## Jordan



| World Summit for Children Indicators, Jordan 2002 |  |  |
| :---: | :---: | :---: |
| Childhood mortality | Infant mortality rate | 22 per 1,000 |
|  | Under-five mortality rate | 27 per 1,000 |
| Childhood undernutrition | Percent stunted (children under 5 years) | 8.5 |
|  | Percent wasted (children under 5 years) | 2.0 |
|  | Percent underweight (children under 5 years) | 4.4 |
| Clean water supply | Percent of households with safe water supply ${ }^{1}$ | 95.1 |
| Sanitary excreta disposal | Percent of households with flush toilets, pit toilet/latrine | 99.9 |
| Family planning | Contraceptive prevalence rate (any method, currently married women) | 55.8 |
| Antenatal care | Percent of women who received antenatal care from a health professional ${ }^{2}$ | 98.6 |
| Delivery care | Percent of births in the 5 years preceding the survey attended by a health professional | 99.5 |
| Low birth weight | Percent of births in the 5 years preceding the survey at low birth weight ${ }^{3}$ | 10.6 |
| Exclusive breastfeeding | Percent of youngest children under 6 months who are exclusively breastfed | 26.7 |
| Continued breastfeeding | Percent of children age 12-15 months still breastfeeding | 51.1 |
|  | Percent of children age 20-23 months still breastfeeding | 12.4 |
| Timely complementary feeding | Percent of youngest children age 6-9 months receiving breast milk and complementary foods | 70.3 |
| Vaccinations | Percent of children age 12-23 months with BCG vaccination | 28.8 |
|  | Percent of children age 12-23 months with at least 3 DPT vaccinations | 98.2 |
|  | Percent of children age 12-23 months with at least 3 polio vaccinations | 97.6 |
|  | Percent of children age 12-23 months with measles vaccination | 95.2 |
|  | Percent of mothers who received at least 2 tetanus toxoid vaccinations during pregnancy ${ }^{2}$ | 9.0 |
| Oral rehydration therapy (ORT) | Percent of children age $0-59$ months with diarrhea in the 2 weeks preceding the survey who received oral rehydration therapy (ORT) | 22.0 |
| Home management of diarrhea | Percent of children age $0-59$ months with diarrhea in the 2 weeks preceding the interview who took more fluids than usual and continued eating somewhat less, the same or more food | 38.4 |
| Treatment of ARI | Percent of children age 0-59 months with acute respiratory infection (ARI) in the 2 weeks preceding the survey who were taken to a health provider | 71.7 |
| Children in especially | Percent of children with at least one parent dead ${ }^{4}$ | 2.7 |
| difficult situations | Percent of children who do not live with either biological parent ${ }^{4}$ | 0.5 |
| HIV/AIDS | Percent of ever-married women age 15-49 who correctly stated 2 ways of avoiding HIV infection ${ }^{5}$ | 29.7 |
|  | Percent of ever-married women age 15-49 who correctly identified 2 misconceptions about HIV/AIDS ${ }^{6}$ | 13.6 |
|  | Percent of ever-married women age 15-49 who believe that AIDS can be transmitted from mother to child during pregnancy, delivery and breastfeeding | 33.8 |
| ${ }^{1}$ Piped water, tanker truck, or bottled water <br> ${ }^{2}$ For the last live birth in the five years preceding the survey <br> ${ }^{3}$ For children without a reported birth weight, the proportion with low birth weight is assumed to be the same as the proportion with low birth weight in each birth size category among children who have a reported birth weight. <br> ${ }^{4}$ Based on de jure children <br> ${ }^{5}$ Having sex with only one partner who has no other partners and using a condom every time they have sex ${ }^{6}$ They say that AIDS cannot be transmitted through mosquito bites and that a healthy-looking person can have the AIDS virus. |  |  |
|  |  |  |
|  |  |  |

## THE HASHEMITE KINGDOM OF JORDAN

# Jordan Population and Family Health Survey 2002 

Department of Statistics
Amman, Jordan

ORC Macro
Calverton, Maryland, USA

June 2003


This report summarizes the findings of the 2002 Jordan Population and Family Health Survey (JPFHS) carried out by the Department of Statistics (DOS). ORC Macro provided technical assistance and the U.S. Agency for International Development (USAID) provided financial support.

The JPFHS is part of the worldwide Demographic and Health Surveys Program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information about the Jordan survey may be obtained from the Department of Statistics, P.O. Box 2015, Amman 11181, Jordan (telephone: (962) 6-5-300-700; fax: (962) 6-5-300-710; e-mail: stat@ dos.gov.jo; internet: www.dos.gov.jo). Additional information about the MEASURE $D H S+$ program may be obtained from ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (telephone: 301-572-0200; fax: 301-572-0999; e-mail: reports @ orcmacro.com; internet: www.measuredhs.com).

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## PREFACE

The Department of Statistics (DOS) takes pleasure in presenting the principal report of the 2002 Jordan Population and Family Health Survey (JPFHS), which was conducted during July through September 2002. Like the previous two JPFHS, conducted in 1990 and 1997, the 2002 JPFHS was carried out by DOS in collaboration with ORC Macro, who provided technical assistance through the worldwide Demographic and Health Surveys (DHS) program. The 2002 JPFHS received financial assistance from the United States Agency for International Development (USAID) mission in Amman. The main objective of the survey is to provide comprehensive data on fertility, mortality, family planning, as well as maternal and child health and nutrition, as main tools to evaluate existing population and health policies and programs.

The survey covered a national sample of 8,000 households, in which about 6,000 ever-married women age 15 to 49 were interviewed. The sample has been designed to produce estimates of major survey variables at the national level, urban and rural areas, the three regions, and each of the three major governorates, namely Amman, Irbid and Zarqa.

The DOS would like to express its thanks and appreciation to the individuals and organizations that contributed to the success of the survey. The timely and high quality data are the result of hard work from all the survey staff. The cooperation of all households interviewed during the survey for their time and willingness to provide the required information is highly appreciated. Acknowledgement also goes to the Ministry of Health for its technical and logistic assistance. Thanks are also due to the USAID mission in Amman for its financial support and technical input, and to the ORC Macro team for its valuable assistance in all stages of the survey. Special thanks are also due to the local and international experts who prepared the present report.

The DOS hopes that the 2002 JPFHS results will benefit planners, policymakers and decisionmakers in formulating population and health programs in general and maternal and child health programs in particular.

Dr. Hussein Shakhatreh<br>Director General of Statistics

## SUMMARY AND RECOMMENDATIONS

The 2002 Jordan Population and Family Health Survey (JPFHS) is a nationally representative survey in which 7,825 households and a total of 6,006 ever-married women between the ages of 15 and 49 were successfully interviewed. The survey was fielded between July and September 2002. This survey is the third in a series of Demographic and Health Surveys (DHS) in Jordan carried out by the Department of Statistics. The DHS project of ORC Macro provided technical assistance under a contract funded by the United States Agency for International Development (USAID).

The JPFHS was designed to provide information on levels and trends of fertility, fertility preferences, infant and child mortality, and family planning. The survey also gathered information on breastfeeding, maternal and child health care, knowledge of HIV/AIDS, as well as the characteristics of households and household members. Anthropometry measurements and blood samples for anemia testing were collected from women and children under five. Survey results are representative at the national level, by urban and rural residence, and for each of the three regions in the country. Results of this survey can be compared with those of previous demographic surveys, including the 1976 Jordan Fertility Survey, the 1983 Jordan Fertility and Family Health Survey and the 1990 and 1997 JPFHS. Results can be used by program managers and policy makers to evaluate and improve existing programs.

## Current Status and Progress

## Fertility

- The JPFHS indicates that fertility continues to decline in Jordan. The total fertility rate for the five-year period prior to the survey indicates that on average, women have 3.7 children by the end of their reproductive years - fifty percent fewer children than the rate recorded in 1976 ( 7.4 children per woman). Fertility de-
clined most rapidly between 1990 and 1997; while fertility has continued to fall in recent years, its pace of decline has slowed since 1997, when the TFR was 4.4.
- Fertility levels vary across regions. The total fertility rate in the Central region is 3.5 births per woman, while women in the North and South regions have about 4 children per woman.
- There has been a reduction in childbearing in adolescence; currently the overall level of childbearing among married women age $15-19$ is 4 percent, a 33 percent reduction in teenage childbearing from 6 percent in 1997.
- There are large differences in fertility by educational attainment of women. Women who have attended higher than secondary education have the fewest children in their lifetime (3.1), while women with preparatory education have 4.4 children - more than women with no education, who have an average of 3.6 children.
- Although fertility has declined significantly in Jordan over the past twenty-five years, still further decline in fertility can be expected in the future. Almost half ( 44 percent) of currently married women in Jordan do not want any more children or have been sterilized, and 31 percent want to delay their next birth for at least two years. If women's desired family size were achieved, the fertility rate would be only 2.6 children per woman, which is about one child less than the observed rate.


## Family Planning

- Increased use of family planning, especially modern methods, has played a major role in fertility decline. Widespread knowledge of family planning is also supportive of further fertility decline. In Jordan, all ever-married women know at least one method of contraception, and on average, an evermarried woman knows about 10 family planning methods.
- In 2002, 56 percent of currently married women were using a method of family planning, and most of these women (41 percent of currently married women) were using a modern contraceptive method. The most popular modern methods are the IUD ( 24 percent) and the pill (8 percent). Withdrawal (9 percent) and periodic abstinence ( 5 percent) are the most frequently employed traditional methods.
- Private health facilities play an important role in supplying contraceptive methods to those who need them. Seventy-six percent of users of modern methods obtain their method from a private source, compared with 72 percent in 1997. The share of the public sector increased correspondingly to about one third ( 34 percent), compared with 28 percent in 1997 survey.
- Women age $40-44$, women with 3 or more living children, and better educated women as well as urban women are more likely than other women to use a family planning method. Contraceptive prevalence is highest in the Central region ( 58 percent) compared with the North region ( 54 percent), and the South region (48 percent).
- Contraceptive use increases with parity: while almost no childless women are using contraception, 44 percent of women with 1 or 2 children are using contraception, and more than 66 percent of women with 3 or more children are using a family planning method.
- Sixty percent of married women who are not currently using contraception say that they intend to adopt a family planning method some time in the future; more than half of the women who expressed an intention to use contraception in the future said they would prefer to use the IUD.


## Other Fertility Determinants

- Staying in school appears to be a motivation for delaying marriage, which in the Jordanian context translates to delays in age at first birth: women who have higher than secondary education marry at least 5 years later than women with the least education. Median age at marriage has increased only slightly between

1997 and 2002, inching up from 21.5 to 21.8, respectively.

- In addition to marriage patterns, the risk of pregnancy is affected by postpartum amenorrhea, the period after childbirth when menstruation has not yet returned, and postpartum abstinence, the period when sexual activity has not yet been resumed. On average, women start menstruating again 6 months after childbirth and resumed sexual relations a little more than 2 months after childbirth. The length of postpartum insusceptibility has increased somewhat since 1997.


## Maternal and Child Health

- For virtually all births in the past five years, mothers received at least one prenatal checkup from a health professional. In Jordan, maternal and child health care is widespread; however, differences according to level of education are noteworthy: while 97 percent of women with higher than secondary education received antenatal care, a smaller proportion of women with no education received the same ( 85 percent). Most women had 6 or more antenatal care visits ( 81 percent), and the majority of women had their first antenatal care visit within the first trimester ( 85 percent).
- Ninety-seven percent of deliveries took place in a health facility, and virtually all births in Jordan were assisted by health personnel during delivery. Sixteen percent of births were delivered by Caesare an section.
- In Jordan, 98 percent of infants age 12-23 months have been fully immunized against DPT and polio, and 95 percent have received the vaccine against measles. While BCG is recommended by the Ministry of Health to be given at school entry, 29 percent of infants age 12-23 months has already received the vaccine against tuberculosis. Immunization coverage varies across regions: 96 percent of infants age 12-23 months in the North region have received vaccinations against measles, diphtheria, pertussis, tetanus, and polio, while the proportion in the South region is 90 percent, and in the Central region is 95 percent. All immunization indicators have shown improvement since 1997.
- In the two weeks preceding the survey, 6 percent of children under five had a cough with
rapid breathing, and 15 percent had diarrhea. Among children with diarrhea, over half were taken to a health facility and two thirds were given oral rehydration therapy.
- Breastfeeding is common in Jordan: among children born in the five years preceding the survey, 94 percent were breastfed - a figure similar to the one reported in the 1997 JPFHS. There is a small variation in ever-breastfed infants with respect to place of delivery: children who were delivered at home were more likely to have been breastfed than those children who were delivered in a health facility ( 98 percent and 94 percent, respectively).
- In the 2002 JPFHS, all children born in the five years preceding the survey who were listed in the household questionnaire were weighed and measured. Two percent of children under five are thin for their height (wasted), 9 percent are short for their age (stunted), and 4 percent are underweight according to their age.
- In the 2002 JPFHS, mother's nutritional status was measured using two indices, height and body mass index (BMI). The mean height of mothers measured in the survey was 158 centimeters; only 1 percent of mothers were shorter than 145 centimeters. Five percent of women had a BMI of less than 18.5 , indicating malnutrition.
- Biomarker data were collected in the 2002 JPFHS, in order to determine prevalence of anemia. The results indicate that 26 percent of women in Jordan have some degree of anemia, and 34 percent of children under age 5 were shown to have anemia. Severe anemia, however, is not a serious public health problem in Jordan for either women or children.


## Infant and Child Mortality

- Twenty-four of 1,000 infants born in the five years prior to the survey will not survive to their first birthday. For the same period, 29 children will not live to be 5 years old. These mortality rates indicate that there has been an improvement in child survival in Jordan since 1997, when infant and under-five mortality rates
were 29 and 34 deaths per thousand children, respectively.
- Under-five mortality varies inversely by mother's education: children of mothers with no education have the highest risk of dying (44 deaths per 1,000 births), while children of mothers with education beyond secondary school have the lowest risk of dying ( 24 per 1,000 births).


## Knowledge of HIV/AIDS

- Almost all of the respondents in the 2002 JPFHS report that they have heard of HIV/AIDS (97 percent); however, those with less education are significantly less likely to have heard of AIDS (no education: 80 percent; elementary education: 91 percent).
- The 2002 JPFHS found that although a little over two-thirds of respondents know that HIV can be transmitted from mother to child during pregnancy, only about half know the virus can be transmitted during delivery ( 55 percent), and fewer know it can be transmitted through breastfeeding ( 43 percent).


## Continuing Challenges

- Despite the increased use of family planning methods, the increase in age at first marriage, and the apparent decline in fertility, the 2002 Jordan Population and Family Health Survey reveals a number of continuing challenges. While fertility levels are declining, 17 percent of births in the five years preceding the survey were mistimed, and 16 percent were not wanted at all. If these unwanted births had been prevented, women would have had an average of 2.6 births, instead of 3.7 births.
- Although it is encouraging to note that the level of unmet need for family planning services in 2002 was lower than that in the 1997 JPFHS, many women want to stop childbearing or delay the next birth for at least two years, but are not using a contraceptive method.
- Two in three births in the five years preceding the survey were high-risk births either because the interval since the previous birth was too short (less than two years), the mother was too young (un-
der age 18), too old (age 35 and over), or had too many prior births (3 or more).
- Breastfeeding in Jordan is universal. However, the practice of breastfeeding is characterized by supplementation at an early age, and widespread use of a bottle and a nipple.


## Recommendations

The results of the 2002 JPFHS reinforce findings from previous surveys that coverage of maternal and child health (MCH) programs in Jordan continues to improve. This is demonstrated by increased use of MCH services, along with knowledge and use of family planning. However, the survey data also note that:

- Information, education and communication programs on the benefits of adopting family planning for the purpose of delaying or limiting childbearing need to be strengthened. These programs should be specifically directed toward women with the most need for family planning, particularly less educated women, women with high parity, and women in the South region.
- Potential users of family planning should be counseled on the most appropriate method for their age, fertility desires, and personal situation.
- Emphasis should be placed on the health benefits for mothers and children of smaller families and longer birth intervals; an effort to decrease levels of unmet need for family planning would be an appropriate means of helping women to space and limit their births.


## JORDAN



## INTRODUCTION

### 1.1 History, Geography, and Economy

Jordan, one of the most modern countries in the Middle East, was part of the Ottoman Empire. It was declared a political entity known as Transjordan under the mandate of the British government in 1923, until it gained independence and was declared a Kingdom in 1946. In 1950, Transjordan and the West Bank were united and assumed the current name of the Hashemite Kingdom of Jordan. The next major change for the Kingdom came in 1967, when the occupation of the West Bank and Gaza Strip by Israeli forces caused a massive wave of migrants to flow into the East Bank. Two decades later, in accordance with the desires of the Arab states and the Palestinian National Authority, the West Bank was administratively disengaged from the Kingdom in order to facilitate the establishment of the Palestinian state.

Geographically, Jordan is almost entirely landlocked. The port of Aqaba in the far south is Jordan's only outlet to the sea, as Palestine and Israel separate Jordan from the Mediterranean. Saudi Arabia lies to the south and east, Iraq is to the northeast, and Syria is to the north. Three climactic zones characterize Jordan, running from the west to east of the country. These include the Jordan Valley, which is largely below sea level and considered semitropical; the highlands east of the Jordan Valley, which range in elevation from 100 to 1,500 meters above sea level, and can be considered to have a Mediterranean climate; and the low-lying desert to the east of the highlands. Over 80 percent of Jordan's 89,000 square kilometers is characterized by semidesert conditions; however, there do exist some wetlands, including the Azraq Basin.

Administratively, the country is divided into 12 governorates, which are then grouped into three regions - the North region (Irbid, Jarash, Ajloun, and Mafraq), the Central region (Amman, Zarqa, Balqa, and Madaba), and the South region (Karak, Tafielah, Ma'an, and Aqaba). The major cities are Amman (the capital), Zarqa, and Irbid.

With regard to the economy, the national government still controls most community services; however, Jordan is moving towards a free market economy. There has been a slight shift in the economic sectoral shares of gross domestic product (GDP). The share of agriculture in GDP at constant prices dropped from 6.2 percent in 1990 to 3.8 percent in 1997, then to as low as 2.9 percent in 2001. Similarly, the contribution of the wholesale and retail trade, restaurants, and hotels to GDP declined from 11.9 percent in 1990 to 10.2 by 2001. There was a concomitant rise in the share of the manufacturing sector, which rose from 10.7 percent in 1990 to 13.8 percent in 2001 . The share of the community and personal services sector also rose slightly during this period, from 2.2 percent to 3.5 percent. The contribution of the transportation, storage and communication sector to the GDP has changed little over the past decade, rising about one percentage point between 1990 and 2001.

The GDP per capita at current prices has demonstrated a steady increase over time, rising from US $\$ 1,185$ in 1990, to US $\$ 1,577$ in 1997, and to US $\$ 1706$ in 2001. The cost of living index increased by 20 percent between 1992 and 1997, and increased by 8.2 percent between 1997 and 2002. The balance of trade deficit rose sharply by 72 percent between 1990 and 1996, but declined by 14 percent between 1997 and 2001. The rate of economic growth at constant prices has increased steadily over time: growth was 3.3 percent for 1997, 4.2 percent for 2001, and 5 percent for 2002.

To restructure economic activities in the country, the government began a reformation program in the early 1990s. Since the mid-1990s, the government has actively encouraged the privatization of certain community services as part of the program, and in 2000 issued the Privatization Act No. 25 for 2000 to establish the legal and institutional framework for privatization in Jordan.

### 1.2 Population

The first population census in Jordan was carried out in 1961. The population then totaled 901,000. As a result of the Arab-Israeli wars in 1948 and 1967, and the subsequent Israeli occupation of the West Bank and the Gaza Strip, a large number of Palestinians moved into the East Bank. In 1979, the population of Jordan numbered 2.13 million; it nearly doubled to 4.14 million by 1994. As of 2002, the population was estimated at 5.3 million, and it is expected to reach 5.6 million by the year 2005 .

Population growth averaged 4.8 percent during the period 1961-1979, and 4.4 percent between 1979 and 1994. The high rates of growth reflected the influx of immigrants to the East Bank from the West Bank and Gaza Strip in the late 1960s, the inflow of large numbers of guest workers, the high rate of natural increase, and the return of about 300,000 Jordanian nationals from the Gulf States as a result of the 1990 Gulf War. The rapid increases in population have created several problems for the country namely, shortages in food, water, housing, and employment opportunities, as well as strains on the education system and the urban infrastructure. Fertility declines in Jordan have contributed to slowing the population growth rate down to 3.2 percent in the second half of the 1990 s, and to 2.8 percent in 2002.

Urbanization is a particularly important topic in Jordan. Historically, internal rural-to-urban migration, as well as immigration, has contributed to rapid urban growth. Recent international crises have also impacted flows of migration into Jordan. The urban population increased by 14 percent between 1980 and 1994, increasing from 70 to 79 percent.

Results of the 1994 census indicate that the age structure of the population has changed considerably since 1979 - the result of changes in fertility, mortality, and migration dynamics. The proportion of the population under 15 years of age declined from 51 percent in 1979 to 39 percent by 2002, while the proportion of those age 65 and over has been rising.

Fertility has been declining in Jordan since the mid-1970s. Studies have found that the total fertility rate declined from 7.4 children per woman in 1976 to 5.6 in 1990, and to 4.4 in 1997 and finally to 3.7 in 2002. These figures indicate a 40 percent decline - about three children fewer per woman - between 1976 and 1997; fertility fell another 19 percent, or by one child more, between 1997 and 2002.

Mortality has also been declining in Jordan, even faster than fertility. The crude death rate, estimated at 18 per thousand in the early 1960s, had declined to 12 by the early 1980s. In 1990, the crude death rate was estimated at seven per thousand; by 2002 it had dropped to five. The infant mortality rate also declined from 82 per thousand in 1976 to 22 in 2002. Drops in mortality, particularly infant mortality, translated into increased life expectancy for the population: in 2002, life expectancy in Jordan reached 69.0 years for both sexes; 68.8 for males and 71.1 for females.

With regard to the education of the population, the illiteracy rate among those age 15 years and over has dropped by 70 percent since 1979 (from 35.5 percent to 10.3 percent of the population in 2002). In addition, almost one-third of Jordan's population is currently enrolled at various educational levels. Seventy-two percent of all students attend schools run by governmental agencies, which comprise 58 percent of all schools in Jordan in 2001.

### 1.3 Population and Family Planning Policies and Programs

Until the 1990s, Jordan had no explicit and official population policy. In 1973, the National Population Commission (NPC) was established, with the mandate to formulate and implement a national population policy and to address all population-related activities. However, the designing of a satisfactory population policy was controversial. Because of the sensitive nature of the topic, the NPC took no distinct actions or steps. The Commission was revitalized in the late 1980s to backstop several agencies working in the population field. During that period, and before 1993, both the public and private sectors made efforts to provide family planning services. The Ministry of Health (MOH), through its Maternal and Child Health Centers (MCH), provided optional and predominantly free family planning services as an unofficial and indirect intervention in the population policy. The efforts made by the Jordan Association of Family Planning and Protection (JAFPP), as well as by some voluntary nongovernmental organizations, were invaluable in this regard.

In 1991, the NPC adopted the Birth Spacing National Program, in an effort to promote better maternal and child health as well as reduce fertility through advocating increased birth intervals. The NPC prepared an integrated proposal, and submitted it to the government and to the public as a suggested population policy. This program was discussed nationwide and in 1993 the government approved the program as an official population policy, taking into consideration the religious, social, national, and freechoice dimensions of Jordanian society.

The NPC created the final national population strategy for Jordan, which was approved by the cabinet in 1996 and was updated in 2000. The strategy document comprised multiple dimensions namely, reproductive health; gender equality and equity; empowerment of women; and population and sustainable development. It also addressed the matter of the various kinds of support that would be needed in order to sustain the implementation of the strategy. This document served as a guide for development plans and other national strategies in the country.

For the purposes of policy formulation and enhancement of public awareness in population issues, and as a substitute for the national population commission, the government established the Higher Population Council (HPC) in 2002. This council is headed by the Prime Minister, and is comprised of the membership of concerned ministers, in addition to relevant members from both the public and private sectors. The HPC mandate is to propose population policies that ensure the achievement of socioeconomic development objectives. The HPC will serve as a coordinating body in the area of population activities, dissemination of information, and strengthening of NGO participation in planning, management and implementation of population programs and projects in compliance with the national population strategy.

The HPC will work toward the promotion of public awareness in population and development issues and enhance advocacy in these areas. The HPC will also collaborate and coordinate with regional and international bodies interested in population issues, in addition to building national capacities for officials working in these areas in different institutions. Further, the HPC will conduct population surveys and studies for the purpose of updating the national population strategy.

### 1.4 Health Priorities and Programs

The MOH is committed to making health services available, accessible, and acceptable in all communities, and seeks to ensure equitable distribution of these services. The government has given priority to the health sector and has developed a national health strategy. This strategy is aimed at creating a comprehensive health care system, utilizing both public and private service providers, and covering all levels of care, from preventive care to tertiary and rehabilitative care.

The MOH developed short-term and long-term plans to improve the health care system and the delivery of services to the population, the last of which was the plan for the period 2002-2005. These plans focus on the following areas:

1. Coordination of primary, secondary, and tertiary health service delivery, in order to improve the efficiency of the health system and to avoid duplication among health providers and waste of resources.
2. Development of health-sector human resources through training programs for medical staff to raise standards in all health-sector human resources categories and to maintain quality standards throughout the system.
3. Facility development by upgrading and/or expanding the existing health centers and hospitals, and building, equipping and computerization of new facilities as needed.
4. Issuance of laws and regulations related to the organization of the health sector, in addition to reconsideration of some existing health laws and regulations expected to be approved during the plan period 2002-2005.
5. Computerization of the MOH existing health facilities all over the country, including the development of a Geographic Information System (GIS) for these facilities.

### 1.5 Objectives of the Survey

As in the previous Demographic and Health Surveys (DHS) in Jordan, the primary objective of the Jordan Population and Family Health Survey (JPFHS) is to provide reliable estimates of demographic parameters, such as fertility, mortality, family planning, fertility preferences, as well as maternal and child health and nutrition that can be used by program managers and policy makers to evaluate and improve existing programs. In addition, the JPFHS data will be useful to researchers and scholars interested in analyzing demographic trends in Jordan, as well as those conducting comparative, regional or crossnational studies.

The content of the 2002 JPFHS was significantly expanded from the 1997 survey to include additional questions on women's status, reproductive health, and family planning. In addition, all women age 15-49 and children less than five years of age were tested for anemia.

### 1.6 Methodology and Organization of the Survey

The JPFHS is designed to collect data on ever-married women of reproductive age. The areas covered include demographic and socioeconomic characteristics, marriage and reproduction, family planning, health care, breastfeeding and child care, fertility preferences, nutritional status of children under five years of age, and knowledge of Acquired Immune Deficiency Syndrome (AIDS) and sexuallytransmitted infections (STIs). The survey was funded primarily by the U.S. Agency for International Development (USAID) as part of the worldwide DHS program. ORC Macro provided technical assistance especially in the sample and questionnaire design, the training activities, the computer processing of survey data, and the preparation of reports. A national advisory committee, headed by the Director General of Statistics, was established to provide guidelines for the planning and implementation stages of the survey. The committee consisted of representatives from various government and non-government agencies involved in population and health issues.

The survey was executed in three stages; the first was the preparatory stage, which involved mapping, listing of households, and design and implementation of sampling procedures. At the same time,
the survey questionnaires and instruction manuals were developed, pretested, and finalized. All of these activities were completed in June 2002. The second stage encompassed interviewing and the collection of data. This was carried out by ten female teams, each consisting of one supervisor, one field editor, and four interviewers and a health technician. Data collection took place from July through September 2002. The third stage involved data entry, which started soon after the beginning of fieldwork and continued until October 2002. Data entry was followed by data cleaning, evaluation, and analysis.

### 1.6.1 Sample Design

The 2002 JPFHS sample was designed to produce reliable estimates of major survey variables for the country as a whole, urban and rural areas, each of the three regions, and for each of the three major governorates: Amman, Irbid and Zarqa. The grouping of the governorates into regions is as follows: the North consists of Irbid, Jarash, Ajlun, and Mafraq; the Central region consists of Amman, Madaba, Balqa and Zarqa; and the South region consists of Karak, Tafielah, Ma'an and Aqaba.

The 2002 JPFHS sample is a subsample of the master sample that was designed using the 1994 Census of Population and Housing as the frame. The sampling frame was stratified by governorate, major cities, other urban, and rural within each stratum. A two-stage sampling procedure was employed. First, blocks were selected systematically as primary sampling units (PSUs) with probability proportional to size of the PSU. A total of 498 PSUs were selected at this stage. In the second stage, a fixed number of 16 households were selected in each selected PSU. The sample design is described in Appendix A; the sampling errors are presented in Appendix B.

### 1.6.2 Updating of Sampling Frame

Prior to the main fieldwork, mapping operations were carried out and the sample units/blocks were selected and then identified and located in the field. The selected blocks were delineated and the outer boundaries were demarcated with special signs. During this process, the numbers on buildings and housing units and households were updated, listed and documented, along with the name of the owner/tenant of the unit or household, and the name of the household head. These activities were completed during the first half of 2002.

### 1.6.3 Questionnaires

The 2002 JPFHS used two questionnaires - namely, the Household Questionnaire and the Individual Questionnaire (See Appendix D). Both questionnaires were developed in English and translated into Arabic. The Household Questionnaire was used to list all usual members of the sampled households and to obtain information on each member's age, sex, educational attainment, relationship to the head of household, and marital status. In addition, questions were included on the socioeconomic characteristics of the household, such as source of water, sanitation facilities, and the availability of durable goods. The Household Questionnaire was also used to identify women who are eligible for the individual interview: ever-married women age 15-49. In addition, all women age 15-49 and children under five years living in the household were measured to determine nutritional status and tested for anemia.

The household and women's questionnaires were based on the DHS Model "A" Questionnaire, which is designed for use in countries with high contraceptive prevalence. Additions and modifications to the model questionnaire were made in order to provide detailed information specific to Jordan, using experience gained from the 1990 and 1997 Jordan Population and Family Health Surveys. For each evermarried woman age 15 to 49 , information on the following topics was collected:

1. Respondent's background
2. Birth history
3. Knowledge and practice of family planning
4. Maternal care, breastfeeding, immunization, and health of children under five years of age
5. Marriage
6. Fertility preferences
7. Husband's background and respondent's employment
8. Knowledge of AIDS and STIs

In addition, information on births and pregnancies, contraceptive use and discontinuation, and marriage during the five years prior to the survey was collected using a monthly calendar.

### 1.6.4 Recruitment of Staff

Different supervisory and executive levels of survey staff members were recruited according to certain criteria, such as experience, educational and personal qualifications, and familiarity with geographic areas. Fieldworkers for the main survey were recruited from among those who participated in the 1994 census as well as those who took part in other demographic surveys conducted by the Department of Statistics (DOS), especially the 1997 JPFHS. The interviewers were all highly qualified females. Supervisors and field editors were selected from the DOS permanent staff or from those with good past experience in such surveys.

### 1.6.5 Training and Pretest

Training of the interviewers took place in Amman for four weeks in June 2002. The training course consisted of instructions regarding interviewing techniques and field procedures, a detailed review of items on the questionnaires, instruction and practice in weighing and measuring children and women, anemia testing, mock interviews between participants in the classroom, and practice interviews. After the training, pretest fieldwork was conducted over a one-week period in three urban clusters and one rural cluster.

Field practice in anemia testing was carried out during the pretest for persons who were assigned as team health technicians. In addition, team members practiced their ability to weigh and measure women and children. Also during this period, field editors and team supervisors were provided with additional training in methods of field editing, data quality control procedures, and fieldwork coordination. Debriefing sessions were held with the pretest field staff, and modifications to the questionnaires and instructions were made based on lessons drawn from the exercise. The survey technical staff, MOH specialists, Johns Hopkins University experts in Jordan and ORC Macro experts participated and lectured in the training program.

### 1.6.6 Main Fieldwork

The survey fieldwork was organized in such a way as to ensure control over field logistics by DOS field offices all over the country. The workload, the dispersion of sample units, and transportation facilities served as criteria for identifying the number of field staff in each area. The field staff consisted of ten teams; each team was comprised of one supervisor, one field editor, four interviewers and a health technician. All teams were supervised by three controllers and two inspectors. During fieldwork, each team was regrouped as necessary. Each team was provided with the required number of vehicles. Fieldwork was carried out between July 1 and September 30, 2002.

To facilitate data collection, each interviewing team was assigned a number of blocks in the sample area. Each inspector, in collaboration with the supervisor, divided his team so as to ensure that all adjacent sampled households were completed by one interviewer. To ensure good data quality, interviewers were asked to conduct fewer interviews during the first three days of data collection; the completed questionnaires were then checked by the field editor and/or the supervisor to ensure completeness
and consistency of data. Under the supervision of controllers and inspectors, the field editor and/or the supervisor conducted spot checks by randomly visiting some sampled households and completing some parts of the same questionnaire (previously filled in by the interviewer). Both questionnaires were then matched and any differences were discussed.

Interviewers made repeated attempts to obtain the responses of eligible respondents by calling back to interview eligible women who were not home at the time of the first visit, or by endeavoring to persuade eligible women who were reluctant to be interviewed. The questionnaires were then delivered to the central office in Amman for further processing.

### 1.6.7 Data Processing

Fieldwork and data processing activities overlapped. After a week of data collection, and after field editing of questionnaires for completeness and consistency, the questionnaires for each cluster were packaged together and sent to the central office in Amman where they were registered and stored. Special teams were formed to carry out office editing and coding of the open-ended questions.

Data entry and verification started after one week of office data processing. The process of data entry, including one hundred percent re-entry, editing and cleaning, was done by using PCs and the CSPro (Census and Survey Processing) computer package, developed specially for such surveys. The CSPro program allows data to be edited while being entered. Data processing operations were completed by the end of October 2002. A data processing specialist from ORC Macro made a trip to Jordan in October and November 2002 to follow up data editing and cleaning and to work on the tabulation of results for the survey preliminary report. The tabulations for the present final report were completed in December 2002 .

### 1.7 ReSULTS OF THE HOUSEHOLD AND INDIVIDUAL INTERVIEWS

Table 1.1 is a summary of the results from both the household and the individual interviews. A total of 7,968 households were selected for the survey from the sampling frame; among those selected households, 7,907 households were found. Of those households, 7,825 (99 percent) were successfully interviewed. In those households, 6,151 eligible women were identified, and complete interviews were obtained with 6,006 of them ( 98 percent of all eligible women). The overall response rate was 97 percent.

## HOUSEHOLD CHARACTERISTICS

This chapter describes the general characteristics of the sample population, including composition by age and sex, residence, household size, education, housing facilities, and presence of durable goods in the household.

The questionnaire for the 2002 Jordan Population and Family Health Survey (JPFHS) included two questions distinguishing between the de jure population (persons who usually live in the selected household) and the de facto population (persons who spent the night before the interview in the household). It was found, however, that the difference between them was small, and since sample selection for the JPFHS was based on the de facto population, as it had been in past demographic surveys, tabulations for the JPFHS household data were carried out on the basis of the de facto population only.

### 2.1 Population by Age and Sex

In many developing countries, data on age are affected by errors such as misstatement and preference for or avoidance of certain digits. In general, that was not the case in Jordan. The survey results indicated that not only age but month and year of birth are widely recognized. Also, the distribution of the population by single years of age (Figure 2.1) indicates that although there is some preference for ages ending in 0 or 5 , the problem is limited.

Figure 2.1 Male and Female Population by Single Year of Age


Table 2.1 shows the percent distribution of the population by age and sex, according to urbanrural residence. The table serves two purposes. The first is to show the effects of past demographic trends on the population and to give an indication of future trends. The second is to describe the context in which various demographic processes are operating.

| Percent distribution of the de facto household population by five-year age group, according to sex and residence, Jordan 2002 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Urban |  |  | Rural |  |  | Total |  |
| Age | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 0-4 | 12.7 | 12.5 | 12.6 | 14.6 | 13.4 | 14.0 | 13.1 | 12.7 | 12.9 |
| 5-9 | 13.8 | 13.5 | 13.7 | 15.5 | 14.7 | 15.1 | 14.2 | 13.8 | 14.0 |
| 10-14 | 12.2 | 11.5 | 11.8 | 13.6 | 13.6 | 13.6 | 12.5 | 11.9 | 12.2 |
| 15-19 | 11.3 | 11.4 | 11.3 | 12.9 | 11.8 | 12.3 | 11.6 | 11.5 | 11.6 |
| 20-24 | 10.6 | 9.6 | 10.1 | 9.3 | 10.3 | 9.8 | 10.3 | 9.8 | 10.1 |
| 25-29 | 8.2 | 8.4 | 8.3 | 7.5 | 7.6 | 7.6 | 8.1 | 8.2 | 8.2 |
| 30-34 | 7.0 | 7.8 | 7.4 | 5.7 | 7.5 | 6.6 | 6.7 | 7.7 | 7.2 |
| 35-39 | 5.6 | 5.8 | 5.7 | 5.6 | 5.3 | 5.4 | 5.6 | 5.7 | 5.6 |
| 40-44 | 4.2 | 4.4 | 4.3 | 3.5 | 3.6 | 3.5 | 4.1 | 4.2 | 4.1 |
| 45-49 | 3.2 | 3.3 | 3.3 | 2.8 | 2.8 | 2.8 | 3.1 | 3.2 | 3.2 |
| 50-54 | 2.3 | 3.0 | 2.6 | 2.1 | 2.5 | 2.3 | 2.3 | 2.9 | 2.6 |
| 55-59 | 2.9 | 2.5 | 2.7 | 1.8 | 1.8 | 1.8 | 2.7 | 2.4 | 2.5 |
| 60-64 | 2.3 | 2.2 | 2.3 | 1.9 | 1.9 | 1.9 | 2.2 | 2.2 | 2.2 |
| 65-69 | 1.5 | 1.7 | 1.6 | 1.2 | 1.3 | 1.3 | 1.4 | 1.6 | 1.5 |
| 70-74 | 1.1 | 1.2 | 1.1 | 1.1 | 0.8 | 0.9 | 1.1 | 1.1 | 1.1 |
| 75-79 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 |
| $80+$ | 0.5 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 17,393 | 17,614 | 35,007 | 4,669 | 4,736 | 9,405 | 22,062 | 22,350 | 44,412 |

The figures in Table 2.1 show that 39 percent of the population is under 15 years of age, an indicator that fertility remains high. The proportion under 15 years old is higher in rural areas ( 43 percent) than it is in urban areas ( 38 percent); this relationship holds for those under 20 as well. The opposite is true in the broad age category of 20-44 years old ( 36 percent and 33 percent in urban and rural areas, respectively). The latter difference is due to rural-urban migration, especially of males, as well as the influx of migrants from abroad, to urban areas in search of employment.

One may note an unusual pattern at the youngest ages in the population pyramid (Figure 2.2), such that there are fewer children in the 0-4 age group than in the 5-9 age group. This pattern may be explained by several circumstances: 1) a significant decrease in the fertility of the population has occurred, 2) heaping has occurred as a result of respondents rounding the age of a child up to the next year rather than reporting the exact age of the child at the time of the survey, or 3) heaping has occurred as a result of interviewers transferring children under age five to the age group 5-9 in order to avoid the timeconsuming effort of taking the height, weight, and anemia measures from eligible children (all children under five years of age in the household). Indeed, it is possible to see the heaping of under-five children into the next age group in Figure 2.1. It is probable that a combination of all three of the suggested circumstances contributed to the apparent heaping.

As is the case in most countries, there are more females than males in Jordan; however, the overall sex ratio is not particularly exaggerated: there are 99 males for every 100 females. The sex ratio does vary by age: among those under 25 years of age, the sex ratio is on average 102; among people age 60 and above, the ratio is 92 , on average. In the middle age groups ( $25-59$ years old), the sex ratio drops to 94 . The low ratio for this age group reflects in part the emigration of Jordanian males abroad.

Figure 2.2 Population Pyramid of Jordan


JPFHS 2002

### 2.2 Population by Age From Other Sources

The percentage of the population under 15 years of age declined substantially, from 51 percent in 1983, to 44 percent in 1990, to its current 2002 level of 39 percent, with proportional increases in the 1559 age group (Figure 2.3). That pattern is typical of populations that are experiencing a fertility decline (see Chapter 4 for more discussion on fertility in Jordan). The change in the age structure is favorable in economic terms. The dependency ratio, calculated as the ratio of persons in the "dependent" ages (under 15 , and 60 and over) to those in the working-age category (15-59) on the basis of those figures, fell from 130 in 1976, to 86 in 1997, and to 82 in 2002.

Figure 2.3 Population by Broad Age Groups, Various Surveys, 1976-2002


### 2.3 Household Size

Table 2.2 provides information on the size of the sampled households. Household characteristics affect the social and economic well-being of the members of the household. Large household size may be associated with crowding, which can lead to unfavorable health conditions. Single-parent families, especially if they are headed by females, usually have limited financial resources.

| Table 2.2 Household composition |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of households by sex of head of household and household size, according to residence, Jordan 2002 |  |  |  |
| Characteristic | Residence |  | Total |
|  | Urban | Rural |  |
| Sex of head of household |  |  |  |
| Male | 88.1 | 90.4 | 88.5 |
| Female | 11.9 | 9.6 | 11.5 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of usual members |  |  |  |
| 1 | 4.5 | 3.8 | 4.4 |
| 2 | 9.2 | 7.6 | 8.9 |
| 3 | 9.9 | 9.0 | 9.8 |
| 4 | 12.7 | 11.5 | 12.5 |
| 5 | 16.2 | 11.7 | 15.3 |
| 6 | 14.6 | 11.9 | 14.0 |
| 7 | 11.6 | 12.3 | 11.7 |
| 8 | 8.2 | 10.0 | 8.6 |
| 9+ | 13.0 | 22.2 | 14.8 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of households | 6,276 | 1,549 | 7,825 |
| Mean size of household | 5.5 | 6.2 | 5.7 |

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

Large households are common in Jordan. The average number of members in a household is 5.7. Household size is slightly smaller in urban areas (5.5) than in rural areas (6.2). Fifteen percent of households, on average, are composed of nine or more persons. The figure is higher in rural areas ( 22 percent) than in urban areas ( 13 percent). The table shows that 12 percent of households in urban areas are headed by females, compared with 10 percent in rural areas.

Results shown in Table 2.3 indicate that the majority of children under 15 years of age ( 94 percent) are living with both parents. The range is between 98 percent for children age $0-2$ years and 90 percent for children age 10-14 years. No variations were noted according to sex, urban-rural residence or region, and no differences are noted over time between the 1997 and 2002 surveys. In addition, 3 percent of children under the age of 15 have experienced the death of one or both parents.

Table 2.3 Children's living arrangements and orphanhood
Percent distribution of de jure children under age 15 by children's living arrangements and survival status of parents, according to background characteristics, Jordan 2002

| Background characteristic | Living with both parents | Living with mother but not father |  | Living with father but not mother |  | Not living with either parent |  |  |  | Total | Number <br> of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Father alive | Father dead | Mother alive | Mother dead | Both alive | Only father alive | Only mother alive | Both dead |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| <2 | 98.2 | 1.4 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 100.0 | 2,200 |
| 2-4 | 96.2 | 2.4 | 0.9 | 0.3 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 100.0 | 3,270 |
| 5-9 | 93.9 | 2.6 | 2.0 | 0.6 | 0.2 | 0.4 | 0.1 | 0.2 | 0.0 | 100.0 | 6,079 |
| 10-14 | 90.1 | 3.1 | 3.8 | 1.2 | 0.9 | 0.3 | 0.1 | 0.2 | 0.1 | 100.0 | 5,310 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |
| Male | 94.0 | 2.7 | 2.0 | 0.6 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 100.0 | 8,525 |
| Female | 93.4 | 2.4 | 2.2 | 0.8 | 0.4 | 0.4 | 0.1 | 0.2 | 0.0 | 100.0 | 8,334 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 93.3 | 3.0 | 2.0 | 0.6 | 0.4 | 0.3 | 0.1 | 0.2 | 0.0 | 100.0 | 12,872 |
| Rural | 94.9 | 1.1 | 2.3 | 0.9 | 0.3 | 0.3 | 0.2 | 0.0 | 0.0 | 100.0 | 3,987 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Central | 93.5 | 2.9 | 2.0 | 0.7 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 100.0 | 10,113 |
| North | 94.0 | 2.4 | 2.2 | 0.7 | 0.4 | 0.2 | 0.0 | 0.1 | 0.0 | 100.0 | 4,969 |
| South | 94.3 | 1.0 | 2.6 | 0.7 | 0.4 | 0.6 | 0.1 | 0.2 | 0.2 | 100.0 | 1,777 |
| Total | 93.7 | 2.6 | 2.1 | 0.7 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 100.0 | 16,859 |

Note: Orphans are children with both parents dead.

### 2.4 Level of Education of the Household Population

Education is an important variable with regard to its association with demographic behavior. Higher education is usually associated with greater knowledge and use of health practices and family planning methods. The education system in Jordan has been in place for a long time. Basic education is free of cost and compulsory, starting at age six and lasting for 10 years. A further two-year period, known as the secondary cycle, is virtually cost-free. In the JPFHS, questions on education were asked for persons six years of age and older, to be used to calculate rates of school enrollment as well as overall education levels of the population.

Table 2.4 presents data on the educational composition of the population reported in the household questionnaire. In the 2002 JPFHS, information on educational attainment refers to the highest level of education attended, and the highest grade completed at that level. An important observation is that women have less education than men: 94 percent of males in Jordan have had some schooling, whereas about 88 percent of females have attended school. Furthermore, men are likely to stay in school longer than women.

This table also shows that 46 percent of males and 43 percent of females have attended secondary education or higher. The median number of years of schooling is 8.6 years for males and 8 years for females in 2002. This indicates that while there has been no improvement in the gender gap in education levels from that in 1997 (when the median was 7.5 and 6.9 years for males and females respectively), overall education levels have increased equally for both men and women.

