore, the UDHS asked women who are not currently in a union whether they have a regular sexual partner, an occasional sexual partner, or no sexual partner at all. Table 6.2 shows the distribution of women who are not currently in a union (whether never married or previously married) by current sexual relationship. The data

reveal that sex outside of marriage is highly unusual in Uzbekistan; barely 1 percent of the unmarried population report having a sexual relationship. Women in their thirties and those living in Tashkent City are somewhat more apt to report having a sexual relationship, but women who report such a relationship never exceed 5 percent, by any background characteristic.



6.2 Age at First Marriage

Marriage generally marks the point in a woman's life when childbearing becomes welcome; it is therefore an important demographic and social indicator. Information on age at first marriage was obtained by asking all ever-married respondents the month and year they started living with their first spouse. As shown in Table 6.3, the median age at first marriage has been hovering around age 20 for several decades. Half the women in Uzbekistan marry before the age of 20.

While the median is a convenient summary measure, not all changes in age at marriage are necessarily reflected in the median. Cohort trends in age at marriage can be more thoroughly examined by comparing the cumulative distributions for successive age groups, as shown in Table 6.3.¹ The distributions in fact reveal very little change in age at marriage in Uzbekistan over the past several decades. The graphing of the distributions in Figure 6.2 summarizes the marriage patterns, which have remained fairly constant over time. The age range of marriage is relatively narrow—60 percent of women marry between the ages of 18 and 22 years.

¹ For each cohort, the accumulated percentages stop at the lower age boundary of the cohort to avoid censoring problems. For instance, for the cohort currently age 20-24, accumulation stops with the percentage married by exact age 20.

time. The age range of marriage is relatively narrow—60 percent of women marry between the ages of 18 and 22 years.

Table 6.2 Sexual relationships of nonmarried women

Percent distribution of women currently not in a union by type of current sexual relationship, by selected background characteristics, Uzbekistan 1996

| Background characteristic | Never married | | Widowed, divorced, not living together ¹ | | Total | Number of women |
|---------------------------|---------------------------|-------------------|---|-------------------|-------|-----------------|
| | Occasional sexual partner | No sexual partner | Occasional sexual partner | No sexual partner | | |
| Age | | | | | | |
| 15-19 | 0.0 | 99.8 | 0.0 | 0.2 | 100.0 | 856 |
| 20-24 | 0.2 | 88.7 | 0.2 | 10.6 | 100.0 | 207 |
| 25-29 | 0.0 | 52.6 | 2.6 | 44.1 | 100.0 | 70 |
| 30-34 | 0.0 | 22.0 | 4.4 | 73.6 | 100.0 | 53 |
| 35-39 | 0.0 | 16.7 | 4.6 | 76.4 | 100.0 | 41 |
| 40-44 | (0.0) | (4.7) | (3.7) | (90.3) | 100.0 | 39 |
| 45-49 | 0.0 | 9.0 | 0.0 | 91.0 | 100.0 | 47 |
| Residence | | | | | | |
| Urban | 0.1 | 76.7 | 1.2 | 21.5 | 100.0 | 525 |
| Rural | 0.0 | 88.3 | 0.2 | 11.4 | 100.0 | 788 |
| Region | | | | | | |
| Region 1 | 0.0 | 84.0 | 0.6 | 15.4 | 100.0 | 152 |
| Region 2 | 0.0 | 88.0 | 0.0 | 12.0 | 100.0 | 356 |
| Region 3 | 0.0 | 83.0 | 0.9 | 16.1 | 100.0 | 365 |
| Region 4 | 0.0 | 85.4 | 0.0 | 14.6 | 100.0 | 314 |
| Tashkent City | 0.4 | 69.0 | 3.1 | 25.6 | 100.0 | 126 |
| Education | | | | | | |
| Primary/Secondary | 0.0 | 89.3 | 0.0 | 10.7 | 100.0 | 911 |
| Secondary-special | 0.0 | 74.9 | 2.1 | 22.7 | 100.0 | 297 |
| Higher | 0.5 | 60.3 | 1.7 | 36.1 | 100.0 | 105 |
| Ethnicity | | | | | | |
| Uzbek | 0.0 | 86.7 | 0.3 | 13.0 | 100.0 | 1,055 |
| Other | 0.2 | 71.5 | 1.7 | 25.7 | 100.0 | 258 |
| Total | 0.0 | 83.7 | 0.6 | 15.5 | 100.0 | 1,313 |

Note: Figures in parentheses are based on 25-49 unweighted women. Total includes five ever-married women who are not currently in union but have regular sexual partners.

¹ Widowed, divorced, not living together includes five women who reported having regular sexual partners.

Table 6.3 Age at first marriage

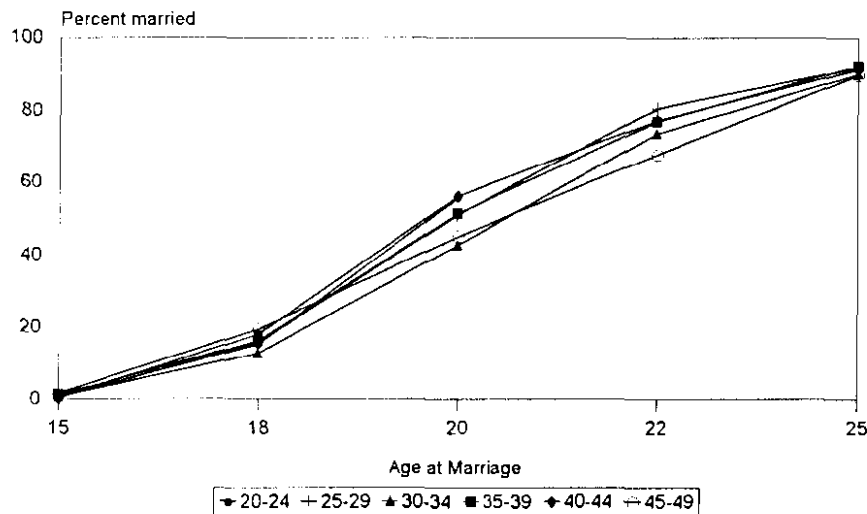
Percentage of women who were first married by specific exact age and median age at first marriage, according to current age, Uzbekistan 1996

| Current age | Percentage who were first married by exact age: | | | | | Percentage who had never married | Number of women | Median age at first marriage |
|-------------|---|------|------|------|------|----------------------------------|-----------------|------------------------------|
| | 15 | 18 | 20 | 22 | 25 | | | |
| 15-19 | 0.5 | NA | NA | NA | NA | 87.0 | 981 | a |
| 20-24 | 0.4 | 15.3 | 55.7 | NA | NA | 22.8 | 806 | 19.8 |
| 25-29 | 1.3 | 15.8 | 51.0 | 80.5 | 91.8 | 5.2 | 710 | 19.9 |
| 30-34 | 0.5 | 12.7 | 42.7 | 73.5 | 90.1 | 1.9 | 624 | 20.4 |
| 35-39 | 1.2 | 16.3 | 51.4 | 76.9 | 92.4 | 1.2 | 561 | 19.9 |
| 40-44 | 0.2 | 18.0 | 56.2 | 77.2 | 91.3 | 0.4 | 422 | 19.7 |
| 45-49 | 1.7 | 19.5 | 45.1 | 67.6 | 89.7 | 1.4 | 310 | 20.4 |
| 25-49 | 1.0 | 15.9 | 49.3 | 76.0 | 91.2 | 2.3 | 2,628 | 20.1 |

NA = Not applicable

^a Omitted because less than 50 percent of the women in the age group 15 to 19 were first married by age 15.

Figure 6.2
Percentage of women Married by specific exact ages



UDHS 1996

Table 6.4 presents the median ages at marriage for women age 25-49 by selected background characteristics. The most pronounced differential is one that is observed in many societies—age at marriage increases with increasing education. A differential of two or three years in the median from the least to the most educated occurs within every age group; women with higher education have a median age at marriage (21.9) which is 2.5 years later than women with a primary or secondary education (19.4).

Table 6.4 Median age at first marriage

Median age at first marriage among women age 20-49 years, by current age and selected background characteristics, Uzbekistan 1996

| Background characteristic | Current age | | | | | | Women age 25-49 |
|---------------------------|-------------|-------|-------|-------|-------|-------|-----------------|
| | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Residence | | | | | | | |
| Urban | - | 20.3 | 20.8 | 21.1 | 20.5 | 21.3 | 20.8 |
| Rural | 19.6 | 19.8 | 20.2 | 19.5 | 19.2 | 19.3 | 19.6 |
| Region | | | | | | | |
| Region 1 | - | 20.6 | 20.5 | 20.3 | 20.0 | 19.2 | 20.3 |
| Region 2 | - | 20.2 | 20.7 | 20.3 | 19.5 | 20.1 | 20.2 |
| Region 3 | 19.9 | 20.1 | 20.3 | 19.9 | 20.0 | 21.4 | 20.2 |
| Region 4 | 19.1 | 19.5 | 20.0 | 19.2 | 19.1 | 19.0 | 19.4 |
| Tashkent City | 19.8 | 20.2 | 21.5 | 21.2 | 21.6 | 21.0 | 21.1 |
| Education | | | | | | | |
| Primary/Secondary | 19.3 | 19.5 | 19.8 | 19.3 | 19.0 | 18.9 | 19.4 |
| Secondary-special | - | 20.5 | 20.7 | 20.9 | 20.9 | 21.5 | 20.8 |
| Higher | - | 21.2 | 22.3 | 22.0 | 21.8 | 22.8 | 21.9 |
| Ethnicity | | | | | | | |
| Uzbek | 19.7 | 19.8 | 20.2 | 19.8 | 19.4 | 20.0 | 19.9 |
| Other | - | 20.9 | 21.4 | 21.0 | 21.2 | 21.5 | 21.2 |
| Total | 19.8 | 19.9 | 20.4 | 19.9 | 19.7 | 20.4 | 20.1 |

Note: In all population subgroups and for the total population, the median age at marriage for women age 15-19 could not be determined because less than 50 percent of those women were first married by age 15, the lower boundary of the age group. In some population subgroups, the median age at marriage for women age 20-24 could not be determined for similar reasons.

The other noticeable differential is that ethnic Uzbeks have a median age at marriage (19.9) that is one year earlier than women of other ethnic groups (21.2). Both the educational and ethnic differentials have been holding steady for over 20 years. Overall, while some differentials exist in age at marriage within the population, these data indicate that there has been no major change in age at marriage in Uzbekistan over the past 20 years.

6.3 Age at First Sexual Intercourse

Before using marriage as a proxy for exposure to intercourse, it is best to verify that the two events coincide, i.e., to verify whether or not some women engage in sexual relations prior to marriage. If women do engage in sexual relations prior to marriage, then the proportion of married women would underestimate the percent of women who are sexually active. The UDHS asked women to state the age at which they first had sexual intercourse. The results, presented in Tables 6.5 and 6.6 mirror almost exactly the figures relating to age at marriage, indicating that in Uzbekistan, first exposure to sexual intercourse coincides with marriage.

Table 6.5 Age at first sexual intercourse

Percentage of women who had first sexual intercourse by exact age 15, 18, 20, 22, and 25, and median age at first intercourse, according to current age, Uzbekistan 1996

| Current age | Percentage who had first intercourse by exact age: | | | | | Percentage who never had intercourse | Number of women | Median age at first intercourse |
|-------------|--|------|------|------|------|--------------------------------------|-----------------|---------------------------------|
| | 15 | 18 | 20 | 22 | 25 | | | |
| 15-19 | 0.5 | NA | NA | NA | NA | 87.0 | 981 | a |
| 20-24 | 0.4 | 15.8 | 55.8 | NA | NA | 22.7 | 806 | 19.7 |
| 25-29 | 1.1 | 15.1 | 49.6 | 78.2 | 88.8 | 5.2 | 710 | 20.0 |
| 30-34 | 0.5 | 12.7 | 41.8 | 71.4 | 87.1 | 1.9 | 624 | 20.5 |
| 35-39 | 1.2 | 16.8 | 51.1 | 75.4 | 89.5 | 1.2 | 561 | 19.9 |
| 40-44 | 0.2 | 17.4 | 55.5 | 75.0 | 88.6 | 0.4 | 422 | 19.7 |
| 45-49 | 1.7 | 19.6 | 43.1 | 64.5 | 86.5 | 1.4 | 310 | 20.6 |
| 25-49 | 0.9 | 15.8 | 48.3 | 73.9 | 88.2 | 2.3 | 2,628 | 20.1 |

NA = Not applicable

^a Omitted because less than 50 percent in the age group 15-19 had had intercourse by age 15

Table 6.6 Median age at first intercourse

Median age at first sexual intercourse among women age 20-49 years, by current age and selected background characteristics, Uzbekistan 1996

| Background characteristic | Current age | | | | | | Women age 25-49 |
|---------------------------|-------------|-------|-------|-------|-------|-------|-----------------|
| | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Residence | | | | | | | |
| Urban | 20.0 | 20.4 | 20.8 | 21.2 | 20.5 | 21.4 | 20.8 |
| Rural | 19.6 | 19.9 | 20.2 | 19.4 | 19.3 | 19.7 | 19.7 |
| Region | | | | | | | |
| Region 1 | - | 20.6 | 20.5 | 20.3 | 20.2 | 19.3 | 20.3 |
| Region 2 | - | 20.3 | 20.8 | 20.4 | 19.6 | 20.4 | 20.3 |
| Region 3 | 19.8 | 20.1 | 20.4 | 19.9 | 19.9 | 21.4 | 20.3 |
| Region 4 | 19.1 | 19.6 | 20.0 | 19.2 | 19.1 | 19.2 | 19.5 |
| Tashkent City | 19.8 | 20.2 | 21.5 | 21.0 | 22.0 | 20.9 | 21.0 |
| Education | | | | | | | |
| Primary/Secondary | 19.3 | 19.5 | 19.9 | 19.3 | 19.1 | 19.1 | 19.4 |
| Secondary-special | - | 20.6 | 20.7 | 20.9 | 21.1 | 21.5 | 20.8 |
| Higher | - | 21.3 | 22.3 | 22.1 | 21.7 | 23.0 | 22.0 |
| Ethnicity | | | | | | | |
| Uzbek | 19.7 | 19.9 | 20.3 | 19.8 | 19.5 | 20.2 | 19.9 |
| Other | - | 21.0 | 21.4 | 20.9 | 21.3 | 21.5 | 21.2 |
| Total | 19.7 | 20.0 | 20.5 | 19.9 | 19.7 | 20.6 | 20.1 |

Note: The median for women age 15-19 and some groups of women age 20-24 could not be determined because less than 50 percent of the women had had intercourse for the first time by age 15 and 20, respectively.

6.4 Recent Sexual Activity

In the absence of contraceptive use, frequency of sexual intercourse is a direct determinant of pregnancy; therefore, knowledge of frequency is a useful indicator of exposure to pregnancy. Table 6.7 shows the percent distribution of women by sexual activity in the four weeks prior to the survey and the duration of abstinence by whether or not the women have recently had a birth (i.e., whether they are postpartum). Women are considered to be sexually active if they have had sexual intercourse at least once in the four weeks prior to the survey.

Overall, 65 percent of all women interviewed were sexually active in the four weeks preceding the survey. Less than 2 percent of women are postpartum abstaining, 9 percent of women are not sexually active for reasons unrelated to childbirth, and 25 percent of women have never had sexual intercourse. Most of the women who are not sexually active are women in their teens (and some women in their early twenties) who have never had intercourse. Approximately 85 percent of women age 25-44 reported being sexually active.

Not surprisingly, women who are using a method of family planning are more likely to be sexually active than women who are not using a method (most of the difference is due to the fact that many of the women not using a method have not yet had intercourse).

6.5 Postpartum Amenorrhea, Abstinence and Insusceptibility

Postpartum amenorrhea refers to the interval between childbirth and the return of menstruation. During this period, the risk of pregnancy is reduced. The duration of reduced risk of conception largely depends on two factors: the length and intensity of breastfeeding, which tends to suppress the resumption of ovulation, and the length of time before the resumption of sexual intercourse. Women who are either amenorrheic or abstaining (or both), are considered insusceptible to the risk of pregnancy.

The percentage of births during the last three years whose mothers are presently postpartum amenorrheic, abstaining or insusceptible is shown in Table 6.8 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 6.8 and 6.9 are calculated from the current status proportions at each time period. The prevalence/incidence mean is defined as the number of children whose mothers are amenorrheic (prevalence) divided by the average number of births per month (incidence). The data are grouped in two-month intervals to minimize fluctuations in the estimates.

While both postpartum amenorrhea and postpartum abstinence are fairly short in duration, the former is longer than the latter and is, therefore, the principal determinant of the length of postpartum insusceptibility. Nearly all women (98 percent) are insusceptible to pregnancy in the first two months following a birth, but become susceptible to the risk of pregnancy quite steadily thereafter. Most women do not abstain for more than two or three months following a birth. The median duration of abstinence is 1.8 months. Fifty percent of women are again susceptible to the risk of pregnancy by 5.4 months, and those who are still insusceptible at six months steadily become susceptible with every passing month. Only about one-quarter of women remain insusceptible to the risk of pregnancy for more than 10 months following a birth.

Table 6.9 presents the median durations of postpartum amenorrhea, abstinence, and insusceptibility by background characteristics. Postpartum abstinence is generally very short in duration, and does not vary much by background characteristics, nor does it greatly affect the duration of insusceptibility. Median durations of amenorrhea do vary according to age, residence, and region. Older women (age 30 and above)

Table 6.7 Recent sexual activity

Percent distribution of women by sexual activity in the four weeks preceding the survey, and among those not sexually active, the length of time they have been abstaining and whether postpartum or not postpartum, according to selected background characteristics and contraceptive method currently used, Uzbekistan 1996

| Background characteristic/ contraceptive method | Sexually active in last 4 weeks | Not sexually active in last 4 weeks | | | | Never had sex | Missing | Total | Number of women |
|--|---------------------------------|-------------------------------------|------------|-----------------------------|------------|---------------|------------|--------------|-----------------|
| | | Abstaining (postpartum) | | Abstaining (not postpartum) | | | | | |
| | | 0-1 years | 2+ years | 0-1 years | 2+ years | | | | |
| Age | | | | | | | | | |
| 15-19 | 11.6 | 0.4 | 0.0 | 1.0 | 0.0 | 87.0 | 0.0 | 100.0 | 981 |
| 20-24 | 67.0 | 2.7 | 0.2 | 5.6 | 1.3 | 22.7 | 0.4 | 100.0 | 806 |
| 25-29 | 82.3 | 2.0 | 0.2 | 6.9 | 2.9 | 5.2 | 0.4 | 100.0 | 710 |
| 30-34 | 86.0 | 2.1 | 0.1 | 5.2 | 4.4 | 1.9 | 0.4 | 100.0 | 624 |
| 35-39 | 87.9 | 1.0 | 0.0 | 4.2 | 5.3 | 1.2 | 0.4 | 100.0 | 561 |
| 40-44 | 84.4 | 0.5 | 0.1 | 7.1 | 7.0 | 0.4 | 0.3 | 100.0 | 422 |
| 45-49 | 74.8 | 0.5 | 0.0 | 11.1 | 12.1 | 1.4 | 0.2 | 100.0 | 310 |
| Duration of union (years) | | | | | | | | | |
| Never married | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 1,099 |
| 0-4 | 85.8 | 3.6 | 0.2 | 8.0 | 1.9 | 0.0 | 0.5 | 100.0 | 784 |
| 5-9 | 85.9 | 1.7 | 0.3 | 7.8 | 4.1 | 0.0 | 0.2 | 100.0 | 703 |
| 10-14 | 91.0 | 2.2 | 0.1 | 3.0 | 3.2 | 0.0 | 0.5 | 100.0 | 616 |
| 15-19 | 87.4 | 1.2 | 0.0 | 5.3 | 5.6 | 0.0 | 0.5 | 100.0 | 507 |
| 20-24 | 86.7 | 0.4 | 0.0 | 6.0 | 6.8 | 0.0 | 0.1 | 100.0 | 415 |
| 25-29 | 73.1 | 0.7 | 0.0 | 13.0 | 12.7 | 0.0 | 0.4 | 100.0 | 240 |
| 30+ | 82.2 | 0.0 | 0.0 | 9.5 | 8.3 | 0.0 | 0.0 | 100.0 | 51 |
| Residence | | | | | | | | | |
| Urban | 64.1 | 1.0 | 0.1 | 5.5 | 5.2 | 23.8 | 0.4 | 100.0 | 1,693 |
| Rural | 65.1 | 1.7 | 0.1 | 4.8 | 2.5 | 25.6 | 0.2 | 100.0 | 2,722 |
| Region | | | | | | | | | |
| Region 1 | 64.4 | 1.2 | 0.1 | 3.6 | 3.3 | 27.1 | 0.2 | 100.0 | 471 |
| Region 2 | 61.4 | 1.7 | 0.0 | 4.1 | 3.1 | 29.5 | 0.3 | 100.0 | 1,060 |
| Region 3 | 64.1 | 1.8 | 0.0 | 5.8 | 3.9 | 24.3 | 0.0 | 100.0 | 1,249 |
| Region 4 | 68.6 | 0.8 | 0.3 | 5.2 | 2.7 | 21.8 | 0.6 | 100.0 | 1,231 |
| Tashkent City | 63.8 | 1.4 | 0.1 | 6.9 | 6.0 | 21.5 | 0.2 | 100.0 | 404 |
| Education | | | | | | | | | |
| Primary/Secondary | 61.8 | 1.5 | 0.1 | 4.8 | 2.6 | 28.9 | 0.4 | 100.0 | 2,817 |
| Secondary-special | 68.8 | 1.2 | 0.0 | 5.7 | 4.6 | 19.7 | 0.0 | 100.0 | 1,127 |
| Higher | 72.5 | 1.3 | 0.4 | 5.4 | 6.4 | 13.4 | 0.5 | 100.0 | 471 |
| Ethnicity | | | | | | | | | |
| Uzbek | 65.4 | 1.5 | 0.1 | 4.8 | 2.9 | 25.1 | 0.3 | 100.0 | 3,647 |
| Other | 61.4 | 1.2 | 0.1 | 6.4 | 6.6 | 24.0 | 0.3 | 100.0 | 768 |
| Contraceptive method | | | | | | | | | |
| No method | 45.1 | 1.9 | 0.2 | 5.9 | 5.4 | 41.2 | 0.5 | 100.0 | 2,668 |
| Pill | 92.0 | 0.0 | 0.0 | 8.0 | 0.0 | 0.0 | 0.0 | 100.0 | 52 |
| IUD | 95.3 | 0.9 | 0.0 | 3.1 | 0.7 | 0.0 | 0.0 | 100.0 | 1,440 |
| Condom | 94.9 | 0.0 | 0.0 | 5.1 | 0.0 | 0.0 | 0.0 | 100.0 | 54 |
| Periodic abstinence | 90.1 | 0.0 | 0.0 | 9.9 | 0.0 | 0.0 | 0.0 | 100.0 | 35 |
| Other | 91.3 | 0.0 | 0.0 | 7.4 | 1.3 | 0.0 | 0.0 | 100.0 | 167 |
| Total | 64.7 | 1.4 | 0.1 | 5.1 | 3.5 | 24.9 | 0.3 | 100.0 | 4,415 |

remain amenorrheic for two months longer, on average, than do younger women. Rural women remain amenorrheic for about 1.5 months longer than do urban women, and women in Regions 2 and 4 have median durations that are about two months longer than among women in other regions. The practice of breastfeeding is virtually universal in Uzbekistan, although mothers begin supplementing with other foods or liquids very early. The data on breastfeeding show a slight rural/urban difference in intensity of feeding babies under six months of age, and that women in Regions 2 and 4 tend to breastfeed babies longer and more intensively (see Chapter 10 for a discussion of breastfeeding practices).

6.6 Termination of Exposure to Pregnancy

Above age 30, the risk of pregnancy declines with age as increasing proportions of women become infecund. Although the onset of infecundity is difficult to determine for an individual woman, it can be estimated for a population. Table 6.10 presents data on two indicators of decreasing exposure to the risk of pregnancy for women age 30 years and older: menopause and long-term abstinence.

Table 6.8 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, Uzbekistan 1996

| Months since birth | Amenor-rheic | Abstaining | Insus-ceptible | Number of births |
|--|--------------|------------|----------------|------------------|
| < 2 | (92.3) | (79.5) | (97.5) | 41 |
| 2-3 | 58.1 | 24.1 | 61.3 | 58 |
| 4-5 | 62.1 | 3.5 | 62.1 | 67 |
| 6-7 | 43.4 | 2.5 | 43.4 | 74 |
| 8-9 | 30.2 | 1.1 | 30.2 | 92 |
| 10-11 | 24.8 | 6.3 | 27.5 | 99 |
| 12-13 | 13.2 | 2.8 | 15.4 | 83 |
| 14-15 | 15.0 | 2.1 | 17.2 | 86 |
| 16-17 | 20.9 | 6.2 | 24.9 | 84 |
| 18-19 | 12.4 | 3.9 | 14.6 | 82 |
| 20-21 | 7.3 | 0.0 | 7.3 | 75 |
| 22-23 | 4.7 | 5.1 | 7.7 | 77 |
| 24-25 | 1.0 | 1.9 | 2.9 | 82 |
| 26-27 | 2.8 | 0.5 | 3.3 | 94 |
| 28-29 | 0.0 | 0.0 | 0.0 | 72 |
| 30-31 | 0.0 | 0.6 | 0.6 | 70 |
| 32-33 | 2.6 | 2.6 | 5.1 | 80 |
| 34-35 | 2.4 | 0.0 | 2.4 | 64 |
| Total | 19.2 | 5.7 | 20.8 | 1,379 |
| Median | 5.3 | 1.8 | 5.4 | - |
| Mean | 8.2 | 3.2 | 8.7 | - |
| Prevalence/ Incidence mean ¹ | 6.8 | 2.0 | 7.4 | - |

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).

The percentage of women who are in menopause refers to the proportion of currently married women who are neither pregnant nor postpartum amenorrheic and have not had a menstrual period in the six months preceding the survey, or who report themselves as being menopausal. Few women are menopausal before reaching their forties, after which time the proportion of menopausal women increases with age, from 8 percent among women age 44-45 to 40 percent among women age 48-49.

The percentage of women practicing long-term abstinence refers to the proportion of currently married women who have not had sexual intercourse in the three years preceding the survey. It can be seen that long-term abstinence is not a factor in reducing the fertility of older women.

A potentially more significant factor in reducing risk of exposure to pregnancy than terminal abstinence may be terminal divorce, widowhood and separation among women in Uzbekistan. As was shown in Table 6.1, 9 percent of women age 40-44 and 14 percent of women age 45-49 are currently widowed, divorced, or separated. If these women do not remarry and are not sexually active, they represent a contributing factor to loss of exposure to pregnancy.

Table 6.9 Median duration of postpartum amenorrhea, abstinence, and insusceptibility by background characteristics

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility, by selected background characteristics, Uzbekistan 1996

| Background characteristic | Postpartum amenorrhea | Postpartum abstinence | Postpartum insusceptibility | Number of births |
|---------------------------|-----------------------|-----------------------|-----------------------------|------------------|
| Age | | | | |
| <30 | 5.1 | 1.7 | 5.1 | 1,019 |
| 30+ | 7.1 | 2.0 | 7.3 | 361 |
| Residence | | | | |
| Urban | 4.3 | 1.3 | 4.3 | 428 |
| Rural | 6.0 | 2.0 | 6.0 | 951 |
| Region | | | | |
| Region 1 | 5.0 | 1.6 | 5.0 | 156 |
| Region 2 | 6.1 | 2.2 | 6.1 | 331 |
| Region 3 | 3.5 | 2.0 | 4.6 | 384 |
| Region 4 | 6.5 | 1.0 | 6.5 | 425 |
| Tashkent City | 3.3 | 1.8 | 3.3 | 84 |
| Education | | | | |
| Primary/Secondary | 4.8 | 1.9 | 5.1 | 879 |
| Secondary-special | 5.9 | 1.7 | 5.9 | 367 |
| Higher | 5.1 | 1.2 | 5.1 | 133 |
| Ethnicity | | | | |
| Uzbek | 5.3 | 1.8 | 5.4 | 1,221 |
| Other | 5.3 | 1.4 | 5.3 | 159 |
| Total | 5.3 | 1.8 | 5.4 | 1,379 |

Note: Medians are based on current status.

Table 6.10 Termination of exposure to the risk of pregnancy

Indicators of menopause and long-term abstinence among currently married women age 30-49, by age, Uzbekistan 1996

| Age | Menopause ¹ | | Long-term abstinence ² | |
|-------|------------------------|--------|-----------------------------------|--------|
| | Percent | Number | Percent | Number |
| 30-34 | 1.1 | 487 | 0.0 | 572 |
| 35-39 | 1.5 | 495 | 0.5 | 520 |
| 40-41 | 3.8 | 170 | 0.6 | 172 |
| 42-43 | 4.3 | 158 | 0.0 | 158 |
| 44-45 | 7.8 | 115 | 0.9 | 115 |
| 46-47 | 31.7 | 110 | 1.2 | 110 |
| 48-49 | 39.9 | 90 | 0.0 | 92 |
| Total | 6.5 | 1,625 | 0.3 | 1,738 |

¹ Percentage of nonpregnant, nonamenorrheic currently married women whose last menstrual period occurred six or more months preceding the survey or who report that they are menopausal.

² Percentage of currently married women who did not have intercourse in the three years preceding the survey.

CHAPTER 7

FERTILITY PREFERENCES

Saidazym N. Sultanov, Kia I. Weinstein, Mila A. Li and Rano M. Usmanova

Women interviewed in the 1996 UDHS were asked several questions in order to determine their fertility preferences: their desire to have a(another) child; the length of time they would prefer to wait before having a(another) child; and, if they were to live their lives again, the number of children they would choose to have. These data make the quantification of fertility preferences possible and, in combination with the data on contraceptive use, allow estimation of the demand for family planning, according to the desire to space or limit births.

7.1 Desire for More Children

Table 7.1 and Figure 7.1 show the percent distribution of currently married women by their fertility preferences. One-half of married women (51 percent) want no more children. An additional one-quarter of women want another child, but want to wait two or more years before having their next birth. Thus, three-quarters of married women in Uzbekistan are potentially in need of contraception, for the purpose of either limiting their family size or spacing births.

Table 7.1 Fertility preferences by number of living children

Percent distribution of currently married women by desire for more children, according to number of living children, Uzbekistan 1996

| Desire for children | Number of living children ¹ | | | | | | | Total |
|---------------------------------|--|-------|-------|-------|-------|-------|-------|-------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6+ | |
| Have another soon ² | 69.6 | 24.9 | 12.4 | 8.0 | 3.5 | 2.1 | 1.7 | 12.9 |
| Have another later ³ | 7.6 | 57.9 | 38.6 | 16.8 | 6.5 | 1.4 | 0.4 | 24.2 |
| Have another, undecided when | 3.6 | 1.3 | 1.1 | 0.6 | 0.4 | 0.7 | 0.7 | 1.0 |
| Undecided | 3.8 | 3.1 | 9.5 | 14.1 | 9.3 | 11.3 | 4.4 | 8.8 |
| Want no more | 2.2 | 9.8 | 36.1 | 59.9 | 78.9 | 82.3 | 92.0 | 50.9 |
| Sterilized | 0.0 | 0.0 | 1.0 | 0.2 | 1.3 | 1.7 | 0.5 | 0.7 |
| Declared infecund | 13.1 | 3.0 | 1.4 | 0.5 | 0.1 | 0.6 | 0.4 | 1.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 142 | 539 | 747 | 607 | 470 | 328 | 270 | 3,102 |

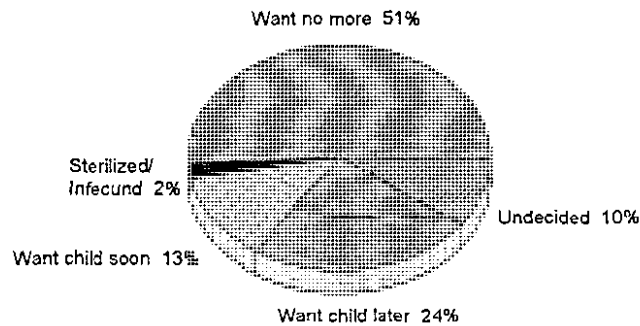
¹ Includes current pregnancy

² Want next birth within 2 years

³ Want to delay next birth for 2 or more years

The fertility preferences of married women are shown according to the number of children they already have in Table 7.1 and Figure 7.2. The proportion of women wanting no more children increases sharply with the number they already have. In Uzbekistan, it is unusual for women with one child to want no more children—10 percent of women with one child report wanting no more. However, among women with three children, a clear majority (60 percent) want no more children.

Figure 7.1
Fertility Preferences among
Currently Married Women 15-49



UDHS 1996

While most women with only one child want another child, the majority (58 percent) want to wait two or more years before having that child, and are thus in need of family planning for spacing purposes. The potential demand for family planning exists at every parity (other than zero, that is, since it is unusual for a married woman to report wanting to delay her first birth).

Table 7.2 shows statistics on the fertility preferences of currently married women by age. The age pattern and pace at which women want no more children is particularly noteworthy. Among women age 15-19 and 20-24, only a small percentage want no more children (2 and 12 percent, respectively). By age 25-29, one-third (32 percent) want no more children and by age 30-34, more than half (57 percent) want no more children. It should be noted that these women have 20 years of potential childbearing ahead of them and, to the extent they remain exposed to the risk of pregnancy, will need contraceptive protection or abortion services if they are to achieve their stated preference for having no more children. Among women age 35 and above, 80 percent or more want no more children.

In Uzbekistan, a majority of women have a preference for having no more children, and many women come to that preference at young ages when they have many fertile years ahead of them. For some of these women, the most appropriate method of contraception may be a long-term method such as female sterilization. However, only 27 percent of married women report knowledge of this method (Table 4.1). In the interest of providing a broad choice of safe and effective means of contraception, information about this method should be made available to women so that they can make informed choices about whether or not the method is appropriate for them. The family planning program should also consider increasing access to this method so that it is available to women who wish to use it.

Table 7.2 Fertility preferences by age

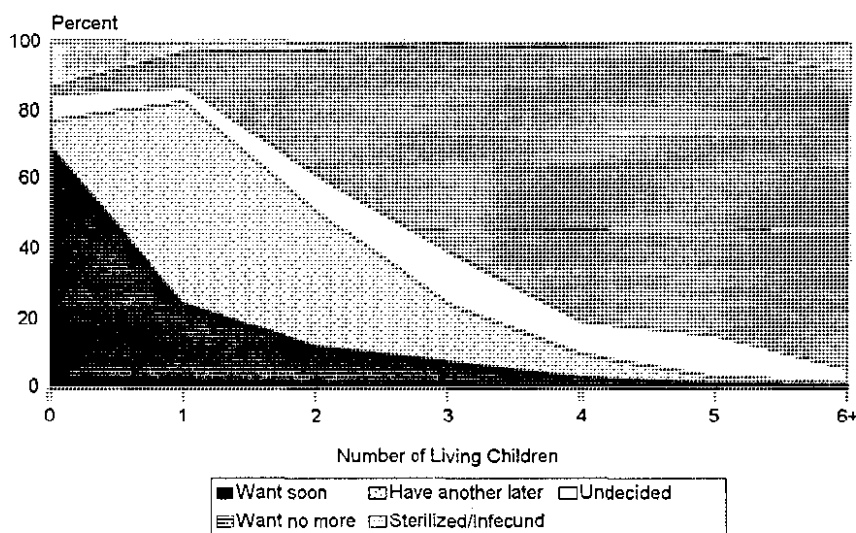
Percent distribution of currently married women by desire for more children, according to age, Uzbekistan 1996

| Desire for children | Age of woman | | | | | | | Total |
|---------------------------------|--------------|-------|-------|-------|-------|-------|-------|-------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Have another soon ¹ | 32.0 | 19.5 | 20.0 | 14.5 | 5.2 | 1.1 | 1.1 | 12.9 |
| Have another later ² | 62.3 | 58.8 | 34.4 | 14.5 | 3.1 | 0.0 | 0.0 | 24.2 |
| Have another, undecided when | 0.8 | 1.6 | 1.6 | 0.7 | 0.5 | 0.0 | 0.7 | 1.0 |
| Undecided | 2.7 | 6.7 | 10.5 | 10.3 | 9.5 | 7.8 | 8.7 | 8.8 |
| Want no more | 2.2 | 11.8 | 31.7 | 58.7 | 79.5 | 87.9 | 82.1 | 50.9 |
| Sterilized | 0.0 | 0.2 | 0.4 | 0.3 | 1.0 | 1.3 | 2.1 | 0.7 |
| Declared infecund | 0.0 | 1.3 | 1.5 | 1.0 | 1.3 | 1.9 | 5.3 | 1.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 125 | 599 | 640 | 572 | 520 | 383 | 264 | 3,102 |

¹ Want next birth within 2 years

² Want to delay next birth for 2 or more years

Figure 7.2
Fertility Preferences among Currently Married Women by Number of Living Children



UDHS 1996

Table 7.3 presents the percentage of currently married women who want no more children by number of living children and selected background characteristics. While the overall proportion of women who want no more children does not vary greatly by background characteristics, there are strong differences in how quickly women with different background characteristics reach the point of wanting no more children. For example, one-half of urban women (52 percent) and one-half of rural women (51 percent) want no more children. However, one-half of urban women want no more children by the time they have two children; the same proportion is not reached among rural women until they have three children.

Table 7.3 Desire to limit childbearing

Percentage of currently married women who want no more children, by number of living children and selected background characteristics, Uzbekistan 1996

| Background characteristic | Number of living children ¹ | | | | | | | Total |
|---------------------------|--|------|------|------|--------|------|--------|-------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6+ | |
| Residence | | | | | | | | |
| Urban | 4.8 | 13.4 | 49.0 | 70.8 | 83.1 | 79.0 | 90.5 | 52.1 |
| Rural | 0.0 | 7.0 | 26.8 | 53.0 | 78.7 | 85.4 | 92.9 | 51.2 |
| Region | | | | | | | | |
| Region 1 | (0.0) | 6.2 | 31.1 | 60.4 | 89.2 | 94.6 | 93.4 | 54.7 |
| Region 2 | (2.1) | 7.4 | 37.0 | 63.0 | 82.9 | 93.2 | 97.7 | 55.8 |
| Region 3 | * | 8.6 | 34.9 | 62.4 | 84.7 | 90.3 | (96.2) | 53.9 |
| Region 4 | * | 6.7 | 32.9 | 51.5 | 69.2 | 67.2 | (76.3) | 43.7 |
| Tashkent City | (4.3) | 28.2 | 57.0 | 74.4 | (89.6) | * | * | 55.3 |
| Education | | | | | | | | |
| Primary/Secondary | 0.0 | 6.7 | 32.3 | 58.7 | 79.3 | 83.0 | 91.8 | 52.3 |
| Secondary-special | (7.3) | 11.9 | 40.6 | 56.4 | 80.1 | 90.1 | (97.1) | 49.3 |
| Higher | (5.3) | 17.5 | 46.5 | 73.6 | 86.6 | * | * | 52.5 |
| Ethnicity | | | | | | | | |
| Uzbek | 1.2 | 5.1 | 30.9 | 58.4 | 79.5 | 83.1 | 92.4 | 50.1 |
| Other | 5.0 | 27.2 | 63.1 | 70.2 | 85.3 | 90.2 | * | 58.7 |
| Total | 2.2 | 9.8 | 37.1 | 60.0 | 80.2 | 84.0 | 92.5 | 51.5 |

Note: Women who have been sterilized are considered to want no more children. An asterisk indicates that a figure is based on fewer than 25 unweighted women and has been suppressed. Figures in parentheses are based on 25-49 unweighted women.

¹ Includes current pregnancy

The most notable regional variation in fertility preferences is in Tashkent City, where more than one-half of women (57 percent) with two children want no more. Women in Region 4 are the least likely to want no more children; only two out of three women with five children in Region 4 report wanting no more, compared to nine out of 10 women with five children in the other regions.

While overall the proportions of women who want no more children are generally the same across educational levels, there is a general pattern of increasing proportions wanting no more children with increasing education at nearly every parity; i.e., women with more education have a lower threshold for wanting no more children. Similarly, non-Uzbek women are more likely than Uzbek women to want no more children at every parity.

7.2 Need for Family Planning Services

Women who are potentially in need of family planning are those who either want to wait two or more years before their next birth (need for spacing), or want to stop childbearing altogether (need for limiting). Women who want to space or limit their childbearing, but are not using contraception, are considered to have an *unmet need* for family planning. Women who are using family planning methods are said to have a *met need* for family planning. The sum of unmet need and met need constitutes the *total demand* for family planning. Table 7.4 shows statistics on unmet need, met need and total demand for family

planning, according to whether the need is for spacing or limiting births. Findings are presented in terms of currently married women.

Table 7.4 Need for family planning services

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

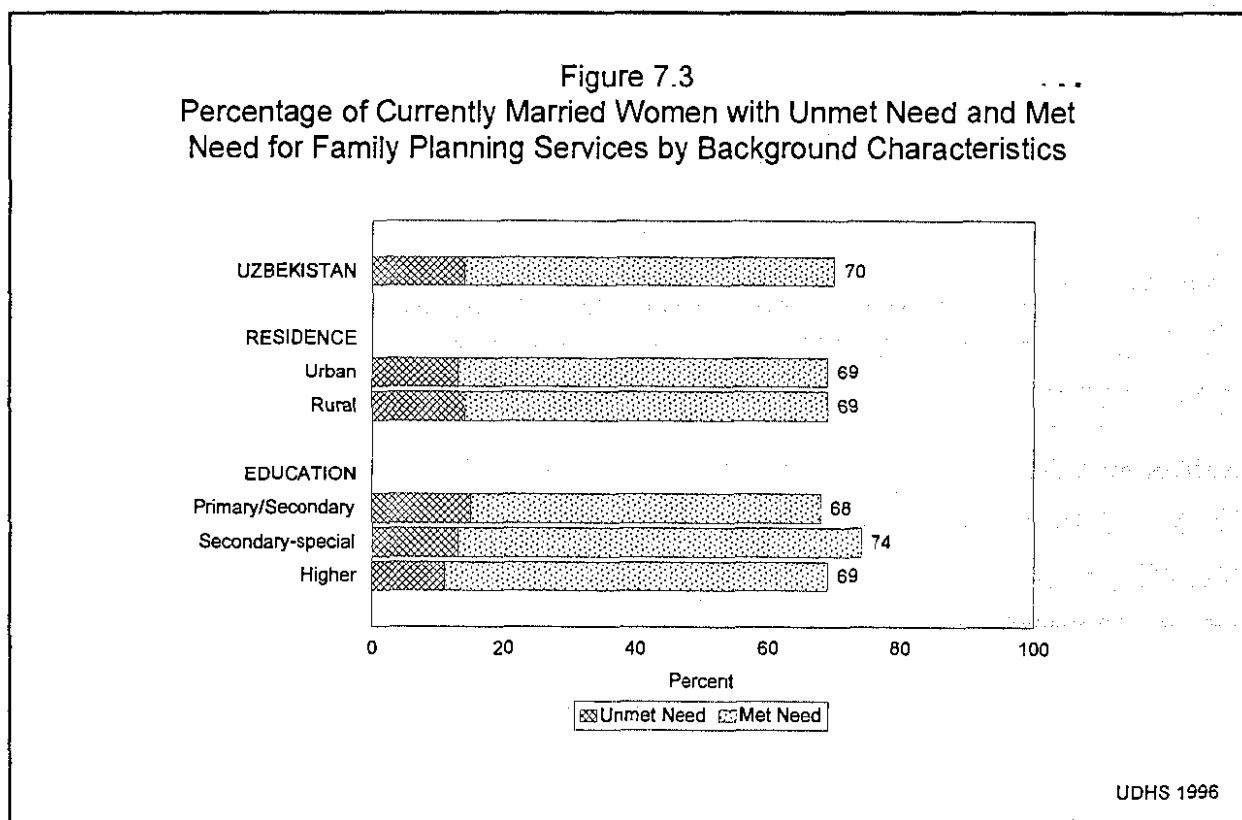
| Background characteristic | Unmet need for family planning ¹ | | | Met need for family planning (currently using) ² | | | Total demand for family planning | | | Percentage of demand satisfied | Number of women |
|---------------------------|---|--------------|-------------|---|--------------|-------------|----------------------------------|--------------|-------------|--------------------------------|-----------------|
| | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total | | |
| Age | | | | | | | | | | | |
| 15-19 | 15.7 | 0.0 | 15.7 | 14.7 | 1.1 | 15.8 | 30.4 | 1.1 | 31.5 | 50.0 | 125 |
| 20-24 | 15.9 | 2.2 | 18.0 | 29.7 | 5.8 | 35.5 | 45.5 | 8.0 | 53.5 | 66.3 | 599 |
| 25-29 | 9.7 | 5.0 | 14.7 | 33.2 | 21.9 | 55.1 | 43.0 | 26.9 | 69.9 | 78.9 | 640 |
| 30-34 | 3.4 | 8.2 | 11.5 | 24.9 | 44.0 | 68.9 | 28.3 | 52.2 | 80.5 | 85.7 | 572 |
| 35-39 | 1.0 | 8.8 | 9.8 | 9.9 | 64.8 | 74.7 | 10.9 | 73.6 | 84.5 | 88.4 | 520 |
| 40-44 | 0.7 | 13.0 | 13.7 | 3.8 | 60.4 | 64.2 | 4.5 | 73.4 | 77.9 | 82.4 | 383 |
| 45-49 | 0.6 | 11.7 | 12.3 | 3.8 | 38.5 | 42.3 | 4.3 | 50.2 | 54.5 | 77.5 | 264 |
| Residence | | | | | | | | | | | |
| Urban | 5.7 | 7.6 | 13.3 | 20.8 | 35.6 | 56.4 | 26.5 | 43.3 | 69.7 | 80.9 | 1,168 |
| Rural | 7.2 | 6.7 | 13.9 | 19.9 | 35.2 | 55.1 | 27.1 | 41.9 | 69.0 | 79.9 | 1,935 |
| Region | | | | | | | | | | | |
| Region 1 | 3.4 | 4.4 | 7.8 | 21.9 | 42.1 | 64.0 | 25.3 | 46.5 | 71.8 | 89.1 | 319 |
| Region 2 | 6.1 | 6.7 | 12.8 | 13.1 | 39.8 | 52.9 | 19.2 | 46.5 | 65.7 | 80.5 | 705 |
| Region 3 | 8.2 | 10.8 | 18.9 | 16.2 | 33.5 | 49.6 | 24.3 | 44.2 | 68.6 | 72.4 | 884 |
| Region 4 | 7.7 | 4.9 | 12.6 | 28.3 | 29.5 | 57.8 | 36.0 | 34.4 | 70.4 | 82.1 | 917 |
| Tashkent City | 3.3 | 6.0 | 9.3 | 22.6 | 41.9 | 64.6 | 26.0 | 47.9 | 73.9 | 87.4 | 278 |
| Education | | | | | | | | | | | |
| Primary/Secondary | 7.7 | 6.8 | 14.5 | 17.7 | 35.2 | 52.9 | 25.4 | 41.9 | 67.4 | 78.5 | 1,906 |
| Secondary-special | 5.7 | 7.3 | 13.0 | 24.8 | 35.9 | 60.7 | 30.5 | 43.2 | 73.6 | 82.4 | 830 |
| Higher | 3.1 | 7.9 | 11.1 | 22.9 | 35.2 | 58.1 | 26.0 | 43.1 | 69.1 | 84.0 | 366 |
| Ethnicity | | | | | | | | | | | |
| Uzbek | 7.1 | 6.9 | 14.0 | 20.6 | 34.3 | 54.9 | 27.7 | 41.2 | 68.8 | 79.7 | 2,592 |
| Other | 4.3 | 7.7 | 11.9 | 18.3 | 41.1 | 59.4 | 22.6 | 48.7 | 71.3 | 83.3 | 511 |
| Total | 6.6 | 7.0 | 13.7 | 20.2 | 35.4 | 55.6 | 26.8 | 42.4 | 69.3 | 80.3 | 3,102 |

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 and 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 and who want no more children. Excluded from the unmet need category are menopausal or infertile women.

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.

Fourteen percent of married women in Uzbekistan have an unmet need for family planning services, 7 percent for spacing births and 7 percent for limiting births (Table 7.4). Combined with the 56 percent of married women who are currently using contraception, the total demand for family planning comprises 69 percent of married women. While contraceptive prevalence is quite high, if all married women who say they want to space or limit their births were to use methods, contraceptive prevalence would increase from 56 to 69 percent of married women.

Unmet need for spacing generally declines with increasing age, as unmet need for limiting increases with age; this pattern reflects the pattern of demand by age. Regional variations in unmet need generally reflect the variations observed in levels of prevalence. Region 1 and Tashkent City have the lowest levels of unmet need (less than 10 percent), while Region 3 has the highest level (19 percent). There are no striking differentials in unmet need by urban/rural residence, education, or ethnicity (see Figure 7.3).



7.3 Ideal Family Size

Thus far, fertility desires have been examined relative to respondents' current family size. However, the UDHS also asked women how many children they would choose to have if they could go back to the time they had no children, i.e., the number of children they consider to be ideal. Overall, the number of children most commonly reported as ideal (the modal category) is four (Table 7.5 shows that 44 percent of women gave this response).