## Table 2.4 Educational attainment of household population

Percent distribution of the de facto male and female household populations age six and over by highest level of education attended, according to background characteristics, Jordan 2002

| Background characteristic | Highest level of schooling attended |  |  |  |  |  | Total | Number | Median number of years |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No education | Elementary | Preparatory | Secondary | Higher | Preparatory and secondary |  |  |  |
| MALE |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 6-9 | 16.0 | 84.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2,523 | 1.3 |
| 10-14 | 0.5 | 54.7 | 44.5 | 0.3 | 0.0 | 44.8 | 100.0 | 2,751 | 5.8 |
| 15-19 | 0.7 | 3.5 | 21.6 | 67.2 | 7.0 | 88.8 | 100.0 | 2,567 | 9.9 |
| 20-24 | 1.0 | 7.1 | 11.4 | 46.5 | 34.0 | 57.9 | 100.0 | 2,282 | 10.9 |
| 25-29 | 1.5 | 8.0 | 21.1 | 39.3 | 30.0 | 60.4 | 100.0 | 1,779 | 10.7 |
| 30-34 | 2.2 | 6.4 | 23.0 | 36.1 | 32.2 | 59.1 | 100.0 | 1,483 | 10.9 |
| 35-39 | 3.1 | 9.0 | 20.8 | 34.0 | 33.1 | 54.8 | 100.0 | 1,229 | 11.1 |
| 40-44 | 3.2 | 11.9 | 25.6 | 24.0 | 35.2 | 49.7 | 100.0 | 895 | 10.7 |
| 45-49 | 3.1 | 15.2 | 22.7 | 24.5 | 34.5 | 47.2 | 100.0 | 692 | 10.8 |
| 50-54 | 5.9 | 21.4 | 19.7 | 17.9 | 35.2 | 37.6 | 100.0 | 502 | 10.2 |
| 55-59 | 8.9 | 30.4 | 16.7 | 17.4 | 26.5 | 34.1 | 100.0 | 591 | 8.4 |
| 60-64 | 18.9 | 29.4 | 14.3 | 15.7 | 21.8 | 30.0 | 100.0 | 491 | 6.5 |
| $65+$ | 44.1 | 33.8 | 8.7 | 7.5 | 5.8 | 16.3 | 100.0 | 787 | 3.0 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 5.3 | 27.2 | 20.3 | 27.2 | 20.0 | 47.5 | 100.0 | 14,722 | 8.7 |
| Rural | 9.3 | 29.4 | 19.4 | 30.0 | 12.1 | 49.3 | 100.0 | 3,849 | 8.0 |
| Region |  |  |  |  |  |  |  |  |  |
| Central | 5.4 | 26.9 | 19.7 | 27.8 | 20.3 | 47.4 | 100.0 | 11,854 | 8.8 |
| North | 6.8 | 28.4 | 21.3 | 27.7 | 15.9 | 48.9 | 100.0 | 4,947 | 8.3 |
| South | 8.9 | 30.3 | 19.8 | 28.3 | 12.6 | 48.2 | 100.0 | 1,769 | 7.9 |
| Total | 6.1 | 27.6 | 20.1 | 27.8 | 18.4 | 47.9 | 100.0 | 18,571 | 8.6 |
| FEMALE |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 6-9 | 13.2 | 86.8 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2,552 | 1.4 |
| 10-14 | 0.5 | 52.9 | 46.3 | 0.2 | 0.0 | 46.6 | 100.0 | 2,668 | 5.8 |
| 15-19 | 0.6 | 3.3 | 19.3 | 65.8 | 11.0 | 85.1 | 100.0 | 2,564 | 10.1 |
| 20-24 | 1.8 | 5.6 | 9.9 | 40.4 | 42.3 | 50.3 | 100.0 | 2,186 | 11.5 |
| 25-29 | 2.2 | 7.3 | 16.6 | 43.2 | 30.7 | 59.8 | 100.0 | 1,843 | 10.8 |
| 30-34 | 4.3 | 8.2 | 19.5 | 35.1 | 32.9 | 54.7 | 100.0 | 1,731 | 10.9 |
| 35-39 | 6.1 | 12.6 | 17.9 | 34.4 | 29.1 | 52.3 | 100.0 | 1,270 | 10.6 |
| 40-44 | 11.0 | 16.2 | 19.5 | 24.8 | 28.5 | 44.3 | 100.0 | 937 | 10.0 |
| 45-49 | 19.2 | 27.4 | 21.0 | 15.9 | 16.5 | 36.9 | 100.0 | 711 | 6.6 |
| 50-54 | 34.9 | 26.7 | 12.8 | 16.3 | 9.3 | 29.1 | 100.0 | 642 | 4.7 |
| 55-59 | 50.6 | 24.3 | 9.1 | 10.6 | 5.4 | 19.7 | 100.0 | 533 | 0.0 |
| 60-64 | 69.6 | 18.0 | 4.4 | 6.5 | 1.6 | 10.9 | 100.0 | 481 | 0.0 |
| $65+$ | 82.9 | 8.6 | 4.6 | 3.0 | 0.9 | 7.7 | 100.0 | 861 | 0.0 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 11.4 | 26.2 | 17.6 | 26.8 | 18.0 | 44.4 | 100.0 | 15,009 | 8.3 |
| Rural | 16.7 | 29.0 | 17.7 | 24.0 | 12.6 | 41.7 | 100.0 | 3,970 | 6.7 |
| Region |  |  |  |  |  |  |  |  |  |
| Central | 11.6 | 25.5 | 17.6 | 27.3 | 18.0 | 44.9 | 100.0 | 12,030 | 8.4 |
| North | 13.6 | 28.9 | 18.1 | 24.6 | 14.8 | 42.7 | 100.0 | 5,166 | 7.4 |
| South | 15.9 | 29.1 | 16.5 | 23.8 | 14.7 | 40.3 | 100.0 | 1,783 | 6.9 |
| Total | 12.5 | 26.8 | 17.6 | 26.2 | 16.8 | 43.9 | 100.0 | 18,979 | 8.0 |

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Elementary eduation corresponds to the first six years of school, preparatory corresponds to the next three years, and secondary to the last three years, for a total of 12 years of schooling. In this report, the "preparatory" and "secondary" categories are shown separately; whereas, in the 1990 and 1997 reports, the "secondary" category represents both categories together.

The figures for median number of years of schooling indicate that education has a long history in Jordan. Men age $50-54$ have had a median of 10.2 years of education, while women in the same age cohort have had 4.7 years. Among persons age $40-44$, the median for men is 10.7 years of education, compared with 10 years for females. The median number of years of education is almost the same for males and females at ages $25-34$, and in the younger age groups, the median number of years of education is slightly higher for females than for males.

The level of education is associated with residence, though differences by residence and by region are not great. In urban areas and in the Central region (Amman, Zarqa, Balqa, and Madaba), the median years of education attained are higher than in the rest of the country.

### 2.5 School Attendance

Figure 2.4 and Table 2.5 show the proportion of the household population age 6-24 years attending school, by age and sex. The data reflect the fact that school attendance in Jordan is very high, at almost 99 percent for both sexes among those ages 8 through 13 . Few differences in attendance are observed between males and females of younger ages (7-13 years).

Figure 2.4 Age-Specific Attendance Rates


Beyond the age of 13, attendance rates start to decline, especially for males. Nevertheless, the overall rate exceeds 90 percent for both sexes up to age 15 . Age 15 marks the beginning of a genderbased divergence in attendance, where 95 percent of females and 90 percent of males are attending school. This gender gap continues through age 20, with 43 percent of females attending school as compared to 38 percent of males. Gender gaps in attendance are inconsistent in direction between the ages of 21 and 24.

| Table 2.5 Age-specific attendance rates |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of the household population age 6-24 years attending school, by age and sex, Jordan 2002 |  |  |  |  |
|  | Male |  | Female |  |
| Age | Attendance <br> rate (\%) | Number | Attendance rate (\%) | Number |
| 6 | 41.9 | 661 | 44.3 | 608 |
| 7 | 98.2 | 632 | 97.8 | 648 |
| 8 | 99.4 | 578 | 99.9 | 636 |
| 9 | 99.0 | 607 | 99.6 | 600 |
| 10 | 99.4 | 547 | 99.5 | 506 |
| 11 | 99.5 | 543 | 99.4 | 521 |
| 12 | 98.7 | 540 | 97.7 | 497 |
| 13 | 98.6 | 503 | 98.6 | 538 |
| 14 | 94.1 | 567 | 95.9 | 548 |
| 15 | 90.3 | 531 | 94.8 | 523 |
| 16 | 88.8 | 509 | 90.9 | 525 |
| 17 | 79.1 | 545 | 84.4 | 523 |
| 18 | 66.1 | 524 | 72.9 | 493 |
| 19 | 42.3 | 510 | 55.3 | 461 |
| 20 | 38.3 | 542 | 43.3 | 457 |
| 21 | 41.4 | 508 | 38.1 | 448 |
| 22 | 29.1 | 506 | 26.1 | 462 |
| 23 | 16.4 | 426 | 20.0 | 426 |
| 24 | 13.6 | 426 | 7.5 | 370 |

### 2.6 Housing Characteristics

In the JPFHS 2002, information on housing characteristics was collected in the household questionnaire. Thus, the sample is comprised of the households interviewed. Table 2.6 indicates that about two in three housing units ( 69 percent) in urban areas are apartments, as compared to nearly one in four (23 percent) in rural areas. Dars, which are homes that are built with an enclosed central courtyard, form 76 percent of the dwellings in rural areas, compared to only 29 percent in urban areas. In general, 98 percent of total housing units in Jordan are either apartments or dars.

About half of the housing units ( 47 percent) consist of two or three rooms, and 44 percent consist of four or five rooms, whereas 6 percent consist of six or more rooms; only 3 percent of housing units consist of one room, with slight differences according to the place of residence. As for sleeping rooms, one in five housing units has one sleeping room, more than two-fifths ( 44 percent) have two rooms, and one in three ( 31 percent) has three rooms.

Table 2.6 indicates that almost all households ( 99.7 percent) in urban areas have electricity, which differs little from rural areas ( 98.7 percent). Moreover, nearly all households use natural gas for cooking regardless of the place of residence. Piped-in water is widely available - particularly in urban areas ( 87 percent), but somewhat less often ( 83 percent) in rural areas. About 9 percent of urban households and only 1 percent of rural households use bottled water for drinking. Consequently, the majority of households in urban areas ( 96 percent) and in rural areas ( 84 percent) use safe water for drinking. About 12 percent of rural dwellings use water that may be unsafe for drinking and other purposes. The problem is further aggravated if households using tankers to obtain water (another 5 percent) are added, as the source of the water carried by tanker trucks may be unknown.

Table 2.6 also shows that a large majority of households ( 89 percent) have a flush toilet (with marked differences between urban and rural households). Seventy-three percent of urban households have access to a public sewage network, in contrast with only 7 percent of rural households.

About nine in ten dwellings have floors made of ceramic or tile; another 10 percent have cement floors. The proportions differ reciprocally by urban-rural residence: urban households are more likely to have ceramic or tile flooring, while rural households tend to have cement flooring.

### 2.7 Presence of Durable Goods in the Household

Jordan is a modern society, and most of the population enjoys the convenience of electrical appliances (Table 2.7). Ninety-six percent of households have television sets, 93 percent have a refrigerator, and 93 percent have a washing machine.

As further testament to the level of development in Jordan, 73 percent of households possess a land-line or mobile phone (with 13 percent of households owning 2 or more mobile phones), one in six households owns a computer, and five percent have internet access. The possession of computer-related assets varies considerably between urban and rural areas: ownership of a computer in urban areas is fourfold that in rural areas, and internet access is about nine times higher in urban than in rural areas.

Of further interest is the fact that two in five households own a private car, and one in five has a solar heater. Overall, less than 1 percent of households owns none of the seven specified durable goods.

| Table 2.6 Housing characteristics |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of households by housing characteristics, according to residence, Jordan 2002 |  |  |  |
| Housing characteristic | Residence |  | Total |
|  | Urban | Rural |  |
| Type of housing unit |  |  |  |
| Apartment | 69.2 | 23.4 | 60.1 |
| Dar | 28.8 | 75.6 | 38.0 |
| Villa | 1.9 | 0.7 | 1.6 |
| Other | 0.2 | 0.4 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 |
| Rooms in the house |  |  |  |
| 1 | 3.3 | 3.5 | 3.3 |
| 2 | 14.8 | 15.5 | 14.9 |
| 3 | 32.8 | 30.0 | 32.2 |
| 4 | 26.6 | 30.4 | 27.4 |
| 5 | 17.2 | 14.2 | 16.6 |
| 6+ | 5.4 | 6.4 | 5.6 |
| Total | 100.0 | 100.0 | 100.0 |
| Sleeping rooms |  |  |  |
| 1 | 20.3 | 23.9 | 21.0 |
| 2 | 43.7 | 43.3 | 43.6 |
| 3 | 31.3 | 27.1 | 30.5 |
| 4+ | 4.7 | 5.6 | 4.9 |
| Total | 100.0 | 100.0 | 100.0 |
| Electricity |  |  |  |
| Yes | 99.7 | 98.7 | 99.5 |
| No | 0.3 | 1.3 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 |
| Source of drinking water |  |  |  |
| Piped into dwelling | 86.5 | 82.8 | 85.8 |
| Rainwater | 3.0 | 10.8 | 4.5 |
| Tanker truck | 1.1 | 4.5 | 1.7 |
| Bottled water | 9.3 | 0.8 | 7.6 |
| Other | 0.2 | 1.1 | 0.3 |
| Total | 100.0 | 100.0 | 100.0 |
| Sanitation facility |  |  |  |
| Flush toilet | 92.0 | 76.2 | 88.8 |
| Traditional pit toilet | 8.0 | 23.5 | 11.1 |
| No facility | 0.0 | 0.3 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 |
| Public sewage |  |  |  |
| Yes | 73.4 | 6.5 | 60.1 |
| No | 26.6 | 93.5 | 39.9 |
| Total | 100.0 | 100.0 | 100.0 |
| Flooring material |  |  |  |
| Tiles | 89.2 | 79.9 | 87.4 |
| Ceramic tiles | 3.1 | 0.5 | 2.6 |
| Cememt | 7.5 | 19.0 | 9.8 |
| Earth/sand | 0.1 | 0.6 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 |
| Type of cooking fuel |  |  |  |
| LPG, natural gas | 99.6 | 99.2 | 99.5 |
| Other | 0.4 | 0.8 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of households | 6,276 | 1,549 | 7,825 |


| Table 2.7 Household durable goods |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of households possessing various durable consumer goods, by urban-rural residence, Jordan 2002 |  |  |  |
|  |  | nce |  |
| Durable consumer goods | Urban | Rural | Total |
| Radio | 82.1 | 69.8 | 79.7 |
| Television | 96.7 | 94.8 | 96.3 |
| Telephone | 56.5 | 46.0 | 54.4 |
| Mobile phone | 50.2 | 38.9 | 48.0 |
| Phone or mobile | 74.7 | 64.4 | 72.6 |
| Refrigerator | 94.4 | 87.9 | 93.2 |
| Satellite | 47.9 | 19.3 | 42.3 |
| Washing machine | 93.9 | 89.1 | 92.9 |
| Solar heater | 21.4 | 11.1 | 19.3 |
| Computer | 19.1 | 5.3 | 16.4 |
| Internet access | 6.1 | 0.7 | 5.0 |
| Car/pickup | 39.0 | 34.0 | 38.0 |
| None of the above | 0.5 | 1.6 | 0.7 |
| Number of households | 6,276 | 1,549 | 7,825 |

## RESPONDENTS' BACKGROUND CHARACTERISTICS

This chapter highlights the basic characteristics of ever-married women age 15-49 who were interviewed in the survey. It also presents data on the respondents' exposure to mass media, employment status, living arrangements, and women's participation in household decisionmaking.

### 3.1 General Characteristics

Table 3.1 presents the distribution of respondents by background characteristics, including age, marital status, residence, educational level attended, and religion. The distribution of ever-married women shows that 15 percent are under age 25 in 2002, compared with 18 percent in 1997 , and 22 percent in 1990. It is noteworthy that the proportion of women in the younger age group (15-19) has dropped by one percentage point in 2002 from that in 1997 (from 3.7 percent to 2.6 percent); in 1990, women in this age group made up 6 percent of the female population. This decline in the proportion of young women in the ever-married population is the consequence of increasing age at marriage (see Chapter 5). Despite the similar proportion of women age 25-34 in both years, the proportion of women age 40-49 was slightly higher in 2002 than it was in 1997.

Among ever-married women, the percent distribution by marital status indicates that 95 percent are currently married; the rest are either divorced or widowed. The proportion married has declined by one percentage point in 2002 from that in 1997.

The population of Jordan is highly urbanized (Table 3.1). Eighty percent of respondents reside in urban areas (localities with a population of 5,000 or more, as stated in the 1994 Census). Only 9 percent of all ever-married women live in the governorates of the South region (Karak, Tafielah, Ma'an, and Aqaba) compared with 65 percent in the Central region and 26 percent in the North region.

Table 3.1 also presents the weighted and unweighted numbers of women in the sample. The unweighted numbers of women in the Central region (Amman, Zarqa, Balqa, and Madaba) are smaller than the weighted numbers. The opposite is true in the South region (because of oversampling). For example, in the South region, although the weighted number of women is 566 , in reality data were collected from 1,458 women. The South region was oversampled to obtain sufficient women to yield statistically reliable estimates.

Table 3.1 indicates that in 2002, 6 percent of ever-married women had not received any formal education. Compared with the proportion of women with no education in 1997 (9 percent) and in 1990 (24 percent), the degree to which access to education has spread in Jordanian society in a relatively short period of time becomes apparent. Education has spread deeply as well as broadly over time in Jordan: only 54 percent of women had ever attended preparatory or higher levels of schooling in 1990; the corresponding figure in 1997 was 76 percent, and by 2002, 83 percent of women had attained preparatory or higher education.

| Percent distribution of ever-married women by background characteristics, Jordan 2002 |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Number of women |  |
| Background characteristic | Weighted percent | Weighted | Unweighted |
| Age |  |  |  |
| 15-19 | 2.6 | 158 | 155 |
| 20-24 | 12.1 | 728 | 753 |
| 25-29 | 19.6 | 1,175 | 1,195 |
| 30-34 | 22.5 | 1,354 | 1,342 |
| 35-39 | 17.8 | 1,071 | 1,090 |
| 40-44 | 14.3 | 862 | 843 |
| 45-49 | 11.0 | 659 | 628 |
| Marital status |  |  |  |
| Married | 95.0 | 5,706 | 5,727 |
| Divorced | 2.2 | 130 | 111 |
| Widowed | 2.8 | 170 | 168 |
| Residence |  |  |  |
| Urban | 79.9 | 4,799 | 4,196 |
| Rural | 20.1 | 1,207 | 1,810 |
| Region |  |  |  |
| Central | 64.9 | 3,898 | 2,788 |
| North | 25.7 | 1,542 | 1,760 |
| South | 9.4 | 566 | 1,458 |
| Educational level attended |  |  |  |
| No education | 6.0 | 363 | 526 |
| Elementary | 11.5 | 689 | 783 |
| Preparatory | 20.5 | 1,231 | 1,248 |
| Secondary | 37.4 | 2,247 | 2,067 |
| Higher | 24.6 | 1,476 | 1,382 |
| Preparatory + secondary | y 57.9 | 3,478 | 3,315 |
| Religion |  |  |  |
| Muslim | 98.4 | 5,912 | 5,898 |
| Christian | 1.6 | 94 | 108 |
| Total | 100.0 | 6,006 | 6,006 |
| Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Elementary education corresponds to the first six years of school, preparatory corresponds to the next three years, and secondary to the last three years, for a total of 12 years of schooling. In this report, the "preparatory" and "secondary" categories are shown separately; whereas, in the 1990 and 1997 JPFHS reports, the "secondary" category represents both categories together. |  |  |  |

### 3.2 Respondents' Level of Education

Table 3.2 shows the relationship between level of education attended and background characteristics. Broad-based access of the Jordanian population to education has received greater emphasis over the past fifty years, as evidenced by data from the JPFHS surveys that indicate that older women are less likely to have had education than younger women: almost 20 percent of women age 45-49 have had no education, while less than 2 percent of women between the ages of 15 and 29 have had no education.

| Percent distribution of all ever-married women by highest level of schooling attended and median number of years of schooling, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Highest level of schooling attended |  |  |  |  |  |  | Number of women | Median <br> number <br> of years <br> of schooling |
| Background characteristic | No education | Elementary | Preparatory | Secondary | Higher | Preparatory and secondary | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 1.4 | 11.4 | 33.0 | 51.4 | 2.8 | 84.4 | 100.0 | 158 | 9.2 |
| 20-24 | 1.1 | 7.0 | 17.0 | 56.8 | 18.1 | 73.8 | 100.0 | 728 | 10.5 |
| 25-29 | 1.9 | 6.4 | 21.0 | 47.4 | 23.2 | 68.4 | 100.0 | 1,175 | 10.5 |
| 30-34 | 3.4 | 7.3 | 21.9 | 36.1 | 31.3 | 58.0 | 100.0 | 1,354 | 10.8 |
| 35-39 | 5.7 | 11.6 | 18.4 | 36.1 | 28.2 | 54.5 | 100.0 | 1,071 | 10.6 |
| 40-44 | 11.0 | 15.4 | 20.8 | 25.0 | 27.9 | 45.7 | 100.0 | 862 | 9.9 |
| 45-49 | 19.3 | 28.7 | 20.6 | 15.9 | 15.5 | 36.5 | 100.0 | 659 | 6.3 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 4.0 | 10.4 | 20.8 | 38.9 | 26.0 | 59.6 | 100.0 | 4,799 | 10.5 |
| Rural | 14.2 | 15.9 | 19.3 | 31.7 | 18.9 | 51.0 | 100.0 | 1,207 | 9.1 |
| Region |  |  |  |  |  |  |  |  |  |
| Central | 4.3 | 10.5 | 20.4 | 39.8 | 24.9 | 60.3 | 100.0 | 3,898 | 10.5 |
| North | 7.6 | 12.5 | 21.6 | 34.5 | 23.7 | 56.1 | 100.0 | 1,542 | 10.0 |
| South | 13.8 | 15.3 | 17.9 | 28.6 | 24.3 | 46.5 | 100.0 | 566 | 9.5 |
| Total | 6.0 | 11.5 | 20.5 | 37.4 | 24.6 | 57.9 | 100.0 | 6,006 | 10.3 |
| Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Elementary education corresponds to the first six years of school, preparatory corresponds to the next three years, and secondary to the last three years, for a total of 12 years of schooling. In this report, the "preparatory" and "secondary" categories are shown separately; whereas, in the 1990 and 1997 JPFHS reports, the "secondary" category represents both categories together. |  |  |  |  |  |  |  |  |  |

The median number of years of schooling according to age group reflects that young women have been able to continue in school for longer periods of time than have older women. The median number of years of education for all women is 10 years; however, women age 20-39 have a median of almost 11 years of education, while those age 45-49 have a median of 6 years of education.

Women in urban areas are more likely to have had any education, as well as higher education, than their rural counterparts. While the proportion of urban women with no education did not exceed 4 percent, it rises to 14 percent for rural women. Differences also exist in terms of the median number of schooling years by residence: urban women have about 2 years of education more than rural women ( 11 years and 9 years in urban and rural areas respectively). There are also pronounced regional differences in women's educational attainment. In the Central region, 4 percent of women have no education, whereas in the South region, the proportion is 14 percent. Regional differences persist with regard to secondary or higher education: a greater proportion of women in the Central Region attain preparatory or higher education ( 85 percent) than in either the North ( 80 percent) or South ( 71 percent) regions.

### 3.3 Exposure to Jordanian Mass Media

The exposure of women to Jordanian television, radio, and newspapers is shown in Table 3.3. Eighty-one percent of women in the sample watch Jordanian television, 44 percent listen to the Jordanian radio, and 36 percent read newspapers at least once a week. While 17 percent of women were exposed to all three forms of media at least once a week, 10 percent were not exposed to any. Although exposure to mass media varies little across age groups, younger women are slightly less likely to be exposed to mass

| Percentage of ever-married women who usually read a Jordanian newspaper at least once a week, watch Jordanian television at least once a week, and listen to Jordanian radio at least once a week, by background characteristics, Jordan 2002 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type of mass media exposure |  |  |  |  |  |
| Background characteristic | Reads a Jordanian newspaper at least once a week | Watches Jordanian television at least once a week | Listens to Jordanian radio at least once a week | All three media | No mass media | Number of women |
| Age |  |  |  |  |  |  |
| 15-19 | 27.2 | 79.7 | 44.3 | 12.8 | 14.2 | 158 |
| 20-24 | 32.2 | 81.8 | 42.3 | 16.3 | 10.1 | 728 |
| 25-29 | 35.6 | 80.2 | 39.1 | 15.4 | 9.6 | 1,175 |
| 30-34 | 36.5 | 81.1 | 45.3 | 17.9 | 9.9 | 1,354 |
| 35-39 | 39.7 | 80.7 | 42.6 | 17.3 | 9.3 | 1,071 |
| 40-44 | 39.1 | 79.1 | 43.1 | 19.7 | 10.7 | 862 |
| 45-49 | 33.9 | 85.2 | 51.7 | 18.3 | 7.8 | 659 |
| Residence |  |  |  |  |  |  |
| Urban | 38.4 | 78.8 | 43.7 | 17.8 | 10.7 | 4,799 |
| Rural | 27.6 | 89.8 | 43.4 | 15.3 | 6.1 | 1,207 |
| Region |  |  |  |  |  |  |
| Central | 40.3 | 76.4 | 46.1 | 18.8 | 11.3 | 3,898 |
| North | 28.2 | 90.3 | 37.9 | 14.3 | 6.7 | 1,542 |
| South | 30.3 | 88.0 | 42.1 | 15.4 | 7.7 | 566 |
| Educational level attended |  |  |  |  |  |  |
| No education | 0.7 | 86.0 | 36.6 | 0.7 | 12.0 | 363 |
| Elementary | 11.5 | 83.1 | 41.1 | 5.8 | 12.0 | 689 |
| Preparatory | 29.0 | 87.0 | 43.4 | 15.7 | 8.2 | 1,231 |
| Secondary | 41.2 | 80.9 | 45.6 | 19.6 | 8.6 | 2,247 |
| Higher | 54.8 | 74.1 | 43.7 | 24.5 | 11.3 | 1,476 |
| Preparatory + secondary | 36.9 | 83.1 | 44.8 | 18.2 | 8.4 | 3,478 |
| Total | 36.2 | 81.1 | 43.6 | 17.3 | 9.8 | 6,006 |

media than older women: whereas 13 percent of women age $15-19$ were exposed to all three forms of mass media, the proportion goes up to 19 percent among women age 40-49. As expected, there is a linear and positive association between education and newspaper reading: a higher proportion of women with at least secondary education reads newspapers than those with less education.

There is no consistent relationship between television viewing or radio listenership and education; however, those who fall into the educational extremes do tend to differ somewhat with regard to their exposure to these kinds of media: women with the highest levels of education are the least likely to report that they watch television weekly, while women with no education are the least likely to report listening to the radio. It should be noted that while about one-fourth of women with higher than secondary education were exposed to all three media, less than 1 percent of women with no education report the same.

The relationship between residence and exposure to mass media varies depending on the type of media. Women in urban areas are more likely to read the newspaper ( 38 percent) than women in rural areas ( 28 percent). The opposite holds for viewing television, where rural women are more likely than urban women to watch television ( 90 percent and 79 percent respectively). The extent to which women
listen to the radio does not vary substantially by urban-rural residence. Women living in the Central region are more likely than in the other two regions to read newspapers and listen to the radio, but less likely to watch television.

### 3.4 Respondents' Employment Characteristics

In the 2002 JPFHS, respondents were asked a number of questions about their employment, including whether they were currently working or not. Women who were currently working were then asked a number of questions about the kind of work they do, their employment status, who makes the decision about how their earnings are used, and what proportion of household expenditures are paid for by the income gained from their own employment.

### 3.4.1 Employment Status

The majority of women ( 90 percent) are not working, nor have they worked during the last seven days prior to the survey (Table 3.4): only one in ten women was employed in the seven days preceding the survey. The proportion of women who were not employed ranges from 99 percent among those age 15-19 to 87 percent among those age 35-44.

Differentials in employment status by urban-rural residence are small; however, a greater proportion of women in the South region report current employment ( 16 percent) than in other regions. This finding seems contrary to the conventional wisdom that higher education increases the likelihood of employment, as women in the South region are the least likely to have any education. While women with post-secondary education are much more likely to report having been employed in the week prior to the survey than any other educational group, those with the second-greatest amount of education (preparatory and secondary) are less likely to work than women with no education at all.

Marital status seems to have a bearing on employment status. The proportion of working women rises from 10 percent among those married and widowed to 16 percent among divorced women. When the number of living children is considered, the percentage of working women rises from 9 percent for those with no children to 12 percent for those with one or two children, and then drops to 7 percent for those with five or more children.

| Table 3.4 Employment status |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women by employment status, according to background characteristics, Jordan 2002 |  |  |  |  |
| Background characteristic | Employed in the 7 days preceding the survey | Not employed in the 7 days preceding the survey | Total | Number of women |
| Age |  |  |  |  |
| 15-19 | 1.2 | 98.8 | 100.0 | 158 |
| 20-24 | 4.4 | 95.6 | 100.0 | 728 |
| 25-29 | 7.1 | 92.9 | 100.0 | 1,175 |
| 30-34 | 11.9 | 88.1 | 100.0 | 1,354 |
| 35-39 | 12.8 | 87.2 | 100.0 | 1,071 |
| 40-44 | 13.3 | 86.7 | 100.0 | 862 |
| 45-49 | 8.0 | 92.0 | 100.0 | 659 |
| Marital status |  |  |  |  |
| Married | 9.6 | 90.4 | 100.0 | 5,706 |
| Divorced | 16.0 | 84.0 | 100.0 | 130 |
| Widowed | 9.9 | 90.1 | 100.0 | 170 |
| Number of living children |  |  |  |  |
| 0 | 8.7 | 91.3 | 100.0 | 521 |
| 1-2 | 12.2 | 87.8 | 100.0 | 1,490 |
| 3-4 | 11.3 | 88.7 | 100.0 | 1,807 |
| $5+$ | 7.0 | 93.0 | 100.0 | 2,188 |
| Residence |  |  |  |  |
| Urban | 9.4 | 90.6 | 100.0 | 4,799 |
| Rural | 11.0 | 89.0 | 100.0 | 1,207 |
| Region |  |  |  |  |
| Central | 8.4 | 91.6 | 100.0 | 3,898 |
| North | 10.6 | 89.4 | 100.0 | 1,542 |
| South | 16.4 | 83.6 | 100.0 | 566 |
| Educational level attended |  |  |  |  |
| No education | 5.7 | 94.3 | 100.0 | 363 |
| Elementary | 2.6 | 97.4 | 100.0 | 689 |
| Preparatory | 2.2 | 97.8 | 100.0 | 1,231 |
| Secondary | 4.7 | 95.3 | 100.0 | 2,247 |
| Higher | 27.8 | 72.2 | 100.0 | 1,476 |
| Preparatory + secondary | 3.8 | 96.2 | 100.0 | 3,478 |
| Total | 9.7 | 90.3 | 100.0 | 6,006 |

### 3.4.2 Occupation

Table 3.5 shows that among women who report having been employed in the seven days prior to the survey, a large proportion is engaged in professional and technical occupations ( 70 percent), while 9 percent are employed in sales work. About 7 percent of women are engaged in clerical work, and 6 percent in craft and related trade occupations. The percentages vary considerably by background characteristics of women. The data also indicate that 86 percent of employed women are paid workers and 8 percent are self-employed (data not shown).

## Table 3.5 Occupation

Percent distribution of all ever-married women employed in the 7 days preceding the survey by occupation, according to background characteristics, Jordan 2002

|  | Occupation |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Legislators and senior officials | Professionals | Technicians and associate professionals | Clerks | Service workers, shop, and market sales workers | Skilled agricultural and fishery workers | Craft and related trades workers | Plant and machine operators and related occupations | Elementary occupations ${ }^{1}$ | Missing | Total | Number of women |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | * | * | * | * | * | 2 |
| 20-24 | (0.0) | (30.3) | 24.9 | 8.6 | 25.8 | 0.0 | 10.4 | 0.0 | 0.0 | 0.0 | 100.0 | 32 |
| 25-29 | 0.0 | 45.1 | 32.9 | 7.0 | 9.7 | 1.3 | 3.5 | 0.0 | 0.6 | 0.0 | 100.0 | 83 |
| 30-34 | 0.2 | 37.2 | 34.1 | 7.0 | 11.9 | 0.0 | 2.7 | 1.4 | 4.7 | 0.7 | 100.0 | 162 |
| 35-39 | 0.0 | 33.8 | 35.5 | 7.9 | 4.8 | 2.9 | 7.3 | 0.0 | 6.9 | 0.8 | 100.0 | 137 |
| 40-44 | 0.0 | 31.3 | 44.2 | 6.0 | 2.4 | 0.4 | 9.7 | 0.0 | 6.1 | 0.0 | 100.0 | 115 |
| 45-49 | 0.0 | 29.0 | 22.3 | 5.7 | 8.7 | 11.0 | 6.9 | 0.0 | 16.3 | 0.0 | 100.0 | 53 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |
| Married | 0.1 | 35.8 | 36.6 | 7.3 | 7.3 | 1.8 | 5.4 | 0.4 | 5.0 | 0.4 | 100.0 | 546 |
| Divorced | * | * | * | * | * | * | * | * | * | * | * | 21 |
| Widowed | * | * | * | * | * | * | * | * | * | * | * | 17 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 0.0 | 27.3 | 43.9 | 14.4 | 6.8 | 0.0 | 2.3 | 0.0 | 5.3 | 0.0 | 100.0 | 45 |
| 1-2 | 0.0 | 44.4 | 30.7 | 4.1 | 10.9 | 0.5 | 7.4 | 0.0 | 2.1 | 0.0 | 100.0 | 181 |
| 3-4 | 0.2 | 40.8 | 32.5 | 8.8 | 7.4 | 0.9 | 4.1 | 1.1 | 3.6 | 0.5 | 100.0 | 204 |
| 5+ | 0.0 | 19.0 | 40.3 | 5.6 | 7.6 | 5.6 | 8.3 | 0.0 | 12.9 | 0.7 | 100.0 | 153 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 0.1 | 36.3 | 34.2 | 6.9 | 9.9 | 0.8 | 6.4 | 0.5 | 4.9 | 0.0 | 100.0 | 450 |
| Rural | 0.0 | 31.1 | 37.0 | 7.1 | 3.5 | 5.9 | 5.1 | 0.0 | 8.6 | 1.7 | 100.0 | 133 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 0.0 | 36.1 | 30.2 | 7.7 | 10.7 | 1.9 | 8.5 | 0.7 | 4.0 | 0.3 | 100.0 | 327 |
| North | 0.2 | 34.4 | 41.2 | 2.9 | 7.3 | 1.6 | 3.8 | 0.0 | 7.9 | 0.7 | 100.0 | 164 |
| South | 0.0 | 32.9 | 40.2 | 11.5 | 2.7 | 2.9 | 1.8 | 0.0 | 8.0 | 0.0 | 100.0 | 93 |
| Educational level attended |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | (0.0) | (0.0) | (0.0) | (0.0) | (15.4) | (35.4) | (9.8) | (0.0) | (39.4) | (0.0) | 100.0 | 21 |
| Elementary | (0.0) | (0.0) | (0.0) | (0.0) | (16.8) | (13.5) | (31.5) | (0.0) | (38.2) | (0.0) | 100.0 | 18 |
| Preparatory | 0.0 | 0.0 | 3.6 | 3.2 | 16.9 | 5.9 | 32.7 | 0.0 | 37.6 | 0.0 | 100.0 | 28 |
| Secondary | 0.0 | 0.0 | 21.5 | 30.9 | 24.9 | 0.0 | 16.1 | 2.2 | 3.5 | 1.1 | 100.0 | 106 |
| Higher | 0.1 | 49.8 | 43.7 | 1.7 | 3.0 | 0.0 | 0.4 | 0.0 | 1.0 | 0.3 | 100.0 | 411 |
| Preparatory + secondary | 0.0 | 0.0 | 17.8 | 25.2 | 23.3 | 1.2 | 19.5 | 1.7 | 10.5 | 0.8 | 100.0 | 134 |
| Total | 0.1 | 35.1 | 34.9 | 7.0 | 8.5 | 2.0 | 6.1 | 0.4 | 5.7 | 0.4 | 100.0 | 584 |

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.
${ }^{1}$ Mainly in sales, services, and agriculture

It is of interest to note that while Table 3.5 reflects expected urban-rural differences for agricultural employment ( 1 percent and 6 percent, respectively), there is not a pronounced urban-rural difference in the professional-technical-managerial sector: 71 percent of employed urban women are in this sector, as compared with 68 percent of employed rural women. The proportion of women employed in the pro-fessional-technical-managerial sector is up from 64 percent in 1997 to 70 percent in 2002.

### 3.4.3 Decision on Use of Women's Earnings

Women earning cash for their work were asked who mainly decides how their earnings will be used, and the proportion of household expenditures that is met by their earnings. Table 3.6 shows that 49 percent of women reported that they and their husband or someone else jointly decide on how the money is to be spent, and 46 percent of women stated that it is their sole decision. Older women, women

| Percent distribution of ever-married women employed in the 7 days preceding the survey receiving cash earnings by person who decides how earnings are to be used and by proportion of household expenditures met by earnings, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Person who decides how earnings are used |  |  | Total | Proportion of household expenditures met by earnings |  |  |  | Total | Number of women |
| Background characteristic | Self only | Jointly ${ }^{1}$ | Someone else only ${ }^{2}$ |  | Almost none/ none | Less than half | Half or more | All |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | * | * | * | 2 |
| 20-24 | (40.7) | (43.9) | (15.4) | (100.0) | (8.2) | (30.9) | (54.2) | (6.7) | (100.0) | 31 |
| 25-29 | 39.9 | 54.1 | 6.0 | 100.0 | 12.3 | 19.8 | 57.2 | 10.6 | 100.0 | 82 |
| 30-34 | 43.4 | 52.8 | 3.8 | 100.0 | 7.0 | 23.4 | 56.2 | 13.4 | 100.0 | 157 |
| 35-39 | 46.7 | 48.7 | 4.6 | 100.0 | 4.2 | 14.7 | 67.3 | 13.8 | 100.0 | 133 |
| 40-44 | 49.1 | 46.6 | 4.3 | 100.0 | 6.5 | 10.8 | 61.8 | 20.9 | 100.0 | 113 |
| 45-49 | (64.4) | (31.3) | (4.3) | (100.0) | (0.0) | (24.3) | (55.2) | (20.5) | (100.0 ) | 46 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Married | 42.8 | 52.0 | 5.2 | 100.0 | 6.3 | 18.4 | 63.1 | 12.3 | 100.0 | 526 |
| Divorced | * | * | * | * | , | , |  | * | * | 21 |
| Widowed | * | * | * | * | * | * | * | * | * | 17 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |
| 0 | 59.5 | 35.9 | 4.5 | 100.0 | 20.6 | 28.7 | 45.1 | 5.6 | 100.0 | 45 |
| 1-2 | 38.8 | 55.6 | 5.6 | 100.0 | 6.0 | 21.7 | 57.0 | 15.3 | 100.0 | 179 |
| 3-4 | 43.8 | 50.8 | 5.4 | 100.0 | 5.8 | 14.2 | 66.9 | 13.1 | 100.0 | 199 |
| $5+$ | 54.8 | 41.1 | 4.2 | 100.0 | 3.6 | 18.0 | 59.0 | 19.4 | 100.0 | 141 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 47.2 | 47.4 | 5.4 | 100.0 | 7.4 | 19.1 | 59.3 | 14.2 | 100.0 | 441 |
| Rural | 42.7 | 53.2 | 4.1 | 100.0 | 3.1 | 17.4 | 62.6 | 16.9 | 100.0 | 123 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Central | 48.3 | 46.9 | 4.8 | 100.0 | 8.6 | 19.0 | 56.1 | 16.3 | 100.0 | 317 |
| North | 47.4 | 47.9 | 4.8 | 100.0 | 2.9 | 19.1 | 66.8 | 11.2 | 100.0 | 155 |
| South | 36.9 | 56.3 | 6.8 | 100.0 | 5.2 | 17.2 | 62.0 | 15.6 | 100.0 | 91 |
| Educational level attended |  |  |  |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | * | * | * | * | 16 |
| Elementary | * | * | * |  | * | (23. | * | * | * | 13 |
| Preparatory | (81.5) | (11.8) | (6.7) | (100.0) | (7.3) | (23.4) | (37.9) | (31.5) | (100.0) | 23 |
| Secondary | 47.4 | 45.0 | 7.6 | 100.0 | 1.9 | 23.1 | 60.9 | 14.1 | 100.0 | 104 |
| Higher | 41.7 | 54.2 | 4.1 | 100.0 | 8.1 | 17.1 | 63.2 | 11.7 | 100.0 | 407 |
| Preparatory + secondary | 53.7 | 38.9 | 7.4 | 100.0 | 2.9 | 23.1 | 56.7 | 17.3 | 100.0 | 127 |
| Total | 46.2 | 48.7 | 5.1 | 100.0 | 6.5 | 18.7 | 60.0 | 14.8 | 100.0 | 564 |
| 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. <br> ${ }^{1}$ With husband or someone else <br> ${ }^{2}$ Includes husband |  |  |  |  |  |  |  |  |  |  |

in urban areas, women who reside in the North and Central regions, and those with no children are more likely than women in other categories to make independent decisions on spending their earnings. As regards the proportion of household expenditures met by women's earnings, Table 3.6 shows that 60 percent of women reported that their earnings meet half or more of household expenditures, 19 percent said that they meet less than half and 15 percent reported that they cover all household expenditures. In general, older women, women with more children, rural women and those living in the Central and South regions are more likely than women in other categories to fully cover household expenditures from their earnings.

### 3.5 Women's Participation in Household Decisionmaking

In order to identify the role of women in household decisionmaking, the respondents were asked about the person who usually has the final decision on the following five issues: respondent's own health care, large household purchases, daily household purchases, visits to family or relatives, and what food to cook daily.

Table 3.7 shows that currently married women have the final say on what food to be cooked daily ( 69 percent), whereas 66 percent reported that visiting family and relatives is decided jointly with the husband. Purchase of either large or daily household needs is more likely to be the decision of the husband alone ( 34 percent and 31 percent respectively) than any other category of decisionmaking; however, most currently married women ( 64 percent) have a say in these matters, either alone or jointly with their spouse.

| Percent distribution of all ever-married women by person who has the final say in making specific decisions, according to current marital status and type of decision, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Currently married |  |  |  |  |  |  | Not married ${ }^{1}$ |  |  |  |  |  |
| Decision | Self only | Jointly with husband | Jointly with someone else | Husband only | Someone else only | Decision not made/not applicable | Total | Number of women | Self only | Jointly with someone else | Someone else only | $\begin{aligned} & \text { Decision } \\ & \text { not } \\ & \text { made/not } \\ & \text { applicable } \end{aligned}$ | Total | Number of women |
| Own health care | 61.4 | 25.9 | 0.5 | 11.7 | 0.5 | 0.0 | 100.0 | 5,706 | 87.7 | 4.6 | 7.2 | 0.6 | 100.0 | 300 |
| Large household purchases | 10.5 | 53.0 | 0.5 | 33.6 | 2.2 | 0.2 | 100.0 | 5,706 | 59.4 | 11.2 | 25.3 | 4.1 | 100.0 | 300 |
| Daily household purchases | 37.4 | 26.8 | 0.8 | 31.2 | 3.7 | 0.0 | 100.0 | 5,706 | 62.5 | 8.0 | 25.5 | 4.0 | 100.0 | 300 |
| Visits to family/relatives or friends | 15.5 | 66.0 | 0.7 | 16.8 | 0.9 | 0.1 | 100.0 | 5,706 | 61.6 | 15.5 | 18.8 | 4.0 | 100.0 | 300 |
| What food to cook each day | 69.2 | 19.1 | 4.5 | 4.0 | 3.0 | 0.2 | 100.0 | 5,706 | 60.9 | 15.4 | 20.0 | 3.7 | 100.0 | 300 |

As regards the respondents' own health care, 61 percent of currently married women reported that they decide for themselves about seeking their own health care, and one in four women said that such decision is made jointly with the husband. Twelve percent of women reported that their husbands have the final say over their wives' health care.

Regarding currently unmarried women, Table 3.7 indicates that divorced or widowed women are more likely to have the final say regarding their own health care ( 88 percent) than are married women (61 percent). Women who are not currently married are much more likely to have the final say with regard to decisions made about any kind of purchase, or with regard to visiting family or relatives, than are currently married women. However, it is of interest to note that for a full 25 percent of these women, someone else has the final word when it comes to making decisions about purchases.

Table 3.8 demonstrates women's participation in household decisionmaking according to background characteristics. Forty-two percent of women decided alone or jointly with another person on all five of the said issues (Figure 3.1), whereas only one percent of women did not have a say in making decisions on any of these issues. Women are most likely to have the final or joint say with regard to what foods are cooked each day ( 92 percent) and their own health care ( 88 percent), while they are least likely to participate in decisionmaking about large or daily household purchases ( 64 percent and 65 percent, respectively).

| Percentage of all ever-married women who say that they alone or jointly have the final say in specific decision, by background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Alone or jointly has final say in: |  |  |  |  | All specified decisions | None of the specified decisions | Number of women |
| Background characteristic | Own health care | Large household purchases | Daily household purchases | Visits to family, relatives, friends | What food to cook daily |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 78.9 | 41.1 | 46.3 | 58.2 | 71.4 | 17.6 | 5.2 | 158 |
| 20-24 | 83.4 | 58.4 | 52.8 | 71.7 | 85.3 | 31.5 | 2.9 | 728 |
| 25-29 | 87.7 | 59.2 | 61.4 | 79.0 | 91.6 | 36.4 | 0.5 | 1,175 |
| 30-34 | 89.1 | 64.1 | 68.6 | 84.3 | 93.4 | 42.7 | 0.5 | 1,354 |
| 35-39 | 89.6 | 68.0 | 68.7 | 85.6 | 96.1 | 47.2 | 0.6 | 1,071 |
| 40-44 | 90.7 | 70.2 | 73.5 | 86.7 | 94.8 | 50.7 | 1.0 | 862 |
| 45-49 | 87.9 | 72.5 | 67.3 | 87.1 | 91.9 | 47.1 | 0.2 | 659 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 87.8 | 64.0 | 65.0 | 82.2 | 92.8 | 41.1 | 0.9 | 5,706 |
| Divorced | 92.2 | 49.5 | 50.4 | 55.4 | 55.6 | 31.9 | 3.8 | 130 |
| Widowed | 92.3 | 86.7 | 85.8 | 93.6 | 92.2 | 75.3 | 1.3 | 170 |
| Number of living children |  |  |  |  |  |  |  |  |
| 0 | 82.9 | 57.8 | 55.0 | 74.8 | 81.8 | 32.8 | 2.8 | 521 |
| 1-2 | 87.4 | 61.4 | 61.2 | 77.2 | 88.3 | 37.8 | 1.3 | 1,490 |
| 3-4 | 88.3 | 66.6 | 67.3 | 85.2 | 94.1 | 44.3 | 0.7 | 1,807 |
| $5+$ | 89.5 | 66.0 | 68.8 | 84.3 | 95.2 | 44.8 | 0.5 | 2,188 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 88.5 | 64.6 | 66.8 | 83.2 | 91.8 | 43.0 | 1.0 | 4,799 |
| Rural | 86.3 | 63.4 | 59.1 | 77.1 | 92.9 | 37.2 | 0.8 | 1,207 |
| Region |  |  |  |  |  |  |  |  |
| Central | 88.9 | 64.9 | 67.7 | 81.7 | 91.7 | 44.5 | 1.1 | 3,898 |
| North | 86.3 | 64.2 | 61.0 | 83.2 | 92.6 | 36.8 | 0.6 | 1,542 |
| South | 86.9 | 61.0 | 60.5 | 80.6 | 92.5 | 37.7 | 0.8 | 566 |
| Educational level attended |  |  |  |  |  |  |  |  |
| No education | 83.4 | 55.0 | 58.2 | 72.6 | 91.6 | 35.4 | 0.8 | 363 |
| Elementary | 85.8 | 59.2 | 65.1 | 75.1 | 91.5 | 37.8 | 1.7 | 689 |
| Preparatory | 87.0 | 60.0 | 64.0 | 79.4 | 90.3 | 38.8 | 1.6 | 1,231 |
| Secondary | 88.5 | 63.3 | 65.6 | 82.0 | 91.2 | 41.8 | 0.9 | 2,247 |
| Higher | 90.5 | 74.2 | 67.6 | 89.6 | 95.0 | 48.0 | 0.2 | 1,476 |
| Preparatory + secondary | 87.9 | 62.1 | 65.0 | 81.1 | 90.9 | 40.7 | 1.2 | 3,478 |
| Employment |  |  |  |  |  |  |  |  |
| Not employed | 87.6 | 63.1 | 64.9 | 81.3 | 91.9 | 41.0 | 1.1 | 5,422 |
| Employed | 92.3 | 76.0 | 68.2 | 88.3 | 93.0 | 50.1 | 0.1 | 584 |
| Total | 88.1 | 64.3 | 65.3 | 82.0 | 92.0 | 41.9 | 1.0 | 6,006 |

# Figure 3.1 Distribution of Women According to the Number of Decisions in Which They Participate in the Final Say 



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Older women, those with more living children, those living in urban areas, women with higher education, and employed women are more likely than women in other categories to participate in household decisionmaking on all of the five issues. Eighty-three percent of uneducated women participate in the final decision regarding their own health care, in contrast to 91 percent of those with higher than secondary education. One in two uneducated women participates in the final say on household large purchases, compared with three in four women with higher than secondary education. Widowed women have the greatest amount of decisionmaking power compared with currently married or divorced women.

It is interesting that there is very little regional variation within each of the specified categories of decisionmaking. The decision that demonstrates the greatest regional variation is that regarding daily purchases: women living in the Central Region are more likely to have a say in daily purchases ( 68 percent) than women living in the North or South regions ( 61 percent). Women in the Central Region are also the most likely to have a say in all specified decisions.

### 3.6 Domestic violence: Women's Attitudes toward Wife Beating

In recent years, there has been increasing concern about violence against women in general, and domestic violence in particular, in both developed and developing countries (United Nations General Assembly, 1991). Not only has domestic violence against women been acknowledged worldwide as a violation of the basic human rights of women, but an increasing amount of research highlights the health burdens, intergenerational effects, and demographic consequences of such violence (Heise et al., 1998, 1994; Jejeebhoy, 1998; Ramasubban and Singh, 1998; Rao and Bloch, 1993).

Both tolerance of and experience of domestic violence are significant barriers to the empowerment of women, with consequences for women's health, their health-seeking behavior, and the health of their children. In JPFHS 2002, women were asked questions with regard to whether they viewed wife beating as justified.

Learning more about attitudes toward domestic violence is important in a context such as Jordan where, in some cases, domestic violence and even murder of one's wife or daughter, called "honour killing" (Faqir, 2001), has been justified by ideas about family honor and what is required to keep it intact.

In order to assess women's attitudes toward wife beating, the survey asked whether respondents thought that a husband is justified in beating his wife for each of the following reasons: if she burns the food, argues with him, goes out without telling him, neglects the children, disobeys the husband, insults the husband, betrays the husband, violates the religion, or disrespects his family. These reasons, which range from reasons that involve suspicions about a wife's moral character to those that may be considered more trivial, such as not cooking properly, were chosen to provide variation in the perceived seriousness of violations of behavioral norms. Table 3.9 gives the percentages of ever-married women who agree with various reasons for wife beating by background characteristics.

The vast majority ( 87 percent) of women accept at least one reason as a justification for wife beating. Women are most likely to agree that betraying the husband justifies wife beating ( 83 percent), while almost no women cite a woman's violation of religion or her disrespect of the husband's family as reasons for wife beating ( 0.2 percent), and relatively few believe that a man is justified in hitting his wife if she argues with him ( 4 percent) or insults him ( 10 percent). Sixty percent of women agree that a husband is justified in using violence against his wife if she burns the food, and 52 percent believe the same if she disobeys her husband.

Table 3.9 indicates that the youngest women are the most likely to agree with each of the different reasons justifying wife beating, with the exception being if a wife argues with her husband, with which reason the oldest age group is most likely to agree. With regard to marital status, the only consistent pattern is that widowed women are the most likely to agree with most of the specified justifications for wife beating.

Women with no children look quite a lot like women with several children in terms of their willingness to accept justifications for wife beating: 90 percent of women with no children accept at least one reason for wife beating, as do 90 percent of women with five or more children. Women with 1-2 and 3-4 children are somewhat less likely to justify wife beating.

There are also differences in terms of justification of violence between those who live in urban versus rural areas, with urban women being less likely to accept justifications of violence (urban: 86 percent; rural: 92 percent). Table 3.9 and Figure 3.2 also indicate that women who have more education, who are employed, or who have more say in household decisionmaking are the least likely to agree with any of the reasons for justifying wife beating.

| Table 3.9 Women's attitude toward wife beating |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all ever-married women who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |
| Husband is justified in hitting or beating his wife if she: |  |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Burns the food | Argues with him | Goes out without telling him | Neglects the children | Disobeys the husband | Insults the husband | Betrays the husband | Violates the religion | Shows disrespect for husband's family | Agrees with at least one specified reason | Number of women |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 72.9 | 4.7 | 34.7 | 45.9 | 69.9 | 18.1 | 90.9 | 0.0 | 0.0 | 94.8 | 158 |
| 20-24 | 63.2 | 2.6 | 26.8 | 38.4 | 56.1 | 9.2 | 89.1 | 0.4 | 0.2 | 91.3 | 728 |
| 25-29 | 60.0 | 2.7 | 21.7 | 34.1 | 52.1 | 7.5 | 85.6 | 0.0 | 0.1 | 89.3 | 1,175 |
| 30-34 | 56.3 | 3.3 | 20.1 | 31.3 | 48.2 | 8.7 | 83.3 | 0.1 | 0.0 | 86.2 | 1,354 |
| 35-39 | 59.4 | 4.5 | 24.9 | 36.8 | 52.3 | 9.8 | 82.8 | 0.4 | 0.4 | 86.7 | 1,071 |
| 40-44 | 57.9 | 5.0 | 22.7 | 37.2 | 49.8 | 11.7 | 79.3 | 0.0 | 0.3 | 83.4 | 862 |
| 45-49 | 59.8 | 8.6 | 31.2 | 46.6 | 55.6 | 17.5 | 78.3 | 0.7 | 0.0 | 83.6 | 659 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |
| Married | 59.5 | 4.0 | 23.9 | 36.3 | 52.1 | 10.1 | 83.6 | 0.2 | 0.2 | 87.2 | 5,706 |
| Divorced | 58.9 | 6.1 | 25.0 | 39.1 | 52.0 | 12.3 | 77.3 | 0.0 | 0.0 | 81.1 | 130 |
| Widowed | 60.2 | 7.6 | 27.6 | 44.1 | 59.5 | 16.8 | 81.9 | 0.0 | 0.0 | 86.3 | 170 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 62.5 | 7.4 | 31.7 | 41.6 | 56.9 | 12.8 | 86.2 | 0.3 | 0.1 | 90.3 | 521 |
| 1-2 | 55.7 | 2.4 | 20.5 | 32.2 | 48.0 | 7.1 | 81.2 | 0.1 | 0.2 | 84.9 | 1,490 |
| 3-4 | 54.9 | 2.6 | 18.7 | 29.4 | 47.2 | 7.7 | 81.0 | 0.1 | 0.1 | 84.3 | 1,807 |
| $5+$ | 65.1 | 6.0 | 29.1 | 44.3 | 58.3 | 14.2 | 86.3 | 0.4 | 0.3 | 90.0 | 2,188 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 56.1 | 3.0 | 20.8 | 33.2 | 49.1 | 8.2 | 82.4 | 0.2 | 0.1 | 85.7 | 4,799 |
| Rural | 72.9 | 9.0 | 37.1 | 49.9 | 64.8 | 19.0 | 87.7 | 0.2 | 0.5 | 92.2 | 1,207 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Central | 56.1 | 3.1 | 20.7 | 32.4 | 49.8 | 8.9 | 82.3 | 0.2 | 0.2 | 85.2 | 3,898 |
| North | 63.8 | 5.0 | 27.4 | 43.1 | 54.3 | 11.1 | 84.2 | 0.2 | 0.0 | 90.0 | 1,542 |
| South | 70.7 | 9.1 | 37.9 | 47.7 | 63.7 | 18.1 | 89.2 | 0.7 | 0.5 | 91.8 | 566 |
| Educational level attended |  |  |  |  |  |  |  |  |  |  |  |
| No education | 84.1 | 21.0 | 63.1 | 73.6 | 82.8 | 41.7 | 93.0 | 0.0 | 0.0 | 96.9 | 363 |
| Elementary | 77.6 | 10.5 | 48.0 | 57.3 | 72.5 | 23.1 | 90.8 | 0.4 | 0.1 | 94.5 | 689 |
| Preparatory | 69.3 | 5.4 | 28.2 | 43.1 | 61.5 | 13.5 | 86.3 | 0.2 | 0.2 | 91.0 | 1,231 |
| Secondary | 58.9 | 1.4 | 19.5 | 34.0 | 49.8 | 5.4 | 85.3 | 0.1 | 0.2 | 88.2 | 2,247 |
| Higher | 37.6 | 0.3 | 6.7 | 16.4 | 31.4 | 1.6 | 72.4 | 0.5 | 0.3 | 76.1 | 1,476 |
| Preparatory + secondary | 62.6 | 2.8 | 22.6 | 37.2 | 53.9 | 8.3 | 85.6 | 0.1 | 0.2 | 89.2 | 3,478 |
| Employment |  |  |  |  |  |  |  |  |  |  |  |
| Not employed | 61.3 | 4.4 | 25.5 | 38.3 | 54.0 | 10.9 | 84.7 | 0.2 | 0.2 | 88.4 | 5,422 |
| Employed | 42.6 | 1.8 | 11.1 | 20.8 | 35.8 | 5.7 | 71.2 | 0.5 | 0.4 | 74.5 | 584 |
| Number of decisions in which woman has final say |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 69.0 | 10.8 | 41.3 | 49.7 | 65.8 | 30.3 | 92.4 | 0.0 | 0.0 | 97.6 | 58 |
| 1-2 | 69.7 | 8.7 | 36.9 | 49.5 | 63.7 | 18.5 | 89.8 | 0.1 | 0.0 | 92.9 | 765 |
| 3-4 | 62.7 | 3.6 | 24.4 | 36.6 | 55.6 | 9.7 | 86.4 | 0.2 | 0.2 | 89.9 | 2,669 |
| 5 | 52.7 | 3.3 | 19.4 | 32.3 | 45.0 | 8.2 | 78.1 | 0.3 | 0.2 | 82.0 | 2,515 |
| Total | 59.5 | 4.2 | 24.1 | 36.6 | 52.3 | 10.4 | 83.4 | 0.2 | 0.2 | 87.0 | 6,006 |

Figure 3.2 Percentage of Women Who Agree with at Least One Reason Justifying a Husband Beating His Wife


JPFHS 2002

### 3.7 Women's Agreement with Reasons for Refusing Sexual Relations

The extent of control women have over when they have sex has important implications for demographic and health outcomes. To measure women's agreement with a woman's right to refuse her husband sex, the JPFHS 2002 asked respondents whether a wife is justified in refusing to have sex with her husband under three circumstances: she is tired or not in the mood, she has recently given birth, and she knows her husband has a sexually transmitted infection or AIDS. These three circumstances for which women's opinions are sought were chosen because they are effective in combining women's rights and women's health issues. Table 3.10 shows the percentage of women who say that women are justified in refusing sex to their husband for specific reasons by background characteristics. Note that, unlike in the case of the previous indicator of empowerment, this indicator is positively related to empowerment: the more reasons women agree with, the higher is their "empowerment" in terms of their belief in women's sexual rights.

For any given reason, the majority of women age 15-49 in Jordan agree that women can refuse sex to their husband: 94 percent believe a wife is justified in refusing her husband sex if he has a sexually transmitted infection, 95 percent believe the same if a wife has recently given birth, and 69 percent also agree that a wife is justified in refusing sex with her husband if she is tired or not in the mood. A very small proportion of women (1 percent) said that women were not justified in refusing their husband sex for any of the given reasons.

Because almost all Jordanian women agree that wives are justified in refusing sex under the stated circumstances, there is little variation in agreement by demographic factors, especially regarding refusal due to husband's STI or due to recent childbirth. Nevertheless, some patterns of agreement do emerge: agreement with reasons for refusing sex increases with level of education, and employed women are marginally more likely to agree with any reason than women who are not employed. For example, 79 percent of women with no education agree that a wife is justified in refusing sexual relations with her husband if he has an STI; among those with higher than secondary education, 98 percent agree with the wife's right to refuse.

| Table 3.10 Women's attitude toward refusing sex with husband |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all ever-married women who believe that a wife is justified in refusing to have sex with her husband for specific reasons, according to background characteristics, Jordan 2002 |  |  |  |  |  |
| Wife is justified in refusing sex with her husband if she: |  |  |  |  |  |
| Background characteristic | Knows husband has a sexually transmitted disease | Has recently given birth | Is tired or not in the mood | Percentage who agree with none of the specified reasons | Number of women |
| Age |  |  |  |  |  |
| 15-19 | 89.5 | 94.0 | 65.0 | 0.2 | 158 |
| 20-24 | 93.1 | 96.3 | 64.4 | 0.9 | 728 |
| 25-29 | 93.7 | 94.5 | 70.5 | 1.6 | 1,175 |
| 30-34 | 96.4 | 95.6 | 69.4 | 0.9 | 1,354 |
| 35-39 | 95.5 | 95.7 | 69.8 | 1.2 | 1,071 |
| 40-44 | 94.1 | 96.0 | 68.5 | 1.9 | 862 |
| 45-49 | 92.4 | 93.5 | 68.3 | 2.7 | 659 |
| Marital status |  |  |  |  |  |
| Married | 94.4 | 95.3 | 68.8 | 1.3 | 5,706 |
| Divorced | 92.6 | 92.3 | 73.1 | 4.5 | 130 |
| Widowed | 93.0 | 95.8 | 62.9 | 3.0 | 170 |
| Number of living children |  |  |  |  |  |
| 0 | 92.1 | 92.9 | 62.5 | 1.5 | 521 |
| 1-2 | 95.0 | 96.0 | 70.6 | 1.2 | 1,490 |
| 3-4 | 95.5 | 95.5 | 70.2 | 1.1 | 1,807 |
| 5+ | 93.5 | 95.2 | 67.6 | 1.8 | 2,188 |
| Residence |  |  |  |  |  |
| Urban | 94.9 | 95.5 | 68.8 | 1.3 | 4,799 |
| Rural | 92.3 | 94.5 | 68.4 | 1.6 | 1,207 |
| Region |  |  |  |  |  |
| Central | 94.2 | 95.0 | 67.4 | 1.5 | 3,898 |
| North | 95.3 | 96.7 | 71.8 | 0.7 | 1,542 |
| South | 93.0 | 93.7 | 69.2 | 2.3 | 566 |
| Educational level attended |  |  |  |  |  |
| No education | 79.3 | 86.7 | 61.5 | 7.3 | 363 |
| Elementary | 90.6 | 91.6 | 65.1 | 3.2 | 689 |
| Preparatory | 93.7 | 96.0 | 68.4 | 1.0 | 1,231 |
| Secondary | 96.2 | 96.4 | 70.7 | 0.8 | 2,247 |
| Higher | 97.6 | 96.9 | 69.4 | 0.4 | 1,476 |
| Preparatory + secondary | 95.3 | 96.2 | 69.9 | 0.9 | 3,478 |
| Employment |  |  |  |  |  |
| Not employed | 94.1 | 95.2 | 68.5 | 1.5 | 5,422 |
| Employed | 96.5 | 96.4 | 70.3 | 0.5 | 584 |
| Number of decisions in which woman has final say |  |  |  |  |  |
| 0 | 84.8 | 82.9 | 60.1 | 8.4 | 58 |
| 1-2 | 90.7 | 93.0 | 67.4 | 3.3 | 765 |
| 3-4 | 94.6 | 95.8 | 66.8 | 0.9 | 2,669 |
| 5 | 95.4 | 95.7 | 71.3 | 1.2 | 2,515 |
| Number of reasons wife beating is justified |  |  |  |  |  |
| 0 | 96.5 | 97.3 | 76.6 | 0.4 | 778 |
| 1-2 | 96.2 | 96.4 | 71.6 | 0.9 | 2,086 |
| 3-4 | 94.2 | 95.1 | 65.1 | 1.3 | 1,925 |
| 5+ | 90.1 | 92.3 | 64.5 | 3.0 | 1,217 |
| Total | 94.4 | 95.3 | 68.7 | 1.4 | 6,006 |

As would be expected, women who are most empowered in terms of the number of decisions in which they participate in the final say are also the most likely to agree that a wife is justified in refusing sex to her husband. This relationship holds in terms of justification of domestic violence: women who say that domestic violence is never justified are the most likely to agree with any of the three reasons for refusing sex. Among women who do not agree with any justifications of domestic violence, 76 percent think that a wife is justified in refusing sex if she is tired or not in the mood, while among women who agree with 5 or more justifications for wife beating, 65 percent believe a wife who is tired or not in the mood is justified in refusing sexual relations.

Fertility measures in this chapter are based on the reported birth histories of ever-married women age 15 to 49 who were interviewed in the 2002 JPFHS. Data were collected in two sections. First, each woman was asked a series of questions on the number of her sons and daughters living with her, the number living elsewhere, and the number who had died. Next, for each live birth, she was asked to report the sex, date of birth, whether the birth was single or multiple, and whether the child was living in the household or elsewhere. The survival status of each live birth was also asked. For deceased children, the age at death was recorded. As an indicator of future fertility, information was collected on whether married women were pregnant at the time of the interview.

Through previous experience in using birth histories to estimate fertility levels and trends, it has been found that the underreporting of children ever born and the displacement of children's dates of birth are common in many countries. Underreporting of children affects estimates of fertility levels, whereas misreporting of children's date of birth distorts fertility trends over time. Regarding the latter, one of the characteristics of the 2002 JPFHS is the high quality of age and date reporting. Virtually all women knew their age, their age at marriage and their date of marriage. For children's age and date of birth reporting, both month and year of birth are documented for all births recorded in the birth history (see Table C. 3 in Appendix C). This information lends confidence to the quality of basic data used in the estimation of fertility measures.

Because fertility rates presented in this chapter are based on direct measures derived from the birth history section of the JPFHS, two potential drawbacks require some attention. First, only surviving women were interviewed in the survey. This would bias the rates if mortality of women of childbearing age were high and if fertility of surviving and non-surviving women differed significantly - neither of which is the case in Jordan. Limiting the survey respondents to ever-married women presents another potential bias. The number of births to single women in Jordan is negligible. Although information on fertility was obtained only from ever-married women, estimates can be made for all women (regardless of marital status) based on information in the household questionnaire; these estimates assume that women who have never been married have had no children.

This chapter also analyzes levels of fertility by background characteristics of women, which include age, residence, and education level. Factors related to fertility - including the mean age at birth, birth intervals, and teenage fertility - are also analyzed.

### 4.1 Fertility Levels and Trends

Age-specific fertility rates and total fertility rates (TFR) for the three-year period preceding the survey are shown in Table 4.1, along with data from four previous surveys for comparison - the 1976 Jordan Fertility Survey (JFS), the 1983 Jordan Fertility and Family Health Survey (JFFHS), and the 1990 and 1997 JPFHS. Data for the 1976 survey are calculated based on the two years preceding the survey (1975-1976), while those for 1983, 1990, 1997 and 2002 refer to the three years preceding the survey (1981-1983, 1988-1990, 1995-1997, and 2000-2002 respectively). Comparison of the findings from the five surveys shows the trends in fertility levels over a 26 -year period.

The TFR is the sum of the age-specific fertility rates; it represents the average number of children a woman in Jordan would have at the end of her reproductive years if she were subject to the observed

| Table 4.1 Trends in fertility |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Age-specific fertility rates and total fertility rates, selected surveys, Jordan |  |  |  |  |  |
| 1976-2002 |  |  |  |  |  |
|  |  |  |  |  |  |
|  | JFS | JFFHS | JPFHS | JPFHS | JPFHS |
| Age group | $1976^{1}$ | $1983^{2}$ | $1990^{2}$ | $1997^{2}$ | $2002^{2}$ |
| $15-19$ | 71 | 49 | 49 | 43 | 28 |
| $20-24$ | 300 | 229 | 219 | 172 | 150 |
| $25-29$ | 367 | 335 | 296 | 246 | 202 |
| $30-34$ | 332 | 305 | 264 | 206 | 184 |
| $35-39$ | 240 | 233 | 188 | 144 | 122 |
| $40-44$ | 112 | 127 | 79 | 48 | 43 |
| $45-49$ | 47 | 40 | 19 | 11 | 5 |
| TFR 15-49 | 7.4 | 6.6 | 5.6 | 4.4 | 3.7 |

age-specific rates. At current levels, a woman would give birth to an average of 3.7 children in her lifetime. That is 50 percent lower than the rate recorded in 1976 ( 7.4 births per woman). Data in Table 4.1 indicate that the pace of fertility decline has been faster in recent years. For example, fertility declined 11 percent between 1976 and 1983 (dropping from 7.4 to 6.6 births per woman), 15 percent between 1983 and 1990 (dropping from 6.6 to 5.6 births per woman), 21 percent between 1990 and 1997 (dropping from 5.6 to 4.4 births per woman), and 16 percent between 1997 and 2002 (dropping from 4.4 to 3.7 births per woman). In the past twelve years (1990-2002), the total fertility rate in Jordan has declined by 34 percent.

Decline in fertility levels in Jordan occurred among all age groups; however, the most significant proportional decline is that which has been observed among teenagers - a 60 percent drop from 71 births in the 1976 JFS to 28 births per 1,000 women in the 2002 JPFHS. Figure 4.1 shows that the bulk of the decline in fertility since 1990 can be attributed to the decrease in the number of births among women between the ages of 20 and 39. At the same time, the age-specific fertility rates in all of the surveys are highest for the 25-29 age group.

Figure 4.1 Trends in Age-specific Fertility Rates, Various Sources, 1976-2002


Table 4.2 and Figure 4.2 present the age-specific fertility rates and cumulative fertility for the three-year period preceding the survey by urban-rural residence. In Table 4.2, the general fertility rate (GFR) is the annual number of live births per 1,000 women age $15-44$ in the three years preceding the survey. The crude birth rate (CBR) is the annual number of live births per 1,000 population for the same period. In general, women in rural areas have almost one child more than urban women (4.2 births compared with 3.5 births). The most significant differences are found in the middle of the women's reproductive period (age 30-34), where rural women have an average 0.037 births more than urban women. According to the age-specific fertility rates shown in the table, women in Jordan will have, on average, less than one child by age 25 , but will have almost three children (2.8) by the time they are 35 years old.

Table 4.2 also indicates that the overall crude birth rate is 29 per 1,000, yet it is slightly higher in rural than in urban areas ( 31 per 1,000 and 28 per 1,000 respectively). The GFR reached 122 births per 1,000 women age 15-44. The rate differs according to residence, where it is higher in rural areas ( 132 per 1,000 ) compared with urban areas ( 118 per 1,000 ).

## Table 4.2 Current fertility

Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Jordan 2002

|  | Residence |  |  |
| :--- | ---: | ---: | ---: |
| Age group | Urban |  | Rural | Total |  | 30 | 20 | 28 |
| :--- | ---: | ---: | ---: |
| $15-19$ | 146 | 162 | 150 |
| $20-24$ | 196 | 225 | 202 |
| $25-29$ | 176 | 213 | 184 |
| $30-34$ | 39 | 140 | 122 |
| $35-39$ | 4 | 7 | 43 |
| $40-44$ | 3.5 | 4.2 | 3.7 |
| $45-49$ | 118 | 132 | 122 |
|  | 28.4 | 31.3 | 29.0 |
| TFR 15-49 |  |  |  |
| GFR |  |  |  |
| CBR |  |  |  |

Note: Rates for age group 45-49 may be slightly biased due to truncation.
TFR: Total fertility rate for ages 15-49, 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 4.2 Age-specific Fertility Rates by Urban-rural Residence


JPFHS 2002

The fertility differentials according to background characteristics of women are shown in Table 4.3. Column one shows the total fertility rates for the three years preceding the survey; column two, the percentage of women who were pregnant at the time of the fieldwork; and column three, the mean number of children ever born (CEB) to women age 40-49. CEB is an indicator of cumulative fertility and reflects the fertility of older women who are nearing the end of their reproductive years, representing completed fertility. When fertility remains constant over time, TFR and CEB will be the same or almost the same. In the 2002 JPFHS, however, the fact that the completed fertility rate ( 5.9 children per woman) is much higher than the total fertility rate (3.7 children per woman) indicates a considerable decline in fertility; this finding corresponds to the decline in fertility over time demonstrated by the comparison of data from several Jordanian surveys executed over the past thirty years (Table 4.1, Figure 4.1).

The TFR is 4.0 births per woman in the South region and 3.9 in the North region, while in the Central region (which comprises the most urbanized areas of the country, including Amman governorate) the TFR is 3.5 children per woman (see Table 4.3). Among women who have had no education and those who have had up to

Table 4.3 Fertility by background characteristics
Total fertility rate for the three years preceding the survey, percentage of women 15-49 currently pregnant, and mean number of children ever born to women age 40-49, by background characteristics, Jordan 2002

| Background characteristic | Total fertility rate | Percentage currently pregnant ${ }^{1}$ | Mean number of children ever born to women age 40-49 |
| :---: | :---: | :---: | :---: |
| Residence |  |  |  |
| Urban | 3.5 | 6.1 | 5.7 |
| Rural | 4.2 | 7.3 | 7.1 |
| Region |  |  |  |
| Central | 3.5 | 5.9 | 5.5 |
| North | 3.9 | 6.8 | 6.9 |
| South | 4.0 | 8.1 | 6.4 |
| Educational level attended |  |  |  |
| No education | 3.6 | 5.3 | 7.4 |
| Elementary | 3.7 | 5.8 | 6.9 |
| Preparatory | 4.4 | 7.6 | 6.9 |
| Secondary | 3.9 | 6.4 | 5.1 |
| Higher | 3.1 | 5.7 | 4.1 |
| Preparatory + secondary | 4.0 | 6.8 | 6.0 |
| Total | 3.7 | 6.3 | 5.9 |

[^0]elementary education, fertility varies little ( 3.6 and 3.7 children successively). The rate peaks (4.4 births) among women who have had up to preparatory education. However, women who have had higher than secondary education have almost 1 birth less (0.8) than women who have had up to secondary education. These figures suggest that post-secondary education for women is associated with lower levels of fertility. It is of interest to note that the relationship of education to fertility is not in fact linear, rather, in Jordan it has an inverted U-shape (Figure 4.3).

The 2002 JPFHS data show that 6 percent of all women of reproductive age were pregnant at the time of the survey compared with 7 percent in 1997. The geographical variation in the proportion of pregnant women follows a pattern similar to that of fertility. Rural women and those living in the South region are more likely to be pregnant than women in other areas. Women with preparatory education are more likely to be pregnant than other women (see Table 4.3, Figure 4.3).

Figure 4.3 Total Fertility Rates and Percentage of Women Currently Pregnant by Educational Level Attended


JPFHS 2002

Comparing data from previous surveys is but one means of studying trends in fertility. Trends can also be investigated by using retrospective data from a single survey. The birth history information collected in the JPFHS is used for this purpose. Data in Table 4.4 indicate that the fertility rate has been declining in all age groups. For example the age-specific fertility rate for women age 25-29 declined from 349 births per 1,000 women in the 15-19 years preceding the survey to 208 births per 1,000 women in the $0-4$ year period before the survey, a 40 percent decline.

Omitted figures represented by dashes reflect the fact that women age 50 and older were not included in the survey: the further back in time that rates are calculated, the more severe the truncation. For example, rates cannot be calculated for women in the age group 45-49 years for the period 5-19 years before the survey, because these women would have been over age 50 at the time of the survey and, thus, were not interviewed.

| Table 4.4 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 the birth, Jordan 2002 |  |  |  |  |
| Mother's age at time of the birth | Number of years preceding the survey |  |  |  |
|  | 0-4 | 5-9 | 10-14 | 15-19 |
| 15-19 | 30 | 51 | 57 | 70 |
| 20-24 | 151 | 210 | 225 | 276 |
| 25-29 | 208 | 263 | 284 | 349 |
| 30-34 | 186 | 223 | 241 | [279] |
| 35-39 | 118 | 161 | [163] | - |
| 40-44 | 44 | [70] | - | - |
| 45-49 | [5] | - | - | - |
| Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. |  |  |  |  |

### 4.2 Children Ever Born

Table 4.5 presents the distribution of all women and currently married women by the number of children they have had. In the 2002 JPFHS, since the respondents are ever-married women, information on the reproductive history of never-married women was not collected. However, since almost no births in Jordan take place before marriage, it can be assumed that never-married women have had no births. The data represent the accumulation of births over time. The difference in fertility between all women and currently married women is due to the proportion of women who were not married at the time of the survey (i.e., single, divorced, or widowed). On average, women have given birth to 1.7 children by their late twenties, 4.4 children by their late thirties, and 6.5 children by the end of their reproductive period.

Differences in the mean number of children born and living are notable after women have reached the age of 40 . Caution should be exercised in interpreting the data for women in the oldest age groups because of possible recall problems; older women are more likely to omit a child, particularly if the child died at a young age or is living away from the mother.

Data in Table 4.5 indicate very little variation between the mean number of children ever born and the mean number of children still living for all women age 15-49 ( 2.20 and 2.12 children, respectively). This table also presents the same data for currently married women. The data indicate that on average, women have given birth to 2.6 children by their late twenties, 5 children by their late thirties, and about 7 children by the end of their reproductive period. The mean number of children ever born is 4.1 births, compared with 3.9 children still living.

| Table 4.5 Children ever born and living |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all women and currently married women by number of children ever born, and mean number of children ever born and mean number of living children, according to age group, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Number of children ever born |  |  |  |  |  |  |  |  |  |  | Total | Number <br> of <br> women | Mean number of children ever born | Mean number of living children |
| Age | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ |  |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 97.0 | 2.5 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2,563 | 0.04 | 0.04 |
| 20-24 | 72.2 | 12.5 | 9.9 | 4.3 | 0.9 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2,135 | 0.50 | 0.48 |
| 25-29 | 40.2 | 9.7 | 14.9 | 18.5 | 11.5 | 3.4 | 1.4 | 0.4 | 0.0 | 0.0 | 0.0 | 100.0 | 1,799 | 1.69 | 1.64 |
| 30-34 | 24.3 | 5.2 | 10.7 | 16.1 | 17.0 | 11.1 | 8.4 | 4.7 | 2.1 | 0.4 | 0.1 | 100.0 | 1,700 | 3.03 | 2.93 |
| 35-39 | 17.3 | 2.4 | 4.0 | 9.0 | 15.8 | 16.9 | 13.1 | 9.4 | 6.3 | 3.0 | 2.7 | 100.0 | 1,226 | 4.37 | 4.23 |
| 40-44 | 11.8 | 2.3 | 4.1 | 5.9 | 11.0 | 12.6 | 13.4 | 13.5 | 9.5 | 7.3 | 8.6 | 100.0 | 930 | 5.47 | 5.24 |
| 45-49 | 8.8 | 0.9 | 3.2 | 6.8 | 8.3 | 10.6 | 9.5 | 10.6 | 10.1 | 10.6 | 20.6 | 100.0 | 690 | 6.55 | 6.16 |
| Total | 50.2 | 5.9 | 7.1 | 8.3 | 7.9 | 5.9 | 4.7 | 3.6 | 2.5 | 1.7 | 2.3 | 100.0 | 11,044 | 2.20 | 2.12 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 50.8 | 40.1 | 8.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 154 | 0.60 | 0.59 |
| 20-24 | 18.1 | 36.1 | 29.6 | 12.8 | 2.6 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 710 | 1.48 | 1.44 |
| 25-29 | 8.1 | 14.1 | 23.1 | 28.6 | 17.9 | 5.3 | 2.3 | 0.6 | 0.0 | 0.0 | 0.0 | 100.0 | 1,136 | 2.62 | 2.54 |
| 30-34 | 4.0 | 5.9 | 13.5 | 20.6 | 21.8 | 14.3 | 10.7 | 6.0 | 2.6 | 0.5 | 0.1 | 100.0 | 1,314 | 3.86 | 3.74 |
| 35-39 | 4.7 | 2.3 | 4.2 | 10.4 | 18.5 | 19.9 | 15.2 | 11.0 | 7.2 | 3.4 | 3.2 | 100.0 | 1,034 | 5.07 | 4.91 |
| 40-44 | 4.7 | 2.2 | 3.8 | 6.0 | 12.0 | 13.0 | 14.5 | 15.0 | 11.0 | 8.3 | 9.6 | 100.0 | 782 | 6.02 | 5.78 |
| 45-49 | 3.2 | 1.0 | 3.4 | 6.4 | 9.7 | 12.0 | 8.9 | 9.7 | 10.9 | 11.0 | 23.9 | 100.0 | 575 | 7.05 | 6.63 |
| Total | 8.0 | 10.5 | 13.3 | 15.4 | 14.9 | 11.0 | 8.5 | 6.5 | 4.5 | 3.0 | 4.3 | 100.0 | 5,706 | 4.07 | 3.91 |

### 4.3 Birth Intervals

A birth interval is the period of time between two successive live births. Research has shown that children born soon after a previous birth are at greater risk of illness and death. The percent distribution of births in the five years before the survey is shown in Table 4.6.

Women in Jordan favor relatively long birth intervals: the median birth interval among children born in the five years preceding the survey is 30.1 months -4.6 months longer than that recorded in the 1997 JPFHS. This relatively large increase (18 percent longer) in length of birth interval may be a reflection of the implementation of Jordan's National Health Program for Birth Spacing, which is one component of the National Population Strategy that was ratified by the government of Jordan in 1996.

About two-thirds of all children ( 67 percent) are born at least two years after their siblings in 2002 compared with 56 percent in 1997, and almost two in five ( 37 percent) are born after an interval of three years or longer in 2002 compared with one in four in 1997. As expected, children born to younger women and low-parity women have shorter birth intervals than those born to older women and highparity women. The birth interval following a child who has died is shorter than the interval following the birth of a surviving child ( 20 months, compared with 30 months). The length of birth intervals varies little according to education. There exists only a small amount of variation in birth interval by residence; the data show that women in rural areas and those living in the South region are more likely than other subgroups to have shorter birth intervals.

Table 4.6 Birth intervals
Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, according to background characteristics, Jordan 2002

| Background characteristic | Number of months since preceding birth |  |  |  |  | Total | Number of births | Median number of months since preceding birth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7-17 | 18-23 | 24-35 | 36-47 | 48+ |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 72.7 | 3.6 | 23.6 | 0.0 | 0.0 | 100.0 | 15 | 16.4 |
| 20-29 | 23.1 | 22.7 | 29.2 | 14.6 | 10.4 | 100.0 | 1,717 | 25.1 |
| 30-39 | 10.7 | 16.7 | 29.9 | 16.7 | 26.0 | 100.0 | 2,465 | 32.5 |
| 40-49 | 7.0 | 10.1 | 23.9 | 16.6 | 42.5 | 100.0 | 418 | 43.7 |
| Birth order |  |  |  |  |  |  |  |  |
| 2-3 | 21.3 | 21.8 | 28.6 | 14.0 | 14.2 | 100.0 | 2,112 | 26.2 |
| 4-6 | 9.8 | 15.9 | 27.9 | 17.6 | 28.9 | 100.0 | 1,831 | 34.3 |
| $7+$ | 10.5 | 13.9 | 33.7 | 16.8 | 25.1 | 100.0 | 672 | 33.0 |
| Sex of preceding birth |  |  |  |  |  |  |  |  |
| Male | 15.9 | 17.5 | 28.0 | 14.7 | 23.9 | 100.0 | 2,312 | 30.3 |
| Female | 14.5 | 19.1 | 30.2 | 17.0 | 19.3 | 100.0 | 2,303 | 29.9 |
| Survival of preceding birth |  |  |  |  |  |  |  |  |
| Living | 14.3 | 18.3 | 29.3 | 16.1 | 21.9 | 100.0 | 4,476 | 30.3 |
| Dead | 42.3 | 17.2 | 20.6 | 6.4 | 13.6 | 100.0 | 139 | 19.9 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 14.9 | 17.5 | 27.7 | 16.7 | 23.3 | 100.0 | 3,535 | 30.9 |
| Rural | 16.1 | 20.9 | 33.7 | 13.0 | 16.2 | 100.0 | 1,080 | 27.5 |
| Region |  |  |  |  |  |  |  |  |
| Central | 14.9 | 17.9 | 27.4 | 16.5 | 23.3 | 100.0 | 2,836 | 30.8 |
| North | 16.0 | 18.7 | 30.5 | 15.1 | 19.6 | 100.0 | 1,303 | 29.1 |
| South | 14.3 | 19.8 | 35.1 | 13.8 | 17.0 | 100.0 | 475 | 28.3 |
| Educational level attended |  |  |  |  |  |  |  |  |
| No education | 13.3 | 15.6 | 37.0 | 13.4 | 20.7 | 100.0 | 218 | 30.4 |
| Elementary | 18.0 | 17.9 | 26.7 | 15.5 | 21.9 | 100.0 | 416 | 29.6 |
| Preparatory | 13.9 | 20.0 | 30.0 | 13.5 | 22.7 | 100.0 | 974 | 28.8 |
| Secondary | 16.3 | 18.7 | 29.4 | 16.5 | 19.1 | 100.0 | 1,855 | 29.5 |
| Higher | 13.7 | 17.0 | 27.1 | 17.3 | 24.9 | 100.0 | 1,151 | 31.8 |
| Preparatory + secondary | 15.5 | 19.1 | 29.6 | 15.5 | 20.3 | 100.0 | 2,829 | 29.2 |
| Total | 15.2 | 18.3 | 29.1 | 15.8 | 21.6 | 100.0 | 4,615 | 30.1 |
| Note: The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth ${ }^{1}$ First-order births are excluded. |  |  |  |  |  |  |  |  |

### 4.4 Age at First Birth

The onset of childbearing is an important indicator of fertility. In Jordan, the postponement of first births (reflecting a later age at first marriage) has made a large contribution to the overall decline in fertility. Table 4.7 shows the distribution of women by age at first birth. Women under age 25 were not included in the calculation of median age at first birth because most had not given birth. Figures in the last column suggest increasing ages at first birth across age cohorts, such that women in younger cohorts are likely to be older at their first birth than were women in older cohorts at the time of their first births. Women age 25-29 (median age 24.8) give birth for the first time 1.3 years later than women age 35-39 (median age 23.5), and 3.6 years later than women age 45-49 (median age 21.2).

| Table 4.7 Age at first birth |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all women who gave birth by specific exact ages, and median age at first birth, by current age, Jordan 2002 |  |  |  |  |  |  |  |  |
|  |  | Women | ve bir | xact ag |  | Percentage who have | Number | Median age at |
| Current age | 15 | 18 | 20 | 22 | 25 | given birth | women | birth |
| 15-19 | 0.0 | na | na | na | na | 97.0 | 2,563 | a |
| 20-24 | 0.1 | 5.0 | 12.7 | na | na | 72.2 | 2,135 | a |
| 25-29 | 0.2 | 6.5 | 20.4 | 34.5 | 51.2 | 40.2 | 1,799 | 24.8 |
| 30-34 | 0.1 | 8.7 | 20.9 | 36.2 | 56.0 | 24.3 | 1,700 | 24.0 |
| 35-39 | 0.4 | 11.1 | 24.0 | 39.3 | 61.9 | 17.3 | 1,226 | 23.5 |
| 40-44 | 1.2 | 14.0 | 31.9 | 45.3 | 64.0 | 11.8 | 930 | 22.6 |
| 45-49 | 1.6 | 18.7 | 40.3 | 57.6 | 74.8 | 8.8 | 690 | 21.2 |
| na $=$ Not applicable |  |  |  |  |  |  |  |  |

Table 4.8 presents the differentials in age at first birth among women age $25-49$ by background characteristics. Overall, the median age at first birth is 23.5 years in 2002 compared with 23.2 years in 1997. Urban women begin childbearing half a year later than rural women ( 23.6 years compared with 23 years). There are no significant differences in the median age at first birth by region. Differentials by education exist only at the secondary and higher levels, at which point more educational attainment translates into later median ages at first birth: women with secondary education had a median age at first birth of 22.7 years; less than half of women with higher education have given birth before the age of 25 , so a median age could not be calculated for them.

| Table 4.8 Median age at first birth by background characteristics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median age at first birth among women 25-49, by current age and background characteristics, Jordan 2002 |  |  |  |  |  |  |
| Background characteristic | Current age |  |  |  |  | Women age 25-49 |
|  | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Residence |  |  |  |  |  |  |
| Urban | 24.7 | 24.2 | 23.6 | 22.7 | 21.4 | 23.6 |
| Rural | 24.9 | 23.3 | 22.5 | 22.0 | 20.1 | 23.0 |
| Region |  |  |  |  |  |  |
| Central | 24.7 | 24.3 | 23.5 | 22.9 | 21.6 | 23.7 |
| North | 24.9 | 23.4 | 23.6 | 22.2 | 20.3 | 23.3 |
| South | 25.0 | 23.6 | 22.9 | 22.2 | 20.9 | 23.3 |
| Educational level attended |  |  |  |  |  |  |
| No education | 23.8 | 21.5 | 20.5 | 20.4 | 20.4 | 20.8 |
| Elementary | a | 22.9 | 22.5 | 21.4 | 19.7 | 21.4 |
| Preparatory | 21.2 | 21.5 | 21.1 | 19.0 | 19.6 | 20.5 |
| Secondary | 23.1 | 22.8 | 22.3 | 22.2 | 21.7 | 22.7 |
| Higher |  | 26.4 | 25.2 | 25.9 | 25.0 | a |
| Preparatory + secondary | 22.6 | 22.3 | 22.0 | 20.6 | 20.7 | 21.9 |
| Total | 24.8 | 24.0 | 23.5 | 22.6 | 21.2 | 23.5 |
| ${ }^{\text {a }}$ Omitted because less than 50 percent of the women had a birth before the beginning of the age group |  |  |  |  |  |  |

### 4.5 Teenage Fertility

Table 4.9 examines the extent of fertility among women age $15-19$. This issue is a major social and health concern because teenage mothers and their children usually have higher risk of illness and death. At the same time, women who become mothers in their teens are more likely to curtail their education.

Among teenagers in Jordan, the level of fertility is low. Only 4 percent of women began childbearing during their teens in 2002, compared with 6 percent in 1997. Levels of teenage pregnancy vary markedly by urban-rural residence ( 4.8 percent and 2.2 percent in urban and rural areas respectively). The most significant differentials are age and education. At age 15, no women have begun childbearing; only 2 percent of women have begun childbearing at age 16. By age 19, one in ten will have become a mother or will be pregnant with her first child. Women's education plays an important part in determining the onset of childbearing. The proportion of teens that has begun childbearing declines as level of education increases - from 14 percent of uneducated women to 1 percent of women with higher than secondary education.

| Table 4.9 Teenage pregnancy and motherhood |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of all women age 15-19 who are mothers or pregnant with their first child, by background characteristics, Jordan 2002 |  |  |  |  |
|  | Percentage who are: |  | Percentage who have begun childbearing | Number of women |
| Background characteristic | Mothers | Pregnant with first child |  |  |
| Age |  |  |  |  |
| 15 | 0.0 | 0.0 | 0.0 | 531 |
| 16 | 0.8 | 1.0 | 1.8 | 568 |
| 17 | 2.8 | 1.1 | 3.8 | 502 |
| 18 | 4.8 | 1.3 | 6.2 | 497 |
| 19 | 7.6 | 2.9 | 10.6 | 465 |
| Residence |  |  |  |  |
| Urban | 3.4 | 1.4 | 4.8 | 2,006 |
| Rural | 1.6 | 0.6 | 2.2 | 557 |
| Region |  |  |  |  |
| Central | 3.0 | 1.1 | 4.2 | 1,580 |
| North | 3.2 | 1.2 | 4.4 | 747 |
| South | 2.4 | 1.8 | 4.2 | 246 |
| Educational level attended |  |  |  |  |
| No education | 12.0 | 2.0 | 14.0 | 15 |
| Elementary | 8.4 | 3.7 | 12.1 | 84 |
| Preparatory | 5.8 | 2.5 | 8.3 | 497 |
| Secondary | 2.4 | 0.7 | 3.1 | 1,684 |
| Higher | 0.0 | 1.0 | 1.0 | 287 |
| Preparatory + secondary | 3.2 | 1.1 | 4.3 | 2,181 |
| Total | 3.0 | 1.2 | 4.3 | 2,563 |

## FERTILITY REGULATION

This chapter considers a number of indicators from the 2002 JPFHS relating to knowledge, attitudes, and use of family planning. This chapter also presents information on intended future use of contraception and exposure to mass media messages about family planning. Trends over time are examined by comparing the 2002 JPFHS findings with those of two earlier surveys: the 1990 and 1997 Jordan Population and Family Health Survey (JPFHS).

### 5.1 Knowledge of Family Planning Methods

Determining the level of knowledge of contraceptive methods was a major objective of the 2002 JPFHS, since knowledge of specific methods is a precondition for using them. Information about women's knowledge of contraceptive methods was collected by asking the respondents an open-ended question about which contraceptive methods they had heard of. When a respondent failed to mention any of the listed methods, the interviewer would describe a method and ask whether the respondent had heard of it. All methods mentioned spontaneously or recognized by the respondent after hearing a description of it were recorded as knowledge.

Information on knowledge was collected for 12 modern methods: the pill, the IUD, injectables, implants, vaginal methods (foam, jelly, or diaphragm), emergency contraception, lactational amenorrhea method (LAM), the male and female condom, and female and male sterilization. Two traditional methods were also included: periodic abstinence and withdrawal. In addition, provision was made in the questionnaire to record any other methods that respondents named without any prompting.

It should be noted that knowledge of a family planning method in the JPFHS and all DHS surveys is defined simply as having heard of a method. No questions were asked to elicit depth of knowledge, such as how a specific method is used.

The 2002 JPFHS results indicate that all ever-married women in Jordan know at least one method of family planning (Table 5.1). Among modern methods, the pill and IUD are the best

Table 5.1 Knowledge of contraceptive methods

Percentage of all ever-married women, of currently married women, and of currently unmarried women who know specific contraceptive methods, Jordan 2002

|  | All <br> ever-married <br> women | Currently <br> married <br> women | Currently <br> unmarried <br> women |
| :--- | :---: | :---: | :---: |
| Contraceptive method | 100.0 | 100.0 | 99.9 |
| Any method | 100.0 | 100.0 | 99.7 |
| Any modern method | 97.9 | 97.8 | 98.2 |
| Female sterilization | 21.8 | 21.9 | 19.7 |
| Male sterilization | 99.7 | 99.7 | 99.7 |
| Pill | 99.9 | 99.9 | 99.5 |
| IUD | 92.7 | 92.9 | 89.0 |
| Injectables | 53.7 | 54.3 | 41.9 |
| Implants | 90.2 | 91.0 | 74.3 |
| Male condom | 17.5 | 17.6 | 16.3 |
| Female condom | 16.8 | 16.9 | 14.6 |
| Diaprhagm | 66.1 | 66.8 | 54.2 |
| Foam/jelly | 12.9 | 12.9 | 13.1 |
| Emergency contraception | 97.8 | 97.8 | 96.7 |
| Lactational amenorrhea (LAM) |  |  |  |
| Any traditional method | 96.1 | 96.5 | 89.2 |
| Periodic abstinence | 87.2 | 87.7 | 77.6 |
| Withdrawal | 92.3 | 92.8 | 81.9 |
| Folk method | 2.1 | 2.1 | 1.2 |
| Mean number of methods known | 9.5 | 9.5 | 8.8 |
| Number of women | 6,006 | 5,706 | 300 | known (100 percent), followed by female sterilization ( 98 percent). Knowledge of the male condom and injectables exists among 90 percent and 93 percent of ever-married women, respectively. The least recognized methods were emergency contraception, diaphragm, and female condom, with 13 percent, 17 percent and 18 percent, respectively, of evermarried women having knowledge of these methods. As expected, the lactational amenorrhea method (LAM) is known to nearly all ever-married women ( 98 percent). Periodic abstinence ( 87 percent) and withdrawal ( 92 percent) are also well known. On average, an ever-married woman knows about 10 family planning methods.