Table 7.5 also shows the percent distribution of women by the number of children they would ideally like to have, according to the number of children they actually have. While the question regarding ideal family size is meant to be independent of the number of children the respondent already has, there is usually a correlation between ideal and actual number of children. This is because women who want larger families will tend to achieve larger families, and because women may adjust their ideal family size upwards as their actual family size increases. For example, nearly 60 percent of women with six or more children reported an ideal family size of six or more. It can be seen that mean ideal family size generally rises as the number of children a woman already has increases. However, an ideal family size of four children is not limited to those with four or more children; approximately 40 percent of women with fewer than three children report an ideal family size of four or more children. In general, the mean ideal number of children is approximately three among women with fewer than three children, and then increases from 3.6 to 5.7 with increasing parity.

Table 7.5 Ideal and actual number of children

Percent distribution of all women by ideal number of children and mean ideal number of children for all women and for currently married women, according to number of living children, Uzbekistan 1996

| Ideal number of children | Number of living children ¹ | | | | | | | Total |
|--------------------------------|--|-------|-------|-------|-------|-------|-------|-------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6+ | |
| 0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 1 | 1.1 | 4.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.0 | 1.0 |
| 2 | 32.2 | 34.2 | 34.6 | 10.9 | 3.0 | 5.5 | 1.2 | 22.6 |
| 3 | 16.1 | 18.0 | 15.3 | 30.7 | 1.5 | 1.1 | 1.2 | 14.6 |
| 4 | 36.3 | 36.2 | 44.0 | 48.3 | 78.7 | 40.5 | 29.4 | 43.9 |
| 5 | 4.9 | 2.8 | 4.0 | 5.1 | 7.7 | 33.5 | 3.7 | 6.9 |
| 6+ | 3.1 | 3.2 | 1.0 | 1.9 | 6.7 | 14.2 | 58.5 | 7.4 |
| Nonnumeric response | 6.0 | 1.4 | 0.8 | 2.9 | 2.3 | 5.0 | 6.0 | 3.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 1,275 | 603 | 792 | 633 | 485 | 343 | 285 | 4,415 |
| All women: | | | | | | | | |
| Mean ideal number ² | 3.2 | 3.1 | 3.2 | 3.6 | 4.2 | 4.6 | 5.7 | 3.6 |
| Number of women | 1,198 | 595 | 785 | 615 | 474 | 326 | 268 | 4,260 |
| Currently married women: | | | | | | | | |
| Mean ideal number ² | 3.2 | 3.2 | 3.2 | 3.6 | 4.2 | 4.6 | 5.7 | 3.8 |
| Number of women | 141 | 535 | 740 | 590 | 459 | 311 | 255 | 3,030 |

¹ Includes current pregnancy

² The means exclude women who gave nonnumeric responses.

Table 7.6 presents the mean ideal number of children for all women by age and selected background characteristics. The mean ideal number of children gradually increases with age of the respondent; the mean among younger women (3.3) is one child fewer than it is among the oldest women interviewed (4.4). The most significant finding regarding ideal family size is the fact that differentials which are apparent among older women are much less pronounced among younger women. For example, rural women age 45-49 report a mean ideal family size of five children, 1.3 children more than urban women of the same age; among women under the age of 30, the urban/rural ideals differ only by 0.3 children. The same narrowing of differentials occurs at the regional level. Women age 45-49 in Region 2 report an ideal family size that is more than two children greater than women in Tashkent City; women in their twenties report ideal family sizes that are within 0.8 children across regions. Educational and ethnic differentials are also less pronounced among younger women.

7.4 Wanted and Unwanted Fertility

There are two ways of estimating levels of unwanted fertility from the UDHS data. One is based on reports of the wanted status of recent births. For each child born in the three years before the survey, and for each current pregnancy, women were asked whether the pregnancy was wanted at that time (planned), wanted at a later time (mistimed), or not wanted at all (unwanted). These data may lead to underestimates of unplanned childbearing, since women may retrospectively declare unwanted pregnancies as planned once the children 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. Estimates using these two approaches indicate at least the minimum level of unwanted fertility.

Table 7.6 Mean ideal number of children by background characteristics

Mean ideal number of children for all women, by age and selected background characteristics, Uzbekistan 1996

| Background characteristic | Age of woman | | | | | | | Total |
|---------------------------|--------------|-------|-------|-------|-------|-------|-------|-------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Residence | | | | | | | | |
| Urban | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.7 | 3.3 |
| Rural | 3.4 | 3.4 | 3.6 | 4.0 | 4.2 | 4.8 | 5.0 | 3.9 |
| Region | | | | | | | | |
| Region 1 | 2.9 | 3.2 | 3.5 | 3.8 | 4.1 | 4.6 | 4.7 | 3.6 |
| Region 2 | 3.6 | 3.6 | 3.6 | 4.0 | 4.3 | 4.8 | 5.4 | 4.0 |
| Region 3 | 3.6 | 3.6 | 3.6 | 3.8 | 4.2 | 4.5 | 4.4 | 3.8 |
| Region 4 | 2.9 | 2.8 | 3.3 | 3.5 | 3.6 | 3.7 | 4.3 | 3.3 |
| Tashkent City | 2.7 | 3.0 | 2.9 | 2.8 | 3.0 | 3.2 | 3.2 | 3.0 |
| Education | | | | | | | | |
| Primary/Secondary | 3.3 | 3.4 | 3.7 | 3.9 | 4.2 | 4.6 | 4.9 | 3.8 |
| Secondary-special | 3.2 | 3.1 | 3.3 | 3.5 | 3.6 | 3.8 | 3.7 | 3.4 |
| Higher | (2.9) | 3.1 | 3.1 | 3.2 | 3.4 | 3.5 | 3.7 | 3.3 |
| Ethnicity | | | | | | | | |
| Uzbek | 3.4 | 3.3 | 3.5 | 3.8 | 4.1 | 4.4 | 4.7 | 3.7 |
| Other | 2.9 | 3.0 | 3.3 | 3.2 | 3.2 | 3.8 | 3.6 | 3.2 |
| Total | 3.3 | 3.3 | 3.5 | 3.7 | 3.9 | 4.2 | 4.4 | 3.6 |

Note: Parentheses indicate a figure is based on 25 to 49 unweighted women.

Table 7.7 shows the percent distribution of births in the three years before the survey (and current pregnancies) by whether the birth was wanted then, wanted later, or not wanted at all. Overall, only 4 percent of births in the three-year period were reported to be unplanned. While the proportion of unwanted births does rise with increasing birth order, the vast majority of even the highest order births are reported as being wanted at the time (90 percent).

Table 7.7 Fertility planning status

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

| Birth order and mother's age | Planning status of birth | | | | Total | Number of births |
|------------------------------|--------------------------|--------------|------------|---------|-------|------------------|
| | Wanted then | Wanted later | Not wanted | Missing | | |
| Birth order | | | | | | |
| 1 | 98.8 | 0.3 | 0.2 | 0.8 | 100.0 | 555 |
| 2 | 94.8 | 4.0 | 0.6 | 0.7 | 100.0 | 497 |
| 3 | 92.2 | 4.1 | 1.7 | 2.0 | 100.0 | 291 |
| 4+ | 90.4 | 2.2 | 6.9 | 0.5 | 100.0 | 355 |
| Age at birth | | | | | | |
| <19 | 95.9 | 2.5 | 0.2 | 1.4 | 100.0 | 205 |
| 20-24 | 96.6 | 2.2 | 0.7 | 0.5 | 100.0 | 756 |
| 25-29 | 93.0 | 3.5 | 2.1 | 1.4 | 100.0 | 422 |
| 30-34 | 93.8 | 1.9 | 3.1 | 1.1 | 100.0 | 228 |
| 35-39 | 89.7 | 0.0 | 10.3 | 0.0 | 100.0 | 72 |
| 40-44 | * | * | * | * | 100.0 | 10 |
| Total | 94.7 | 2.4 | 1.9 | 0.9 | 100.0 | 1,697 |

Note: Birth order includes current pregnancy. An asterisk indicates that a figure is based on fewer than 25 births (and current pregnancies) and has been suppressed.

Table 7.8 presents “wanted” fertility rates. Wanted fertility represents the level of fertility that would have prevailed in the three years before the survey if all unwanted births had been prevented. Unwanted births are those which exceed the number considered ideal by the respondent. The wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. The small proportion of women who gave a nonnumeric response to the question on ideal family size are assumed to have wanted all their births. A comparison of the total wanted fertility rate and the actual fertility rate suggests the potential demographic impact of avoiding unwanted births.

As seen in Table 7.5, women who report an ideal family size which is smaller than what they actually have are in the minority; therefore, differences between wanted and actual fertility rates are extremely low in Uzbekistan. The wanted fertility rate is only 0.2 children lower than the actual rate, and there are no great differentials by background characteristics.

Table 7.8 Wanted fertility rates

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

| Background characteristic | Total wanted fertility rate | Total fertility rate |
|---------------------------|-----------------------------|----------------------|
| Residence | | |
| Urban | 2.5 | 2.7 |
| Rural | 3.4 | 3.7 |
| Region | | |
| Region 1 | 3.2 | 3.4 |
| Region 2 | 3.2 | 3.4 |
| Region 3 | 3.1 | 3.3 |
| Region 4 | 3.1 | 3.6 |
| Tashkent City | 2.2 | 2.3 |
| Education | | |
| Primary/Secondary | 3.2 | 3.5 |
| Secondary-special | 2.9 | 3.1 |
| Higher | 2.7 | 2.8 |
| Ethnicity | | |
| Uzbek | 3.2 | 3.5 |
| Other | 2.2 | 2.5 |
| Total | 3.1 | 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 8

INFANT AND CHILD MORTALITY

Akhror B. Yarrulov and Jeremiah M. Sullivan

8.1 Background and Assessment of Data Quality

This chapter presents information on mortality among children under five years of age. The rates shown provide information on levels and time trends in mortality as well as differentials between population subgroups. The information on mortality differentials should be of particular use to the agencies providing health services because the population subgroups at high risk of mortality are identified.

The rates of mortality presented in this chapter are defined as follows:

- **Neonatal mortality (NN):** the probability of dying within the first month of life,
- **Postneonatal mortality (PNN):** the difference between infant and neonatal mortality,
- **Infant mortality (${}_1q_0$):** the probability of dying between birth and the first birthday,
- **Child mortality (${}_4q_1$):** the probability of dying between exact ages one and five,
- **Under-five mortality (${}_5q_0$):** the probability of dying between birth and the fifth birthday.

All rates are expressed as deaths per 1,000 live births, except child mortality which is expressed as deaths per 1,000 children surviving to age one.

The mortality estimates were calculated from information in the reproductive section of the Women's Questionnaire. In the UDHS, survey respondents were asked to report reproductive events in terms of international definitions. The definition of a live birth is a birth, irrespective of the duration of pregnancy, which after separation from the mother breathes or shows any other signs of life such as beating of the heart or movement of voluntary muscles. Infant deaths are deaths of live-born infants under one year of age (United Nations, 1992).

The reproductive section of the UDHS questionnaire includes a pregnancy history in which specific questions are asked about each pregnancy that a woman has had. For each live birth reported in the pregnancy history, questions are asked about the month and year of birth, sex of the child, survivorship status and current age (for surviving children) or age at death (for deceased children).

The accuracy of mortality estimates calculated from pregnancy history data depends upon the *sampling variability* of the estimates and on *nonsampling error* (i.e., the completeness and accuracy with which births and deaths are reported and recorded). Sampling variability is discussed in the next section of this chapter. Typically, the most serious source of nonsampling error in mortality data collected by a retrospective survey is underreporting of the births and deaths of children who do not survive (United Nations, 1982). Such underreporting results in underestimated mortality rates.

When there is underreporting of deceased children in a survey, it is usually most severe for deaths which occur in early infancy, i.e., in the neonatal period. If there is underreporting of early neonatal deaths, this would result in an abnormally low ratio of neonatal mortality to infant mortality. In retrospective surveys, underreporting of early infant deaths is usually more common for births that occur further back in time than for births occurring close to the time of the survey. Hence, when considering the quality of

mortality data, it is useful to examine the ratios of neonatal to infant mortality for different retrospective time periods.

Neonatal and infant mortality rates from the UDHS are shown in Table 8.1. For the periods 0-4, 5-9 and 10-14 years before the survey, the values of the ratio of the former to the latter are .46, .54 and .47, respectively. In countries known for having complete and accurate mortality data, at a level of infant mortality between 40 and 50 per 1,000 (a range which includes the infant mortality rates estimated by the UDHS), the value of this ratio is typically between .50 and .60.¹ The ratios for Uzbekistan are somewhat lower than this but not greatly so. Accordingly, this inspection of the data does not suggest substantial underreporting of neonatal deaths.

| Years preceding survey | Neonatal mortality (NN) | Postneonatal mortality (PNN) | Infant mortality (${}_1Q_0$) | Child mortality (${}_4Q_1$) | Under-five mortality (${}_5Q_0$) |
|------------------------|-------------------------|------------------------------|--------------------------------|-------------------------------|------------------------------------|
| 0-4 | 22.8 | 26.3 | 49.1 | 10.7 | 59.3 |
| 5-9 | 20.6 | 17.2 | 37.8 | 13.9 | 51.1 |
| 10-14 | 21.7 | 24.5 | 46.3 | 20.0 | 65.3 |

8.2 Levels and Trends in Early Childhood Mortality

Table 8.1 shows infant and childhood mortality estimates for 0-4, 5-9, and 10-14 years before the survey. For the period 0-4 years before the survey (i.e., approximately mid-1992 to mid-1996), infant mortality was estimated as 49 per 1,000 births. The estimates of neonatal and postneonatal mortality were 23 and 26 per 1,000. The estimate of child mortality (age 1 to age 5) was much lower at 11 per 1,000. Overall, for the period mid-1992 to mid-1996, under-five mortality was 59 per 1,000.

Between the periods 10-14 and 0-4 years before the survey, the estimates of infant mortality were 46 and 49 per 1,000, respectively, indicating very little change in mortality during the period. The rate for the period 5-9 years before the survey was 38 per 1,000, a rate lower than the estimates for the adjacent time periods. However, given the sampling variability of the estimates (i.e., variability arising because the estimates are based on a sample of births rather than all births in Uzbekistan in a particular time period), one cannot be confident that the variability of the estimates reflects true changes in mortality levels rather than sampling variability.² This is particularly true when the observed fluctuations in the estimated rates have no obvious explanation; for example, a severe downturn in economic conditions accompanied by food shortages, and other statistical sources do not show a recent upturn in mortality. Under these circumstances, it is probably most appropriate to focus on the rates for the 10-year period preceding the survey. In this approach, the estimate of infant mortality for the period 1986-95, following definitions of live birth and infant death advocated by the United Nations, is 44 per 1,000.

¹ For example, see the neonatal and infant mortality rates for Austria (1959), Canada (1952), and Belgium (1956) in the *U.N. Demographic Yearbook, 1961* and for Cuba (1968), Puerto Rico (1965), and Poland (1966) in the *U.N. Demographic Yearbook, 1974*.

² The mortality estimates of the UDHS are based on data provided by a sample of 4,415 women and are subject to sampling variability. Of interest here is the 95-percent confidence interval for the estimated infant mortality rate for the period 0-4 years before the survey (49 per 1,000). The confidence interval is very broad and extends from 36 to 62 per 1,000 (see Appendix B). Thus, the point estimate of 49 per 1,000 cannot be considered exact and the true rate could be higher or lower.

8.3 Infant Mortality Rates from the Ministry of Health

The Republic of Uzbekistan has a long history of demographic and health data collection primarily through the use of registration systems which are national in coverage and which collect information on all events throughout the country. In the case of births and infant deaths, the Ministry of Health (MOH) is responsible for data collection which is performed when reports of local level health officials are forwarded up the reporting hierarchy to the *oblast* level and to the Ministry.

The data on live births and infant deaths are collected following protocols which were established during the period of the former Soviet Union. Those protocols define live births somewhat differently than the definitions of the United Nations which were used in the UDHS. According to the protocols, a pregnancy terminating at a gestation age of less than 28 weeks (i.e., weighing less than 1,000 grams or measuring less than 35 centimeters) is considered premature and is classified as a late miscarriage even if signs of life are present at the time of delivery. Only if a premature birth survives for seven days is the child classified as a live birth. A pregnancy terminating at 28 or more weeks of gestation is considered a live birth if the child breathes and as a stillbirth if breathing is not evident at the time of delivery. Thus, some events classified as late miscarriages in the Uzbekistan statistical system would be classified as live births and infant deaths according to the definitions used in the UDHS.

Official government statistics on infant mortality are published in the annual statistical reports of the MOH and in the annual statistical reports of the State Committee on Statistics and Analysis (Goskomprognozstat).³

Table 8.2 shows infant mortality rates based on MOH data for the years 1986 through 1995 as well as the average of the annual rates for that 10-year period. Overall there is a steady declining trend in the annual rates from 46.3 to 26.0 per 1,000. The only deviations from the trend line are the modest increases in 1991 and 1992. The average of the annual rates for the 10-year period is 37 per 1,000. This corresponds to the UDHS rate for the same time period of 44 per 1,000. Thus, the rates of infant mortality based on MOH data are lower than the estimates derived from the survey by 16 percent.

Differences between the MOH and the UDHS in the definition of a live birth and an infant death no doubt contribute to the difference in infant mortality estimates for the period 1986-95. An assessment of the source of the difference in the estimates must also consider the sampling variability of the UDHS estimates. At this time, the precise contribution of definitional differences, sampling variability or other factors to differences between the estimates is not clear.

Table 8.2 Trends in infant mortality rates

Infant mortality rates reported by the Ministry of Health, 1986-95

| Year | Infant mortality |
|--------------|------------------|
| 1986 | 46.3 |
| 1987 | 45.9 |
| 1988 | 43.3 |
| 1989 | 37.8 |
| 1990 | 34.6 |
| 1991 | 35.5 |
| 1992 | 37.0 |
| 1993 | 32.0 |
| 1994 | 28.2 |
| 1995 | 26.0 |
| Mean 1986-95 | 36.6 |

Sources: 1986-93: Church and Koutanev, 1995: 1994: Ministry of Health, Republic of Uzbekistan, 1995; 1995: Data tabulation obtained from Ministry of Health

³ It is worth noting that the rates published by the MOH and Goskomprognozstat are shown at the national level, for Tashkent City, for the 12 *oblasts* of Uzbekistan, and for the autonomous region of Karakalpakstan.

8.4 Socioeconomic Differentials in Childhood Mortality

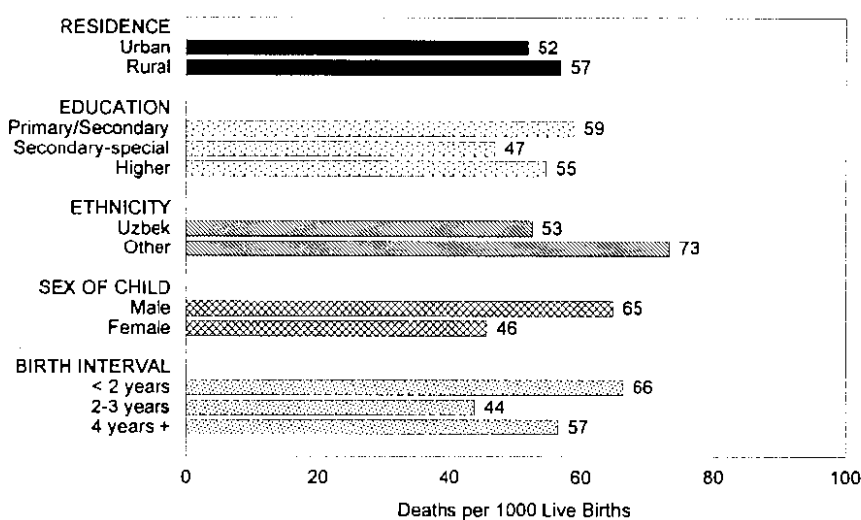
Differentials in infant and child mortality by urban-rural residence, mother's education and mother's ethnic group are shown in Table 8.3 and Figure 8.1. The estimated rates for subgroups of the population are for a 10-year period preceding the survey.

Table 8.3 Infant and child mortality by background characteristics

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

| Background characteristic | Neonatal mortality (NN) | Postneonatal mortality (PNN) | Infant mortality (${}_1Q_0$) | Child mortality (${}_4Q_1$) | Under-five mortality (${}_5Q_0$) |
|---------------------------|-------------------------|------------------------------|--------------------------------|-------------------------------|------------------------------------|
| Residence | | | | | |
| Urban | 23.5 | 19.4 | 42.9 | 9.3 | 51.8 |
| Rural | 20.9 | 22.9 | 43.8 | 13.6 | 56.8 |
| Education | | | | | |
| Primary/Secondary | 21.9 | 23.5 | 45.4 | 14.0 | 58.8 |
| Secondary-special | 16.8 | 19.3 | 36.1 | 11.0 | 46.8 |
| Higher | 34.2 | 16.8 | 51.0 | 3.7 | 54.6 |
| Ethnicity | | | | | |
| Uzbek | 19.6 | 21.0 | 40.6 | 12.4 | 52.5 |
| Other | 35.8 | 26.7 | 62.5 | 11.5 | 73.3 |
| Total | 21.7 | 21.8 | 43.5 | 12.2 | 55.2 |

Figure 8.1 Under-five Mortality by Selected Characteristics



UDHS 1996

Under-five mortality is marginally higher in rural (57 per 1,000) than in urban areas (52 per 1,000). Most of this differential is the result of higher child mortality rates in rural areas.

The mortality estimates for children by education of mother exhibit some unexpected differentials and suggest that early infant deaths (deaths to neonates) may have been underreported by some population groups in the survey. The problem is most evident in terms of the educational differentials in rates for the neonatal, postneonatal and child (age 1 to 5) age intervals. The postneonatal and child mortality rates behave as expected and exhibit a declining pattern when progressing from women with primary/secondary to secondary-special to higher education. On the other hand, the neonatal rates show the opposite pattern and are substantially greater for higher educated women (34 per 1,000) than for primary/secondary and secondary-special women (22 and 17 per 1,000 respectively). A full investigation of this problem is beyond the scope of this report. However, one plausible explanation is underreporting of events by less educated women. This explanation is based on the following rationale. The educational differential of the neonatal rates is not credible. Moreover, it is unlikely that neonatal mortality is mistakenly overreported by higher educated mothers. However, less educated women may have underreported events if they were less knowledgeable about live births who survived only a short time following birth and were classified as miscarriages, as would be the case in Uzbekistan for pregnancies terminating at less than 28 weeks of gestation.

Striking mortality differentials are also evident by the ethnicity of a child's mother. Children born to women of Uzbek ethnicity have lower rates of infant mortality than children born to women of other ethnicity (41 and 63 per 1,000, respectively). The mortality advantage of Uzbek children is evident in both the neonatal and postneonatal rates.

8.5 Demographic Differentials in Childhood Mortality

The relationship between early childhood mortality and selected demographic variables is shown in Table 8.4. In most populations, male children experience higher mortality than female children; this is the case in Uzbekistan. In terms of infant mortality, the rate for males (50 per 1,000) exceeds the rate for females (37 per 1,000) by 37 percent.

The relationship between childhood mortality and birth order indicates that first births and, especially, births of order four and higher are at greater than average risk of mortality.

A clear association is indicated between mortality risk and the length of the preceding birth interval. Births which occur after a short birth interval are at greater risk of mortality than births occurring after longer intervals. The risk of infant mortality for births following an interval of less than two years (51 per 1,000) is greater than the risk for births following an interval of 2-3 years (35 per 1,000) or four or more years (48 per 1,000). This relationship suggests that some mortality reduction would result if the proportion of births occurring after a short birth interval were reduced.

8.6 High-Risk Fertility Behavior

Previous research has shown a strong relationship between fertility patterns and children's risk of mortality (United Nations, 1994). Typically, mortality risks are greater for children who are born to mothers who are too young or too old, who are born after a short birth interval, or who have a high birth order. 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 within 2 years of the previous birth, and a child is of "high order" if the mother had previously given birth to four or more children.

Table 8.4 Infant and child mortality by demographic characteristics

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

| Demographic characteristic | Neonatal mortality (NN) | Postneonatal mortality (PNN) | Infant mortality (1Q0) | Child mortality (4Q1) | Under-five mortality (5Q0) |
|--------------------------------|-------------------------|------------------------------|------------------------|-----------------------|----------------------------|
| Sex of child | | | | | |
| Male | 24.1 | 26.1 | 50.2 | 15.3 | 64.7 |
| Female | 19.3 | 17.4 | 36.7 | 9.2 | 45.6 |
| Age of mother at birth | | | | | |
| < 20 | 28.2 | 16.8 | 45.0 | 14.8 | 59.2 |
| 20-29 | 17.6 | 24.3 | 41.9 | 13.7 | 55.1 |
| 30-39 | 29.4 | 16.6 | 46.1 | 6.5 | 52.3 |
| Birth order | | | | | |
| 1 | 20.8 | 21.1 | 41.9 | 14.8 | 56.0 |
| 2-3 | 18.5 | 21.2 | 39.7 | 13.5 | 52.7 |
| 4+ | 27.6 | 23.4 | 51.0 | 8.3 | 58.9 |
| Previous birth interval | | | | | |
| < 2 yrs | 20.4 | 30.4 | 50.8 | 16.4 | 66.3 |
| 2-3 yrs | 18.5 | 17.0 | 35.4 | 8.6 | 43.8 |
| 4+ yrs | 27.8 | 19.7 | 47.5 | 9.4 | 56.5 |
| Total | 21.7 | 21.8 | 43.5 | 12.2 | 55.2 |

Table 8.5 shows the distribution of children born in the five years before the survey by risk category. While first births to women age 18 to 34 are shown separately in Table 8.5, they are not included in the analysis because they are not considered an avoidable risk.

Column 1 of Table 8.5 shows that, in the five-year period before the survey, 28 percent of births were in a single high-risk category and 6 percent were in a multiple high-risk category.

Column 2 of the table shows risk ratios for high-risk births relative to births not having any high-risk characteristics. Overall, the risk ratio for births in a single high-risk category is 1.3 (i.e., elevated by 30 percent over births in the no risk category). For births with multiple high-risk characteristics, the risk ratio is 2.1 (i.e., elevated by a factor of 2).

Column 3 of Table 8.5 looks to the future and addresses the question: how many currently married women have the potential for having a high-risk birth? The results were obtained by simulating the risk category into which a birth to a currently married woman would fall if she were to become pregnant at the time of the survey. For example, a woman who was 37 years old at the time of the survey, and had four previous births the last of which occurred three years earlier would be classified into the multiple high-risk category of being too old (35 or older) and at risk of having a high order birth (greater than 4).

Overall, 63 percent of currently married women had the potential to give birth to a child with an elevated risk of mortality. Twenty-nine percent of women had the potential to give birth to a child with multiple high-risk factors.

Table 8.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey by category of elevated risk of 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, Uzbekistan 1996

| 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 | 36.8 | 1.0 | 29.4 ^b |
| Unavoidable risk category | | | |
| First birth between ages 18 and 34 | 29.0 | 1.1 | 7.6 |
| Single high-risk category | | | |
| Mother's age < 18 | 1.4 | 0.6 | 0.1 |
| Mother's age > 34 | 1.3 | 0.9 | 12.5 |
| Birth interval < 24 months | 18.3 | 1.6 | 14.1 |
| Birth order > 4 | 7.3 | 0.7 | 6.9 |
| Subtotal | 28.3 | 1.3 | 33.6 |
| Multiple high-risk category | | | |
| Age <18 & birth interval <24 ^c months | 0.1 | 0.0 | 0.0 |
| Age >34 & birth interval <24 months | 0.3 | 0.0 | 0.1 |
| Age >34 & birth order >4 | 3.8 | 2.4 | 25.6 |
| Age >34 & birth interval <24 & birth order >4 | 0.5 | 0.0 | 0.9 |
| Birth interval <24 & birth order >4 | 1.3 | 2.4 | 2.7 |
| Subtotal | 5.9 | 2.1 | 29.4 |
| In any high-risk category | 34.2 | 1.5 | 63.0 |
| Total | 100.0 | - | 100.0 |
| Number of births | 2,455 | - | 3,102 |

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*.

^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 4 or higher.

^b Includes sterilized women

^c Includes the combined categories *Age <18 and birth order >4*.

CHAPTER 9

MATERNAL AND CHILD HEALTH

Akhror B. Yarkulov, Damin A. Asadov and Saidazym N. Soultanov

This chapter presents findings concerning maternal and child health in Uzbekistan. Information is presented on maternal care during pregnancy and delivery, vaccinations of children and child illnesses (respiratory infection, fever and diarrhea) in the two weeks preceding the survey. Data on maternal care were obtained for all live births in the three years prior to the survey, while data on child vaccinations and illnesses were obtained for surviving children.

9.1 Antenatal Care

Interviewers recorded in the UDHS questionnaires all medical personnel that a woman reported as having seen for antenatal care for each live birth in the three years preceding the survey. For the purpose of presenting results, antenatal care is classified in terms of the provider with the highest medical qualifications.

Table 9.1 and Figure 9.1 show the percentage of births for which mothers received antenatal care. A very high proportion of mothers receive care from professional health providers (95 percent); the majority from a doctor (85 percent) and a significant proportion from a nurse or midwife (10 percent). Only 5 percent of women report no antenatal care.

Differences in antenatal care between age groups of women are negligible. Births to older women are less likely to benefit from antenatal care from a doctor. Differences by birth order are more pronounced. Mothers are more apt to receive care by a doctor for first births (87 percent) than for births of order four and higher (78 percent).

Significant differences in the source of antenatal care are found for mothers classified by urban/rural residence and by region. The percentage of mothers who receive care from a doctor is greater in urban (91 percent) than in rural areas (83 percent), and greater in Tashkent City (98 percent) and Regions 2 and 4 (95 and 99 percent, respectively) than in Regions 1 and 3 (73 and 64 percent, respectively). In Region 3, the percent of mothers who receive no antenatal care (14 percent) is several times higher than in any other region.

Mother's education and ethnicity are also associated with antenatal care. All women, irrespective of education and ethnicity, receive antenatal care from a doctor equally.

Antenatal care is most beneficial when it is sought early in pregnancy and is continued throughout a pregnancy. The first visit to the women's consulting center should occur in the first three months of pregnancy so that a timely assessment of each woman's health can be made and appropriate procedures can be employed for the management of the pregnancy.

Table 9.2 shows information on the timing and number of visits made to health providers during pregnancy for live births in the three years preceding the survey. By the start of the third month of pregnancy, 39 percent of women have made their first antenatal visit and by the start of the sixth month of pregnancy, 90 percent have made a visit. The median duration of pregnancy for the first antenatal visit is 3.2 months.

Table 9.2 also indicates that 79 percent of women make four or more antenatal care visits. The median number of antenatal care visits is 8. It is clear that in Uzbekistan antenatal care is received early in pregnancy and, for most women, is continued throughout pregnancy.

Table 9.1 Antenatal care

Percent distribution of births in the three years preceding the survey by source of antenatal care during pregnancy, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Antenatal care provider ¹ | | | Total | Number of births |
|------------------------------|--------------------------------------|---------------------------|--------|-------|------------------|
| | Doctor | Nurse/ Trained midwife | No one | | |
| Mother's age at birth | | | | | |
| < 20 | 86.1 | 7.1 | 6.8 | 100.0 | 169 |
| 20-34 | 85.9 | 9.6 | 4.5 | 100.0 | 1,150 |
| 35+ | 75.1 | 16.1 | 8.8 | 100.0 | 72 |
| Birth order | | | | | |
| 1 | 87.0 | 8.2 | 4.9 | 100.0 | 432 |
| 2-3 | 87.8 | 8.2 | 4.1 | 100.0 | 654 |
| 4+ | 77.8 | 14.8 | 7.3 | 100.0 | 305 |
| Residence | | | | | |
| Urban | 90.7 | 5.9 | 3.3 | 100.0 | 428 |
| Rural | 82.9 | 11.3 | 5.8 | 100.0 | 963 |
| Region | | | | | |
| Region 1 | 72.9 | 26.8 | 0.3 | 100.0 | 157 |
| Region 2 | 94.8 | 0.9 | 4.3 | 100.0 | 334 |
| Region 3 | 64.0 | 22.2 | 13.8 | 100.0 | 386 |
| Region 4 | 99.3 | 0.7 | 0.0 | 100.0 | 431 |
| Tashkent City | 97.7 | 0.0 | 2.3 | 100.0 | 84 |
| Mother's education | | | | | |
| Primary/Secondary | 83.5 | 10.5 | 6.0 | 100.0 | 889 |
| Secondary-special | 88.7 | 8.2 | 3.1 | 100.0 | 368 |
| Higher | 88.3 | 7.9 | 3.8 | 100.0 | 135 |
| Ethnicity | | | | | |
| Uzbek | 85.4 | 9.4 | 5.2 | 100.0 | 1,231 |
| Other | 85.0 | 11.3 | 3.7 | 100.0 | 161 |
| All births | 85.3 | 9.6 | 5.0 | 100.0 | 1,392 |

Note: Figures are for births in the period 0-35 months preceding the survey.
¹ If the respondent mentioned more than one provider, only the most qualified provider is considered.

9.2 Assistance and Medical Care at Delivery

Hygienic conditions during delivery and supervision of delivery by trained medical staff reduce the risk of infections and ensure that complications of delivery are effectively handled. The UDHS collected information on the place of delivery for all children born in the three years preceding the survey and the type of medical staff assisting during delivery.

Table 9.3 indicates that virtually all births are delivered at health facilities (94 percent). The great majority of births occur in a delivery hospital (93.7 percent) and another 0.4 percent in either a general hospital or a FAP (doctor's assistant/midwife post). Only 6 percent of births are reported as occurring outside the setting of a health facility (i.e., primarily at the respondent's home). The high proportion of births delivered in delivery hospitals leaves little potential for differentials in place of delivery by age groups. Table 9.3 indicates that the percentage of births delivered in a hospital setting is 86 percent or higher for all population groups.

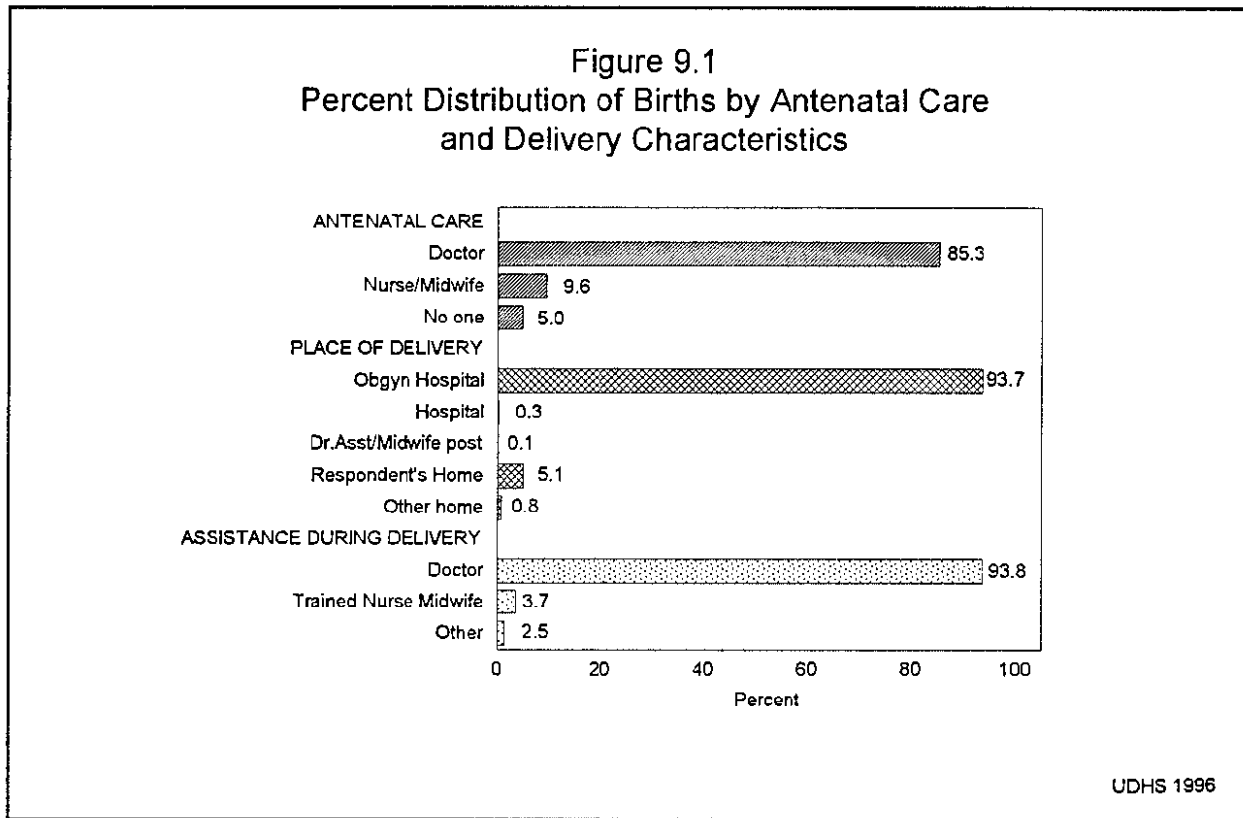


Table 9.4 indicates that almost all births are delivered under the supervision of persons with medical training—94 percent by a doctor and 4 percent by a nurse or trained midwife.

While virtually all births are delivered by trained medical staff, there are differences in the percentage of deliveries assisted by a doctor and, alternatively, by a nurse or midwife by residence and region. Relatively more deliveries are attended by doctors in urban areas (99 percent) than in rural areas (92 percent), and more deliveries are attended by a doctor in Tashkent City (99 percent) and Regions 1 and 4 (98 percent) than in Regions 2 and 3 (88 and 91 percent, respectively).

The likelihood of delivery under a doctor's supervision is greater for women of Uzbek ethnicity (95 percent) than for women of other ethnicity (88 percent).

9.3 Characteristics of Delivery

Respondents were asked in the UDHS if their births were delivered by caesarean section. Respondents were also asked if their children were weighed at the time of birth, and if so, how much each baby weighed. In addition, mothers were asked for their subjective assessment of their baby's size at birth (very large, larger than average, average size, smaller than average, or very small).

Table 9.5 indicates that according to mothers' reports, 3 percent of births in the three years before the UDHS were delivered by caesarean section. This estimate is consistent with the reported statistic of 2.5 percent of deliveries by caesarean section (Ministry of Health, 1996). Delivery by caesarean section is more common among births to older women, women younger than 20, women residing in urban areas, more educated women, and women of non-Uzbek ethnicity. However, the most pronounced differential in the prevalence of caesarean section delivery is associated with region. The rate of caesarean section is several times higher among births in Tashkent City (9 percent) than among births in the other survey regions (2 to 4 percent).

Mothers who report that their baby was weighed at birth were able to report the birth weight for 96 percent of all births in the last three years. As Table 9.5 indicates, 4 percent of births have a weight of less than 2.5 kilograms, which is classified as low birth weight and is considered to have a higher than average risk of early infant mortality.

According to the mother's subjective evaluation of birth size, 1 percent of children are reported as very small at birth and another 11 percent are smaller than average.

9.4 Vaccinations

According to guidelines developed by the World Health Organization, a child should have received a BCG vaccination to protect against tuberculosis, three doses of DPT to protect against diphtheria, pertussis and tetanus, three doses of the polio vaccine, and a measles vaccination by the age of 12 months.

The child vaccination schedule in Uzbekistan requires that BCG and oral polio vaccines are first given in the delivery hospital during the first 3-4 days of life. Revaccinations with oral polio vaccine are usually done at 2, 3, 4, 16, 18 months and 6-7 years of a child's life. The vaccination schedule for diphtheria, pertussis and tetanus toxoid (DPT or DT) is similar to the schedule for the polio vaccination, except that the first DPT vaccine is given at the age of 2 months. Measles vaccinations are given at 9 and 16 months of age (Ministry of Health, 1993B).

Vaccination coverage is controlled throughout childhood by several mechanisms. During the first two years of life, the patronage nurse is responsible for maintaining vaccination records and ensuring that the child receives vaccinations at the appropriate times. After the two-year period, the vaccination schedule may still be under the control of the staff of the pediatric departments of polyclinics or the records can be transferred to a day care center if the child attends one. In the latter case, vaccination is coordinated by the day care nurse. Finally, when the child starts to attend primary school at age seven, the school nurse becomes responsible for the child's vaccinations.

Information on vaccination coverage was collected in the UDHS for all children under three years of age. In Uzbekistan, child health cards are maintained in the local health care facilities or day care centers rather than in the homes of respondents. Therefore, the decision was made to collect vaccination data in two

Table 9.2 Number of antenatal care visits and stage of pregnancy

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

| Characteristic | Percent |
|---|---------|
| Number of visits | |
| 0 | 5.0 |
| 1 | 1.9 |
| 2-3 | 7.8 |
| 4+ | 78.5 |
| Don't know/missing | 6.8 |
| Total | 100.0 |
| Median | 7.8 |
| Number of months pregnant at time of first visit | |
| No antenatal care | 5.0 |
| <3 months | 39.2 |
| 3-5 months | 50.9 |
| 6+ months | 3.2 |
| Don't know/missing | 1.6 |
| Total | 100.0 |
| Median | 3.2 |
| Number of births | 1,392 |

Note: Figures are for births in the period 0-35 months preceding the survey.

ways: first, from respondents while administering the Individual Woman's Questionnaire, and second, from the health cards maintained at the health facilities or day care centers.

Table 9.3. Place of delivery

Percent distribution of births in the three years preceding the survey by place of delivery, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Place of delivery | | | | | Total | Number of births |
|------------------------------|-------------------|----------|---------------------------------|-------------------|------------|-------|------------------|
| | Delivery hospital | Hospital | Doctor's assistant/midwife post | Respondent's home | Other home | | |
| Mother's age at birth | | | | | | | |
| < 20 | 96.8 | 0.9 | 0.0 | 1.4 | 0.9 | 100.0 | 169 |
| 20-34 | 93.7 | 0.2 | 0.2 | 5.2 | 0.8 | 100.0 | 1,150 |
| 35+ | 87.4 | 0.0 | 0.0 | 12.6 | 0.0 | 100.0 | 72 |
| Birth order | | | | | | | |
| 1 | 97.0 | 0.5 | 0.4 | 1.4 | 0.7 | 100.0 | 432 |
| 2-3 | 94.4 | 0.0 | 0.0 | 5.0 | 0.5 | 100.0 | 654 |
| 4+ | 87.6 | 0.5 | 0.0 | 10.5 | 1.5 | 100.0 | 305 |
| Residence | | | | | | | |
| Urban | 97.8 | 0.5 | 0.0 | 1.2 | 0.4 | 100.0 | 428 |
| Rural | 91.9 | 0.2 | 0.2 | 6.8 | 1.0 | 100.0 | 963 |
| Region | | | | | | | |
| Region 1 | 98.7 | 0.0 | 0.0 | 1.3 | 0.0 | 100.0 | 157 |
| Region 2 | 89.7 | 0.2 | 0.0 | 9.6 | 0.4 | 100.0 | 334 |
| Region 3 | 89.9 | 0.4 | 0.5 | 9.3 | 0.0 | 100.0 | 386 |
| Region 4 | 97.3 | 0.4 | 0.0 | 0.2 | 2.1 | 100.0 | 431 |
| Tashkent City | 98.8 | 0.0 | 0.0 | 0.0 | 0.6 | 100.0 | 84 |
| Mother's education | | | | | | | |
| Primary/Secondary | 91.6 | 0.4 | 0.2 | 6.6 | 1.1 | 100.0 | 889 |
| Secondary-special | 97.5 | 0.0 | 0.0 | 2.3 | 0.1 | 100.0 | 368 |
| Higher | 97.3 | 0.0 | 0.0 | 2.7 | 0.0 | 100.0 | 135 |
| Ethnicity | | | | | | | |
| Uzbek | 94.4 | 0.3 | 0.1 | 4.2 | 0.9 | 100.0 | 1,231 |
| Other | 88.4 | 0.0 | 0.0 | 11.6 | 0.0 | 100.0 | 161 |
| Antenatal care visits | | | | | | | |
| None | 83.7 | 2.0 | 0.0 | 14.3 | 0.0 | 100.0 | 70 |
| 1-3 visits | 91.4 | 0.0 | 0.0 | 8.6 | 0.0 | 100.0 | 134 |
| 4 or more visits | 95.1 | 0.2 | 0.2 | 3.7 | 0.8 | 100.0 | 1,093 |
| Don't know/Missing | 88.7 | 0.0 | 0.0 | 9.7 | 1.6 | 100.0 | 95 |
| All births | 93.7 | 0.3 | 0.1 | 5.1 | 0.8 | 100.0 | 1,392 |

Note: Figures are for births in the period 0-35 months preceding the survey.

The data collected in the Individual Woman's Questionnaire were almost entirely based on mother's recall, since health cards were unavailable in the homes for 98 percent of children. Data were collected on whether or not a child had received specific vaccines, such as BCG, polio, DPT or DT (against diphtheria and tetanus without the pertussis vaccine component), and measles. For children who were reported to have received polio and DPT/DT, mothers were asked the number of doses received for each.

The vaccination data from the health cards were collected by the supervisors of the interviewing teams who visited the health care facilities or day care centers and, with the help of facility personnel (i.e., nurse or archive clerks), searched for the child health cards. Cards were found for 90 percent of children

reported as under three years of age in the woman's questionnaires. The team supervisors recorded the vaccination data for each child on forms designed for that purpose.

Table 9.4 Assistance during delivery

Percent distribution of births in the three years preceding the survey by reported provider during delivery, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Attendant assisting during delivery ¹ | | | | Total | Number of births |
|------------------------------|--|------------------------|-----------------|--------|-------|------------------|
| | Doctor | Nurse/ Trained midwife | Relative/ Other | No one | | |
| Mother's age at birth | | | | | | |
| < 20 | 98.5 | 1.5 | 0.0 | 0.0 | 100.0 | 169 |
| 20-34 | 93.5 | 4.1 | 2.0 | 0.4 | 100.0 | 1,150 |
| 35+ | 88.1 | 1.9 | 8.2 | 1.9 | 100.0 | 72 |
| Birth order | | | | | | |
| 1 | 97.1 | 2.3 | 0.6 | 0.0 | 100.0 | 432 |
| 2-3 | 94.2 | 2.8 | 2.5 | 0.4 | 100.0 | 654 |
| 4+ | 88.4 | 7.4 | 3.3 | 0.9 | 100.0 | 305 |
| Residence | | | | | | |
| Urban | 98.9 | 1.1 | 0.0 | 0.0 | 100.0 | 428 |
| Rural | 91.6 | 4.8 | 3.0 | 0.6 | 100.0 | 963 |
| Region | | | | | | |
| Region 1 | 98.1 | 1.6 | 0.3 | 0.0 | 100.0 | 157 |
| Region 2 | 88.2 | 3.3 | 6.9 | 1.6 | 100.0 | 334 |
| Region 3 | 91.2 | 7.4 | 1.4 | 0.0 | 100.0 | 386 |
| Region 4 | 97.9 | 2.1 | 0.0 | 0.0 | 100.0 | 431 |
| Tashkent City | 99.4 | 0.6 | 0.0 | 0.0 | 100.0 | 84 |
| Mother's education | | | | | | |
| Primary/Secondary | 92.6 | 4.4 | 2.7 | 0.3 | 100.0 | 889 |
| Secondary-special | 96.1 | 1.8 | 1.4 | 0.7 | 100.0 | 368 |
| Higher | 95.9 | 4.1 | 0.0 | 0.0 | 100.0 | 135 |
| Ethnicity | | | | | | |
| Uzbek | 94.6 | 4.0 | 1.1 | 0.3 | 100.0 | 1,231 |
| Other | 88.3 | 1.6 | 9.3 | 0.8 | 100.0 | 161 |
| Antenatal care visits | | | | | | |
| None | 79.2 | 6.5 | 12.3 | 1.9 | 100.0 | 70 |
| 1-3 visits | 90.1 | 3.5 | 6.4 | 0.0 | 100.0 | 134 |
| 4 or more visits | 95.5 | 3.7 | 0.6 | 0.2 | 100.0 | 1,093 |
| Total | 93.8 | 3.7 | 2.1 | 0.4 | 100.0 | 1,392 |

Note: Figures are for births in the period 0-35 months preceding the survey. Total includes 95 births for which data on antenatal care are missing.

¹ If the respondent mentioned more than one attendant, only the most qualified attendant is considered.

Table 9.6 presents vaccination coverage rates for: 1) the data obtained on the Woman's Questionnaire (i.e., based on mother's recall), and 2) the data obtained from the cards at the health facilities. Vaccination coverage with BCG, first dose of polio, and measles vaccines was similarly high based on both the mother's verbal reports and the records from the health facilities. However, mothers reported much lower coverage with the second and third doses of polio and with all doses of DPT/DT vaccines compared to what was recorded in the health cards. Because of the high dropout rate between the first and third vaccines of polio and DPT/DT according to the mother's report, the percentage of children who had received all WHO recommended vaccinations was only 28 percent, while according to the health cards, 85 percent of the children were fully immunized.

Table 9.5 Delivery characteristics: caesarean section, birth weight and size

Among births in the three years preceding the survey, the percentage of deliveries by caesarean section, and the percent distribution by birth weight and the mother's estimate of baby's size at birth, according to selected background characteristics, Uzbekistan 1996

| Background characteristic | Delivery by C-section | Birth weight | | | | Size of child at birth | | | | | Number of births |
|---------------------------|-----------------------|------------------|----------------|------------|--------------|------------------------|----------------------|-------------------|------------|--------------|------------------|
| | | Less than 2.5 kg | 2.5 kg or more | Don't know | Total | Very small | Smaller than average | Average or larger | Don't know | Total | |
| Age | | | | | | | | | | | |
| <20 | 5.1 | 5.7 | 93.4 | 0.9 | 100.0 | 1.8 | 11.0 | 87.3 | 0.0 | 100.0 | 169 |
| 20-34 | 2.4 | 4.1 | 92.2 | 3.7 | 100.0 | 0.9 | 11.5 | 86.5 | 1.1 | 100.0 | 1,150 |
| 35+ | 6.1 | 2.2 | 87.2 | 10.7 | 100.0 | 0.0 | 8.3 | 87.9 | 3.8 | 100.0 | 72 |
| Birth order | | | | | | | | | | | |
| 1 | 3.2 | 5.3 | 93.3 | 1.4 | 100.0 | 1.0 | 13.5 | 85.4 | 0.0 | 100.0 | 432 |
| 2-3 | 2.7 | 3.5 | 92.7 | 3.7 | 100.0 | 0.6 | 11.2 | 87.3 | 0.9 | 100.0 | 654 |
| 4+ | 3.1 | 4.1 | 88.9 | 6.9 | 100.0 | 1.7 | 8.0 | 87.1 | 3.3 | 100.0 | 305 |
| Residence | | | | | | | | | | | |
| Urban | 4.7 | 2.8 | 96.4 | 0.8 | 100.0 | 1.1 | 8.7 | 89.9 | 0.3 | 100.0 | 428 |
| Rural | 2.2 | 4.8 | 90.1 | 5.0 | 100.0 | 0.9 | 12.4 | 85.2 | 1.5 | 100.0 | 963 |
| Region | | | | | | | | | | | |
| Region 1 | 1.8 | 4.7 | 94.0 | 1.3 | 100.0 | 2.2 | 6.7 | 91.1 | 0.0 | 100.0 | 157 |
| Region 2 | 1.7 | 4.3 | 88.5 | 7.2 | 100.0 | 0.4 | 15.2 | 81.1 | 3.3 | 100.0 | 334 |
| Region 3 | 4.3 | 2.4 | 92.0 | 5.6 | 100.0 | 0.0 | 12.6 | 86.1 | 1.3 | 100.0 | 386 |
| Region 4 | 2.0 | 5.6 | 93.5 | 1.0 | 100.0 | 1.3 | 8.3 | 90.3 | 0.0 | 100.0 | 431 |
| Tashkent City | 8.7 | 4.7 | 95.3 | 0.0 | 100.0 | 3.5 | 12.8 | 83.7 | 0.0 | 100.0 | 84 |
| Mother's education | | | | | | | | | | | |
| Primary/Secondary | 2.2 | 5.0 | 90.2 | 4.8 | 100.0 | 0.9 | 12.6 | 84.8 | 1.6 | 100.0 | 889 |
| Secondary-special | 4.3 | 2.5 | 95.5 | 2.0 | 100.0 | 0.8 | 9.2 | 89.6 | 0.4 | 100.0 | 368 |
| Higher | 4.0 | 3.9 | 94.8 | 1.4 | 100.0 | 1.7 | 7.5 | 90.8 | 0.0 | 100.0 | 135 |
| Ethnicity | | | | | | | | | | | |
| Uzbek | 2.5 | 3.5 | 93.1 | 3.4 | 100.0 | 0.8 | 10.9 | 87.4 | 1.0 | 100.0 | 1,231 |
| Other | 6.5 | 9.4 | 84.4 | 6.2 | 100.0 | 2.3 | 14.1 | 81.0 | 2.5 | 100.0 | 161 |
| Total | 3.0 | 4.2 | 92.1 | 3.7 | 100.0 | 1.0 | 11.2 | 86.7 | 1.1 | 100.0 | 1,392 |

Note: Figures are for births in the period 0-35 months preceding the survey. Figures may not add to 100.0 due to rounding.

Table 9.6 Vaccinations by source of information

Percentage of all children age 12-23 months who have received specific vaccinations by the time of the survey, by whether the information was from a vaccination card or from the mother's report, Uzbekistan 1996

| Source of information | Percentage of children who received: | | | | | | | | | Number of children |
|-----------------------|--------------------------------------|-------|------|------|------|------|------|---------|------------------|--------------------|
| | BCG | Polio | | | DPT | | | Measles | All ¹ | |
| | | 1 | 2 | 3 | 1 | 2 | 3 | | | |
| Mother's recall | 96.2 | 95.2 | 90.3 | 62.4 | 86.6 | 68.0 | 39.3 | 89.3 | 28.4 | 466 |
| Health cards | 97.6 | 99.5 | 99.3 | 96.2 | 99.5 | 98.4 | 94.4 | 91.5 | 85.0 | 420 |

¹ All = BCG, polio 1-3, DPT/DT 1-3, and measles

Comparative analyses of 90 percent of children, for which data were available from both sources, show that mothers consistently report fewer vaccinations for the second and third doses of polio and DPT/DT. Among 1,330 individual cases analyzed, differences between the health card records and mother's verbal report were found in 880 and 712 cases for the polio and DPT/DT vaccinations, respectively. These data suggest that the mother's report of vaccination coverage is an unreliable source of information compared to the health card. For this reason, in the remainder of this report, vaccination data are presented based exclusively on health cards found in the health facilities.

Table 9.7 and Figure 9.2 show rates of vaccination coverage for children 12-23 months of age (i.e., children who should be fully vaccinated). BCG vaccination is usually given in delivery hospitals soon after delivery and is found to be nearly universal (98 percent). Almost all children (100 percent) have received the first doses of polio and DPT/DT. Coverage for the second doses of polio and DPT/DT is also nearly universal (exceeded 98 percent). The third doses of polio and DPT/DT have been received by more than 94 percent of children. This represents a dropout rate of only 3 and 5 percent for the polio and DPT/DT vaccinations, respectively. A high proportion of children (92 percent) have received the measles vaccine.

Table 9.7. Vaccinations by background characteristics

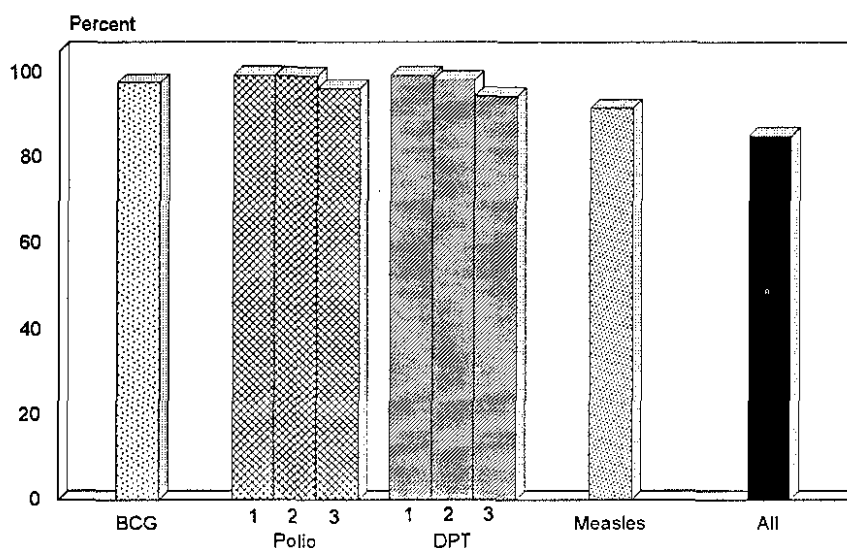
Percentage of all children 12-23 months who have received specific vaccinations by the time of the survey (according to the health card maintained at the health facilities), by background characteristics, Uzbekistan 1996

| Background characteristic | Percentage of children who received: | | | | | | | | | Number of children | |
|---------------------------|--------------------------------------|-------|-------|-------|-------|------|------|---------|------------------|--------------------|-------------|
| | BCG | Polio | | | DPT | | | Measles | All ¹ | Weighted | Un-weighted |
| | | 1 | 2 | 3 | 1 | 2 | 3 | | | | |
| Sex | | | | | | | | | | | |
| Male | 99.0 | 100.0 | 99.8 | 97.4 | 100.0 | 98.5 | 94.3 | 91.1 | 85.5 | 217 | 207 |
| Female | 96.1 | 99.0 | 98.7 | 95.0 | 99.0 | 98.3 | 94.5 | 91.8 | 84.4 | 203 | 188 |
| Residence | | | | | | | | | | | |
| Urban | 97.1 | 98.3 | 98.0 | 92.0 | 98.4 | 96.1 | 88.9 | 83.9 | 74.8 | 125 | 162 |
| Rural | 97.8 | 100.0 | 99.8 | 98.0 | 100.0 | 99.4 | 96.8 | 94.7 | 89.3 | 294 | 233 |
| Region | | | | | | | | | | | |
| Region 1 | 98.2 | 100.0 | 98.9 | 97.8 | 99.1 | 98.0 | 98.0 | 91.9 | 90.8 | 47 | 96 |
| Region 2 | 98.7 | 100.0 | 100.0 | 97.3 | 100.0 | 98.7 | 95.5 | 92.3 | 86.6 | 109 | 91 |
| Region 3 | 93.9 | 100.0 | 100.0 | 95.6 | 100.0 | 98.7 | 93.0 | 92.6 | 82.6 | 106 | 63 |
| Region 4 | 98.8 | 98.5 | 98.5 | 95.0 | 99.2 | 98.5 | 94.6 | 90.8 | 83.9 | 136 | 100 |
| Tashkent City | 100.0 | 100.0 | 97.8 | 97.8 | 97.8 | 95.6 | 86.7 | 84.4 | 82.2 | 22 | 45 |
| Mother's education | | | | | | | | | | | |
| Primary/Secondary | 96.4 | 100.0 | 100.0 | 96.6 | 100.0 | 99.1 | 95.2 | 91.8 | 83.7 | 264 | 221 |
| Secondary-special | 99.6 | 99.1 | 98.7 | 95.5 | 99.1 | 98.7 | 95.6 | 92.7 | 88.6 | 118 | 127 |
| Higher | 98.9 | 97.3 | 96.0 | 96.0 | 97.6 | 92.8 | 85.2 | 85.2 | 82.5 | 38 | 47 |
| Ethnicity | | | | | | | | | | | |
| Uzbek | 97.5 | 99.4 | 99.2 | 95.8 | 99.6 | 98.3 | 94.6 | 91.2 | 84.3 | 374 | 330 |
| Other | 98.1 | 100.0 | 100.0 | 100.0 | 99.0 | 99.0 | 92.7 | 93.6 | 90.6 | 45 | 65 |
| All children | 97.6 | 99.5 | 99.3 | 96.2 | 99.5 | 98.4 | 94.4 | 91.5 | 85.0 | 420 | 395 |

¹ All = BCG, polio 1-3, DPT/DT 1-3, and measles

Because of the high coverage with BCG, measles and individual doses of polio and DPT/DT vaccinations, the percentage of children 12-23 months of age who have received all WHO recommended vaccinations is high at 85 percent.

Figure 9.2
Vaccination Coverage Among
Children Age 12-23 Months



UDHS 1996

Table 9.7 also presents differentials in vaccination coverage according to selected background characteristics. The sex of the child makes little difference in coverage levels: the percentage of children fully immunized is only slightly greater for boys (86 percent) than girls (84 percent).

Vaccination coverage is higher in rural areas than in urban: 89 percent of rural children have been fully immunized, compared with 75 percent of urban children. Among the regions, the lowest vaccination coverage is found in Tashkent City, where 82 percent of children have been fully immunized compared with 91, 87, 83 and 84 percent in Regions 1 to 4, respectively. Relatively low vaccination coverage in urban areas and in the capital city of Tashkent is mainly due to the more pronounced dropout between the first and third doses of DPT/DT vaccination and the relatively low measles vaccination coverage rate. For example, in Tashkent City and urban areas, the DPT/DT drop out rates are 11 and 10 percent, respectively, while in rural areas the rate is only 3 percent.

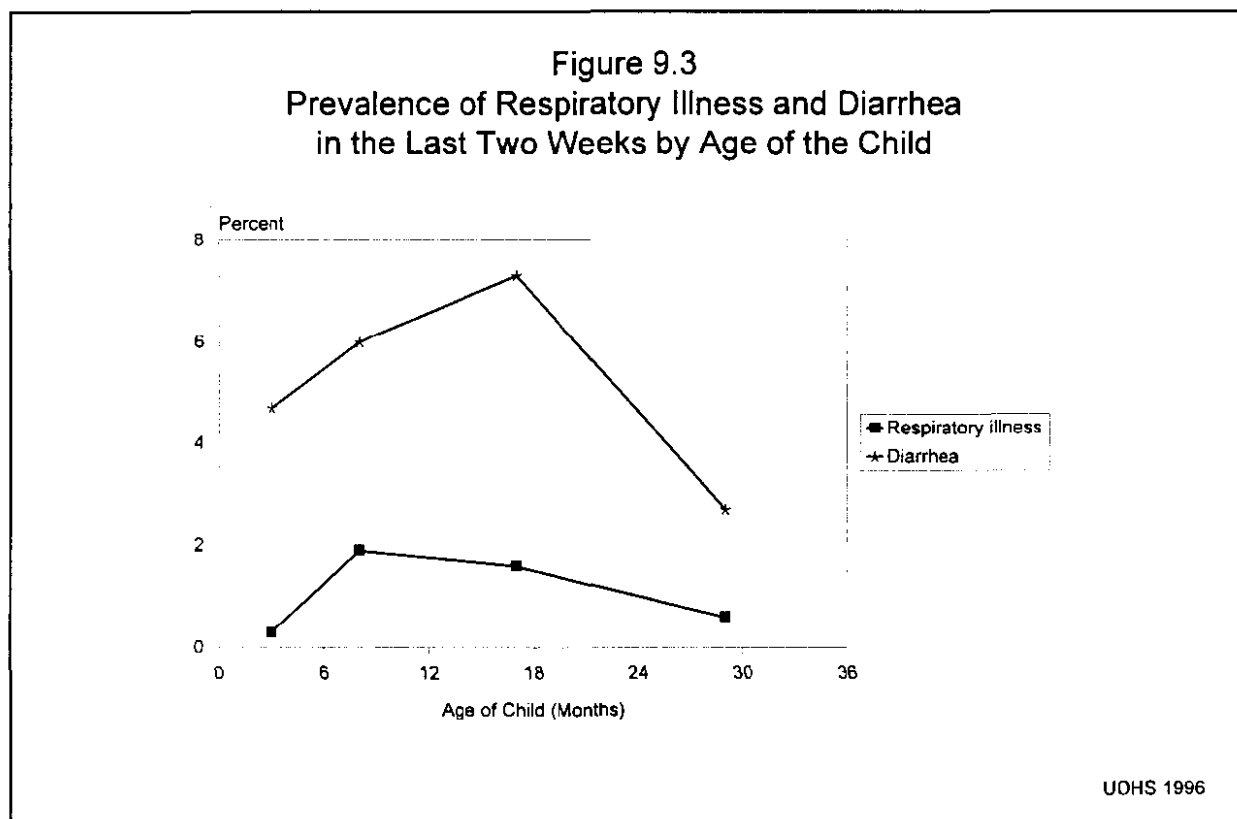
Vaccination coverage is higher among children whose mothers have completed secondary-special education (89 percent) compared with children whose mothers have completed primary/secondary education (84 percent), or higher education (83 percent). Children of Uzbek ethnicity are less likely to be immunized (84 percent) than children of other ethnic groups (91 percent).

9.5 Acute Respiratory Infection

Acute respiratory infection (ARI) is a primary cause of morbidity among children and a leading cause of infant mortality throughout the world. In Uzbekistan, approximately half of all infant deaths are attributed to ARI (Goskomprognozstat, 1994).

In the UDHS, mothers were asked if their children under three years of age had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. These symptoms are compatible with ARI. It should be noted that the morbidity data collected in the UDHS are subjective in the sense that they are based on the mother's perception of illness without validation by medical personnel. Also, the data apply to the period from June to October, while the peak prevalence of ARI is in mid-winter.

Table 9.8 and Figure 9.3 indicate that 1 percent of children under three years of age were ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey.



Differentials in ARI also exist according to age and sex of child, birth order, area of residence, education, and ethnicity. Whether these differentials in illness prevalence reflect genuine differences in morbidity or are due to differences in perceptions of illness cannot be ascertained from these data.

9.6 Fever

Table 9.8 also shows that 8 percent of children had an episode of fever during the two weeks prior to the survey. Differentials in the prevalence of fever are most pronounced by region with children living in Tashkent City and Region 2 being four times as likely to have had a fever than children living in Region

9.7 Diarrhea

Dehydration caused by severe diarrhea is a major cause of morbidity among young children. In Uzbekistan, over 16 percent of all infant deaths are attributed to diarrhea (Goskomprognozstat, 1994).

Table 9.8 Prevalence of acute respiratory infection and fever

Percentage of children under three years who were ill with a cough accompanied by short, rapid breathing (acute respiratory infection) during the two weeks preceding the survey, and the percentage of children with fever during the two weeks preceding the survey, by selected background characteristics, Uzbekistan 1996

| Background characteristic | Percentage of children with cough and rapid breathing | Percentage of children with a fever | Number of children |
|---------------------------|---|-------------------------------------|--------------------|
| Child's age | | | |
| < 6 months | 0.3 | 7.8 | 162 |
| 6-11 months | 1.9 | 7.8 | 254 |
| 12-23 months | 1.6 | 9.0 | 466 |
| 24-35 months | 0.6 | 7.7 | 444 |
| Sex | | | |
| Male | 1.5 | 7.8 | 676 |
| Female | 0.8 | 8.6 | 649 |
| Birth order | | | |
| 1 | 2.0 | 9.7 | 408 |
| 2-3 | 0.9 | 8.2 | 624 |
| 4+ | 0.5 | 6.0 | 293 |
| Residence | | | |
| Urban | 2.5 | 9.7 | 414 |
| Rural | 0.5 | 7.5 | 911 |
| Region | | | |
| Region 1 | 3.8 | 9.8 | 149 |
| Region 2 | 0.0 | 13.1 | 315 |
| Region 3 | 0.9 | 7.7 | 363 |
| Region 4 | 0.2 | 3.1 | 419 |
| Tashkent City | 6.7 | 14.7 | 80 |
| Education | | | |
| Primary/Secondary | 1.0 | 7.6 | 842 |
| Secondary-special | 1.5 | 11.1 | 357 |
| Higher | 1.2 | 4.0 | 126 |
| Ethnicity | | | |
| Uzbek | 0.9 | 7.8 | 1,177 |
| Other | 2.9 | 11.3 | 148 |
| All children | 1.2 | 8.2 | 1,325 |

Note: Figures are for children born in the period 0-35 months preceding the survey.

A prompt increase in a child's fluid intake is a simple and effective procedure to prevent diarrhea from developing into a life-threatening illness. Increased fluid intake should be administered in the form of a sugar, salt, and water solution, i.e., oral rehydration therapy (ORT). A product called Rehydron is widely available throughout Uzbekistan for use in ORT.

All women who had a birth in the last three years were asked some basic questions about the care which should be given to a child with diarrhea—namely, if the intake of liquids and solid foods should be increased and if they had ever heard of Rehydron as a treatment for diarrhea. Table 9.9 indicates that most women had heard of Rehydron (79 percent). However, a significant proportion of women indicated that it is appropriate to reduce the amount of liquid offered to a child with diarrhea (12 percent).

Table 9.9 Knowledge of diarrhea care

Percentage of mothers with births in the last three years who know about Rehydron for treatment of diarrhea and the percent distribution by knowledge of appropriate feeding during diarrhea, according to background characteristics, Uzbekistan 1996

| Background characteristic | Percent who know Rehydron | Quantities that should be given during diarrhea | | | | | | | | | | Number of mothers | |
|---------------------------|---------------------------|---|------|------|---------------------|-------|-------------|------|------|---------------------|-------|-------------------|--|
| | | Liquids | | | | | Solid foods | | | | | | |
| | | Less | Same | More | Don't know/ Missing | Total | Less | Same | More | Don't know/ Missing | Total | | |
| Age | | | | | | | | | | | | | |
| 15-19 | 80.3 | 15.7 | 21.2 | 57.5 | 5.6 | 100.0 | 60.9 | 22.9 | 10.6 | 5.6 | 100.0 | 61 | |
| 20-24 | 75.9 | 15.7 | 12.7 | 65.5 | 6.2 | 100.0 | 64.8 | 17.3 | 13.1 | 4.8 | 100.0 | 440 | |
| 25-29 | 82.1 | 11.1 | 12.7 | 72.8 | 3.5 | 100.0 | 63.5 | 18.1 | 15.8 | 2.5 | 100.0 | 375 | |
| 30-34 | 79.6 | 8.7 | 13.8 | 72.4 | 5.1 | 100.0 | 63.8 | 14.9 | 18.0 | 3.2 | 100.0 | 227 | |
| 35+ | 75.2 | 8.9 | 19.5 | 65.2 | 6.4 | 100.0 | 62.6 | 20.7 | 7.0 | 9.7 | 100.0 | 111 | |
| Residence | | | | | | | | | | | | | |
| Urban | 84.3 | 13.0 | 8.2 | 74.0 | 4.8 | 100.0 | 70.0 | 14.0 | 12.1 | 3.9 | 100.0 | 383 | |
| Rural | 76.0 | 12.0 | 16.6 | 66.1 | 5.3 | 100.0 | 61.0 | 19.4 | 15.1 | 4.5 | 100.0 | 830 | |
| Region | | | | | | | | | | | | | |
| Region 1 | 97.0 | 18.4 | 18.4 | 63.2 | 0.0 | 100.0 | 69.6 | 25.9 | 4.4 | 0.0 | 100.0 | 132 | |
| Region 2 | 82.7 | 8.1 | 8.1 | 81.0 | 2.7 | 100.0 | 83.9 | 8.9 | 5.0 | 2.2 | 100.0 | 280 | |
| Region 3 | 75.0 | 13.7 | 26.0 | 49.1 | 11.1 | 100.0 | 54.0 | 28.6 | 8.7 | 8.7 | 100.0 | 338 | |
| Region 4 | 70.3 | 12.1 | 7.1 | 76.6 | 4.2 | 100.0 | 52.6 | 12.2 | 31.3 | 3.9 | 100.0 | 387 | |
| Tashkent City | 90.3 | 12.3 | 8.4 | 78.1 | 1.3 | 100.0 | 81.3 | 14.8 | 1.9 | 1.9 | 100.0 | 76 | |
| Mother's education | | | | | | | | | | | | | |
| Primary/Secondary | 72.8 | 12.8 | 14.8 | 65.8 | 6.6 | 100.0 | 60.1 | 18.1 | 16.9 | 4.9 | 100.0 | 768 | |
| Secondary-special | 88.1 | 13.6 | 12.0 | 72.0 | 2.5 | 100.0 | 68.9 | 19.1 | 9.6 | 2.4 | 100.0 | 328 | |
| Higher | 90.5 | 5.9 | 13.8 | 77.2 | 3.1 | 100.0 | 74.1 | 11.0 | 9.3 | 5.6 | 100.0 | 117 | |
| Ethnicity | | | | | | | | | | | | | |
| Uzbek | 77.8 | 12.0 | 14.3 | 68.6 | 5.1 | 100.0 | 62.8 | 17.9 | 15.1 | 4.2 | 100.0 | 1,070 | |
| Other | 85.0 | 14.9 | 11.4 | 68.6 | 5.1 | 100.0 | 71.3 | 16.3 | 7.5 | 4.9 | 100.0 | 144 | |
| All mothers | 78.6 | 12.3 | 13.9 | 68.6 | 5.1 | 100.0 | 63.8 | 17.7 | 14.2 | 4.3 | 100.0 | 1,213 | |

Mothers were also asked if their children had an episode of diarrhea in the last two weeks and, if so, whether there was blood in the stools. The results of these questions are presented in Table 9.10.

Table 9.10 and Figure 9.3 indicate that 5 percent of children under three had experienced diarrhea and that 0.3 percent had blood with the diarrhea. The age pattern of diarrhea shows a broad peak extending from late infancy (6-11 months) through age one (12-23 months). These are the ages when a child begins to crawl and walk, and therefore experiences more exposure to the environment. The prevalence of diarrhea among children under 6 months of age is 5 percent, increases to a peak among children ages 12-23 months (7 percent) and declines at 24-35 months of age (3 percent).

Table 9.10 also indicates that region is associated with the most pronounced differentials in diarrhea. Children in Tashkent City and Region 1 are most likely to have diarrhea (9 and 8 percent, respectively), while children in Regions 2 and 4 are less likely to have diarrhea (4 and 3 percent, respectively).

Table 9.11 shows the treatment received by children who had diarrhea in the last two weeks. Thirty-four percent of children with diarrhea were taken to a health facility or health provider for treatment. In terms of other treatments, 31 percent of children received Rehydron and 9 percent received a homemade sugar-salt-water solution, so that 37 percent received some type of ORT. Overall, increased fluids were used to treat 77 percent of children with diarrhea.

Table 9.12 summarizes the feeding practices which mothers followed when their children had diarrhea. Ninety-four percent of children were given fluids in either the same or increased amounts, and only 5 percent were given reduced amounts of fluids.

| Table 9.10 Prevalence of diarrhea | | | |
|--|-----------------------------------|---------------------|--------------------|
| Percentage of children under three years who had diarrhea and diarrhea with blood in the two weeks preceding the survey, by selected background characteristics, Uzbekistan 1996 | | | |
| Background characteristic | Diarrhea in the preceding 2 weeks | | Number of children |
| | All diarrhea | Diarrhea with blood | |
| Child's age | | | |
| < 6 months | 4.7 | 0.0 | 162 |
| 6-11 months | 6.0 | 0.7 | 254 |
| 12-23 months | 7.3 | 0.1 | 466 |
| 24-35 months | 2.7 | 0.4 | 444 |
| Sex | | | |
| Male | 4.7 | 0.1 | 676 |
| Female | 5.7 | 0.6 | 649 |
| Birth order | | | |
| 1 | 6.2 | 0.4 | 408 |
| 2-3 | 4.3 | 0.4 | 624 |
| 4+ | 5.6 | 0.0 | 293 |
| Residence | | | |
| Urban | 8.5 | 0.6 | 414 |
| Rural | 3.7 | 0.2 | 911 |
| Region | | | |
| Region 1 | 8.3 | 0.6 | 149 |
| Region 2 | 4.0 | 0.4 | 315 |
| Region 3 | 6.9 | 0.4 | 363 |
| Region 4 | 2.7 | 0.0 | 419 |
| Tashkent City | 9.2 | 0.6 | 80 |
| Mother's education | | | |
| Primary/Secondary | 4.6 | 0.3 | 842 |
| Secondary-special | 6.0 | 0.3 | 357 |
| Higher | 6.4 | 0.3 | 126 |
| Ethnicity | | | |
| Uzbek | 5.3 | 0.3 | 1,177 |
| Other | 4.0 | 0.6 | 148 |
| All children | 5.2 | 0.3 | 1,325 |

Note: Figures are for children born in the period 0-35 months preceding the survey.

Table 9.11 Treatment of diarrhea

Among children under three years who had diarrhea in the two weeks preceding the survey, the percentage taken to a health facility or provider for treatment, the percentage who received oral rehydration therapy, the percentage who received increased fluids, and the percentage who received neither oral rehydration therapy nor increased fluids, Uzbekistan 1996

| Treatments received | Percentage |
|---|------------|
| Taken to a health facility or provider ¹ | 34.0 |
| Received oral rehydration therapy | |
| Rehydron | 31.3 |
| Home sugar-salt-water solution | 8.5 |
| Either | 37.1 |
| Received increased fluids | 77.1 |
| Neither Rehydron, home sugar-salt-water solution nor increased fluids | 13.2 |
| Number of children | 699 |

¹ Includes health center, hospital, clinic and private doctor

Table 9.12 Feeding practices during diarrhea

Percent distribution of children under three who had diarrhea in the past two weeks by amount of solid foods given and amount of fluids given, Uzbekistan 1996

| Feeding practices | Total |
|------------------------------|-------|
| Amount of solid foods | |
| Same | 19.6 |
| Increase | 9.1 |
| Decrease | 69.2 |
| Don't know/missing | 2.1 |
| Amount of fluids | |
| Same | 16.4 |
| Increase | 77.1 |
| Decrease | 5.0 |
| Don't know/missing | 1.5 |
| Total | 100.0 |
| Number of children | 69 |

Note: Figures are for children born in the period 0-35 months preceding the survey.

CHAPTER 10

NUTRITION OF WOMEN AND CHILDREN

Akhror B. Yarkulov, Farida M. Ayupova and Parakhad R. Menlikulov

This chapter covers two topics: infant feeding practices and the nutritional status of women and children. The former is described in terms of breastfeeding practices, supplementary feeding practices, and the use of bottles for supplementary feeding. Nutritional status is reported in terms of the height and weight of women and children.

10.1 Breastfeeding and Supplementation

Infant feeding practices have important influences on both the child and the mother; for example, they determine a child's nutritional status and susceptibility to morbidity. Additionally, breastfeeding affects the health of a woman because of its influence on the return of ovulation following a birth and a woman's risk of another pregnancy.

In the 1996 UDHS, for each child born in the last three years, mothers were asked if they had breastfed the child and, if so, how long after delivery breastfeeding was initiated. Women were also asked if their children were still breastfeeding and the age at which supplemental feeding began. Finally, for children not currently breastfeeding, the age at which they stopped breastfeeding was obtained.

With these data, it is possible to look at several aspects of breastfeeding. For children born in the last three years, the length of time between delivery and initiation of breastfeeding can be investigated. From the data on current breastfeeding status (i.e., status at the time of the survey), the percentage of children breastfeeding by age can be calculated as well as median durations of breastfeeding.

10.1.1 Initiation of Breastfeeding

Colostrum, which is contained in a mother's breast milk, has been proven to be highly nutritious and to contain the antibodies necessary to protect babies from infection before their immune system is fully mature.

Table 10.1 indicates that breastfeeding is almost universal in Uzbekistan—96 percent of children born in the three years preceding the survey were breastfed; 19 percent within an hour of delivery and 40 percent within 24 hours of delivery.

There was no significant variation between population groups in the percent of children breastfed. However, there were significant differences in the timing of initiation of breastfeeding. Initiation within an hour of delivery is more likely among women in Regions 1, 2, and 4 (33, 23 and 22 percent, respectively) than in Tashkent City (6 percent) and Region 3 (8 percent). Pronounced differentials in the initiation of breastfeeding exist by mother's ethnicity. Breastfeeding was more likely within an hour of delivery among non-Uzbek women (29 percent) than among Uzbek women (18 percent) and this differential was maintained at 24 hours of delivery (54 and 39 percent, respectively). It appears that more rapid initiation of breastfeeding following delivery would benefit many children in Uzbekistan and would be particularly beneficial to Uzbek children.

Table 10.1 Initial breastfeeding

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

| Background characteristic | Percentage ever breastfed | Among last-born children, percentage who started breastfeeding: | | Number of children |
|---------------------------|---------------------------|---|------------------------------------|--------------------|
| | | Within 1 hour of birth | Within 1 day of birth ¹ | |
| Sex | | | | |
| Male | 96.1 | 18.3 | 40.8 | 717 |
| Female | 96.1 | 19.6 | 39.8 | 675 |
| Residence | | | | |
| Urban | 96.6 | 16.6 | 36.7 | 428 |
| Rural | 95.9 | 20.0 | 41.9 | 963 |
| Region | | | | |
| Region 1 | 98.4 | 33.4 | 52.3 | 157 |
| Region 2 | 97.3 | 22.7 | 42.3 | 334 |
| Region 3 | 94.5 | 8.4 | 17.5 | 386 |
| Region 4 | 95.9 | 22.3 | 58.2 | 431 |
| Tashkent City | 95.3 | 6.1 | 20.7 | 84 |
| Mother's education | | | | |
| Primary/Secondary | 95.6 | 18.5 | 39.2 | 889 |
| Secondary-special | 96.6 | 20.4 | 43.9 | 368 |
| Higher | 98.2 | 18.0 | 37.9 | 135 |
| Ethnicity | | | | |
| Uzbek | 96.3 | 17.6 | 38.5 | 1,231 |
| Other | 94.7 | 29.3 | 54.4 | 161 |
| Place of delivery | | | | |
| Health facility | 96.4 | 17.2 | 38.7 | 1,310 |
| At home | 91.7 | 48.1 | 68.6 | 82 |
| All children | 96.1 | 18.9 | 40.3 | 1,392 |

¹ Includes children who started breastfeeding within 1 hour of birth.

10.1.2 Age Pattern of Breastfeeding

Research has shown that breast milk contains all the nutrients needed by children in the first several months of life. Supplementation of breast milk before four months of age is not necessary and is discouraged since early supplementation increases the risk of a child having diarrhea. Early supplementation also reduces a woman's output of breast milk since milk production is influenced by the frequency and intensity of breastfeeding.

Table 10.2 shows information on the breastfeeding status of children by age in months. As can be seen, a high proportion of children are breastfed in Uzbekistan. At 0-3 months of age, 98 percent of children are breastfed and at 8-11 months, 83 percent are still breastfed. This falls to 35 percent by 20-23 months and almost all children have stopped breastfeeding by their third birthday.

Table 10.2 Breastfeeding status

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

| Age in months | Percentage of living children who are: | | | | Total | Number of living children |
|---------------|--|------------------------|--------------------|-------------|-------|---------------------------|
| | Not breast-feeding | Exclusively breast-fed | Breastfeeding and: | | | |
| | | | Plain water only | Supplements | | |
| 0-3 | 2.4 | 4.1 | 28.7 | 64.8 | 100.0 | 96 |
| 4-7 | 10.3 | 0.0 | 4.5 | 85.2 | 100.0 | 138 |
| 8-11 | 16.5 | 0.0 | 0.8 | 82.7 | 100.0 | 182 |
| 12-15 | 32.2 | 0.0 | 0.0 | 67.8 | 100.0 | 164 |
| 16-19 | 49.4 | 0.0 | 0.0 | 50.6 | 100.0 | 157 |
| 20-23 | 64.6 | 0.0 | 0.0 | 35.4 | 100.0 | 144 |
| 24-27 | 82.8 | 0.0 | 0.0 | 17.2 | 100.0 | 169 |
| 28-31 | 89.4 | 0.0 | 0.0 | 10.6 | 100.0 | 136 |
| 32-35 | 96.6 | 0.0 | 0.0 | 3.4 | 100.0 | 138 |
| 0-3 months | 2.4 | 4.1 | 28.7 | 64.8 | 100.0 | 96 |
| 4-6 months | 9.5 | 0.0 | 6.2 | 84.4 | 100.0 | 101 |
| 7-9 months | 11.4 | 0.0 | 1.1 | 87.4 | 100.0 | 122 |

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

However, while breastfeeding is lengthy, supplementary feeding starts early in Uzbekistan. Exclusive breastfeeding during early infancy, as recommended by the World Health Organization,¹ is not common. At ages 0-3 months, only 4 percent of children were exclusively breastfed. During these early months of infancy, most breastfed children receive either plain water (29 percent) or other foods and liquids (65 percent).

Table 10.3 shows information on the median duration of breastfeeding. For all of Uzbekistan, the median duration of any breastfeeding is lengthy (17 months) but the duration of exclusive and full breastfeeding (breastfeeding plus plain water) are short (0.4 and 0.7 months, respectively).

The most pronounced differentials in breastfeeding are by region and ethnicity. The median duration of any breastfeeding is longer in Regions 1, 2, and 4 (19 months) than in Tashkent City and Region 3 (12 months). The median duration of any breastfeeding is almost equal for Uzbek and non-Uzbek women (17 and 18 months, respectively).

Ninety-two percent of children under six months of age were reported to have been breastfed six or more times in the 24 hours preceding the survey.

10.1.3 Types of Supplemental Foods

In the UDHS, mothers were asked about the types of foods that were given to children in the 24 hours preceding the survey. The foods given to a child are not mutually exclusive, and as a result, a child could be reported as receiving several types of food.

¹ Exclusive breastfeeding is the practice of feeding with breast milk only. Supplementation with water is discouraged (WHO/UNICEF, 1990).

Table 10.3 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and full breastfeeding among children under three years of age, and the percentage of children under 6 months of age who were breastfed six or more times in the 24 hours preceding the interview, according to background characteristics, Uzbekistan 1996

| Background characteristic | Median duration in months ¹ | | | Number of children under 3 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 | 18.8 | 0.4 | 0.7 | 717 | 90.6 | 84 |
| Female | 15.6 | 0.4 | 0.9 | 675 | 92.8 | 78 |
| Residence | | | | | | |
| Urban | 15.7 | 0.4 | 0.6 | 428 | 84.2 | 59 |
| Rural | 17.9 | 0.4 | 1.1 | 963 | 95.9 | 103 |
| Region | | | | | | |
| Region 1 | 19.3 | 0.6 | 1.7 | 157 | * | 20 |
| Region 2 | 19.0 | 0.4 | 0.5 | 334 | (95.1) | 43 |
| Region 3 | 11.9 | 0.4 | 1.4 | 386 | (87.4) | 48 |
| Region 4 | 19.2 | 0.4 | 1.6 | 431 | (97.2) | 37 |
| Tashkent City | 12.3 | 0.4 | 0.6 | 84 | * | 13 |
| Education | | | | | | |
| Primary/Secondary | 18.0 | 0.4 | 0.8 | 889 | 90.0 | 98 |
| Secondary-special | 16.3 | 0.4 | 0.6 | 368 | (94.6) | 43 |
| Higher | 13.2 | 0.4 | 1.2 | 135 | * | 20 |
| Ethnicity | | | | | | |
| Uzbek | 17.2 | 0.4 | 0.7 | 1,231 | 91.6 | 143 |
| Other | 18.1 | 0.6 | 1.7 | 161 | * | 19 |
| Total | 17.3 | 0.4 | 0.7 | 1,392 | 91.7 | 162 |
| Mean | 17.8 | 0.9 | 2.2 | - | 96.3 | - |
| Prevalence/Incidence ³ | - | - | - | - | - | - |
| | 16.8 | 0.1 | 1.0 | - | - | - |

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.

¹ Medians and means are based on current status

² Either exclusive breastfeeding or breastfeeding and plain water only

³ Prevalence-incidence mean

Table 10.4 indicates the types of food given to children according to breastfeeding status. Among children 0-3 months of age who are breastfeeding, infant formula is commonly used to supplement breast milk (12 percent) as well as powdered and evaporated milk (23 percent). Tea is especially popular in Uzbekistan and was given in the last 24 hours to 49 percent of infants 0-3 months of age.

Meat, poultry, fish, and eggs contain protein and other nutrients important for the physical and mental development of young children. Nineteen percent of breastfeeding infants age 4-7 months receive these foods. Fruits and vegetables are also commonly given to infants who are breastfeeding; 35 percent of infants 4-7 months of age were given these foods in the 24 hours before the survey interview.

Table 10.4 Types of food received by children in preceding 24 hours

Percentage of children under 36 months of age by type of food received in the 24 hours before the interview, and the percentage using a bottle with a nipple, according to breastfeeding status and child's age in months, Uzbekistan 1996

| Age (in months) | Breast milk only | Infant formula | Powdered/ evapo- rated milk | Fer- mented milk products ¹ | Plain water | Juice | Tea | Other liquids | Poultry/ fish/ eggs/ meat | Grain/ flour/ cereal | Tubers/ potatoes | Fruit/ vege- tables | Sweets/ choco- late | Other | Using bottle with a nipple | Number of children |
|-----------------------------------|------------------------|-------------------|--------------------------------------|---|----------------|-------|------|------------------|------------------------------------|----------------------------|---------------------|---------------------------|---------------------------|-------|-------------------------------------|--------------------------|
| BREASTFEEDING CHILDREN | | | | | | | | | | | | | | | | |
| 0-3 | 4.2 | 12.0 | 23.4 | 3.5 | 85.1 | 9.5 | 48.5 | 26.9 | 2.9 | 9.1 | 9.0 | 6.1 | 2.8 | 1.7 | 34.7 | 94 |
| 4-7 | 0.0 | 20.2 | 45.2 | 21.3 | 89.4 | 18.0 | 85.2 | 44.4 | 18.5 | 50.2 | 37.7 | 35.1 | 23.9 | 11.8 | 35.6 | 124 |
| 8-11 | 0.0 | 31.2 | 65.0 | 44.4 | 91.6 | 22.6 | 98.1 | 67.4 | 36.2 | 81.9 | 78.8 | 75.1 | 53.9 | 21.9 | 27.6 | 152 |
| 0-11 | 1.1 | 22.6 | 47.8 | 26.2 | 89.2 | 17.7 | 81.2 | 49.4 | 21.8 | 52.8 | 47.3 | 44.2 | 30.9 | 13.3 | 32.1 | 369 |
| 12-23 | 0.0 | 31.1 | 58.4 | 56.6 | 97.0 | 30.3 | 94.9 | 75.4 | 58.0 | 89.2 | 76.7 | 85.2 | 68.7 | 28.5 | 17.1 | 242 |
| Total | 0.6 | 26.4 | 52.2 | 39.7 | 92.9 | 23.4 | 87.6 | 61.4 | 38.3 | 69.5 | 60.1 | 62.9 | 48.8 | 19.2 | 24.9 | 659 |
| NON-BREASTFEEDING CHILDREN | | | | | | | | | | | | | | | | |
| 0-11 | NA | 22.7 | 81.1 | 50.0 | 98.4 | 40.0 | 92.3 | 79.9 | 51.4 | 93.9 | 80.0 | 86.1 | 68.1 | 27.4 | 43.9 | 30 |
| 12-23 | NA | 31.1 | 60.9 | 58.8 | 93.4 | 38.3 | 97.8 | 82.2 | 71.4 | 92.1 | 88.9 | 95.3 | 82.6 | 32.7 | 20.3 | 224 |
| 24-29 | NA | 28.4 | 67.0 | 64.6 | 95.2 | 51.0 | 99.8 | 87.0 | 78.8 | 94.1 | 90.9 | 98.5 | 83.3 | 35.6 | 8.9 | 200 |
| 30-35 | NA | 24.8 | 61.2 | 61.3 | 97.4 | 41.6 | 99.2 | 83.0 | 79.6 | 93.8 | 89.2 | 97.9 | 81.2 | 36.3 | 9.7 | 195 |
| Total | NA | 28.8 | 64.1 | 60.3 | 95.1 | 43.0 | 97.9 | 83.0 | 73.6 | 92.3 | 88.0 | 95.8 | 80.4 | 33.7 | 15.9 | 666 |

NA = Not applicable

A relatively high percentage of children still being breastfed are also fed using a bottle with a nipple: 35 percent at age 0-3 months and 36 percent at 4-7 months of age.

Among non-breastfeeding children, a high proportion at all ages receive powdered or evaporated milk (64 percent). Also, a high proportion receive high protein foods (poultry, fish, meat, or eggs) after the first birthday (71 percent of children).

10.2 Nutritional Status of Children under Age Three

The data on height and weight of children in the UDHS permit the evaluation of nutritional status and the identification of subgroups of children that are at increased risk of faltered growth and morbidity.

10.2.1 Measures of Nutritional Status in Childhood

The 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. The distribution of children in such a well-nourished population can be used as a reference for assessing the nutritional status of children in other populations. The reference population recommended by the World Health Organization, which is used in this report, is the NCHS (U.S. National Center for Health Statistics) standard.

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

- height-for-age
- weight-for-height
- weight-for-age.

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 growth. A child who is below minus two standard deviations (-2SD) 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 chronic undernutrition. If a child is below minus three standard deviations (-3SD) from the reference median, the child is considered to be severely stunted.

Weight-for-height describes current nutritional status. A child who is below minus two standard deviations (-2SD) from the reference median is considered too thin for his/her height, or *wasted*, a condition reflecting an acute or recent nutritional deficit. If a child is below minus three standard deviations (-3SD) from the reference median, the child is considered severely wasted.

The weight-for-age index does not distinguish between chronic undernutrition (stunting) and acute undernutrition (wasting). A child can be underweight for age because he is stunted, because he is wasted, or because he is both wasted and stunted. Weight-for-age is a good overall indicator of a population's nutritional health.

In a healthy, well-nourished population of children, it is expected that 2.3 percent of children will fall below minus two standard deviations (-2SD) of the median of the reference population on these nutritional indices (i.e., will be classified as moderately or severely undernourished).

In the survey, all surviving children born since January 1993 were eligible for height and weight measurement. Of the 1,325 children under three years of age at the time of the survey, plausible values for height and weight were obtained for 989 children (75 percent). The most commonly reported reason for not measuring a child was that the child was not at home. The following analysis pertains to the 989 children, age 0-35 months, for whom complete and plausible anthropometric data were collected.

10.2.2 Levels of Child Undernutrition in Uzbekistan

Table 10.5 shows the percentage of children under three years of age classified as undernourished according to demographic characteristics. For all of Uzbekistan, 31 percent of children are moderately or severely stunted, 12 percent are moderately or severely wasted, and 19 percent are moderately or severely underweight for age.

Table 10.5 Nutritional status of children by demographic characteristics

Percentage of children 0-35 months of age who are classified as undernourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by demographic characteristics, Uzbekistan 1996

| Demographic characteristic | Height-for-age | | Weight-for-height | | Weight-for-age | | Number of children |
|-----------------------------------|------------------------|-------------------------------------|------------------------|-------------------------------------|------------------------|-------------------------------------|--------------------|
| | Percentage below -3 SD | Percentage below -2 SD ¹ | Percentage below -3 SD | Percentage below -2 SD ¹ | Percentage below -3 SD | Percentage below -2 SD ¹ | |
| Age | | | | | | | |
| <6 months | 4.2 | 8.4 | 4.8 | 17.1 | 0.8 | 6.0 | 123 |
| 6-11 months | 11.2 | 26.1 | 1.9 | 10.3 | 4.9 | 17.6 | 192 |
| 12-23 months | 18.3 | 43.5 | 3.0 | 13.1 | 7.0 | 24.8 | 335 |
| 24-35 months | 14.8 | 30.4 | 2.4 | 8.9 | 4.6 | 18.2 | 339 |
| Sex | | | | | | | |
| Male | 16.6 | 33.9 | 2.6 | 12.6 | 5.8 | 20.7 | 509 |
| Female | 11.3 | 28.5 | 3.1 | 10.6 | 4.2 | 16.8 | 480 |
| Birth order | | | | | | | |
| 1 | 11.6 | 27.4 | 2.6 | 9.0 | 3.3 | 11.8 | 313 |
| 2-3 | 14.5 | 30.7 | 3.0 | 11.6 | 4.4 | 20.0 | 465 |
| 4+ | 16.4 | 38.3 | 2.8 | 15.6 | 9.0 | 26.5 | 211 |
| Birth interval² | | | | | | | |
| First birth | 11.6 | 27.4 | 2.5 | 9.0 | 3.3 | 11.8 | 314 |
| < 24 months | 18.0 | 33.6 | 4.0 | 13.9 | 6.3 | 28.0 | 196 |
| 24-47 months | 14.2 | 31.5 | 2.6 | 13.8 | 6.2 | 20.9 | 348 |
| 48+ months | 13.3 | 36.7 | 2.2 | 8.7 | 4.3 | 16.4 | 131 |
| Total | 14.0 | 31.3 | 2.8 | 11.6 | 5.0 | 18.8 | 989 |

Note: Figures are for children born in the period 0-35 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 undernourished 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

² Excludes first births

In terms of demographic characteristics, the most pronounced differentials are found by age and birth interval. Children age 12-23 months and 24-35 months are less well-nourished than infants by almost all indices of undernutrition. Children born within a birth interval of less than 24 months are generally less well-nourished than children born after longer birth intervals. Figure 10.1 shows nutritional differentials by

selected demographic variables in terms of the stunting index. Moderate or severe stunting is found in a significant proportion of children 12-23 months of age (44 percent) and those born within a birth interval of less than 24 months and more than 48 months (34 and 37 percent, respectively).