Since knowledge of any family planning method or any modern method is universal, there is almost no variation among subgroups on the basis of background characteristics; thus, no table is shown.

### 5.2 Ever Use of Contraception

All ever-married women interviewed in the 2002 JPFHS who said they had heard of a method of family planning were asked whether they had ever used it. Table 5.2 shows that eight in ten ever-married women reported that they had used a contraceptive method at some time, including 17 percent who had used the lactational amenorrhea method (LAM). Ever use among currently married women ( 81 percent) is almost the same as for ever-married women ( 80 percent). Modern methods have been used by 73 percent of currently married women. The IUD is the most popular method ( 50 percent), followed by the pill (41 percent). The percentage reporting ever use of other modern methods, with the exception of female condom, diaphragm, implants, and emergency contraception, varies from 3 percent for female sterilization to 22 percent for male condoms.

The level of ever use of traditional contraceptive methods is fairly high in Jordan. Withdrawal, the most frequently adopted traditional method, has been used by 35 percent of currently married women, followed by periodic abstinence ( 23 percent).

| Percentage of all women and of currently married women who have ever used any contraceptive method, by specific method and age, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Modern method |  |  |  |  |  |  |  |  |  | Traditional method |  |  |  | Number of women |
| Age | Any method | Any modern method | Female sterilization | Pill | IUD | Injectables | Implants | Malecondom | Foam/ jelly | LAM | Other modern methods | Any traditional method | Periodic abstinence | Withdrawal | Folk method |  |
| ALL EVER-MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 32.1 | 21.3 | 0.0 | 10.0 | 4.3 | 0.0 | 0.0 | 6.4 | 0.0 | 6.1 | 0.0 | 13.5 | 2.4 | 12.7 | 0.0 | 158 |
| 20-24 | 59.4 | 47.0 | 0.0 | 21.4 | 22.2 | 1.3 | 0.0 | 14.6 | 1.2 | 11.1 | 0.2 | 32.5 | 10.1 | 27.6 | 0.0 | 728 |
| 25-29 | 80.1 | 68.7 | 0.0 | 38.8 | 41.0 | 3.9 | 0.0 | 20.9 | 3.7 | 17.5 | 0.2 | 45.0 | 22.4 | 34.7 | 0.2 | 1,175 |
| 30-34 | 85.6 | 79.2 | 0.5 | 42.3 | 56.4 | 4.2 | 0.4 | 24.4 | 6.5 | 20.3 | 0.3 | 48.6 | 25.4 | 39.5 | 0.4 | 1,354 |
| 35-39 | 86.1 | 80.8 | 4.2 | 45.6 | 62.7 | 6.2 | 0.6 | 24.3 | 9.8 | 17.5 | 0.6 | 45.5 | 26.9 | 37.3 | 0.5 | 1,071 |
| 40-44 | 85.9 | 81.5 | 6.7 | 48.5 | 61.0 | 3.6 | 0.2 | 23.6 | 10.0 | 18.7 | 0.6 | 43.9 | 27.2 | 33.6 | 0.3 | 862 |
| 45-49 | 82.1 | 76.8 | 9.7 | 46.4 | 52.8 | 2.1 | 0.0 | 15.2 | 9.1 | 16.5 | 1.0 | 38.8 | 22.7 | 26.6 | 1.4 | 659 |
| Total | 79.7 | 72.1 | 2.9 | 40.2 | 49.2 | 3.7 | 0.2 | 20.9 | 6.5 | 17.1 | 0.4 | 42.7 | 22.6 | 33.8 | 0.4 | 6,006 |
|  |  |  |  |  |  | CUR | RENTLY | MARRIED | D WOM |  |  |  |  |  |  |  |
| 15-19 | 32.2 | 21.2 | 0.0 | 9.5 | 4.4 | 0.0 | 0.0 | 6.6 | 0.0 | 6.3 | 0.0 | 13.9 | 2.5 | 13.1 | 0.0 | 154 |
| 20-24 | 60.2 | 47.6 | 0.0 | 21.8 | 22.7 | 1.4 | 0.0 | 14.6 | 1.3 | 11.3 | 0.2 | 33.3 | 10.3 | 28.2 | 0.0 | 710 |
| 25-29 | 81.4 | 69.9 | 0.0 | 39.1 | 41.5 | 3.8 | 0.0 | 21.4 | 3.8 | 17.9 | 0.2 | 46.2 | 23.0 | 35.5 | 0.2 | 1,136 |
| 30-34 | 86.9 | 80.3 | 0.5 | 42.9 | 57.5 | 4.0 | 0.4 | 24.6 | 6.5 | 20.7 | 0.3 | 49.1 | 26.0 | 39.9 | 0.4 | 1,314 |
| 35-39 | 87.1 | 82.1 | 4.4 | 46.5 | 63.7 | 6.4 | 0.6 | 25.1 | 10.0 | 17.8 | 0.6 | 46.4 | 27.2 | 38.0 | 0.5 | 1,034 |
| 40-44 | 87.0 | 82.1 | 7.3 | 49.3 | 61.9 | 3.6 | 0.3 | 25.3 | 10.4 | 18.8 | 0.6 | 46.7 | 29.2 | 35.8 | 0.3 | 782 |
| 45-49 | 84.8 | 79.0 | 9.7 | 47.2 | 57.1 | 2.4 | 0.0 | 16.5 | 9.6 | 17.1 | 1.2 | 41.8 | 24.8 | 28.7 | 1.6 | 575 |
| Total | 80.9 | 73.0 | 2.9 | 40.6 | 50.2 | 3.8 | 0.2 | 21.6 | 6.6 | 17.4 | 0.5 | 44.0 | 23.3 | 34.8 | 0.4 | 5,706 |
| LAM = Lactational amenorrhea method |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

### 5.3 Current Use of Contraception

The level of current use of contraception is one of the indicators most frequently used to assess the success of family planning activities. It is also widely used as a measure in analyzing the determinants of fertility.

Results from the 2002 JPFHS indicate that 56 percent of married women are using a contraceptive method, including 41 percent who are using modern methods and 15 percent using traditional methods. Contraceptive prevalence has increased slightly between 1997 and 2002 survey (from 53 to 56 percent; see Table 5.3). The IUD is the most widely adopted modern method ( 24 percent), followed by the pill ( 8 percent), and male condom, female sterilization, and LAM ( 3 percent for each). Less than 1 percent of women rely on other modern methods. Withdrawal ( 9 percent) and periodic abstinence ( 5 percent) are the most frequently employed traditional methods.

| Table 5.3 Current use of contraception |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married women by contraceptive method currently used, according to age, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Modern method |  |  |  |  |  |  |  | Traditional method |  |  |  |  | Total | Number of women |
| Age | Any method | Any modern method | Female sterilization | Pill | IUD | Injectables | Malecondom | LAM | Other modern methods | Any traditional method | Periodic abstinence | Withdrawal | Folk method | Not currently using |  |  |
| 15-19 | 21.3 | 13.4 | 0.0 | 4.3 | 3.0 | 0.0 | 2.7 | 3.4 | 0.0 | 7.9 | 2.5 | 5.4 | 0.0 | 78.7 | 100.0 | 154 |
| 20-24 | 42.2 | 28.0 | 0.0 | 6.9 | 13.6 | 0.2 | 3.7 | 3.6 | 0.0 | 14.1 | 3.2 | 10.9 | 0.0 | 57.8 | 100.0 | 710 |
| 25-29 | 54.0 | 40.0 | 0.0 | 11.1 | 20.6 | 1.3 | 3.3 | 3.6 | 0.2 | 14.0 | 4.4 | 9.7 | 0.0 | 46.0 | 100.0 | 1,136 |
| 30-34 | 60.1 | 46.5 | 0.5 | 8.7 | 28.8 | 0.9 | 3.7 | 3.8 | 0.1 | 13.6 | 4.5 | 9.1 | 0.0 | 39.9 | 100.0 | 1,314 |
| 35-39 | 63.9 | 48.7 | 4.4 | 6.6 | 30.0 | 1.4 | 3.8 | 2.2 | 0.3 | 15.2 | 5.9 | 9.3 | 0.0 | 36.1 | 100.0 | 1,034 |
| 40-44 | 65.6 | 49.0 | 7.3 | 6.1 | 29.9 | 0.8 | 3.2 | 0.6 | 1.0 | 16.6 | 7.3 | 9.2 | 0.1 | 34.4 | 100.0 | 782 |
| 45-49 | 47.5 | 31.3 | 9.7 | 2.6 | 15.9 | 0.6 | 1.9 | 0.1 | 0.5 | 16.2 | 7.9 | 8.0 | 0.4 | 52.5 | 100.0 | 575 |
| Total | 55.8 | 41.2 | 2.9 | 7.5 | 23.6 | 0.9 | 3.4 | 2.6 | 0.3 | 14.6 | 5.2 | 9.3 | 0.1 | 44.2 | 100.0 | 5,706 |

Note: If more than one method is used, only the most effective method is considered in the tabulation.
LAM = Lactational amenorrhea method

Overall, the level of current contraceptive use of any method among currently married women has increased substantially in the last 12 years, from 40 percent in the 1990 JPFHS survey to 53 percent in the 1997 JPFHS survey and 56 percent in the 2002 JPFHS (Figure 5.1). The relative increase in use during the five years preceding the 2002 JPFHS is 6 percent for all methods, and 9 percent for all modern methods. However, most of the increase in modern method use is due to the addition of LAM to the range of modern methods. If LAM were removed to create strict comparability in the list of modern methods asked about in both 1997 and 2002, the increase in modern method use is only 2 percent. The corresponding increase for the period 1990-1997 was 32 percent of all methods and 40 percent of modern methods.

Comparing specific methods, there was considerable change in the use of specific contraceptive methods in the period between 1990 and 2002. Most noticeable is the increased use of the IUD, which rose from 15 percent in 1990 to 24 percent in 2002. Use of the male condom also increased during the same period, rising from less than 1 percent to just over 3 percent.

Figure 5.1 Current Use of Modern Contraceptive Methods Among Currently Married Women, 1990-2002


Use of contraceptive methods differs according to age: the use of contraception increases steadily up to age 40-44 and declines thereafter (Table 5.3); use among currently married women is lowest among those age 15-19 (21 percent), peaks among women age 40-44 ( 66 percent), then declines sharply among those age 45-49 ( 48 percent). Most women in the younger cohorts use contraception for spacing births, relying on the pill, male condom and traditional methods, while older women are using more permanent methods. Female sterilization in particular rises in popularity among women 35 years of age and older, with the prevalence of sterilization increasing from 4 percent among 35-39 year-olds, to 7 percent among 40-44 year-olds, to 10 percent among currently married women age 45-49; the use of IUDs is also very popular among older women. It should be noted that male sterilization is virtually nonexistent in Jordan.

Current use of contraceptive methods also differs by background characteristics (Table 5.4). The level of contraceptive use is higher by 13 percent among women living in urban areas ( 57 percent) than among women in rural areas ( 51 percent). The percentage using modern methods among women living in urban areas is 19 percent higher than the percentage among those living in rural areas ( 43 percent and 36 percent, respectively; see Figure 5.2).

There is also regional variation in current use of family planning. The Central region (which includes the capital, Amman) has the highest level of any contraceptive use ( 58 percent), followed by the North region ( 54 percent). The lowest level is the South region ( 48 percent). Differentials in the use of modern methods are similar to those for the use of any method.

Current use of contraception varies primarily between currently married women who have attended school and those with little or no education. This pattern also holds for the current use of modern methods. Current use of contraception increases steadily with women's education. While 41 percent of women with no education are currently using a method, 54 percent of women with preparatory education and 60 percent of women with higher than secondary education are currently using a contraceptive method. It should be noted, however, that use of the IUD increases with level of education, whereas use of female sterilization is negatively correlated with level of educational attainment. Those correlations could be due in part to the fact that women with no education tend to be older and have more children

| Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Modern method |  |  |  |  |  |  |  | Traditional method |  |  |  | Not currently using Total |  | Number of women |
| Background characteristic | Any method | Any modern method | Female sterilization | Pill | IUD | In- ject- ables | Male condom |  | Other modern methods | Any traditional method | Periodic abstinence | Withdrawa | Folk merthod |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 57.1 | 42.6 | 2.8 | 7.6 | 25.3 | 0.8 | 3.6 | 2.1 | 0.4 | 14.5 | 5.4 | 9.1 | 0.0 | 42.9 | 100.0 | 4,546 |
| Rural | 50.5 | 35.8 | 3.3 | 6.8 | 17.2 | 1.2 | 2.4 | 4.8 | 0.1 | 14.6 | 4.7 | 9.8 | 0.1 | 49.5 | 100.0 | 1,160 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 57.5 | 43.3 | 2.6 | 7.8 | 25.9 | 0.8 | 3.6 | 2.3 | 0.3 | 14.2 | 5.5 | 8.6 | 0.1 | 42.5 | 100.0 | 3,683 |
| North | 54.4 | 39.0 | 3.2 | 6.7 | 21.3 | 0.9 | 3.1 | 3.4 | 0.4 | 15.4 | 4.7 | 10.8 | 0.0 | 45.6 | 100.0 | 1,480 |
| South | 48.0 | 33.3 | 4.1 | 7.2 | 14.9 | 1.3 | 2.8 | 2.7 | 0.3 | 14.7 | 4.8 | 9.7 | 0.2 | 52.0 | 100.0 | 542 |
| Educational level attended |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 40.6 | 33.0 | 13.1 | 4.3 | 9.3 | 2.8 | 0.9 | 2.6 | 0.0 | 7.6 | 1.9 | 5.4 | 0.3 | 59.4 | 100.0 | 324 |
| Elementary | 46.7 | 34.9 | 6.1 | 4.3 | 19.0 | 1.4 | 1.9 | 2.3 | 0.0 | 11.8 | 3.7 | 8.1 | 0.0 | 53.3 | 100.0 | 638 |
| Preparatory | 53.5 | 41.0 | 2.9 | 8.1 | 24.2 | 0.8 | 2.0 | 2.5 | 0.4 | 12.5 | 2.4 | 10.0 | 0.2 | 46.5 | 100.0 | 1,144 |
| Secondary | 58.9 | 44.6 | 1.2 | 9.2 | 25.6 | 0.8 | 4.3 | 3.1 | 0.3 | 14.3 | 4.5 | 9.8 | 0.0 | 41.1 | 100.0 | 2,159 |
| Higher | 60.3 | 41.0 | 1.7 | 6.5 | 25.5 | 0.4 | 4.3 | 2.1 | 0.4 | 19.3 | 10.0 | 9.3 | 0.0 | 39.7 | 100.0 | 1,441 |
| Preparatory + secondary | 57.0 | 43.3 | 1.8 | 8.8 | 25.1 | 0.8 | 3.5 | 2.9 | 0.4 | 13.7 | 3.8 | 9.9 | 0.1 | 43.0 | 100.0 | 3,303 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.8 | 0.4 | 0.0 | 98.7 | 100.0 | 468 |
| 1-2 | 43.6 | 27.5 | 0.0 | 6.7 | 13.5 | 0.3 | 3.5 | 3.4 | 0.0 | 16.1 | 5.2 | 10.9 | 0.0 | 56.4 | 100.0 | 1,407 |
| 3-4 | 66.2 | 50.7 | 0.8 | 10.9 | 31.0 | 0.8 | 4.3 | 2.6 | 0.4 | 15.5 | 6.9 | 8.6 | 0.0 | 33.8 | 100.0 | 1,751 |
| $5+$ | 67.5 | 51.8 | 7.3 | 6.7 | 29.6 | 1.6 | 3.3 | 2.7 | 0.5 | 15.8 | 4.9 | 10.8 | 0.1 | 32.5 | 100.0 | 2,080 |
| Total | 55.8 | 41.2 | 2.9 | 7.5 | 23.6 | 0.9 | 3.4 | 2.6 | 0.3 | 14.6 | 5.2 | 9.3 | 0.1 | 44.2 | 100.0 | 5,706 |
| Note: If more than one method is used, only the most effective method is considered in the tabulation. LAM = Lactational amenorrhea method |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

than women who have attended school, and thus the former are more likely to want to stop childbearing altogether. The use of traditional methods also increases with level of education.

Use of contraception increases with the number of living children, from 1 percent among currently married women with no children to 68 percent among women with five or more children (Table 5.4). It should be noted that 54 percent of contraceptive users are using a method for spacing their births, while 46 percent of users employ contraception in order to stop childbearing (data not shown).

In addition, 18 percent of users would like to shift to another method: three out of five want to switch to IUDs, 13 percent to the pill, and 12 percent to female sterilization. Twenty six percent of women mentioned the doctor's advice as a reason for not using their preferred method. Other women mentioned husband's objection ( 12 percent), not having enough knowledge about a method ( 9 percent), and high cost ( 5 percent) as reasons behind not using their preferred method (tables not shown).

Figure 5.2 Current Use of Contraception Among Currently Married Women by Background Characteristics


### 5.4 Current use by Women's Status

A woman's ability to use contraceptive methods to control her fertility is likely to be affected by her status and degree of empowerment. Women who are more empowered are expected to be better able to control all aspects of their lives including their fertility. The JPFHS 2002 collected information on three indicators of women's empowerment: number of decisions in which the respondent participates in the final say, the number of reasons for which a woman can refuse to have sexual relations with her husband, and the number of reasons for which the respondent feels a husband is justified in beating his wife. This section focuses on the relationship between contraceptive use and women's status. (See Chapter 3 for an explanation of these indicators.)

According to Table 5.5, currently married women who have more say with regard to household decisionmaking are more likely to use a contraceptive method, particularly a modern method than women with less say in household decisionmaking: whereas 59 percent of women who have a say in all five specified decisions are currently using a method, only 45 percent of women who have a say in one or two household decisions are current users of contraception.

Currently married women who agree with a variety of circumstances under which they would feel justified in refusing their husband sex are also more likely to be currently using a contraceptive method: among women agreeing with all three circumstances under which a wife would be justified in denying her husband sex, 57 percent are currently using a method, compared with 47 percent among those who believe that none of the specified circumstances constitute justification for a wife's refusal to have sex with her husband.

Finally, the more that a woman considers wife beating justifiable, the less likely she is to use a contraceptive method. Among women who believe that wife beating is never justified, 63 percent are currently using a contraceptive method. The numbers are significantly lower for those who agree with most or all of the justifications for wife beating: only 46 percent of these are currently using contraception.

| Percent distribution of currently married women by contraceptive method currently used, according to selected indicators of women's status, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Modern method |  |  |  |  |  |  |  | Traditional method |  |  |  | Not currently using Total |  | Number of women |
| Background characteristic | Any method | Any modern method | Female sterili- <br> zation |  | IUD | In-jectables | Male condom | LAM | Other modern methods | Any traditional method | Periodic abstinence | Withdrawal | Folk merthod |  |  |  |
| Number of decisions in which woman has final say |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | (41.8) | (32.1) | (5.4) | (9.4) | (13.2) | (0.0) | (0.0) | (4.0) | (0.0) | (9.8) | (2.6) | (7.2) | (0.0) | (58.2) | 100.0 | 51 |
| 1-2 | 45.0 | 32.4 | 2.4 | 6.3 | 16.8 | 0.8 | 3.0 | 3.0 | 0.0 | 12.6 | 3.0 | 9.2 | 0.3 | 55.0 | 100.0 | 706 |
| 3-4 | 56.2 | 41.8 | 2.4 | 8.3 | 23.9 | 0.8 | 3.5 | 2.6 | 0.3 | 14.3 | 5.3 | 8.9 | 0.0 | 43.8 | 100.0 | 2,604 |
| 5 | 58.9 | 43.4 | 3.5 | 6.8 | 25.6 | 1.1 | 3.4 | 2.5 | 0.5 | 15.5 | 5.8 | 9.7 | 0.0 | 41.1 | 100.0 | 2,345 |
| Number of reasons to refuse sex with husband |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 46.8 | 34.8 | 9.3 | 1.3 | 15.6 | 0.0 | 1.7 | 6.9 | 0.0 | 12.0 | 1.1 | 10.3 | 0.6 | 53.2 | 100.0 | 74 |
| 1-2 | 52.9 | 39.0 | 2.6 | 7.8 | 21.4 | 0.8 | 3.4 | 2.6 | 0.2 | 14.0 | 4.4 | 9.5 | 0.0 | 47.1 | 100.0 | 1,876 |
| $3+$ | 57.4 | 42.5 | 2.9 | 7.4 | 24.9 | 1.0 | 3.4 | 2.5 | 0.4 | 14.9 | 5.7 | 9.1 | 0.1 | 42.6 | 100.0 | 3,757 |
| Number of reasons wife beating is justified |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 63.4 | 42.7 | 1.3 | 6.6 | 27.4 | 0.6 | 3.5 | 2.1 | 1.2 | 20.7 | 9.7 | 11.1 | 0.0 | 36.6 | 100.0 | 730 |
| 1-2 | 58.9 | 43.2 | 2.3 | 7.9 | 25.0 | 0.9 | 4.5 | 2.7 | 0.0 | 15.6 | 6.0 | 9.5 | 0.1 | 41.1 | 100.0 | 2,006 |
| 3-4 | 55.3 | 42.6 | 2.9 | 7.9 | 24.5 | 0.9 | 3.1 | 2.8 | 0.3 | 12.7 | 4.1 | 8.6 | 0.0 | 44.7 | 100.0 | 1,824 |
| $5+$ | 46.3 | 34.5 | 4.9 | 6.5 | 17.5 | 1.1 | 1.7 | 2.6 | 0.2 | 11.8 | 2.8 | 8.9 | 0.1 | 53.7 | 100.0 | 1,146 |
| Total | 55.8 | 41.2 | 2.9 | 7.5 | 23.6 | 0.9 | 3.4 | 2.6 | 0.3 | 14.6 | 5.2 | 9.3 | 0.1 | 44.2 | 100.0 | 5,706 |
| Note: If more than one method is used, only the most effective method is considered in the tabulation. Figures in parentheses are based on $25-49$ unweighted cases. <br> LAM = Lactational amenorrhea method |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 5.5 indicates that women who are most empowered according to the definition set forth here are also the most likely to use a contraceptive method. This table also indicates that women who are least empowered are the most likely to be sterilized. For example, among women who cannot justify a wife refusing sex to her husband for any of the specified reasons, 9 percent are sterilized, compared with women who believe that a wife would be justified in refusing sex to her husband under any of the given circumstances, among whom only 3 percent are sterilized.

### 5.5 Number of Children at First Use of Contraception

Table 5.6 shows the number of living children at the time of first use of contraception by age among ever-married women. With the increasing adoption of family planning - particularly among younger women - the average parity of women at first use of contraception has been declining. About two-thirds of women age 40-49 used any family planning method before having four or more children, compared with about 97 percent of women age $25-29$. Women are adopting family planning fairly early in the family building process. The proportion that started using contraception after marriage to delay the first birth has increased from 1 percent among women age 35-49 to 11 percent among those age 15-19. In general, the results show that the majority of women prefer to start using a contraceptive method after they have had one or two children ( 41 percent and 27 percent, respectively). In other words, 71 percent of women prefer to use a method before having a third child.

Table 5.6 Number of children at first use of contraception
Percent distribution of all ever-married women who have ever used contraception by number of living children at the time of first use of contraception, according to current age, Jordan 2002

|  | Number of living children at time <br> of first use of contraception |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 0 | 1 | 2 | 3 | $4+$ |  | Number <br> of <br> women |
| Current age | 11.4 | 77.8 | 10.9 | 0.0 | 0.0 | 100.0 | 51 |  |  |  |  |  |  |  |  |
| $15-19$ | 8.8 | 64.8 | 21.3 | 4.3 | 0.8 | 100.0 | 432 |  |  |  |  |  |  |  |  |
| $20-24$ | 4.0 | 52.6 | 31.7 | 8.5 | 3.2 | 100.0 | 942 |  |  |  |  |  |  |  |  |
| $25-29$ | 2.5 | 41.7 | 31.2 | 12.3 | 12.3 | 100.0 | 1,159 |  |  |  |  |  |  |  |  |
| $30-34$ | 1.0 | 33.3 | 28.9 | 15.6 | 21.2 | 100.0 | 922 |  |  |  |  |  |  |  |  |
| $35-39$ | 1.4 | 28.4 | 23.8 | 15.0 | 31.3 | 100.0 | 740 |  |  |  |  |  |  |  |  |
| $40-44$ | 2.9 | 26.3 | 20.2 | 13.0 | 39.1 | 100.0 | 541 |  |  |  |  |  |  |  |  |
| $45-49$ | 40.9 | 27.4 | 11.8 | 17.0 | 100.0 | 4,787 |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

### 5.6 Knowledge of the Fertile Period

A basic knowledge of reproductive physiology provides a useful background for the successful practice of coitus-dependent methods (such as withdrawal, condom, or barrier methods), and even more so for the practice of periodic abstinence. As noted earlier, periodic abstinence has been used by 23 percent of currently married women at some time, and it is currently being used by 5 percent of recently surveyed women. Since the failure rate for using the safe period method is high, it is important to find out if women who are practicing the method know when during the ovulatory cycle they should avoid having sexual intercourse.

Table 5.7 presents the distribution of ever-married women who are currently using periodic abstinence, categorized by the time during the ovulatory cycle when they think a woman is most likely to get pregnant (perceived fertile period). To obtain these data, the respondents were asked when during the monthly cycle a woman has the greatest chance of becoming pregnant. The results indicate that the ovulatory cycle is well known to ever-married women, as well as to women who have used the safe period method. Two-thirds of ever-married women can correctly identify the safe period. Among women using periodic abstinence, 88 percent answered correctly, while 11 percent gave the response "after the period ended."

| Table 5.7 Knowledge of fertile period |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of all ever-married women by knowledge of the fertile period during the ovulatory cycle, according to current use/nonuse of periodic abstinence, Jordan 2002 |  |  |  |
| Perceived fertile period | Users of periodic abstinence | Nonusers of periodic abstinence | All women |
| Just before her period begins | 0.4 | 1.2 | 1.2 |
| During her period | 0.4 | 0.0 | 0.0 |
| Right after her period has ended | 10.6 | 17.3 | 17.0 |
| Halfway between two periods | 87.7 | 66.4 | 67.5 |
| Other | 0.0 | 0.0 | 0.0 |
| No specific time | 0.6 | 5.4 | 5.2 |
| Don't know | 0.3 | 9.6 | 9.1 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 298 | 5,708 | 6,006 |

Despite the relatively large proportion of women who can correctly identify the fertile period, it should be noted that one-third of ever-married women said they did not know the fertile period or gave the wrong answer. Since periodic abstinence is being used by a substantial number of women, family planning workers need to provide more information on the physiology of reproduction, with emphasis on the ovulatory cycle.

### 5.7 Timing of Sterilization

Although current use of female sterilization decreased between 1997 and 2002, it still represents 7 percent of the contraceptive use among users of modern methods; therefore, the age at which the operation takes place is of particular interest to family planning officials (Table 5.8). Overall, women's age at sterilization remained almost the same in Jordan between 1997 and 2002: the median age for women under age 40 is 35.4 years in 2002, compared with 35 years in 1997 , i.e. an increase of only 5 months. Women who were sterilized when they were less than 30 years of age are more likely to have had the operation performed in the distant past; women sterilized at a later age (40 and over) tend to have had the operation more recently.

Table 5.8 Timing of sterilization
Percent distribution of sterilized women by age at the time of sterilization, and median age at sterilization, according to the number of years since the operation, Jordan 2002

| Years since operation | Age at time of sterilization |  |  |  |  |  | Total | Number of women | Median age ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <25 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |  |  |
| $<2$ | * | * | * | * | * | * | * | 20 | * |
| 2-3 | (0.0) | (1.7) | (27.1) | (50.7) | (16.3) | (4.2) | 100.0 | 37 | (35.7) |
| 4-5 | (0.0) | (11.5) | (27.1) | (39.8) | (20.3) | (1.3) | 100.0 | 32 | (35.0) |
| 6-7 | (0.0) | (9.5) | (14.8) | (48.8) | (26.9) | (0.0) | 100.0 | 30 | (37.0) |
| 8-9 | * | * | * | * | * | * | * | 17 | * |
| 10+ | (1.5) | (25.5) | (44.5) | (28.5) | (0.0) | (0.0) | 100.0 | 37 | a |
| Total | 0.3 | 10.3 | 28.1 | 45.1 | 15.1 | 1.1 | 100.0 | 173 | 35.4 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Median ages are calculated only for women sterilized at less than 40 years of age to avoid problems of censoring.
${ }^{\text {a }}$ Not calculated due to censoring

Information on attitudes towards female sterilization among women who have heard about this method was collected in the 2002 JPFHS. Women were asked whether they approve or disapprove use of this method to avoid childbearing. The results (presented in Table 5.9) showed that only 19 percent approve of the method, 21 percent approve with conditions, and 58 percent disapprove of it. Urban women, women living in the Central region, more educated women, and women with fewer children are more likely to disapprove of female sterilization compared with other women. When asked about the reasons for disapproving of female sterilization, about half ( 49 percent) of the women who disapprove of the method said that it is against their religion, 28 percent attribute their disapproval to health problems associated with sterilization, and 17 percent disapprove of it because it might cause family problems with the husband, or lead to divorce (data not shown).

| Table 5.9 Approval of sterilization |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all ever-married women who know of sterilization by attitude toward sterilization, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |
|  | Approval/disapproval of female sterilization |  |  |  | Total | Number of women |
| Background characteristic | Approve | Approve only under certain circumstances | Disapprove | Don't know/ unsure |  |  |
| Residence |  |  |  |  |  |  |
| Urban | 17.7 | 21.7 | 58.9 | 1.7 | 100.0 | 4,704 |
| Rural | 23.3 | 20.2 | 55.2 | 1.3 | 100.0 | 1,173 |
| Region |  |  |  |  |  |  |
| Central | 17.3 | 21.2 | 59.6 | 1.9 | 100.0 | 3,803 |
| North | 20.7 | 22.9 | 55.1 | 1.3 | 100.0 | 1,527 |
| South | 23.5 | 18.4 | 57.1 | 1.1 | 100.0 | 548 |
| Educational level attended |  |  |  |  |  |  |
| No education | 35.3 | 17.0 | 45.9 | 1.8 | 100.0 | 345 |
| Elementary | 30.5 | 20.9 | 47.1 | 1.4 | 100.0 | 674 |
| Preparatory | 20.9 | 21.5 | 56.5 | 1.1 | 100.0 | 1,196 |
| Secondary | 16.9 | 21.6 | 59.9 | 1.7 | 100.0 | 2,205 |
| Higher | 10.7 | 22.2 | 64.9 | 2.2 | 100.0 | 1,457 |
| Preparatory + secondary | 18.3 | 21.5 | 58.7 | 1.5 | 100.0 | 3,401 |
| Number of living children |  |  |  |  |  |  |
| 0 | 10.6 | 21.0 | 64.7 | 3.8 | 100.0 | 488 |
| 1-2 | 12.8 | 20.8 | 64.3 | 2.2 | 100.0 | 1,447 |
| 3-4 | 16.3 | 23.5 | 58.5 | 1.7 | 100.0 | 1,769 |
| 5+ | 26.7 | 20.1 | 52.4 | 0.9 | 100.0 | 2,173 |
| Total | 18.8 | 21.4 | 58.2 | 1.7 | 100.0 | 5,877 |

### 5.8 Source of Supply for Modern Methods

In addition to information about the level of contraceptive use, program officials need to know where users obtain their methods. As in the 1997 JPFHS, the 2002 survey included a question for current users of modern methods regarding the source of their method. The Jordanian Association of Family Planning and Protection (JAFPP), private doctors, and pharmacies are the major private sources of supply for modern contraceptive methods (Table 5.10 and Figure 5.3). Private sources serve two-thirds ( 66 percent) of current users, compared with 72 percent in 1997 survey. The share of the public sector increased to about one-third ( 34 percent), compared with 28 percent in the 1997 survey.

The sources relied on by users vary by method used. Pharmacies are the primary source for users of methods that require resupply, including the pill ( 36 percent), and condoms ( 44 percent). Family planning clinics (JAFPP) are the primary source for IUDs ( 31 percent) and injections ( 16 percent). In the public sector, government hospitals are the major source for most female sterilizations ( 46 percent), followed by the private hospitals ( 32 percent) and Royal Medical Services ( 20 percent).


Figure 5.3 Sources of Family Planning Methods Among Current Users of Modern Methods


JPFHS 2002

### 5.9 INFORMED ChOICE

Women who are currently using a modern method of contraception, and had adopted the method within the five years preceding the survey, were asked whether they were informed about the side effects of the methods they were using, whether they were told what to do if they experienced any side effects, and whether they were informed about other methods of contraception they could use.

Table 5.11 shows that 70 percent of women were informed about the side effects of their method, while 56 percent were informed about what to do should they experience side effects. Seventy percent of women were also informed about alternative methods. The majority of women who use injectables were well informed: 80 percent had been told about side effects, 66 percent knew what to do when they had side effects, and 72 percent were informed about other available methods of contraception. Users of the IUD and the pill were similarly well informed about side effects (IUD: 72 percent; pill: 70 percent), and

| Table 5.11 Informed choice |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Among current users of modern contraceptive methods who adopted the current method in the five years preceding the survey, percentage who were informed about the side effects of the method used, percentage who were informed what to do if side effects were experienced, and percentage who were informed of other methods that could be used for contraception, and percentage of women who were sterilized in the five years preceding the survey who were informed that they would not be able to have any more children, by specific method, initial source of method, and background characteristics, Jordan 2002 |  |  |  |  |
| Type of information received |  |  |  |  |
| Method, source, and background characteristic | Informed about side effects or problems of method used ${ }^{1}$ | Informed what to do if experienced side effects ${ }^{2}$ | Informed of other methods that could be used ${ }^{2}$ | Informed that sterilization is permanent ${ }^{3}$ |
| Method |  |  |  |  |
| Female sterilization | 45.4 | 24.7 | 51.6 | 96.5 |
| Pill | 69.7 | 49.2 | 71.3 | na |
| IUD | 71.6 | 59.4 | 71.2 | na |
| Injectables | 79.9 | 65.8 | 72.3 | na |
| Other ${ }^{4}$ | * | * | 70.3 | na |
| Initial source of method ${ }^{5}$ |  |  |  |  |
| Public | 69.1 | 57.2 | 71.1 | 94.7 |
| Government hospital | 67.6 | 52.8 | 67.3 | 92.8 |
| Government health center | 70.0 | 59.3 | 72.2 | na |
| Government MCH | 70.3 | 58.4 | 71.6 | na |
| Other public | 64.5 | 53.2 | 72.4 | 100.0 |
| Private medical | 71.0 | 54.8 | 70.1 | 100.0 |
| Private hospital/clinic | 70.8 | 39.5 | 52.0 | 100.0 |
| Private doctor | 68.6 | 58.0 | 67.2 | na |
| Pharmacy | 67.5 | 39.1 | 56.1 | na |
| Jordanian Assoc. of Fam Plan. and Protection (JAFPP) | 75.8 | 60.1 | 77.3 | na |
| UNRWA health center | 69.1 | 58.2 | 84.7 | na |
| Residence |  |  |  |  |
| Urban | 69.8 | 54.9 | 70.8 | 98.3 |
| Rural | 72.8 | 59.1 | 68.7 | 90.7 |
| Region |  |  |  |  |
| Central | 69.7 | 53.7 | 71.3 | 96.6 |
| North | 71.6 | 59.3 | 67.8 | 97.6 |
| South | 71.7 | 61.9 | 71.4 | 93.1 |
| Educational level attended |  |  |  |  |
| No education | 60.1 | 47.1 | 62.1 | 100.0 |
| Elementary | 68.3 | 50.9 | 61.5 | 92.3 |
| Preparatory | 68.8 | 56.3 | 70.7 | 94.5 |
| Secondary | 72.9 | 56.8 | 71.7 | 100.0 |
| Higher | 69.3 | 56.0 | 72.3 | 96.5 |
| Preparatory + secondary | 71.5 | 56.6 | 71.4 | 96.8 |
| Total | 70.3 | 55.6 | 70.4 | 96.5 |
| Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. na $=$ Not applicable <br> ${ }^{1}$ Among users of female sterilization, pill, IUD, and injectables <br> ${ }^{2}$ Among users of female sterilization, pill, IUD, injectables, diaphragm, foam or jelly, and lactational amenorrhea method (LAM) <br> ${ }^{3}$ Sterilized women who were told that they would not be able to have any more children <br> ${ }^{4}$ Diaphragm, foam, jelly and lactational amenorrhea method (LAM) <br> ${ }^{5}$ Source at start of current episode of use |  |  |  |  |

were told in equal proportions about other methods they could use ( 71 percent); however, those who use an IUD were much more likely to have been told about what to do in case of side effects ( 59 percent) than users of the pill ( 49 percent). It should be noted that only 45 percent of sterilized women were informed about side effects, and only 25 percent were informed about what to do if they experienced side effects; 52 percent were informed about other methods. Four percent of women reported that they were not told that sterilization is a permanent method before undergoing the procedure.

Contraceptive users who obtained their methods from a public source were almost equally likely to have received information about the method as those who went to a private source ( 69 percent and 71 percent, respectively); those who obtained their method from JAFPP were most likely to have received information about side effects ( 76 percent) and what to do about them ( 60 percent). Differentials by residence show that rural women are more likely to have been told what to do about side effects than urban women ( 59 percent compared with 55 percent), while urban women are slightly better informed than rural women with regard to other methods. There are small regional differences in the information given to contraceptive users, with women in the South region being somewhat more likely to have received all three kinds of information.

A woman's level of education is associated with the provision of information about the method's side effects, such that women with less education (none or elementary only) are less likely to have been told about side effects, what to do in the event of side effects, or about other methods they could use, than more educated women.

### 5.10 CONTRACEPTIVE DISCONTINUATION

A key concern of family planning officials is the extent to which women discontinue use of contraceptive methods, and their reasons for doing so. Life table discontinuation rates based on information collected in the calendar are presented in Table 5.12. Discontinuation rates were calculated for each method based on use during the first 12 months after beginning the method. The reasons for discontinuation were examined, then classified into four main categories: method failure, desire to become pregnant, switch to another method, and other reasons (including problems related to the use of a particular method, husband's disapproval, health reasons, cost, and absence of need to use a family planning method). Table 5.12 indicates that eleven percent of users stopped using before the end of the first year because the method failed; 9 percent said they stopped because they wanted to become pregnant; 15 percent switched to another method. ${ }^{1}$ These discontinuation rates are lower than those found in the 1997 JPFHS.

Discontinuation rates were highest for LAM (61 percent) - in part because, by definition, LAM can be used for a maximum of 6 months postpartum - followed by the male condom ( 56 percent) and the pill and injectables ( 55 percent each). The lowest discontinuation rate was for the IUD (the most common method), with 13 percent of women discontinuing the method during the first year of use. Part of the reason that the IUD has the lowest discontinuation rate may be because a woman has to seek the help of a medical professional to have it removed; she cannot stop using the method of her own volition.

[^1]Table 5.12 First-year contraceptive discontinuation rates
Percentage of contraceptive users who discontinued use of a method within 12 months after beginning its use in the five years preceding the survey, by reason for discontinuation and specific method, Jordan 2002

|  | Reason for discontinuation |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Method <br> failure | Desire <br> to become <br> pregnant | Switched <br> to another <br> method $^{1}$ | Other <br> reason | Total |
| Mill | 9.3 | 10.0 | 20.5 | 15.5 | 55.4 |
| IUD | 1.4 | 2.7 | 5.1 | 3.7 | 12.8 |
| Injectables | 0.0 | 8.3 | 28.2 | 18.7 | 55.2 |
| Male condom | 13.2 | 10.9 | 25.6 | 6.3 | 56.0 |
| LAM | 7.9 | 3.9 | 32.9 | 16.3 | 61.0 |
| Periodic abstinence | 27.9 | 15.0 | 5.2 | 4.4 | 52.5 |
| Withdrawal | 16.4 | 15.4 | 13.2 | 4.0 | 49.0 |
| All methods | 10.5 | 8.6 | 14.9 | 8.1 | 42.0 |

Note: Table is based on episode of contraceptive use that began 3-59 months prior to the survey LAM = Lactational amenorrhea
${ }^{1}$ Used a different method in the month following discontinuation or said that they wanted a more effective method and started another method within two months of discontinuation

First-year discontinuation rates due to method failure are highest for periodic abstinence and withdrawal (Figure 5.4). Fifteen percent of women who used periodic abstinence, 15 percent of women who used withdrawal, 11 percent who used the male condom, and 10 percent who used the pill discontinued the method to become pregnant.

Figure 5.4 Contraceptive Discontinuation Rates by Reason and Method


Table 5.13 provides information about women's reasons for discontinuing contraception. The table includes all discontinuations in the five years before the survey, regardless of whether they occurred during the first 12 months of use or later. The reason given most frequently for discontinuation was the desire to get pregnant ( 31 percent), followed by method failure ( 21 percent), and side effects ( 13 percent). The other reasons women cited for discontinuation were the desire to have a more effective method (11 percent), health concerns ( 9 percent), and inconvenient to use ( 5 percent). About 2 percent of currently married women report husband's disapproval of family planning as their reason for discontinuation.

| Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason stated for discontinuation, according to specific method, Jordan 2002 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reason | Pill | IUD | Injectables | Condoms | Foam/ jelly | LAM | Periocic abstinence | Withdrawal | All methods ${ }^{1}$ |
| Became pregnant while using | 14.8 | 7.0 | 5.3 | 24.6 | 44.7 | 15.0 | 45.6 | 35.7 | 20.8 |
| Wanted to become pregnant | 26.7 | 39.9 | 17.9 | 28.8 | 12.6 | 10.7 | 35.8 | 36.5 | 30.9 |
| Infrequent sex/husband away | 5.2 | 2.3 | 0.6 | 2.1 | 1.1 | 0.6 | 5.0 | 2.8 | 3.0 |
| Marital dissolution/separation | 0.6 | 1.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.8 | 0.6 |
| Difficult to get pregnant/menopausal | 0.1 | 1.0 | 0.0 | 0.2 | 0.0 | 0.0 | 1.3 | 0.5 | 0.5 |
| Husband disapproved | 1.4 | 0.4 | 0.0 | 13.6 | 3.3 | 0.1 | 0.8 | 3.5 | 2.2 |
| Fatalistic | 0.3 | 0.2 | 2.1 | 0.2 | 3.1 | 0.9 | 0.0 | 0.5 | 0.4 |
| Health concerns | 13.6 | 18.1 | 20.2 | 5.6 | 1.7 | 1.5 | 0.7 | 1.1 | 9.0 |
| Side effects | 25.5 | 22.2 | 47.2 | 6.1 | 16.3 | 0.1 | 0.2 | 1.1 | 13.1 |
| Wanted a more effective method | 6.4 | 0.6 | 2.4 | 16.0 | 7.5 | 38.0 | 8.8 | 15.5 | 11.3 |
| Cost too much | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Inconvenient to use | 3.2 | 3.0 | 1.7 | 2.4 | 7.7 | 25.4 | 0.5 | 1.2 | 5.2 |
| Access/availability | 0.1 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.5 | 0.0 | 0.1 |
| Other | 2.1 | 4.2 | 2.1 | 0.3 | 2.0 | 7.4 | 0.4 | 0.9 | 2.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of discontinuations | 1,152 | 1,480 | 90 | 398 | 81 | 670 | 566 | 1,030 | 5,475 |

Discontinuation due to method failure is particularly high for the traditional methods of periodic abstinence ( 46 percent) and withdrawal ( 36 percent). Among modern methods, method failure was the main reason given for discontinuation of vaginal methods such as the diaphragm, or contraceptive foam or jelly ( 45 percent) and condoms ( 25 percent), both coitus-dependent methods. Side effects were most frequently cited as the reason for discontinuation among women who had been relying on injectables ( 47 percent), the pill ( 25 percent), and the IUD ( 22 percent).

### 5.11 Reasons for Not Using and Future Use of Family Planning

Women who were not using contraception at the time of the survey were asked about the main reason for not currently using a contraceptive method (Table 5.14). Approximately one-third of the women ( 34 percent) mentioned the desire for more children as the main reason, followed by current pregnancy combined with the fact that they were recently postpartum and breastfeeding ( 28 percent). Fear of side effects and health concerns were reported by about 7 percent of women.

To obtain information about potential demand for family planning services, all currently married women who were not using contraception at the time of the survey were asked about their intention to use family planning in the future. Those who responded in the affirmative were also asked which method they would prefer to use.

| Table 5.14 Reasons for not using contraception |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of currently married women who are not using a contraceptive method by main reason for not using, according to age, Jordan 2002 |  |  |  |
| Reason | Age |  | Total |
|  | 15-29 | 30-49 |  |
| Fertility-related reasons |  |  |  |
| No/Infrequent sex | 2.2 | 8.9 | 6.1 |
| Menopausal | 0.0 | 5.6 | 3.3 |
| Hysterectomy | 0.2 | 2.8 | 1.7 |
| Subfecund, infecund | 1.2 | 7.0 | 4.6 |
| Postpartum, childbearing | 7.9 | 6.6 | 7.1 |
| Wants more children | 46.9 | 25.0 | 34.2 |
| Pregnant | 27.0 | 16.5 | 20.9 |
| Difficult to get pregnant | 4.5 | 9.1 | 7.2 |
| Sexual impotence | 0.1 | 0.6 | 0.4 |
| Husband sick | 0.3 | 1.8 | 1.2 |
| Has not menstruated | 0.6 | 0.6 | 0.6 |
| Opposition to use |  |  |  |
| Respondent opposed | 1.1 | 1.3 | 1.2 |
| Husband opposed | 2.5 | 2.2 | 2.3 |
| Religious prohibition | 0.2 | 0.1 | 0.1 |
| Rumors | 0.1 | 0.5 | 0.3 |
| Method-related reasons |  |  |  |
| Health concerns | 2.3 | 5.6 | 4.2 |
| Fear side effects | 2.0 | 3.6 | 2.9 |
| Costs too much | 0.2 | 0.0 | 0.1 |
| Inconvenient to use | 0.1 | 0.6 | 0.4 |
| Interferes with body's processes | 0.0 | 0.3 | 0.2 |
| Other/don't know | 0.7 | 1.2 | 1.0 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 1,054 | 1,469 | 2,523 |

Table 5.15 presents the distribution of currently married women who were not using contraception, by intention to use in the future, according to number of living children. Nearly 6 out of 10 nonusers in the 2002 JPFHS said that they intend to use family planning in the future, while more than one-third ( 36 percent) of nonusers said they do not intend to use in the future. In the 1997 JPFHS, the proportion of nonusers who intended to use a family planning method in the future was 65 percent and the proportion of those who did not plan to do anything to avoid a pregnancy in the future was 28 percent.