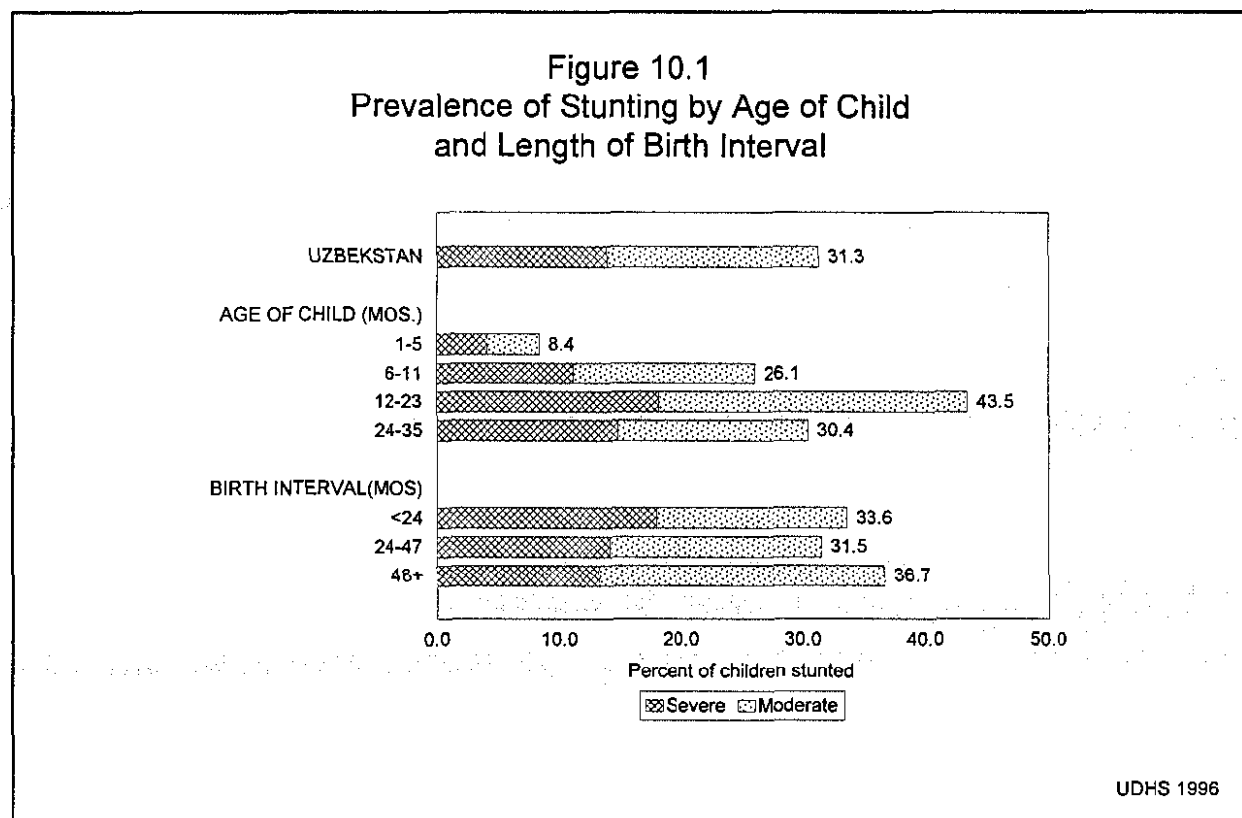


Table 10.6 shows nutritional indices by background characteristics. In terms of almost all indices, children in urban areas suffer undernutrition as much as children in rural areas. Children in Tashkent City suffer less undernutrition than children in the other regions. Figure 10.2 shows nutritional differentials in terms of the stunting index. Moderate or severe stunting is found in a significant proportion of children in urban and rural areas (33 and 31 percent, respectively), those in the Regions 2 and 4 (40 and 35 percent, respectively), and those born to women with a primary/secondary education (34 percent). Differentials by ethnicity are small.

10.3 Women's Anthropometric Status

In the UDHS, data were collected on the height and weight of all women 15-49 years of age. Measurements were obtained for 99 percent of surveyed women. Two indices of women's nutritional status are presented in this report: the height of women and the body mass index (BMI)—an indicator combining height and weight data.

A woman's height is associated with past socioeconomic status and her access to nutritional foods during childhood and adolescence. Maternal height can be used to predict the risk of difficult delivery, since small stature is often associated with small pelvis size. The height below which a woman can be considered at risk is in the range of 140-150 centimeters.

Table 10.6 Nutritional status of children by background characteristics

Percentage of children 0-35 months of age who are classified as undernourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Uzbekistan 1996

| Background characteristic | Height-for-age | | Weight-for-height | | Weight-for-age | | Number of children |
|---------------------------|------------------------|-------------------------------------|------------------------|-------------------------------------|------------------------|-------------------------------------|--------------------|
| | Percentage below -3 SD | Percentage below -2 SD ¹ | Percentage below -3 SD | Percentage below -2 SD ¹ | Percentage below -3 SD | Percentage below -2 SD ¹ | |
| Residence | | | | | | | |
| Urban | 14.3 | 32.6 | 2.2 | 10.2 | 5.7 | 16.6 | 285 |
| Rural | 13.9 | 30.7 | 3.1 | 12.2 | 4.7 | 19.7 | 704 |
| Region | | | | | | | |
| Region 1 | 9.9 | 26.7 | 1.9 | 6.8 | 2.6 | 14.5 | 128 |
| Region 2 | 20.3 | 39.8 | 4.4 | 14.2 | 4.9 | 24.5 | 253 |
| Region 3 | 13.0 | 24.1 | 3.5 | 17.9 | 8.0 | 16.3 | 290 |
| Region 4 | 12.8 | 35.2 | 1.6 | 6.6 | 3.6 | 21.4 | 260 |
| Tashkent City | 5.9 | 22.7 | 0.0 | 2.5 | 2.5 | 4.2 | 58 |
| Mother's education | | | | | | | |
| Primary/Secondary | 16.3 | 33.8 | 3.5 | 13.9 | 6.3 | 24.7 | 620 |
| Secondary-special | 11.0 | 29.4 | 1.7 | 9.5 | 3.6 | 10.3 | 269 |
| Higher | 7.6 | 20.8 | 1.4 | 3.3 | 0.8 | 5.2 | 100 |
| Ethnicity | | | | | | | |
| Uzbek | 14.4 | 31.4 | 2.6 | 12.0 | 5.3 | 19.3 | 869 |
| Other | 11.3 | 30.2 | 4.6 | 9.0 | 3.1 | 15.4 | 120 |
| Total | 14.0 | 31.3 | 2.8 | 11.6 | 5.0 | 18.8 | 989 |

Note: Figures are for children born in the period 0-35 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 undernourished 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

Table 10.7 shows the percent distribution of women by height. The mean height of women is 159 cm. One percent of women are under 145 cm in height.²

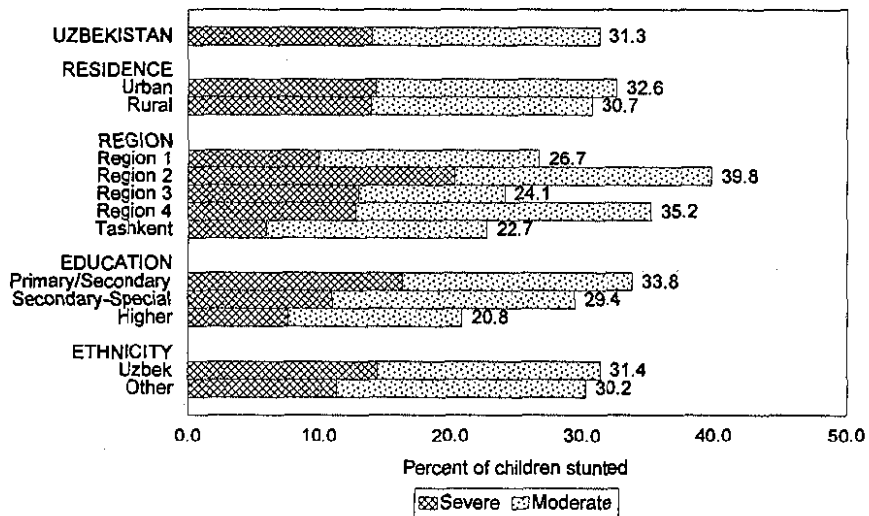
Indices of body mass are used to assess thinness and obesity. The most common is the body mass index (BMI), which is defined as weight (in kilograms) divided by squared height (in meters). A cutoff point of 18.5 kg/m² has been recommended for defining energy deficiency among nonpregnant women. Table 10.9 indicates that the mean BMI among nonpregnant, weighed and measured women³ is 22.7, with 10 percent having a BMI below 18.5 kg/m².

Table 10.8 shows mean values and the percent distribution of women for the BMI index by background characteristics. There are significant differentials in the percentage of women with a BMI less than 18.5 kg/m². Women in the 15-19 age group, those residing in the Regions 2 and 3, those with primary/secondary education, and those living in rural areas are more likely to have a low BMI value than other women.

² If 150 cm is used as the cutoff, 6 percent of women would be considered at risk.

³ Pregnant women were excluded from the BMI analyses because precise data on gestational age which are necessary for adjustments were not available.

Figure 10.2
Prevalence of Stunting by Background Characteristics



UDHS 1996

Table 10.7 Anthropometric indicators of female nutritional status

Percent distribution and mean and standard deviation for all women by height, weight, and body mass index (BMI), Uzbekistan 1996

| Indicator | Percent | Percent distribution including missing |
|-------------------------------|---------|--|
| Height (cm) | | |
| 130.0-134.9 | 0.1 | 0.1 |
| 135.0-139.9 | 0.1 | 0.1 |
| 140.0-144.9 | 0.9 | 0.9 |
| 145.0-149.9 | 4.5 | 4.5 |
| 150.0-154.9 | 17.7 | 17.6 |
| 155.0-159.9 | 31.0 | 30.8 |
| 160.0-164.9 | 25.7 | 25.6 |
| 165.0-169.9 | 15.1 | 15.0 |
| 170.0-174.9 | 3.9 | 3.8 |
| 175.0-179.9 | 0.9 | 0.9 |
| ≥180.0 | 0.1 | 0.1 |
| Missing | - | 0.6 |
| Total | 100.0 | 100.0 |
| Mean | 159.3 | - |
| Standard deviation | 6.3 | - |
| Number of women | 4,387 | 4,415 |
| BMI (kg/m²) | | |
| 12.0-15.9 | 0.8 | 0.8 |
| 16.0-16.9 | 1.7 | 1.7 |
| 17.0-18.4 | 7.8 | 7.8 |
| 18.5-20.4 | 20.1 | 19.9 |
| 20.5-22.9 | 31.7 | 31.4 |
| 23.0-24.9 | 16.2 | 16.1 |
| 25.0-26.9 | 9.8 | 9.7 |
| 27.0-28.9 | 4.9 | 4.9 |
| 29.0-29.9 | 1.5 | 1.5 |
| 30.0-31.9 | 2.1 | 2.0 |
| 32.0-33.9 | 1.4 | 1.4 |
| 34.0-35.9 | 0.9 | 0.9 |
| 36.0-37.9 | 0.5 | 0.5 |
| 38.0-39.9 | 0.4 | 0.4 |
| ≥40.0 | 0.2 | 0.2 |
| Missing | - | 0.8 |
| Total | 100.0 | 100.0 |
| Mean | 22.7 | - |
| Standard deviation | 4.0 | - |
| Number of women | 4,037 | 4,069 |

Note: The BMI index excludes pregnant women and those who are less than 3 months postpartum.

Table 10.8 Nutritional status of women by background characteristics

Mean height and percentage of women shorter than 145 centimeters, mean body mass index (BMI), and percent distribution by BMI, for women age 15-49, by selected background characteristics, Uzbekistan 1996

| Background characteristic | Height | | | Body Mass Index | | | | Total | Number |
|---------------------------|--------------|-----------------|--------------|-----------------|----------------------|-------------|------------|--------------|--------------|
| | Mean | Percent <145 cm | Number | Mean | Percent distribution | | | | |
| | | | | | <18.5 | 18.5-29.9 | ≥ 30.0 | | |
| Age | | | | | | | | | |
| 15-19 | 158.3 | 1.7 | 976 | 20.9 | 18.1 | 81.5 | 0.4 | 100.0 | 929 |
| 20-24 | 159.8 | 0.7 | 800 | 21.7 | 12.1 | 86.1 | 1.8 | 100.0 | 642 |
| 25-29 | 160.0 | 0.5 | 707 | 22.2 | 11.5 | 85.3 | 3.1 | 100.0 | 615 |
| 30-34 | 159.4 | 1.5 | 620 | 23.1 | 7.5 | 86.8 | 5.7 | 100.0 | 583 |
| 35-49 | 159.3 | 0.9 | 1,284 | 24.7 | 4.4 | 83.6 | 12.0 | 100.0 | 1,269 |
| Residence | | | | | | | | | |
| Urban | 160.4 | 1.0 | 1,669 | 23.1 | 9.3 | 83.2 | 7.5 | 100.0 | 1,539 |
| Rural | 158.6 | 1.1 | 2,718 | 22.4 | 10.9 | 84.9 | 4.2 | 100.0 | 2,499 |
| Region | | | | | | | | | |
| Region 1 | 158.7 | 0.9 | 469 | 22.8 | 9.8 | 83.7 | 6.5 | 100.0 | 430 |
| Region 2 | 159.3 | 0.5 | 1,051 | 21.9 | 12.3 | 85.4 | 2.3 | 100.0 | 961 |
| Region 3 | 160.1 | 1.1 | 1,241 | 22.5 | 11.5 | 84.9 | 3.7 | 100.0 | 1,134 |
| Region 4 | 157.7 | 1.8 | 1,227 | 23.1 | 10.0 | 81.9 | 8.1 | 100.0 | 1,140 |
| Tashkent City | 162.5 | 0.4 | 398 | 24.1 | 3.3 | 87.0 | 9.7 | 100.0 | 372 |
| Mother's education | | | | | | | | | |
| Primary/Secondary | 158.8 | 1.4 | 2,803 | 22.5 | 11.1 | 84.3 | 4.6 | 100.0 | 2,591 |
| Secondary-special | 159.8 | 0.6 | 1,119 | 22.9 | 10.1 | 83.6 | 6.4 | 100.0 | 1,029 |
| Higher | 161.0 | 0.0 | 465 | 23.5 | 6.0 | 85.8 | 8.2 | 100.0 | 418 |
| Ethnicity | | | | | | | | | |
| Uzbek | 159.0 | 1.1 | 3,629 | 22.7 | 10.3 | 84.2 | 5.5 | 100.0 | 3,327 |
| Other | 160.9 | 1.0 | 757 | 22.6 | 10.5 | 84.4 | 5.1 | 100.0 | 711 |
| Total | 159.3 | 1.1 | 4,387 | 22.7 | 10.3 | 84.2 | 5.4 | 100.0 | 4,038 |

Note: The BMI index excludes pregnant women and those who are less than 3 months postpartum.

CHAPTER 11

ANEMIA

Saidazym N. Soultanov, Almaz T. Sharmanov, and Nazima M. Abrarova

11.1 Introduction

Anemia is a condition which is characterized by a reduction in the red blood cell volume and a decrease in the concentration of hemoglobin in the blood. Commonly, anemia is the final outcome of a nutritional deficiency of iron, folate, vitamin B₁₂ and some other nutrients. Although many other causes of anemia such as hemorrhage, infection, genetic disorders or chronic disease have been identified, nutritional deficiency, due primarily to a lack of bioavailable dietary iron, accounts for the majority of cases of anemia (INACG, 1979, 1989; DeMaeyer et al., 1989; Hercberg and Galan, 1992; Yip, 1994).

Anemia is known to have detrimental health implications, particularly for mothers and young children. Compared to non-anemic mothers, unfavorable pregnancy outcomes have been reported to be more common in anemic mothers (INACG, 1989). Women with severe anemia can experience difficulty meeting oxygen transport requirements near and at delivery, especially if significant hemorrhage occurs. This may be an underlying cause of maternal death, and prenatal and perinatal infant loss (Fleming, 1987; Omar et al., 1994; Thonneau et al., 1992). Iron-deficient anemia among children has been demonstrated in many studies to be associated with impaired cognitive performance, motor development, coordination, language development and scholastic achievement (Scrimshaw, 1984; Lozoff et al., 1991). Anemia increases morbidity from infectious diseases because several immune mechanisms are adversely affected.

Anemia due to iron deficiency is recognized as a major public health problem throughout the world. According to the epidemiological data collected from multiple countries by the World Health Organization, some 35 percent of women and 43 percent of young children in the world are affected by anemia. In developing countries, about 50 percent of women and young children are anemic. In the U.S. and Europe, the prevalence of anemia is 7 to 12 percent among women and children. The highest overall rates of anemia are reported in southern Asia and certain regions of Africa (DeMaeyer et al., 1989).

Anemia has been considered to be among the leading public health problems in Uzbekistan for decades. A study conducted in 1993 by the Crosslink Group in Muynak District of Karakalpak Republic of Uzbekistan found anemia levels of over 60 percent for women of reproductive age and approximately 80 percent for children under the age of three (Morse, 1994). Because of correspondingly low serum levels of iron and ferritin, iron deficiency was recognized as the major cause of anemia among women and young children in that area. Similarly high levels of anemia among women and children were found in the Southern and Western Regions of neighboring Kazakstan during the anemia study conducted in conjunction with the 1995 Kazakstan Demographic and Health Survey (NIN and MI, 1996).

11.2 Anemia Measurement Procedures

Testing of women and children for anemia was one of the major efforts of the 1996 UDHS. This was the first anemia study in Uzbekistan done on a nationally representative sample. The study involved hemoglobin testing for anemia to determine the prevalence and severity of anemia among women and

children, and to identify demographic, socioeconomic, nutritional and other risk factors for anemia by residence, region, education, and other subgroups of population in Uzbekistan. This chapter presents findings of the anemia study.

Anemia testing was done on 3,658 women age 15-49 and 739 of their children age three and under. Prior to participating in the study, each respondent was asked to sign a consent form giving permission for the collection of a blood droplet from herself and her children.

For hemoglobin measurement, capillary blood was taken from the finger using Tenderlett lancets (i.e., sterile disposable instruments that allow a relatively painless skin puncture). Hemoglobin was measured in the blood using the Hemocue system that allows the detection of the level of hemoglobin within a minute. This system consists of a battery-operated portable photometer and a disposable cuvette which serves as both a blood collection device and the site where reaction occurs. The procedure was performed by specially trained medical personnel and was determined to be suitable for the field conditions of the survey.

Levels of anemia were classified as severe, moderate, and mild based on the hemoglobin concentration in the blood and according to criteria developed by the World Health Organization (DeMaeyer et al., 1989). Severe anemia was diagnosed when hemoglobin concentration was less than 7.0 g/dl, moderate anemia when the hemoglobin concentration was 7.0-9.9 g/dl, and mild anemia when the hemoglobin concentration was 10.0-11.9 g/dl (10-10.9 g/dl for pregnant women and children under age three).

11.3 Anemia Prevalence Among Women

Table 11.1 shows the results of anemia testing of women age 15-49. Sixty percent of the women in the UDHS survey suffer from some degree of anemia. The great majority of these women have either mild (45 percent) or moderate anemia (14 percent). One percent have severe anemia.

Differences in anemia status of women by age, residence, ethnicity and education are minor. However, differences by region are more marked. High rates of moderate and severe anemia are found in Regions 1 and 4 (23 and 25 percent, respectively), while Tashkent City has the lowest rate of moderate anemia (7 percent). No cases of severe anemia are diagnosed in Tashkent City.

When iron deficiency is the main etiologic factor of anemia, population groups with high iron requirements are disproportionately affected and develop anemia more frequently. Negative iron balance due to an imbalance of iron requirements versus iron intake often occurs during pregnancy and growth. For this reason, when iron deficiency is highly prevalent in a population, pregnant women, who provide the fetus with a considerable amount of iron, are at greater risk of developing anemia than nonpregnant women.

Figure 11.1 shows the prevalence of moderate anemia among pregnant, breastfeeding, and nonpregnant, non-breastfeeding women. Among pregnant women in Uzbekistan, moderate anemia is twice as prevalent than among nonpregnant women (breastfeeding or non-breastfeeding).

Figure 11.2 illustrates hemoglobin distributions of pregnant women, breastfeeding women, and nonpregnant, non-breastfeeding women. The entire hemoglobin distribution for pregnant women is shifted downward (to the left) as compared to the distribution for nonpregnant women. The hemoglobin distribution for breastfeeding women is also shifted downward compared to the distribution for nonpregnant and non-breastfeeding women, but to a lesser extent than the distribution for pregnant women.

There is sufficient evidence to suggest that the majority of cases of anemia among women in Uzbekistan are due to a nutritional deficiency of iron. Testing blood for hemoglobin, which is an iron-containing conjugated protein occurring in red blood cells, can be used as a screening procedure for iron deficiency. However, anemia represents only the severe end of iron deficiency, and the real magnitude of iron deficiency in a population is greater than that reflected by hemoglobin measurement alone. Iron deficiency results primarily from low consumption of food products containing bioavailable iron and promoters of iron absorption, such as animal protein and ascorbic acid.

Table 11.1 Anemia among women

Percentage of women age 15-49 classified as having anemia by background characteristics, Uzbekistan 1996

| Background characteristic | Percentage of women with: | | | Women measured |
|---------------------------|----------------------------|------------------------------|--------------------------|----------------|
| | Severe anemia ¹ | Moderate anemia ² | Mild anemia ³ | |
| Age | | | | |
| 15-19 | 0.6 | 10.4 | 45.3 | 964 |
| 20-24 | 0.9 | 16.6 | 45.0 | 792 |
| 25-29 | 0.6 | 16.4 | 45.5 | 697 |
| 30-34 | 1.2 | 16.3 | 45.8 | 615 |
| 35-39 | 1.6 | 14.6 | 47.0 | 551 |
| 40-44 | 0.8 | 11.5 | 45.4 | 414 |
| 45-49 | 1.1 | 13.3 | 41.5 | 300 |
| Residence | | | | |
| Urban | 0.9 | 12.8 | 45.5 | 1,625 |
| Rural | 0.9 | 15.1 | 45.2 | 2,709 |
| Region | | | | |
| Region 1 | 2.1 | 21.3 | 48.1 | 461 |
| Region 2 | 0.3 | 10.0 | 33.7 | 1,049 |
| Region 3 | 0.4 | 8.5 | 44.7 | 1,243 |
| Region 4 | 1.8 | 23.1 | 53.4 | 1,224 |
| Tashkent City | 0.0 | 6.7 | 50.2 | 357 |
| Education | | | | |
| Primary/Secondary | 1.0 | 13.8 | 45.8 | 2,787 |
| Secondary-Special | 0.8 | 16.6 | 44.7 | 1,095 |
| Higher | 0.5 | 10.8 | 43.7 | 451 |
| Ethnicity | | | | |
| Uzbek | 0.9 | 14.6 | 45.9 | 3,594 |
| Other | 0.8 | 12.1 | 42.3 | 739 |
| Total | 0.9 | 14.2 | 45.3 | 4,333 |

¹ Hemoglobin level less than 7g/dl
² Hemoglobin level 7 - 9.9 g/dl
³ Hemoglobin level 10 - 11.9 g/dl (10 - 10.9 g/dl for pregnant women)

It has been shown that the mean monthly menstrual blood loss increases from 30 ml for women who are not using contraception to 50 ml for those who rely on the IUD (INACG, 1989). The chronic use of the IUD can lead to iron depletion and iron deficiency anemia (Palomo et al., 1993). Based on the UDHS data, 46 percent of currently married women in Uzbekistan are using the IUD. The prevalence of anemia among women according to whether or not the respondent is currently using the IUD as a method of contraception is presented in Figure 11.3. The rates of both severe and moderate anemia among IUD users are higher than among nonusers.

11.4 Anemia Prevalence Among Children

Table 11.2 presents anemia rates for children. Sixty-one percent of children under the age of three suffer from some degree of anemia. Twenty-six percent have moderate anemia. One percent of children are severely anemic.

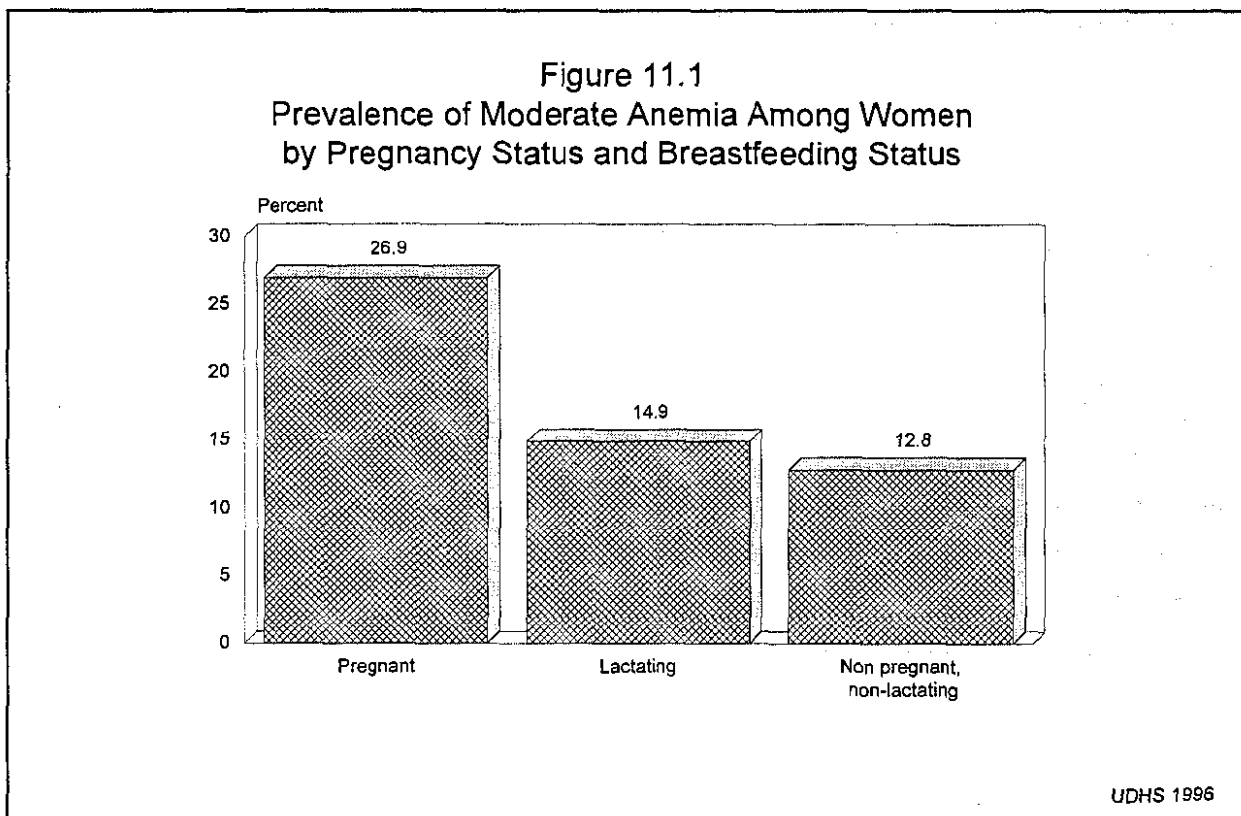
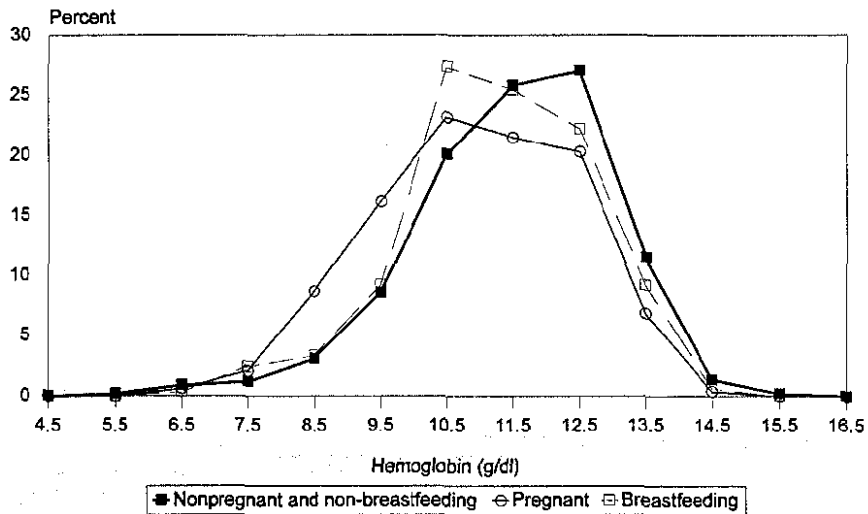
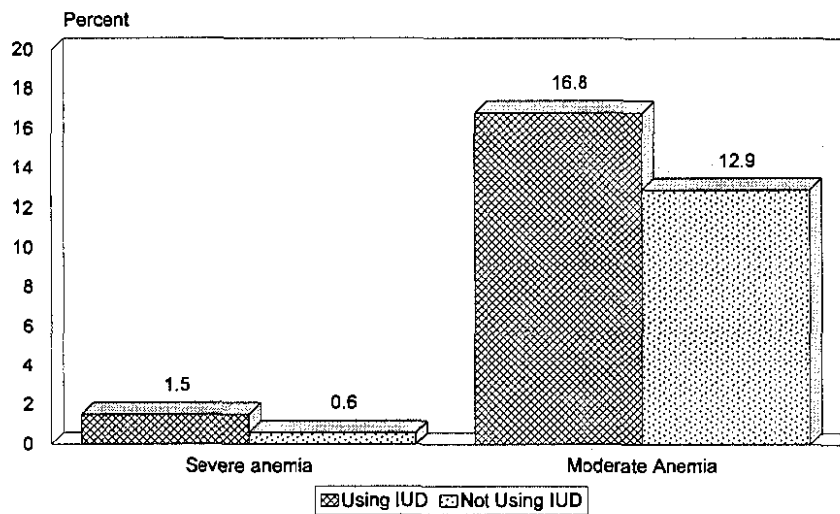


Figure 11.2
Percent Distribution of Hemoglobin Levels
among Women Age 15-49



UDHS 1996

Figure 11.3
Percentage of Women with Moderate or Severe Anemia
Among Those Who are Currently Using or Not Using the IUD



UDHS 1996

Differences in overall rates of anemia by sex of the child, residence and education of the mother are relatively minor. However, as is the case with women, differences by region are substantial. More than half of the children (53 percent) living in Region 1 are diagnosed as having moderate or severe anemia. Prevalence of moderate and severe anemia is also high in Regions 3 and 4 (26 and 28 percent, respectively). In Tashkent City, the prevalence of moderate anemia among children is relatively low (7 percent), and no cases of severe anemia are diagnosed.

Certain relationships are observed between the prevalence of anemia among mothers and their children. Table 11.3 shows the prevalence of anemia for children according to the anemia status of their mothers. Among children of mothers with moderate anemia, 3 percent have severe anemia and 38 percent have moderate anemia. The proportion of moderate anemia among these children is more than twice as high as among children of non-anemic mothers.

11.5 Summary

The high prevalence of anemia among the women and children of Uzbekistan is documented by the 1996 UDHS. The UDHS results are in accordance with data from the 1993 Crosslink study in Muynak District of Karakalpakstan (Morse, 1994) which showed high rates of anemia among women and children living in the area of environmental crisis around the Aral Sea. In the UDHS, the area of the Aral sea is covered by Survey Region 1 (Karakalpakstan and Khorezm *Oblast*), where the prevalence of anemia is among the highest.

It is unlikely that hemoglobinopathies contribute sub-stancially to the high prevalence of anemia in the UDHS Region 1. In the study by the Crosslink group, only 0.14 percent of individuals residing in Muynak District of Karakalpakstan are diagnosed as having hemoglobinopathy (thalassemia was not determined) (Morse, 1994). Negative iron balance is probably a major cause of anemia among both women and young children in this region.

Table 11.2 Anemia among children

Percentage of children under three years classified as having anemia by background characteristics, Uzbekistan 1996

| Background characteristic | Percentage of children with: | | | Children measured |
|----------------------------|------------------------------|------------------------------|--------------------------|-------------------|
| | Severe anemia ¹ | Moderate anemia ² | Mild anemia ³ | |
| Sex of child | | | | |
| Male | 1.8 | 27.5 | 31.8 | 557 |
| Female | 0.6 | 23.7 | 36.2 | 549 |
| Residence | | | | |
| Urban | 0.9 | 23.8 | 32.8 | 310 |
| Rural | 1.4 | 26.3 | 34.4 | 795 |
| Region | | | | |
| Region 1 | 5.2 | 48.2 | 27.5 | 122 |
| Region 2 | 0.5 | 17.6 | 29.6 | 294 |
| Region 3 | 0.5 | 25.8 | 26.9 | 335 |
| Region 4 | 1.4 | 26.9 | 50.2 | 307 |
| Tashkent City | 0.0 | 7.1 | 22.4 | 48 |
| Education of mother | | | | |
| Primary/Secondary | 1.1 | 26.8 | 35.1 | 709 |
| Secondary-Special | 1.9 | 23.6 | 31.4 | 293 |
| Higher | 0.4 | 23.1 | 33.4 | 104 |
| Ethnicity | | | | |
| Uzbek | 1.0 | 25.0 | 34.6 | 980 |
| Other | 3.2 | 30.2 | 29.3 | 126 |
| Total | 1.2 | 25.6 | 34.0 | 1,106 |

¹ Hemoglobin level less than 7g/dl

² Hemoglobin level 7 - 9.9 g/dl

³ Hemoglobin level 10 - 10.9 g/dl

However, without focused studies of the prevalence of hemoglobinopathies and α and β thalassemias it is difficult to exclude their role as etiologic factors of anemia in certain regions of Uzbekistan, which is characterized by a highly ethnic admixture and a historically intensive migration process, in such areas as Fergana Valley (UDHS Region 4) and Samarkand *Oblast* (UDHS Region 3).

The UDHS findings, as well as other geographically focused studies, provide an important information base for development of health intervention programs to prevent many severe complications of pregnancy and delivery related to iron-deficiency anemia among women of certain ethnic, educational, and residential groups in Uzbekistan. These data are important as a background for public health policy decisions that pertain to the iron fortification of food in Uzbekistan. Since anemia represents only the severe end of the iron deficiency spectrum, it is assumed that the total proportion of iron deficient individuals in the population is greater than that reflected by the prevalence of anemia detected by hemoglobin measurement alone. Therefore, in Uzbekistan, where the prevalence of anemia is 60 percent among women and almost 61 percent among children based on hemoglobin measurement, the real magnitude of iron deficiency is greater, and universal iron fortification or supplementation may be justified. Another solution would be selective supplementation of iron for certain population groups, such as pregnant women and young children.

Table 11.3 Anemia among children born to anemic mothers

Percent distribution of children under three years by anemia status according to mother's anemia status at the time of the survey, Uzbekistan 1996

| Mother's anemia status | Child's anemia status | | | | Total | Children measured |
|------------------------------|----------------------------|------------------------------|--------------------------|------------|-------|-------------------|
| | Severe anemia ¹ | Moderate anemia ² | Mild anemia ³ | Not anemic | | |
| Severe anemia ¹ | * | * | * | * | 100.0 | 9 |
| Moderate anemia ² | 2.7 | 38.0 | 40.0 | 19.4 | 100.0 | 174 |
| Mild anemia ³ | 1.4 | 29.1 | 32.7 | 36.8 | 100.0 | 524 |
| Not anemic | 0.1 | 15.4 | 32.7 | 51.8 | 100.0 | 397 |
| Total | 1.2 | 25.6 | 33.9 | 39.2 | 100.0 | 1,104 |

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

¹ Hemoglobin level less than 7g/dl

² Hemoglobin level 7 - 9.9 g/dl

³ Hemoglobin level 10 - 11.9 g/dl (10 - 10.9 g/dl for pregnant women and children under age three)

REFERENCES

Akhmedov. 1993. *Uzbekistan*. Tashkent, Uzbekistan.

Church, Mary and Eugene Koutanev. 1995. *Health sector indicators available through government institutions in the central Asian region of the former Soviet Union*. Almaty, Kazakstan: Zdravreform, Abt Associates, Inc.

DeMaeyer, E.M., P. Dallman, J.M. Gurney, L. Hallberg, S.K. Sood, and S.G. Srikantia. 1989. *Preventing and controlling iron deficiency anemia through primary health care*. A guide for health administrators and program managers. Geneva, Switzerland: World Health Organization.

Fleming, A.F. 1987. Maternal anemia in northern Nigeria: Causes and solutions. *World Health Forum* 8(3):339-343.

Goskomprognozstat (State Committee on Statistics and Analyses of the Republic of Uzbekistan). 1990. *Census 1989*. Tashkent, Uzbekistan: Goskomprognozstat.

Goskomprognozstat (State Committee on Statistics and Analyses of the Republic of Uzbekistan). 1995. *Demographic yearbook of Uzbekistan*. Tashkent, Uzbekistan: Goskomprognozstat.

Hercberg, S., and P. Galan. 1992. Nutritional anemias. *Baillière's Clinical Haematology* 5(1):143.

Institute for Mother and Child Health Care (IMCHC) and Centers for Disease Control and Prevention (CDC). 1995. *Reproductive Health Survey of Romania 1993*. Atlanta, Georgia: IMCHC and CDC.

International Nutritional Anemia Consultative Group (INACG). 1979. *Iron deficiency in infancy and childhood*. Geneva, Switzerland: INACG, World Health Organization.

International Nutritional Anemia Consultative Group (INACG). 1989. *Iron deficiency in women*. Geneva, Switzerland: INACG, World Health Organization.

Lozoff, B., E. Jimenez, and A.W. Wolf. 1991. Long-term development outcome of infants with iron deficiency. *New England Journal of Medicine* 325(10):687-694.

Ministry of Health. 1993. *Prikaz No.518 (October 23, 1993): Procedures for immunoprophylaxis of infectious diseases in the Republic of Uzbekistan*. Tashkent, Uzbekistan: Ministry of Health.

Ministry of Health. 1995. *Health of population and health protection in Republic of Uzbekistan in 1994*. Tashkent, Uzbekistan: Statistics Department, Ministry of Health.

Ministry of Health. 1996. *Prikaz No.721 (October 29, 1996): Rules and procedures for pregnancy termination*. Tashkent, Uzbekistan: Ministry of Health.

Morse, C. 1994. *A study of the prevalence and causes of anemia, Muynak district, Karakalpakistan, the Republic of Uzbekistan*. Washington, D.C.: IMPACT Project, USAID.

National Institute of Nutrition (NIN) and Macro International (MI). 1996. *Kazakhstan Demographic and Health Survey 1995*. Calverton, Maryland: NIN and MI.

Omar, M.M., U. Hogberg, and B. Bergstrom. 1994. Maternal health and child survival in relation to socioeconomic factors. *Gynecologic and Obstetric Investigation* 38(2):107-112.

Palomo, I., G. Grebe, M. Ferrada, J.M. Carrasco, M. Maffioletti, and E. Felix. 1993. Effects of the prolonged use of intrauterine devices (IUDs) and oral contraceptives on iron nutrition. *Revista Médica de Chile* 121(6):639-644.

Research Institute of Obstetrics and Gynecology [Uzbekistan]. 1996. Special Tabulation. Unpublished.

Russian Centre for Public Opinion and Market Research (RCPOMR) and Centers for Disease Control and Prevention (CDC). 1997. *1996 Russian Women's Reproductive Health Survey, Preliminary Report*. Atlanta, Georgia: RCPOMR and CDC.

Scrimshaw, N.S. 1984. Functional consequences of iron deficiency in human populations. *Journal of Nutritional Science and Vitaminology* 30:47-63.

Thonneau, P., B. Toure, P. Cantrelle, T.M. Barry, and E. Papiernik. 1992. Risk factors for maternal mortality: Results of a case-control study conducted in Conakry (Guinea). *International Journal of Gynecology and Obstetrics* 39(2):87-92.

United Nations. 1982. *Non-sampling errors in household surveys: Sources, assessment and control*. National Household Survey Capability Programme. New York: United Nations.

United Nations. 1992. *1990 Demographic Yearbook*. New York: United Nations.

United Nations. 1995. *Abortion policies: A global review. Vol 3: Oman to Zimbabwe*. New York: United Nations.

Yip, R. 1994. Iron deficiency: Contemporary scientific issues and international programmatic approaches. Symposium: Clinical nutrition in developing countries. *Journal of Nutrition* 124:1479S-1490S.

APPENDIX A

SAMPLE DESIGN

APPENDIX A

SAMPLE DESIGN

Thanh Lê

A.1 Introduction

The UDHS employed a probability sample of women age 15 to 49, representative of 98.7 percent of the country. Seven *raions* were excluded from the survey because they were considered too remote and sparsely inhabited. These *raions* are: Kungradskiyi, Muyinakskiyi, and Takhtakupyrskiyi in Karakalpakstan; Uchkudukskiyi, Tamdinskiyi, and Kanimekhskiyi in Navoiiskaya; and Romitanskiyi in Bukharskaya. The remainder of the country was divided into five survey regions. Tashkent City constituted a survey region by itself, while the remaining four survey regions consisted of groups of contiguous *oblasts*. The five survey regions were defined as follows:

- Region 1: Karakalpakstan and Khoresmskaya.
- Region 2: Navoiyskaya, Bukharskaya, Kashkadarinskaya, and Surkhandarinskaya.
- Region 3: Samarkandskaya, Dzhizakskaya, Syrdarinskaya, and Tashkentskaya.
- Region 4: Namanganskaya, Ferganskaya, and Andizhanskaya.
- Region 5: Tashkent City.

A.2 Characteristics of the UDHS Sample

The sample for the UDHS was selected in three stages. In the rural areas, the primary sampling units (PSUs) corresponded to the *raions* which were selected with probabilities proportional to size, the size being the 1994 population. At the second stage, one village was selected in each selected *raion*. A complete listing of the households residing in each selected village was carried out. The lists of households obtained were used as the frame for third-stage sampling, which is the selection of the households to be visited by the UDHS interviewing teams during the main survey fieldwork. In each selected household, women between the ages of 15 and 49 were identified and interviewed.

In the urban areas, the PSUs were the cities and towns themselves. In the second stage, one health block was selected from each town except in self-representing cities (large cities that were selected with certainty), where more than one health block was selected. The selected health blocks were segmented prior to the household listing operation which provided the household lists for the third-stage selection of households.

A.3 Sample Allocation

Tables A.1 and A.2 show the distribution of the population in Uzbekistan to the different survey regions.

The regions, stratified by urban and rural areas, were the sampling strata. There were thus nine strata with Tashkent City constituting an entire stratum. A proportional allocation of the target number of 4,000 women to the 9 strata would yield the sample distribution presented in Table A.3.

| Region | Urban | Rural | Total |
|---------------|-----------|------------|------------|
| Region 1 | 923,000 | 1,504,200 | 2,427,200 |
| Region 2 | 1,461,900 | 3,738,000 | 5,199,900 |
| Region 3 | 2,122,400 | 3,990,000 | 6,112,400 |
| Region 4 | 1,963,300 | 4,085,500 | 6,048,800 |
| Tashkent City | 2,113,000 | 0 | 2,113,000 |
| Total | 8,583,600 | 13,317,700 | 21,901,300 |

| Region | Urban | Rural | Total |
|---------------|-------|-------|-------|
| Region 1 | 38.0 | 62.0 | 11.1 |
| Region 2 | 28.1 | 71.9 | 23.7 |
| Region 3 | 34.7 | 65.3 | 27.9 |
| Region 4 | 32.5 | 67.5 | 27.6 |
| Tashkent City | 100.0 | 0.0 | 9.6 |
| Total | 39.2 | 60.8 | 100.0 |

The proportional allocation would result in a completely self-weighting sample but would not allow for reliable estimates for at least two of the five survey regions, namely Region 1 and Tashkent City. Results of other demographic and health surveys show that a minimum sample of 1,000 women is required in order to obtain estimates of fertility and childhood mortality rates at an acceptable level of sampling errors. Given that the total sample size for the UDHS could not be increased so as to achieve the required level of sampling errors, it was decided that the sample would be divided equally among the five regions, and within each region, it would be distributed proportionally to the urban and the rural areas. With this type of allocation, demographic rates (fertility and mortality) could not be produced for regions separately. Table A.4 shows the proposed sample allocation.

| Region | Urban | Rural | Total |
|---------------|-------|-------|-------|
| Region 1 | 168 | 275 | 443 |
| Region 2 | 267 | 683 | 950 |
| Region 3 | 387 | 729 | 1116 |
| Region 4 | 359 | 746 | 1105 |
| Tashkent City | 386 | 0 | 386 |
| Total | 1567 | 2433 | 4000 |

| Region | Urban | Rural | Total |
|---------------|-------|-------|-------|
| Region 1 | 304 | 496 | 800 |
| Region 2 | 225 | 575 | 800 |
| Region 3 | 278 | 522 | 800 |
| Region 4 | 260 | 540 | 800 |
| Tashkent City | 800 | 0 | 800 |
| Total | 1867 | 2133 | 4000 |

The number of sample points (or clusters) to be selected for each stratum was calculated by dividing the number of women in the stratum by the average "take" in the cluster. Analytical studies of surveys of the same nature suggest that the optimum number of women to be interviewed is around 20-25 in each urban cluster and 30-35 in each rural cluster. If, on average, 20 women in each urban cluster and 30 women in each rural cluster were to be interviewed, then the distribution of sample points would be shown in Table A.5 as follows:

The number of clusters in Region 2 (Table A.5) would yield a slightly smaller number of women than expected because of rounding errors. Consequently, the number of clusters was rearranged in each stratum to be an even number, but in such a way that the expected regional sample size did not fall short of the required 800 minimum, as shown in Table A.6. The even number of clusters is recommended for the purpose of calculating sampling errors in which the first step is to form pairs of homogeneous clusters.

| Region | Urban | Rural | Total |
|---------------|-------|-------|-------|
| Region 1 | 15 | 17 | 32 |
| Region 2 | 11 | 19 | 30 |
| Region 3 | 14 | 17 | 31 |
| Region 4 | 13 | 18 | 31 |
| Tashkent City | 40 | 0 | 40 |
| Total | 93 | 71 | 164 |

| Region | Urban | Rural | Total |
|---------------|-------|-------|-------|
| Region 1 | 16 | 16 | 32 |
| Region 2 | 16 | 16 | 32 |
| Region 3 | 16 | 16 | 32 |
| Region 4 | 16 | 16 | 32 |
| Tashkent City | 40 | 0 | 40 |
| Total | 104 | 64 | 168 |

The number of households to be selected for each stratum was calculated as follows:

$$\text{Number of HHs} = \frac{\text{Number of women}}{\text{Number of women per HH} \times \text{Overall response rate}}$$

According to the 1989 census, the proportion of women age 15-49 in Uzbekistan was 25.0 percent in the urban areas and 22.3 percent in the rural areas. By applying this figure to the average household size of 4.7 and 6.2 for the urban and rural areas, respectively, obtained from the census, the number of women age 15-49 was estimated to be 1.2 per urban household and 1.4 per rural household. The overall response rate was assumed to be 80 percent (95 percent for households and 85 percent for women), which was the average overall response rate found in other surveys implemented in Uzbekistan. Using these two parameters in the above equation, approximately 3,900 households had to be selected in order to yield the target sample of women. This resulted in selecting on average 21 households in each urban cluster and 27 households in each rural cluster.

A.4 Stratification and Systematic Selection of Clusters

Stratification of the area sampling units was mostly geographic within each sampling stratum.

A.4.1 Urban areas

In the urban areas, the cities and towns were selected with probabilities proportional to size, the size being the 1994 population count. Large cities, or self-representing cities, that had to be selected with certainty (probability = 1.0) were separated out before towns were selected. The limit above which a city became self-representing was calculated as follows:

$$L = \frac{\text{Population in stratum}}{\text{Number of health blocks to be selected}}$$

Within each city, the required number of health blocks were selected with equal probability.

The selection intervals for the towns were calculated as follows:

$$I = \frac{\sum M_i}{a}$$

where ΣM_i is the size of the stratum (total population in the stratum according to the sampling frame) and a is the number of towns to be selected in the stratum. The selection procedure consisted of: (1) calculating the cumulated size of each town; (2) calculating the series of sampling numbers $R, R+I, R+2I, \dots, R+(a-1)I$, where R is a random number between 1 and I ; and (3) comparing each sampling number with the cumulated sizes. The town to be selected was the first town whose cumulated size was greater or equal to the sampling number. Within each town, one health block was selected using a random number between 1 and the number of health blocks that exist in the town.

A.4.2 Rural areas

In the rural areas, the *raions* were selected with probabilities proportional to size. One village was then selected within each *raion* using a random number between 1 and the number of villages that exist in the *raion*. Selection of *raions* followed the same procedure for town selection.

Health blocks and villages that were very large in size were divided into segments of approximately 200-300 households and only one segment was retained for the UDHS.

A.5 Sampling Probabilities of Selected Health Blocks and Villages

The sampling probabilities were calculated separately for each sampling stage, and independently for each stratum. The following notations were used:

- P_1 is the first-stage sampling probability (towns, or *raions*)
- P_2 is the second-stage sampling probability (health blocks, villages)
- P_3 is the third-stage sampling probability (households)

A.5.1 Urban areas

First, towns will be discussed. Let a be the number of towns selected in a given stratum, M_i the size (population according to the sampling frame) of the i^{th} town in the stratum, and ΣM_i the total size of the stratum (population according to the sampling frame). The probability of inclusion of the i^{th} town in the sample is calculated as follows:

$$P_{1i} = \frac{a M_i}{\Sigma M_i}$$

In the second stage, one health block was selected in each town. The probability of selection of the j^{th} health block in the i^{th} town is as follows:

$$P_{2ij} = \frac{m_{ij}}{\Sigma m_{ij}}$$

where m_{ij} is the size of the j^{th} health block.

An intermediary sampling stage was introduced between the second and third sampling stages. This selection stage was not considered an effective stage but only a pseudo-stage in order to reduce the size of the health block. Let t_{ijk} be the estimated size (in proportion) of the k^{th} segment selected for the j^{th} health block. Note that $\Sigma t_{ijk} = 1$. The sampling probabilities are:

$$P_{1i} \cdot P_{2ij} = \frac{aM_i}{\sum_i M_i} \cdot \frac{m_{ij} t_{ijk}}{\sum_j m_{ij}}$$

In the third stage, a number, b_i , of households was selected from the number M_i' of households listed in the k^{th} segment of the j^{th} health block by the UDHS teams. It follows that:

$$P_{1i} \cdot P_{2ij} \cdot P_{3ijk} = \frac{aM_i}{\sum_i M_i} \cdot \frac{m_{ij} t_{ijk}}{\sum_j m_{ij}} \cdot \frac{b_i}{M_i'}$$

In order for the sample to be self-weighting within the stratum, the overall probability $f = P_{1i} \cdot P_{2ij} \cdot P_{3ijk}$ must be the same for each household within the stratum, where f is the sampling fraction calculated separately for each stratum:

$$f = \frac{n}{N}$$

where n is the number of households selected in the stratum, and N is the number of households that exist in the stratum in 1996, at the time of fieldwork.

The selection of the households was systematic with equal probability and the selection interval was calculated as follows:

$$I_i = \frac{1}{P_{3ijk}} = \frac{P_{1i} \cdot P_{2ij}}{f}$$

In the case of self-representing cities, $P_{1i} = 1$. If more than one health block were selected then:

$$P_{2ij} = \frac{a' m_{ij}}{\sum_j m_{ij}}$$

where a' is the number of health blocks selected in the city. The other parameters were calculated as those for towns.

A.5.2 Rural areas

The calculations of the selection probabilities for the different stages of sampling were the same as for the towns, with *raions* equivalent to towns, and villages equivalent to health blocks.

Because of the non-proportional distribution of the sample to the different strata, sampling weights were necessary to ensure the actual representation of the sample at the national level.

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

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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 UDHS 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 UDHS 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 UDHS sample is the result of a multistage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the UDHS 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:

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

in which

$$z_{hi} = y_{hi} - r \cdot x_{hi}, \text{ and } z_h = y_h - r \cdot x_h$$

where h represents the stratum which varies from 1 to H ,
 m_h is the total number of clusters selected in the h^{th} stratum,
 y_{hi} is the sum of the values of variable y in the i^{th} cluster in the h^{th} stratum,
 x_{hi} is the sum of the number of cases in the i^{th} cluster in the h^{th} stratum, and
 f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the UDHS, there were 168 non-empty clusters. Hence, 168 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 168 clusters,
 $r_{(i)}$ is the estimate computed from the reduced sample of 167 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 UDHS 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 five survey regions. 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.9 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 ($R \pm 2SE$) 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). Estimates and sampling errors of total fertility and childhood mortality rates only apply to the national sample and the urban and rural samples. In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *Children ever born to women age 15-49*) can be interpreted as follows: the overall average from the national sample is 2.26 and its standard error is .045. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $2.26 \pm 2 \times .045$. There is a high probability (95 percent) that the *true* average number of children ever born to all women age 15 to 49 is between 2.17 and 2.35.

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 33.3 percent with an average of 6.7 percent; the highest relative standard errors are for estimates of very low values (e.g., *Severe anemia* among children under three who were tested). If estimates of very low values (less than 10 percent) were removed, then the average drops to 4.1 percent. So in general, the relative standard errors for most estimates for the country as a whole are small, except for estimates of very small proportions. The relative standard error for the total fertility rate is small at 3.9 percent. However, for the mortality rates, the average relative standard error is much higher at 15.7 percent.

There are differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *secondary-special education*, the relative standard errors as a percent of the estimated proportion for the whole country, for the rural areas, and for Region 2 are 4.3 percent, 7.8 percent, and 11.4 percent, respectively.

For the total sample, the value of the design effect (DEFT), averaged over all variables, is 1.36 which means that, due to multistage clustering of the sample, variance is increased by a factor of 1.8 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Uzbekistan 1996

| Variable name | Estimate | Base population |
|---|------------|--|
| Primary/secondary education | Proportion | All women 15-49 |
| Secondary-special education | Proportion | All women 15-49 |
| Higher education | Proportion | All women 15-49 |
| Never married (in union) | Proportion | All women 15-49 |
| Currently married (in union) | Proportion | All women 15-49 |
| Married before age 20 | Proportion | Women 25-49 |
| Had first sexual intercourse before 18 | Proportion | Women 25-49 |
| Children ever born | Mean | All women 15-49 |
| Children ever born to women over 40 | Mean | Women aged 40-49 |
| Children surviving | Mean | All women 15-49 |
| Knowing any contraceptive method | Proportion | Currently married women 15-49 |
| Knowing any modern contraceptive method | Proportion | Currently married women 15-49 |
| Ever used any contraceptive method | Proportion | Currently married women 15-49 |
| Currently using any method | Proportion | Currently married women 15-49 |
| Currently using a modern method | Proportion | Currently married women 15-49 |
| Currently using pill | Proportion | Currently married women 15-49 |
| Currently using IUD | Proportion | Currently married women 15-49 |
| Currently using injectables | Proportion | Currently married women 15-49 |
| Currently using condom | Proportion | Currently married women 15-49 |
| Currently using periodic abstinence | Proportion | Currently married women 15-49 |
| Currently using withdrawal | Proportion | Currently married women 15-49 |
| Using public sector source | Proportion | Current users of modern method |
| Want no more children | Proportion | Currently married women 15-49 |
| Want to delay at least 2 years | Proportion | Currently married women 15-49 |
| Ideal number of children | Mean | All women 15-49 |
| Severe anemia | Proportion | Women 15-49 who were tested |
| Moderate anemia | Proportion | Women 15-49 who were tested |
| Mild anemia | Proportion | Women 15-49 who were tested |
| BMI < 18.5 | Proportion | Women 15-49 who were measured |
| BMI between 18.5 and 30.0 | Proportion | Women 15-49 who were measured |
| BMI > 30.0 | Proportion | Women 15-49 who were measured |
| Weight-for-height (< -2 SD) | Proportion | Women 15-49 who were measured |
| 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 |
| Consulted medical personnel | 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 |
| Children with severe anemia | Proportion | Children under 3 who were tested |
| Children with moderate anemia | Proportion | Children under 3 who were tested |
| Children with mild anemia | Proportion | Children under 3 who were tested |
| Weight-for-height (< -2 SD) | Proportion | Children under 3 who were measured |
| Height-for-age (< -2 SD) | Proportion | Children under 3 who were measured |
| Weight-for-age (< -2 SD) | Proportion | Children under 3 who were measured |
| Total fertility rate (3 years) | Rate | Women-years of exposure to child-bearing |
| Neonatal mortality rate | Rate | Number of births exposed to risk of dying |
| Postneonatal mortality rate | Rate | Number of births exposed to risk of dying |
| Infant mortality rate | Rate | Number of births exposed to risk of dying |
| Child mortality rate | Rate | Number of births exposed to risk of dying |
| Under-five mortality rate | Rate | Number of births exposed to risk of dying |

Table B.2 Sampling errors - National sample, Uzbekistan 1996

| Variable | Value (R) | Standard error (SE) | Number of cases | | Design effect (DEFT) | Relative error (SE/R) | Confidence limits | |
|---|--------------|---------------------------|-------------------|------------------|----------------------------|-----------------------------|-------------------|--------|
| | | | Unweighted (N) | Weighted (WN) | | | R-2SE | R+2SE |
| Primary/secondary education | .637 | .014 | 4415 | 4415 | 1.946 | .022 | .609 | .665 |
| Secondary-special education | .255 | .011 | 4415 | 4415 | 1.675 | .043 | .233 | .277 |
| Higher education | .107 | .006 | 4415 | 4415 | 1.335 | .056 | .095 | .119 |
| Never married (in union) | .249 | .010 | 4415 | 4415 | 1.540 | .040 | .229 | .269 |
| Currently married (in union) | .703 | .010 | 4415 | 4415 | 1.515 | .014 | .683 | .723 |
| Married before age 20 | .493 | .014 | 2656 | 2628 | 1.484 | .028 | .465 | .521 |
| Had first sexual intercourse before 18 | .158 | .010 | 2656 | 2628 | 1.445 | .063 | .138 | .178 |
| Children ever born | 2.260 | .045 | 4415 | 4415 | 1.364 | .020 | 2.170 | 2.350 |
| Children ever born to women over 40 | 4.606 | .117 | 761 | 732 | 1.390 | .025 | 4.372 | 4.840 |
| Children surviving | 2.124 | .039 | 4415 | 4415 | 1.268 | .018 | 2.046 | 2.202 |
| Knowing any contraceptive method | .957 | .006 | 3067 | 3102 | 1.542 | .006 | .945 | .969 |
| Knowing any modern method | .955 | .006 | 3067 | 3102 | 1.532 | .006 | .943 | .967 |
| Ever used any contraceptive method | .679 | .015 | 3067 | 3102 | 1.750 | .022 | .649 | .709 |
| Currently using any method | .556 | .014 | 3067 | 3102 | 1.596 | .025 | .528 | .584 |
| Currently using a modern method | .513 | .015 | 3067 | 3102 | 1.707 | .029 | .483 | .543 |
| Currently using pill | .017 | .003 | 3067 | 3102 | 1.271 | .176 | .011 | .023 |
| Currently using IUD | .458 | .015 | 3067 | 3102 | 1.716 | .033 | .428 | .488 |
| Currently using injectables | .014 | .002 | 3067 | 3102 | 1.097 | .143 | .010 | .018 |
| Currently using condom | .017 | .003 | 3067 | 3102 | 1.123 | .176 | .011 | .023 |
| Currently using periodic abstinence | .011 | .002 | 3067 | 3102 | 1.015 | .182 | .007 | .015 |
| Currently using withdrawal | .028 | .004 | 3067 | 3102 | 1.411 | .143 | .020 | .036 |
| Using public sector source | .983 | .003 | 1641 | 1614 | 1.016 | .003 | .977 | .989 |
| Want no more children | .509 | .012 | 3067 | 3102 | 1.315 | .024 | .485 | .533 |
| Want to delay at least 2 years | .242 | .010 | 3067 | 3102 | 1.247 | .041 | .222 | .262 |
| Ideal number of children | 3.623 | .041 | 4274 | 4260 | 1.999 | .011 | 3.541 | 3.705 |
| Severe anemia | .009 | .002 | 4274 | 4333 | 1.503 | .222 | .005 | .013 |
| Moderate anemia | .142 | .007 | 4274 | 4333 | 1.278 | .049 | .128 | .156 |
| Mild anemia | .453 | .008 | 4274 | 4333 | 1.039 | .018 | .437 | .469 |
| BMI < 18.5 | .103 | .006 | 4035 | 4038 | 1.347 | .058 | .091 | .115 |
| BMI between 18.5 and 30.0 | .842 | .006 | 4035 | 4038 | 1.080 | .007 | .830 | .854 |
| BMI higher than 30.0 | .054 | .004 | 4035 | 4038 | .995 | .074 | .046 | .062 |
| Weight-for-height | .046 | .004 | 4031 | 4033 | 1.214 | .087 | .038 | .054 |
| Mothers received medical care at birth | .975 | .013 | 1324 | 1392 | 2.911 | .013 | .949 | 1.000 |
| Had diarrhea in the last 2 weeks | .052 | .006 | 1261 | 1325 | 1.051 | .115 | .040 | .064 |
| Treated with ORS packets | .313 | .055 | 77 | 69 | .986 | .176 | .203 | .423 |
| Consulted medical personnel | .340 | .072 | 77 | 69 | 1.258 | .212 | .196 | .484 |
| Having health card, seen | 1.000 | .000 | 395 | 420 | Und | .000 | 1.000 | 1.000 |
| Received BCG vaccination | .976 | .011 | 395 | 420 | 1.399 | .011 | .954 | .998 |
| Received DPT vaccination (3 doses) | .944 | .012 | 395 | 420 | 1.091 | .013 | .920 | .968 |
| Received polio vaccination (3 doses) | .962 | .011 | 395 | 420 | 1.167 | .011 | .940 | .984 |
| Received measles vaccination | .915 | .017 | 395 | 420 | 1.278 | .019 | .881 | .949 |
| Fully immunized | .850 | .021 | 395 | 420 | 1.226 | .025 | .808 | .892 |
| Severe anemia | .012 | .004 | 1018 | 1106 | 1.001 | .333 | .004 | .020 |
| Moderate anemia | .256 | .017 | 1018 | 1106 | 1.263 | .066 | .222 | .290 |
| Mild anemia | .340 | .019 | 1018 | 1106 | 1.339 | .056 | .302 | .378 |
| Weight-for-height | .116 | .016 | 954 | 989 | 1.545 | .138 | .084 | .148 |
| Height-for-age | .313 | .021 | 954 | 989 | 1.361 | .067 | .271 | .355 |
| Weight-for-age | .188 | .019 | 954 | 989 | 1.445 | .101 | .150 | .226 |
| Total fertility rate (3 years) | 3.341 | .129 | NA | 12291 | 1.587 | .039 | 3.083 | 3.599 |
| Neonatal mortality rate (0-4 years) | 22.835 | 5.079 | 2401 | 2518 | 1.592 | .222 | 12.677 | 32.993 |
| Postneonatal mortality rate (0-4 years) | 26.289 | 3.218 | 2407 | 2522 | 1.043 | .122 | 19.853 | 32.725 |
| Infant mortality rate (0-4 years) | 49.124 | 6.634 | 2407 | 2522 | 1.462 | .135 | 35.856 | 62.392 |
| Child mortality rate (0-4 years) | 10.719 | 1.979 | 2407 | 2523 | 1.002 | .185 | 6.761 | 14.677 |
| Under-five mortality rate (0-4 years) | 59.316 | 7.042 | 2413 | 2527 | 1.432 | .119 | 45.232 | 73.400 |

NA = Not applicable
Und = Undefined

Table B.3. Sampling errors - Urban sample, Uzbekistan 1996

| Variable | Value (R) | Standard error (SE) | Number of cases | | Design effect (DEFT) | Relative error (SE/R) | Confidence limits | |
|---|--------------|---------------------------|-------------------|------------------|----------------------------|-----------------------------|-------------------|--------|
| | | | Unweighted (N) | Weighted (WN) | | | R-2SE | R+2SE |
| Primary/secondary education | .486 | .021 | 2306 | 1693 | 2.022 | .043 | .444 | .528 |
| Secondary-special education | .336 | .014 | 2306 | 1693 | 1.433 | .042 | .308 | .364 |
| Higher education | .178 | .013 | 2306 | 1693 | 1.623 | .073 | .152 | .204 |
| Never married (in union) | .238 | .011 | 2306 | 1693 | 1.194 | .046 | .216 | .260 |
| Currently married (in union) | .690 | .011 | 2306 | 1693 | 1.145 | .016 | .668 | .712 |
| Married before age 20 | .387 | .015 | 1444 | 1060 | 1.204 | .039 | .357 | .417 |
| Had first sexual intercourse before 18 | .124 | .012 | 1444 | 1060 | 1.331 | .097 | .100 | .148 |
| Children ever born | 1.938 | .046 | 2306 | 1693 | 1.179 | .024 | 1.846 | 2.030 |
| Children ever born to women over 40 | 3.600 | .130 | 458 | 334 | 1.299 | .036 | 3.340 | 3.860 |
| Children surviving | 1.836 | .041 | 2306 | 1693 | 1.123 | .022 | 1.754 | 1.918 |
| Knowing any contraceptive method | .972 | .005 | 1575 | 1168 | 1.206 | .005 | .962 | .982 |
| Knowing any modern method | .970 | .005 | 1575 | 1168 | 1.202 | .005 | .960 | .980 |
| Ever used any contraceptive method | .725 | .015 | 1575 | 1168 | 1.363 | .021 | .695 | .755 |
| Currently using any method | .564 | .015 | 1575 | 1168 | 1.198 | .027 | .534 | .594 |
| Currently using a modern method | .502 | .017 | 1575 | 1168 | 1.333 | .034 | .468 | .536 |
| Currently using pill | .020 | .004 | 1575 | 1168 | 1.144 | .200 | .012 | .028 |
| Currently using IUD | .420 | .018 | 1575 | 1168 | 1.475 | .043 | .384 | .456 |
| Currently using injectables | .016 | .003 | 1575 | 1168 | .827 | .188 | .010 | .022 |
| Currently using condom | .038 | .006 | 1575 | 1168 | 1.340 | .158 | .026 | .050 |
| Currently using periodic abstinence | .023 | .004 | 1575 | 1168 | 1.149 | .174 | .015 | .031 |
| Currently using withdrawal | .029 | .007 | 1575 | 1168 | 1.567 | .241 | .015 | .043 |
| Using public sector source | .977 | .005 | 818 | 603 | 1.004 | .005 | .967 | .987 |
| Want no more children | .513 | .015 | 1575 | 1168 | 1.186 | .029 | .483 | .543 |
| Want to delay at least 2 years | .230 | .012 | 1575 | 1168 | 1.140 | .052 | .206 | .254 |
| Ideal number of children | 3.259 | .046 | 2235 | 1638 | 1.801 | .014 | 3.167 | 3.351 |
| Severe anemia | .009 | .003 | 2181 | 1625 | 1.643 | .333 | .003 | .015 |
| Moderate anemia | .128 | .009 | 2181 | 1625 | 1.321 | .070 | .110 | .146 |
| Mild anemia | .455 | .014 | 2181 | 1625 | 1.308 | .031 | .427 | .483 |
| BMI < 18.5 | .093 | .008 | 2099 | 1539 | 1.194 | .086 | .077 | .109 |
| BMI between 18.5 and 30.0 | .832 | .009 | 2099 | 1539 | 1.101 | .011 | .814 | .850 |
| BMI higher than 30.0 | .075 | .006 | 2099 | 1539 | 1.052 | .080 | .063 | .087 |
| Weight-for-height | .044 | .006 | 2097 | 1537 | 1.398 | .136 | .032 | .056 |
| Mothers received medical care at birth | 1.000 | .000 | 568 | 428 | Und | .000 | 1.000 | 1.000 |
| Had diarrhea in the last 2 weeks | .085 | .011 | 548 | 414 | .903 | .129 | .063 | .107 |
| Treated with ORS packets | .395 | .068 | 47 | 35 | .958 | .172 | .259 | .531 |
| Consulted medical personnel | .433 | .093 | 47 | 35 | 1.301 | .215 | .247 | .619 |
| Having health card, seen | 1.000 | .000 | 162 | 125 | Und | .000 | 1.000 | 1.000 |
| Received BCG vaccination | .971 | .022 | 162 | 125 | 1.715 | .023 | .927 | 1.000 |
| Received DPT vaccination (3 doses) | .889 | .029 | 162 | 125 | 1.226 | .033 | .831 | .947 |
| Received polio vaccination (3 doses) | .920 | .029 | 162 | 125 | 1.384 | .032 | .862 | .978 |
| Received measles vaccination | .839 | .028 | 162 | 125 | .999 | .033 | .783 | .895 |
| Fully immunized | .748 | .040 | 162 | 125 | 1.214 | .053 | .668 | .828 |
| Severe anemia | .009 | .005 | 400 | 310 | 1.035 | .556 | .000 | .019 |
| Moderate anemia | .238 | .033 | 400 | 310 | 1.519 | .139 | .172 | .304 |
| Mild anemia | .328 | .033 | 400 | 310 | 1.413 | .101 | .262 | .394 |
| Weight-for-height | .102 | .018 | 391 | 285 | 1.137 | .176 | .066 | .138 |
| Height-for-age | .326 | .027 | 391 | 285 | 1.113 | .083 | .272 | .380 |
| Weight-for-age | .166 | .026 | 391 | 285 | 1.375 | .157 | .114 | .218 |
| Total fertility rate (3 years) | 2.712 | .145 | NA | 4757 | 1.608 | .053 | 2.422 | 3.002 |
| Neonatal mortality rate (0-9 years) | 23.484 | 4.045 | 2100 | 1575 | 1.031 | .172 | 15.394 | 31.574 |
| Postneonatal mortality rate (0-9 years) | 19.389 | 3.341 | 2102 | 1577 | 1.005 | .172 | 12.707 | 26.071 |
| Infant mortality rate (0-9 years) | 42.873 | 4.718 | 2102 | 1577 | .893 | .110 | 33.437 | 52.309 |
| Child mortality rate (0-9 years) | 9.318 | 2.318 | 2105 | 1578 | 1.045 | .249 | 4.682 | 13.954 |
| Under-five mortality rate (0-9 years) | 51.792 | 5.556 | 2107 | 1579 | .975 | .107 | 40.680 | 62.904 |

NA = Not applicable
Und = Undefined

Table B.4 Sampling errors - Rural sample, Uzbekistan 1996

| Variable | Value (R) | Standard error (SE) | Number of cases | | Design effect (DEFT) | Relative error (SE/R) | Confidence limits | |
|---|--------------|---------------------------|-------------------|------------------|----------------------------|-----------------------------|-------------------|--------|
| | | | Unweighted (N) | Weighted (WN) | | | R-2SE | R+2SE |
| Primary/secondary education | .731 | .019 | 2109 | 2722 | 1.943 | .026 | .693 | .769 |
| Secondary-special education | .205 | .016 | 2109 | 2722 | 1.777 | .078 | .173 | .237 |
| Higher education | .062 | .006 | 2109 | 2722 | 1.118 | .097 | .050 | .074 |
| Never married (in union) | .256 | .015 | 2109 | 2722 | 1.553 | .059 | .226 | .286 |
| Currently married (in union) | .711 | .016 | 2109 | 2722 | 1.577 | .023 | .679 | .743 |
| Married before age 20 | .564 | .021 | 1212 | 1568 | 1.467 | .037 | .522 | .606 |
| Had first sexual intercourse before 18 | .181 | .016 | 1212 | 1568 | 1.408 | .088 | .149 | .213 |
| Children ever born | 2.461 | .069 | 2109 | 2722 | 1.344 | .028 | 2.323 | 2.599 |
| Children ever born to women over 40 | 5.453 | .162 | 303 | 398 | 1.333 | .030 | 5.129 | 5.777 |
| Children surviving | 2.302 | .060 | 2109 | 2722 | 1.254 | .026 | 2.182 | 2.422 |
| Knowing any contraceptive method | .947 | .009 | 1492 | 1935 | 1.471 | .010 | .929 | .965 |
| Knowing any modern method | .945 | .009 | 1492 | 1935 | 1.459 | .010 | .927 | .963 |
| Ever used any contraceptive method | .651 | .021 | 1492 | 1935 | 1.713 | .032 | .609 | .693 |
| Currently using any method | .551 | .021 | 1492 | 1935 | 1.629 | .038 | .509 | .593 |
| Currently using a modern method | .520 | .023 | 1492 | 1935 | 1.753 | .044 | .474 | .566 |
| Currently using pill | .014 | .004 | 1492 | 1935 | 1.304 | .286 | .006 | .022 |
| Currently using IUD | .482 | .023 | 1492 | 1935 | 1.752 | .048 | .436 | .528 |
| Currently using injectables | .014 | .003 | 1492 | 1935 | 1.148 | .214 | .008 | .020 |
| Currently using condom | .004 | .002 | 1492 | 1935 | 1.033 | .500 | .000 | .008 |
| Currently using periodic abstinence | .004 | .002 | 1492 | 1935 | .958 | .500 | .000 | .008 |
| Currently using withdrawal | .027 | .005 | 1492 | 1935 | 1.283 | .185 | .017 | .037 |
| Using public sector source | .987 | .004 | 823 | 1011 | 1.025 | .004 | .979 | .995 |
| Want no more children | .506 | .017 | 1492 | 1935 | 1.293 | .034 | .472 | .540 |
| Want to delay at least 2 years | .249 | .014 | 1492 | 1935 | 1.214 | .056 | .221 | .277 |
| Ideal number of children | 3.851 | .058 | 2039 | 2621 | 1.878 | .015 | 3.735 | 3.967 |
| Severe anemia | .009 | .003 | 2093 | 2709 | 1.375 | .333 | .003 | .015 |
| Moderate anemia | .151 | .009 | 2093 | 2709 | 1.190 | .060 | .133 | .169 |
| Mild anemia | .452 | .009 | 2093 | 2709 | .872 | .020 | .434 | .470 |
| BMI < 18.5 | .109 | .009 | 1936 | 2499 | 1.317 | .083 | .091 | .127 |
| BMI between 18.5 and 30.0 | .849 | .008 | 1936 | 2499 | 1.023 | .009 | .833 | .865 |
| BMI higher than 30.0 | .042 | .004 | 1936 | 2499 | .972 | .095 | .034 | .050 |
| Weight-for-height | .047 | .005 | 1934 | 2497 | 1.080 | .106 | .037 | .057 |
| Mothers received medical care at birth | .964 | .018 | 756 | 963 | 2.562 | .019 | .928 | 1.000 |
| Had diarrhea in the last 2 weeks | .037 | .008 | 713 | 911 | 1.136 | .216 | .021 | .053 |
| Treated with ORS packets | .227 | .085 | 30 | 33 | 1.035 | .374 | .057 | .397 |
| Consulted medical personnel | .242 | .100 | 30 | 33 | 1.193 | .413 | .042 | .442 |
| Having health card, seen | 1.000 | .000 | 233 | 294 | Und | .000 | 1.000 | 1.000 |
| Received BCG vaccination | .978 | .012 | 233 | 294 | 1.191 | .012 | .954 | 1.000 |
| Received DPT vaccination (3 doses) | .968 | .012 | 233 | 294 | 1.055 | .012 | .944 | .992 |
| Received polio vaccination (3 doses) | .980 | .010 | 233 | 294 | 1.043 | .010 | .960 | 1.000 |
| Received measles vaccination | .947 | .022 | 233 | 294 | 1.449 | .023 | .903 | .991 |
| Fully immunized | .893 | .025 | 233 | 294 | 1.211 | .028 | .843 | .943 |
| Severe anemia | .014 | .004 | 618 | 795 | .915 | .286 | .006 | .022 |
| Moderate anemia | .263 | .020 | 618 | 795 | 1.093 | .076 | .223 | .303 |
| Mild anemia | .344 | .023 | 618 | 795 | 1.216 | .067 | .298 | .390 |
| Weight-for-height | .122 | .021 | 563 | 704 | 1.485 | .172 | .080 | .164 |
| Height-for-age | .307 | .027 | 563 | 704 | 1.318 | .088 | .253 | .361 |
| Weight-for-age | .197 | .024 | 563 | 704 | 1.319 | .122 | .149 | .245 |
| Total fertility rate (3 years) | 3.737 | .181 | NA | 7534 | 1.382 | .048 | 3.375 | 4.099 |
| Neonatal mortality rate (0-9 years) | 20.930 | 4.918 | 2677 | 3425 | 1.635 | .235 | 11.094 | 30.766 |
| Postneonatal mortality rate (0-9 years) | 22.873 | 3.059 | 2681 | 3429 | .991 | .134 | 16.755 | 28.991 |
| Infant mortality rate (0-9 years) | 43.803 | 6.009 | 2681 | 3429 | 1.400 | .137 | 31.785 | 55.821 |
| Child mortality rate (0-9 years) | 13.636 | 2.267 | 2682 | 3432 | .972 | .166 | 9.102 | 18.170 |
| Under-five mortality rate (0-9 years) | 56.842 | 6.235 | 2686 | 3436 | 1.272 | .110 | 44.372 | 69.312 |

NA = Not applicable
Und = Undefined

Table B.5 Sampling errors - Region 1, Uzbekistan 1996

| Variable | Value (R) | Standard error (SE) | Number of cases | | Design effect (DEFT) | Relative error (SE/R) | Confidence limits | |
|--|--------------|---------------------------|-------------------|------------------|----------------------------|-----------------------------|-------------------|-------|
| | | | Unweighted (N) | Weighted (WN) | | | R-2SE | R+2SE |
| Primary/secondary education | .517 | .022 | 982 | 471 | 1.368 | .043 | .473 | .561 |
| Secondary-special education | .370 | .017 | 982 | 471 | 1.114 | .046 | .336 | .404 |
| Higher education | .113 | .010 | 982 | 471 | 1.008 | .088 | .093 | .133 |
| Never married (in union) | .271 | .018 | 982 | 471 | 1.272 | .066 | .235 | .307 |
| Currently married (in union) | .678 | .016 | 982 | 471 | 1.060 | .024 | .646 | .710 |
| Married before age 20 | .452 | .025 | 572 | 274 | 1.178 | .055 | .402 | .502 |
| Had first sexual intercourse before 18 | .169 | .024 | 572 | 274 | 1.548 | .142 | .121 | .217 |
| Children ever born | 2.460 | .102 | 982 | 471 | 1.282 | .041 | 2.256 | 2.664 |
| Children ever born to women over 40 | 5.776 | .258 | 146 | 69 | 1.223 | .045 | 5.260 | 6.292 |
| Children surviving | 2.225 | .078 | 982 | 471 | 1.100 | .035 | 2.069 | 2.381 |
| Knowing any contraceptive method | .998 | .002 | 663 | 319 | 1.033 | .002 | .994 | 1.000 |
| Knowing any modern method | .998 | .002 | 663 | 319 | 1.033 | .002 | .994 | 1.000 |
| Ever used any contraceptive method | .788 | .015 | 663 | 319 | .957 | .019 | .758 | .818 |
| Currently using any method | .640 | .022 | 663 | 319 | 1.160 | .034 | .596 | .684 |
| Currently using a modern method | .617 | .021 | 663 | 319 | 1.113 | .034 | .575 | .659 |
| Currently using pill | .003 | .002 | 663 | 319 | .997 | .667 | .000 | .007 |
| Currently using IUD | .593 | .021 | 663 | 319 | 1.098 | .035 | .551 | .635 |
| Currently using injectables | .015 | .007 | 663 | 319 | 1.462 | .467 | .001 | .029 |
| Currently using condom | .003 | .002 | 663 | 319 | .930 | .667 | .000 | .007 |
| Currently using periodic abstinence | .018 | .006 | 663 | 319 | 1.126 | .333 | .006 | .030 |
| Currently using withdrawal | .004 | .003 | 663 | 319 | 1.008 | .750 | .000 | .010 |
| Using public sector source | .990 | .006 | 412 | 200 | 1.235 | .006 | .978 | 1.000 |
| Want no more children | .544 | .024 | 663 | 319 | 1.219 | .044 | .496 | .592 |
| Want to delay at least 2 years | .247 | .023 | 663 | 319 | 1.360 | .093 | .201 | .293 |
| Ideal number of children | 3.625 | .051 | 947 | 454 | 1.209 | .014 | 3.523 | 3.727 |
| Severe anemia | .021 | .006 | 961 | 461 | 1.199 | .286 | .009 | .033 |
| Moderate anemia | .213 | .010 | 961 | 461 | .738 | .047 | .193 | .233 |
| Mild anemia | .481 | .018 | 961 | 461 | 1.134 | .037 | .445 | .517 |
| BMI < 18.5 | .098 | .009 | 897 | 430 | .918 | .092 | .080 | .116 |
| BMI between 18.5 and 30.0 | .837 | .013 | 897 | 430 | 1.018 | .016 | .811 | .863 |
| BMI higher than 30.0 | .065 | .006 | 897 | 430 | .788 | .092 | .053 | .077 |
| Weight-for-height | .049 | .010 | 896 | 430 | 1.367 | .204 | .029 | .069 |
| Mothers received medical care at birth | .997 | .003 | 323 | 157 | 1.015 | .003 | .991 | 1.000 |
| Had diarrhea in the last 2 weeks | .083 | .015 | 306 | 149 | .948 | .181 | .053 | .113 |
| Treated with ORS packets | .455 | .095 | 26 | 12 | .964 | .209 | .265 | .645 |
| Consulted medical personnel | .462 | .087 | 26 | 12 | .889 | .188 | .288 | .636 |
| Having health card, seen | 1.000 | .000 | 96 | 47 | Und | .000 | 1.000 | 1.000 |
| Received BCG vaccination | .982 | .002 | 96 | 47 | .169 | .002 | .978 | .986 |
| Received DPT vaccination (3 doses) | .980 | .013 | 96 | 47 | .924 | .013 | .954 | 1.000 |
| Received polio vaccination (3 doses) | .978 | .015 | 96 | 47 | 1.017 | .015 | .948 | 1.000 |
| Received measles vaccination | .919 | .019 | 96 | 47 | .693 | .021 | .881 | .957 |
| Fully immunized | .908 | .024 | 96 | 47 | .810 | .026 | .860 | .956 |
| Severe anemia | .052 | .016 | 251 | 122 | .991 | .308 | .020 | .084 |
| Moderate anemia | .482 | .033 | 251 | 122 | 1.015 | .068 | .416 | .548 |
| Mild anemia | .275 | .030 | 251 | 122 | 1.093 | .109 | .215 | .335 |
| Weight-for-height | .068 | .010 | 262 | 128 | .605 | .147 | .048 | .088 |
| Height-for-age | .267 | .035 | 262 | 128 | 1.245 | .131 | .197 | .337 |
| Weight-for-age | .145 | .023 | 262 | 128 | 1.102 | .159 | .099 | .191 |

Und = Undefined

Table B.6 Sampling errors - Region 2, Uzbekistan 1996

| Variable | Value (R) | Standard error (SE) | Number of cases | | Design effect (DEFT) | Relative error (SE/R) | Confidence limits | |
|--|--------------|---------------------------|-------------------|------------------|----------------------------|-----------------------------|-------------------|-------|
| | | | Unweighted (N) | Weighted (WN) | | | R-2SE | R+2SE |
| Primary/secondary education | .691 | .031 | 936 | 1060 | 2.065 | .045 | .629 | .753 |
| Secondary-special education | .229 | .026 | 936 | 1060 | 1.906 | .114 | .177 | .281 |
| Higher education | .079 | .009 | 936 | 1060 | .985 | .114 | .061 | .097 |
| Never married (in union) | .295 | .022 | 936 | 1060 | 1.483 | .075 | .251 | .339 |
| Currently married (in union) | .665 | .023 | 936 | 1060 | 1.511 | .035 | .619 | .711 |
| Married before age 20 | .468 | .039 | 536 | 600 | 1.811 | .083 | .390 | .546 |
| Had first sexual intercourse before 18 | .137 | .020 | 536 | 600 | 1.367 | .146 | .097 | .177 |
| Children ever born | 2.278 | .101 | 936 | 1060 | 1.302 | .044 | 2.076 | 2.480 |
| Children ever born to women over 40 | 5.248 | .245 | 144 | 160 | 1.233 | .047 | 4.758 | 5.738 |
| Children surviving | 2.153 | .094 | 936 | 1060 | 1.275 | .044 | 1.965 | 2.341 |
| Knowing any contraceptive method | .942 | .012 | 621 | 705 | 1.249 | .013 | .918 | .966 |
| Knowing any modern method | .936 | .012 | 621 | 705 | 1.208 | .013 | .912 | .960 |
| Ever used any contraceptive method | .609 | .031 | 621 | 705 | 1.600 | .051 | .547 | .671 |
| Currently using any method | .529 | .032 | 621 | 705 | 1.576 | .060 | .465 | .593 |
| Currently using a modern method | .496 | .030 | 621 | 705 | 1.471 | .060 | .436 | .556 |
| Currently using pill | .006 | .003 | 621 | 705 | .937 | .500 | .000 | .012 |
| Currently using IUD | .445 | .030 | 621 | 705 | 1.519 | .067 | .385 | .505 |
| Currently using injectables | .021 | .006 | 621 | 705 | 1.081 | .286 | .009 | .033 |
| Currently using condom | .016 | .006 | 621 | 705 | 1.292 | .375 | .004 | .028 |
| Currently using periodic abstinence | .007 | .003 | 621 | 705 | .917 | .429 | .001 | .013 |
| Currently using withdrawal | .025 | .008 | 621 | 705 | 1.255 | .320 | .009 | .041 |
| Using public sector source | .982 | .007 | 311 | 352 | .925 | .007 | .968 | .996 |
| Want no more children | .550 | .026 | 621 | 705 | 1.300 | .047 | .498 | .602 |
| Want to delay at least 2 years | .254 | .019 | 621 | 705 | 1.083 | .075 | .216 | .292 |
| Ideal number of children | 3.974 | .087 | 936 | 1060 | 1.807 | .022 | 3.800 | 4.148 |
| Severe anemia | .003 | .002 | 922 | 1049 | .893 | .667 | .000 | .007 |
| Moderate anemia | .100 | .012 | 922 | 1049 | 1.222 | .120 | .076 | .124 |
| Mild anemia | .337 | .014 | 922 | 1049 | .885 | .042 | .309 | .365 |
| BMI < 18.5 | .123 | .019 | 844 | 961 | 1.695 | .154 | .085 | .161 |
| BMI between 18.5 and 30.0 | .854 | .018 | 844 | 961 | 1.456 | .021 | .818 | .890 |
| BMI higher than 30.0 | .023 | .004 | 844 | 961 | .742 | .174 | .015 | .031 |
| Weight-for-height | .056 | .010 | 844 | 961 | 1.315 | .179 | .036 | .076 |
| Mothers received medical care at birth | .914 | .051 | 284 | 334 | 2.993 | .056 | .812 | 1.000 |
| Had diarrhea in the last 2 weeks | .040 | .017 | 269 | 315 | 1.464 | .425 | .006 | .074 |
| Treated with ORS packets | .169 | .076 | 11 | 13 | .680 | .450 | .017 | .321 |
| Consulted medical personnel | .231 | .107 | 11 | 13 | .851 | .463 | .017 | .445 |
| Having health card, seen | 1.000 | .000 | 91 | 109 | Und | .000 | 1.000 | 1.000 |
| Received BCG vaccination | .987 | .013 | 91 | 109 | 1.148 | .013 | .961 | 1.000 |
| Received DPT vaccination (3 doses) | .955 | .023 | 91 | 109 | 1.072 | .024 | .909 | 1.000 |
| Received polio vaccination (3 doses) | .973 | .017 | 91 | 109 | 1.009 | .017 | .939 | 1.000 |
| Received measles vaccination | .923 | .046 | 91 | 109 | 1.686 | .050 | .831 | 1.000 |
| Fully immunized | .866 | .049 | 91 | 109 | 1.396 | .057 | .768 | .964 |
| Severe anemia | .005 | .005 | 249 | 294 | 1.106 | 1.000 | .000 | .015 |
| Moderate anemia | .176 | .027 | 249 | 294 | 1.114 | .153 | .122 | .230 |
| Mild anemia | .296 | .026 | 249 | 294 | .908 | .088 | .244 | .348 |
| Weight-for-height | .142 | .020 | 215 | 253 | .841 | .141 | .102 | .182 |
| Height-for-age | .398 | .025 | 215 | 253 | .727 | .063 | .348 | .448 |
| Weight-for-age | .245 | .026 | 215 | 253 | .889 | .106 | .193 | .297 |

Und = Undefined

Table B.7 Sampling errors - Region 3, Uzbekistan 1996

| Variable | Value (R) | Standard error (SE) | Number of cases | | Design effect (DEFT) | Relative error (SE/R) | Confidence limits | |
|--|--------------|---------------------------|-------------------|------------------|----------------------------|-----------------------------|-------------------|-------|
| | | | Unweighted (N) | Weighted (WN) | | | R-2SE | R+2SE |
| Primary/secondary education | .690 | .028 | 755 | 1249 | 1.670 | .041 | .634 | .746 |
| Secondary-special education | .218 | .019 | 755 | 1249 | 1.262 | .087 | .180 | .256 |
| Higher education | .092 | .012 | 755 | 1249 | 1.179 | .130 | .068 | .116 |
| Never married (in union) | .243 | .022 | 755 | 1249 | 1.432 | .091 | .199 | .287 |
| Currently married (in union) | .708 | .024 | 755 | 1249 | 1.454 | .034 | .660 | .756 |
| Married before age 20 | .463 | .032 | 463 | 760 | 1.367 | .069 | .399 | .527 |
| Had first sexual intercourse before 18 | .132 | .020 | 463 | 760 | 1.250 | .152 | .092 | .172 |
| Children ever born | 2.303 | .115 | 755 | 1249 | 1.399 | .050 | 2.073 | 2.533 |
| Children ever born to women over 40 | 4.500 | .238 | 132 | 211 | 1.168 | .053 | 4.024 | 4.976 |
| Children surviving | 2.167 | .095 | 755 | 1249 | 1.234 | .044 | 1.977 | 2.357 |
| Knowing any contraceptive method | .966 | .013 | 533 | 884 | 1.627 | .013 | .940 | .992 |
| Knowing any modern method | .964 | .013 | 533 | 884 | 1.647 | .013 | .938 | .990 |
| Ever used any contraceptive method | .664 | .036 | 533 | 884 | 1.764 | .054 | .592 | .736 |
| Currently using any method | .496 | .034 | 533 | 884 | 1.552 | .069 | .428 | .564 |
| Currently using a modern method | .442 | .037 | 533 | 884 | 1.720 | .084 | .368 | .516 |
| Currently using pill | .020 | .006 | 533 | 884 | 1.001 | .300 | .008 | .032 |
| Currently using IUD | .385 | .033 | 533 | 884 | 1.573 | .086 | .319 | .451 |
| Currently using injectables | .015 | .005 | 533 | 884 | 1.052 | .333 | .005 | .025 |
| Currently using condom | .018 | .007 | 533 | 884 | 1.140 | .389 | .004 | .032 |
| Currently using periodic abstinence | .007 | .004 | 533 | 884 | 1.174 | .571 | .000 | .015 |
| Currently using withdrawal | .047 | .010 | 533 | 884 | 1.134 | .213 | .027 | .067 |
| Using public sector source | .981 | .007 | 243 | 400 | .763 | .007 | .967 | .995 |
| Want no more children | .534 | .032 | 533 | 884 | 1.487 | .060 | .470 | .598 |
| Want to delay at least 2 years | .255 | .024 | 533 | 884 | 1.251 | .094 | .207 | .303 |
| Ideal number of children | 3.840 | .086 | 697 | 1149 | 1.607 | .022 | 3.668 | 4.012 |
| Severe anemia | .004 | .003 | 751 | 1243 | 1.386 | .750 | .000 | .010 |
| Moderate anemia | .085 | .014 | 751 | 1243 | 1.334 | .165 | .057 | .113 |
| Mild anemia | .447 | .016 | 751 | 1243 | .907 | .036 | .415 | .479 |
| BMI < 18.5 | .115 | .012 | 685 | 1134 | 1.025 | .104 | .091 | .139 |
| BMI between 18.5 and 30.0 | .849 | .011 | 685 | 1134 | .819 | .013 | .827 | .871 |
| BMI higher than 30.0 | .037 | .007 | 685 | 1134 | 1.022 | .189 | .023 | .051 |
| Weight-for-height | .054 | .008 | 684 | 1133 | .887 | .148 | .038 | .070 |
| Mothers received medical care at birth | .986 | .012 | 227 | 386 | 1.610 | .012 | .962 | 1.000 |
| Had diarrhea in the last 2 weeks | .069 | .009 | 214 | 363 | .509 | .130 | .051 | .087 |
| Treated with ORS packets | .371 | .114 | 16 | 25 | .918 | .307 | .143 | .599 |
| Consulted medical personnel | .371 | .172 | 16 | 25 | 1.383 | .464 | .027 | .715 |
| Having health card, seen | 1.000 | .000 | 63 | 106 | Und | .000 | 1.000 | 1.000 |
| Received BCG vaccination | .939 | .039 | 63 | 106 | 1.304 | .042 | .861 | 1.000 |
| Received DPT vaccination (3 doses) | .930 | .028 | 63 | 106 | .881 | .030 | .874 | .986 |
| Received polio vaccination (3 doses) | .956 | .032 | 63 | 106 | 1.243 | .033 | .892 | 1.000 |
| Received measles vaccination | .926 | .030 | 63 | 106 | .909 | .032 | .866 | .986 |
| Fully immunized | .826 | .052 | 63 | 106 | 1.102 | .063 | .722 | .930 |
| Severe anemia | .005 | .006 | 197 | 335 | 1.098 | 1.200 | .000 | .017 |
| Moderate anemia | .258 | .028 | 197 | 335 | .932 | .109 | .202 | .314 |
| Mild anemia | .269 | .023 | 197 | 335 | .756 | .086 | .223 | .315 |
| Weight-for-height | .179 | .042 | 170 | 290 | 1.432 | .235 | .095 | .263 |
| Height-for-age | .241 | .052 | 170 | 290 | 1.589 | .216 | .137 | .345 |
| Weight-for-age | .163 | .043 | 170 | 290 | 1.446 | .264 | .077 | .249 |

Und = Undefined

Table B.8 Sampling errors - Region 4, Uzbekistan 1996

| Variable | Value (R) | Standard error (SE) | Number of cases | | Design effect (DEFT) | Relative error (SE/R) | Confidence limits | |
|--|--------------|---------------------------|-------------------|------------------|----------------------------|-----------------------------|-------------------|-------|
| | | | Unweighted (N) | Weighted (WN) | | | R-2SE | R+2SE |
| Primary/secondary education | .680 | .027 | 914 | 1231 | 1.749 | .040 | .626 | .734 |
| Secondary-special education | .231 | .024 | 914 | 1231 | 1.699 | .104 | .183 | .279 |
| Higher education | .087 | .013 | 914 | 1231 | 1.364 | .149 | .061 | .113 |
| Never married (in union) | .218 | .014 | 914 | 1231 | 1.017 | .064 | .190 | .246 |
| Currently married (in union) | .745 | .014 | 914 | 1231 | .988 | .019 | .717 | .773 |
| Married before age 20 | .611 | .023 | 541 | 727 | 1.079 | .038 | .565 | .657 |
| Had first sexual intercourse before 18 | .215 | .026 | 541 | 727 | 1.464 | .121 | .163 | .267 |
| Children ever born | 2.314 | .055 | 914 | 1231 | .839 | .024 | 2.204 | 2.424 |
| Children ever born to women over 40 | 4.645 | .204 | 147 | 199 | 1.343 | .044 | 4.237 | 5.053 |
| Children surviving | 2.182 | .052 | 914 | 1231 | .848 | .024 | 2.078 | 2.286 |
| Knowing any contraceptive method | .932 | .011 | 680 | 917 | 1.093 | .012 | .910 | .954 |
| Knowing any modern method | .932 | .011 | 680 | 917 | 1.093 | .012 | .910 | .954 |
| Ever used any contraceptive method | .660 | .024 | 680 | 917 | 1.305 | .036 | .612 | .708 |
| Currently using any method | .578 | .022 | 680 | 917 | 1.135 | .038 | .534 | .622 |
| Currently using a modern method | .566 | .025 | 680 | 917 | 1.306 | .044 | .516 | .616 |
| Currently using pill | .020 | .007 | 680 | 917 | 1.304 | .350 | .006 | .034 |
| Currently using IUD | .529 | .029 | 680 | 917 | 1.520 | .055 | .471 | .587 |
| Currently using injectables | .008 | .001 | 680 | 917 | .305 | .125 | .006 | .010 |
| Currently using condom | .002 | .002 | 680 | 917 | 1.076 | 1.000 | .000 | .006 |
| Currently using periodic abstinence | .005 | .002 | 680 | 917 | .893 | .400 | .001 | .009 |
| Currently using withdrawal | .007 | .005 | 680 | 917 | 1.504 | .714 | .000 | .017 |
| Using public sector source | .987 | .006 | 384 | 520 | 1.057 | .006 | .975 | .999 |
| Want no more children | .430 | .012 | 680 | 917 | .624 | .028 | .406 | .454 |
| Want to delay at least 2 years | .231 | .014 | 680 | 917 | .860 | .061 | .203 | .259 |
| Ideal number of children | 3.316 | .043 | 893 | 1205 | 1.186 | .013 | 3.230 | 3.402 |
| Severe anemia | .018 | .006 | 909 | 1224 | 1.437 | .333 | .006 | .030 |
| Moderate anemia | .231 | .012 | 909 | 1224 | .858 | .052 | .207 | .255 |
| Mild anemia | .534 | .017 | 909 | 1224 | 1.056 | .032 | .500 | .568 |
| BMI < 18.5 | .100 | .009 | 848 | 1140 | .825 | .090 | .082 | .118 |
| BMI between 18.5 and 30.0 | .819 | .010 | 848 | 1140 | .787 | .012 | .799 | .839 |
| BMI higher than 30.0 | .081 | .007 | 848 | 1140 | .787 | .086 | .067 | .095 |
| Weight-for-height | .040 | .007 | 846 | 1138 | .981 | .175 | .026 | .054 |
| Mothers received medical care at birth | 1.000 | .000 | 318 | 431 | Und | .000 | 1.000 | 1.000 |
| Had diarrhea in the last 2 weeks | .027 | .011 | 309 | 419 | 1.225 | .407 | .005 | .049 |
| Treated with ORS packets | .181 | .134 | 9 | 11 | 1.012 | .740 | .000 | .449 |
| Consulted medical personnel | .181 | .122 | 9 | 11 | .925 | .674 | .000 | .425 |
| Having health card, seen | 1.000 | .000 | 100 | 136 | Und | .000 | 1.000 | 1.000 |
| Received BCG vaccination | .988 | .011 | 100 | 136 | 1.031 | .011 | .966 | 1.000 |
| Received DPT vaccination (3 doses) | .946 | .024 | 100 | 136 | 1.053 | .025 | .898 | .994 |
| Received polio vaccination (3 doses) | .950 | .017 | 100 | 136 | .798 | .018 | .916 | .984 |
| Received measles vaccination | .908 | .029 | 100 | 136 | 1.010 | .032 | .850 | .966 |
| Fully immunized | .839 | .034 | 100 | 136 | .914 | .041 | .771 | .907 |
| Severe anemia | .014 | .008 | 223 | 307 | 1.006 | .571 | .000 | .030 |
| Moderate anemia | .269 | .042 | 223 | 307 | 1.383 | .156 | .185 | .353 |
| Mild anemia | .502 | .048 | 223 | 307 | 1.445 | .096 | .406 | .598 |
| Weight-for-height | .066 | .021 | 188 | 260 | 1.202 | .318 | .024 | .108 |
| Height-for-age | .352 | .043 | 188 | 260 | 1.218 | .122 | .266 | .438 |
| Weight-for-age | .214 | .043 | 188 | 260 | 1.424 | .201 | .128 | .300 |