Intention to use contraception in the future appears not to have a strong positive association with the number of living children a woman has: women with three children are more likely to want to use contraception in the future than those with fewer or more children. Specifically, 72 percent of women with three children said they intend to use a method of family planning, compared with 48 percent of childless women and 53 percent of women with four or more children.

| Table 5.15 Future use of contraception |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- |
| Percent distribution of currently married women who are not using a contraceptive |
| method by intention to use in the future, according to number of living children, Jor- |
| dan 2002 |

The reasons women choose not to use family planning are of particular interest to family planning program officials. Table 5.16 gives the distribution of women who are not using contraception and have no intention to do so by their reason for not using and not intending to use. The primary reason given is infecundity and desire to have more children (28 percent each). The next most common reason for not using is menopause ( 8 percent). Other reasons mentioned are health concerns or fear of side effects ( 12 percent), and infrequent sexual relations ( 6 percent). Another 8 percent mention husband's or respondent's disapproval of contraception.

Women under age 30 are more likely than older women to mention the desire to have children, while infecundity and menopause are more often reported by older women. Husband's or respondent's disapproval of contraception is mentioned more often by younger women than by women age 30 and over. Fear of side effects is cited more often by younger women than older women.

Married women who were not using contraception at the time of the survey, but reported that they intended to use, were asked about the method they intend to use. The results are shown in Table 5.17. The majority

Table 5.16 Reasons for not intending to use contraception
Percent distribution of currently married women who are not using a contraceptive method and who do not intend to use in the future by main reason for not intending to use, according to age, Jordan 2002

|  | Age |  |  |
| :--- | ---: | ---: | ---: |
| Reason | $15-29$ | $30-49$ | Total |
| Fertility-related reason | 60.1 | 77.2 | 74.1 |
| Infrequent sex | 0.3 | 7.0 | 5.8 |
| Menopausal, hysterectomy | 0.0 | 9.5 | 7.8 |
| Subfecund, infecund | 8.5 | 32.0 | 27.8 |
| Wants more children | 47.5 | 23.2 | 27.6 |
| Difficult to get pregnant | 3.8 | 5.4 | 5.1 |
| Opposition to use |  |  |  |
| Respondent opposed | 20.4 | 5.7 | 8.3 |
| Husband opposed | 4.9 | 3.3 | 3.6 |
| Others opposed | 14.4 | 2.3 | 4.5 |
| Religious prohibition | 0.5 | 0.0 | 0.1 |
| Method-related reason | 0.7 | 0.1 | 0.2 |
| Health concerns | 16.3 | 11.9 | 12.7 |
| Fear side effects | 9.1 | 6.9 | 7.3 |
| Costs too much | 6.7 | 3.8 | 4.3 |
| Inconvenient to use | 0.0 | 0.1 | 0.1 |
| Interferes with body | 0.4 | 0.4 | 0.4 |
|  | 0.1 | 0.7 | 0.6 |
| Other | 3.1 | 4.9 | 4.6 |
|  |  |  |  |
| Don't know | 0.0 | 0.3 | 0.3 |
| Total |  |  | 100.0 |
| Number of women | 100.0 | 100.0 | 738 | of women ( 79 percent) say they want to use a modern method of contraception; and 11 percent want to use a traditional method. More than half of the women (53 percent) who intend to use contraception say they want to use the IUD. After the IUD, the most popular modern methods are the pill ( 15 percent) and female sterilization (4 percent). The younger women (less than 30 years) were more likely to use the pill

than older women (30 years or more). The converse was true with regard to the use of female sterilization, with 7 percent of older women preferring sterilization, but less than half of one percent of younger women preferring the same. The trend with respect to other methods was almost the same for both of the two age groups.

Some programmatic implications can be drawn from the data in Table 5.17. Because of the popularity of the IUD, the pill, and female sterilization, several issues need to be considered in anticipation of women's carrying out their intentions to use those methods. First, the supply of pills must be adequate to meet the needs of women who want to use that method; second, for women who want to use the IUD or female sterilization, trained personnel must be available to provide the services.

Women who intended to use the IUD in

Table 5.17 Preferred method of contraception for future use

Percent distribution of currently married women who are not using a contraceptive method but who intend to use in the future by preferred method, according to age, Jordan 2002

|  | Age |  |  |
| :--- | ---: | ---: | ---: |
| Method | $15-29$ | $30-49$ | Total |
| Female sterilization | 0.4 | 7.4 | 3.5 |
| Pill | 17.3 | 13.0 | 15.4 |
| IUD | 52.6 | 54.2 | 53.3 |
| Injectables | 1.9 | 2.1 | 2.0 |
| Implants | 0.6 | 0.7 | 0.7 |
| Condom | 3.3 | 3.1 | 3.2 |
| Foam/jelly | 0.7 | 1.1 | 0.8 |
| Lactation amenorrhea | 0.9 | 0.1 | 0.5 |
| Periodic abstinence | 3.8 | 4.8 | 4.2 |
| Withdrawal | 7.2 | 6.3 | 6.8 |
| Other | 0.1 | 0.0 | 0.1 |
| Unsure | 11.2 | 7.2 | 9.5 |
|  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 843 | 661 | 1,504 | the future were asked about the preferred sex of IUD service providers. Eighty-seven percent said that they prefer the service provider to be a female compared with 4 percent who preferred a male provider, and 9 percent who said that the sex of the IUD provider does not matter to them (table not shown).

### 5.12 Exposure to Family Planning Messages

Radio and television are the major sources of information about family planning in the media beside print and other media. To assess the effectiveness of those media for disseminating family planning information, all ever-married women were asked if they had heard, seen or read messages about family planning on the radio, television or other mentioned sources during the few months prior to the survey. The results indicate that, overall, 76 and 33 percent of ever-married women are exposed to family planning messages via the electronic media of radio and television, respectively (Table 5.18). Differentials in access to family planning messages by age, place of residence, region and education are generally evident, with those sources of information that require literacy showing particularly striking differentials by education. Nevertheless, 52 percent of women had been exposed to family planning information via posters, followed by bulletins and booklets ( 48 percent) and newspapers and magazines ( 37 percent). Lectures were the least common sources of exposure to family planning messages (11 percent).

The results also show that 14 percent of respondents reported that they hadn't been exposed to family planning information via any of the six media sources. Younger women ( $15-19$ years), older women (40-49 years), urban women, women living in the Central region, women with no education, and women with elementary education were less likely to have been exposed to family planning messages through media than other women.

## Table 5.18 Exposure to family planning messages

Percentage of all ever-married women who have heard or seen a family planning message through various media sources (radio, television, newspaper/magazine, posters, bulletins/booklets, and lectures, in the few months preceding the survey, by background characteristics, Jordan 2002

| Background characteristic | Exposed to family planninng messages through: |  |  |  |  |  | these six media sources | None of Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Radio | Television | Newspaper/ magazine | Posters | Bulletins/ booklets | Lectures |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 25.3 | 67.9 | 29.5 | 44.4 | 46.0 | 6.7 | 22.4 | 158 |
| 20-24 | 27.1 | 77.2 | 34.7 | 55.9 | 54.0 | 8.2 | 11.0 | 728 |
| 25-29 | 30.7 | 74.5 | 36.9 | 55.6 | 55.8 | 9.0 | 12.8 | 1,175 |
| 30-34 | 34.8 | 77.1 | 40.5 | 57.7 | 53.1 | 13.1 | 11.0 | 1,354 |
| 35-39 | 37.1 | 80.9 | 41.6 | 53.5 | 49.0 | 13.6 | 11.1 | 1,071 |
| 40-44 | 30.8 | 69.3 | 35.3 | 46.2 | 38.0 | 11.6 | 19.6 | 862 |
| 45-49 | 38.4 | 73.5 | 31.5 | 33.7 | 29.9 | 11.8 | 18.6 | 659 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 33.2 | 73.9 | 38.6 | 52.4 | 49.4 | 10.9 | 14.3 | 4,799 |
| Rural | 32.4 | 82.0 | 31.9 | 48.9 | 42.9 | 12.8 | 11.3 | 1,207 |
| Region |  |  |  |  |  |  |  |  |
| Central | 34.9 | 72.3 | 40.7 | 51.5 | 49.1 | 10.3 | 15.3 | 3,898 |
| North | 28.6 | 82.4 | 29.4 | 52.9 | 46.3 | 10.2 | 10.3 | 1,542 |
| South | 32.4 | 79.0 | 35.2 | 49.6 | 46.4 | 20.9 | 12.2 | 566 |
| Educational level attended |  |  |  |  |  |  |  |  |
| No education | 28.8 | 67.4 | 3.3 | 16.2 | 5.0 | 10.9 | 28.3 | 363 |
| Elementary | 29.5 | 70.9 | 15.4 | 31.1 | 24.2 | 10.5 | 20.7 | 689 |
| Preparatory | 32.3 | 78.4 | 33.0 | 49.7 | 48.0 | 10.5 | 13.0 | 1,231 |
| Secondary | 34.5 | 76.9 | 41.9 | 57.7 | 55.5 | 11.0 | 12.0 | 2,247 |
| Higher | 34.2 | 75.1 | 52.4 | 62.4 | 58.7 | 12.7 | 10.1 | 1,476 |
| Preparatory + secondary | 33.7 | 77.4 | 38.7 | 54.9 | 528 | 10.8 | 12.4 | 3,478 |
| Total | 33.0 | 75.5 | 37.3 | 51.7 | 48.1 | 11.3 | 13.7 | 6,006 |

### 5.13 Contact of Nonusers With Family Planning Providers

Information on whether currently married nonusers had visited a health facility (seeking care for themselves or their children) in the last 12 months was collected in the 2002 JPFHS. This contact may provide an opportunity for them to receive family planning information; therefore, women who reported having visited a health facility in the past 12 months were asked whether anyone in the health facility had talked to them about family planning methods.

Table 5.19 shows that eight in ten nonusers had visited a health facility in the 12 months preceding the survey, of whom only one-fourth had discussed family planning during their visit. The results also show that older women, urban women, women living in the Central region, and less educated women were less likely to visit a health facility than other women. Women age 20-39 years, rural women, women living in the North and South region, and more educated women were more likely to have visited a health facility and discussed family planning during their visit to the health facility compared with other women.

| Table 5.19 Contact of nonusers with family planning providers |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all ever-married women who are not using contraception by whether they visited a health facility and discussed family planning in the 12 months preceding the survey, by background characteristics, Jordan 2002 |  |  |  |  |  |
| Background characteristic | Women who visited a health facility and discussed family planning | Women who visited a health health facility but did not discuss family planning | Women who did not visit a health facility | Total | Number of women |
| Age |  |  |  |  |  |
| 15-19 | 13.2 | 70.6 | 16.2 | 100.0 | 125 |
| 20-24 | 27.2 | 58.0 | 14.8 | 100.0 | 428 |
| 25-29 | 28.2 | 58.7 | 13.1 | 100.0 | 562 |
| 30-34 | 22.0 | 62.6 | 15.4 | 100.0 | 563 |
| 35-39 | 21.6 | 60.0 | 18.4 | 100.0 | 410 |
| 40-44 | 9.8 | 64.3 | 25.9 | 100.0 | 348 |
| 45-49 | 8.6 | 61.6 | 29.9 | 100.0 | 378 |
| Residence |  |  |  |  |  |
| Urban | 19.6 | 61.3 | 19.2 | 100.0 | 2,194 |
| Rural | 22.8 | 60.9 | 16.4 | 100.0 | 621 |
| Region |  |  |  |  |  |
| Central | 19.5 | 59.3 | 21.2 | 100.0 | 1,774 |
| North | 21.6 | 65.8 | 12.6 | 100.0 | 736 |
| South | 21.5 | 61.0 | 17.4 | 100.0 | 305 |
| Educational level attended |  |  |  |  |  |
| No education | 10.9 | 61.9 | 27.2 | 100.0 | 229 |
| Elementary | 14.8 | 59.9 | 25.3 | 100.0 | 386 |
| Preparatory | 26.1 | 54.4 | 19.5 | 100.0 | 618 |
| Secondary | 21.0 | 62.6 | 16.5 | 100.0 | 976 |
| Higher | 20.2 | 66.4 | 13.5 | 100.0 | 607 |
| Preparatory + secondary | 23.0 | 59.4 | 17.6 | 100.0 | 1,594 |
| Total | 20.3 | 61.2 | 18.6 | 100.0 | 2.815 |

## NUPTIALITY AND EXPOSURE TO THE RISK OF PREGNANCY

This chapter addresses the principal factors, other than contraception, that affect a woman's risk of becoming pregnant: nuptiality, postpartum amenorrhea, and secondary infertility. In addition, data pertaining to the timing of respondents' most recent sexual activity were collected.

Information on nuptiality is of particular interest because marriage is a primary determinant of the exposure of women to the risk of pregnancy, particularly in countries like Jordan where premarital fertility is rare. Marriage patterns are important for an understanding of fertility, since early age at first marriage is associated with early childbearing and high fertility. In this survey and for all data collection in Jordan, the term marriage refers to a legal or formal union.

### 6.1 Current Marital Status

Table 6.1 compares data on ever-married women from the 2002 JPFHS with the 1976 Jordan Fertility Survey (JFS), the 1983 Jordan Fertility and Family Health Survey (JFFHS), and the 1990 and 1997 Jordan Population and Family Health Surveys (JPFHS). During the 26 years between 1976 and 2002, the percentage of women ever married decreased from 66 to 54 percent, a drop of 17 percent. However, the bulk of decline appears to have taken place between 1976 and 1983 ( 15 percent). After this initial decline, the proportion of women ever married remains nearly unchanged, ranging from about 54 to 56 percent.

Table 6.1 Trends in the proportion of ever-married women by age group

Percentage of women 15-49 who have ever married by age, selected surveys, Jordan 1976-2002

| Age group | JFS <br> 1976 | JFFHS <br> 1983 | JPFHS <br> 1990 | JPFHS <br> 1997 | JPFHS <br> 2002 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $15-19$ | 19.5 | 9.4 | 10.6 | 8.2 | 6.2 |
| $20-24$ | 64.1 | 42.0 | 45.2 | 38.8 | 34.1 |
| $25-29$ | 87.4 | 76.3 | 73.7 | 66.2 | 65.3 |
| $30-34$ | 95.3 | 90.1 | 89.1 | 80.7 | 79.6 |
| $35-39$ | 97.4 | 94.9 | 94.6 | 89.9 | 87.3 |
| $40-44$ | 98.0 | 96.8 | 97.3 | 94.4 | 92.6 |
| $45-49$ | 98.3 | 97.1 | 98.0 | 96.0 | 95.4 |
| Total | 65.7 | 56.0 | 56.2 | 54.6 | 54.4 |

In Jordan, marriage is almost universal. In 2002, only 5 percent of women have not married by the end of their reproductive years (see Table 6.2). However, the percentage never married has increased over the years. For example, in 1976, less than 3 percent of women age 35-39 had never married (see Figure 6.1). The proportion of women never married increased to about 5 percent between 1983 and 1990, doubled in 1997 ( 10 percent), and rose again to 13 percent in 2002. The pattern is similar for women in the younger age groups. The proportion of never-married women age 20-24 increased from 36 percent in 1976 to 55 percent in 1990, then to 66 percent in 2002. Echoing this trend, the proportion of women age 15-19 who had never married increased by 17 percent during the years from 1976 to 2002. This change is the consequence of an increase of the age at marriage.

| Table 6.2 Current marital status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women by current marital status, according to age, Jordan 2002 |  |  |  |  |  |  |
|  | Marital status |  |  |  |  | Number of women |
| Age group | Never married | Married | Divorced | Widowed | Total |  |
| 15-19 | 93.8 | 6.0 | 0.1 | 0.0 | 100.0 | 2,563 |
| 20-24 | 65.9 | 33.3 | 0.8 | 0.0 | 100.0 | 2,135 |
| 25-29 | 34.7 | 63.2 | 1.6 | 0.6 | 100.0 | 1,799 |
| 30-34 | 20.4 | 77.3 | 1.7 | 0.6 | 100.0 | 1,700 |
| 35-39 | 12.7 | 84.3 | 1.4 | 1.6 | 100.0 | 1,226 |
| 40-44 | 7.4 | 84.1 | 2.0 | 6.5 | 100.0 | 930 |
| 45-49 | 4.6 | 83.3 | 2.3 | 9.8 | 100.0 | 690 |
| Total | 45.6 | 51.7 | 1.2 | 1.5 | 100.0 | 11,044 |

Figure 6.1 Distribution of Never-married Women 15-39 by Age Group, Various Surveys, 1976-2002


Table 6.2 presents the distribution of women by current marital status. Of the 11,044 women age 15-49 listed in the household schedule, 46 percent had never married, 52 percent were currently married, and the remaining 3 percent were either divorced or widowed.

The proportion currently married increases steadily from 6 percent among women age 15-19 to 84 percent among those age 35-44, then declines slightly to 83 percent for women in the oldest age group 45-49. As expected, the proportion widowed increases with age, reaching 10 percent for women age 45-49. About 1 percent of women in Jordan are divorced.

### 6.2 Polygyny

Marital unions are predominantly of two types - those that are monogamous and those that are polygynous. The distinction has social significance and possible implications for fertility, although the relationship between type of union and fertility is complex and not easily understood. The proportion of currently married women in Jordan in a polygynous union is shown in Table 6.3.

| Table 6.3 Number of cowives |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married women by number of cowives, according to background characteristics, Jordan 2002 |  |  |  |  |  |
| Background characteristic | Number of cowives |  |  | Total | Number of women |
|  | 0 | 1 | $2+$ |  |  |
| Age |  |  |  |  |  |
| 15-19 | 96.5 | 3.5 | 0.0 | 100.0 | 154 |
| 20-24 | 97.9 | 1.9 | 0.2 | 100.0 | 710 |
| 25-29 | 96.6 | 2.9 | 0.4 | 100.0 | 1,136 |
| 30-34 | 94.2 | 4.9 | 0.8 | 100.0 | 1,314 |
| 35-39 | 92.4 | 6.6 | 1.0 | 100.0 | 1,034 |
| 40-44 | 87.7 | 10.8 | 1.4 | 100.0 | 782 |
| 45-49 | 86.4 | 11.5 | 2.1 | 100.0 | 575 |
| Residence |  |  |  |  |  |
| Urban | 93.9 | 5.3 | 0.8 | 100.0 | 4,546 |
| Rural | 90.5 | 8.1 | 1.4 | 100.0 | 1,160 |
| Region |  |  |  |  |  |
| Central | 93.3 | 5.7 | 1.0 | 100.0 | 3,683 |
| North | 93.6 | 5.6 | 0.8 | 100.0 | 1,480 |
| South | 91.6 | 7.8 | 0.7 | 100.0 | 542 |
| Educational level attended |  |  |  |  |  |
| No education | 78.0 | 19.4 | 2.6 | 100.0 | 324 |
| Elementary | 83.9 | 13.2 | 3.0 | 100.0 | 638 |
| Preparatory | 92.0 | 7.1 | 0.9 | 100.0 | 1,144 |
| Secondary | 96.7 | 2.8 | 0.4 | 100.0 | 2,159 |
| Higher | 96.4 | 3.3 | 0.3 | 100.0 | 1,441 |
| Preparatory + secondary | 95.1 | 4.3 | 0.6 | 100.0 | 3,303 |
| Total | 93.2 | 5.9 | 0.9 | 100.0 | 5,706 |

Overall, 7 percent of currently married women in 2002 as well as in 1997 in Jordan are in a polygynous union. Older women are more likely to be in a polygynous union than younger women ( 13 percent at age $40-49$ versus less than 3 percent at ages 15-24). The incidence of polygyny is also higher among women residing in rural areas. There is little difference in type of marital union by region.

There is an inverse relationship between polygyny and education. Among women with no education, the proportion of married women in a polygynous union is 22 percent. The percentage decreases to 8 percent among women with preparatory education and to 3 percent among women with a secondary or higher education.

### 6.3 CONSANGUINITY

Kinship marriage, also called consanguineous marriage, is relatively common in Jordan. Data in Table 6.4 indicate that more than two-fifths ( 43 percent) of women age 15-49 in Jordan reported that they are related to their current husband (or last husband, if they were divorced or widowed). Four percent were dual first cousin marriages (i.e., both father's and mother's sides). The proportion of first cousin marriages/father's side was higher than that of the mother's side (14 percent and 8 percent, respectively), and 17 percent were marriages to second cousins or other relatives.

| Table 6.4 Consanguinity |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all ever-married women by their relationship to their current or first husband, by background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Relationship to husband |  |  |  |  |  |  |  | Total | Number of women |
| Background characteristic | No relation | First <br> cousin: father and mother | First cousin: father | First cousin: mother | First cousin: father's sister | First cousin: mother's sister | Second cousin: father | Second cousin: mother | Other relative |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 58.4 | 3.9 | 6.1 | 2.5 | 5.5 | 5.3 | 4.8 | 10.9 | 2.7 | 100.0 | 158 |
| 20-24 | 56.0 | 4.5 | 11.1 | 3.3 | 4.7 | 6.0 | 8.0 | 4.5 | 1.8 | 100.0 | 728 |
| 25-29 | 58.3 | 3.7 | 7.9 | 3.2 | 4.3 | 5.4 | 11.4 | 4.1 | 1.5 | 100.0 | 1,175 |
| 30-34 | 58.8 | 2.9 | 9.2 | 3.9 | 4.6 | 5.0 | 9.5 | 5.0 | 1.2 | 100.0 | 1,354 |
| 35-39 | 56.8 | 3.9 | 10.2 | 3.5 | 3.1 | 3.9 | 11.0 | 6.3 | 1.2 | 100.0 | 1,071 |
| 40-44 | 58.9 | 4.0 | 11.5 | 3.6 | 3.5 | 4.0 | 10.4 | 2.8 | 1.3 | 100.0 | 862 |
| 45-49 | 51.1 | 4.1 | 13.2 | 3.0 | 2.0 | 4.6 | 13.3 | 4.9 | 3.7 | 100.0 | 659 |
| First married by exact age |  |  |  |  |  |  |  |  |  |  |  |
| 15 | 44.8 | 2.7 | 15.5 | 1.3 | 8.2 | 5.8 | 15.9 | 5.5 | 0.2 | 100.0 | 235 |
| 18 | 47.8 | 4.7 | 13.8 | 3.7 | 4.0 | 4.4 | 13.0 | 6.3 | 2.2 | 100.0 | 1,430 |
| 20 | 50.2 | 3.4 | 11.7 | 4.8 | 5.0 | 7.4 | 10.4 | 5.3 | 1.9 | 100.0 | 1,252 |
| 22 | 57.8 | 5.1 | 7.8 | 3.1 | 4.0 | 4.5 | 11.5 | 4.6 | 1.6 | 100.0 | 1,147 |
| 25 | 67.1 | 3.2 | 8.4 | 2.8 | 2.9 | 3.6 | 6.9 | 3.7 | 1.6 | 100.0 | 1,118 |
| Number of cowives |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 56.4 | 3.9 | 10.1 | 3.6 | 4.0 | 5.1 | 10.5 | 4.9 | 1.7 | 100.0 | 5,600 |
| 1 | 69.3 | 1.8 | 8.1 | 1.7 | 3.3 | 1.5 | 9.1 | 4.5 | 0.9 | 100.0 | 354 |
| $2+$ | 61.5 | 2.2 | 20.9 | 0.0 | 0.0 | 0.0 | 13.5 | 1.8 | 0.0 | 100.0 | 52 |
| Marital duration ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| Women married once |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 years | 64.9 | 3.3 | 7.4 | 2.8 | 3.4 | 5.0 | 7.0 | 5.2 | 1.1 | 100.0 | 1,164 |
| 5-9 years | 59.3 | 3.5 | 7.4 | 3.9 | 5.1 | 5.0 | 9.9 | 4.1 | 1.7 | 100.0 | 1,194 |
| 10-14 years | 59.3 | 3.7 | 9.9 | 3.4 | 3.5 | 5.1 | 9.3 | 4.3 | 1.7 | 100.0 | 1,127 |
| 15-19 years | 51.7 | 4.0 | 13.0 | 3.9 | 4.1 | 4.6 | 11.7 | 5.7 | 1.4 | 100.0 | 875 |
| 20-24 years | 47.7 | 5.3 | 12.4 | 3.7 | 4.2 | 3.3 | 15.8 | 6.2 | 1.5 | 100.0 | 595 |
| $25+$ years | 49.8 | 4.5 | 14.3 | 3.8 | 3.6 | 3.9 | 11.9 | 4.6 | 3.5 | 100.0 | 594 |
| Women married more than once | 57.6 | 2.8 | 11.8 | 3.1 | 0.8 | 5.1 | 15.2 | 2.3 | 1.2 | 100.0 | 156 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 59.6 | 3.8 | 9.0 | 3.3 | 3.9 | 4.8 | 9.5 | 4.7 | 1.4 | 100.0 | 4,799 |
| Rural | 47.5 | 3.3 | 14.3 | 4.0 | 3.8 | 4.8 | 14.1 | 5.4 | 2.7 | 100.0 | 1,207 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Central | 59.4 | 4.5 | 8.9 | 3.4 | 3.7 | 4.7 | 9.5 | 4.6 | 1.4 | 100.0 | 3,898 |
| North | 52.5 | 2.4 | 11.9 | 3.7 | 4.4 | 5.1 | 12.4 | 5.6 | 2.1 | 100.0 | 1,542 |
| South | 54.8 | 2.4 | 12.9 | 2.9 | 3.9 | 5.2 | 11.1 | 4.5 | 2.3 | 100.0 | 566 |
| Educational level attended |  |  |  |  |  |  |  |  |  |  |  |
| No education | 50.6 | 3.5 | 16.4 | 2.4 | 1.3 | 3.1 | 14.2 | 4.9 | 3.7 | 100.0 | 363 |
| Elementary | 51.6 | 4.4 | 12.5 | 5.0 | 4.9 | 3.8 | 10.5 | 5.3 | 2.0 | 100.0 | 689 |
| Preparatory | 51.9 | 5.2 | 11.5 | 3.8 | 4.4 | 5.1 | 11.0 | 5.4 | 1.6 | 100.0 | 1,231 |
| Secondary | 55.6 | 3.7 | 9.4 | 3.6 | 4.1 | 6.1 | 10.7 | 5.1 | 1.7 | 100.0 | 2,247 |
| Higher | 68.1 | 2.3 | 7.1 | 2.5 | 3.2 | 3.6 | 8.5 | 3.7 | 0.9 | 100.0 | 1,476 |
| Preparatory + secondary | 54.3 | 4.2 | 10.1 | 3.6 | 4.2 | 5.7 | 10.8 | 5.2 | 1.7 | 100.0 | 3,478 |
| Total | 57.2 | 3.8 | 10.1 | 3.4 | 3.9 | 4.8 | 10.4 | 4.8 | 1.6 | 100.0 | 6,006 |
| ${ }^{1}$ For currently married women |  |  |  |  |  |  |  |  |  |  |  |

As expected, kinship marriages are more common among rural women ( 52 percent) than among urban women ( 40 percent). Women in the North and South regions are more likely than those in the Central region to marry a relative. Further, less educated women tend more often than higher educated women to marry a relative: 32 percent of women with higher than secondary education married a relative, while 49 percent of women with no education did so. Little variation in consanguineous marriage exists by current age. As regards age at first marriage, women who married by age 20 or less were more likely to marry a relative than those who first married at older ages.

Data in Table 6.4 also show that women who have recently married are less likely than other women to marry a relative. The proportion of women who are engaged in a consanguineous marriage rises from 35 percent among those whose duration of marriage is $0-4$ years to 50 percent among those with a marital duration of 15 or more years.

### 6.4 Age at First Marriage

In Jordan, almost all births occur within marriage; thus, age at first marriage is an important indicator of exposure to the risk of pregnancy and childbirth. In Jordan, the minimum age at marriage is 18 years for both sexes.

Table 6.5 shows the percentage of women who have ever married by specified ages and the median age at first marriage according to their age at the time of the survey. Comparing percentages across age groups, the data point to an increase in women's age at first marriage. For example, among women age $20-24,1$ percent were married by age 15,11 percent by age 18 , and 22 percent by age 20 . For women age 25-29, the percentages at each specific age are all higher than those for the younger women. Older women married at even younger ages: 8 percent of women age $45-49$ were married by age 15 , compared with less than 2 percent of women age 25-29. This holds for all other ages at first marriage.

| Table 6.5 Age at first marriage |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all ever-married women who were first married by specific exact ages and median age at first marriage, according to current age, Jordan 2002 |  |  |  |  |  |  |  |  |
|  |  | ercent first | f wom ed by | at we age: |  | Percentage | Number | Median age at |
| Current age | 15 | 18 | 20 | 22 | 25 | married | women | marriage |
| 15-19 | 0.6 | na | na | na | na | 93.8 | 2,563 | a |
| 20-24 | 0.9 | 11.1 | 21.5 | na | na | 65.9 | 2,135 | a |
| 25-29 | 1.6 | 16.0 | 30.5 | 43.9 | 59.4 | 34.7 | 1,799 | 23.0 |
| 30-34 | 1.7 | 15.4 | 31.4 | 47.6 | 64.5 | 20.4 | 1,700 | 22.4 |
| 35-39 | 3.1 | 20.9 | 35.5 | 52.3 | 71.4 | 12.7 | 1,226 | 21.7 |
| 40-44 | 5.5 | 27.6 | 43.7 | 58.3 | 73.8 | 7.4 | 930 | 20.9 |
| 45-49 | 7.5 | 36.0 | 54.2 | 70.1 | 82.6 | 4.6 | 690 | 19.4 |
| 20-49 | 2.6 | 18.3 | 32.5 | na | na | 31.0 | 8,481 | a |
| 25-49 | 3.2 | 20.7 | 36.2 | 51.5 | 67.7 | 19.3 | 6,346 | 21.8 |
| na $=$ Not applicable <br> ${ }^{\text {a }}$ Omitted because less than 50 percent of the women married for the first time before the beginning of the age group |  |  |  |  |  |  |  |  |

The last column in Table 6.5 provides further indications of later marriage among younger women. Median age at first marriage has steadily increased, from 19.4 years among the cohort of women age 45-49 at the time of the survey to 23 years among the cohort of women age 25-29 at the time of the
survey. The trend toward later marriage is supported, as mentioned earlier, by data showing that the proportion of women who married by age 15 has declined from 8 percent among women age $45-49$ to less than 1 percent among women age $15-19$. Overall, among Jordanian women age $25-49$, about 21 percent of women were married by age 18 and one in three was married by age 20.

Although there are only minor differentials in median age at first marriage by residence and region, education plays an important role in determining women's age at marriage (Table 6.6). The improvement of educational opportunities, particularly for girls, has resulted in their staying in school longer and, subsequently, their age at first marriage has risen. Women with secondary education tend to marry almost 2 years later than those with no education or with elementary or preparatory education. Median age at marriage for women with higher education is not shown because less than 50 percent of these women were married by the age of 25 . This means that the median age at marriage for these women is greater than 25 ; thus, women with higher than secondary education marry at least 5 years later than those with no education. There was no significant change in the median age at marriage for women in Jordan from 1997 to 2002 ( 21.5 and 21.8 years, respectively); however, the median age at marriage for women age $25-49$ is 21.8 , a significant increase over the JPFHS 1990 estimate of 19.6 years.

| Table 6.6 Median age at first marriage |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median age at first marriage among women 25-49, by current age and background characteristics, Jordan 2002 |  |  |  |  |  |  |
| Background characteristic | Current age |  |  |  |  | $\begin{gathered} \text { Women } \\ \text { age } \\ 25-49 \end{gathered}$ |
|  | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Residence |  |  |  |  |  |  |
| Urban | 23.0 | 22.5 | 21.9 | 21.1 | 19.7 | 21.9 |
| Rural | 23.2 | 21.9 | 20.6 | 20.2 | 18.4 | 21.3 |
| Region |  |  |  |  |  |  |
| Central | 23.1 | 22.6 | 21.8 | 21.2 | 19.9 | 21.9 |
| North | 22.9 | 21.8 | 21.7 | 20.5 | 18.8 | 21.5 |
| South | 23.0 | 22.1 | 20.9 | 20.1 | 18.9 | 21.5 |
| Educational level attended |  |  |  |  |  |  |
| No education | 22.2 | 20.4 | 18.2 | 18.4 | 18.6 | 19.2 |
| Elementary | 22.7 | 20.5 | 19.2 | 18.7 | 18.1 | 19.0 |
| Preparatory | 19.0 | 19.6 | 19.0 | 17.9 | 18.1 | 18.8 |
| Secondary | 21.5 | 21.2 | 20.8 | 20.5 | 20.3 | 21.0 |
| Higher | - | 25.0 | 23.9 | 24.6 | 23.7 | a |
| Preparatory + secondary | 20.8 | 20.7 | 20.4 | 19.2 | 19.3 | 20.4 |
| Total | 23.0 | 22.4 | 21.7 | 20.9 | 19.4 | 21.8 |
| ${ }^{\text {a }}$ Omitted because less than 50 percent of the women married for the first time before the beginning of the age group |  |  |  |  |  |  |

### 6.5 Recent Sexual Activity

In the absence of effective contraception, the probability of becoming pregnant is related to the frequency of intercourse. Information on sexual activity can, therefore, be used to refine measures of exposure to pregnancy. Currently married women were asked about the time of their most recent sexual intercourse. This information is presented in Table 6.7. Overall, nine in ten women stated that the most recent sexual intercourse with their husband was during the four weeks prior to the day of interview, 7 percent during the year preceding the survey, and less than 2 percent during one or more years before the survey.

Table 6.7 Recent sexual activity
Percent distribution of currently married women by timing of last sexual intercourse, according to background characteristics, Jordan 2002

| Background characteristic | Timing of last sexual intercourse |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Within the last 4 weeks | Within <br> 1 year | One or more years ago | Missing |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 95.6 | 2.9 | 0.4 | 1.2 | 100.0 | 154 |
| 20-24 | 92.2 | 5.7 | 0.2 | 1.9 | 100.0 | 710 |
| 25-29 | 92.9 | 5.9 | 0.4 | 0.8 | 100.0 | 1,136 |
| 30-34 | 91.5 | 6.7 | 1.0 | 0.7 | 100.0 | 1,314 |
| 35-39 | 90.7 | 6.5 | 1.2 | 1.7 | 100.0 | 1,034 |
| 40-44 | 86.7 | 8.1 | 4.1 | 1.1 | 100.0 | 782 |
| 45-49 | 84.3 | 9.5 | 5.6 | 0.7 | 100.0 | 575 |
| Marital duration for women Married once |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 0-4 years | 92.5 | 5.5 | 0.3 | 1.7 | 100.0 | 1,164 |
| 5-9 years | 91.4 | 6.4 | 1.2 | 1.0 | 100.0 | 1,194 |
| 10-14 years | 91.8 | 6.3 | 0.9 | 1.0 | 100.0 | 1,127 |
| 15-19 years | 90.6 | 5.4 | 2.2 | 1.8 | 100.0 | 875 |
| 20-24 years | 88.6 | 8.8 | 2.3 | 0.2 | 100.0 | 595 |
| $25+$ years | 84.5 | 10.0 | 5.0 | 0.5 | 100.0 | 594 |
| Women married more than once | 86.8 | 9.5 | 3.7 | 0.0 | 100.0 | 156 |
| Residence |  |  |  |  |  |  |
| Urban | 90.4 | 6.9 | 1.7 | 1.0 | 100.0 | 4,546 |
| Rural | 90.5 | 6.2 | 1.8 | 1.5 | 100.0 | 1,160 |
| Region |  |  |  |  |  |  |
| Central | 90.5 | 6.5 | 1.7 | 1.2 | 100.0 | 3,683 |
| North | 90.2 | 7.5 | 1.4 | 0.8 | 100.0 | 1,480 |
| South | 90.7 | 6.3 | 2.1 | 1.0 | 100.0 | 542 |
| Educational level attended |  |  |  |  |  |  |
| No education | 84.1 | 8.8 | 6.2 | 0.8 | 100.0 | 324 |
| Elementary | 87.6 | 7.4 | 4.0 | 1.0 | 100.0 | 638 |
| Preparatory | 91.0 | 7.3 | 1.2 | 0.5 | 100.0 | 1,144 |
| Secondary | 92.2 | 5.9 | 1.0 | 0.9 | 100.0 | 2,159 |
| Higher | 90.0 | 6.9 | 1.1 | 2.0 | 100.0 | 1,441 |
| Preparatory + secondary | 91.8 | 6.4 | 1.1 | 0.7 | 100.0 | 3,303 |
| Current method of contraception |  |  |  |  |  |  |
| Female sterilization | 89.8 | 7.8 | 2.4 | 0.0 | 100.0 | 165 |
| Pill | 95.5 | 4.3 | 0.0 | 0.1 | 100.0 | 426 |
| IUD | 95.0 | 4.2 | 0.1 | 0.7 | 100.0 | 1,349 |
| Condom | 99.0 | 1.0 | 0.0 | 0.0 | 100.0 | 193 |
| Periodic abstinence | 95.4 | 3.7 | 0.0 | 0.9 | 100.0 | 298 |
| Other method | 96.2 | 3.4 | 0.1 | 0.3 | 100.0 | 752 |
| No method | 84.2 | 10.3 | 3.6 | 1.9 | 100.0 | 2,523 |
| Total | 90.4 | 6.8 | 1.7 | 1.1 | 100.0 | 5,706 |

[^2]In general, younger women, women who have been married for a shorter period of time, and women with higher levels of education stated that the most recent sexual intercourse with their husband was during the four weeks prior to the day of interview. No differences in sexual intercourse were noticed according to urban-rural residence or region. However, users of contraception were more likely than nonusers to have sexual intercourse with their husband during the four weeks prior to the interview date ( 95 percent and 84 percent, respectively).

### 6.6 Postpartum Amenorrhea, Postpartum Abstinence, and Insusceptibility

The risk of pregnancy is affected by several factors besides marriage patterns. There is a low risk of becoming pregnant during the period after childbirth before the return of menstruation (postpartum amenorrhea) and (certainly) during the period before the resumption of sexual activity (postpartum abstinence). The duration of amenorrhea is directly related to the duration and intensity of breastfeeding: the longer a woman breastfeeds, the longer she is likely to remain amenorrheic. Since breastfeeding is an important issue in childhood nutrition (see Chapter 10), only postpartum amenorrhea and postpartum abstinence are considered in this section. Women are insusceptible when they are not exposed to the risk of pregnancy either because they are amenorrheic or because they are abstaining from marital relations following a birth, or both. The estimates for postpartum amenorrhea, postpartum abstinence, and insusceptibility are based on current status measures that is, the proportion of births occurring $x$ months before the survey for which mothers were still amenorrheic, abstaining, or insusceptible at the time of the survey. The medians were calculated on the basis of current status proportions at each time period. The data are grouped by two-month intervals for greater stability.

Table 6.8 presents the distribution of births in the 36 months before the survey according to the postpartum status of mothers. Fourteen percent of mothers had not experienced the return of menstruation, and 5 percent had not resumed sexual relations.

Table 6.8 Postpartum amenorrhea, abstinence, and in-suscep-tibility

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, Jordan 2002

|  | Percentage of births <br> for which the mother is: |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Months <br> since birth | Amenor- <br> rheic | Abstain- <br> ing | Insuscep- <br> tible | Number <br> of <br> births |
| $<2$ | 98.3 | 81.6 | 98.3 | 148 |
| $2-3$ | 52.6 | 7.4 | 56.0 | 176 |
| $4-5$ | 39.1 | 1.7 | 39.4 | 168 |
| $6-7$ | 29.5 | 1.7 | 30.4 | 204 |
| $8-9$ | 25.3 | 0.9 | 26.0 | 247 |
| $10-11$ | 12.7 | 2.0 | 14.7 | 223 |
| $12-13$ | 6.2 | 0.2 | 6.4 | 188 |
| $14-15$ | 4.3 | 0.5 | 4.8 | 184 |
| $16-17$ | 2.4 | 0.0 | 2.4 | 191 |
| $18-19$ | 3.7 | 0.1 | 3.7 | 207 |
| $20-21$ | 1.9 | 1.1 | 2.7 | 189 |
| $22-23$ | 0.4 | 1.4 | 1.7 | 188 |
| $24-25$ | 2.4 | 0.7 | 3.1 | 212 |
| $26-27$ | 0.0 | 0.0 | 0.0 | 189 |
| $28-29$ | 0.8 | 0.4 | 1.1 | 175 |
| $30-31$ | 0.2 | 0.7 | 0.9 | 204 |
| $32-33$ | 0.0 | 0.5 | 0.5 | 187 |
| $34-35$ | 0.0 | 0.0 | 0.0 | 195 |
|  |  |  |  |  |
| Total | 14.3 | 4.5 | 15.0 | 3,477 |
| Median | 3.6 | 1.8 | 3.7 | na |
| Mean | 5.9 | 2.4 | 6.1 | na |

Note: Estimates are based on status at the time of the survey.
na $=$ Not applicable Combining the two conditions indicates that mothers of 15 percent of births were still insusceptible to the risk of pregnancy. The mean duration of amenorrhea is about 6 months; the mean duration of abstinence is about two months.

Mothers of 98 percent of births were still amenorrheic up to two months following childbirth. The percentage drops to 53 between two and three months after birth, and drops further to 39 percent in the next two months. In Jordan, as in other Islamic societies, women observe sexual abstinence after childbirth. The period of postpartum abstinence traditionally lasts 40 days. The observance of this practice is noticeable in the 2002 JPFHS data. Mothers of 82 percent of the children born during the two months before the survey were still abstaining from sexual relations at the time of the survey. For births two and three months before the survey, only 7 percent of mothers were still abstaining, with the percentage declining to less than 3 percent in subsequent months.

Table 6.9 presents the median duration of postpartum amenorrhea ( 3.6 months), postpartum abstinence ( 1.8 months), and postpartum insusceptibility ( 3.7 months). There is little variation in the median duration of abstinence, and insusceptibility by age, residence, or region. Older women, rural women, and women living in the North region are more likely than other subgroups to have a higher median duration of amenorrhea and insusceptibility.

| Table 6.9 Median duration of postpartum insusceptibility by background characteristics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Jordan 2002 |  |  |  |  |
|  | Postpartum: |  |  | Number of births |
| Background characteristic | Amenorrhea | Abstinence | Insusceptibility |  |
| Age |  |  |  |  |
| 15-29 | 3.3 | 1.7 | 3.4 | 1,822 |
| 30-49 | 3.9 | 1.9 | 4.1 | 1,655 |
| Residence |  |  |  |  |
| Urban | 3.5 | 1.8 | 3.6 | 2,694 |
| Rural | 3.9 | 1.7 | 4.0 | 783 |
| Region |  |  |  |  |
| Central | 3.4 | 1.8 | 3.6 | 2,178 |
| North | 4.0 | 1.8 | 4.1 | 951 |
| South | 3.3 | 1.7 | 3.3 | 348 |
| Educational level attended |  |  |  |  |
| No education | 6.9 | 0.6 | 6.9 | 125 |
| Elementary | 4.0 | 1.8 | 4.0 | 286 |
| Preparatory | 3.4 | 1.7 | 3.6 | 680 |
| Secondary | 3.6 | 1.7 | 3.7 | 1,494 |
| Higher | 3.4 | 2.1 | 3.5 | 893 |
| Preparatory + secondary | 3.5 | 1.7 | 3.7 | 2,174 |
| Total | 3.6 | 1.8 | 3.7 | 3,477 |
| Note: Medians are based on current status. |  |  |  |  |

Women's level of education has both positive and negative associations with the proximate determinants of fertility. While age at first marriage increases with education - a phenomenon that tends to reduce fertility - the duration of postpartum insusceptibility, which protects women from pregnancy, decreases with education. In Jordan, the duration of insusceptibility among women who have more than secondary education is about half that of women with no education. This holds for the median duration of amenorrhea: 6.9 months for uneducated women, compared with 3.5 months for women with secondary or higher education. However, the median duration of abstinence was less than 1 month for uneducated women, compared with 2 months for women with more than secondary education.

### 6.7 Menopause

This section addresses menopause (i.e. termination of exposure to pregnancy and childbearing) for women age 30-49. Exposure to pregnancy is affected by the terminal amenorrhea of older women. Table 6.10 shows the percentage of menopausal women age $30-49$. For the purpose of this survey, lack of a menstrual period in the six months preceding the survey among women who are neither pregnant nor postpartum amenorrheic is taken as evidence of menopause, and therefore infecundity. Consequently,

Table 6.10 shows few cases of menopausal women under the age of 40 . Beyond this age, the percentage of menopausal women increases with age. The proportion rose from about 4 percent among women age 42-45 to 15 percent among those age 46-47, then further to almost one-third for older women (age 48-49).

| Table 6.10 Menopause |  |  |
| :---: | :---: | :---: |
| Percentage of all ever-married women age 30-49 who are menopausal by age, Jordan 2002 |  |  |
| Age | Percentage menopausal ${ }^{1}$ | Number of women |
| 30-34 | 0.9 | 1,354 |
| 35-39 | 0.9 | 1,071 |
| 40-41 | 2.1 | 374 |
| 42-43 | 3.8 | 329 |
| 44-45 | 4.0 | 301 |
| 46-47 | 15.3 | 266 |
| 48-49 | 31.4 | 250 |
| Total | 4.4 | 3,945 |
| 1 Percentage of all ever-married women who are not pregnant and not postpartum amenorrheic whose last menstrual period occurred six or more months preceding the survey |  |  |

## FERTILITY PREFERENCES

This chapter addresses questions about the need for contraception and the extent of unwanted fertility. Information collected from respondents includes whether they want more children and, if so, the gender they would prefer and how long they would want to wait before their next child. The respondents were also asked about the number of children they would like to have if they could start anew. Two other issues are also examined: the extent to which unwanted and mistimed births occur and the effect that preventing such births would have on fertility rates.

Survey questions on fertility preferences have often been the subject of criticism. First, it is suggested that the answers respondents give are misleading because they may reflect uninformed, ephemeral views held with little conviction. Critics also argue that the questions do not take into account the effects of social pressure or the attitudes of other family members - particularly the husband, who may exert considerable influence on the wife's reproductive decisions. The first objection is probably not relevant in Jordan, since family planning is widely used (presumably to realize fertility preferences). The second objection is correct in principle, but evidence from surveys in which both spouses are interviewed suggests that there are no significant differences between husbands and wives regarding their fertility preferences.

Women who were pregnant at the time of the survey were asked whether they would want to have another child later. Taking into account the way in which the preference variable is defined for pregnant women, a current pregnancy is treated as being equivalent to a living child. Women who have been sterilized are classified as wanting no more children.

### 7.1 Desire for Children

Women's preferences concerning future childbearing serve as indicators of future fertility. However, sterilized women and women who state that they are infecund (declared infecund), have no impact on future fertility, because their potential contribution to fertility has been curtailed. The data on fertility preference also provide information on the potential need for contraceptive services for spacing and limiting births.

Table 7.1 and Figure 7.1 show that over two-fifths ( 44 percent) of currently married women want no more children at any time in the future, including around 3 percent who are sterilized. These figures show a decline of about seven percentage points since 1997 JPFHS. The findings also show that about 31 percent of currently married women want to have another child later (two or more years); this figure is higher than that recorded in the 1997 JPFHS. In general, about 72 percent of currently married women in Jordan have a potential need for family planning services for limiting or spacing their births. This figure is close to the one recorded in the 1997 JPFHS.