Und = Undefined

Table B.9 Sampling errors - Tashkent City, Uzbekistan 1996

| Variable | Value (R) | Standard error (SE) | Number of cases | | Design effect (DEFT) | Relative error (SE/R) | Confidence limits | |
|--|--------------|---------------------------|-------------------|------------------|----------------------------|-----------------------------|-------------------|-------|
| | | | Unweighted (N) | Weighted (WN) | | | R-2SE | R+2SE |
| Primary/secondary education | .343 | .032 | 828 | 404 | 1.916 | .093 | .279 | .407 |
| Secondary-special education | .380 | .022 | 828 | 404 | 1.324 | .058 | .336 | .424 |
| Higher education | .277 | .026 | 828 | 404 | 1.564 | .094 | .225 | .329 |
| Never married (in union) | .216 | .014 | 828 | 404 | .948 | .065 | .188 | .244 |
| Currently married (in union) | .688 | .014 | 828 | 404 | .883 | .020 | .660 | .716 |
| Married before age 20 | .349 | .022 | 544 | 266 | 1.056 | .063 | .305 | .393 |
| Had first sexual intercourse before 18 | .114 | .014 | 544 | 266 | 1.020 | .123 | .086 | .142 |
| Children ever born | 1.687 | .077 | 828 | 404 | 1.417 | .046 | 1.533 | 1.841 |
| Children ever born to women over 40 | 2.802 | .208 | 192 | 94 | 1.670 | .074 | 2.386 | 3.218 |
| Children surviving | 1.617 | .075 | 828 | 404 | 1.431 | .046 | 1.467 | 1.767 |
| Knowing any contraceptive method | .998 | .002 | 570 | 278 | 1.006 | .002 | .994 | 1.000 |
| Knowing any modern method | .998 | .002 | 570 | 278 | 1.006 | .002 | .994 | 1.000 |
| Ever used any contraceptive method | .839 | .022 | 570 | 278 | 1.431 | .026 | .795 | .883 |
| Currently using any method | .646 | .025 | 570 | 278 | 1.259 | .039 | .596 | .696 |
| Currently using a modern method | .488 | .022 | 570 | 278 | 1.041 | .045 | .444 | .532 |
| Currently using pill | .037 | .011 | 570 | 278 | 1.398 | .297 | .015 | .059 |
| Currently using IUD | .342 | .024 | 570 | 278 | 1.231 | .070 | .294 | .390 |
| Currently using injectables | .016 | .005 | 570 | 278 | .872 | .313 | .006 | .026 |
| Currently using condom | .081 | .011 | 570 | 278 | 1.003 | .136 | .059 | .103 |
| Currently using periodic abstinence | .049 | .010 | 570 | 278 | 1.128 | .204 | .029 | .069 |
| Currently using withdrawal | .068 | .012 | 570 | 278 | 1.161 | .176 | .044 | .092 |
| Using public sector source | .966 | .012 | 291 | 142 | 1.166 | .012 | .942 | .990 |
| Want no more children | .542 | .025 | 570 | 278 | 1.191 | .046 | .492 | .592 |
| Want to delay at least 2 years | .198 | .022 | 570 | 278 | 1.328 | .111 | .154 | .242 |
| Ideal number of children | 2.979 | .088 | 801 | 391 | 2.066 | .030 | 2.803 | 3.155 |
| Severe anemia | .000 | .000 | 731 | 357 | Und | Und | .000 | .000 |
| Moderate anemia | .067 | .010 | 731 | 357 | 1.123 | .149 | .047 | .087 |
| Mild anemia | .502 | .020 | 731 | 357 | 1.089 | .040 | .462 | .542 |
| BMI < 18.5 | .033 | .007 | 761 | 372 | 1.036 | .212 | .019 | .047 |
| BMI between 18.5 and 30.0 | .870 | .010 | 761 | 372 | .821 | .011 | .850 | .890 |
| BMI higher than 30.0 | .097 | .007 | 761 | 372 | .691 | .072 | .083 | .111 |
| Weight-for-height | .008 | .003 | 761 | 372 | .815 | .375 | .002 | .014 |
| Mothers received medical care at birth | 1.000 | .000 | 172 | 84 | Und | .000 | 1.000 | 1.000 |
| Had diarrhea in the last 2 weeks | .092 | .015 | 163 | 80 | .676 | .163 | .062 | .122 |
| Treated with ORS packets | .333 | .077 | 15 | 7 | .632 | .231 | .179 | .487 |
| Consulted medical personnel | .467 | .117 | 15 | 7 | .910 | .251 | .233 | .701 |
| Having health card, seen | 1.000 | .000 | 45 | 22 | Und | .000 | 1.000 | 1.000 |
| Received BCG vaccination | 1.000 | .000 | 45 | 22 | Und | .000 | 1.000 | 1.000 |
| Received DPT vaccination (3 doses) | .867 | .052 | 45 | 22 | 1.016 | .060 | .763 | .971 |
| Received polio vaccination (3 doses) | .978 | .022 | 45 | 22 | 1.002 | .022 | .934 | 1.000 |
| Received measles vaccination | .844 | .066 | 45 | 22 | 1.218 | .078 | .712 | .976 |
| Fully immunized | .822 | .069 | 45 | 22 | 1.208 | .084 | .684 | .960 |
| Severe anemia | .000 | .000 | 98 | 48 | Und | Und | .000 | .000 |
| Moderate anemia | .071 | .033 | 98 | 48 | 1.251 | .465 | .005 | .137 |
| Mild anemia | .224 | .050 | 98 | 48 | 1.198 | .223 | .124 | .324 |
| Weight-for-height | .025 | .024 | 119 | 58 | 1.272 | .960 | .000 | .073 |
| Height-for-age | .227 | .039 | 119 | 58 | .974 | .172 | .149 | .305 |
| Weight-for-age | .042 | .020 | 119 | 58 | .949 | .476 | .002 | .082 |

Und = Undefined

APPENDIX C

DATA QUALITY TABLES

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Uzbekistan 1996

| Age | Males | | Females | | Age | Males | | Females | |
|-----|--------|---------|---------|---------|------------------------|--------|---------|---------|---------|
| | Number | Percent | Number | Percent | | Number | Percent | Number | Percent |
| 0 | 233 | 2.5 | 196 | 2.1 | 37 | 113 | 1.2 | 113 | 1.2 |
| 1 | 250 | 2.6 | 224 | 2.4 | 38 | 130 | 1.4 | 115 | 1.2 |
| 2 | 220 | 2.3 | 236 | 2.5 | 39 | 95 | 1.0 | 116 | 1.2 |
| 3 | 237 | 2.5 | 254 | 2.7 | 40 | 108 | 1.1 | 114 | 1.2 |
| 4 | 270 | 2.8 | 279 | 2.9 | 41 | 58 | 0.6 | 73 | 0.8 |
| 5 | 263 | 2.8 | 247 | 2.6 | 42 | 85 | 0.9 | 81 | 0.9 |
| 6 | 286 | 3.0 | 223 | 2.3 | 43 | 88 | 0.9 | 106 | 1.1 |
| 7 | 230 | 2.4 | 238 | 2.5 | 44 | 88 | 0.9 | 67 | 0.7 |
| 8 | 270 | 2.8 | 238 | 2.5 | 45 | 85 | 0.9 | 80 | 0.8 |
| 9 | 236 | 2.5 | 277 | 2.9 | 46 | 92 | 1.0 | 69 | 0.7 |
| 10 | 256 | 2.7 | 255 | 2.7 | 47 | 45 | 0.5 | 58 | 0.6 |
| 11 | 229 | 2.4 | 240 | 2.5 | 48 | 68 | 0.7 | 40 | 0.4 |
| 12 | 199 | 2.1 | 244 | 2.6 | 49 | 70 | 0.7 | 76 | 0.8 |
| 13 | 223 | 2.3 | 245 | 2.6 | 50 | 66 | 0.7 | 50 | 0.5 |
| 14 | 229 | 2.4 | 241 | 2.5 | 51 | 27 | 0.3 | 44 | 0.5 |
| 15 | 233 | 2.4 | 205 | 2.2 | 52 | 39 | 0.4 | 54 | 0.6 |
| 16 | 230 | 2.4 | 211 | 2.2 | 53 | 49 | 0.5 | 46 | 0.5 |
| 17 | 229 | 2.4 | 203 | 2.1 | 54 | 47 | 0.5 | 50 | 0.5 |
| 18 | 205 | 2.2 | 182 | 1.9 | 55 | 54 | 0.6 | 74 | 0.8 |
| 19 | 160 | 1.7 | 189 | 2.0 | 56 | 78 | 0.8 | 80 | 0.8 |
| 20 | 214 | 2.2 | 184 | 1.9 | 57 | 38 | 0.4 | 43 | 0.5 |
| 21 | 135 | 1.4 | 165 | 1.7 | 58 | 67 | 0.7 | 58 | 0.6 |
| 22 | 163 | 1.7 | 157 | 1.7 | 59 | 35 | 0.4 | 41 | 0.4 |
| 23 | 169 | 1.8 | 169 | 1.8 | 60 | 79 | 0.8 | 89 | 0.9 |
| 24 | 169 | 1.8 | 158 | 1.7 | 61 | 37 | 0.4 | 38 | 0.4 |
| 25 | 193 | 2.0 | 180 | 1.9 | 62 | 32 | 0.3 | 31 | 0.3 |
| 26 | 152 | 1.6 | 155 | 1.6 | 63 | 43 | 0.5 | 65 | 0.7 |
| 27 | 171 | 1.8 | 133 | 1.4 | 64 | 47 | 0.5 | 45 | 0.5 |
| 28 | 160 | 1.7 | 138 | 1.4 | 65 | 48 | 0.5 | 62 | 0.7 |
| 29 | 115 | 1.2 | 116 | 1.2 | 66 | 42 | 0.4 | 41 | 0.4 |
| 30 | 167 | 1.7 | 164 | 1.7 | 67 | 33 | 0.4 | 47 | 0.5 |
| 31 | 131 | 1.4 | 104 | 1.1 | 68 | 27 | 0.3 | 31 | 0.3 |
| 32 | 149 | 1.6 | 154 | 1.6 | 69 | 32 | 0.3 | 30 | 0.3 |
| 33 | 112 | 1.2 | 110 | 1.2 | 70+ | 239 | 2.5 | 324 | 3.4 |
| 34 | 126 | 1.3 | 102 | 1.1 | Don't know/ missing | 1 | 0.0 | 0 | 0.0 |
| 36 | 103 | 1.1 | 137 | 1.4 | Total | 9,527 | 100.0 | 9,502 | 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 10-54 and of interviewed women age 15-49, and the percentage of eligible women who were interviewed (weighted) by five-year age groups. Uzbekistan 1996

| Age | Household population of women | | Interviewed women | | Percent interviewed (weighted) |
|-------|-------------------------------|---------|-------------------|---------|--------------------------------|
| | Number | Percent | Number | Percent | |
| 10-14 | 1,225 | - | - | - | - |
| 15-19 | 989 | 21.9 | 976 | 22.1 | 98.6 |
| 20-24 | 833 | 18.4 | 811 | 18.4 | 97.4 |
| 25-29 | 722 | 16.0 | 703 | 16.0 | 97.3 |
| 30-34 | 634 | 14.0 | 622 | 14.1 | 98.1 |
| 35-39 | 578 | 12.8 | 564 | 12.8 | 97.6 |
| 40-44 | 441 | 9.8 | 423 | 9.6 | 96.0 |
| 45-49 | 322 | 7.1 | 307 | 7.0 | 95.5 |
| 50-54 | 244 | - | - | - | - |
| 15-49 | 4,519 | - | 4,405 | - | 97.5 |

Note: The de facto population includes all residents and nonresidents who slept in the household the night before interview.

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted),
Uzbekistan 1996

| Subject | Reference group | Percentage missing information | Number of cases |
|--------------------------------------|-----------------------------------|--------------------------------|-----------------|
| Birth date | Births in last 15 years | | |
| Month only | | 0.4 | 7,131 |
| Month and year | | 0.0 | 7,131 |
| Age at death | Deaths to births in last 15 years | 0.0 | 403 |
| Age/date at first union ¹ | Ever-married women | 0.6 | 3,316 |
| Respondent's education | All women | 0.0 | 4,415 |
| Child's size at birth | Births in last 35 months | 0.5 | 1,346 |
| Anthropometry² | Living children age 0-35 months | | |
| Height missing | | 12.6 | 1,325 |
| Weight missing | | 12.0 | 1,325 |
| Height or weight missing | | 12.8 | 1,325 |
| Diarrhea in last 2 weeks | Living children age 0-35 months | 0.2 | 1,325 |

¹ Both year and age missing

² Child not measured

Table C.4 Births by calendar years

Distribution of births by Western 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, Uzbekistan 1996

| Year | Number of births | | | Percentage with complete birth date ¹ | | | Sex ratio at birth ² | | | Calendar ratio ³ | | | Male | | | Female | | |
|-------|------------------|-----|-------|--|-------|-------|---------------------------------|-------|-------|-----------------------------|-------|-------|-------|-----|-------|--------|-----|-------|
| | L | D | T | L | D | T | L | D | T | L | D | T | L | D | T | L | D | T |
| 95 | 503 | 26 | 529 | 100.0 | 100.0 | 100.0 | 120.1 | 171.2 | 122.1 | NA | NA | NA | 274 | 16 | 291 | 229 | 10 | 238 |
| 94 | 446 | 25 | 472 | 100.0 | 100.0 | 100.0 | 96.8 | 216.4 | 100.9 | 93.6 | 98.2 | 93.9 | 220 | 17 | 237 | 227 | 8 | 235 |
| 93 | 450 | 26 | 476 | 100.0 | 100.0 | 100.0 | 84.1 | 219.7 | 88.5 | 91.4 | 84.0 | 91.0 | 206 | 18 | 223 | 244 | 8 | 253 |
| 92 | 538 | 36 | 575 | 99.9 | 100.0 | 99.9 | 89.7 | 103.5 | 90.5 | 115.4 | 142.2 | 116.8 | 254 | 18 | 273 | 284 | 18 | 302 |
| 91 | 482 | 25 | 508 | 99.8 | 100.0 | 99.8 | 105.9 | 104.1 | 105.8 | 93.5 | 77.7 | 92.5 | 248 | 13 | 261 | 234 | 12 | 247 |
| 90 | 494 | 28 | 522 | 99.7 | 100.0 | 99.7 | 124.6 | 155.1 | 126.1 | 106.2 | 142.6 | 107.7 | 274 | 17 | 291 | 220 | 11 | 231 |
| 89 | 448 | 15 | 463 | 100.0 | 100.0 | 100.0 | 89.8 | 135.4 | 91.0 | 93.6 | 50.6 | 91.2 | 212 | 8 | 220 | 236 | 6 | 242 |
| 88 | 464 | 29 | 493 | 100.0 | 92.9 | 99.6 | 131.2 | 176.0 | 133.5 | 100.1 | 138.1 | 101.8 | 263 | 19 | 282 | 201 | 11 | 211 |
| 87 | 478 | 28 | 506 | 99.7 | 98.2 | 99.6 | 83.5 | 132.4 | 85.6 | 102.7 | 92.8 | 102.1 | 217 | 16 | 233 | 261 | 12 | 273 |
| 86 | 467 | 31 | 498 | 99.7 | 95.3 | 99.4 | 91.3 | 106.7 | 92.2 | NA | NA | NA | 223 | 16 | 239 | 244 | 15 | 259 |
| 91-95 | 2,420 | 139 | 2,559 | 99.9 | 100.0 | 99.9 | 98.7 | 148.3 | 100.9 | NA | NA | NA | 1,202 | 83 | 1,285 | 1,218 | 56 | 1,274 |
| 86-90 | 2,351 | 131 | 2,482 | 99.8 | 96.9 | 99.7 | 102.5 | 138.8 | 104.1 | NA | NA | NA | 1,190 | 76 | 1,266 | 1,161 | 55 | 1,216 |
| 81-85 | 1,964 | 135 | 2,099 | 99.7 | 89.1 | 99.0 | 93.6 | 141.7 | 96.1 | NA | NA | NA | 949 | 79 | 1,028 | 1,014 | 56 | 1,070 |
| 76-80 | 1,470 | 116 | 1,586 | 99.9 | 88.8 | 99.1 | 114.0 | 163.8 | 117.0 | NA | NA | NA | 783 | 72 | 855 | 687 | 44 | 731 |
| <76 | 949 | 74 | 1,023 | 99.8 | 93.8 | 99.4 | 99.7 | 152.8 | 102.8 | NA | NA | NA | 474 | 44 | 518 | 475 | 29 | 504 |
| All | 9,153 | 595 | 9,748 | 99.8 | 93.9 | 99.5 | 100.9 | 148.0 | 103.3 | NA | NA | NA | 4,598 | 355 | 4,953 | 4,556 | 240 | 4,795 |

NA = Not applicable

¹ Both year and month of birth given

² $(B_m/B_f) \cdot 100$, where B_m and B_f are the numbers of male and female births, respectively

³ $[2B_x/(B_{x-1}+B_{x+1})] \cdot 100$, 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, Uzbekistan 1996

| Age at death (in days) | Number of years preceding the survey | | | | Total 0-19 | |
|-------------------------------|--------------------------------------|------|-------|-------|---------------|------|
| | 0-4 | 5-9 | 10-14 | 15-19 | | |
| <1 | 4 | 3 | 1 | 1 | 10 | |
| 1 | 11 | 13 | 16 | 9 | 50 | |
| 2 | 3 | 10 | 6 | 3 | 22 | |
| 3 | 6 | 9 | 8 | 9 | 31 | |
| 4 | 7 | 0 | 3 | 2 | 12 | |
| 5 | 8 | 2 | 2 | 8 | 20 | |
| 6 | 5 | 0 | 1 | 0 | 6 | |
| 7 | 0 | 0 | 1 | 0 | 1 | |
| 8 | 1 | 1 | 1 | 0 | 3 | |
| 9 | 3 | 3 | 2 | 0 | 7 | |
| 10 | 0 | 2 | 0 | 2 | 5 | |
| 13 | 0 | 0 | 2 | 0 | 2 | |
| 14 | 1 | 0 | 0 | 0 | 1 | |
| 15 | 1 | 0 | 2 | 0 | 3 | |
| 16 | 1 | 0 | 0 | 0 | 1 | |
| 17 | 1 | 0 | 1 | 0 | 2 | |
| 18 | 3 | 0 | 2 | 0 | 5 | |
| 20 | 2 | 0 | 4 | 0 | 6 | |
| 23 | 0 | 0 | 0 | 1 | 1 | |
| 26 | 0 | 2 | 0 | 0 | 2 | |
| 31+ | 0 | 0 | 2 | 2 | 3 | |
| Total 0-30 | 57 | 46 | 53 | 35 | 190 | |
| Percent neonatal ¹ | early | | | | | |
| | | 78.0 | 81.2 | 72.5 | 90.4 | 79.5 |

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, Uzbekistan 1996

| Age at death (in months) | Number of years preceding the survey | | | | Total 0-19 |
|-------------------------------|--------------------------------------|------|-------|-------|---------------|
| | 0-4 | 5-9 | 10-14 | 15-19 | |
| <1 ^a | 57 | 46 | 53 | 35 | 190 |
| 1 | 10 | 4 | 5 | 6 | 24 |
| 2 | 7 | 7 | 3 | 4 | 22 |
| 3 | 5 | 6 | 11 | 10 | 32 |
| 4 | 5 | 2 | 8 | 2 | 17 |
| 5 | 8 | 7 | 1 | 1 | 17 |
| 6 | 7 | 7 | 11 | 1 | 26 |
| 7 | 4 | 0 | 3 | 3 | 9 |
| 8 | 4 | 1 | 4 | 3 | 11 |
| 9 | 8 | 3 | 6 | 4 | 21 |
| 10 | 1 | 1 | 3 | 2 | 6 |
| 11 | 3 | 2 | 4 | 1 | 10 |
| 12 | 4 | 10 | 6 | 4 | 25 |
| 13 | 5 | 0 | 0 | 1 | 6 |
| 14 | 1 | 0 | 0 | 2 | 4 |
| 15 | 0 | 0 | 2 | 0 | 2 |
| 16 | 0 | 0 | 3 | 1 | 4 |
| 17 | 0 | 0 | 0 | 0 | 1 |
| 18 | 1 | 0 | 1 | 2 | 4 |
| 20 | 0 | 1 | 0 | 0 | 1 |
| 22 | 0 | 1 | 0 | 0 | 1 |
| 1 year | 2 | 1 | 12 | 4 | 19 |
| Total 0-11 | 118 | 85 | 112 | 72 | 386 |
| Percent neonatal ^b | 48.1 | 53.9 | 47.3 | 49.2 | 49.3 |

^a Includes deaths under 1 month reported in days

^b (Under 1 month/under 1 year) * 100

APPENDIX D

SAMPLE IMPLEMENTATION

Table D.1 Sample implementation

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 region and residence, Uzbekistan 1996

| Result | Region | | | | | Residence | | Total |
|--|----------|----------|----------|----------|---------------|-----------|-------|-------|
| | Region 1 | Region 2 | Region 3 | Region 4 | Tashkent City | Urban | Rural | |
| Selected households | | | | | | | | |
| Completed (C) | 92.1 | 96.9 | 95.6 | 96.5 | 89.0 | 92.5 | 95.6 | 93.9 |
| Household present but no competent respondent at home (HP) | 0.3 | 0.1 | 0.1 | 0.0 | 1.2 | 0.5 | 0.2 | 0.4 |
| Refused (R) | 1.0 | 0.1 | 0.5 | 0.7 | 1.4 | 1.0 | 0.5 | 0.8 |
| Dwelling not found (DNF) | 0.1 | 0.1 | 1.4 | 0.0 | 0.2 | 0.1 | 0.7 | 0.4 |
| Household absent (HA) | 2.9 | 2.2 | 1.2 | 0.8 | 6.1 | 3.6 | 1.6 | 2.7 |
| Dwelling vacant (DV) | 3.5 | 0.5 | 0.9 | 1.7 | 1.9 | 2.0 | 1.3 | 1.7 |
| Dwelling destroyed (DD) | 0.0 | 0.0 | 0.3 | 0.4 | 0.1 | 0.2 | 0.1 | 0.2 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 763 | 765 | 767 | 767 | 883 | 2,228 | 1,717 | 3,945 |
| Household response rate (HRR)¹ | 98.5 | 99.6 | 97.9 | 99.3 | 96.9 | 98.2 | 98.6 | 98.4 |
| Eligible women | | | | | | | | |
| Completed (EWC) | 96.4 | 98.6 | 98.7 | 96.6 | 95.7 | 96.6 | 97.8 | 97.2 |
| Not at home (EWNH) | 2.6 | 0.4 | 0.5 | 2.2 | 1.3 | 1.9 | 1.0 | 1.5 |
| Refused (EWR) | 0.6 | 0.3 | 0.4 | 0.3 | 2.0 | 1.0 | 0.3 | 0.7 |
| Incapacitated (EWI) | 0.5 | 0.6 | 0.4 | 0.8 | 1.0 | 0.5 | 0.9 | 0.7 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,019 | 949 | 765 | 946 | 865 | 2,388 | 2,156 | 4,544 |
| Eligible woman response rate (EWRR)² | 96.4 | 98.6 | 98.7 | 96.6 | 95.7 | 96.6 | 97.8 | 97.2 |
| Overall response rate (ORR)³ | 94.9 | 98.2 | 96.6 | 96.0 | 92.8 | 94.9 | 96.5 | 95.6 |

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, 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:

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

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

$$ORR = HRR * EWRR$$

APPENDIX E

PERSONS INVOLVED IN THE 1996 UZBEKISTAN DEMOGRAPHIC AND HEALTH SURVEY

APPENDIX E

PERSONS INVOLVED IN THE 1996 UZBEKISTAN DEMOGRAPHIC AND HEALTH SURVEY

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Executive Directors

Dr. Damin Asadov

Dr. Akhror Yarkulov

Technical Directors

Farida Aupova

Feruz Faizieva

Senior Field Staff

Dr. Mila Li, Field Coordinator

Dr. Rano Usmanova, Field Coordinator

Macro International Staff

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Dr. Almaz Sharmanov, Health Specialist

Mr. Trevor Croft, Chief of Data Processing

Ms. Thanh Lê, Sampling Statistician

Dr. Kia Weinstein, Consultant

Ms. Annie Cross, Regional Coordinator

Ms. Trina Yannicos, Editor

Ms. Kaye Mitchell, Document Production Specialist

Mr. Jonathan Dammons, Graphics Specialist

Ms. Catherine Sansone, Graphics Specialist

Ministry of Health, Republic of Uzbekistan

S.I. Karimov, Minister

A.B. Yarkulov, Deputy Minister

Goskomprognozstat (State Committee on Statistics and Analysis)

G.S. Kudratov, General Director

R.S. Makhmudova, Deputy Director

Chiefs of Oblast Health Departments

M.A. Ziyaeva, Tashkent City

T.B. Yeshganov, Karakalpakstanskaya Oblast

B.O. Dustjanov, Khorezmskaya Oblast

I.N. Norbaev, Navoyiskaya Oblast

M.M. Abdurakhmanov, Bukharskaya Oblast

H.M. Mustafaev, Kashkadyinskaya Oblast

H.H. Kurramov, Surkhandyinskaya Oblast

J.E. Eshkbulov, Samarkandskaya Oblast

M.G. Sadykov, Jizzakskaya Oblast

B.R. Mirzaev, Syrdaryinskaya Oblast
A.S. Sadykov, Tashkentskaya Oblast
M.E. Turabekov, Namanganskaya Oblast
H.H. Khojarahmetova, Ferganskaya Oblast
A.A. Atakhanov, Andijanskaya Oblast

Field Staff

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K.D. Mikirtichev

Listers
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Mappers
B.J. Jumanov
H.Safarov

Region 2

Supervisor
A.H. Shamirov

Listers
N.Aripov

Mappers
S. Razikov

Region 3

Supervisor
K. Abdurakhmanov

Listers
S. Tashmetov

Mappers
A. Jalilov

Region 4

Supervisor
Norbaev T.

Listers
B. Usupaliev

Mappers

Region 5

Supervisor
K.D. Mikirtichev

Listers
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Mappers
N.F. Fuzailova

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Supervisor
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Field Editor
G.N. Bekbaulieva
Interviewers
Z.U. Umirbekova
Z.D. Jumaniyazov
Z.Matkarimova
D.Matkarimova
R. Abdurakhimova
Medical Technician
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Field Editor
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D. Ruzmatova

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T. Norbaev

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Field Editor

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Interviewers

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Z. Akhatova

E.N. Azimova

N. Turdibaeva

D. Abdullaeva

Medical Technician

Z. Nematova

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D.B. Akbarova

M.M. Faizirakhmanova

APPENDIX F
QUESTIONNAIRES

UZBEKISTAN DEMOGRAPHIC AND HEALTH SURVEY QUESTIONNAIRE HOUSEHOLD SCHEDULE

**REPUBLIC OF UZBEKISTAN
INSTITUTE OF OBSTETRICS AND GYNECOLOGY MINISTRY OF HEALTH**

| IDENTIFICATION | |
|---|--|
| CITY/TOWN/VILLAGE NAME _____ | |
| NAME OF HOUSEHOLD HEAD _____ | |
| REGION | |
| OBLAST | |
| RAION | |
| CLUSTER NUMBER | |
| URBAN/RURAL (urban = 1; rural = 2) | |
| LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE (large city = 1, small city = 2, town = 3, countryside = 4) | |
| HOUSEHOLD NUMBER | |

| INTERVIEWER VISIT | | | | |
|--|---|---|---|--|
| | 1 | 2 | 3 | FINAL VISIT |
| DATE | | | | DAY MONTH YEAR NAME RESULT <div style="float: right; text-align: center;"> </div> |
| INTERVIEWER'S NAME | | | | |
| RESULT* | | | | |
| NEXT VISIT: DATE TIME | | | | TOTAL NO. VISITS <input style="width: 20px; height: 20px;" type="text"/> |
| * 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 <input style="width: 20px; height: 20px;" type="text"/> TOTAL ELIGIBLE WOMEN <input style="width: 20px; height: 20px;" type="text"/> LINE NO. OF RESP. TO HOUSEHOLD SCHEDULE <input style="width: 20px; height: 20px;" type="text"/> |

| | | | |
|--|--|---|---|
| SUPERVISOR | FIELD EDITOR | OFFICE EDITOR | KEYED BY |
| NAME _____ <input style="width: 30px; height: 20px;" type="text"/> | NAME _____ <input style="width: 30px; height: 20px;" type="text"/> | <input style="width: 30px; height: 20px;" type="text"/> | <input style="width: 30px; height: 20px;" type="text"/> |
| DATE _____ | DATE _____ | | |

INFORMATION ABOUT HOUSEHOLD MEMBERS AND VISITORS

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 | | | PENSION | PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 15 YEARS OLD | | | ELIGIBILITY | |
|----------|---|--|--------------------------------|----------------------------------|---------------------------|--------------------|---------------------------------|--|---------------------------|-------------------------|--|-----------------------------------|--|--|---|
| | | | Does (NAME) usually live here? | Did (NAME) stay here last night? | Is (NAME) male or female? | How old is (NAME)? | Has (NAME) ever been to school? | IF ATTENDED SCHOOL | | IF AGE 7 YEARS OR OLDER | IF AGE 50 YEARS OR OLDER | IF ALIVE | Is (NAME'S) natural father alive? | IF ALIVE | CIRCLE LINE NUMBER OF WOMEN ELIGIBLE FOR INDIVIDUAL INTERVIEW |
| | 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? | | | | | | What is the highest level of school (NAME) attended? | IF AGE LESS THAN 35 YEARS | | Is (NAME) pensioner? | Is (NAME'S) natural mother alive? | Does (NAME'S) natural mother live in this household? IF YES: What is her name? | Does (NAME'S) natural father live in this household? IF YES: What is his name? | |
| | (2) | (3) | YES NO | YES NO | M F | IN YEARS | YES NO | LEVEL GRADE | YES NO | | YES NO DK | YES NO DK | | YES NO DK | (16) |
| 01 | | | 1 2 | 1 2 | 1 2 | | 1 2 | | 1 2 | | 1 2 8 | 1 2 8 | | 1 2 8 | 01 |
| 02 | | | 1 2 | 1 2 | 1 2 | | 1 2 | | 1 2 | | 1 2 8 | 1 2 8 | | 1 2 8 | 02 |
| 03 | | | 1 2 | 1 2 | 1 2 | | 1 2 | | 1 2 | | 1 2 8 | 1 2 8 | | 1 2 8 | 03 |
| 04 | | | 1 2 | 1 2 | 1 2 | | 1 2 | | 1 2 | | 1 2 8 | 1 2 8 | | 1 2 8 | 04 |
| 05 | | | 1 2 | 1 2 | 1 2 | | 1 2 | | 1 2 | | 1 2 8 | 1 2 8 | | 1 2 8 | 05 |

HOUSEHOLD SCHEDULE CONTINUED

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) |
|-----|-----|----------------------|--------|--------|-----|----------------------|--------|----------------------|--------|-----------|-----------|----------------------|-----------|----------------------|------|
| | | | YES NO | YES NO | M F | IN YEARS | YES NO | LEVEL GRADE | YES NO | YES NO DK | YES NO DK | | YES NO DK | | |
| 06 | | <input type="text"/> | 1 2 | 1 2 | 1 2 | <input type="text"/> | 1 2 | <input type="text"/> | 1 2 | 1 2 8 | 1 2 8 | <input type="text"/> | 1 2 8 | <input type="text"/> | 06 |
| 07 | | <input type="text"/> | 1 2 | 1 2 | 1 2 | <input type="text"/> | 1 2 | <input type="text"/> | 1 2 | 1 2 8 | 1 2 8 | <input type="text"/> | 1 2 8 | <input type="text"/> | 07 |
| 08 | | <input type="text"/> | 1 2 | 1 2 | 1 2 | <input type="text"/> | 1 2 | <input type="text"/> | 1 2 | 1 2 8 | 1 2 8 | <input type="text"/> | 1 2 8 | <input type="text"/> | 08 |
| 09 | | <input type="text"/> | 1 2 | 1 2 | 1 2 | <input type="text"/> | 1 2 | <input type="text"/> | 1 2 | 1 2 8 | 1 2 8 | <input type="text"/> | 1 2 8 | <input type="text"/> | 09 |
| 10 | | <input type="text"/> | 1 2 | 1 2 | 1 2 | <input type="text"/> | 1 2 | <input type="text"/> | 1 2 | 1 2 8 | 1 2 8 | <input type="text"/> | 1 2 8 | <input type="text"/> | 10 |
| 11 | | <input type="text"/> | 1 2 | 1 2 | 1 2 | <input type="text"/> | 1 2 | <input type="text"/> | 1 2 | 1 2 8 | 1 2 8 | <input type="text"/> | 1 2 8 | <input type="text"/> | 11 |
| 12 | | <input type="text"/> | 1 2 | 1 2 | 1 2 | <input type="text"/> | 1 2 | <input type="text"/> | 1 2 | 1 2 8 | 1 2 8 | <input type="text"/> | 1 2 8 | <input type="text"/> | 12 |

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TICK HERE IF CONTINUATION SHEET USED

Just to make sure that I have a complete listing:

1) Are there any other persons such as small children or infants that we have not listed?

YES → ENTER EACH IN TABLE NO

2) In addition, are there any other people who may not be members of your family (lodgers or friends) who usually live here?

YES → ENTER EACH IN TABLE NO

3) Are there any guests or temporary visitors staying here, or anyone else who slept here last night that have not been listed?

YES → ENTER EACH IN TABLE NO

* CODES FOR Q.3
RELATIONSHIP TO HEAD OF HOUSEHOLD:

- 01 . HEAD
- 02 . WIFE OR HUSBAND
- 03 . SON OR DAUGHTER
- 04 . SON-IN-LAW OR DAUGHTER-IN-LAW
- 05 . GRANDCHILD
- 06 . PARENT
- 07 . PARENT-IN-LAW
- 08 . BROTHER OR SISTER
- 09 . CO-WIFE
- 10 . OTHER RELATIVE
- 11 . ADOPTED/FOSTER/STEP CHILD
- 12 . NOT RELATED
- 98 . DK

** CODES FOR Q.9
LEVEL OF EDUCATION:

- 1 . PRIMARY AND SECONDARY
- 2 . SECONDARY SPECIAL
- 3 . HIGHER
- 8 . DK
- GRADE
- 00 . LESS THAN 1 YEAR COMPLETED
- 98 . DK

*** THESE QUESTIONS REFER TO THE BIOLOGICAL PARENTS OF THE CHILD. RECORD 00 IF PARENT NOT MEMBER OF HOUSEHOLD.

| No | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|------|-----|----|------------------|---|---|-----------------|---|---|-----------------|---|---|----------------|---|---|-------------------|---|---|--|
| 17 | What is the main source of drinking water for members of your household? | PIPED WATER PIPED INTO RESIDENCE/YARD/PLOT..... 1 1 → 19 PUBLIC TAP 1 2 WELL WATER WELL IN RESIDENCE/YARD/PLOT..... 2 1 → 19 PUBLIC WELL 2 2 SURFACE WATER SPRING WATER 3 1 RIVER/STREAM..... 3 2 POND/LAKE 3 3 DAM 3 4 RAINWATER 4 1 → 19 TANKER TRUCK 5 1 BOTTLED WATER 6 1 → 19 OTHER _____ 9 6 (SPECIFY) | | | | | | | | | | | | | | | | | | | |
| 18 | How long does it take to go there, get water, and come back? | MINUTES..... <input type="text"/> <input type="text"/> <input type="text"/> ON PREMISES996 | | | | | | | | | | | | | | | | | | | |
| 19 | What kind of toilet facility does your household have? | FLUSH TOILET OWN FLUSH TOILET..... 1 1 SHARED FLUSH TOILET 1 2 PIT TOILET/LATRINE TRADITIONAL TYPE..... 2 1 IMPROVED - VENTILATED 2 2 NO FACILITY (BUSH/FIELD) 3 1 OTHER _____ 9 6 (SPECIFY) | | | | | | | | | | | | | | | | | | | |
| 20 | Does your household have: Electricity? A radio? A television? A telephone? A refrigerator | <table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>ELECTRICITY.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>RADIO.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>TELEVISION.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>TELEPHONE.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>REFRIGERATOR.....</td> <td>1</td> <td>2</td> </tr> </tbody> </table> | | YES | NO | ELECTRICITY..... | 1 | 2 | RADIO..... | 1 | 2 | TELEVISION..... | 1 | 2 | TELEPHONE..... | 1 | 2 | REFRIGERATOR..... | 1 | 2 | |
| | YES | NO | | | | | | | | | | | | | | | | | | | |
| ELECTRICITY..... | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| RADIO..... | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| TELEVISION..... | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| TELEPHONE..... | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| REFRIGERATOR..... | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| 21 | How many rooms in your household are used for sleeping? | ROOMS..... <input type="text"/> <input type="text"/> | | | | | | | | | | | | | | | | | | | |
| 22 | MAIN MATERIAL OF THE FLOOR RECORD OBSERVATION | NATURAL FLOOR EARTH/SAND 1 1 TEZEK 1 2 RUDIMENTARY FLOOR WOOD PLANKS 2 1 STRAW/SAWDUST..... 2 2 FINISHED FLOOR PARQUET OR POLISHED WOOD 3 1 LINOLEUM OR ASPHALT 3 2 CERAMIC TILES 3 3 CEMENT 3 4 CARPET 3 5 OTHER _____ 9 6 (SPECIFY) | | | | | | | | | | | | | | | | | | | |
| 23 | Does any member of your household own A bicycle? A motorcycle? A car? | <table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>BICYCLE.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>MOTORCYCLE.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>CAR.....</td> <td>1</td> <td>2</td> </tr> </tbody> </table> | | YES | NO | BICYCLE..... | 1 | 2 | MOTORCYCLE..... | 1 | 2 | CAR..... | 1 | 2 | | | | | | | |
| | YES | NO | | | | | | | | | | | | | | | | | | | |
| BICYCLE..... | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| MOTORCYCLE..... | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| CAR..... | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| 24 | What type of salt is usually used for cooking in your household? (ASK TO SEE SALT PACKAGE). | LOCAL SALT 0 1 PACKAGED SALT (IODIZED)..... 0 2 PACKAGED SALT (NOT IODIZED)..... 0 3 OTHER _____ 9 6 (SPECIFY) | | | | | | | | | | | | | | | | | | | |

INDIVIDUAL WOMAN'S QUESTIONNAIRE

REPUBLIC OF UZBEKISTAN

INSTITUTE OF OBSTETRICS AND GYNECOLOGY MINISTRY OF HEALTH

| IDENTIFICATION | |
|---|--|
| CITY/TOWN/VILLAGE NAME _____ | |
| NAME OF HOUSEHOLD HEAD _____ | |
| REGION | |
| OBLAST | |
| RAION | |
| CLUSTER NUMBER | |
| URBAN/RURAL (urban = 1; rural = 2) | |
| LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE (large city = 1, small city = 2, town = 3, countryside = 4) | |
| HOUSEHOLD NUMBER | |
| NAME AND LINE NUMBER OF WOMAN _____ | |

| INTERVIEWER VISIT | | | | |
|--------------------------|---|---|---|--|
| | 1 | 2 | 3 | FINAL VISIT |
| DATE | | | | DAY MONTH YEAR NAME RESULT |
| INTERVIEWER'S NAME | | | | |
| RESULT* | | | | |
| NEXT VISIT: DATE TIME | | | | TOTAL NO. VISITS |

RESULT CODES:

| | | |
|---------------|--------------------|---------------|
| 1 COMPLETED | 4 REFUSED | 7 OTHER _____ |
| 2 NOT AT HOME | 5 PARTLY COMPLETED | (SPECIFY) |
| 3 POSTPONED | 6 INCAPACITATED | |

| | | |
|----------------------------------|-------|---------|
| | UZBEK | RUSSIAN |
| 1. LANGUAGE OF INTERVIEW | 1 | 2 |
| 2. NATIVE LANGUAGE OF RESPONDENT | 1 | 2 |
| | YES | NO |
| 3. WHETHER TRANSLATOR USED | 1 | 2 |

| SUPERVISOR | FIELD EDITOR | OFFICE EDITOR | KEYED BY |
|--|--|---|---|
| NAME _____ <input style="width: 20px; height: 15px;" type="text"/> | NAME _____ <input style="width: 20px; height: 15px;" type="text"/> | <input style="width: 20px; height: 15px;" type="text"/> | <input style="width: 20px; height: 15px;" type="text"/> |
| DATE _____ | DATE _____ | | |

Section 1. RESPONDENT'S BACKGROUND

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|--|--|-------|
| 101 | RECORD THE TIME | HOUR <input type="text"/> <input type="text"/> MINUTES <input type="text"/> <input type="text"/> | |
| 102 | First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a town, or in a countryside? | CITY 1 TOWN 2 COUNTRYSIDE 3 | |
| 103 | How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? | YEARS <input type="text"/> <input type="text"/> VISITOR 95 ALWAYS 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? | MONTH <input type="text"/> <input type="text"/> DON'T KNOW MONTH 98 YEAR <input type="text"/> <input type="text"/> DON'T KNOW YEAR 98 | |
| 106 | How old were you at your last birthday? | AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/> | |
| 107 | Have you ever attended school? | YES 1 NO 2 | → 114 |

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| | | |
|---------|--|---|
| 108 | What is the highest level of school you attended: primary, secondary, secondary-special, or high | PRIMARY/SECONDARY 1 → 109 SECONDARY SPECIAL 2 HIGHER 3 |
| 108A | What did you study? | _____ <input type="text"/> <input type="text"/> (NAME OF SPECIALITY) |
| 109 | How many years/classes/courses did you completed at that level? | <input type="text"/> <input type="text"/> |
| 110 | CHECK 106: 34 OR BELOW <input type="checkbox"/> 35 OR ABOVE <input type="checkbox"/> | → 114 |
| 101 111 | Are you currently attending school? | YES 1 → 114 NO 2 |
| 112 | What was the main reason you stopped attending school? | GOT PREGNANT 01 GOT MARRIED 02 TO CARE FOR YOUNGER CHILDREN 03 FAMILY NEEDED HELP AT WORK 04 NEEDED TO EARN MONEY 05 HAD ENOUGH SCHOOLING 06 DID NOT PASS ENTRANCE EXAMS 07 DID NOT LIKE SCHOOL 08 SCHOOL IS TOO FAR 09 OTHER _____ 96 (SPECIFY) DON'T KNOW 98 |
| 114 | Can you read or understand a letter or newspaper easily, with difficulty, or not at all? | EASILY 1 WITH DIFFICULTY 2 NOT AT ALL 3 → 116 |

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|------|---|---|------|
| 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 every day? | YES 1 NO 2 | |
| 117 | Do you usually watch television at least once a week? | YES 1 NO 2 | |
| 118 | What is your religion: Are you Muslim, Christian, another religion or do you not practice any religion? | MUSLIM 1 CHRISTIAN 2 OTHER 6 _____ (SPECIFY) NOT RELIGIOUS 7 DONT KNOW 8 | |
| 119 | What is your nationality? Are you Uzbek? Russian? Kazakh? Tadzhik? Korean? Other? | UZBEK 1 RUSSIAN 2 KAZAKH 3 TADZHIK 4 KOREAN 5 OTHER 6 _____ (SPECIFY) DONT KNOW 8 | |
| 119A | What language is easiest for you to read: Only Uzbek? Uzbek more than Russian? Both equally? Russian more than Uzbek? Only Russian? Other language? | ONLY UZBEK 1 MORE UZBEK THAN RUSSIAN 2 SAME UZBEK AND RUSSIAN 3 MORE RUSSIAN THAN UZBEK 4 ONLY RUSSIAN 5 OTHER 6 _____ (SPECIFY) | |

| | | | |
|------|--|--|-------|
| 119B | <p>What language do you usually speak at home:</p> <p>Only Uzbek?</p> <p>Uzbek more than Russian?</p> <p>Both equally?</p> <p>Russian more than Uzbek?</p> <p>Only Russian?</p> <p>Other language?</p> | <p>ONLY UZBEK 1</p> <p>MORE UZBEK THAN RUSSIAN 2</p> <p>SAME UZBEK AND RUSSIAN 3</p> <p>MORE RUSSIAN THAN UZBEK 4</p> <p>ONLY RUSSIAN 5</p> <p>OTHER _____ 6 (SPECIFY)</p> | |
| 119C | <p>Do you own dacha, or do you have access to a garden from which you obtain fruits and vegetables during the growing seasons?</p> | <p>YES 1</p> <p>NO 2</p> <p>OTHER _____ 6 (SPECIFY)</p> | |
| 119D | <p>Do you have any chronic diseases?</p> | <p>YES 1</p> <p>NO 2</p> | → 120 |
| 119E | <p>What kind of disease do you have?</p> | <p>_____ <input type="checkbox"/> <input type="checkbox"/></p> <p>(NAME OF DISEASE)</p> | |
| 120 | <p>CHECK INTERVIEWER'S ASSIGNMENT SHEET</p> <p>THE WOMAN INTERVIEWED IS NOT A USUAL RESIDENT <input type="checkbox"/></p> <p>THE WOMAN INTERVIEWED IS A USUAL RESIDENT <input type="checkbox"/></p> | | → 201 |
| 121 | <p>Now I would like to ask about the place in which you usually live.</p> <p>What is the name of the place in which you usually live?</p> <p>_____</p> <p>(NAME OF PLACE)</p> <p>Is that a city, town, or the countryside?</p> | <p>CAPITAL CITY, LARGE CITY 1</p> <p>SMALL CITY 2</p> <p>TOWN 3</p> <p>COUNTRYSIDE 4</p> | |

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|--|--|------|
| 122 | In which oblast is that located? | ORLAST: KHOREZMSKAYA 01 NAVOIYSKAYA 02 BUKHARSKAYA 03 KASHKADAINSKAYA 04 SURKHANDARINSKAYA 05 SAMARKANDSKAYA 06 DZHIZAKSKAYA 07 SYRDARINSKAYA 08 TASHKENTSKAYA 09 NAMANGANSKAYA 10 FERGANSKAYA 11 ANDIZHANSKAYA 12 THE CITY OF TASHKENT 13 OTHER _____ 96 SPECIFY | |
| 123 | Now I would like to ask about the household in which you usually live. What is the main source of drinking water for members of your household? | PIPED WATER PIPED INTO RESIDENCE/YARD/PLOT..... 11 → 125 PUBLIC TAP 12 WELL WATER WELL IN RESIDENCE/YARD/PLOT..... 21 → 125 PUBLIC WELL 22 SURFACE WATER SPRING WATER 31 RIVER/STREAM..... 32 POND/LAKE 33 DAM 34 RAINWATER 41 → 125 TANKER TRUCK 51 BOTTLED WATER 61 → 125 OTHER _____ 86 (SPECIFY) | |

Section 2. PREGNANCY HISTORY

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP | | | | |
|-----|---|--|--------------|--|--|--|--|
| 201 | <p>Now I would like to ask you about all the births you have had during your life. Have you ever given birth?</p> | <p>YES 1 NO 2</p> | <p>→ 206</p> | | | | |
| 202 | <p>Do you have any sons or daughters to whom you have given birth who are now living with you?</p> | <p>YES 1 NO 2</p> | <p>→ 204</p> | | | | |
| 203 | <p>How many sons live with you? And how many daughters live with you?</p> <p>IF NONE, RECORD '00'</p> | <p>SONS AT HOME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS AT HOME</p> | | | | | |
| | | | | | | | |
| | | | | | | | |
| 204 | <p>Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?</p> | <p>YES 1 NO 2</p> | <p>→ 206</p> | | | | |
| 205 | <p>How many sons are alive but do not live with you? And how many daughters are alive but do not live with you?</p> <p>IF NONE, RECORD '00'</p> | <p>SONS ELSEWHERE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS ELSEWHERE</p> | | | | | |
| | | | | | | | |
| | | | | | | | |
| 206 | <p>Have you ever given birth to a boy or a girl who was born alive but later died?</p> <p>IF NO, PROBE: Any baby who cried or showed signs of life but survived only a few hours or days?</p> | <p>YES 1 NO 2</p> | <p>→ 208</p> | | | | |

| | | | |
|-----|---|--|------------|
| 207 | <p>How many boys have died?</p> <p>How many girls have died?</p> | <p>BOYS DEAD <input type="text"/></p> <p>GIRLS DEAD <input type="text"/></p> | |
| 208 | <p>SUM ANSWERS TO 203, 205, 207, AND ENTER TOTAL IF NONE, RECORD '00'</p> | <p>TOTAL BIRTHS <input type="text"/></p> | |
| 209 | <p>Women sometime have pregnancies which do not result in a live born child. That is, a pregnancy can ended very early by a mini abortion or by an induced abortion, a miscarriage or a stillbirth. In total how many mini abortions, and induced abortions have you had?</p> | <p>TOTAL ABORTIONS <input type="text"/></p> | |
| 210 | <p>How many miscarriages?</p> | <p>TOTAL MISCARRIAGES <input type="text"/></p> | |
| 211 | <p>How many stillbirths?</p> | <p>TOTAL STILLBIRTHS <input type="text"/></p> | |
| 212 | <p>SUM ANSWERS TO 208, 209, 210, 211, AND ENTER TOTAL. IF NO PREGNANCIES, RECORD '00'</p> | <p>TOTAL PREGNANCIES <input type="text"/></p> | |
| 213 | <p>CHECK 212</p> <p>ONE OR MORE PREGNANCY <input type="checkbox"/></p> <p>NO PREGNANCIES <input type="checkbox"/></p> | | <p>227</p> |

2 1 4 Now I want to talk to you about each of your pregnancies, including those which ended in a live birth, an induced abortion, a miscarriage, and a stillbirth.
Starting with your last pregnancy, please tell me the following information

| 2 1 5 | 2 1 6 | 2 1 7 | 2 1 8 | 2 1 9 | 2 2 0 | 2 2 1 | 2 2 2 | 2 2 3 | 2 2 4 |
|---|---|--|---|--|------------------------------------|-------------------------------------|--|---|---|
| When did your (last/next-to-last/etc.) pregnancy end? In what month and year? | Did this pregnancy end in a live birth, an induced abortion, a miscarriage, or a stillbirth? | FROM YEAR OF LAST/NEXT-TO-THE LAST, ETC PREGNANCY SUBTRACT YEAR OF PREVIOUS PREGNANCY IS THE DIFFERENCE 4 OR MORE? TRY TO DETERMINE IF THERE WAS ANOTHER PREGNANCY BETWEEN THIS AND PREVIOUS PREGNANCY | CHECK 216 RECORD SAME RESPONSE | Was this a single or a multiple birth? | What name was given to this child? | Is (NAME) a boy or girl? | Is (NAME) still alive? | How old was (NAME) on his/her last birthday? RECORD AGE IN COMPLETED YEARS | How old was (NAME) when he/she died? IF 1 YR., PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS, OR YEARS. |
| 0 1 MONTH YEAR | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |
| 0 2 MONTH YEAR | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |
| 0 3 MONTH YEAR | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |
| 0 4 MONTH YEAR | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |

| | | | | | | | | | | |
|-----|---|---|---------------------------|---|------------------------------|------------------------------|-----------------------------|------------------------------------|---|---|
| 0 5 | MONTH <input type="text"/> YEAR <input type="text"/> | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME <input type="text"/> | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS <input type="text"/> 218 ← | DAYS 1 MONTHS 2 YEARS 3 <input type="text"/> |
| 0 6 | MONTH <input type="text"/> YEAR <input type="text"/> | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME <input type="text"/> | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS <input type="text"/> 218 ← | DAYS 1 MONTHS 2 YEARS 3 <input type="text"/> |
| 0 7 | MONTH <input type="text"/> YEAR <input type="text"/> | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME <input type="text"/> | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS <input type="text"/> 218 ← | DAYS 1 MONTHS 2 YEARS 3 <input type="text"/> |
| 0 8 | MONTH <input type="text"/> YEAR <input type="text"/> | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME <input type="text"/> | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS <input type="text"/> 218 ← | DAYS 1 MONTHS 2 YEARS 3 <input type="text"/> |

| | | | | | | | | | | |
|----|---------------|---|---------------------------|---|------------------------------|---------------|-----------------------------|---------------------------|-----------------------|---|
| 09 | MONTH YEAR | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME _____ | BOY 1 GIRL 2 | YES 1 NO 2 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |
| 10 | MONTH YEAR | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME _____ | BOY 1 GIRL 2 | YES 1 NO 2 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |
| 11 | MONTH YEAR | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME _____ | BOY 1 GIRL 2 | YES 1 NO 2 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |
| 12 | MONTH YEAR | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME _____ | BOY 1 GIRL 2 | YES 1 NO 2 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |

| | | | | | | | | | | |
|----|---------------------|--|---------------------------|--|------------------------------|------|-----------------------------|------------------------------------|-----------------------|---|
| 13 | MONTH... YEAR... | LIVE BIRTH 1 INDUCED ABORTION .. 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION .. 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |
| 14 | MONTH... YEAR... | LIVE BIRTH 1 INDUCED ABORTION .. 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION .. 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |
| 15 | MONTH... YEAR... | LIVE BIRTH 1 INDUCED ABORTION .. 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION .. 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |
| 16 | MONTH... YEAR... | LIVE BIRTH 1 INDUCED ABORTION .. 2 MISCARRIAGE 3 STILLBIRTH 4 | YES 1 NO 2 | LIVE BIRTH 1 INDUCED ABORTION .. 2 MISCARRIAGE 3 STILLBIRTH 4 NEXT PREGNANCY ← | SING 1 MULT 2 | NAME | BOY 1 GIRL 2 | YES 1 NO 2 → 224 | AGE IN YEARS 218 ← | DAYS 1 MONTHS 2 YEARS 3 |

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225 COMPARE 212 WITH TOTAL PREGNANCIES IN PREGNANCY HISTORY IN QUESTION 215:
 NUMBERS ARE THE SAME NUMBERS ARE DIFFERENT → (PROBE AND RECONCILE)

CHECK: Q215 FOR EACH PREGNANCY: YEAR OF PREGNANCY ENDED IS RECORDED.