The desire for childbearing is strongly associated with the number of children that a woman has. It is found that nine in ten women who have not started childbearing by the time of the survey want to have a child and the majority of them ( 87 percent) want to have this child soon. About 94 percent of women who have one child want to have another child, but the majority ( 55 percent) want to wait for at least two years before having another child. Among those who have more than one child, the desire to stop childbearing increases rapidly with the number of children they have - from 14 percent among

Table 7.1 Fertility preferences by number of living children
Percent distribution of currently married women by desire for children, according to number of living children, Jordan 2002

| Desire for children | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6+ |  |
| Have another soon ${ }^{2}$ | 87.3 | 37.6 | 21.8 | 19.2 | 11.5 | 9.9 | 3.2 | 19.1 |
| Have another later ${ }^{3}$ | 2.1 | 55.1 | 58.5 | 46.4 | 30.0 | 17.8 | 7.8 | 30.5 |
| Have another, undecided when | 0.8 | 1.3 | 0.5 | 0.7 | 0.6 | 0.2 | 0.6 | 0.7 |
| Undecided | 0.4 | 1.3 | 3.9 | 3.4 | 3.6 | 2.9 | 1.4 | 2.5 |
| Want no more | 0.0 | 2.8 | 14.0 | 28.7 | 50.4 | 62.5 | 73.1 | 41.0 |
| Sterilized | 0.0 | 0.0 | 0.0 | 0.4 | 1.1 | 3.3 | 8.8 | 2.9 |
| Declared infecund | 9.4 | 1.9 | 1.3 | 1.1 | 2.8 | 3.4 | 5.1 | 3.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 343 | 575 | 831 | 929 | 888 | 667 | 1,472 | 5,706 |

${ }^{1}$ Includes current pregnancy
${ }^{2}$ Wants next birth within 2 years
${ }^{3}$ Wants to delay next birth for 2 or more years

Figure 7.1 Fertility Preferences of Currently Married Women 15-49

women who have two children to 82 percent among those with six children or more, including 9 percent who are sterilized. More than 9 percent of childless women declared themselves infecund, probably because they were sterile.

Differentials in the desire to stop childbearing are presented in Table 7.2. In general, women living in urban areas are slightly more likely to want to stop childbearing than rural women. That result is reflected in the higher percentage ( 46 percent) of women in the Central region (which includes the two largest cities in Jordan - Amman and Zarqa) who want no more children. The same pattern is seen when

| Table 7.2 Desire to limit childbearing |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of currently married women who want no more children, by number of living children and background characteristics, Jordan 2002 |  |  |  |  |  |  |  |
| Background characteristic | Number of living children ${ }^{1}$ |  |  |  |  |  | Total |
|  | 1 | 2 | 3 | 4 | 5 | 6+ |  |
| Residence |  |  |  |  |  |  |  |
| Urban | 2.9 | 16.0 | 30.5 | 54.2 | 68.6 | 83.1 | 44.7 |
| Rural | 2.5 | 5.8 | 22.0 | 39.1 | 54.7 | 78.3 | 40.9 |
| Region |  |  |  |  |  |  |  |
| Central | 2.7 | 15.7 | 34.7 | 56.1 | 71.2 | 84.2 | 45.5 |
| North | 3.1 | 11.2 | 15.2 | 42.5 | 55.5 | 78.3 | 40.6 |
| South | 2.8 | 8.9 | 21.5 | 40.2 | 55.7 | 80.4 | 41.9 |
| Educational level attended |  |  |  |  |  |  |  |
| No education | 17.1 | 19.2 | 48.3 | 33.5 | 61.9 | 82.0 | 65.3 |
| Elementary | 6.1 | 18.0 | 29.9 | 51.9 | 61.8 | 81.4 | 55.9 |
| Preparatory | 4.7 | 12.3 | 24.1 | 44.1 | 60.6 | 82.5 | 49.1 |
| Secondary | 2.2 | 12.3 | 29.7 | 49.8 | 66.0 | 82.9 | 38.0 |
| Higher | 1.1 | 16.1 | 29.8 | 59.4 | 72.9 | 79.3 | 38.5 |
| Preparatory + secondary | 2.8 | 12.3 | 28.3 | 48.0 | 64.1 | 82.7 | 41.9 |
| Total | 2.8 | 14.0 | 29.2 | 51.5 | 65.8 | 81.9 | 43.9 |
| Note: Women who have been sterilized are considered to want no more children. ${ }^{1}$ Includes current pregnancy |  |  |  |  |  |  |  |

the data are analyzed on the basis of the number of living children a woman has: women in urban areas and in the Central region are consistently more likely to want to stop childbearing than women in other areas.

Education is negatively associated with the desire to stop childbearing. The proportion of women who want no more children decreases as the level of education increases - from 65 percent among uneducated women to 39 percent among women who have more than secondary education. However, the fact that the effect of education diminishes when these women are analyzed by their number of living children suggests that the reason uneducated women are more likely to want to stop childbearing is that they already have more children than educated women. The same pattern was also noted in the 1997 JPFHS for all background characteristics.

As mentioned earlier, the desire for more children is associated with the actual number of living children. It is also expected that this desire is associated with the sex composition of those children, i.e. the number of males and females among them, and specifically number of males. In general, Asian societies have shown stronger desire for having more boys than girls, and this is also true in Jordan. When mothers who want another child were asked about the preferred sex of this child, 35 percent said that they prefer to have a boy compared with 21 percent who would prefer a girl. However, almost half of women who want to have another child ( 45 percent) reported that the sex of the child makes no difference (see Table 7.3).

The desire for having a boy was stronger among older women in general. Surprisingly, this desire was also higher in the Central region, urban areas, and among the more educated women compared with other subgroups.

| Table 7.3 Preferred sex of future child |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women who want another child by the preferred sex of that child, according to background characteristics, Jordan 2002 |  |  |  |  |  |
| Background characteristic | Preferred sex of future child |  |  |  | Number of women |
|  | Boy | Girl | Does not matter | Total |  |
| Age |  |  |  |  |  |
| 15-19 | 30.0 | 20.9 | 49.0 | 100.0 | 151 |
| 20-24 | 30.8 | 24.0 | 45.2 | 100.0 | 647 |
| 25-29 | 31.4 | 21.6 | 47.1 | 100.0 | 878 |
| 30-34 | 40.5 | 19.4 | 40.1 | 100.0 | 748 |
| 35-39 | 35.7 | 17.9 | 46.4 | 100.0 | 314 |
| 40-44 | 41.1 | 9.7 | 49.1 | 100.0 | 111 |
| 45-49 | * | * |  | * | 19 |
| Residence |  |  |  |  |  |
| Urban | 35.4 | 20.8 | 43.8 | 100.0 | 2,242 |
| Rural | 31.1 | 19.8 | 49.1 | 100.0 | 627 |
| Region |  |  |  |  |  |
| Central | 35.7 | 20.0 | 44.2 | 100.0 | 1,786 |
| North | 33.9 | 20.1 | 46.1 | 100.0 | 801 |
| South | 28.4 | 25.4 | 46.2 | 100.0 | 282 |
| Educational level attended |  |  |  |  |  |
| No education | 28.4 | 12.7 | 58.9 | 100.0 | 71 |
| Elementary | 31.3 | 13.3 | 55.4 | 100.0 | 228 |
| Preparatory | 32.3 | 21.1 | 46.5 | 100.0 | 518 |
| Secondary | 34.7 | 22.4 | 42.9 | 100.0 | 1,232 |
| Higher | 37.0 | 20.1 | 42.9 | 100.0 | 820 |
| Preparatory + secondary | 34.0 | 22.0 | 44.0 | 100.0 | 1,751 |
| Total | 34.5 | 20.6 | 44.9 | 100.0 | 2,869 |

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

### 7.2 Need for Family Planning Services

Information on fertility desires is insufficient by itself to estimate the need for family planning services. Many women who do not want to have another child soon are not exposed to the risk of pregnancy, either because they are using contraception or for other reasons. Clearly, a more detailed analysis of unmet need for family planning is needed. In this analysis, unmet need for family planning is defined as pertaining to women 1 ) who are pregnant or amenorrheic and not using any method of family planning and whose last birth was mistimed or unwanted and 2 ) women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say either that they want to delay their next childbirth for at least two years or that they want no more children.

Table 7.4 presents information on the need for family planning services. The distribution of women who have an unmet need for family planning is shown in columns $1-3$. Columns $4-6$ show the distribution of women whose need for family planning has been met, i.e., women who are currently using a family planning method for spacing (want to wait 2 years or more for their next child) or for limiting births (want no more children).

Table 7.4 Need for family planning
Percentage of currently married women with unmet need for family planning, and with met need for family planning, and the total demand for family planning, by background characteristics, Jordan 2002

| Background characteristic | Unmet need for family planning ${ }^{1}$ |  |  | Met need for family planning (currently using) ${ }^{2}$ |  |  | Total demand for family planning ${ }^{3}$ |  |  | Percentage of demand satisfied | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 18.5 | 0.0 | 18.5 | 21.3 | 0.0 | 21.3 | 42.3 | 0.0 | 42.3 | 56.2 | 154 |
| 20-24 | 13.2 | 1.9 | 15.1 | 38.8 | 3.4 | 42.2 | 55.2 | 5.8 | 61.0 | 75.2 | 710 |
| 25-29 | 7.6 | 2.4 | 10.0 | 43.2 | 10.8 | 54.0 | 54.2 | 14.0 | 68.2 | 85.3 | 1,136 |
| 30-34 | 6.1 | 4.5 | 10.6 | 34.6 | 25.6 | 60.1 | 43.4 | 31.4 | 74.9 | 85.8 | 1,314 |
| 35-39 | 2.2 | 7.5 | 9.7 | 15.7 | 48.2 | 63.9 | 18.6 | 57.8 | 76.4 | 87.3 | 1,034 |
| 40-44 | 0.6 | 10.4 | 11.0 | 4.9 | 60.6 | 65.6 | 5.5 | 71.6 | 77.1 | 85.8 | 782 |
| 45-49 | 0.1 | 9.2 | 9.4 | 0.4 | 47.0 | 47.5 | 0.5 | 56.6 | 57.1 | 83.6 | 575 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 4.9 | 5.1 | 10.0 | 25.6 | 31.5 | 57.1 | 32.3 | 37.7 | 69.9 | 85.7 | 4,546 |
| Rural | 7.9 | 7.0 | 14.9 | 25.2 | 25.2 | 50.5 | 35.8 | 33.1 | 68.9 | 78.4 | 1,160 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Central | 4.5 | 5.6 | 10.1 | 25.1 | 32.3 | 57.5 | 31.5 | 39.1 | 70.5 | 85.7 | 3,683 |
| North | 7.5 | 4.8 | 12.2 | 27.3 | 27.1 | 54.4 | 36.6 | 32.5 | 69.2 | 82.3 | 1,480 |
| South | 7.4 | 6.7 | 14.0 | 23.3 | 24.7 | 48.0 | 33.2 | 32.6 | 65.8 | 78.7 | 542 |
| Educational level attended |  |  |  |  |  |  |  |  |  |  |  |
| No education | 5.2 | 10.9 | 16.1 | 5.3 | 35.3 | 40.6 | 11.3 | 47.1 | 58.4 | 72.4 | 324 |
| Elementary | 4.7 | 10.1 | 14.8 | 13.4 | 33.3 | 46.7 | 18.9 | 44.0 | 62.8 | 76.4 | 638 |
| Preparatory | 6.3 | 6.8 | 13.1 | 19.9 | 33.7 | 53.5 | 28.5 | 41.9 | 70.4 | 81.5 | 1,144 |
| Secondary | 6.1 | 3.9 | 10.0 | 31.2 | 27.7 | 58.9 | 39.1 | 32.5 | 71.6 | 86.1 | 2,159 |
| Higher | 4.6 | 3.6 | 8.2 | 31.5 | 28.9 | 60.3 | 38.6 | 33.5 | 72.1 | 88.7 | 1,441 |
| Preparatory + secondary | y 6.2 | 4.9 | 11.0 | 27.3 | 29.8 | 57.0 | 35.4 | 35.8 | 71.2 | 84.5 | 3,303 |
| Total | 5.6 | 5.5 | 11.0 | 25.5 | 30.3 | 55.8 | 33.0 | 36.8 | 69.7 | 84.2 | 5,706 |

${ }^{1}$ Unmet need for spacing includes pregnant women whose pregnancy was mistimed, amenorrheic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait 2 or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth unless they say it would not be a problem if they discovered they were pregnant in the next few weeks. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrheic women who became pregnant while using a method (these women are in need of a better method of contraception).
${ }^{2}$ Using for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.
${ }^{3}$ Nonusers who are pregnant or amenorrheic and women whose pregnancy was the result of a contraceptive failure are not included in the category of unmet need, but are included in total demand for contraception (since they would have been using had their method not failed).

The total demand for family planning is shown in columns 7-9. Total demand is defined as the total number of women who have unmet need plus those women whose need has been met (current users). Column 10 of the table shows the percentage of the total demand for family planning that is satisfied that is, the proportion of women using a method to the total demand.

The data in Table 7.4 indicate that 11 percent of currently married women in Jordan have an unmet need for family planning. The need is equally split between a need for spacing births and a need for limiting them (about 6 percent each). Total unmet need is lower than that recorded in the earlier surveys of 1990 and 1997, when a respective 22 and 14 percent of women had an unmet contraceptive need.

Fifty-six percent of women have a met need for contraception; they are currently using a method. Twenty-six percent of women are using contraception to delay their next birth, while 30 percent want to stop childbearing. An additional 3 percent of women (not presented in the table) need a better method, since the one they were using failed. When the proportion of women with a met need is combined with the proportion of women who are considered to have an unmet need, it is found that the total demand for family planning among currently married women in Jordan is 70 percent, of whom 84 percent of women have had their demand for family planning satisfied. Comparison of data from the 2002 JPFHS with findings of the 1997 JPFHS shows that the level of unmet need for family planning has declined by 21 percent (from 14 percent to 11 percent), compared with a 36 percent decline (from 22 percent to 14 percent) between 1990 and 1997. The proportion of total demand that is satisfied has increased by 5 percent (from 80 percent to 84 percent) between 1997 and 2002. The increase in the proportion of total demand that is satisfied was higher for the period 1990-1997, where there was an increase of 21 percent (from 66 to 80 percent).

Unmet need for contraception for purposes of spacing births declines in relation to a woman's age, whereas the need for limiting births increases as a woman ages. The needs for spacing and limiting are complementary, as evidenced by the fact that total unmet need varies little by age of the woman.

Unmet need is related to place of residence and region. Women living in rural areas and in the South region tend to have a greater unmet need than their counterparts in urban areas and other regions. Ten percent of urban women have an unmet need, as compared with 15 percent for rural women. Because urban women are more likely than rural women to use contraception ( 57 percent versus 51 percent), a greater percentage of their total demand for family planning is satisfied.

Unmet need is also associated with education. Women with no education have a higher level of unmet need ( 16 percent) than women who have secondary or higher education ( 10 and 8 percent, respectively). Since educated women are more likely to use a contraceptive method than uneducated women, a higher proportion of their total demand for family planning is satisfied.

### 7.3 IDEAL Number OF CHILDREN

The focus of this chapter has been on the future reproductive intentions of women, implicitly taking into account their number of living children. To ascertain her ideal number of children, the respondent is asked to consider - abstractly and independently of her actual family size - the number of children she would choose if she could start childbearing again.

There is usually a correlation between actual and ideal number of children. The reason is twofold. First, to the extent that women implement their preferences, those who want larger families tend to achieve larger families. Second, women may adjust their ideal family size upwards as their actual number of children increases. It is also possible that women with large families have larger ideal family sizes, because of attitudes they acquired 20 to 30 years ago.

Despite the likelihood that some rationalization occurs in the determination of ideal family size, respondents often state ideal family sizes that are lower than their actual number of surviving children (see Table 7.5). The data in Table 7.5 can be grouped into three categories. The first group is women who have reached their ideal family size - i.e., women whose ideal number of children is exactly the same as their number of living children; it is represented by diagonal figures from 0 to $6+$ children. The second group consists of women whose surviving children have exceeded their ideal family size (shown by the figures above the diagonal); the last group consists of women who have not reached their ideal family size (shown by the figures below the diagonal). The second category is of particular interest, because it permits the calculation of surplus or unwanted fertility (discussed in the next section).
Table 7.5 Ideal number of children
Percent distribution of all ever-married women by ideal number of children and mean ideal number of children for all
ever-married women and for currently married women, according to number of living children, Jordan 2002

| Ideal number of children | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ |  |
| 0 | 0.9 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 |
| 1 | 5.7 | 1.0 | 1.8 | 1.9 | 0.7 | 1.0 | 1.4 | 1.6 |
| 2 | 28.3 | 18.3 | 16.0 | 13.6 | 14.1 | 13.5 | 8.1 | 14.1 |
| 3 | 13.8 | 19.7 | 15.8 | 11.8 | 4.6 | 10.4 | 8.0 | 11.1 |
| 4 | 31.1 | 41.7 | 45.8 | 48.7 | 48.2 | 36.6 | 37.2 | 41.9 |
| 5 | 4.8 | 6.5 | 7.8 | 11.1 | 11.2 | 16.2 | 7.8 | 9.5 |
| 6+ | 9.6 | 10.0 | 10.0 | 11.0 | 17.5 | 19.8 | 32.2 | 18.2 |
| Non-numeric responses | 5.9 | 2.8 | 2.5 | 1.8 | 3.6 | 2.4 | 5.1 | 3.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 396 | 626 | 863 | 962 | 911 | 692 | 1,556 | 6,006 |
| Mean ideal number of children for: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| All women | 3.5 | 3.8 | 3.8 | 4.0 | 4.3 | 4.3 | 4.9 | 4.2 |
| Number | 373 | 608 | 841 | 944 | 878 | 676 | 1,477 | 5,797 |
| Currently married women | 3.6 | 3.9 | 3.9 | 4.0 | 4.3 | 4.3 | 5.0 | 4.3 |
| Number | 322 | 563 | 812 | 912 | 861 | 652 | 1,403 | 5,525 |

${ }^{1}$ Includes current pregnancy
${ }^{2}$ Means are calculated excluding the women giving non-numeric responses.

The data in Table 7.5 indicate that a majority of women ( 70 percent) consider the ideal family size to be at least 4 children. Only 14 percent of ever-married women state an ideal family size of two children, the number that is required for replacement level fertility. The mean ideal number of children is 4.2 among ever-married women and 4.3 among currently married women. Of concern to family planning program administrators is the fact that a high proportion (about 63 percent) of women with six or more children have exceeded their ideal family size, in many cases by two or more children.

Compared with the 1997 JPFHS, the percentage of women in the 2002 JPFHS who did not give a numeric response to the hypothetical question on ideal family size declined from 5 percent to only 3.5 percent. Failure to give a definite answer suggests either an absence of conscious consideration given to the matter or a strong belief that family size is determined by God. Women who have one to five children are most likely to state a numeric ideal family size; childless women are less likely to do so, perhaps indicating either that they want to have as many children as possible or that they have reached the end of their reproductive years, or that they have given up hope of having a child. Women who already have six or more children may avoid specifying a number, possibly because they have exceeded their ideal family size.

Table 7.6 presents the mean ideal number of children by age and background characteristics. The mean ideal number of children in Jordan increases with age, from 3.6 children for ever-married women in the youngest age group (15-19) to 4.0 children among women age 25-29 and to 4.8 among the oldest women (45-49). This trend indicates that the ideal family size has decreased in the younger cohorts. In general, women living in rural areas, women in the North and South regions, and women with less education have a slightly higher ideal family size.

| Mean ideal number of children for all ever-married women, by age and background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current age of woman |  |  |  |  |  |  | Total |
| characteristic | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 3.5 | 3.9 | 4.0 | 4.1 | 4.2 | 4.4 | 4.7 | 4.2 |
| Rural | 4.1 | 4.1 | 4.4 | 4.6 | 4.6 | 4.8 | 5.3 | 4.5 |
| Region |  |  |  |  |  |  |  |  |
| Central | 3.4 | 3.9 | 3.9 | 4.0 | 4.1 | 4.3 | 4.6 | 4.1 |
| North | 3.9 | 4.2 | 4.4 | 4.5 | 4.6 | 4.9 | 5.3 | 4.6 |
| South | 3.7 | 4.1 | 4.2 | 4.4 | 4.6 | 4.7 | 5.2 | 4.5 |
| Educational level attended |  |  |  |  |  |  |  |  |
| No education | 4.1 | 3.5 | 3.8 | 4.8 | 4.5 | 4.5 | 5.6 | 4.8 |
| Elementary | 3.8 | 4.4 | 4.1 | 4.1 | 4.4 | 5.1 | 4.7 | 4.5 |
| Preparatory | 3.4 | 3.9 | 4.2 | 4.4 | 4.5 | 4.5 | 4.9 | 4.4 |
| Secondary | 3.6 | 3.9 | 4.0 | 4.1 | 4.2 | 4.2 | 4.4 | 4.1 |
| Higher | 4.6 | 4.1 | 4.0 | 4.0 | 4.0 | 4.3 | 4.4 | 4.1 |
| Preparatory + secondary | 3.5 | 3.9 | 4.1 | 4.2 | 4.3 | 4.3 | 4.7 | 4.2 |
| Total | 3.6 | 4.0 | 4.0 | 4.2 | 4.3 | 4.5 | 4.8 | 4.2 |

### 7.4 Planning Status of Births

Respondents in the 1997 JPFHS and 2002 JPFHS were asked a series of questions concerning each child born in the five years preceding the survey and for any current pregnancy, to determine whether the particular pregnancy was either planned, unplanned but wanted at a later date, or unwanted. These questions yielded data that provide a powerful indicator of the degree to which couples are able to control childbearing. Additionally, the data can be used to measure the effect of preventing unwanted births on the level of fertility for a period of time.

The questions about the planning status of births are demanding. The respondent is required to accurately recall her wishes at one or more points in the preceding five years, and to report them honestly. The possibility of rationalization is present, since an unwanted conception may well turn out to be a cherished child. Despite problems of comprehension, recall, and truthfulness, the results from previous surveys indicate that the questions are effective in eliciting plausible information about the planning status of births. Although some postpartum rationalization does occur, respondents are willing to report unwanted conceptions. Overall, the estimates of unwanted fertility obtained from the data are probably low.

Table 7.7 shows that about two-thirds of births during the five years preceding the survey were wanted when conceived, 17 percent were wanted later, and 16 percent were not wanted at all at the time of conception. The percentage of births wanted at conception is negatively associated with birth order; conversely, the percentage of unwanted births increases with birth order. In other words, higher order (later) births are more likely than first or second births to have been either mistimed or unwanted. The low percentage of first births wanted later or not wanted at all indicates that almost all first order births are wanted.

Births to young women tend to be wanted (then or later), whereas births to older women are more likely to be unwanted (Table 7.7). Although 82 percent of births to women under 20 years of age were wanted at the time, the percentage declines to 41 percent among women age 40-44.

| Table 7.7 Fertility planning status |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of births in the five years preceding the survey (including current pregnancies), by fertility planning status, according to birth order and mother's age at birth, Jordan 2002 |  |  |  |  |  |
| Birth order and mother's age at birth | Planning status of birth |  |  | Total | Number of births |
|  | Wanted then | Wanted later | Wanted no more |  |  |
| Birth order |  |  |  |  |  |
| 1 | 93.9 | 5.0 | 1.1 | 100.0 | 1,306 |
| 2 | 66.0 | 25.2 | 8.9 | 100.0 | 1,248 |
| 3 | 71.1 | 19.6 | 9.3 | 100.0 | 1,170 |
| 4+ | 52.9 | 18.3 | 28.7 | 100.0 | 2,795 |
| Age at birth |  |  |  |  |  |
| <20 | 81.5 | 14.6 | 3.9 | 100.0 | 393 |
| 20-24 | 73.0 | 19.2 | 7.8 | 100.0 | 1,615 |
| 25-29 | 69.6 | 20.0 | 10.4 | 100.0 | 2,076 |
| 30-34 | 61.6 | 16.6 | 21.7 | 100.0 | 1,534 |
| 35-39 | 56.1 | 9.8 | 34.1 | 100.0 | 704 |
| 40-44 | 40.6 | 5.8 | 53.6 | 100.0 | 187 |
| 45-49 | * | * | * | * | 12 |
| Total | 66.9 | 17.2 | 15.9 | 100.0 | 6,520 |

Another way of measuring the extent of unwanted fertility is to calculate the fertility rate if all unwanted births were avoided. This is known as the wanted fertility rate (Table 7.8). In this analysis, a birth is considered wanted if the number of living children at the time of the pregnancy was less than the ideal number of children as reported by the respondent. In Jordan, if all unwanted births were prevented, the total wanted fertility rate would be 2.6 children per woman, or 1.1 children less than the actual total fertility rate. That theoretical rate implies that the total fertility rate is inflated by more than 42 percent because of unwanted births. Table 7.8 also shows that the gap between actual and wanted fertility rates is slightly higher among rural women, women living in the North and South regions, and women who have no education or who have preparatory education. Urban women and women who have more than secondary education, who also have the lowest fertility, are generally more successful in narrowing the gap between wanted and actual fertility rates ( 1 and 0.7 child respectively).

| Table 7.8 Wanted fertility rates |  |  |
| :---: | :---: | :---: |
| Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Jordan 2002 |  |  |
| Background characteristic | Total wanted fertility rate | Total fertility rate |
| Residence |  |  |
| Urban | 2.5 | 3.5 |
| Rural | 2.8 | 4.2 |
| Region |  |  |
| Central | 2.4 | 3.5 |
| North | 2.7 | 3.9 |
| South | 2.8 | 4.0 |
| Educational level attended |  |  |
| No education | 1.8 | 3.6 |
| Elementary | 2.6 | 3.7 |
| Preparatory | 2.8 | 4.4 |
| Secondary | 2.7 | 3.9 |
| Higher | 2.4 | 3.1 |
| Preparatory + secondary | 2.7 | 4.0 |
| Total | 2.6 | 3.7 |

Note: Rates are calculated 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 4.3.

Estimates of levels, trends, and differentials in neonatal, postneonatal, and child mortality are important both for monitoring and evaluating ongoing health programs and for use in formulating future policies. The levels of infant and child mortality are viewed as basic indicators of the socioeconomic situation, quality of life, and general standard of living in a society. In addition to addressing those issues, this chapter examines the risk factors for births in Jordan.

Five measures of infant and child mortality used in this chapter are as follows:
Neonatal mortality, or the probability of dying in the first month of life
Postneonatal mortality, or the probability of dying after the first month of life but before the first birthday (the difference between infant and neonatal mortality rates)
Infant mortality $\left({ }_{1} \mathbf{q}_{0}\right)$, or the probability of dying before the first birthday
Child mortality $\left({ }_{4} \mathbf{q}_{1}\right)$, or the probability of dying between the first and fifth birthday
Under-five mortality ( ${ }_{5} \mathbf{q}_{0}$ ), or the probability of dying before the fifth birthday.
All of these rates are calculated per 1,000 live births, except for child mortality which is calculated per 1,000 children still living up to their fifth birthday.

Infant and child mortality rates are calculated from information collected in the birth history section of the individual questionnaire. In the 2002 JPFHS, each woman was asked about the number of sons and daughters living with her, the number living away, and the number who had died. Those questions were aimed at obtaining the total number of births the respondent had experienced. Next, the respondent was asked to give information on each of the children she had borne, including name, sex, date of birth, whether the birth was single or multiple, and survival status. If the child had died, the age at death was recorded. If the child was still living, questions were asked about his/her age at last birthday and whether the child lived with his/her mother. It should be noted that birth histories are often subject to inaccuracies in the reporting of events, errors that can result in biased rates and trends over time. Despite the disadvantages, birth histories provide data for analyses that would be impossible to collect by any other method of gathering data.

The reliability of the mortality data depends on women's recall about children who have died, the absence of severe differential displacement of birth dates of living and dead children, and accurate reporting of ages at death. Previous survey results have shown some heaping of age at death at exactly 12 months or 1 year. On the assumption that age at death is reported in completed months or years, deaths at 12 months are classified as child rather than infant deaths. In reality, some of those deaths may have occurred before the first birthday, so that their classification as child deaths tends to negatively bias infant mortality estimates and positively bias child mortality estimates. The analyst should be aware that the problem may arise in DHS surveys, although the probable effect is usually modest and is unlikely to bias the estimates by as much as 5 percent.

The issue of whether or not to present mortality estimates that are adjusted for heaping of deaths at 12 months of age is difficult to resolve because any solution involves a somewhat arbitrary decision about the true distribution by age. The general DHS policy is not to present rates in the first country report on the basis of models that adjust the observed data. Accordingly, it is recommended that adjusted rates be presented only as part of the discussion of the text of the chapter. Moreover, adjusted rates should be presented only if the adjustment procedure - described by Sullivan et al. (1990) - results in an increase of at least 5 percent in the infant mortality estimate and if there is clear evidence from the distri-
bution of reported deaths by age in months that some of the heaped deaths are actually infant deaths. Table C. 6 in Appendix C shows the distribution of deaths under two years of age by age at death in months. Heaping at 12 months is minimal, and any adjustment would result in an increase in infant mortality of less than 2 percent; thus, no adjustment is deemed necessary.

In addition to levels of mortality, this chapter also includes a table indicating the distribution of children and women according to characteristics of avoidable fertility behavior that place children at greater risk of mortality. That information is useful for designing and monitoring programs designed both to discourage high-risk behavior and to cope with the elevated risks.

### 8.1 Levels and Trends

It is seldom possible to establish with confidence mortality levels for a period more than 15 years before a survey. Even within the recent 15 -year period considered here, apparent trends in mortality rates should be interpreted with caution. First, in the completeness of death reporting, there may be differences related to length of time before the survey. Second, the accuracy of reports of age at death and of date of birth may deteriorate systematically with time. Thus, without a detailed evaluation of the quality of birth history data (which is not attempted in this report), conclusions regarding changes in mortality should be considered preliminary. Also, whenever possible, external estimates should be sought for and compared with the DHS estimates; however, the quality of the external estimates must be taken into consideration.

Table 8.1 shows early childhood mortality rates in the fifteen years preceding the survey. Underfive mortality rate in the $0-4$ years before the survey (1997-2002) was 27 per 1,000 live births. Most deaths captured by the under-five mortality rate occur during the first year of life, where the rate was 22 per 1,000 live births. The child mortality rate $\left({ }_{4} q_{1}\right)$ reached 5 per 1,000 children still living by their fifth birthday. As expected, neonatal mortality is higher than postneonatal mortality ( 16 per 1,000 and 7 per 1,000 , respectively), and accounts for 73 percent of total infant mortality.

| Table 8.1 Early childhood mortality rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Jordan 2002 |  |  |  |  |  |
| Years preceding the survey | Neonatal mortality (NN) | Postneonatal mortality ${ }^{1}$ (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Under-five mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| 0-4 | 16 | 7 | 22 | 5 | 27 |
| 5-9 | 19 | 7 | 27 | 5 | 31 |
| 10-14 | 19 | 9 | 28 | 3 | 30 |
| 0-9 | 17 | 7 | 24 | 5 | 29 |
| ${ }^{1}$ Computed as the difference between the infant and the neonatal mortality rates. Figures may not reflect the exact difference between the mortality rates because of rounding. |  |  |  |  |  |

It is apparent from Table 8.1 and Figure 8.1 that infant mortality has been declining steadily for many years - from 28 deaths per 1,000 live births during the period 10-14 years before the survey (around 1990) to 22 deaths during the five years before the survey (around 2000). However, child mortality has not changed during the last ten years. In general, under-five mortality declined from 30 deaths per 1,000 live births in the period 10-14 years preceding the survey to about 27 deaths per 1,000 in the last period (0-4 years).

Figure 8.1 Trends in Infant and Child Mortality by Five-year Periods


JPFHS 2002

The rates presented in Table 8.1 approximate the calendar periods 1997-2002, 1992-1997 and 1987-1992. Because fieldwork for the 2002 JPFHS and the 1997 JPFHS was carried out in the third quarter of the year, whereas the 1990 JPFHS was fielded in the fourth quarter of the year, comparison between estimates derived from those surveys is not absolutely precise. However, for purposes of trend analysis, the results of the three surveys have been compared (Figure 8.2). Ideally, the estimates for overlapping periods should be the same; although the estimates from the three surveys are very close, they are not exact due to some discrepancies caused by internal biases in each of the estimates. It is apparent, however, that infant mortality has been declining for many years.

Figure 8.2 Trends in Infant and Child Mortality, 1978-2002


The pace of decline in infant and child mortality varies. Infant mortality shows a regular and continuous decline, from about 40 per thousand at the beginning of the 1980 s, to about 30 per thousand at the beginning of the 1990 s, and down to 22 per thousand in the most recent period. Child mortality declined at the beginning of the 1980s (from about 10 per thousand to 6 per thousand), but has not changed during the past 15 years, staying at around 5 child deaths per thousand. To understand the differences in the patterns of decline between infant and child mortality, it should be recognized that the factors affecting infant mortality are different from those affecting child mortality. Infant mortality is dependent on the health of the mother during pregnancy, the length of the birth interval, and receipt of services such as antenatal and postnatal care - all factors that are relatively amenable to programmatic intervention. Child mortality, however, is more dependent on broader environmental, economic, and social factors that are less tractable.

### 8.2 Differentials in Infant and Child Mortality

## Differentials by Background Characteristics

Differentials in neonatal, postneonatal, infant, child, and under-five mortality by socioeconomic characteristics are shown in Table 8.2. A 10-year period is used to calculate the mortality estimates, so as to obtain enough cases in each category. It is expected that use of the 10 -year reference period will improve the reliability of the mortality estimates.

| Table 8.2 Early childhood mortality by background characteristics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Neonatal, postneonatal, infant, child, and under-five mortality rates for the ten-year period preceding the survey, by background characteristics, Jordan 2002 |  |  |  |  |  |
| Background characteristic | Neonatal mortality (NN) | Postneonatal mortality ${ }^{1}$ (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Under-five mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| Residence |  |  |  |  |  |
| Urban | 17 | 6 | 23 | 5 | 27 |
| Rural | 20 | 10 | 30 | 6 | 36 |
| Region |  |  |  |  |  |
| Central | 16 | 6 | 22 | 5 | 27 |
| North | 20 | 8 | 29 | 6 | 35 |
| South | 18 | 9 | 27 | 4 | 31 |
| Educational level attended |  |  |  |  |  |
| No education | 23 | 11 | 34 | 10 | 44 |
| Elementary | 21 | 13 | 34 | 9 | 43 |
| Preparatory | 17 | 6 | 23 | 5 | 28 |
| Secondary | 15 | 8 | 23 | 4 | 27 |
| Higher | 17 | 4 | 21 | 3 | 24 |
| Preparatory + secondary | 16 | 7 | 23 | 4 | 27 |
| Total | 17 | 7 | 24 | 5 | 29 |

There are substantial differences in under-five mortality by type of residence. Children in urban areas have lower mortality than their counterparts in the rural areas ( 27 and 36 deaths per 1,000 live births, respectively). A similar pattern is found for neonatal mortality, as well as postneonatal mortality.

Infant mortality and under-five mortality vary across regions. Infant and child mortality are slightly higher in the North (29 and 6 deaths per 1,000, respectively) than in the South ( 27 and 4 deaths per 1,000, respectively) and Central regions ( 22 and 5 deaths per 1,000, respectively).

Mother's education is negatively associated with child mortality. Children of mothers who attended at least preparatory education are less likely to die in the first five years of life than children of mothers with less or no education. Under-five mortality ranges from about 44 per thousand for children of women who either attended elementary school or received no education to 24 per thousand for children of women with more than secondary education.

## Differentials by Demographic Characteristics

Besides socioeconomic characteristics, demographic characteristics of the child and the mother have been found to affect mortality risks. Some of these factors include the sex of the child, mother's age at birth, birth order, length of previous birth interval, and the size of the child at birth. The relationship between these demographic characteristics and mortality is shown in Table 8.3 and Figure 8.3.


Figure 8.3 Infant Mortality by Demographic Characteristics


Note: Rates refer to the 10-year period preceding the survey.
JPFHS 2002

As expected, infant mortality is slightly higher among males than among females ( 25 per 1,000 and 23 per 1,000 respectively). However, child mortality is the same for both sexes. The relationship between mother's age (at birth) and infant mortality shows a U-shaped curve. These mortality measures are substantially higher among children born to mothers less than 20 or age 40 and over.

First births and higher-order births experience higher mortality, indicating a shallow U-shaped relationship between birth order and mortality. For example, infant mortality for first births and births of order seven and higher is 27 per 1,000 births and 33 per 1,000 births, respectively, compared with 21 per 1,000 births for second- and third-order births.

Mortality among children is negatively associated with the length of the previous birth interval, except when the previous birth interval is very long. Infant mortality decreases sharply from a high of 29 for children born less than two years after a previous birth to 15 per 1,000 live births for children born three years after a previous birth. Infant mortality is higher for children born four or more years after a previous birth than for those born three years later.

Children's weight at birth is closely associated with their chances of survival, particularly during the first month of life. Children reported as "small or very small" at birth were at twice the risk of dying compared with children whose size at birth was reported as "average or larger." Thirty-seven of 1,000 children reported to be "small or very small" did not survive to their first birthday.

### 8.3 Perinatal Mortality

The 2002 JPFHS survey asked women to report on pregnancy losses and the duration of the pregnancy for each loss, for all such pregnancies ending in the five years before the survey. Pregnancy losses occurring after seven completed months of gestation (stillbirths) plus deaths to live births within the first seven days of life (early neonatal deaths) constitute perinatal deaths. When the total number of perinatal deaths is divided by the total number of pregnancies reaching seven months' gestation, the perinatal mortality rate is derived. The routine collection of data to estimate rates of perinatal mortality is new to sam-
ple survey research. An important consideration in the evaluation of the results of this new initiative is the quality or completeness of reports on stillbirths, which are susceptible to omission, underreporting, or misclassification (as early neonatal deaths). The distinction between a stillbirth and an early neonatal death may be a fine one, depending often on the observed presence or absence of some faint signs of life after delivery. The causes of stillbirths and early neonatal deaths are overlapping, and examining just one or the other can understate the true level of mortality around delivery. For this reason, it is suggested that both event types be combined and examined together.

Table 8.4 shows perinatal mortality rates, according to demographic and socioeconomic characteristics. At the national level, the perinatal mortality rate is estimated to be 22 perinatal deaths per 1,000 pregnancies reaching 7 months of gestation. Perinatal mortality is expected to display a U-shaped pattern in relation to age of the mother, with the youngest and oldest women having the highest rates. In Jordan,

| Table 8.4 Perinatal mortality |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Jordan 2002 |  |  |  |  |
| Background characteristic | Number of stillbirths ${ }^{1}$ | Number of early neonatal deaths ${ }^{2}$ | Perinatal mortality rate ${ }^{3}$ | Number of pregnancies $7+$ months ${ }^{\prime}$ duration |
| Mother's age at birth |  |  |  |  |
| <20 | 2 | 4 | 17 | 355 |
| 20-29 | 31 | 45 | 22 | 3,505 |
| 30-39 | 25 | 22 | 23 | 2,073 |
| 40-49 | 4 | 2 | 30 | 202 |
| Previous pregnancy interval in months |  |  |  |  |
| First pregnancy | 5 | 14 | 18 | 1,055 |
| <15 | 10 | 15 | 27 | 933 |
| 15-26 | 17 | 25 | 22 | 1,882 |
| 27-38 | 13 | 10 | 21 | 1,106 |
| 39+ | 17 | 9 | 22 | 1,159 |
| Residence |  |  |  |  |
| Urban | 35 | 45 | 19 | 4,124 |
| Rural | 27 | 28 | 27 | 2,011 |
| Region |  |  |  |  |
| Central | 32 | 29 | 22 | 2,725 |
| North | 15 | 28 | 23 | 1,882 |
| South | 15 | 16 | 20 | 1,528 |
| Educational level attended |  |  |  |  |
| No education | 11 | 3 | 36 | 394 |
| Elementary | 13 | 9 | 35 | 631 |
| Preparatory | 9 | 16 | 20 | 1,250 |
| Secondary | 17 | 25 | 18 | 2,325 |
| Higher | 12 | 20 | 21 | 1,535 |
| Preparatory + secondary | y 26 | 41 | 19 | 3,575 |
| Total | 62 | 73 | 22 | 6,135 |
| ${ }^{1}$ Stillbirths are fetal deaths in pregnancies lasting seven or more months. <br> ${ }^{2}$ Early neonatal deaths are deaths at age 0-6 days among live-born children. <br> ${ }^{3}$ The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration. |  |  |  |  |
|  |  |  |  |  |

while the highest rates are found among pregnancies of oldest women ( 30 per 1,000) , perinatal mortality is quite low among the youngest women (17 per 1,000). First pregnancies and pregnancies with a shortpreceding interpregnancy interval are also normally at high perinatal risk. Once again, these expected results are not found in Jordan, since first pregnancies have the lowest perinatal risk of 18 perinatal deaths per 1,000 . This unusual finding is likely to be a result of both small sample size, as well as the fact that modern antenatal and delivery care services are widely available and utilized in Jordan.

Perinatal mortality is higher in rural areas (27 per 1,000 ) than in urban areas ( 19 per 1,000 ). At the regional level, the differences in perinatal mortality rates are minimal; it is, however, worth noting that perinatal mortality is higher for women with elementary education or no education ( 35 and 36 per 1,000 respectively) than for those with at least preparatory education (about 20 per 1,000 ).

### 8.4 HiGH-RISK Fertility Behavior

Table 8.5 presents the distribution of children born in the five years preceding the survey who are at increased risk of dying because of the mother's fertility characteristics. Children are at higher risk if the mother was too young or too old at time of birth, if they are of high birth order, or if they were born too soon after their next older sibling. In this report, a woman 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 at the time of giving birth. A child is considered "high birth order" if the mother previously delivered three or more children. A "short birth interval" is defined as a birth occurring less than 24 months after a previous birth. In the analysis of birth intervals, only children whose preceding birth interval was less than 24 months are included, even though a short birth interval also increases the risk of dying for the previous child at the beginning of the interval. The latter relationship is subject to reverse causality in that the death of the earlier child may cause the subsequent interval to be short.

Sixty-one percent of children born during the five years preceding the survey are at an elevated risk of dying. In 40 percent of the cases the risk is higher only because of a single risk category (mother's age, birth order, or birth interval), and in 22 percent of the cases the risk is higher owing to multiple risk categories. The largest group of children at risk includes those who are of a high birth order (43 percent) and those whose preceding birth interval was shorter than 24 months ( 27 percent). Nine percent of children were born with a preceding birth interval of less than 24 months and with birth order higher than 3. However, it should be noted that the effect of high birth order (4 or higher) outweighs the effects of factors such as length of preceding birth interval and mother's age.

Table 8.5 also shows the relative risk of dying for children born in the last five years by comparing the proportion dead in each risk category to the proportion dead among children with no risk factors. Column 2 of Table 8.5 presents the risk ratios for births during the five years preceding the survey (i.e., the ratio of the proportion dead in each risk category to the proportion dead among children who were not in any risk category). The single most detrimental factor is the birth order: children born after the third birth are almost twice (1.81) as likely to die as children not in any risk category. The combination of a mother's giving birth at an older age and the child's birth order higher than 3 is particularly detrimental to children's survival (1.61), as is the combination of a short birth interval and a high birth order (1.60). Children born to mothers over 34 years of age, and born less than 24 months after a preceding birth with a birth order higher than 3 are one-and-a-half (1.5) times more likely to die than children not in any risk category.

The last column of Table 8.5 presents the distribution of currently married women according to category of increased risk. Women are placed in the categories according to the status they would have at the birth of a child conceived at the time of the survey: women who were 17 years and 3 months old or younger or 34 years and 2 months old or older, women whose most recent birth was less than 15 months before the survey, and women whose most recent birth was of order 3 or higher. Many women are protected from the risk of pregnancy by contraception, postpartum insusceptibility, and prolonged abstinence but, in this report, for the sake of simplicity, only sterilized women are classified as not being in any risk category.

Table 8.5 High-risk fertility behavior
Percent distribution of children born in the five years preceding the survey by category of elevated risk of dying and the risk ratio, and the percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Jordan 2002

| Risk category | Births in the 5 years preceding the survey |  | Percentage of currently married women ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
|  | Percentage of births | Risk ratio |  |
| Not in any high-risk category | 20.0 | 1.00 | $13.8{ }^{\text {a }}$ |
| Unavoidable risk category |  |  |  |
| First-order births between ages 18 and 34 years | 18.7 | 1.62 | 5.8 |
| Single high-risk category |  |  |  |
| Mother's age <18 | 1.4 | 1.53 | 0.3 |
| Mother's age > 34 | 1.2 | 1.55 | 4.4 |
| Birth interval $<24$ months | 15.1 | 1.56 | 10.0 |
| Birth order $>3$ | 22.1 | 1.81 | 17.7 |
| Subtotal | 39.8 | 1.70 | 32.4 |
| Multiple high-risk category |  |  |  |
| Age $<18$ \& birth interval $<24$ months ${ }^{2}$ | 0.1 | * | 0.1 |
| Age $>34 \&$ birth interval <24 months | 0.5 | ${ }^{*}$ | 0.2 |
| Age $>34$ \& birth order $>3$ | 10.1 | 1.61 | 32.9 |
| Age $>34$ \& birth interval $<24$ months |  |  |  |
| \& birth order $>3$ | 2.1 | 1.53 | 4.4 |
| Birth interval <24 months \& birth order > 3 | 8.7 | 1.60 | 10.3 |
| Subtotal | 21.5 | 1.55 | 48.0 |
| In any avoidable high-risk category | 61.3 | 1.65 | 80.4 |
| Total | 100.0 | na | 100.0 |
| Number of births | 5,820 | na | 5,706 |

[^3]About eight of ten married women are at risk of conceiving a child who will be at increased risk of dying. About two-thirds of married women are at risk because of having already had 3 births; twofifths are at risk because of being over age 34. The figures in Table 8.5 demonstrate the strong influence of parity (the number of children the mother has had) on the risk of dying among children under five years of age.

## MATERNAL AND CHILD HEALTH

Health conditions in Jordan are among the best in the Middle East. This is due in large part to the Kingdom's stability and to a range of effective development plans and projects that have included health as a major component. This chapter presents findings on important areas of maternal and child health: antenatal, delivery, and postnatal care; vaccination coverage; and common childhood illnesses (fever, acute respiratory tract infections and diarrhea) and their treatment. In addition, problems in accessing health care, breast self-examination and smoking in women are also discussed. This information, in combination with data on mortality, is useful in formulating programs and policies to improve maternal and child health services.

### 9.1 Maternal Health

A mother's well-being has a direct impact on her children's well-being. Conversely, when mothers fare poorly, so do children. For newborns, survival is directly linked to a mother's health during pregnancy.

## Antenatal Care

The health care that a mother receives during pregnancy and at the time of delivery is important for the survival and well being of both the mother and the child. Antenatal care (ANC) coverage is described according to the type of provider, number of ANC visits, stage of pregnancy at the time of the first and last visits, and number of visits, as well as services and information provided during ANC. It is also recommended that women receive two doses of tetanus toxoid vaccine, adequate amounts of iron and folic acid tablets, and iron/syrup to prevent and treat anemia. Blood pressure checks and procedures to detect pregnancy complications are also part of ANC coverage. A well-designed and implemented ANC program facilitates detection and treatment of problems during pregnancy, such as anemia and infections, and provides an opportunity to disseminate health messages to women and their households.