Q223 FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED.

Q224 FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS.

226 CHECK 215 AND ENTER THE NUMBER OF PREGNANCIES ENDED SINCE JANUARY 1993.
 IF NONE, RECORD '0'.

| No | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-------|--|--|--------|
| 227 | Are you pregnant now? | YES 1 NO 2 UNSURE 8 | → 229A |
| 228 | How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS | MONTHS <input type="text"/> <input type="text"/> | |
| 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 want</u> to become pregnant at all? | THEN 1 LATER 2 NOT AT ALL 3 | |
| 229A | At what age did you have your first menstrual period? | MONTHS <input type="text"/> <input type="text"/> NEVER MENSTRUATED 96 DON'T KNOW 98 | → 231 |
| 230 | When did your last menstrual period start? _____ (DATE, IF GIVEN) | DAYS AGO 1 <input type="text"/> <input type="text"/> WEEKS AGO 2 <input type="text"/> <input type="text"/> MONTHS AGO 3 <input type="text"/> <input type="text"/> YEARS AGO 4 <input type="text"/> <input type="text"/> IN MENOPAUSE 994 BEFORE LAST BIRTH 995 NEVER MENSTRUATED 996 | |
| 230 A | For how many days your menstrual cycle lasts? | DAYS <input type="text"/> <input type="text"/> | |
| 230B | Is the time between your menstrual cycle regular or irregular? | REGULAR 1 IRREGULAR 2 | |

| | | | |
|-------|--|--|----------------|
| 230 C | For how many days your menstruations usually last? | DAYS <input type="text"/> <input type="text"/> | |
| 230D | Are your menstrual flows usually light, heavy or normal? | LIGHT 1 NORMAL 2 HEAVY 3 | |
| 230E | Do your menstruations usually occur without any pain, with little pain, or very painful? | WITHOUT PAIN 1 WITH LITTLE PAIN 2 VERY PAINFUL 3 | |
| 231 | Between the first day of a woman's period and the first day of her next period, are there certain times when she has a greater chance of becoming pregnant than other times? | YES 1 NO 2 DON'T KNOW 8 | } } → 3 0 1 |
| 232 | During which times of the monthly cycle does a woman have the greatest chance of becoming pregnant? | DURING HER PERIOD 01 RIGHT AFTER HER PERIOD HAS ENDED. . . 02 IN THE MIDDLE OF THE CYCLE 03 JUST BEFORE HER PERIOD BEGINS. 04 OTHER _____ (SPECIFY) 06 DON'T KNOW. 08 | |

Section 3. OUTCOME OF PREGNANCIES

| | | | | | |
|------|---|--|--|--|--|
| 301 | CHECK 225 | ONE OR MORE PREGNANCY SINCE JANUARY 1965 <input type="checkbox"/> | NO PREGNANCY SINCE JANUARY 1994 <input type="checkbox"/> | (SKIP TO 458) | |
| 302 | ENTER THE LINE NUMBER FOR EACH PREGNANCY ENDED SINCE JANUARY 1994 IN THE TABLE. (IF THERE ARE MORE THAN FOUR PREGNANCIES, USE ADDITIONAL QUESTIONNAIRE) Now I would like to ask you some questions about the pregnancies you have had in the last three years. | | | | |
| 303 | LINE NUMBER FROM Q. 215 | LAST PREGNANCY LINE NUMBER <input type="text"/> | NEXT-TO-THE-LAST PREGNANCY LINE NUMBER <input type="text"/> | NEXT-TO-NEXT-TO-THE-LAST PREGN. LINE NUMBER <input type="text"/> | NEXT-TO-NEXT-TO-NEXT-TO-THE-LAST PREG. LINE NUMBER <input type="text"/> |
| 304 | SEE Q. 215 AND 220: OUTCOME OF PREGNANCY OR THE NAME OF CHILD. | OUTCOME OR NAME | OUTCOME OR NAME | OUTCOME OR NAME | OUTCOME OR NAME |
| 304A | When during your pregnancy did you learn that you are pregnant? | DAYS 1 <input type="text"/> WEEKS 2 <input type="text"/> MONTHS 3 <input type="text"/> DON'T KNOW 998 | DAYS 1 <input type="text"/> WEEKS 2 <input type="text"/> MONTHS 3 <input type="text"/> DON'T KNOW 998 | DAYS 1 <input type="text"/> WEEKS 2 <input type="text"/> MONTHS 3 <input type="text"/> DON'T KNOW 998 | DAYS 1 <input type="text"/> WEEKS 2 <input type="text"/> MONTHS 3 <input type="text"/> DON'T KNOW 998 |
| 305 | At the time you became pregnant (with NAME), did you want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you want <u>no (more)</u> children at all? | THEN (SKIP TO 306A) 1 <input type="text"/> LATER 2 <input type="text"/> NO MORE (SKIP TO 306A) 3 <input type="text"/> | THEN (SKIP TO 306A) 1 <input type="text"/> LATER 2 <input type="text"/> NO MORE (SKIP TO 306A) 3 <input type="text"/> | THEN (SKIP TO 306A) 1 <input type="text"/> LATER 2 <input type="text"/> NO MORE (SKIP TO 306A) 3 <input type="text"/> | THEN (SKIP TO 306A) 1 <input type="text"/> LATER 2 <input type="text"/> NO MORE (SKIP TO 306A) 3 <input type="text"/> |
| 305A | How much longer would you like to have waited? | MONTHS 1 <input type="text"/> YEARS 2 <input type="text"/> DON'T KNOW 998 | MONTHS 1 <input type="text"/> YEARS 2 <input type="text"/> DON'T KNOW 998 | MONTHS 1 <input type="text"/> YEARS 2 <input type="text"/> DON'T KNOW 998 | MONTHS 1 <input type="text"/> YEARS 2 <input type="text"/> DON'T KNOW 998 |
| 306 | At the time you became pregnant, were you using a method of contraception? Which method? | YES 1 <input type="text"/> NO 2 <input type="text"/> | YES 1 <input type="text"/> NO 2 <input type="text"/> | YES 1 <input type="text"/> NO 2 <input type="text"/> | YES 1 <input type="text"/> NO 2 <input type="text"/> |
| 306A | CHECK 304: OUTCOME OF PREGNANCY | INDUCED ABORTION <input type="checkbox"/> → 315A MISCARRIAGE <input type="checkbox"/> → 325 STILLBIRTH <input type="checkbox"/> LIVE BIRTH <input type="checkbox"/> | INDUCED ABORTION <input type="checkbox"/> → 315A MISCARRIAGE <input type="checkbox"/> → 325 STILLBIRTH <input type="checkbox"/> LIVE BIRTH <input type="checkbox"/> | INDUCED ABORTION <input type="checkbox"/> → 315A MISCARRIAGE <input type="checkbox"/> → 325 STILLBIRTH <input type="checkbox"/> LIVE BIRTH <input type="checkbox"/> | INDUCED ABORTION <input type="checkbox"/> → 315A MISCARRIAGE <input type="checkbox"/> → 325 STILLBIRTH <input type="checkbox"/> LIVE BIRTH <input type="checkbox"/> |

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| | | | | | |
|-----|---|--|--|--|--|
| 307 | <p>When you were pregnant (with NAME), did you see anyone for antenatal care for this pregnancy?</p> <p>IF YES: Whom did you see? Anyone else?</p> <p>PROBE FOR THE TYPE OF PERSONS PROVIDED ANTENATAL CARE</p> | <p>HEALTH PROFESSIONAL DOCTOR A NURSE/MIDWIFE B NONMEDICAL PERSONS TRADITIONAL BIRTH C REALTIVE/FRIEND D OTHER _____ X (SPECIFY)</p> <p>NO ONE Y</p> <p>(SKIP TO 312) ←</p> | <p>HEALTH PROFESSIONAL DOCTOR A NURSE/MIDWIFE B NONMEDICAL PERSONS TRADITIONAL BIRTH C REALTIVE/FRIEND D OTHER _____ X (SPECIFY)</p> <p>NO ONE Y</p> <p>(SKIP TO 312) ←</p> | <p>HEALTH PROFESSIONAL DOCTOR A NURSE/MIDWIFE B NONMEDICAL PERSONS TRADITIONAL BIRTH C REALTIVE/FRIEND D OTHER _____ X (SPECIFY)</p> <p>NO ONE Y</p> <p>(SKIP TO 312) ←</p> | <p>HEALTH PROFESSIONAL DOCTOR A NURSE/MIDWIFE B NONMEDICAL PERSONS TRADITIONAL BIRTH C REALTIVE/FRIEND D OTHER _____ X (SPECIFY)</p> <p>NO ONE Y</p> <p>(SKIP TO 312) ←</p> |
| 308 | <p>How many months pregnant were you when you first received antenatal care?</p> | <p>MONTHS <input type="text"/><input type="text"/> DONT KNOW 98</p> | <p>MONTHS <input type="text"/><input type="text"/> DONT KNOW 98</p> | <p>MONTHS <input type="text"/><input type="text"/> DONT KNOW 98</p> | <p>MONTHS <input type="text"/><input type="text"/> DONT KNOW 98</p> |
| 309 | <p>How many times did you receive antenatal care during this pregnancy?</p> | <p>NUMBER <input type="text"/><input type="text"/> DONT KNOW 98</p> | <p>NUMBER <input type="text"/><input type="text"/> DONT KNOW 98</p> | <p>NUMBER <input type="text"/><input type="text"/> DONT KNOW 98</p> | <p>NUMBER <input type="text"/><input type="text"/> DONT KNOW 98</p> |
| 312 | <p>Where did the (birth of NAME)/ pregnancy termination) take place?</p> | <p>HOME RESPONDENT'S HOME 11 OTHER HOME 12</p> <p>IN THE HEALTH FACILITY OBGYN HOSPITAL 21 HOSPITAL 22 DOCTOR'S ASSISTANT/MIDWIFE POST (FAP) 23 OTHER HEALTH FACILITY 26 (SPECIFY)</p> <p>OTHER 96 (SPECIFY)</p> | <p>HOME RESPONDENT'S HOME 11 OTHER HOME 12</p> <p>IN THE HEALTH FACILITY OBGYN HOSPITAL 21 HOSPITAL 22 DOCTOR'S ASSISTANT/MIDWIFE POST (FAP) 23 OTHER HEALTH FACILITY 26 (SPECIFY)</p> <p>OTHER 96 (SPECIFY)</p> | <p>HOME RESPONDENT'S HOME 11 OTHER HOME 12</p> <p>IN THE HEALTH FACILITY OBGYN HOSPITAL 21 HOSPITAL 22 DOCTOR'S ASSISTANT/MIDWIFE POST (FAP) 23 OTHER HEALTH FACILITY 26 (SPECIFY)</p> <p>OTHER 96 (SPECIFY)</p> | <p>HOME RESPONDENT'S HOME 11 OTHER HOME 12</p> <p>IN THE HEALTH FACILITY OBGYN HOSPITAL 21 HOSPITAL 22 DOCTOR'S ASSISTANT/MIDWIFE POST (FAP) 23 OTHER HEALTH FACILITY 26 (SPECIFY)</p> <p>OTHER 96 (SPECIFY)</p> |

| | LAST PREGNANCY OUTCOME OR NAME | NEXT-TO-THE-LAST PREGNANCY OUTCOME OR NAME | NEXT-TO-NEXT-TO-THE-LAST PREGN. OUTCOME OR NAME | NEXT-TO-NEXT-TO-NEXT-TO-LAST PREG. OUTCOME OR NAME |
|---|---|---|---|---|
| 313 Who assisted with the (delivery of (NAME)/ pregnancy termination?) Anyone else? | <u>HEALTH PROFESSIONAL</u> DOCTOR A NURSE/MIDWIFE B <u>NON MEDICAL PERSON</u> TRADITIONAL MIDWIFE C RELATIVE/FRIEND D OTHER PERSON X (SPECIFY) NO ONE Y | <u>HEALTH PROFESSIONAL</u> DOCTOR A NURSE/MIDWIFE B <u>NON MEDICAL PERSON</u> TRADITIONAL MIDWIFE C RELATIVE/FRIEND D OTHER PERSON X (SPECIFY) NO ONE Y | <u>HEALTH PROFESSIONAL</u> DOCTOR A NURSE/MIDWIFE B <u>NON MEDICAL PERSON</u> TRADITIONAL MIDWIFE C RELATIVE/FRIEND D OTHER PERSON X (SPECIFY) NO ONE Y | <u>HEALTH PROFESSIONAL</u> DOCTOR A NURSE/MIDWIFE B <u>NON MEDICAL PERSON</u> TRADITIONAL MIDWIFE C RELATIVE/FRIEND D OTHER PERSON X (SPECIFY) NO ONE Y |
| 314 At the time of the (birth of (NAME)/ ending of the pregnancy), did you have any of the following problems: | YES NO LONG LABOR 1 2 BLEEDING 1 2 FEVER/BAD SMELLING 1 2 CONVULSIONS 1 2 EARLY RUPTURE OF AMNIOTIC FLUID SAC 1 2 | YES NO LONG LABOR 1 2 BLEEDING 1 2 FEVER/BAD SMELLING 1 2 CONVULSIONS 1 2 EARLY RUPTURE OF AMNIOTIC FLUID SAC 1 2 | YES NO LONG LABOR 1 2 BLEEDING 1 2 FEVER/BAD SMELLING 1 2 CONVULSIONS 1 2 EARLY RUPTURE OF AMNIOTIC FLUID SAC 1 2 | YES NO LONG LABOR 1 2 BLEEDING 1 2 FEVER/BAD SMELLING 1 2 CONVULSIONS 1 2 EARLY RUPTURE OF AMNIOTIC FLUID SAC 1 2 |

| | | | | | |
|------|---|--|--|--|--|
| 315 | Was the (birth of (NAME)/pregnancy termination) by caesarian section? | YES.....1 NO.....2 325 ← | YES.....1 NO.....2 325 ← | YES.....1 NO.....2 325 ← | YES.....1 NO.....2 325 ← |
| 315A | How did you determine you were pregnant? | SAW A DOCTOR.....1 CONDUCTED SELF PREGN TEST...2 DECIDED MYSELF BECAUSE OF MISSED PERIOD.....3 OTHER.....6 (SPECIFY) | SAW A DOCTOR.....1 CONDUCTED SELF PREGN TEST...2 DECIDED MYSELF BECAUSE OF MISSED PERIOD.....3 OTHER.....6 (SPECIFY) | SAW A DOCTOR.....1 CONDUCTED SELF PREGN TEST...2 DECIDED MYSELF BECAUSE OF MISSED PERIOD.....3 OTHER.....6 (SPECIFY) | SAW A DOCTOR.....1 CONDUCTED SELF PREGN TEST...2 DECIDED MYSELF BECAUSE OF MISSED PERIOD.....3 OTHER.....6 (SPECIFY) |
| 315B | Who suggested you to do abortion? | HEALTH PROFESSIONAL.....1 HUSBAND.....2 MOTHER/MOTHER-IN-LAW.....3 FRIENDS/RELATIVES.....4 DECIDED HERSELF.....5 OTHER.....6 (SPECIFY) DON'T KNOW.....8 | HEALTH PROFESSIONAL.....1 HUSBAND.....2 MOTHER/MOTHER-IN-LAW.....3 FRIENDS/RELATIVES.....4 DECIDED HERSELF.....5 OTHER.....6 (SPECIFY) DON'T KNOW.....8 | HEALTH PROFESSIONAL.....1 HUSBAND.....2 MOTHER/MOTHER-IN-LAW.....3 FRIENDS/RELATIVES.....4 DECIDED HERSELF.....5 OTHER.....6 (SPECIFY) DON'T KNOW.....8 | HEALTH PROFESSIONAL.....1 HUSBAND.....2 MOTHER/MOTHER-IN-LAW.....3 FRIENDS/RELATIVES.....4 DECIDED HERSELF.....5 OTHER.....6 (SPECIFY) DON'T KNOW.....8 |
| 316 | Where was the induced abortion performed? | <u>PUBLIC SECTOR</u> HOSPITAL.....11 POLYCLINIC.....12 AMBULATORY.....13 MOBILE CLINIC.....14 OTHER HEALTH CARE FACILITY.....16 (SPECIFY) <u>PRIVATE SECTOR</u> PRIVATE CLINIC.....21 PRIVATE DOCTOR.....22 OTHER PRIVATE HEALTH CARE FACILITY.....26 (SPECIFY) PRIVATE PERSON (NON MEDICAL).....31 OTHER.....96 (SPECIFY) | <u>PUBLIC SECTOR</u> HOSPITAL.....11 POLYCLINIC.....12 AMBULATORY.....13 MOBILE CLINIC.....14 OTHER HEALTH CARE FACILITY.....16 (SPECIFY) <u>PRIVATE SECTOR</u> PRIVATE CLINIC.....21 PRIVATE DOCTOR.....22 OTHER PRIVATE HEALTH CARE FACILITY.....26 (SPECIFY) PRIVATE PERSON (NON MEDICAL).....31 OTHER.....96 (SPECIFY) | <u>PUBLIC SECTOR</u> HOSPITAL.....11 POLYCLINIC.....12 AMBULATORY.....13 MOBILE CLINIC.....14 OTHER HEALTH CARE FACILITY.....16 (SPECIFY) <u>PRIVATE SECTOR</u> PRIVATE CLINIC.....21 PRIVATE DOCTOR.....22 OTHER PRIVATE HEALTH CARE FACILITY.....26 (SPECIFY) PRIVATE PERSON (NON MEDICAL).....31 OTHER.....96 (SPECIFY) | <u>PUBLIC SECTOR</u> HOSPITAL.....11 POLYCLINIC.....12 AMBULATORY.....13 MOBILE CLINIC.....14 OTHER HEALTH CARE FACILITY.....16 (SPECIFY) <u>PRIVATE SECTOR</u> PRIVATE CLINIC.....21 PRIVATE DOCTOR.....22 OTHER PRIVATE HEALTH CARE FACILITY.....26 (SPECIFY) PRIVATE PERSON (NON MEDICAL).....31 OTHER.....96 (SPECIFY) |
| 317 | Can you tell me what procedure was used to terminate the pregnancy? | D & C.....1 ASPIRATION.....2 CAESARIAN SECTION.....3 TRADITIONAL METHOD.....4 OTHER.....6 (SPECIFY) DON'T KNOW.....8 | D & C.....1 ASPIRATION.....2 CAESARIAN SECTION.....3 TRADITIONAL METHOD.....4 OTHER.....6 (SPECIFY) DON'T KNOW.....8 | D & C.....1 ASPIRATION.....2 CAESARIAN SECTION.....3 TRADITIONAL METHOD.....4 OTHER.....6 (SPECIFY) DON'T KNOW.....8 | D & C.....1 ASPIRATION.....2 CAESARIAN SECTION.....3 TRADITIONAL METHOD.....4 OTHER.....6 (SPECIFY) DON'T KNOW.....8 |

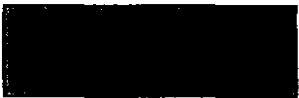


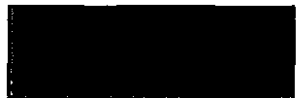
| | | LAST PREGNANCY OUTCOME OR NAME | NEXT-TO-THE-LAST PREGNANCY OUTCOME OR NAME | NEXT-TO-NEXT-TO THE LAST PREGN. OUTCOME OR NAME | NEXT-TO-NEXT-TO-NEXT-TO LAST PREG. OUTCOME OR NAME |
|-----|--|--|--|--|--|
| 318 | Who helped you to perform that procedure? | DOCTOR A NURSE/MIDWIFE B TRADITIONAL MIDWIFE C OTHER PERSON _____ (SPECIFY) X NO ONE Y | DOCTOR A NURSE/MIDWIFE B TRADITIONAL MIDWIFE C OTHER PERSON _____ (SPECIFY) X NO ONE Y | DOCTOR A NURSE/MIDWIFE B TRADITIONAL MIDWIFE C OTHER PERSON _____ (SPECIFY) X NO ONE Y | DOCTOR A NURSE/MIDWIFE B TRADITIONAL MIDWIFE C OTHER PERSON _____ (SPECIFY) X NO ONE Y |
| 319 | Sometimes, a woman has health problems after an induced abortion. Did you have any health problems afterwards? | YES 1 NO 2 DON'T KNOW B 325 ← | YES 1 NO 2 DON'T KNOW B 325 ← | YES 1 NO 2 DON'T KNOW B 325 ← | YES 1 NO 2 DON'T KNOW B 325 ← |
| 320 | What health problems did you have: sterility? infection? lack of menstruation? irregular bleeding? other? | PELVIC PAIN A STERILITY B INFECTION C LACK OF MENSTRUATION D IRREGULAR BLEEDING E OTHER _____ (SPECIFY) X DON'T KNOW Y | PELVIC PAIN A STERILITY B INFECTION C LACK OF MENSTRUATION D IRREGULAR BLEEDING E OTHER _____ (SPECIFY) X DON'T KNOW Y | PELVIC PAIN A STERILITY B INFECTION C LACK OF MENSTRUATION D IRREGULAR BLEEDING E OTHER _____ (SPECIFY) X DON'T KNOW Y | PELVIC PAIN A STERILITY B INFECTION C LACK OF MENSTRUATION D IRREGULAR BLEEDING E OTHER _____ (SPECIFY) X DON'T KNOW Y |
| 321 | Did you seek care because of these complications? | YES 1 NO 2 325 ← | YES 1 NO 2 325 ← | YES 1 NO 2 325 ← | YES 1 NO 2 325 ← |

| | | | | | |
|-----|---|--|--|--|--|
| 322 | Where did you seek care? | <p>PUBLIC SECTOR HOSPITAL A POLYCLINIC B AMBULATORY C MOBILE CLINIC D OTHER HEALTH CARE FACILITY E _____ (SPECIFY)</p> <p>PRIVATE SECTOR PRIVATE CLINIC F PRIVATE DOCTOR G OTHER PRIVATE HEALTH CARE FACILITY H _____ (SPECIFY)</p> <p>PRIVATE PERSON (NON MEDICAL) I OTHER K _____ (SPECIFY)</p> | <p>PUBLIC SECTOR HOSPITAL A POLYCLINIC B AMBULATORY C MOBILE CLINIC D OTHER HEALTH CARE FACILITY E _____ (SPECIFY)</p> <p>PRIVATE SECTOR PRIVATE CLINIC F PRIVATE DOCTOR G OTHER PRIVATE HEALTH CARE FACILITY H _____ (SPECIFY)</p> <p>PRIVATE PERSON (NON MEDICAL) I OTHER K _____ (SPECIFY)</p> | <p>PUBLIC SECTOR HOSPITAL A POLYCLINIC B AMBULATORY C MOBILE CLINIC D OTHER HEALTH CARE FACILITY E _____ (SPECIFY)</p> <p>PRIVATE SECTOR PRIVATE CLINIC F PRIVATE DOCTOR G OTHER PRIVATE HEALTH CARE FACILITY H _____ (SPECIFY)</p> <p>PRIVATE PERSON (NON MEDICAL) I OTHER K _____ (SPECIFY)</p> | <p>PUBLIC SECTOR HOSPITAL A POLYCLINIC B AMBULATORY C MOBILE CLINIC D OTHER HEALTH CARE FACILITY E _____ (SPECIFY)</p> <p>PRIVATE SECTOR PRIVATE CLINIC F PRIVATE DOCTOR G OTHER PRIVATE HEALTH CARE FACILITY H _____ (SPECIFY)</p> <p>PRIVATE PERSON (NON MEDICAL) I OTHER K _____ (SPECIFY)</p> |
| 323 | Have you been hospitalized because of these problems? | <p>YES 1 NO 2 _____ ← 325</p> | <p>YES 1 NO 2 _____ ← 325</p> | <p>YES 1 NO 2 _____ ← 325</p> | <p>YES 1 NO 2 _____ ← 325</p> |
| 324 | How many days? | <p>NUMBER <input type="text"/> <input type="text"/> DON'T KNOW 98</p> | <p>NUMBER <input type="text"/> <input type="text"/> DON'T KNOW 98</p> | <p>NUMBER <input type="text"/> <input type="text"/> DON'T KNOW 98</p> | <p>NUMBER <input type="text"/> <input type="text"/> DON'T KNOW 98</p> |
| 325 | | <p>GO BACK TO Q. 305 IN NEXT COLUMN. IF NO MORE PREGNANCY, GO TO Q.401</p> | <p>GO BACK TO Q. 305 IN NEXT COLUMN. IF NO MORE PREGNANCY, GO TO Q.401</p> | <p>GO BACK TO Q. 305 IN NEXT COLUMN. IF NO MORE PREGNANCY, GO TO Q.401</p> | <p>GO BACK TO Q. 305 IN NEXT COLUMN. IF NO MORE PREGNANCY, GO TO Q.401</p> |

Section 4A. CHILD HEALTH AND NUTRITION PRACTICES

| | | | | |
|------|---|---|---|---|
| 401 | CHECK 306A: ONE OR MORE LIVE BIRTHS SINCE JANUARY 1995 <input type="checkbox"/> NO LIVE BIRTHS SINCE JANUARY 1995 <input type="checkbox"/> | | | → (SKIP TO 458) |
| 402 | CHECK 303 AND 306A: ENTER THE LINE NUMBER FOR EACH LIVE BIRTH. ASK THE QUESTIONS ABOUT EACH OF THESE BIRTHS BEGINNING WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 2 BIRTHS, USE ADDITIONAL QUESTIONNAIRE). Now I would like to ask you some questions about your children born in the past three years. Let's talk about one child at a time. | | | |
| 403 | LINE NUMBER FROM 303 | LAST BIRTH LINE NUMBER | <input type="text"/> | NEXT-TO-LAST BIRTH LINE NUMBER |
| 404 | NAME FROM 304 | NAME | <input type="text"/> | NAME |
| 404A | During your pregnancy with (NAME), did you have any of the following diseases? Anemia Heart or circulatory diseases Kidney diseases Liver or gastrointestinal diseases Lung diseases Hormonal diseases | YES NO 1 2 1 2 1 2 1 2 1 2 1 2 | YES NO 1 2 1 2 1 2 1 2 1 2 | |
| 404B | CHECK 404A: ONE OR MORE RESPONSES "YES" | YES 1 NO 2 (SKIP TO 405) ← | YES 1 NO 2 (SKIP TO 405) ← | |
| 404c | During your pregnancy with (NAME) did you visit a health care facility for preventive care because of this illness? | YES 1 NO 2 (SKIP TO 405) ← | YES 1 NO 2 (SKIP TO 405) ← | |

| | | | |
|------|--|---|---|
| 404D | <p>What type of health care facility did you visit for preventive care?</p> | <p>POLYCLINIC 1 WOMEN'S CONSULTING CTR 2 HOSPITAL 3 AMBULATORY 4 MEDSANCHAST 5 OTHER 6 _____ (SPECIFY) DON'T KNOW 8</p> | <p>POLYCLINIC 1 WOMEN'S CONSULTING CTR 2 HOSPITAL 3 AMBULATORY 4 MEDSANCHAST 5 OTHER 6 _____ (SPECIFY) DON'T KNOW 8</p> |
| 405 | <p>When (NAME) was born, was he/she: very large, larger than average, average, smaller than average, or very small?</p> | <p>VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALL 4 VERY SMALL 5 DON'T KNOW 8</p> | <p>VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALL 4 VERY SMALL 5 DON'T KNOW 8</p> |
| 406 | <p>Was (NAME) weighed at birth?</p> | <p>YES 1 NO 2 (SKIP TO 408) ←</p> | <p>YES 1 NO 2 (SKIP TO 408) ←</p> |
| 407 | <p>How much did (he/she) weigh? RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE</p> | <p>GRAMS FROM CARD 1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> GRAMS FROM RECALL 2 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW 99998</p> | <p>GRAMS FROM CARD 1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> GRAMS FROM RECALL 2 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW 99998</p> |
| 408 | <p>Was the length of (NAME) measured at birth?</p> | <p>YES 1 NO 2 (SKIP TO 410) ←</p> | <p>YES 1 NO 2 (SKIP TO 410) ←</p> |
| 409 | <p>What was length of (NAME) at birth? RECORD LENGTH FROM HEALTH CARD, IF AVAILABLE</p> | <p>CENTIMETERS FROM CARD 1 <input type="text"/> <input type="text"/> CENTIMETERS FROM RECALL 2 <input type="text"/> <input type="text"/> DON'T KNOW 998</p> | <p>CENTIMETERS FROM CARD 1 <input type="text"/> <input type="text"/> CENTIMETERS FROM RECALL 2 <input type="text"/> <input type="text"/> DON'T KNOW 998</p> |

| | | LAST BIRTH NAME _____ | NEXT-TO-LAST BIRTH NAME _____ |
|-----|--|--|--|
| 410 | Has your period returned since the birth of (NAME)? | YES 1 (SKIP TO 412) ← |  |
| | | NO 2 (SKIP TO 413) ← | |
| 411 | Did your period return between the birth of (NAME) and your next pregnancy? |  | YES 1 NO 2 (SKIP TO 415) ← |
| 412 | For how many months after the birth of (NAME) did you <u>not</u> have a period? | MONTHS <input type="text"/> <input type="text"/> DON'T KNOW 98 | MONTHS <input type="text"/> <input type="text"/> DON'T KNOW 98 |
| 413 | CHECK 227: IS RESPONDENT CURRENTLY PREGNANT? | NOT PREG- <input type="checkbox"/> NANT PREGNANT <input type="checkbox"/> OR UNSURE (SKIP TO 415) |  |
| 414 | Have you resumed sexual relations since the birth of (NAME)? | YES 1 NO 2 (SKIP TO 416) ← |  |
| 415 | For how many months after the birth of (NAME) did you <u>not</u> have sexual relations? | MONTHS <input type="text"/> <input type="text"/> DON'T KNOW 98 | MONTHS <input type="text"/> <input type="text"/> DON'T KNOW 98 |
| 416 | Did you ever breastfeed (NAME)? | YES 1 NO 2 (SKIP TO 422) ← | YES 1 NO 2 (SKIP TO 422) ← |
| 417 | 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 <input type="text"/> <input type="text"/> DAYS 2 <input type="text"/> <input type="text"/> | IMMEDIATELY 000 HOURS 1 <input type="text"/> <input type="text"/> DAYS 2 <input type="text"/> <input type="text"/> |

| | | | |
|-----|--|---|---|
| 418 | CHECK 222: CHILD ALIVE? | ALIVE <input type="checkbox"/> NOT ALIVE <input type="checkbox"/> (SKIP TO 420) | ALIVE <input type="checkbox"/> NOT ALIVE <input type="checkbox"/> (SKIP TO 420) |
| 419 | Are you still breastfeeding (NAME)? | YES 1 (SKIP TO 423) ← NO 2 | YES 1 (SKIP TO 423) ← NO 2 |
| 420 | For how many months did you breastfeed (NAME)? | MONTHS <input type="text"/> <input type="text"/> DON'T KNOW 98 | MONTHS <input type="text"/> <input type="text"/> DON'T KNOW 98 |
| 421 | Why did you stop breastfeeding (NAME)? | MOTHER ILL/WEAK 01 CHILD ILL/WEAK 02 CHILD DIED 03 NIPPLE PROBLEM 04 NOT ENOUGH MILK 05 MOTHER WORKING 06 CHILD REFUSED 07 WEANING AGE/AGE TO STOP 08 BECAME PREGNANT 09 STARTED USING CONTRACEPTION ... 10 OTHER _____ 96 (SPECIFY) | MOTHER ILL/WEAK 01 CHILD ILL/WEAK 02 CHILD DIED 03 NIPPLE PROBLEM 04 NOT ENOUGH MILK 05 MOTHER WORKING 06 CHILD REFUSED 07 WEANING AGE/AGE TO STOP 08 BECAME PREGNANT 09 STARTED USING CONTRACEPTION ... 10 OTHER _____ 96 (SPECIFY) |

| | | LAST BIRTH NAME _____ | NEXT-TO-LAST BIRTH NAME _____ |
|-----|---|---|---|
| 422 | CHECK 418 CHILD ALIVE? | ALIVE <input type="checkbox"/> (SKIP TO 425) | NOT ALIVE <input type="checkbox"/> (GO BACK TO 405 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 433) |
| 423 | 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 <input type="text"/> | NUMBER OF NIGHTTIME FEEDINGS <input type="text"/> |
| 424 | How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER. | NUMBER OF DAYTIME FEEDINGS <input type="text"/> | NUMBER OF DAYTIME FEEDINGS <input type="text"/> |
| 425 | Did (NAME) drink anything from a bottle with a nipple yesterday or last night? | YES 1 NO 2 DON'T KNOW 8 | YES 1 NO 2 DON'T KNOW 8 |

426

At any time yesterday or last night, was (NAME) given any of the following?

Water (boiled and not boiled)?

Sugar water?

Juice?

Tea?

Baby formula?

Milk products (fresh, powdered, tinned milk)?

Fermented milk (kefir, airan, kumys, yogurt)?

Any other liquids (soups, coca-cola, etc.)?

Fruits and vegetables?

Any food made from wheat, rice, maize, such as bread, noodles, pasta, etc.?

Any food made from potatoes, carrots, or tuber?

Eggs, fish, poultry?

Meat (lamb, beef, ham, horse meat, etc.)?

Sweets, chocolate, cookies, etc.?

Any other solid or semi-solid foods?

YES NO DK

WATER 1 2 8

SWEET WATER 1 2 8

JUICE 1 2 8

TEA 1 2 8

BABY FORMULA 1 2 8

MILK 1 2 8

FERMENTED MILK 1 2 8

OTHER LIQUIDS 1 2 8

FRUITS AND VEGETABLES ... 1 2 8

PASTA AND
FOOD MADE FROM GRAIN ... 1 2 8

POTATOE AND TUBER 1 2 8

EGG/FISH/POULTRY 1 2 8

MEAT 1 2 8

SWEETS 1 2 8

OTHER SOLID OR SEMI-
SOLID FOODS 1 2 8

YES NO DK

WATER 1 2 8

SWEET WATER 1 2 8

JUICE 1 2 8

TEA 1 2 8

BABY FORMULA 1 2 8

MILK 1 2 8

FERMENTED MILK 1 2 8

OTHER LIQUIDS 1 2 8

FRUITS AND VEGETABLES . 1 2 8

PASTA AND
FOOD MADE FROM GRAIN . 1 2 8

POTATOE AND TUBER 1 2 8

EGG/FISH/POULTRY 1 2 8

MEAT 1 2 8

SWEETS 1 2 8

OTHER SOLID OR SEMI-
SOLID FOODS 1 2 8

215

427

CHECK 426: FOOD OR LIQUID GIVEN YESTERDAY?

"YES"
TO ONE
OR MORE

"NO/DK"
TO ALL

(SKIP TO 431)

"YES"
TO ONE
OR MORE

"NO/DK"
TO ALL

(SKIP TO 431)

430

(Aside from breastfeeding,) how many times did (NAME) eat yesterday, including both meals and snacks?

IF 7 OR MORE TIMES, RECORD 7

NUMBER OF TIMES

DONT KNOW 8

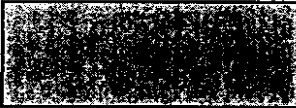

NUMBER OF TIMES

DONT KNOW 8

| | | LAST BIRTH NAME _____ | NEXT-TO-LAST BIRTH NAME _____ |
|-----|---|---|---|
| 431 | <p>On how many days during the last seven days was (NAME) given any of the following?</p> <p>Water?</p> <p>Milk and fermented milk products?</p> <p>Any other liquids?</p> <p>Fruits and vegetables?</p> <p>Any food made from wheat, rice, maize, such as bread, noodles, pasta, etc.?</p> <p>Any food made from potatoes, carrots, or tuber?</p> <p>Eggs, fish, poultry?</p> <p>Meat products.?</p> <p>Any other solid or semi-solid foods?</p> | <p>RECORD THE NUMBER OF DAYS</p> <p>WATER <input type="text"/></p> <p>MILK <input type="text"/></p> <p>OTHER LIQUIDS <input type="text"/></p> <p>FRUITS AND VEGETABLES. <input type="text"/></p> <p>PASTA AND GRAIN <input type="text"/></p> <p>POTATOE AND OTHER TUBER. <input type="text"/></p> <p>EGGS/FISH/POULTRY. <input type="text"/></p> <p>MEAT <input type="text"/></p> <p>OTHER SOLID OR <input type="text"/></p> <p>SEMI-SOLID FOODS</p> | <p>RECORD THE NUMBER OF DAYS</p> <p>WATER <input type="text"/></p> <p>MILK <input type="text"/></p> <p>OTHER LIQUIDS <input type="text"/></p> <p>FRUITS AND VEGETABLES. <input type="text"/></p> <p>PASTA AND GRAIN <input type="text"/></p> <p>POTATOE AND OTHER TUBER. <input type="text"/></p> <p>EGGS/FISH/POULTRY. <input type="text"/></p> <p>MEAT <input type="text"/></p> <p>OTHER SOLID OR <input type="text"/></p> <p>SEMI-SOLID FOODS</p> |
| 432 | | GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 433. | GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 433. |

Section 4B. IMMUNIZATION AND HEALTH

| | | | |
|-----|--|---|---|
| 433 | <p>CHECK #03, #04 AND #18: ENTER LINE NUMBER FOR EACH LIVE BIRTH SINCE JANUARY 1995 IN THE TABLE. INDICATE WHETHER THE CHILD IS ALIVE OR NOT ALIVE. ASK THE QUESTIONS ABOUT EACH OF THESE BIRTHS BEGINNING WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 2 BIRTHS, USE ADDITIONAL QUESTIONNAIRE).</p> | | |
| 434 | LINE NUMBER FROM 403 | LAST BIRTH LINE NUMBER <input type="text"/> <input type="text"/> | NEXT-TO-LAST BIRTH LINE NUMBER <input type="text"/> <input type="text"/> |
| 435 | NAME FROM 404 SURVIVORSHIP STATUS FROM 418 | NAME _____ ALIVE <input type="checkbox"/> NOT ALIVE <input type="checkbox"/> (GO TO Q 435 IN NEXT COLUMN. IF NO MORE BIRTHS, GO TO 458). | NAME _____ ALIVE <input type="checkbox"/> NOT ALIVE <input type="checkbox"/> (GO TO Q 435 IN NEXT COLUMN. IF NO MORE BIRTHS, GO TO 458). |
| 436 | Do you have a card where (NAME'S) vaccinations are written? IF YES: May I see it please? | YES, SEEN 1 (SKIP TO 438) ← YES, NOT SEEN 2 (SKIP TO 440) ← NO CARD 3 | YES, SEEN 1 (SKIP TO 438) ← YES, NOT SEEN 2 (SKIP TO 440) ← NO CARD 3 |
| 437 | Did you ever have a vaccination card for (NAME)? | YES 1 (SKIP TO 440) ← NO 2 | YES 1 (SKIP TO 440) ← NO 2 |

| | | LAST BIRTH NAME _____ | NEXT-TO-LAST BIRTH NAME _____ |
|------|--|---|---|
| 440 | Did (NAME) ever receive any vaccinations to prevent him(her) from getting diseases? | YES 1 NO 2 (SKIP TO 442) ← DON'T KNOW 8 | YES 1 NO 2 (SKIP TO 442) ← DON'T KNOW 8 |
| 441 | Please tell me if (NAME) received any of the following vaccinations: |  |  |
| 441A | A BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that left a scar? | YES 1 NO 2 DON'T KNOW 8 | YES 1 NO 2 DON'T KNOW 8 |
| 441B | Polio vaccine, that is drops in the mouth? | YES 1 NO 2 (SKIP TO 441E) ← DON'T KNOW 8 | YES 1 NO 2 (SKIP TO 441E) ← DON'T KNOW 8 |
| 441C | How many times? | NUMBER OF TIMES <input type="checkbox"/> | NUMBER OF TIMES <input type="checkbox"/> |
| 441D | When was the first polio vaccine given, just after birth or later? | JUST AFTER BIRTH 1 LATER 2 DON'T KNOW 8 | JUST AFTER BIRTH 1 LATER 2 DON'T KNOW 8 |
| 441E | DPT/DP vaccination, that is, an injection usually given at the same time as polio drops? | YES 1 NO 2 (SKIP TO 441 G) ← DON'T KNOW 8 | YES 1 NO 2 (SKIP TO 441 G) ← DON'T KNOW 8 |
| 441F | How many times? | NUMBER OF TIMES <input type="checkbox"/> | NUMBER OF TIMES <input type="checkbox"/> |
| 441G | An injection to prevent measles? | YES 1 NO 2 DON'T KNOW 8 | YES 1 NO 2 DON'T KNOW 8 |

| | | | |
|-----|--|---|---|
| 442 | Has (NAME) been ill with a fever at any time in the last 2 weeks? | YES..... 1 NO..... 2 DONT KNOW..... B | YES..... 1 NO..... 2 DONT KNOW..... B |
| 443 | Has (NAME) been ill with cough at any time in the last 2 weeks? | YES..... 1 NO..... 2 (SKIP TO 447) ← DONT KNOW..... B | YES..... 1 NO..... 2 (SKIP TO 447) ← DONT KNOW..... B |
| 444 | When (NAME) was ill with cough, did he/she breathe faster than usual with short, fast breaths? | YES..... 1 NO..... 2 DONT KNOW..... B | YES..... 1 NO..... 2 DONT KNOW..... B |
| 445 | Did you seek advice or treatment for the cough? | YES..... 1 NO..... 2 (SKIP TO 447) ← | YES..... 1 NO..... 2 (SKIP TO 447) ← |
| 446 | Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.. | PUBLIC SECTOR HOSPITAL..... A POLYCLINIC..... B AMBULATORY..... C PHARMACY..... D FAP..... E OTHER PUBLIC HEALTH FACILITY _____ F (SPECIFY) PRIVATE HEALTH SECTOR PRIVATE CLINIC..... G PRIVATE PHARMACY..... H PRIVATE DOCTOR..... I OTHER PRIVATE HEALTH FACILITY _____ J (SPECIFY) OTHER PRIVATE SHOP..... K PRIVATE PERSON (NON MEDICAL) L OTHER..... X (SPECIFY) | PUBLIC SECTOR HOSPITAL..... A POLYCLINIC..... B AMBULATORY..... C PHARMACY..... D FAP..... E OTHER PUBLIC HEALTH FACILITY _____ F (SPECIFY) PRIVATE HEALTH SECTOR PRIVATE CLINIC..... G PRIVATE PHARMACY..... H PRIVATE DOCTOR..... I OTHER PRIVATE HEALTH FACILITY _____ J (SPECIFY) OTHER PRIVATE SHOP..... K PRIVATE PERSON (NON MEDICAL) L OTHER..... X (SPECIFY) |

| | | LAST BIRTH NAME _____ | NEXT-TO-LAST BIRTH NAME _____ |
|-------|---|--|--|
| 4 4 7 | Has (NAME) had diarrhea in the last two weeks? | YES 1 NO 2 (SKIP TO 457) ← DON'T KNOW 8 | YES 1 NO 2 (SKIP TO 457) ← DON'T KNOW 8 |
| 4 4 8 | Was there any blood in the stools? | YES 1 NO 2 DON'T KNOW 8 | YES 1 NO 2 DON'T KNOW 8 |
| 4 4 9 | On the worst day of the diarrhea, how many bowel movements did (NAME) have? | NUMBER <input type="text"/> <input type="text"/> DON'T KNOW 98 | NUMBER <input type="text"/> <input type="text"/> DON'T KNOW 98 |
| 4 5 0 | Was he/she given the same amount to drink as before the diarrhea, or more, or less? | SAME 1 MORE 2 LESS 3 DON'T KNOW 8 | SAME 1 MORE 2 LESS 3 DON'T KNOW 8 |
| 4 5 1 | Was he/she given the same amount food to eat as before the diarrhea, or more, or less? | SAME 1 MORE 2 LESS 3 DON'T KNOW 8 | SAME 1 MORE 2 LESS 3 DON'T KNOW 8 |
| 4 5 2 | Was (NAME) given rehydron, fluid made from a special packet to drink? | YES 1 NO 2 DON'T KNOW 8 | YES 1 NO 2 DON'T KNOW 8 |
| 4 5 3 | Was anything (else) given to treat the diarrhea? | YES 1 NO 2 (SKIP TO 455) ← DON'T KNOW 8 | YES 1 NO 2 (SKIP TO 455) ← DON'T KNOW 8 |
| 4 5 4 | What was given to treat the diarrhea? Anything else? RECORD ALL MENTIONED | RECOMMENDED HOME FLUIDS A PILLS OR SYRUP B INJECTION C (I.V.) INTRAVENOUS D HOME REMEDIES/HERBS E OTHER X _____ (SPECIFY) | RECOMMENDED HOME FLUIDS A PILLS OR SYRUP B INJECTION C (I.V.) INTRAVENOUS D HOME REMEDIES/HERBS E OTHER X _____ (SPECIFY) |

| | | | |
|-----|--|--|--|
| 455 | Did you seek advice or treatment for the diarrhea? | YES..... 1 NO..... 2 (SKIP TO 457) ← DON'T KNOW..... B | YES..... 1 NO..... 2 (SKIP TO 457) ← DON'T KNOW..... B |
| 456 | Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED. | PUBLIC SECTOR HOSPITAL..... A POLYCLINIC..... B AMBULATORY..... C PHARMACY..... D FAP..... E OTHER PUBLIC HEALTH FACILITY..... F (SPECIFY) PRIVATE HEALTH SECTOR PRIVATE CLINIC..... G PRIVATE PHARMACY..... H PRIVATE DOCTOR..... I OTHER PRIVATE HEALTH FACILITY..... J (SPECIFY) OTHER PRIVATE SHOP..... K PRIVATE PERSON (NON MEDICAL)..... L OTHER..... X (SPECIFY) | PUBLIC SECTOR HOSPITAL..... A POLYCLINIC..... B AMBULATORY..... C PHARMACY..... D FAP..... E OTHER PUBLIC HEALTH FACILITY..... F (SPECIFY) PRIVATE HEALTH SECTOR PRIVATE CLINIC..... G PRIVATE PHARMACY..... H PRIVATE DOCTOR..... I OTHER PRIVATE HEALTH FACILITY..... J (SPECIFY) OTHER PRIVATE SHOP..... K PRIVATE PERSON (NON MEDICAL)..... L OTHER..... X (SPECIFY) |
| 457 | | GO BACK TO 435 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 458 | GO BACK TO 435 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 458 |

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|---|--|------|
| 458 | When a child has diarrhea, should he/she be given less to drink than usual, about the same amount, or more than usual? | LESS TO DRINK 1 ABOUT SAME AMOUNT TO DRINK 2 MORE TO DRINK 3 DON'T KNOW 8 | |
| 459 | When a child has diarrhea, should he/she be given less to eat than usual, about the same amount, or more than usual? | LESS TO EAT 1 ABOUT SAME AMOUNT TO EAT 2 MORE TO EAT 3 DON'T KNOW 8 | |
| 460 | When a child 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? RECORD ALL MENTIONED. | REPEATED WATERY STOOL A ANY WATERY STOOL B REPEATED VOMITING C ANY VOMITING D BLOOD IN STOOL E HIGH BODY TEMPERATURE F MARKED THIRST G NOT EATING/NOT DRINKING WELL H GETTING SICKER/VERY SICK I NOT GETTING BETTER J OTHER _____ X (SPECIFY) DON'T KNOW Z | |
| 461 | When a child 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? RECORD ALL MENTIONED | FAST BREATHING A DIFFICULT BREATHING B NOISY BREATHING C HIGH BODY TEMPERATURE D UNABLE TO DRINK E NOT EATING/NOT DRINKING WELL F GETTING SICKER/VERY SICK G NOT GETTING BETTER H OTHER _____ X (SPECIFY) DON'T KNOW Z | |
| 462 | CHECK 452, ALL COLUMNS NO CHILD RECEIVED REHYDRON <input type="checkbox"/> ANY CHILD RECEIVED REHYDRON <input type="checkbox"/> | | 501 |
| 463 | Have you ever heard of a special product called rehydron you can get for the treatment of diarrhea? | YES 1 NO 2 | |

Section 5. CONTRACEPTION

Now I would like to talk about contraception - the various ways or methods that a couple can use to delay or avoid a pregnancy.