Information on ANC coverage was obtained from women who had a birth in the five years preceding the survey. For women with two or more live births during the five-year period, data refer to the most recent birth only. Table 9.1 shows the percent distribution of mothers in the five years preceding the survey by source of antenatal care received during pregnancy. Almost all women ( 99 percent) received ANC from medically-trained personnel (doctors, nurses and midwives): the majority of women ( 93 percent) received care during pregnancy from a doctor, and 5 percent received care from a nurse or a midwife. Only 1 percent of women did not receive antenatal care for births in the preceding five years, and almost none of the women sought assistance from a traditional birth attendant. These findings are similar to those found in the 1997 JPFHS.

Women less than 20 years of age are more likely to receive antenatal care from midwives compared with older women. Mothers are more likely to receive care from a health professional for first births ( 97 percent) than for births of order six and higher ( 91 percent). There are small differences in the use of antenatal care services between urban and rural women. Health professionals provided antenatal care for 99 percent of mothers in urban areas and 97 percent of mothers in rural areas. Compared with the 1997 JPFHS, ANC from a trained health professional among rural women has increased by 5 percent in this survey.

| Table 9.1 Antenatal care |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Antenatal care provider |  |  |  |  |  |  |
| Background characteristic | Doctor | Nurse/ midwife | Traditional birth attendant/ other | No one | Total | Number <br> of <br> women |
| Age at birth |  |  |  |  |  |  |
| <20 | 89.6 | 8.0 | 0.0 | 2.4 | 100.0 | 171 |
| 20-34 | 93.7 | 5.1 | 0.0 | 1.1 | 100.0 | 2,906 |
| 35-49 | 92.9 | 4.8 | 0.0 | 2.2 | 100.0 | 667 |
| Birth order |  |  |  |  |  |  |
| 1 | 96.9 | 2.8 | 0.0 | 0.3 | 100.0 | 555 |
| 2-3 | 93.3 | 5.5 | 0.0 | 1.2 | 100.0 | 1,338 |
| 4-5 | 93.7 | 5.3 | 0.0 | 1.0 | 100.0 | 1,011 |
| 6+ | 91.0 | 6.2 | 0.0 | 2.8 | 100.0 | 839 |
| Residence |  |  |  |  |  |  |
| Urban | 94.1 | 4.9 | 0.0 | 1.0 | 100.0 | 2,931 |
| Rural | 90.9 | 6.5 | 0.0 | 2.7 | 100.0 | 812 |
| Region |  |  |  |  |  |  |
| Central | 95.0 | 4.2 | 0.0 | 0.9 | 100.0 | 2,378 |
| North | 89.9 | 8.1 | 0.0 | 1.9 | 100.0 | 1,001 |
| South | 92.6 | 4.1 | 0.1 | 3.2 | 100.0 | 364 |
| Educational level attended |  |  |  |  |  |  |
| No education | 84.6 | 6.2 | 0.2 | 9.0 | 100.0 | 149 |
| Elementary | 86.1 | 11.1 | 0.0 | 2.8 | 100.0 | 306 |
| Preparatory | 92.9 | 5.0 | 0.0 | 2.0 | 100.0 | 741 |
| Secondary | 93.6 | 5.6 | 0.0 | 0.7 | 100.0 | 1,539 |
| Higher | 96.9 | 2.8 | 0.0 | 0.3 | 100.0 | 1,008 |
| Preparatory + secondary | 93.4 | 5.4 | 0.0 | 1.1 | 100.0 | 2,280 |
| Total | 93.4 | 5.2 | 0.0 | 1.4 | 100.0 | 3,743 |
| Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. |  |  |  |  |  |  |

Regional differences in the source of antenatal care are significant: 95 percent of mothers in the Central region received antenatal care from a doctor, compared with 90 percent and 93 percent in the North and South regions, respectively. In the North, more women ( 8 percent) sought care from a nurse/midwife, compared with 4 percent in both the Central and South regions. Also, the percentage of mothers who did not receive antenatal care is the highest in the South (3 percent) and lowest in the Central region (1 percent).

The use of antenatal care services is strongly associated with the mother's level of education. Women with a secondary education or higher are more likely to receive antenatal care from any trained personnel ( 99 and 100 percent) than women with elementary education ( 97 percent) and women with no education ( 91 percent). Similarly, 9 percent of uneducated women receive no antenatal care, whereas the proportion of women who receive no care decreases to 3 percent and less than 1 percent for women with secondary or higher education, respectively.

Antenatal care can be more effective in avoiding adverse pregnancy outcomes when it is sought early in the pregnancy and continues through to delivery. Obstetricians generally recommend that antenatal visits be made on a monthly basis to the 28th week (seventh month), fortnightly to the 36th week, and then weekly until the 40 th week (until birth). If the first antenatal visit is made at the third month of pregnancy, this optimum schedule translates to a total of at least 12-13 visits during the pregnancy. Table 9.2 shows that 81 percent of women make six or more antenatal care visits during their entire pregnancy. The percentage of women who make six or more antenatal care visits is higher in urban areas ( 83 percent) than rural areas ( 74 percent).

Eighty-five percent of women make their first antenatal care visit before the fourth month of pregnancy, and the proportion of women seeking antenatal care increases to almost 96 percent before six months of pregnancy. The median duration of pregnancy for the first antenatal care visit is 2.1 months. This indicates that in Jordan, women start antenatal care at a relatively early stage of their pregnancy.

## Components of Antenatal Care

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit, according to residence, Jordan 2002

| Number and timing <br> of ANC visits | Residence |  |  |
| :--- | ---: | ---: | ---: |
|  | Urban | Rural | Total |
|  |  |  |  |
| None | 1.0 | 2.7 | 1.4 |
| 1 | 1.2 | 2.2 | 1.4 |
| 2 | 1.7 | 3.7 | 2.1 |
| 3 | 3.8 | 5.1 | 4.1 |
| 4 | 3.8 | 4.6 | 4.0 |
| 5 | 5.5 | 7.8 | 6.0 |
| $6+$ | 82.9 | 74.0 | 80.9 |
| Don't know/missing | 0.1 | 0.0 | 0.1 |
|  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 |


| Number of months pregnant <br> at time of first ANC visit |  |  |  |
| :--- | ---: | ---: | ---: |
| $\quad$ No antenatal care | 1.0 | 2.7 | 1.4 |
| $<4$ | 85.6 | 83.5 | 85.1 |
| $4-5$ | 10.7 | 10.5 | 10.6 |
| $6-7$ | 1.8 | 2.1 | 1.9 |
| $8+$ | 0.9 | 1.2 | 1.0 |
|  | 100.0 | 100.0 | 100.0 |
| Total |  |  |  |
| Median months pregnant at <br> first visit (for those with ANC) | 2.0 | 2.3 | 2.1 |
| Number of women | 2,931 | 812 | 3,743 |

The effectiveness of antenatal checkups in ensuring safe motherhood depends in part on the tests and measurements done and the advice given during the checkups. The 2002 JPFHS survey collected information on this important aspect of antenatal care by asking mothers who received antenatal checkups whether they received each of several components of ANC during their last pregnancy in the five years preceding the survey. Table 9.3 shows that 43 percent of mothers who received antenatal care reported that they were informed about pregnancy-related complications during their visits. Blood pressure was part of antenatal care for 96 percent of mothers. Urine and blood samples were taken from 89 and 90 percent of women, respectively. In addition, less than three-fourths ( 72 percent) of women either received or purchased iron tablets or syrup during pregnancy.
Table 9.3
Urban-rural differences are noticed for various components of antenatal care. Urban women were more likely to get each component of antenatal care than rural women. Regional variations in antenatal care are also seen. For example, women in the Central region, which includes the capital city Amman, are more likely to receive each antenatal care component, especially getting urine and blood tests, compared to women in the North or South regions. Antenatal care content is also greatly affected by the level of mother's education. Women with secondary or higher education were more likely to have received all routine tests than less-educated women. Similarly, women with elementary education were more likely to get each ANC component than women with no education. Women who were pregnant with their first child were more likely to receive all components of ANC.

| Table 9.3 Components of antenatal care |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women with a live birth in the five years preceding the survey who received antenatal care for the most recent birth, by content of antenatal care, and percentage of women with a live birth in the five years preceding the survey who were given or purchased iron tablets or syrup for the most recent birth, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |
| Among women who received antenatal care |  |  |  |  |  |  |  |  |  |
|  | Informed of signs of pregnan complications | y Weight measured | Height measured | Blood pressure measured | Urine sample taken | Blood sample taken | Number of women | Received/ purchased iron tablets or syrup | Number of women |
| Age at birth |  |  |  |  |  |  |  |  |  |
| <20 | 46.1 | 95.9 | 65.1 | 96.7 | 88.7 | 94.1 | 167 | 69.4 | 171 |
| 20-34 | 43.5 | 93.8 | 62.9 | 95.6 | 88.8 | 89.5 | 2,873 | 72.7 | 2,906 |
| 35-49 | 37.5 | 92.6 | 60.7 | 95.3 | 89.0 | 90.0 | 652 | 70.3 | 667 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 1 | 50.7 | 96.9 | 66.5 | 97.1 | 92.1 | 95.2 | 553 | 81.2 | 555 |
| 2-3 | 43.3 | 95.1 | 63.6 | 97.1 | 89.6 | 90.6 | 1,322 | 74.8 | 1,338 |
| 4-5 | 38.7 | 92.1 | 61.8 | 95.1 | 88.0 | 87.7 | 1,001 | 70.2 | 1,011 |
| 6+ | 40.6 | 91.0 | 59.5 | 92.9 | 86.5 | 87.5 | 815 | 64.0 | 839 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 42.8 | 94.7 | 63.8 | 96.6 | 90.3 | 91.3 | 2,902 | 74.7 | 2,931 |
| Rural | 41.8 | 90.0 | 58.5 | 91.9 | 83.5 | 84.2 | 790 | 62.9 | 812 |
| Region |  |  |  |  |  |  |  |  |  |
| Central | 43.6 | 95.3 | 65.6 | 96.8 | 90.4 | 90.9 | 2,358 | 77.0 | 2,378 |
| North | 40.4 | 90.2 | 54.0 | 93.7 | 86.3 | 88.5 | 982 | 64.9 | 1,001 |
| South | 41.9 | 92.8 | 67.0 | 92.9 | 85.7 | 86.1 | 353 | 60.0 | 364 |
| Educational level attended |  |  |  |  |  |  |  |  |  |
| No education | 37.9 | 81.3 | 44.8 | 79.7 | 74.4 | 71.8 | 136 | 50.3 | 149 |
| Elementary | 40.6 | 90.8 | 61.5 | 90.5 | 86.8 | 85.2 | 298 | 57.5 | 306 |
| Preparatory | 40.9 | 91.6 | 62.6 | 94.9 | 87.1 | 88.3 | 726 | 63.2 | 741 |
| Secondary | 42.9 | 94.9 | 63.9 | 96.8 | 89.9 | 91.3 | 1,529 | 74.4 | 1,539 |
| Higher | 44.5 | 95.9 | 63.5 | 98.0 | 91.1 | 92.3 | 1,004 | 82.8 | 1,008 |
| Preparatory + secondary | ry 42.2 | 93.8 | 63.5 | 96.2 | 89.0 | 90.4 | 2,254 | 70.8 | 2,280 |
| Total | 42.6 | 93.7 | 62.6 | 95.6 | 88.8 | 89.8 | 3,692 | 72.1 | 3,743 |

## Coverage of Tetanus Toxoid Vaccinations

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus, an important cause of death among infants. Neonatal tetanus is most common among children who are delivered in unhygienic environments and when unsterilized instruments are used to cut the umbilical cord. Tetanus usually develops during the first or second week of life and is fatal in 70-90 percent of cases. Neonatal tetanus, however, is a preventable disease. Two doses of tetanus vaccine given one month apart during early pregnancy are nearly 100 percent effective in preventing tetanus among both newborn infants and mothers. If a woman has been vaccinated during a previous pregnancy, she may require only one dose for the current pregnancy. When the mother is vaccinated, immunity against tetanus is transferred to the fetus through the placenta.

In the 2002 JPFHS, information was collected on the number of doses of tetanus toxoid the mother received. The results are presented in Table 9.4. Less than one-fourth ( 24 percent) of women received one dose of the vaccine, an observation similar to the 1997 JPFHS. Two or more doses of tetanus toxoid were received by only 9 percent of women, a significant drop from the previous JPFHS survey where 16 percent of women received two or more doses. In general, women less than twenty years of age and pregnant with their first child were more likely to get one and two or more doses of tetanus toxoid
injections. However, women who are not as educated or with no education and living in rural areas are slightly more likely to receive two or more injections of tetanus toxoid. The low prevalence of tetanus vaccination in Jordan may be explained by the fact that many women have already received vaccinations against tetanus in school or during a previous pregnancy.

| Table 9.4 Tetanus toxoid injections |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women who had a live birth in the five years preceding the survey by number of tetanus toxoid injections received during pregnancy for the most recent birth, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |
| Background characteristic | Number of injections |  |  |  | Total | Number of women |
|  | None | One injection | Two or more injections | Don't know/ missing |  |  |
| Age at birth |  |  |  |  |  |  |
| $<20$ | 47.4 | 31.8 | 20.2 | 0.6 | 100.0 | 171 |
| 20-34 | 66.0 | 24.3 | 8.8 | 0.9 | 100.0 | 2,906 |
| 35-49 | 69.1 | 22.5 | 6.9 | 1.4 | 100.0 | 667 |
| Birth order |  |  |  |  |  |  |
| 1 | 44.9 | 34.7 | 20.2 | 0.2 | 100.0 | 555 |
| 2-3 | 67.7 | 24.2 | 7.3 | 0.9 | 100.0 | 1,338 |
| 4-5 | 68.7 | 23.1 | 7.3 | 1.0 | 100.0 | 1,011 |
| 6+ | 72.9 | 19.2 | 6.4 | 1.5 | 100.0 | 839 |
| Residence |  |  |  |  |  |  |
| Urban | 65.0 | 25.4 | 8.6 | 1.0 | 100.0 | 2,931 |
| Rural | 68.5 | 20.4 | 10.4 | 0.6 | 100.0 | 812 |
| Region |  |  |  |  |  |  |
| Central | 63.7 | 26.1 | 9.3 | 0.9 | 100.0 | 2,378 |
| North | 68.0 | 22.0 | 8.7 | 1.2 | 100.0 | 1,001 |
| South | 72.3 | 19.4 | 7.7 | 0.6 | 100.0 | 364 |
| Educational level attended |  |  |  |  |  |  |
| No education | 71.3 | 17.9 | 10.2 | 0.6 | 100.0 | 149 |
| Elementary | 58.7 | 27.7 | 10.9 | 2.7 | 100.0 | 306 |
| Preparatory | 64.8 | 25.8 | 8.8 | 0.6 | 100.0 | 741 |
| Secondary | 63.4 | 26.6 | 9.3 | 0.7 | 100.0 | 1,539 |
| Higher | 71.3 | 19.7 | 7.9 | 1.1 | 100.0 | 1,008 |
| Preparatory + secondary | 63.8 | 26.4 | 9.1 | 0.7 | 100.0 | 2,280 |
| Total | 65.7 | 24.3 | 9.0 | 1.0 | 100.0 | 3,743 |

### 9.2 Delivery

## Place of Delivery

The objective of providing safe delivery services is to protect the life and health of the mother and her child by ensuring the safe delivery of the child. An important component of efforts to reduce the health risks to mother and child is to increase the proportion of infants delivered under the supervision of health professionals. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may cause death or serious illness for the mother, the child, or both. Data on delivery care was obtained for all births that occurred in the five years preceding the survey.

| Table 9.5 Place of delivery |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |
| Background characteristic | Place of delivery |  |  |  |  |  | Total | Number <br> of births |
|  | Government hospital | Royal Medical Services | Other public sector | Any public sector | Private sector | Home |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |
| <20 | 54.1 | 12.5 | 0.1 | 66.8 | 29.7 | 3.5 | 100.0 | 358 |
| 20-34 | 45.6 | 16.1 | 1.8 | 63.5 | 33.2 | 3.3 | 100.0 | 4,654 |
| 35-49 | 45.3 | 14.8 | 2.2 | 62.3 | 36.1 | 1.7 | 100.0 | 808 |
| Birth order |  |  |  |  |  |  |  |  |
| 1 | 43.7 | 13.6 | 1.7 | 59.1 | 39.1 | 1.8 | 100.0 | 1,186 |
| 2-3 | 43.9 | 16.3 | 1.5 | 61.7 | 35.2 | 3.0 | 100.0 | 2,131 |
| 4-5 | 47.7 | 15.7 | 1.6 | 65.0 | 31.3 | 3.7 | 100.0 | 1,396 |
| $6+$ | 50.8 | 16.7 | 2.4 | 69.8 | 26.4 | 3.8 | 100.0 | 1,106 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 43.5 | 13.0 | 1.5 | 58.0 | 39.1 | 2.9 | 100.0 | 4,487 |
| Rural | 54.7 | 24.7 | 2.5 | 82.0 | 14.1 | 3.9 | 100.0 | 1,333 |
| Region |  |  |  |  |  |  |  |  |
| Central | 40.2 | 11.3 | 2.6 | 54.1 | 43.6 | 2.3 | 100.0 | 3,635 |
| North | 61.4 | 18.6 | 0.5 | 80.5 | 15.1 | 4.4 | 100.0 | 1,596 |
| South | 40.7 | 35.0 | 0.1 | 75.7 | 19.9 | 4.3 | 100.0 | 589 |
| Mother's education |  |  |  |  |  |  |  |  |
| No education | 60.2 | 16.9 | 1.4 | 78.4 | 11.4 | 10.1 | 100.0 | 237 |
| Elementary | 60.5 | 14.9 | 0.8 | 76.2 | 18.7 | 5.2 | 100.0 | 484 |
| Preparatory | 53.1 | 17.8 | 0.7 | 71.6 | 24.0 | 4.4 | 100.0 | 1,154 |
| Secondary | 46.8 | 16.2 | 1.3 | 64.3 | 33.1 | 2.6 | 100.0 | 2,440 |
| Higher | 32.7 | 13.3 | 3.6 | 49.7 | 49.2 | 1.1 | 100.0 | 1,504 |
| Preparatory + secondary | 48.8 | 16.7 | 1.1 | 66.6 | 30.2 | 3.2 | 100.0 | 3,594 |
| Antenatal care visits |  |  |  |  |  |  |  |  |
| None | 69.0 | 15.3 | 0.0 | 84.3 | 2.5 | 13.2 | 100.0 | 51 |
| 1-3 | 55.8 | 14.9 | 1.0 | 71.7 | 19.5 | 8.8 | 100.0 | 287 |
| 4+ | 45.1 | 14.8 | 1.8 | 61.7 | 36.2 | 2.0 | 100.0 | 3,402 |
| Total ${ }^{1}$ | 46.1 | 15.7 | 1.7 | 63.5 | 33.4 | 3.1 | 100.0 | 5,820 |

Note: Includes only the most recent birth in the five years preceding the survey
${ }^{1}$ Total includes 3 missing cases for antenatal visit.

The main providers of health services in Jordan are the Ministry of Health (government hospitals) and the Jordan Armed Forces (Royal Medical Services), both under the public health sector, and the private sector. Royal Medical Services has several centers providing medical services for all acting and retired military personnel.

An overwhelming majority of births ( 97 percent) in the five years before the survey were delivered in a medical facility (Table 9.5 and Figure 9.1), an increase of four percentage points from the previous survey. Eighty-one percent of births took place in a public health facility in the North region compared with 54 percent in the Central region. More women ( 44 percent) in the Central region went to a private health facility than women from the North or South regions. Women are more likely to have their first birth at a private health facility than subsequent births. The reverse is true for public health facilities. Younger women are more likely to deliver at a public health facility or at home, while older women are
more likely to deliver in a private health facility. In rural areas more children are born in public health facilities than private health facilities, and vice versa in urban areas.

Only 3 percent of women gave birth at home, a drop of more than 50 percent from the previous JPFHS survey ( 7 percent). There is also a strong association between the level of education of mothers and the place of delivery. The proportion of births delivered in a public health facility is higher ( 78 percent) for uneducated mothers, compared with 50 percent of births to mothers with higher education. There is a ten-fold difference in the proportion of births at home by uneducated women ( 10 percent) compared with women with higher education (1 percent).

Figure 9.1 Place of Delivery


## Assistance at Delivery

Obstetric care by a trained provider during delivery is recognized as critical for the reduction of maternal and neonatal mortality. Table 9.6 shows the type of assistance during delivery by background characteristics. Almost all births in Jordan are delivered with the assistance of a trained health professional, that is, a doctor, nurse, or midwife.

In all regions, the proportion of births assisted by a trained health professional is fairly similar. Both urban and rural women get assistance from a trained health professional during delivery. However, urban women are more likely to receive assistance from a doctor compared to a nurse or a midwife. First births are more likely to be assisted by a doctor than higher-order births. Rural women are more likely to receive assistance during birth from a traditional birth attendant ( 1.5 percent) compared with urban women, although numbers are very small. Women's education is positively associated with deliveries by medical professionals. Almost all births to women with preparatory, secondary and higher education receive delivery assistance from a health professional, whereas 94 percent of women with no education receive the same. The remaining women with no education sought assistance during delivery from a traditional birth attendant ( 5 percent).

| Table 9.6 Assistance during delivery |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |
| Background characteristic | Doctor | Nurse/ midwife | Traditional birth attendant | No one | Total | Number of births |
| Mother's age at birth |  |  |  |  |  |  |
| <20 | 64.5 | 35.1 | 0.4 | 0.0 | 100.0 | 358 |
| 20-34 | 62.4 | 37.1 | 0.4 | 0.1 | 100.0 | 4,654 |
| 35-49 | 65.1 | 34.3 | 0.5 | 0.1 | 100.0 | 808 |
| Birth order |  |  |  |  |  |  |
| 1 | 73.5 | 26.4 | 0.1 | 0.0 | 100.0 | 1,186 |
| 2-3 | 62.8 | 36.9 | 0.1 | 0.1 | 100.0 | 2,131 |
| 4-5 | 58.6 | 40.8 | 0.5 | 0.1 | 100.0 | 1,396 |
| 6+ | 57.2 | 41.6 | 1.1 | 0.2 | 100.0 | 1,106 |
| Residence |  |  |  |  |  |  |
| Urban | 66.4 | 33.5 | 0.1 | 0.1 | 100.0 | 4,487 |
| Rural | 51.4 | 46.9 | 1.5 | 0.2 | 100.0 | 1,333 |
| Region |  |  |  |  |  |  |
| Central | 71.4 | 28.5 | 0.1 | 0.1 | 100.0 | 3,635 |
| North | 47.5 | 51.6 | 0.9 | 0.0 | 100.0 | 1,596 |
| South | 52.7 | 46.2 | 0.7 | 0.3 | 100.0 | 589 |
| Mother's education |  |  |  |  |  |  |
| No education | 47.1 | 47.3 | 5.4 | 0.3 | 100.0 | 237 |
| Elementary | 54.9 | 43.6 | 1.3 | 0.2 | 100.0 | 484 |
| Preparatory | 56.1 | 43.7 | 0.1 | 0.1 | 100.0 | 1,154 |
| Secondary | 61.9 | 38.0 | 0.1 | 0.0 | 100.0 | 2,440 |
| Higher | 74.9 | 24.9 | 0.1 | 0.2 | 100.0 | 1,504 |
| Preparatory + secondary | 60.1 | 39.8 | 0.1 | 0.0 | 100.0 | 3,594 |
| Total | 62.9 | 36.6 | 0.4 | 0.1 | 100.0 | 5,820 |
| Note: If the respondent mentioned more than one person, only the most qualified person is considered in this tabulation. |  |  |  |  |  |  |

## Delivery Characteristics

Caesarean section (C-section) rates are one of the few indicators for measuring women's access to obstetric care. C-sections are generally performed because the mother has medical problems or experiences complications at the time of delivery. Based on research and analysis, WHO has determined that the rate of C-sections in a given population should not be less than 5 percent and not more than 15 percent of all pregnancies if the lives of women and infants are to be protected (UNICEF, 1999). Rates below 5 percent are clear and grave warnings that many women and babies may be dying because of inadequate access to the whole spectrum of obstetric services. Rates above 15 percent indicate an unnecessarily high reliance on a major surgical procedure with numerous risks. It is essential that C -sections be performed only when necessary, and in facilities that are adequately equipped and staffed to ensure safety (UNICEF, 1999).

The JPFHS 2002 obtained information on a number of other key aspects of deliveries, including the frequency of C-sections and the birth weights of babies. Table 9.7 shows that one in six deliveries in the five-year period before the survey was by C-section, a more than 50 percent increase from the previ-
ous survey (JPFHS 1997). Given the high C-section rates (16 percent) and the disproportionately large increase in the proportion of births delivered by C-section since 1997, the indications for the performance of a Caesarean section need to be reviewed and addressed in Jordan. C-sections are more frequent in the Central region (17 percent) compared with the North (13 percent) and South (15 percent) regions. Older women are more than twice as likely to have a C-section ( 25 percent) as younger women ( 12 percent), but this may be related to a woman's previous history of having a C -section and the proclivity of the medical community to routinely deliver a woman by C -section if she has had one before.

Birth weight is a major determinant of infant and child health and mortality. In the 2002 JPFHS, for all births during the five-year period preceding the survey, mothers were first asked to subjectively assess the size of their baby and then were asked to report the actual weight in kilograms if the baby had been weighed after delivery. Table 9.7 shows that less than 2 percent of babies were not weighed at birth. Among those births for which the mother was able to report the baby's weight, about 10 percent were classified as low birth weight - i.e., they weighed less than 2.5 kilograms at birth - and 88 percent weighed 2.5 kilograms or more.

| Table 9.7 Delivery characteristics |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of live births in the five years preceding the survey delivered by caesarean section, and percent distribution by birth weight and by mother's estimate of baby's size at birth, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Birth weight |  |  |  |  |  | Size of child at birth |  |  |  |  |  |
| Background characteristic | by caesare section | Not eighed | Less than 2.5 kg . | 2.5 kg . or more | Don't know/ missing | Total | Very small | Smaller than average | Average or larger | Don't know/ missing | Total | Number of births |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |  |  |  |
| <20 | 11.7 | 1.0 | 8.2 | 90.4 | 0.4 | 100.0 | 4.8 | 18.2 | 77.0 | 0.0 | 100.0 | 358 |
| 20-34 | 14.7 | 1.5 | 10.8 | 87.1 | 0.6 | 100.0 | 4.4 | 12.4 | 83.0 | 0.2 | 100.0 | 4,654 |
| 35-49 | 25.3 | 1.9 | 7.6 | 89.8 | 0.7 | 100.0 | 4.3 | 7.5 | 88.3 | 0.0 | 100.0 | 808 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 17.1 | 0.5 | 11.6 | 87.5 | 0.4 | 100.0 | 5.0 | 16.1 | 78.9 | 0.1 | 100.0 | 1,186 |
| 2-3 | 15.7 | 1.3 | 9.5 | 88.7 | 0.5 | 100.0 | 4.0 | 11.7 | 84.3 | 0.1 | 100.0 | 2,131 |
| 4-5 | 13.4 | 1.7 | 10.9 | 86.7 | 0.8 | 100.0 | 4.8 | 11.7 | 83.3 | 0.2 | 100.0 | 1,396 |
| 6+ | 18.6 | 2.6 | 9.2 | 87.4 | 0.8 | 100.0 | 3.9 | 9.2 | 86.4 | 0.5 | 100.0 | 1,106 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 16.3 | 0.8 | 8.9 | 89.9 | 0.4 | 100.0 | 3.7 | 11.6 | 84.6 | 0.0 | 100.0 | 4,487 |
| Rural | 14.8 | 3.7 | 14.6 | 80.3 | 1.5 | 100.0 | 6.5 | 13.7 | 79.0 | 0.8 | 100.0 | 1,333 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 17.4 | 0.5 | 10.0 | 89.2 | 0.4 | 100.0 | 3.5 | 12.3 | 84.1 | 0.0 | 100.0 | 3,635 |
| North | 13.1 | 2.9 | 9.5 | 87.0 | 0.6 | 100.0 | 5.3 | 11.4 | 82.8 | 0.5 | 100.0 | 1,596 |
| South | 14.9 | 3.8 | 13.4 | 80.6 | 2.2 | 100.0 | 7.2 | 12.3 | 80.0 | 0.5 | 100.0 | 589 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 16.9 | 10.1 | 18.1 | 65.2 | 6.6 | 100.0 | 10.3 | 15.4 | 71.4 | 2.9 | 100.0 | 237 |
| Elementary | 23.2 | 3.6 | 13.4 | 81.9 | 1.1 | 100.0 | 6.2 | 12.2 | 81.1 | 0.5 | 100.0 | 484 |
| Preparatory | 16.0 | 1.4 | 11.5 | 86.7 | 0.4 | 100.0 | 4.0 | 13.7 | 82.2 | 0.1 | 100.0 | 1,154 |
| Secondary | 12.6 | 0.8 | 9.3 | 89.6 | 0.3 | 100.0 | 4.2 | 12.4 | 83.4 | 0.0 | 100.0 | 2,440 |
| Higher | 18.9 | 0.7 | 8.4 | 90.8 | 0.2 | 100.0 | 3.4 | 9.9 | 86.7 | 0.1 | 100.0 | 1,504 |
| Preparatory + secondary | 13.7 | 1.0 | 10.0 | 88.7 | 0.3 | 100.0 | 4.1 | 12.8 | 83.0 | 0.0 | 100.0 | 3,594 |
| Total | 16.0 | 1.5 | 10.2 | 87.7 | 0.6 | 100.0 | 4.4 | 12.1 | 83.3 | 0.2 | 100.0 | 5,820 |

Table 9.7 also includes information on the mother's assessment of the baby's size at birth. It is important to remember that this assessment may vary among respondents since it is based on the mother's perception of what is a small, average, or large baby and not on a uniform definition. Eighty-three percent of the births were considered average or larger than average. About 4 percent were considered very small.

## Payment for Delivery

Table 9.8 shows that in the five years preceding the survey, 41 percent of births delivered in any public facility were paid for by respondents or their families; the corresponding figure for deliveries in private facilities was 75 percent. Government insurance was used by 38 percent of respondents: 94 percent of deliveries in Royal Medical Services were paid for this way, as were 82 percent of deliveries in

| Table 9.8 Payment for delivery |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of live births delivered in health facilities during the five years preceding the survey by party responsible for payment for delivery, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |
| Background characteristic | Party responsible for payment |  |  |  |  |  | Total | Number of births |
|  | Government insurance | Private insurance |  | Respondent/ family | Other | Don't know/ missing |  |  |
| Age at birth |  |  |  |  |  |  |  |  |
| <20 | 29.7 | 2.0 | 0.0 | 66.3 | 1.9 | 0.0 | 100.0 | 346 |
| 20-34 | 37.7 | 7.8 | 0.7 | 53.1 | 0.4 | 0.3 | 100.0 | 4,500 |
| 35-49 | 44.3 | 8.1 | 1.4 | 45.8 | 0.4 | 0.0 | 100.0 | 794 |
| Birth order |  |  |  |  |  |  |  |  |
| 1 | 31.7 | 7.7 | 0.5 | 59.3 | 0.7 | 0.1 | 100.0 | 1,164 |
| 2-3 | 35.1 | 8.4 | 0.5 | 55.0 | 0.8 | 0.2 | 100.0 | 2,066 |
| 4-5 | 41.6 | 7.0 | 0.9 | 50.1 | 0.1 | 0.4 | 100.0 | 1,344 |
| 6+ | 46.6 | 6.2 | 1.2 | 45.5 | 0.3 | 0.1 | 100.0 | 1,065 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 29.5 | 8.7 | 0.9 | 60.0 | 0.6 | 0.3 | 100.0 | 4,359 |
| Rural | 67.4 | 3.4 | 0.2 | 28.7 | 0.2 | 0.0 | 100.0 | 1,281 |
| Region |  |  |  |  |  |  |  |  |
|  | 25.1 | 8.6 | 0.8 | 64.6 | 0.7 | 0.3 | 100.0 | 3,551 |
| North | 60.2 | 4.2 | 0.9 | 34.5 | 0.3 | 0.0 | 100.0 | 1,526 |
| South | 60.6 | 9.8 | 0.0 | 29.1 | 0.2 | 0.4 | 100.0 | 563 |
| Educational level attended |  |  |  |  |  |  |  |  |
| No education | 55.0 | 1.7 | 0.9 | 41.5 | 0.6 | 0.2 | 100.0 | 213 |
| Elementary | 40.9 | 7.7 | 1.1 | 49.5 | 0.7 | 0.0 | 100.0 | 459 |
| Preparatory | 39.0 | 4.1 | 0.3 | 55.9 | 0.5 | 0.2 | 100.0 | 1,103 |
| Secondary | 35.0 | 5.7 | 0.6 | 57.9 | 0.6 | 0.3 | 100.0 | 2,377 |
| Higher | 39.3 | 13.6 | 1.1 | 45.4 | 0.4 | 0.2 | 100.0 | 1,488 |
| Preparatory + secondary | 36.2 | 5.2 | 0.5 | 57.2 | 0.6 | 0.2 | 100.0 | 3,480 |
| Health facility |  |  |  |  |  |  |  |  |
| Government Hospital | 43.1 | 0.5 | 1.0 | 55.1 | 0.3 | 0.0 | 100.0 | 2,682 |
| Royal Medical Services | 94.1 | 2.6 | 0.1 | 3.2 | 0.0 | 0.0 | 100.0 | 914 |
| Other public sector | 82.2 | 1.1 | 0.0 | 16.7 | 0.0 | 0.0 | 100.0 | 101 |
| Private sector | 2.7 | 19.8 | 0.8 | 75.0 | 1.1 | 0.6 | 100.0 | 1,943 |
| Assistance during delivery |  |  |  |  |  |  |  |  |
| Doctor | 30.3 | 10.6 | 0.8 | 57.4 | 0.6 | 0.3 | 100.0 | 3,655 |
| Nurse/midwife | 42.5 | 6.0 | 0.7 | 50.1 | 0.5 | 0.2 | 100.0 | 3,991 |
| Other/none | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 3 |
| Total | 38.1 | 7.5 | 0.7 | 52.9 | 0.5 | 0.2 | 100.0 | 5,640 |

other public sector health facilities. On the other hand, private insurance was used by 8 percent of respondents: 20 percent of deliveries in the private sector and only 3 percent of deliveries in the Royal Medical Services were paid for with private insurance. Rural women were more than twice as likely to use government insurance ( 67 percent) as women living in urban areas ( 30 percent). The cost of delivery for less than 1 percent of babies was covered by payments from the United Nations Relief and Works Agency (UNRWA).

### 9.3 Postnatal Care and Practices

## Postnatal Care

A large proportion of maternal and neonatal deaths occur during the first 48 hours after delivery. Safe motherhood programs have recently increased their emphasis on the importance of postnatal care, recommending that all women receive a health check within two days of delivery. To assess the extent of postnatal care utilization, respondents were asked whether they had received a health check after the delivery of their last birth in the five years preceding the survey.

Each woman with a birth in the five years previous to the survey was asked questions on the postnatal care she received for her latest birth, depending on where she gave birth. If she gave birth outside of a health facility, she was asked whether or not a health professional checked on her health after the birth. If, as did 97 percent of Jordanian women, she gave birth at a health facility, it was assumed that the woman received initial postnatal care shortly after birth while still in the facility; these women then were asked whether or not they received a postnatal check after they had been discharged from the facility.

Figure 9.2 shows that among women whose last birth in the five years preceding the survey took place outside of a health facility, only 8 percent received a postnatal checkup in the crucial 2 days after delivery. Twenty-two percent of women who gave birth outside of a facility had a postnatal checkup between 3 and 39 days after delivery, and 5 percent had a health checkup 40 days or more after delivery; the remaining 65 percent received no postnatal care.

Figure 9.2 Postnatal Care by Timing of First Postnatal Checkup


[^4]It is assumed that women who give birth in a facility receive some degree of postnatal care before they leave the health facility, especially in countries such as Jordan, which has a well-developed health care system. Hence, those women who gave birth in a facility were asked whether or not they sought further postnatal care after they had left the facility in which they gave birth. Figure 9.2 shows that among women whose last birth in the five years preceding the survey took place in a health facility, most (69 percent) did not return for further postnatal care once they had left the health facility in which they gave birth. One percent of women who gave birth in a facility had another checkup within two days of leaving the facility, 25 percent had a checkup between 3 and 39 days after birth, and 5 percent more had a checkup 40 days or more after the birth of their last child.

Table 9.9 presents information on reasons given by women for either not receiving a postnatal check after leaving the place of delivery, or for not receiving any postnatal check (for those who did not deliver in a health facility). Most women felt no need to go for a checkup or didn't feel sick (delivered in facility: 89 percent; outside of facility: 76 percent). Of concern, particularly among women who gave

## Table 9.9 Reasons for no postnatal check

Among women whose last birth was in the five years preceding the survey, percent distribution of those who delivered in a health facility but had no post-facility-discharge postnatal check and those who did not deliver in a health facility and had no postnatal check by reason for not having a postnatal check, according to background characteristics, Jordan 2002

|  | Reason for not having postnatal check |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Health facility too far | Too expensive | Waiting time too long | Facility not well equpped | Not enough qualified personnel | Not well received | No need to go, not sick | Not aware of availability | Husband, family opposed | Not supposed to go out $<40$ days | No one to take care of baby during visit | Other | Total | Number of women |
| Age at birth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 86.1 | 9.3 | 1.0 | 2.7 | 0.0 | 0.9 | 100.0 | 125 |
| 20-34 | 0.3 | 1.7 | 0.0 | 0.1 | 0.2 | 0.4 | 88.5 | 6.0 | 0.1 | 0.9 | 1.2 | 0.6 | 100.0 | 1,986 |
| 35-49 | 0.1 | 1.7 | 0.7 | 0.0 | 0.2 | 0.2 | 87.6 | 5.8 | 0.3 | 1.7 | 0.8 | 0.9 | 100.0 | 468 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 1.1 | 0.3 | 0.0 | 0.0 | 0.4 | 0.3 | 85.1 | 7.9 | 0.5 | 2.2 | 0.5 | 1.6 | 100.0 | 360 |
| 2-3 | 0.0 | 2.0 | 0.0 | 0.2 | 0.2 | 0.2 | 90.1 | 5.5 | 0.1 | 0.3 | 0.9 | 0.4 | 100.0 | 898 |
| 4-5 | 0.1 | 1.2 | 0.2 | 0.0 | 0.2 | 0.4 | 88.8 | 5.7 | 0.0 | 1.4 | 1.6 | 0.5 | 100.0 | 692 |
| 6+ | 0.2 | 2.3 | 0.3 | 0.1 | 0.2 | 0.5 | 86.5 | 6.4 | 0.2 | 1.6 | 1.0 | 0.8 | 100.0 | 630 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 0.2 | 1.6 | 0.1 | 0.1 | 0.1 | 0.3 | 89.1 | 5.7 | 0.2 | 1.2 | 0.7 | 0.7 | 100.0 | 1,963 |
| Rural | 0.2 | 1.7 | 0.1 | 0.1 | 0.3 | 0.5 | 85.3 | 7.6 | 0.2 | 1.2 | 2.2 | 0.4 | 100.0 | 616 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 0.3 | 1.3 | 0.2 | 0.0 | 0.3 | 0.1 | 93.1 | 2.1 | 0.2 | 1.1 | 0.4 | 0.7 | 100.0 | 1,510 |
| North | 0.1 | 2.2 | 0.1 | 0.3 | 0.1 | 0.4 | 78.4 | 14.4 | 0.1 | 1.0 | 2.5 | 0.5 | 100.0 | 798 |
| South | 0.3 | 1.5 | 0.1 | 0.0 | 0.1 | 1.3 | 89.4 | 4.4 | 0.0 | 1.8 | 0.2 | 0.9 | 100.0 | 271 |
| Educational level attended |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 0.6 | 2.5 | 0.0 | 0.0 | 0.0 | 0.3 | 83.0 | 11.0 | 0.5 | 1.0 | 1.1 | 0.0 | 100.0 | 127 |
| Elementary | 0.2 | 4.8 | 1.1 | 0.2 | 0.2 | 0.2 | 84.0 | 6.8 | 0.0 | 1.1 | 1.1 | 0.2 | 100.0 | 232 |
| Preparatory | 0.1 | 1.7 | 0.2 | 0.0 | 0.1 | 0.1 | 85.5 | 9.0 | 0.2 | 1.0 | 1.2 | 1.0 | 100.0 | 532 |
| Secondary | 0.4 | 1.2 | 0.0 | 0.2 | 0.2 | 0.5 | 88.6 | 6.1 | 0.2 | 1.2 | 0.9 | 0.5 | 100.0 | 1,075 |
| Higher | 0.0 | 0.9 | 0.0 | 0.0 | 0.3 | 0.3 | 92.5 | 2.5 | 0.0 | 1.3 | 1.1 | 1.0 | 100.0 | 612 |
| Preparatory + secondary | 0.3 | 1.4 | 0.1 | 0.1 | 0.2 | 0.3 | 87.6 | 7.0 | 0.2 | 1.1 | 1.0 | 0.6 | 100.0 | 1,608 |
| Place of delivery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Health facility | 0.2 | 1.5 | 0.1 | 0.1 | 0.2 | 0.3 | 88.5 | 6.0 | 0.2 | 1.1 | 1.0 | 0.7 | 100.0 | 2,513 |
| Home/other | 0.0 | 6.9 | 0.0 | 0.0 | 0.0 | 1.0 | 76.0 | 11.5 | 0.0 | 2.6 | 1.6 | 0.5 | 100.0 | 66 |
| Total | 0.2 | 1.6 | 0.1 | 0.1 | 0.2 | 0.3 | 88.2 | 6.1 | 0.2 | 1.2 | 1.1 | 0.7 | 100.0 | 2,579 |

birth outside of a facility, is the proportion of women who cited expense or lack of awareness of postnatal checks as the reason why they did not obtain postnatal care: among those who gave birth outside of a facility, 7 percent said that postnatal care was too expensive, and 12 percent said that they were not aware of the availability of postnatal care. The corresponding figures for women who gave birth in a health facility are 2 percent and 6 percent, respectively. There is a traditional belief in Jordan that women are not supposed to go out of their homes for forty days after delivery; however, the data indicate that this belief largely did not affect the likelihood that women would seek postnatal care (1.2 percent).

### 9.4 Problems in Accessing Health Care

Many different factors can prevent women from getting medical advice or treatment for themselves. In the 2002 JPFHS, women were asked about various problems they can face in accessing health care. Table 9.10 shows that 64 percent of women reported having one or the other problem in accessing health care for themselves.

| Table 9.10 Problems in accessing health care |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all ever-married women who reported they have big problems in accessing health care for themselves when they are sick, by type of problem and background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |
| Background characteristic | Knowing where to go for treatment | Getting permission <br> to go for treatment | Getting money for treatment | Distance to health facility | Having to take transport | Not wanting to go alone | Concern there may not be a female provider | Any of the specified problems | Number of women |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 12.5 | 6.7 | 22.5 | 26.9 | 29.5 | 51.0 | 41.0 | 73.3 | 158 |
| 20-29 | 11.1 | 8.7 | 29.3 | 31.8 | 31.6 | 35.4 | 28.0 | 69.6 | 1,903 |
| 30-39 | 9.6 | 7.0 | 28.8 | 27.0 | 29.9 | 23.7 | 25.4 | 61.8 | 2,424 |
| 40-49 | 8.6 | 5.5 | 34.3 | 27.4 | 28.3 | 23.4 | 22.8 | 60.4 | 1,520 |
| Number of living children |  |  |  |  |  |  |  |  |  |
| 0 | 12.7 | 8.5 | 32.0 | 29.8 | 31.7 | 39.8 | 29.4 | 71.1 | 521 |
| 1-2 | 11.7 | 8.7 | 27.7 | 27.2 | 28.9 | 32.9 | 25.3 | 65.7 | 1,490 |
| 3-4 | 8.1 | 6.5 | 25.9 | 24.9 | 26.4 | 23.9 | 23.7 | 59.5 | 1,807 |
| $5+$ | 9.5 | 6.3 | 35.0 | 32.4 | 33.4 | 25.4 | 27.5 | 65.5 | 2,188 |
| Marital status |  |  |  |  |  |  |  |  |  |
| Married | 9.7 | 7.0 | 29.4 | 28.3 | 29.8 | 27.8 | 26.2 | 63.9 | 5,706 |
| Divorced | 13.0 | 20.1 | 47.9 | 37.5 | 35.3 | 35.1 | 21.8 | 75.5 | 130 |
| Widowed | 12.0 | 1.0 | 42.0 | 32.2 | 32.6 | 30.5 | 23.0 | 65.2 | 170 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 9.3 | 6.2 | 29.4 | 24.8 | 25.9 | 26.2 | 25.5 | 61.3 | 4,799 |
| Rural | 12.2 | 10.9 | 33.2 | 44.0 | 46.6 | 35.6 | 27.8 | 75.7 | 1,207 |
| Region |  |  |  |  |  |  |  |  |  |
| Central | 9.7 | 6.3 | 29.2 | 24.4 | 26.4 | 25.6 | 25.1 | 60.7 | 3,898 |
| North | 9.5 | 8.5 | 31.3 | 35.8 | 35.0 | 33.1 | 28.5 | 70.2 | 1,542 |
| South | 12.2 | 9.2 | 34.3 | 38.6 | 41.2 | 31.7 | 25.3 | 72.4 | 566 |
| Educational level attended |  |  |  |  |  |  |  |  |  |
| No education | 15.5 | 13.7 | 52.4 | 46.4 | 44.9 | 32.5 | 30.0 | 80.3 | 363 |
| Elementary | 11.2 | 11.6 | 45.6 | 35.4 | 36.7 | 32.4 | 28.7 | 73.3 | 689 |
| Preparatory | 11.3 | 9.3 | 38.1 | 34.1 | 34.7 | 30.6 | 27.8 | 71.0 | 1,231 |
| Secondary | 9.1 | 5.5 | 27.4 | 27.2 | 28.4 | 28.4 | 26.6 | 62.4 | 2,247 |
| Higher | 7.8 | 4.2 | 15.3 | 18.7 | 21.9 | 22.4 | 21.3 | 53.1 | 1,476 |
| Preparatory + secondary | 9.9 | 6.8 | 31.2 | 29.7 | 30.6 | 29.1 | 27.0 | 65.5 | 3,478 |
| Employment |  |  |  |  |  |  |  |  |  |
| Not employed | 10.0 | 7.5 | 31.7 | 29.3 | 30.8 | 28.8 | 26.9 | 65.5 | 5,422 |
| Employed | 8.7 | 3.7 | 16.6 | 22.3 | 23.2 | 21.3 | 17.3 | 52.5 | 584 |
| Total | 9.9 | 7.2 | 30.2 | 28.6 | 30.0 | 28.1 | 26.0 | 64.2 | 6,006 |

The main problems women cited in accessing health care were getting money for treatment ( 30 percent), having to take transport ( 30 percent), not wanting to go alone ( 28 percent), and the distance to the health facility ( 29 percent). One in four women was concerned that there might not be a female provider at the health facility. Older women were more likely to go alone compared with younger women. Employed women and women with higher education were less likely to have problems in accessing health cre than women with no education and women who were not employed. As expected, rural women were more likely than urban women to have problems related to distance to the health facility, need for transportation, not wanting to go alone, and knowing where to go for treatment.