CIRCLE CODE 1 IN 501 FOR EACH METHOD MENTIONED SPONTANEOUSLY.

THEN PROCEED DOWN COLUMN 502, 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 501 OR 502, ASK 503.

| | 501 Which ways or methods have you heard about? | | 502 Have you ever heard of (METHOD)? | | 503 Have you ever used (METHOD)? |
|---|---|--|--------------------------------------|----|----------------------------------|
| | SPONTANEOUS YES | | PROBED YES | NO | |
| 01 PILL Women can take a pill every day. | 1 | | 2 | | YES 1 NO 2 |
| 02 IUD Women can have a loop or coil placed inside them by a doctor. | 1 | | 2 | | 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 | | YES 1 NO 2 |
| 05 DIAPHRAGM, FOAM, JELLY. Women can place a sponge, suppository, diaphragm, jelly inside themselves before intercourse. | 1 | | 2 | | YES 1 NO 2 |

| | | | | |
|----|---|---|---|---|
| 06 | CONDOM. Men can use a rubber sheath during sexual intercourse. | 1 | 2 | YES 1 NO..... 2 |
| 07 | FEMALE STERILIZATION. Women can have an operation to avoid having any more children. | 1 | 2 | Have you ever had an operation to avoid having any more children? YES 1 NO..... 2 |
| 09 | CALENDAR METHOD. Every month that a women is sexually active she can avoid having sexual intercourse on the days of the month she is most likely to get pregnant. | 1 | 2 | YES 1 NO..... 2 |
| 10 | WITHDRAWAL. Men can be careful pull out before climax. | 1 | 2 | YES 1 NO..... 2 |
| 11 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? | 1 | 3 _____ (SPECIFY) _____ (SPECIFY) | YES 1 NO..... 2 YES 1 NO..... 2 |

504 CHECK 503

NOT A SINGLE "YES" (NEVER USED)

AT LEAST ONE "YES" (EVER USED) → SKIP TO 509

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|--|---|--------|
| 505 | Have you ever used anything or tried in any way to delay or avoid getting pregnant? | YES..... 1 NO..... 2 | → 531 |
| 507 | What have you used or done? CORRECT 503 AND 504 (AND 502 IF NECESSARY) | | |
| 509 | Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. How many living children did you have at that time, if any? IF NONE, RECORD '00' | NUMBER OF CHILDREN..... <input type="text"/> <input type="text"/> | |
| 510 | When you first time began to use contraception, did you want to have another child but at a later time, or did you not want to have another child at all? | WANTED CHILD LATER..... 1 DID NOT WANT ANOTHER CHILD..... 2 OTHER..... 6 (SPECIFY) | |
| 511 | CHECK 503 WOMAN NOT STERILIZED <input type="checkbox"/> | WOMAN STERILIZED <input type="checkbox"/> | → 514A |
| 512 | CHECK 227 NOT PREGNANT OR UNSURE <input type="checkbox"/> | PREGNANT <input type="checkbox"/> | → 532 |
| 513 | Are you currently doing something or using any method to delay or avoid getting pregnant? | YES..... 1 NO..... 2 | → 531 |

| | | |
|------------------------|--|---|
| <p>514</p> <p>514A</p> | <p>Which method are you using?</p> <p>CIRCLE '07 FOR FEMALE STERILIZATION.</p> | <p>PILLS 01</p> <p>IUD 02</p> <p>INJECTIONS 03</p> <p>DIAPHRAGM/FOAM/JELLY 05</p> <p>CONDOM 06</p> <p>FEMALE STERILIZATION 07</p> <p>CALENDAR METHOD 09</p> <p>WITHDRAWAL 10</p> <p>OTHER _____ 98</p> <p>(SPECIFY)</p> <p>→ 526</p> <p>→ 518</p> <p>→ 523</p> <p>→ 526</p> |
| <p>515</p> | <p>May I see the package of pills you are now using?</p> <p>RECORD NAME OF BRAND IF PACKAGE IS SEEN</p> | <p>PACKAGE SEEN 1</p> <p>BRAND NAME _____</p> <p>PACKAGE NOT SEEN 2</p> <p>→ 517</p> |
| <p>516</p> | <p>Do you know the brand name of the pills you are now using?</p> <p>RECORD NAME OF BRAND.</p> | <p>BRAND NAME _____</p> <p>DON'T KNOW 98</p> |
| <p>517</p> | <p>How much does one packet of pills cost you?</p> | <p>COST [] [] [] []</p> <p>FREE 9998</p> <p>DON'T KNOW 9998</p> <p>→ 526</p> |
| <p>518</p> | <p>Where did the sterilization take place?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> | <p>PUBLIC SECTOR</p> <p>HOSPITAL 1</p> <p>POLYCLINIC 2</p> <p>WOMEN'S CENTER 3</p> <p>MOBILE CLINIC 4</p> <p>OTHER HEALTH FACILITY</p> <p>_____ 6</p> <p>(SPECIFY)</p> <p>DON'T KNOW 8</p> |

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP | | | | | | | | |
|-----|---|--|-----------------|--|--|--|--|--|--|--|-------|
| 521 | In what month and year was the sterilization performed? | MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> | | | | | | | | | → 527 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 523 | How do you determine which days of your monthly cycle not to have sexual relations | BASED ON CALENDAR 01 BASED ON BODY TEMPERATURE 02 BASED ON CERVICAL MUCUS (BILLING METHOD) 03 BASED ON RECTAL TEMPERATURE 04 NO SPECIFIC SYSTEM 05 OTHER _____ 96 (SPECIFY) | | | | | | | | | |
| 526 | For how many months have you been using (method) continuously? IF LESS THAN 1 MONTH, RECORD '00' | MONTHS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> 8 YEARS OR LONGER 96 | | | | | | | | | |
| | | | | | | | | | | | |
| 527 | CHECK 514 CIRCLE METHOD CODE: | PILLS 01 IUD 02 INJECTIONS 03 DIAPHRAGM/FOAM/JELLY 05 CONDOM 06 FEMALE STERILIZATION 07 CALENDAR METHOD 08 WITHDRAWAL 10 OTHER _____ 96 (SPECIFY) | → 529A → 532 | | | | | | | | |

| | | | |
|------|---|--|-------|
| 527A | Who recommended you to use this method of contraception? | DOCTOR FROM THE HOSPITAL 01 DOCTOR FROM WOMEN'S CENTER 02 OTHER HEALTH PROFESSIONAL 03 PHARMACIST 04 FRIENDS/RELATIVES 05 DECIDED HERSELF 06 OTHER _____ 96 SPECIFY | |
| 528 | Where did you obtain (METHOD) the last time? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) | PUBLIC SECTOR HOSPITAL 11 POLYCLINIC 12 FAMILY PLANNING CLINIC 13 PHARMACY 14 COMMUNITY HEALTH WORKER 15 OTHER PUBLIC HEALTH FACILITY _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL /CLINIC 21 PRIVATE PHARMACY 22 PRIVATE DOCTOR 23 MOBILE CLINIC 24 PRIVATE HEALTH WORKER 25 OTHER PRIVATE HEALTH FACILITY _____ 26 (SPECIFY) OTHER SOURCE SHOP 31 RELIGIOUS ORGANIZATION 32 FRIENDS/RELATIVES 33 OTHER _____ 36 (SPECIFY) | |
| 529 | Do you know another place where you could have obtained (METHOD) the last time? | YES 1 | |
| 529A | At the time of the sterilization operation, did you know another place where you could have received the operation? | NO. 2 | → 534 |

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|--|--|--------------|
| 530 | <p>People select the place where they obtain contraceptives for various reasons. What was the main reason you went to (NAME OF PLACE IN Q.528 OR Q.518) instead of the other place you know about?</p> <p>RECORD RESPONSE AND CIRCLE CODE</p> <p>_____</p> | <p>ACCESS-RELATED REASONS</p> <p>CLOSER TO HOME 11</p> <p>CLOSER TO WORK 12</p> <p>AVAILABILITY OF TRANSPORT 13</p> <p>SERVICE-RELATED REASONS</p> <p>STAFF MORE COMPETENT/FRIENDLY 21</p> <p>CLEANER FACILITY 22</p> <p>OFFERS MORE PRIVACY 23</p> <p>SHORTER WAITING TIME 24</p> <p>LONGER HOURS OF OPERATION 25</p> <p>USE OTHER SERVICES AT THE FACILITY 26</p> <p>LOWER COST/CHEAPER 31</p> <p>WANTED ANONYMITY 41</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p> <p>DONT KNOW 98</p> | <p>→ 534</p> |
| 531 | <p>What is the main reason you are not using a method of contraception to avoid pregnancy?</p> | <p>NOT MARRIED 11</p> <p>FERTILITY-RELATED REASONS</p> <p>NOT HAVING SEX 21</p> <p>INFREQUENT SEX 22</p> <p>MENOPAUSAL/HYSTERECTOMY 23</p> <p>SUBFECUND/INFECUND 24</p> <p>POSTPARTUM/BREASTFEEDING 25</p> <p>WANTS (MORE)CHILDREN 26</p> <p>PREGNANT 27</p> <p>OPPOSITION TO USE</p> <p>RESPONDENT OPPOSED 31</p> <p>HUSBAND OPPOSED 32</p> <p>OTHERS OPPOSED 33</p> <p>RELIGIOUS PROHIBITION 34</p> <p>LACK OF KNOWLEDGE</p> <p>KNOWS NO METHOD 41</p> <p>KNOWS NO SOURCE 42</p> <p>METHOD RELATED REASONS</p> <p>HEALTH CONCERNS 51</p> <p>FEAR OF SIDE EFFECTS 52</p> <p>LACK OF ACCESS/TOO FAR 53</p> <p>COST TOO MUCH 54</p> <p>INCONVENIENT TO USE 55</p> <p>INTERFERES WITH BODY'S</p> <p>NORMAL PROCESSES 56</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p> <p>DONT KNOW 98</p> | |

| | | | |
|-----|---|---|-------|
| 532 | Do you know of a place where you can obtain a method of contraception? | YES 1 NO 2 | → 534 |
| 533 | <p>Where is that?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> | <p>PUBLIC SECTOR</p> <p>HOSPITAL 11</p> <p>POLYCLINIC 12</p> <p>FAMILY PLANNING CLINIC 13</p> <p>PHARMACY 14</p> <p>COMMUNITY HEALTH WORKER 15</p> <p>OTHER PUBLIC HEALTH FACILITY</p> <p>_____ 16</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC 21</p> <p>PRIVATE PHARMACY 22</p> <p>PRIVATE DOCTOR 23</p> <p>MOBILE CLINIC 24</p> <p>PRIVATE HEALTH WORKER 25</p> <p>OTHER PRIVATE HEALTH FACILITY</p> <p>_____ 26</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP 31</p> <p>RELIGIOUS ORGANIZATION 32</p> <p>FRIENDS/RELATIVES 33</p> <p>OTHER</p> <p>_____ 36</p> <p>(SPECIFY)</p> | |
| 534 | Were you visited by a health worker who discussed the use of contraception during the last 12 months? | YES 1 NO 2 | |
| 535 | Have you visited a health facility for any reason in the last 12 months? | YES 1 NO 2 | → 537 |
| 536 | Did any staff member at the health facility speak to you about contraception? | YES 1 NO 2 | |
| 537 | Do you think that breast feeding can affect a woman's chance of becoming pregnant? | YES 1 NO 2 DON'T KNOW 8 | → 543 |
| 538 | Do you think that a woman's chance of becoming pregnant is increased or decreased by breastfeeding? | INCREASED 1 DECREASED 2 DEPENDS 3 DON'T KNOW 8 | → 543 |

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|--|--|------|
| 539 | CHECK 208 ONE OR MORE BIRTHS <input type="checkbox"/> NO BIRTHS <input type="checkbox"/> | | 543 |
| 540 | Have you ever relied on breastfeeding as a method of avoiding pregnancy? ↓ | YES 1 NO 2 | 543 |
| 541 | CHECK 227 AND 514 NOT PREGNANT OR UNSURE AND NOT STERILIZED <input type="checkbox"/> EITHER PREGNANT OR STERILIZED <input type="checkbox"/> | | 543 |
| 542 | Are you currently relying on breastfeeding to avoid getting pregnant? ↓ | YES 1 NO 2 | |
| 543 | (SHOW LOGO 1) Have you ever seen this symbol? | YES 1 NO 2 | 548 |
| 544 | Where have you seen it? Anywhere else? | PHARMACY 1 WOMEN'S CENTER 2 POLYCLINIC 3 TELEVISION 4 OTHER _____ 6 (SPECIFY) | |
| 545 | What does this symbol mean? | CONTRACEPTIVES 1 DRUG 2 OTHER _____ 6 (SPECIFY) DON'T KNOW 8 | |

| | | | |
|-----|---|--|-------|
| 543 | (SHOW LOGO 2) Have you ever seen this symbol? | YES 1 NO 2 | → 549 |
| 544 | Where have you seen it? Anywhere else? | PHARMACY 1 WOMEN'S CENTER 2 POLYCLINIC 3 TELEVISION 4 OTHER _____ 6 (SPECIFY) | |
| 545 | What does this symbol mean? | CONTRACEPTIVES 1 DRUG 2 OTHER _____ 6 (SPECIFY) DON'T KNOW 8 | |

234

| | | | | | | |
|-----|--|----------------|----------------|-------------------|-------------------|------------|
| 549 | Now I would like to read you some statements about oral contraceptives (pills) and injectable contraceptives. For each statement, please tell me whether you strongly agree, agree somewhat, disagree somewhat or strongly disagree. | | | | | |
| | STATEMENT | STRONGLY AGREE | AGREE SOMEWHAT | DISAGREE SOMEWHAT | STRONGLY DISAGREE | DON'T KNOW |
| | a. Taking oral contraceptives (pills) usually does not harm a woman's health | 1 | 2 | 3 | 4 | 8 |
| | b. If a woman experiences nausea when she starts taking oral contraceptives, she should not stop taking them immediately. | 1 | 2 | 3 | 4 | 8 |
| | c. Women who use injectable contraceptives cannot get pregnant again after they stop the injection | 1 | 2 | 3 | 4 | 8 |
| | d. Women who use injectable contraceptives often stop menstruating while they are taking them. | 1 | 2 | 3 | 4 | 8 |

Section 6. MARRIAGE

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP | | | | | | | | | | | | | | | |
|---------------------------------|--|---|------------------------------|-----|----|---------------------------------|---|-------|-------------------------|---|-------|-------------------|---|---|---------------------|---|---|--|
| 601 | PRESENCE OF OTHERS AT THIS POINT. | <table border="0"> <tr> <td></td> <td align="center">YES</td> <td align="center">NO</td> </tr> <tr> <td>CHILDREN UNDER 10</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>HUSBAND/PARTNER</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>OTHER MALES</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>OTHER FEMALES</td> <td align="center">1</td> <td align="center">2</td> </tr> </table> | | YES | NO | CHILDREN UNDER 10 | 1 | 2 | HUSBAND/PARTNER | 1 | 2 | OTHER MALES | 1 | 2 | OTHER FEMALES | 1 | 2 | |
| | YES | NO | | | | | | | | | | | | | | | | |
| CHILDREN UNDER 10 | 1 | 2 | | | | | | | | | | | | | | | | |
| HUSBAND/PARTNER | 1 | 2 | | | | | | | | | | | | | | | | |
| OTHER MALES | 1 | 2 | | | | | | | | | | | | | | | | |
| OTHER FEMALES | 1 | 2 | | | | | | | | | | | | | | | | |
| 602 | Are you currently married or living with a man? | <table border="0"> <tr> <td>CURRENTLY MARRIED</td> <td align="center">1</td> <td></td> </tr> <tr> <td>LIVING WITH A MAN</td> <td align="center">2</td> <td align="right">→ 607</td> </tr> <tr> <td>NOT IN UNION</td> <td align="center">3</td> <td></td> </tr> </table> | CURRENTLY MARRIED | 1 | | LIVING WITH A MAN | 2 | → 607 | NOT IN UNION | 3 | | | | | | | | |
| CURRENTLY MARRIED | 1 | | | | | | | | | | | | | | | | | |
| LIVING WITH A MAN | 2 | → 607 | | | | | | | | | | | | | | | | |
| NOT IN UNION | 3 | | | | | | | | | | | | | | | | | |
| 603 | Do you currently have a regular sexual partner, an occasional sexual partner, or no sexual partner at all? | <table border="0"> <tr> <td>REGULAR SEXUAL PARTNER</td> <td align="center">1</td> <td></td> </tr> <tr> <td>OCCASIONAL SEXUAL PARTNER</td> <td align="center">2</td> <td></td> </tr> <tr> <td>NO SEXUAL PARTNER</td> <td align="center">3</td> <td></td> </tr> </table> | REGULAR SEXUAL PARTNER | 1 | | OCCASIONAL SEXUAL PARTNER | 2 | | NO SEXUAL PARTNER | 3 | | | | | | | | |
| REGULAR SEXUAL PARTNER | 1 | | | | | | | | | | | | | | | | | |
| OCCASIONAL SEXUAL PARTNER | 2 | | | | | | | | | | | | | | | | | |
| NO SEXUAL PARTNER | 3 | | | | | | | | | | | | | | | | | |
| 604 | Have you ever been married or lived with a man? | <table border="0"> <tr> <td>FORMERLY MARRIED</td> <td align="center">1</td> <td></td> </tr> <tr> <td>LIVED WITH A MAN</td> <td align="center">2</td> <td align="right">→ 611</td> </tr> <tr> <td>NO</td> <td align="center">3</td> <td align="right">→ 615</td> </tr> </table> | FORMERLY MARRIED | 1 | | LIVED WITH A MAN | 2 | → 611 | NO | 3 | → 615 | | | | | | | |
| FORMERLY MARRIED | 1 | | | | | | | | | | | | | | | | | |
| LIVED WITH A MAN | 2 | → 611 | | | | | | | | | | | | | | | | |
| NO | 3 | → 615 | | | | | | | | | | | | | | | | |
| 606 | What is your marital status now: are you widowed, divorced, or separated? | <table border="0"> <tr> <td>WIDOWED</td> <td align="center">1</td> <td></td> </tr> <tr> <td>DIVORCED</td> <td align="center">2</td> <td align="right">→ 611</td> </tr> <tr> <td>SEPARATED</td> <td align="center">3</td> <td></td> </tr> </table> | WIDOWED | 1 | | DIVORCED | 2 | → 611 | SEPARATED | 3 | | | | | | | | |
| WIDOWED | 1 | | | | | | | | | | | | | | | | | |
| DIVORCED | 2 | → 611 | | | | | | | | | | | | | | | | |
| SEPARATED | 3 | | | | | | | | | | | | | | | | | |
| 607 | Is your husband/partner living with you now or is he staying elsewhere? | <table border="0"> <tr> <td>LIVES WITH HER</td> <td align="center">1</td> <td></td> </tr> <tr> <td>STAYING ELSEWHERE</td> <td align="center">2</td> <td></td> </tr> </table> | LIVES WITH HER | 1 | | STAYING ELSEWHERE | 2 | | | | | | | | | | | |
| LIVES WITH HER | 1 | | | | | | | | | | | | | | | | | |
| STAYING ELSEWHERE | 2 | | | | | | | | | | | | | | | | | |
| 611 | Have you been married or lived with a man only once, or more than once? | <table border="0"> <tr> <td>ONCE</td> <td align="center">1</td> <td></td> </tr> <tr> <td>MORE THAN ONCE</td> <td align="center">2</td> <td></td> </tr> </table> | ONCE | 1 | | MORE THAN ONCE | 2 | | | | | | | | | | | |
| ONCE | 1 | | | | | | | | | | | | | | | | | |
| MORE THAN ONCE | 2 | | | | | | | | | | | | | | | | | |

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|--|---|--------------|
| 612 | <p>CHECK 611</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>MARRIED/LIVED WITH A MAN ONLY ONCE</p> <input style="width: 30px; height: 15px;" type="checkbox"/> </div> <div style="text-align: center;"> <p>MARRIED/LIVED WITH A MAN MORE THAN ONCE</p> <input style="width: 30px; height: 15px;" type="checkbox"/> </div> </div> <p>In what month and year did you start living with your husband/partner?</p> <p>Now we will talk about your first husband/partner. In what month and year did you start living with him?</p> | <p>MONTH <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p>DON'T KNOW MONTH 98</p> <p>YEAR <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p>DON'T KNOW YEAR 98</p> | <p>→ 615</p> |
| 613 | <p>How old were you when you started living with him?</p> | <p>AGE <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> | |
| 615 | <p>Now I need to ask you some questions about sexual activity in order to gain a better understanding of some issues of contraception.</p> <p>When was the last time you had sexual intercourse (if ever)?</p> | <p>NEVER 000</p> <p>DAYS AGO 1 <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p>WEEKS AGO 2 <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p>MONTHS AGO 3 <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p>YEARS AGO 4 <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p>BEFORE LAST BIRTH 998</p> | <p>→ 712</p> |
| 619 | <p>How old were you when you first had sexual intercourse?</p> | <p>AGE <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p>FIRST TIME WHEN MARRIED 98</p> | |

Section 7. FERTILITY PREFERENCES

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|---|---|------------|
| 701 | <p>CHECK 514</p> <p style="text-align: center;">WOMAN NOT STERILIZED <input type="checkbox"/></p> <p style="text-align: center;">WOMAN STERILIZED <input type="checkbox"/></p> | | 712 |
| 702 | <p>CHECK 227</p> <p style="text-align: center;">NOT PREGNANT OR UNSURE <input type="checkbox"/></p> <p style="text-align: center;">PREGNANT <input type="checkbox"/></p> <p>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?</p> <p>Now I have some questions about the future. After the child you are expecting, would like to have another child or would you prefer not to have more children?</p> | <p>HAVE (A/ANOTHER) CHILD 1</p> <p>NO MORE/NONE 2</p> <p>SAYS SHE CAN'T GET PREGNANT 3</p> <p>UNDECIDED/DONT KNOW 8</p> | 708 704 |
| 703 | <p>CHECK 227</p> <p style="text-align: center;">NOT PREGNANT OR UNSURE <input type="checkbox"/></p> <p style="text-align: center;">PREGNANT <input type="checkbox"/></p> <p>How long would you like to wait from now before the birth of (a/another) child?</p> <p>How long would you like to wait after the birth of the child you are expecting before the birth of another child?</p> | <p>MONTHS 1</p> <p>YEARS 2</p> <p>SOON/NOW 993</p> <p>SAYS SHE CAN'T GET PREGNANT 994</p> <p>AFTER MARRIAGE 995</p> <p>OTHER (SPECIFY) 996</p> <p>DONT KNOW 998</p> | 706 |

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|--|--|------|
| 704 | CHECK 227: NOT PREGNANT OR UNSURE <input type="checkbox"/> PREGNANT <input type="checkbox"/> | | 707 |
| 705 | If you became pregnant in the next few weeks, would you be <u>happy</u> , <u>unhappy</u> , or would it <u>not matter</u> very much? | HAPPY 1 UNHAPPY 2 WOULD NOT MATTER 3 | |
| 706 | CHECK 513: USING A METHOD? NOT ASKED <input type="checkbox"/> NOT CURRENTLY USING <input type="checkbox"/> CURRENTLY USING <input type="checkbox"/> | | 712 |
| 707 | Do you think you will use a method to delay or avoid pregnancy within the next 12 months? | YES 1 NO 2 DON'T KNOW 8 | 709 |
| 708 | Do you think you will use a method at any time in the future? | YES 1 NO 2 DON'T KNOW 8 | 710 |

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709

Which method would you prefer to use?

PILLS 01
 IUD 02
 INJECTIONS 03
 DIAPHRAGM/FOAM/JELLY 05
 CONDOM 06
 FEMALE STERILIZATION 07
 CALENDAR METHOD 09
 WITHDRAWAL 10
 OTHER 96
 (SPECIFY)
 UNSURE 98

→ 712

710

What is the main reason that you think you will never use a method?

NOT MARRIED 11
 FERTILITY-RELATED REASONS
 INFREQUENT SEX 22
 MENOPAUSAL/HYSTERECTOMY 23
 SUBFECUND/INFECUND 24
 WANTS (MORE)CHILDREN 28
 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)
 DONT KNOW 98

→ 712

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|--|--|------|
| 711 | Would you ever use a method if you were married? | YES 1 NO 2 DONT KNOW 8 | |
| 712 | <p>CHECK 222</p> <p>HAS LIVING CHILDREN <input type="checkbox"/></p> <p>NO LIVING CHILDREN <input type="checkbox"/></p> <p>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?</p> <p>PROBE FOR A NUMERIC RESPONSE.</p> <p>If you could choose exactly the number of children to have in your life, how many would that be?</p> | NUMBER <input type="text"/> <input type="text"/> OTHER 96 (SPECIFY) → 714 | |
| 713 | How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter? | <p>BOYS</p> <p>NUMBER <input type="text"/><input type="text"/> OTHER 96 (SPECIFY)</p> <p>GIRLS</p> <p>NUMBER <input type="text"/><input type="text"/> OTHER 96 (SPECIFY)</p> <p>EITHER</p> <p>NUMBER <input type="text"/><input type="text"/> OTHER 96 (SPECIFY)</p> | |

| 714 | Would you say that you approve or disapprove of couples using a method to avoid getting pregnant? | APPROVE 1 DISAPPROVE 2 NO OPINION 3 | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|--|-----|-----------------|---------------------|-------------|-------------|---|------------------|---|------------------|-----------------------------|---|---|--------------|---|---|--------------------------------|---|---|--|
| 715 | Is it acceptable or not acceptable to you for information on contraception to be provided: On the radio? On the television? | <table border="0"> <thead> <tr> <th></th> <th>ACCEP- TABLE</th> <th>NOT ACCEP- TABLE</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>RADIO</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>TELEVISION</td> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table> | | ACCEP- TABLE | NOT ACCEP- TABLE | DK | RADIO | 1 | 2 | 3 | TELEVISION | 1 | 2 | 3 | | | | | | | |
| | ACCEP- TABLE | NOT ACCEP- TABLE | DK | | | | | | | | | | | | | | | | | | |
| RADIO | 1 | 2 | 3 | | | | | | | | | | | | | | | | | | |
| TELEVISION | 1 | 2 | 3 | | | | | | | | | | | | | | | | | | |
| 716 | In the last few months have you heard about contraception: On the radio? On the television? In a newspaper or magazine? From a poster? From leaflets or brochures? | <table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>RADIO</td> <td>1</td> <td>2</td> </tr> <tr> <td>TELEVISION</td> <td>1</td> <td>2</td> </tr> <tr> <td>NEWSPAPER OR MAGAZINE</td> <td>1</td> <td>2</td> </tr> <tr> <td>POSTER</td> <td>1</td> <td>2</td> </tr> <tr> <td>LEAFLETTERS OR BROCHURES</td> <td>1</td> <td>2</td> </tr> </tbody> </table> | | YES | NO | RADIO | 1 | 2 | TELEVISION | 1 | 2 | NEWSPAPER OR MAGAZINE | 1 | 2 | POSTER | 1 | 2 | LEAFLETTERS OR BROCHURES | 1 | 2 | |
| | YES | NO | | | | | | | | | | | | | | | | | | | |
| RADIO | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| TELEVISION | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| NEWSPAPER OR MAGAZINE | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| POSTER | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| LEAFLETTERS OR BROCHURES | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| 718 | In the last few months have you discussed contraception with your friends, neighbors, or relatives? | YES 1 NO 2 | 720 | | | | | | | | | | | | | | | | | | |
| 719 | With whom? Anyone else? RECORD ALL MENTIONED | HUSBAND/PARTNER A MOTHER B FATHER C SISTER(S) D BROTHER(S) E DAUGHTER F MOTHER-IN-LAW G FRIENDS/NEIGHBORS H OTHER _____ X (SPECIFY) | | | | | | | | | | | | | | | | | | | |

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| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|---|--|------|
| 720 | CHECK 602 CURRENTLY MARRIED <input type="checkbox"/> LIVING WITH A MAN <input type="checkbox"/> NOT IN UNION <input type="checkbox"/> | | 801 |
| 721 | Spouses/partners do not always agree on everything. Now I want to ask you about your husband's/partner's views on contraception. Do you think that your husband/partner approves or disapproves of couples using a method to avoid pregnancy? | APPROVES 1 DISAPPROVES 2 DON'T KNOW 8 | |
| 722 | How often have you talked to your husband/partner about contraception in the past year? | NEVER 4 ONCE OR TWICE 2 MORE OFTEN 3 | |
| 723 | Do you think your husband/partner wants the same number of children that you want, or does he want more or fewer than you want? | SAME NUMBER 1 MORE CHILDREN 2 FEWER CHILDREN 3 DON'T KNOW 8 | |

Section 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|---|---|----------------|
| 801 | CHECK 602 AND 604 CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/> FORMERLY MARRIED/ LIVED WITH A MAN <input type="checkbox"/> NEVER MARRIED AND NEVER IN UNION <input type="checkbox"/> | | → 803 → 809 |
| 802 | How old was your husband/partner on his last birthday? | AGE <input type="text"/> <input type="text"/> | |
| 803 | Did your (last) husband/partner ever attend school, technikum, or institute? | YES 1 NO 2 | → 806 |
| 804 | What was the highest level of school he attended? | PRIMARY/SECONDARY 1 SECONDARY-SPECIAL 2 HIGHER 3 DONT KNOW 6 | → 805 |
| 805 | How many years/classes/courses he completed at that level? | YEARS <input type="text"/> <input type="text"/> DONT KNOW 98 | |
| 806 | What is (was) your (last) husband/partner's occupation? That is, what kind of work does (did) he mainly do? | _____ <input type="text"/> <input type="text"/> _____ | |
| 807 | CHECK 806 WORKS (WORKED) IN AGRICULTURE <input type="checkbox"/> DOES(DID) NOT WORK IN AGRICULTURE <input type="checkbox"/> | | → 809 |
| 808 | (Does/did) your husband/partner work mainly on the state land or on his own land, or on family land, or (does/did) he rent land? | STATE LAND 1 OWN LAND 2 FAMILY LAND 3 RENTED LAND 4 | |

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| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
|-----|--|--|---|
| 809 | Aside from your own housework, are you currently working? IF NOT: Are you on maternity leave? | YES..... 1 NO..... 2 MATERNITY LEAVE..... 3 | → 812 → 812 |
| 810 | As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. Are you currently doing any of these things or any other work? | YES..... 1 NO..... 2 | → 812 |
| 811 | Have you done any work in the last 12 months? | YES..... 1 NO..... 2 | → 826 |
| 812 | What is your occupation, that is, what kind of work do you mainly do? | _____ _____ _____ | <input type="checkbox"/> <input type="checkbox"/> |
| 813 | CHECK 812 WORKS IN AGRICULTURE <input type="checkbox"/> DOES NOT WORK IN AGRICULTURE <input type="checkbox"/> | | → 815 |
| 814 | Do you work mainly on the state land or on your own land, or on family land, or do you rent land? | STATE LAND..... 1 OWN LAND..... 2 FAMILY LAND..... 3 RENTED LAND..... 4 | |

| | | | |
|-----|--|--|--------------------|
| 815 | Are you public servant, or do you work on state enterprise, a private firm or enterprise owned by yourself, your husband, member of your family, or by someone else, or are you self-employed? | GOVERNMENT/STATE ENTERPRISE 1 FAMILY/OWN BUSINESS 2 PRIVATE FIRM/PERSON 3 SELF-EMPLOYED 4 | |
| 816 | Do you usually work throughout the year, or do you work seasonally, or only once in a while (episodically)? | THROUGHOUT THE YEAR 1 SEASONALLY 2 ONCE IN A WHILE (EPISODICALLY) 3 | 1 → 818 3 → 819 |
| 817 | During the last 12 months, how many months did you work? | NUMBER OF MONTHS <input type="text"/> | |
| 818 | (In the months you worked,) How many days a week did you usually work? | NUMBER OF DAYS <input type="text"/> | → 820 |
| 819 | During the last 12 months, approximately how many days did you work? | NUMBER OF DAYS <input type="text"/> | |
| 820 | Do you earn cash for your work? PROBE: DO YOU MAKE MONEY FOR WORKING? | YES 1 NO 2 | 2 → 823 |

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP | | | | |
|------|---|---|------|--|--|--|--|
| 822 | <p>CHECK 602</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/></p> <p>↓</p> <p>Who mainly decides how the money you earn will be used: you, your husband/partner, you and your husband/partner jointly, someone else, or you and someone else jointly?</p> </div> <div style="text-align: center;"> <p>NOT MARRIED, NOT LIVING WITH A MAN <input type="checkbox"/></p> <p>↓</p> <p>Who mainly decides how the money you earn will be used: you, someone else, or you and someone else jointly?</p> </div> </div> | <p>RESPONDENT DECIDES 1</p> <p>HUSBAND/PARTNER DECIDES 2</p> <p>JOINTLY WITH HUSBAND/PARTNER 3</p> <p>SOMEONE ELSE DECIDES 4</p> <p>JOINTLY WITH SOMEONE ELSE 5</p> | | | | | |
| 823 | Do you usually work at home or away from home? | <p>HOME 1</p> <p>AWAY 2</p> | | | | | |
| 824 | <p>CHECK 223: IS THERE A CHILD WHO IS AGE 5 OR LESS?</p> <p style="text-align: center;">YES <input type="checkbox"/> NO <input type="checkbox"/></p> | | 826 | | | | |
| 824A | Does (NAME OF YOUNGEST CHILD) live with you? | <p>YES 1</p> <p>NO 2</p> | 826 | | | | |
| 825 | Who usually takes care of (NAME OF YOUNGEST CHILD AT HOME) while you are working? | <p>RESPONDENT 01</p> <p>HUSBAND/PARTNER 02</p> <p>OLDER FEMALE CHILD 03</p> <p>OLDER MALE CHILD 04</p> <p>OTHER RELATIVES 05</p> <p>NEIGHBORS 06</p> <p>FRIENDS 07</p> <p>BABY SITTER 08</p> <p>CHILD IS IN CHILDCARE 10</p> <p>HAS NOT WORKED SINCE LAST BIRTH 95</p> <p>OTHER 96</p> <p style="text-align: center;">(SPECIFY)</p> | | | | | |
| 826 | RECORD THE TIME | <p>HOUR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table></p> <p>MINUTES <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table></p> | | | | | |
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Section 9. HEIGHT AND WEIGHT

IN 901 AND 902 RECORD HEIGHT AND WEIGHT OF THE RESPONDENT.

| | | | | | | | | | | | | | | | |
|-----|--------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 901 | RESPONDENT'S HEIGHT (IN CENTIMETERS) | <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 902 | RESPONDENT'S WEIGHT (IN KILOGRAMS) | <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 903 | RESULT | MEASURED 1 NOT MEASURED 2 REFUSED 3 OTHER 6 (SPECIFY) _____ | | | | | | | | | | | | | |

| | | | | | |
|---|--|--|---|--|--------|
| 904 | CHECK 435 | <table style="width:100%;"> <tr> <td style="width:50%; text-align: center;"> ONE OR MORE LIVING CHILDREN BORN SINCE JANUARY 1993 <input style="width: 30px; height: 15px; margin-left: 10px;" type="checkbox"/> </td> <td style="width:50%; text-align: center;"> NO LIVING CHILDREN BORN SINCE JANUARY 1993 <input style="width: 30px; height: 15px; margin-left: 10px;" type="checkbox"/> </td> </tr> </table> | ONE OR MORE LIVING CHILDREN BORN SINCE JANUARY 1993 <input style="width: 30px; height: 15px; margin-left: 10px;" type="checkbox"/> | NO LIVING CHILDREN BORN SINCE JANUARY 1993 <input style="width: 30px; height: 15px; margin-left: 10px;" type="checkbox"/> | → 1001 |
| ONE OR MORE LIVING CHILDREN BORN SINCE JANUARY 1993 <input style="width: 30px; height: 15px; margin-left: 10px;" type="checkbox"/> | NO LIVING CHILDREN BORN SINCE JANUARY 1993 <input style="width: 30px; height: 15px; margin-left: 10px;" type="checkbox"/> | | | | |

IN 905 RECORD THE LINE NUMBER FOR EACH CHILD BORN SINCE JANUARY 1993 AND STILL ALIVE. IN 906 AND 907 RECORD THE NAME AND BIRTH DATE OF THE LIVING CHILDREN. IN 909 AND 911 RECORD HEIGHT AND WEIGHT OF THE LIVING CHILDREN. IF THERE ARE MORE THAN TWO LIVING CHILDREN BORN SINCE JANUARY 1993 USE ADDITIONAL FORMS.

| | | <input style="width: 15px; height: 15px;" type="checkbox"/> 1 YOUNGEST LIVING CHILD | <input style="width: 15px; height: 15px;" type="checkbox"/> 2 NEXT-TO-YOUNGEST LIVING CHILD | | | | | | | | | | | | | | | | |
|-----|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 905 | LINE NUMBER FROM 434 | <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | | | | | | | | | | | |
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| 906 | NAME FROM 435 | (NAME) _____ | (NAME) _____ | | | | | | | | | | | | | | | | |
| 907 | DATE OF BIRTH FROM 215, AND ASK FOR DAY OF BIRTH | DAY <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> | | | | | | | | | DAY <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> | | | | | | | | |
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|-----|--|--|--|
| 908 | BCG SCAR ON TOP OF SHOULDER | NO SCAR 1 SCAR 1 - 4 mm 2 SCAR 5 mm AND MORE 3 | NO SCAR 1 SCAR 1 - 4 mm 2 SCAR 5 mm AND MORE 3 |
| 909 | HEIGHT (IN CENTIMETERS) | <div style="text-align: center;"> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> </div> | <div style="text-align: center;"> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> </div> |
| 910 | WAS LENGTH/HEIGHT OF CHILD MEASURED LYING DOWN OR STANDING UP? | LYING 1 STANDING 2 | LYING 1 STANDING 2 |
| 911 | WEIGHT (IN KILOGRAMS) | <div style="text-align: center;"> <input type="text"/> <input type="text"/> . <input type="text"/> </div> | <div style="text-align: center;"> <input type="text"/> <input type="text"/> . <input type="text"/> </div> |
| 912 | DATE WEIGHED AND MEASURED | DAY <input type="text"/> <input type="text"/> MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> | DAY <input type="text"/> <input type="text"/> MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> |
| 913 | RESULT | MEASURED 1 CHILD IS SICK 2 CHILD NOT PRESENT 3 CHILD REFUSED 4 MOTHER REFUSED 5 OTHER _____ 6 (SPECIFY) | MEASURED 1 CHILD IS SICK 2 CHILD NOT PRESENT 3 CHILD REFUSED 4 MOTHER REFUSED 5 OTHER _____ 6 (SPECIFY) |

914 NAME OF MEASURER:

NAME OF ASSISTANT:

LETTERHEAD OF THE INSTITUTE OF OBSTATRICS AND GYNECOLOGY

Dear Respondent:

The Institute Obstetrics and Gynecology is conducting Demographic and Health Survey in Uzbekistan. As part of this program we study the prevalence of anemia among the women and their children. We ask you to participate in this program, which will assist the Ministry of Health of Uzbekistan to develop the specific measures to prevent and treat anemia.

Anemia is a disease, which is characterized by a low count of red blood cells. It results from poor nutrition and can be especially damaging to the health of pregnant and breastfeeding women.

Today, it is possible to rapidly (within a few minutes) diagnose this disease. A low level of hemoglobin (less than 11g/dL) can be determined by the Hemocue machine on the basis of a single drop of blood.

If you decide to participate in this program, we will ask you to provide a drop of blood from your finger for the analysis. Also, if you have a child of age 3 or less, please let our nurse to obtain drop of blood from him. The procedure will be done by sterile instruments. The blood will be analyzed using the new sophisticated American equipment, Hemocue. The result of analysis will be available to you right after the blood is taken and assessed by Hemocue. We will also keep the results confidential.

If you decide to participate in this program, please sign at the bottom of this form that you agree to provide a drop of blood and allow us to obtain drop of blood from your child.

If you decide not to participate, it is your right, and we will respect your choice.

I am _____
Last name, First Name, Middle Name

agree to donate a drop of blood for the purpose of anemia diagnosis. I also allow a drop of blood to be taken from my child (children) for the purposes of anemia diagnosis.

Signature

Date " _____ " _____ 1995

Section 10. HEMOGLOBIN MEASUREMENT IN THE BLOOD

ALL INTERVIEWED WOMEN ARE ELIGIBLE FOR HEMOGLOBIN MEASUREMENT. IN 1001 RECORD RESPONDENT'S HEMOGLOBIN LEVEL.

| | | | |
|------|--------------------------------------|---|--|
| 1001 | RESPONDENT'S HEMOGLOBIN LEVEL (G/DL) | <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> | |
| 1002 | RESULT | MEASURED 1 NOT MEASURED 2 REFUSED 3 OTHER _____ 6 (SPECIFY) | |

| | | |
|------|-----------|--|
| 1003 | CHECK 435 | ONE OR MORE LIVING CHILDREN BORN SINCE JANUARY 1993 <input style="width: 30px; height: 20px;" type="checkbox"/> NO LIVING CHILDREN BORN SINCE JANUARY 1993 <input style="width: 30px; height: 20px;" type="checkbox"/> |
| | | _____ → 1009 |

IN 1004 RECORD THE LINE NUMBER FOR EACH CHILD BORN SINCE JANUARY 1993 AND STILL ALIVE. IN 1005 RECORD THE NAMES OF THE LIVING CHILDREN. IN 1006 RECORD THE HEMOGLOBIN LEVEL IN THE BLOOD OF THE LIVING CHILDREN. IF THERE ARE MORE THAN TWO LIVING CHILDREN BORN SINCE JANUARY 1993 USE ADDITIONAL FORMS.

| | | <input style="width: 20px; height: 20px;" type="checkbox"/> 1 YOUNGEST LIVING CHILD | <input style="width: 20px; height: 20px;" type="checkbox"/> 2 NEXT-TO-YOUNGEST LIVING CHILD |
|------|--------------------------------------|---|---|
| 1004 | LINE NUMBER FROM 434 | <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> | <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> |
| 1005 | NAME FROM 435 | (NAME) _____ | (NAME) _____ |
| 1006 | HEMOGLOBIN LEVEL IN THE BLOOD (G/DL) | <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> | <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> |

| | | | |
|------|---|--|--|
| 1007 | RESULT | MEASURED 1 CHILD SICK 2 CHILD NOT PRESENT 3 CHILD REFUSED 4 MOTHER REFUSED 5 OTHER 6 (SPECIFY) | MEASURED 1 CHILD SICK 2 CHILD NOT PRESENT 3 CHILD REFUSED 4 MOTHER REFUSED 5 OTHER 6 (SPECIFY) |
| 1008 | NAME OF MEASURER | NAME OF ASSISTANT | |
| 1009 | CHECK 1001 AND 1006 NO VALUES BELOW 7 G/DL | ONE OR MORE VALUE BELOW 7 G/DL | CONS ENT FOR M NO 2 |

RECORD THE RESULTS OF HEMOGLOBIN MEASUREMENT. TEAR OFF HERE AND PRESENT THIS PORTION TO THE RESPONDENT

INSTITUTE OF OBSTETRICS AND GYNECOLOGY RESULTS OF HEMOGLOBIN MEASUREMENT IN THE BLOOD

Date _____ 1996

| Name | Respondent | Last child | Next-to-youngest child |
|--|--|--|--|
| Hemoglobin level in the blood (G/DL) | <input type="text"/> <input type="text"/> . <input type="text"/> | <input type="text"/> <input type="text"/> . <input type="text"/> | <input type="text"/> <input type="text"/> . <input type="text"/> |
| | You have | Your child has | Your child has |
| WHO CLASSIFICATION OF ANEMIA | | | |
| Normal level Hb level above 11 G/DL | Normal level | Normal level | Normal level |
| Mild anemia Hb (10-11G/DL) | Mild anemia | Mild anemia | Mild anemia |
| Moderate anemia Hb (7-10 G/DL) | Moderate anemia | Moderate anemia | Moderate anemia |
| Severe anemia Hb (less than 7 G/DL) | Severe anemia | Severe anemia | Severe anemia |

In case of severe anemia (Hb level less than 7 G/DL), we recommend you to immediately contact your doctor.

If you have any question about hemoglobin measurement procedure, please call us at (3712)637830, or write to: Institute of Obstetrics and Gynecology, Ministry of Health of Uzbekistan, 132A Abdullaev Ave, Tashkent, Uzbekistan

LETTERHEAD OF THE INSTITUTE OF OBSTETRICS AND GYNECOLOGY

CONSENT FORM No 2

Dear Respondent:

We detected a low level of hemoglobin in your (your child's) blood. This indicates that you (your child) have developed severe anemia, which is serious health problem. We would like to inform the doctor at health care facility in your area about your condition. This will assist you to obtain appropriate further diagnosis and treatment of your (your child's) condition.

If you agree with this please sign at the bottom of this form.

Thank you for your cooperation.

I
am

Last name,

First Name,

Middle Name

agree that the information about the level of hemoglobin in my (my child's) blood will be disclosed to the doctor at the local health care facility.

Signature

Date " _____ " _____ 1995

COMMENTS

Comments about Respondent:

Comments on Specific Questions:

Any Other Comments:

SUPERVISOR'S OBSERVATIONS

Name of Supervisor: _____ Date _____

EDITOR'S OBSERVATIONS

Name of Editor _____ Date _____