### 9.5 SMOKIng TOBACCO

Tobacco use is widely regarded as the most preventable cause of death and disease among adults. In general, chronic exposure to nicotine may cause an acceleration of coronary artery disease, peptic ulcer disease, reproductive disturbances, esophageal reflux and hypertension. Tobacco and its various components have been associated with an increased risk of cancer of various body organs.

Smoking is the most important contributor to the development of chronic bronchitis and chronic obstructive pulmonary disease (COPD), which are characterized by chronic cough, phlegm and airflow obstruction. Smoking is well established as the cause of the majority of pulmonary emphysema. Smoking among women also creates particular risks for their offspring. Poor pregnancy outcomes, including low birth weight (LBW) and intrauterine growth retardation (IUGR), are more frequent among women who smoke than among those who do not smoke.

Table 9.11 shows the percentage of women who use tobacco for smoking. Overall, 12 percent of women smoke tobacco (either cigarettes or nargila). Older women are more likely to smoke cigarettes than younger women. However, younger women smoke more nargila (water pipe) than older women. Women living in urban areas ( 13 percent) are more likely to smoke tobacco than women living in rural areas (8 percent). Also, women in the Central region (including the capital city Amman) are more likely to smoke tobacco compared with women from other regions.

Women with no education are more likely to smoke tobacco (17 percent) than women who have secondary education (11 percent) or higher (12 percent). During pregnancy and lactation, more
than 92 percent of women do not use tobacco. However, 7 and 8 percent of mothers smoke during pregnancy and lactation, respectively.

### 9.6 Premarital Medical Examinations

Premarital examinations, which normally include genetic testing (given the high proportion of consanguineous unions in Jordan), are considered an important aspect of the process of forming a marital union in Jordan. Unfortunately, there are few facilities available for premarital examinations, and they tend to be avoided because of fear of findings; even first-cousin marriages are known to avoid a premarital examination (Jordan National Population Commission and The Futures Policy Project 2000). The lack of facilities and the desire to avoid premarital medical examinations are likely to have the result of increasing poor health outcomes for children if their parents are too closely related to one another by blood.

Table 9.12 indicates that only 6 percent of ever-married women and/or their husbands underwent premarital medical examinations. This is particularly worrisome given that 43 percent of ever-married women are related in some way to their husband, and 26 percent of women report that they are first cousins to their spouses (see Chapter 6, Table 6.4). Women residing in urban areas ( 6 percent) are twice as likely to go for premarital medical examinations as women residing in rural areas ( 3 percent). Also, women with higher education (7 percent) are more likely to go for a premarital medical examination than women with no education ( 2 percent).

### 9.7 Breast Cancer Examinations

| Table 9.12 Premarital medical examinations |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all ever-married women by whether they and/or their husband underwent a premarital medical examination, according to background characteristics, Jordan 2002 |  |  |  |  |
| Background characteristic | Prem medic | ital exam |  | Number |
|  | No | Yes | Total | women |
| Residence |  |  |  |  |
| Urban | 93.7 | 6.3 | 100.0 | 4,799 |
| Rural | 97.3 | 2.7 | 100.0 | 1,207 |
| Region |  |  |  |  |
| Central | 93.6 | 6.4 | 100.0 | 3,898 |
| North | 95.9 | 4.1 | 100.0 | 1,542 |
| South | 96.2 | 3.8 | 100.0 | 566 |
| Educational level attended |  |  |  |  |
| No education | 98.3 | 1.7 | 100.0 | 363 |
| Elementary | 96.7 | 3.3 | 100.0 | 689 |
| Preparatory | 94.5 | 5.5 | 100.0 | 1,231 |
| Secondary | 94.1 | 5.9 | 100.0 | 2,247 |
| Higher | 92.7 | 7.3 | 100.0 | 1,476 |
| Preparatory + secondary | 94.2 | 5.8 | 100.0 | 3,478 |
| Age at first marriage |  |  |  |  |
| 15-19 | 95.4 | 4.6 | 100.0 | 2,682 |
| 20-24 | 93.9 | 6.1 | 100.0 | 2,266 |
| 25-29 | 92.3 | 7.7 | 100.0 | 649 |
| 30-34 | 89.5 | 10.5 | 100.0 | 121 |
| 35+ | 90.7 | 9.3 | 100.0 | 54 |
| Total | 94.4 | 5.6 | 100.0 | 6,006 |

Women themselves detect most breast cancers. Therefore, breast self-examination (BSE) is a very important part of every adult woman's personal health regimen. BSE should be performed once each month beginning at age 20 and should continue each month throughout a woman's lifetime. In addition to BSE, adult women should receive regular physician-performed clinical breast exams. Table 9.13 shows the percentage of women who have had a breast cancer self-exam or an exam by a health specialist.

Only 17 percent of women had a breast cancer exam in the twelve months preceding the survey. Women who are currently married, women who live in urban areas, women with higher education, and employed women are more likely to have had a breast cancer self-exam or an examination by a health professional.

| Table 9.13 Breast cancer examinations |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all ever-married women by whether they have had a breast cancer self-exam or an exam by a health specialist to detect breast cancer in the twelve months preceding the survey, according to background characteristics, Jordan 2002 |  |  |  |  |
| Background characteristic | $\begin{array}{r} \mathrm{Bre} \\ \text { cance } \end{array}$ |  |  | Number |
|  | No | Yes | Total | women |
| Age |  |  |  |  |
| 15-19 | 93.4 | 6.6 | 100.0 | 158 |
| 20-29 | 86.2 | 13.8 | 100.0 | 1,903 |
| 30-39 | 80.5 | 19.5 | 100.0 | 2,424 |
| 40-49 | 82.2 | 17.8 | 100.0 | 1,520 |
| Number of living children |  |  |  |  |
| 0 | 89.6 | 10.4 | 100.0 | 521 |
| 1-2 | 83.6 | 16.4 | 100.0 | 1,490 |
| 3-4 | 81.1 | 18.9 | 100.0 | 1,807 |
| 5+ | 82.8 | 17.2 | 100.0 | 2,188 |
| Marital status |  |  |  |  |
| Married | 82.6 | 17.4 | 100.0 | 5,706 |
| Divorced | 89.5 | 10.5 | 100.0 | 130 |
| Widowed | 94.2 | 5.8 | 100.0 | 170 |
| Residence |  |  |  |  |
| Urban | 82.5 | 17.5 | 100.0 | 4,799 |
| Rural | 85.3 | 14.7 | 100.0 | 1,207 |
| Region |  |  |  |  |
| Central | 84.0 | 16.0 | 100.0 | 3,898 |
| North | 79.3 | 20.7 | 100.0 | 1,542 |
| South | 86.7 | 13.3 | 100.0 | 566 |
| Educational level attended |  |  |  |  |
| No education | 93.0 | 7.0 | 100.0 | 363 |
| Elementary | 91.2 | 8.8 | 100.0 | 689 |
| Preparatory | 87.0 | 13.0 | 100.0 | 1,231 |
| Secondary | 82.6 | 17.4 | 100.0 | 2,247 |
| Higher | 74.2 | 25.8 | 100.0 | 1,476 |
| Preparatory + secondary | 84.2 | 15.8 | 100.0 | 3,478 |
| Employment |  |  |  |  |
| Not employed | 83.8 | 16.2 | 100.0 | 5,422 |
| Employed | 76.0 | 24.0 | 100.0 | 584 |
| Total | 83.1 | 16.9 | 100.0 | 6,006 |

### 9.8 Vaccination Coverage

Universal immunization of children from six vaccine-preventable diseases (namely, tuberculosis, diphtheria, whooping cough, tetanus, polio, and measles) is a crucial component in any strategy with the aim of reducing infant and child mortality. Differences in vaccination coverage among subgroups of the population are of great assistance for program planning. Additionally, information on immunization coverage is important for the monitoring and evaluation of the expanded program on immunization (EPI).

Jordan joined the United Nations Children's Fund's "Child Survival Revolution" in 1980. Since then, the Ministry of Health has made the immunization card a requirement for entry into the school system. At the time of a child's first vaccination, the card is issued through various service providers. Upon
registering at the Maternal and Child Health Center, each child receives a health card that shows vaccinations and child's height and weight.

The survey collected information on vaccination coverage for all living children born in the five years preceding the survey. According to the guidelines developed by the World Health Organization (WHO), children are considered fully vaccinated when they have received a vaccination against tuberculosis (BCG), three doses each of the DPT (diphtheria, pertussis and tetanus) and polio vaccines, and a measles vaccination by the age of 12 months. According to WHO, BCG should be given at birth or at first clinical contact.

Information on vaccination coverage was collected in two ways: from vaccination cards shown to the interviewer, and from mothers' verbal reports. If the cards were available, the interviewer copied the vaccination dates directly onto the questionnaire. The respondent was asked to recall the vaccines given to her child when there was no vaccination card for the child, or if a vaccine had not been recorded on the card. Table 9.14 and Figure 9.3 show the percentage of children age 12-23 months who have received the various vaccinations by source of information, that is, from vaccination card or mother's report. This is the youngest cohort of children who have reached the age by which they should be fully vaccinated.

Table 9.14 Vaccinations by source of information
Percentage of children 12-23 months who had received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Jordan 2002

| Source of information | Percentage of children who had received: |  |  |  |  |  |  |  |  |  |  |  | Number <br> of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | DPT |  |  | Polio ${ }^{1}$ |  |  |  | Measles | All ${ }^{2}$ | All except BCG | No vaccinations |  |
|  | BCG | 1 | 2 | 3 | 0 | 1 | 2 | 3 |  |  |  |  |  |
| Vaccinated at any time before survey |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vaccination card | 21.8 | 77.6 | 77.4 | 77.0 | 4.8 | 77.6 | 77.5 | 76.9 | 74.8 | 21.3 | 74.2 | 0.0 | 881 |
| Mother's report | 7.0 | 21.9 | 21.7 | 21.2 | 1.8 | 22.2 | 22.0 | 20.7 | 20.4 | 6.6 | 19.4 | 0.1 | 254 |
| Either source | 28.8 | 99.5 | 99.1 | 98.2 | 6.6 | 99.9 | 99.5 | 97.6 | 95.2 | 27.9 | 93.7 | 0.1 | 1,135 |
| Vaccinated by 12 months of age ${ }^{3}$ | 28.8 | 99.3 | 98.9 | 97.9 | 6.6 | 99.7 | 99.4 | 97.3 | 88.6 | 26.5 | 87.2 | 0.3 | 1,135 |

${ }^{1}$ Polio 0 is the polio vaccination given at birth.
${ }^{2}$ BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)
${ }^{3}$ For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

Ninety-four percent of children are fully vaccinated (except for BCG), an eight percentage point increase from the previous survey in which about 86 percent of children were fully immunized (except for BCG). However, the percentage of children receiving full immunization (including BCG) is only 28 percent because Jordan does not emphasize BCG vaccinations for children below six years of age. Ninetyfive percent of children have been vaccinated against measles; this figure includes children who have received either the measles vaccine or at least one dose of MMR. MMR is a combined vaccine against measles, mumps and rubella.

Figure 9.3 Percentage of Children Vaccinated by 12-23 Months of Age


JPFHS 2002

The coverage for the first dose and second doses of DPT is slightly higher (more than 99 percent for each) than that for the third dose of DPT ( 98 percent). Although DPT and polio vaccines are often administered at the same time, polio coverage is slightly higher than DPT coverage. The dropout between the first and third doses of polio is higher than that between the first and third doses of DPT. In addition, the percentage of children age 12-23 months who received polio at birth is only 7 percent.

Table 9.15 shows the vaccination coverage among children age 12-23 months, according to information from the vaccination card or mother's report, by background characteristics. There are no significant differences in vaccination coverage - an indication of the success of the immunization program in reaching out to all population subgroups. However, there are small differences in vaccination coverage between urban and rural areas. The differences with respect to residence, region and education are higher for BCG and Polio 0 vaccination. As mentioned earlier, this could be because Jordan does not emphasize BCG vaccination below six years of age, nor does it emphasize polio vaccination at birth.

| Table 9.15 Vaccinations of children 12-23 months by background characteristics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children 12-23 months who received specific vaccines at any time before the survey (according to vaccination card or mother's report), and percentage with a vaccination card, by background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Percentage of children who received: |  |  |  |  |  |  |  |  |  |  |  | Percentage with vaccination card | Number of children |
|  |  | DPT |  |  | Polio ${ }^{1}$ |  |  |  | Measles | $\mathrm{All}^{2}$ | All except BCG | No <br> vacci- <br> nations |  |  |
| characteristic | BCG | 1 | 2 | 3 | 0 | 1 | 2 | 3 |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 28.7 | 99.7 | 99.4 | 98.1 | 6.2 | 99.7 | 99.6 | 97.0 | 94.7 | 27.2 | 92.4 | 0.3 | 76.9 | 558 |
| Female | 28.9 | 99.3 | 98.8 | 98.3 | 7.0 | 100.0 | 99.4 | 98.2 | 95.6 | 28.5 | 94.9 | 0.0 | 78.3 | 577 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 39.3 | 99.2 | 99.2 | 98.7 | 8.9 | 99.8 | 99.5 | 97.8 | 96.6 | 37.4 | 95.0 | 0.2 | 78.5 | 213 |
| 2-3 | 30.2 | 100.0 | 99.8 | 99.5 | 5.2 | 100.0 | 99.8 | 99.0 | 95.9 | 29.2 | 95.2 | 0.0 | 75.8 | 443 |
| 4-5 | 23.2 | 99.4 | 99.1 | 98.1 | 8.1 | 99.8 | 99.4 | 97.8 | 94.6 | 22.8 | 92.8 | 0.2 | 79.6 | 279 |
| 6+ | 22.2 | 98.6 | 97.3 | 94.8 | 5.2 | 99.8 | 98.8 | 94.0 | 92.8 | 21.8 | 90.0 | 0.2 | 78.0 | 199 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 35.2 | 99.6 | 99.2 | 98.4 | 8.2 | 100.0 | 99.7 | 97.6 | 95.4 | 34.0 | 93.9 | 0.0 | 75.7 | 879 |
| Rural | 6.8 | 99.1 | 98.7 | 97.3 | 1.4 | 99.6 | 99.0 | 97.5 | 94.2 | 6.8 | 92.9 | 0.4 | 84.1 | 256 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 38.1 | 99.5 | 99.1 | 98.6 | 8.9 | 99.9 | 99.6 | 97.5 | 95.0 | 36.8 | 93.3 | 0.1 | 75.1 | 705 |
| North | 17.3 | 100.0 | 99.8 | 98.9 | 3.7 | 100.0 | 99.8 | 98.9 | 96.2 | 17.0 | 95.6 | 0.0 | 82.1 | 315 |
| South | 2.9 | 98.1 | 97.3 | 93.3 | 1.1 | 99.1 | 98.3 | 94.6 | 93.6 | 2.9 | 90.4 | 0.9 | 80.7 | 115 |
| Educational level attended |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 5.6 | 92.6 | 89.1 | 82.2 | 5.6 | 98.9 | 95.4 | 83.0 | 80.8 | 5.6 | 78.2 | 1.1 | 67.8 | 37 |
| Elementary | 18.2 | 99.4 | 99.4 | 98.3 | 6.6 | 100.0 | 100.0 | 99.6 | 93.2 | 18.2 | 92.1 | 0.0 | 82.7 | 88 |
| Preparatory | 26.8 | 99.5 | 98.3 | 96.3 | 10.4 | 100.0 | 98.8 | 94.6 | 91.8 | 24.3 | 88.1 | 0.0 | 77.8 | 219 |
| Secondary | 31.3 | 99.9 | 99.8 | 99.4 | 6.4 | 99.9 | 99.8 | 99.1 | 97.3 | 30.5 | 96.5 | 0.1 | 81.4 | 509 |
| Higher | 32.1 | 99.7 | 99.7 | 99.4 | 4.2 | 99.9 | 99.9 | 98.6 | 96.4 | 31.8 | 95.4 | 0.1 | 70.3 | 282 |
| Preparatory + secondary | 30.0 | 99.8 | 99.3 | 98.5 | 7.6 | 99.9 | 99.5 | 97.7 | 95.6 | 28.7 | 94.0 | 0.1 | 80.4 | 728 |
| Total | 28.8 | 99.5 | 99.1 | 98.2 | 6.6 | 99.9 | 99.5 | 97.6 | 95.2 | 27.9 | 93.7 | 0.1 | 77.6 | 1,135 |
| ${ }^{1}$ Polio 0 is the polio vaccination given at birth. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Trends in Vaccination Coverage

One way of measuring trends in vaccination coverage is to compare coverage among children of different ages. Table 9.16 shows the percentage of children who have received vaccinations during the first year of life according to their current age. This type of data can provide evidence of any trends in the vaccination coverage over the past five years.

There is a noticeable change in the vaccination coverage over the past five years. Table 9.16 shows an increase of four percentage points in vaccination coverage from the age group 48-59 months ( 83 percent) to 12-23 months ( 87 percent). Vaccination cards were shown for 78 percent of children age 1223 months but only for 61 percent of children age $48-59$ months. The lower percentage of cards shown for older children could be due to failure of the mother to show the health card to the interviewer. The card is generally kept at the school when the child enters primary school.

Table 9.16 Vaccinations in first year of life
Percentage of children 1-4 years of age at the time of the survey who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, Jordan 2002

| Current age of child in months | Percentage of children who received: |  |  |  |  |  |  |  |  |  |  |  | Percentage with a vaccination card seen | Number <br> of <br> children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | DPT |  |  | Polio ${ }^{1}$ |  |  |  | Measles | $\mathrm{All}^{2}$ | $\begin{aligned} & \text { All } \\ & \text { except } \\ & \text { BCG } \end{aligned}$ | No vaccinations |  |  |
|  | BCG | 1 | 2 | 3 | 0 | 1 | 2 | 3 |  |  |  |  |  |  |
| 12-23 | 28.8 | 99.3 | 98.9 | 97.9 | 6.6 | 99.7 | 99.4 | 97.3 | 88.6 | 26.5 | 87.2 | 0.3 | 77.6 | 1,135 |
| 24-35 | 28.2 | 99.4 | 99.2 | 97.5 | 6.9 | 99.5 | 99.3 | 97.0 | 85.1 | 23.3 | 83.2 | 0.4 | 74.8 | 1,154 |
| 36-47 | 23.6 | 99.5 | 99.3 | 97.9 | 5.6 | 99.4 | 99.3 | 97.3 | 88.0 | 20.4 | 86.4 | 0.4 | 71.3 | 1,058 |
| 48-59 | 25.5 | 98.7 | 98.2 | 97.0 | 6.3 | 98.8 | 98.5 | 96.2 | 84.7 | 21.5 | 82.8 | 1.1 | 60.9 | 1,166 |
| Total | 26.6 | 99.2 | 99.0 | 97.6 | 6.4 | 99.4 | 99.1 | 97.0 | 86.8 | 23.1 | 85.1 | 0.5 | 71.1 | 4,512 |

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.
${ }^{1}$ Polio 0 is the polio vaccination given at birth.
${ }^{2}$ BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

## Place of Vaccination

For last-born children born in the 5 years preceding the survey who had received three doses of DPT, the respondent was asled about the place/location where each dose was received. For the first dose of DPT, approximately 70 percent of children received the vaccination at a public facility, 22 percent received it from UNRWA, and 8 percent received it from a private health facility. Percent distribution of the location was same for the second and third doses of DPT (data not shown). Similar results were also obtained for measles vaccination: 78 percent received the vaccination from a public facility, 11 percent from a private facility, and 11 percent from UNRWA. Distribution of location was also similar for the second dose of measles vaccination. Based on these data, it can be concluded that there was no shift from one sector to another for different doses of vaccinations.

## Additional Doses

Table 9.17 shows percentage of children 24-59 months who received polio, DPT, Hepatitis, Hib, Measles and MMR vaccines at any time before the survey.

Polio 1, 2 and 3 are generally given at 2 -month intervals. In addition, polio at birth, a fourth dose of polio at nine months of age, and a booster dose of polio at 18 months are also given. There are no noticeable differences in polio vaccination coverage for polio 1,2 and 3. However, there is a significant decrease between the proportion of children vaccinated with polio 3 and the proportion vaccinated with polio 4 or the booster dose. It should be noted that the JPFHS included only children less than five years of age, while the booster dose is generally given between the ages of 4 and 6 years. Therefore, a large percentage of children included in the survey were still too young to have received the booster dose.

As already mentioned, DPT 1, 2, and 3 coverage is high with slight differences between the first three doses. However, as in the case for polio, coverage for DPT booster, usually given at 18 months, is slightly lower than DPT 3.

| Percentage of children 24-59 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentge with a vaccination card, by background characteristics, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Polio |  |  |  |  |  | DPT |  |  |  | Number of children |
|  | 0 | 1 | 2 | 3 | 4 | Booster | 1 | 2 | 3 | Booster |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |
| Male | 6.5 | 99.7 | 99.6 | 98.3 | 49.3 | 61.7 | 99.7 | 99.6 | 99.6 | 74.8 | 1,739 |
| Female | 6.3 | 99.8 | 99.7 | 98.7 | 51.3 | 60.5 | 99.7 | 99.5 | 99.7 | 75.5 | 1,639 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 5.7 | 99.4 | 99.4 | 98.9 | 51.9 | 60.0 | 99.7 | 99.6 | 99.4 | 76.1 | 693 |
| 2-3 | 6.5 | 99.8 | 99.7 | 98.1 | 50.2 | 61.0 | 99.8 | 99.7 | 99.7 | 75.7 | 1,232 |
| 4-5 | 7.2 | 100.0 | 100.0 | 99.4 | 53.4 | 62.1 | 99.9 | 99.8 | 100.0 | 77.5 | 820 |
| $6+$ | 5.9 | 99.7 | 99.4 | 97.7 | 44.5 | 61.0 | 99.3 | 98.9 | 99.4 | 70.0 | 632 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 7.7 | 99.8 | 99.8 | 98.6 | 49.3 | 59.0 | 99.8 | 99.7 | 99.8 | 74.6 | 2,604 |
| Rural | 2.0 | 99.6 | 99.3 | 98.2 | 53.6 | 68.1 | 99.3 | 99.1 | 99.3 | 77.2 | 774 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Central | 8.3 | 99.7 | 99.7 | 98.2 | 46.1 | 56.3 | 99.7 | 99.6 | 99.7 | 71.5 | 2,105 |
| North | 3.6 | 99.8 | 99.8 | 99.5 | 59.1 | 70.6 | 99.8 | 99.8 | 99.8 | 82.8 | 924 |
| South | 2.3 | 99.4 | 99.0 | 97.6 | 52.2 | 64.6 | 99.2 | 98.8 | 99.0 | 76.7 | 348 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 2.1 | 97.9 | 97.7 | 93.3 | 46.3 | 56.0 | 96.4 | 96.2 | 97.7 | 67.6 | 155 |
| Elementary | 4.6 | 100.0 | 99.6 | 99.3 | 51.6 | 69.6 | 100.0 | 99.6 | 99.6 | 76.8 | 288 |
| Preparatory | 7.3 | 99.6 | 99.6 | 97.8 | 52.1 | 59.2 | 99.7 | 99.4 | 99.6 | 76.5 | 684 |
| Secondary | 5.6 | 99.9 | 99.9 | 98.9 | 49.8 | 63.0 | 99.9 | 99.9 | 99.9 | 75.4 | 1,370 |
| Higher | 8.2 | 99.7 | 99.7 | 99.1 | 49.8 | 57.6 | 99.7 | 99.8 | 99.7 | 74.5 | 880 |
| Preparatory + secondary | 6.2 | 99.8 | 99.8 | 98.6 | 50.6 | 61.8 | 99.9 | 99.7 | 99.8 | 75.8 | 2,055 |
| Total | 6.4 | 99.7 | 99.7 | 98.5 | 50.3 | 61.1 | 99.7 | 99.6 | 99.7 | 75.2 | 3,378 |
| Background characteristic | Hepatitis B |  |  | Haemophilus influenza type b (Hib) |  |  | Measles |  | At least one MMR | Percentage with health card seen | Number of children |
|  | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |
| Male | 98.2 | 98.0 | 97.4 | 10.6 | 6.7 | 5.1 | 97.6 | 37.5 | 49.9 | 69.2 | 1,739 |
| Female | 98.4 | 98.2 | 97.4 | 11.5 | 8.0 | 6.9 | 97.5 | 37.9 | 48.7 | 68.6 | 1,639 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 97.0 | 97.0 | 96.8 | 14.9 | 10.4 | 7.7 | 97.4 | 36.8 | 50.9 | 67.0 | 693 |
| 2-3 | 99.0 | 98.7 | 98.3 | 11.4 | 7.7 | 6.3 | 97.9 | 38.9 | 49.0 | 67.9 | 1,232 |
| 4-5 | 99.4 | 99.1 | 98.7 | 10.4 | 6.9 | 6.4 | 98.3 | 38.3 | 49.6 | 70.0 | 820 |
| $6+$ | 97.1 | 96.8 | 95.0 | 7.1 | 3.8 | 3.1 | 95.7 | 35.7 | 47.8 | 71.3 | 632 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 98.3 | 98.1 | 97.7 | 12.6 | 8.5 | 6.9 | 98.0 | 36.4 | 52.5 | 67.4 | 2,604 |
| Rural | 98.3 | 97.9 | 96.6 | 5.8 | 3.3 | 2.9 | 95.9 | 42.1 | 38.6 | 73.7 | 774 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Central | 97.9 | 97.6 | 96.9 | 14.8 | 9.7 | 7.9 | 97.4 | 34.6 | 55.1 | 67.0 | 2,105 |
| North | 99.4 | 99.4 | 99.0 | 5.1 | 3.7 | 3.4 | 98.5 | 43.3 | 41.9 | 72.4 | 924 |
| South | 97.9 | 97.4 | 96.5 | 4.4 | 2.7 | 1.7 | 95.7 | 41.8 | 33.9 | 71.0 | 348 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 96.1 | 95.6 | 90.9 | 6.5 | 3.0 | 2.7 | 89.6 | 36.9 | 35.0 | 70.2 | 155 |
| Elementary | 99.5 | 98.9 | 98.9 | 5.4 | 4.6 | 3.7 | 96.5 | 37.9 | 39.4 | 78.6 | 288 |
| Preparatory | 98.3 | 98.1 | 97.6 | 6.4 | 4.8 | 4.1 | 97.6 | 37.7 | 45.8 | 68.0 | , 684 |
| Secondary | 98.1 | 97.9 | 97.5 | 10.7 | 7.5 | 6.3 | 98.2 | 35.8 | 53.4 | 71.9 | 1,370 |
| Higher | 98.6 | 98.6 | 98.0 | 17.9 | 10.6 | 8.3 | 98.0 | 40.8 | 51.3 | 61.5 | 880 |
| Preparatory + secondary | 98.2 | 97.9 | 97.5 | 9.3 | 6.6 | 5.6 | 9.08 | 36.5 | 50.9 | 70.6 | 2,055 |
| Total | 98.3 | 98.1 | 97.4 | 11.0 | 7.3 | 6.0 | 97.5 | 37.7 | 49.3 | 68.9 | 3,378 |

## Additional Vaccinations

Hepatitis $B$ is a viral disease that primarily attacks the liver. Primary vaccination consists of three intramuscular injections: the first dose is administered at birth, and the second and third doses are given between the first and third month, and between the second and seventeenth month, respectively. The percentage of children vaccinated with Hepatitis B is high: 98 percent received both Hepatitis 1 and 2, and 97 percent received the third dose.

Haemophilus influenza type $b(H i b)$ is a bacterial disease that can cause meningitis in infants and severe infection of the epiglottis in older children. Children should receive 2 doses of Hib vaccine at two and four months of age, respectively. A third dose may be given at 6 months. Jordanian children age 2459 months are not widely vaccinated with the Hib, and there is noticeable attrition in coverage from the first to the third dose of Hib vaccination: Hib 1 (11 percent), Hib 2 (7 percent) and Hib 3 (6 percent).

Since 1989, a routine two-dose schedule has been recommended for measles vaccination. The purpose of the second dose is to produce measles immunity in a person who failed to respond to the first dose. Both doses of measles vaccine should preferably be given as a combined MMR vaccine. The first dose is administered at 12 months and the second dose is recommended at 4-6 years, or prior to entry to kindergarten or first grade. Ninety-eight percent of children age 24-59 months received the first dose of the measles vaccine (Table 9.17) either as measles vaccine or as combined MMR. However, the percentage of children receiving the second dose of the measles vaccine drops to 38 percent. The substantial decline between the two doses is attributed to the fact that only children under five years of age were included in the survey, and only 49 percent of children had received at least one dose of MMR. However, as discussed earlier, 98 percent of children receiving the first dose of the measles vaccine also include children who have received at least one dose of MMR.

### 9.9 Acute Respiratory Infection and Fever

Acute respiratory infection (ARI) is a leading cause of childhood morbidity and mortality throughout the world. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. In the 2002 JPFHS, the prevalence of ARI was estimated by asking mothers whether their children under age five 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 are subjective, they are based on mother's perception of illness with no validation from medical personnel, and that the prevalence of ARI is subject to seasonality. Fever is a major manifestation of acute infections in children.

## Prevalence of ARI and Fever

Table 9.18 shows the percent distribution of children under five with fever and ARI during the two weeks preceding the survey by background characteristics.

Six percent of children under five years of age showed symptoms of ARI at some time in the two weeks preceding the survey. Prevalence of ARI varies by age of child. Children age 6-11 months have the greatest chance of having ARI symptoms ( 10 percent) compared with all other age groups. There is a slight difference in the prevalence of ARI by the sex of the child, region and place of residence. Mothers who smoke reported higher prevalence ( 10 percent) of ARI symptoms among children under five years compared with mothers who do not smoke (6 percent).

Table 9.18 Prevalence and treatment of symptoms of acute respiratory infections (ARI) and fever
Percentage of children under five years of age who had a cough accompanied by short, rapid breathing (symptoms of ARI), and percentage of children who had fever in the two weeks preceding the survey, and percentage of children with symptoms of ARI and/or fever for whom treatment was sought from a health facility or provider, by background characteristics, Jordan 2002

| Background characteristic | Prevalence of ARI and/or fever among children under five |  |  | Treatment of children with symptoms of ARI and/or fever |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage of children with symptoms of ARI | Percentage of children with fever | Number <br> of children | Percentage for whom treatment was sought from a health facility or provider ${ }^{1}$ | Number of children |
| Age in months |  |  |  |  |  |
| <6 | 4.9 | 6.8 | 493 | 67.5 | 48 |
| 6-11 | 10.2 | 13.6 | 672 | 82.4 | 129 |
| 12-23 | 8.0 | 14.8 | 1,135 | 64.8 | 216 |
| 24-35 | 6.1 | 8.1 | 1,154 | 70.0 | 133 |
| 36-47 | 5.5 | 5.4 | 1,058 | 74.1 | 89 |
| 48-59 | 3.4 | 4.9 | 1,166 | 75.7 | 85 |
| Sex |  |  |  |  |  |
| Male | 6.8 | 8.6 | 2,868 | 75.2 | 364 |
| Female | 5.6 | 9.0 | 2,810 | 68.0 | 337 |
| Residence |  |  |  |  |  |
| Urban | 6.2 | 8.9 | 4,390 | 71.9 | 545 |
| Rural | 6.0 | 8.5 | 1,288 | 71.1 | 155 |
| Region |  |  |  |  |  |
| Central | 6.1 | 7.9 | 3,561 | 70.6 | 412 |
| North | 7.0 | 11.0 | 1,544 | 72.9 | 224 |
| South | 4.9 | 8.6 | 573 | 74.7 | 65 |
| Educational level attended |  |  |  |  |  |
| No education | 7.8 | 8.6 | 230 | (60.5) | 29 |
| Elementary | 7.2 | 7.8 | 468 | 72.1 | 52 |
| Preparatory | 7.6 | 10.5 | 1,126 | 73.3 | 161 |
| Secondary Higher | 6.1 4.7 | 8.9 | 2,380 1,473 | 70.9 73.8 | 305 153 |
| Preparatory + secondary | 6.6 | 9.5 | 3,507 | 71.7 | 467 |
| Mother's smoking status 9.8 |  |  |  |  |  |
| Smokes cigarettes/tobacco Does not smoke cigarettes/ | 9.8 | 8.8 | 529 | 71.0 | 79 |
| tobacco | 5.8 | 8.8 | 5,149 | 71.8 | 622 |
| Total | 6.2 | 8.8 | 5,678 | 71.7 | 701 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
ARI = Acute respiratory infection
${ }^{1}$ Excludes pharmacy, shop, and traditional practitioner

The prevalence of fever varies by age of child. Children age 6-11 and 12-23 months are more commonly sick with fever (14 and 15 percent, respectively) than other children (Figure 9.4). There are no significant variations in the prevalence of fever by the sex of the child or by place of residence. There are small variations by region, ranging from 8 percent in Central region to 11 percent in the North. Mother's education has little impact on the prevalence of fever among children less than five years.

Figure 9.4 Percentage of Children Under Five Years With Symptoms of ARI, Fever, and Diarrhea in the Two Weeks Preceding the Survey


## Treatment of Symptoms of ARI and Fever

Advice or treatment was sought from a health facility or provider for 72 percent of all children under five with cough and rapid breathing and/or fever. Children in the age group of 6-11 months are more likely to be taken to a health facility than children in other age groups. Male children are slightly more likely than female children to be taken to a health provider. There are no notable differences with respect to the place of residence or mother's smoking status.

### 9.10 Prevalence of Diarrhea

Diarrhea has been singled out for investigation for two reasons: dehydration from diarrhea is a major cause of death in infancy and childhood, and the condition can be easily treated by oral rehydration therapy (ORT). This makes diarrhea and its management a high priority for health programs. In interpreting the findings of the 2002 JPFHS, it should be borne in mind that the prevalence of diarrhea may be affected by recall bias of the mother as to when an episode of diarrhea actually occurred and that the number of diarrhea cases varies seasonally.

Table 9.19 shows the percentage of children under five with diarrhea in the two weeks preceding the survey according to background characteristics. Fifteen percent of all children less than five years of age experienced diarrhea at some time in the two weeks before the survey. The occurrence of diarrhea varies by age of the child. Young children ages 6-23 months are more prone to diarrhea than children in the other age groups (Figure 9.4). Episodes of diarrhea are slightly more common among rural children ( 16 percent) than among urban children ( 14 percent). There are also slight variations in the prevalence of diarrhea by regions. Children whose drinking water comes from a tanker truck are more likely to have experienced diarrhea ( 20 percent) compared to those who use bottled water ( 12 percent).

| Table 9.19 Prevalence of diarrhea |  |  |
| :---: | :---: | :---: |
| Percentage of children under five years with diarrhea in the two weeks preceding the survey, by background characteristics, Jordan 2002 |  |  |
| Background characteristic | Diarrhea in the two weeks preceding the survey | Number of children |
| Age in months |  |  |
| <6 | 18.1 | 493 |
| 6-11 | 26.2 | 672 |
| 12-23 | 24.8 | 1,135 |
| 24-35 | 13.6 | 1,154 |
| 36-47 | 6.7 | 1,058 |
| 48-59 | 5.4 | 1,166 |
| Sex |  |  |
| Male | 14.7 | 2,868 |
| Female | 14.8 | 2,810 |
| Residence |  |  |
| Urban | 14.3 | 4,390 |
| Rural | 16.2 | 1,288 |
| Region |  |  |
| Central | 14.3 | 3,561 |
| North | 15.4 | 1,544 |
| South | 16.0 | 573 |
| Mother's education |  |  |
| No education | 13.3 | 230 |
| Elementary | 15.3 | 468 |
| Preparatory | 17.0 | 1,126 |
| Secondary | 15.0 | 2,380 |
| Higher | 12.7 | 1,473 |
| Preparatory + secondary | 15.6 | 3,507 |
| Source of drinking water |  |  |
| Piped into dwelling | 14.8 | 4,888 |
| Rainwater | 15.9 | 283 |
| Tanker truck | 19.8 | 98 |
| Bottled water | 11.7 | 393 |
| Other/missing | * | 17 |
| Total | 14.7 | 5,678 |
| Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. |  |  |

## Knowledge of ORS Packets

Rehydration therapy may include the use of a solution prepared from packets of oral rehydration salts (ORS) or recommended home fluids (RHF) such as a sugar-salt-water solution. In addition, it is recommended that food intake not be decreased for children suffering from diarrhea. To ascertain how widespread knowledge of ORS is in Jordan, respondents were asked whether they knew about ORS packets.

Table 9.20 shows that majority of women (97 percent) who gave birth in the five years preceding the survey know about ORS packets. Mothers under 20 years of age are somewhat less likely to know about ORS packets compared with older women. However, there are no differences in the knowledge of ORS packets between women residing in urban and rural areas. Knowledge of ORS varies slightly by region. There are some differences in the knowledge of ORS packets by educational level of mothers: 98 percent of mothers with secondary and higher education, respectively, know about ORS packets, compared with 91 percent of mothers with no education.

## Diarrhea Treatment

Table 9.21 shows the percentage of children with diarrhea who received specific treatments according to background characteristics. Treatment and/or advice was sought from a health facility for more than half (53 percent) of children with diarrhea in the two weeks prior to the survey. Younger children are more likely to be taken to a health facility than older children. Notable differences also exist by residence. The proportion of children taken to a health facility in rural areas ( 56 percent) is higher than in urban areas ( 52 percent).

Less than two-thirds ( 64 percent) of children with diarrhea were treated with some kind of oral rehydration therapy: 18 percent were treated with solution prepared from ORS packets, 6 percent were given recommended home fluids (RHF) prepared at home, 22 percent received either ORS or RHF and more than half ( 54 percent) were given increased fluids. In addition, 49 percent of children were given pills or syrup, 8 percent were given home remedies, and 2 percent were given an injection. Twenty-two percent of children with diarrhea did not receive any type of treatment at all.

Diarrhea treatment varies slightly with age. More children in the younger age group ( $<6$ months) are given RHF and injections than older children. However, children in this age group are more likely to receive no treatment than older children. Slight variations also exist between urban and rural areas and with respect to the sex of the children. Children in urban areas ( 65 percent) are slightly more likely to receive ORT - either ORS, RHF, or increased fluids - than children in rural areas ( 61 percent). Mother's education does not influence children's diarrheal treatment.

Table 9.21 Diarrhea treatment
Percentage of children under five years of age who had diarrhea in the two weeks preceding the survey taken for treatment to a health provider, percentage who received oral rehydration therapy (ORT), and percentage given other treatments, by background characteristics, Jordan 2002

| Background characteristic | Percentage taken to a health facility ${ }^{1}$ | Oral rehydration therapy (ORT) ${ }^{2}$ |  |  |  |  | Other treatments |  |  |  |  | Number of children with diarrhea |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ORS packets | RHF | Either ORS or RHF | Increased fluids | ORS,RHF or increased fluids | $\begin{aligned} & \text { Pill } \\ & \text { or } \\ & \text { syrup } \end{aligned}$ | Injection | Intravenous solution | Home remedy/ other | No treatment |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | 57.6 | 11.0 | 10.1 | 19.9 | 20.5 | 36.6 | 34.9 | 4.7 | 0.0 | 7.5 | 45.5 | 89 |
| 6-11 | 57.2 | 14.6 | 7.0 | 17.9 | 53.8 | 60.2 | 47.8 | 1.7 | 0.2 | 7.6 | 21.0 | 176 |
| 12-23 | 56.2 | 22.8 | 5.1 | 26.8 | 64.1 | 74.8 | 53.8 | 1.9 | 0.3 | 8.6 | 12.8 | 281 |
| 24-35 | 46.5 | 18.3 | 3.2 | 20.4 | 55.0 | 65.3 | 49.3 | 1.2 | 0.0 | 10.2 | 20.3 | 157 |
| 36-47 | 50.2 | 21.2 | 6.6 | 24.8 | 59.9 | 70.6 | 50.2 | 2.4 | 3.0 | 7.2 | 17.1 | 71 |
| 48-59 | 42.3 | 14.8 | 5.2 | 15.5 | 48.3 | 53.3 | 46.0 | 3.0 | 0.0 | 5.3 | 37.8 | 63 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 54.3 | 19.5 | 6.4 | 23.6 | 52.7 | 63.4 | 47.5 | 1.7 | 0.6 | 6.5 | 23.8 | 422 |
| Female | 52.0 | 17.0 | 5.1 | 20.3 | 55.3 | 64.4 | 50.1 | 2.6 | 0.2 | 10.0 | 19.5 | 415 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 52.3 | 17.6 | 5.4 | 21.5 | 54.5 | 64.8 | 48.7 | 2.5 | 0.5 | 6.6 | 21.6 | 629 |
| Rural | 55.8 | 20.1 | 7.1 | 23.6 | 52.5 | 61.2 | 49.2 | 1.0 | 0.0 | 13.2 | 21.7 | 209 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 54.7 | 20.5 | 5.3 | 24.1 | 51.3 | 62.6 | 49.6 | 3.3 | 0.5 | 8.1 | 22.9 | 508 |
| North | 47.8 | 15.1 | 5.8 | 18.0 | 59.4 | 66.7 | 44.3 | 0.2 | 0.2 | 8.3 | 20.7 | 238 |
| South | 58.6 | 13.8 | 8.5 | 20.5 | 55.5 | 63.6 | 56.1 | 1.1 | 0.3 | 8.9 | 17.4 | 91 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 70.6 | 32.2 | 8.3 | 34.4 | 50.2 | 68.1 | 53.6 | 1.7 | 0.0 | 7.1 | 21.3 | 31 |
| Elementary | 53.4 | 14.5 | 4.1 | 15.6 | 42.3 | 48.5 | 48.2 | 0.9 | 0.0 | 7.5 | 25.2 | 72 |
| Preparatory | 59.7 | 29.5 | 8.2 | 33.9 | 50.9 | 71.0 | 55.8 | 0.7 | 1.1 | 7.1 | 15.1 | 192 |
| Secondary | 54.1 | 17.3 | 5.8 | 21.6 | 56.4 | 64.1 | 50.2 | 3.9 | 0.1 | 8.9 | 21.2 | 357 |
| Higher | 41.9 | 7.6 | 3.7 | 11.0 | 57.8 | 61.3 | 38.4 | 1.0 | 0.4 | 8.6 | 28.1 | 187 |
| Preparatory + secondary | 56.0 | 21.6 | 6.6 | 25.9 | 54.5 | 66.5 | 52.1 | 2.7 | 0.5 | 8.3 | 19.0 | 548 |
| Total | 53.2 | 18.2 | 5.8 | 22.0 | 54.0 | 63.9 | 48.8 | 2.2 | 0.4 | 8.2 | 21.7 | 837 |

${ }^{1}$ Excludes pharmacy, shop, and traditional practitioner
${ }^{2}$ Oral rehydration therapy (ORT) includes solution prepared from oral rehydration salt (ORS) packets, recommended home fluids (RHF), or increased fluids.

## NUTRITIONAL STATUS, PREVALENCE OF ANEMIA, AND MICRONUTRIENT SUPPLEMENTATION

This chapter focuses on infant feeding practices, and the nutritional and micronutrient status of women and children. Infant feeding practices, including breastfeeding, complementary feeding patterns, and the prevalence of bottle-feeding are presented first. Anthropometric data (height and weight) collected in the survey are used to assess the current nutritional status of children under age five as well as that of their mothers. The chapter considers information collected on the prevalence of anemia in children under five and in women 15-49 years. Other important nutritional issues, including consumption of foods rich in vitamin A among children and iron supplementation among pregnant women, are also discussed.

### 10.1 Breastreeding and Supplementation

Breastfeeding and complementary feeding behaviors are important predictors of infant and child nutrition, health and survival. Poor nutritional status has been shown to increase the risk of illness and death among children. Breastfeeding practices also have an effect on the mother's fertility. A welldocumented effect of exclusive breastfeeding of sufficient intensity and duration is delayed return to ovulation, resulting in longer birth intervals and lower fertility, which is strongly related to infant and child survival.

## Initiation of Breastfeeding

Breast milk excels as the most desirable source of nutrients for infants. Breastfeeding provides a complete source of nutrition for the first six months of life, half of all requirements in the second six months of life and one-third of requirements in the second year of life. The attributes of breast milk go beyond its nutrient content, as it offers the infant unsurpassed protection against infection. Colostrum, a premilk substance containing antibodies and white cells from the mother's blood, is produced during the first 2-3 days of lactation. Colostrum contains maternal immune factors and helps protect the newborn infant from infections. There is evidence that links having been breastfed as a child with stronger intellectual development and a reduced risk of cancer, obesity and several chronic diseases. The early initiation of breastfeeding is also beneficial for the mother since it stimulates breast milk production and causes the uterus to retract, which reduces postpartum blood loss. Furthermore, women who breastfeed have a reduced risk of ovarian cancer and premenopausal breast cancer (ACC/SCN, 2000).

Table 10.1 shows that breastfeeding is common in Jordan. Among children born in the five years preceding the survey, 94 percent were breastfed - a figure similar to the one reported in the 1997 JPFHS. There are small or negligible differences in the percentage of infants ever breastfed by sex, residence, region and mother's education. There is a small variation in the ever breastfed infants with respect to place of delivery: children who were delivered at home are more likely to have been breastfed than those who were delivered in a health facility ( 98 percent and 94 percent, respectively).

Among Jordanian children who were breastfed, Table 10.1 shows that 40 percent begin breastfeeding within an hour after delivery, and more than three-fourths ( 79 percent) of infants were breastfed within the first day. The Central region shows a lower percentage of infants breastfeeding within an hour after delivery and within one day of birth compared with the North and South regions. Delivery at home is associated with higher proportion ( 60 percent) of infants for whom breastfeeding was initiated within
an hour of birth compared with children who were delivered in a health facility ( 39 percent). Breastfeeding was initiated within a day after delivery for 93 percent of children who were delivered at home compared with 79 percent deliveries in a health facility. Despite the high proportion of ever-breastfed children, lower levels of early initiation of breastfeeding may be reflective of cultural practices regarding breastfeeding.

Prelacteal feeding is the practice of giving other liquids to a child during the period after birth before the mother's milk is flowing freely. According to Table 10.1, a total of 61 percent received a prelacteal feed. The proportion of infants receiving a prelacteal feed is slightly higher in the Central region (62 percent) compared with the North and South regions (59 and 57 percent, respectively). Also, the proportion receiving a prelacteal feed is higher in infants born to mothers with elementary ( 64 percent) and higher education ( 63 percent) compared with infants born to mothers with no education ( 56 percent).

The World Health Organization and UNICEF recommendation is that mothers and their new babies initiate breastfeeding within the first hour of life, and that prelacteal feeds, which interfere with the breastfeeding relationship and may introduce pathogens into the infant's system, are to be discouraged.

| Table 10.1 Initial breastfeeding |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children born in the five years preceding the survey who were ever breastfed, and among children ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth, and percentage who received a prelacteal feed, by background characteristics, Jordan 2002 |  |  |  |  |  |  |
|  | All children |  | Among children ever breastfed, percentage who: |  |  |  |
| Background characteristic | Percentage ever breastfed | Number <br> of children | Started breastfeeding within 1 hour of birth | Started breastfeeding within 1 day of birth ${ }^{1}$ | Received a prelacteal feed ${ }^{2}$ | Number of children ever breastfed |
| Sex |  |  |  |  |  |  |
| Male | 93.9 | 2,950 | 38.9 | 78.8 | 60.9 | 2,769 |
| Female | 94.6 | 2,870 | 40.6 | 79.1 | 60.2 | 2,715 |
| Residence |  |  |  |  |  |  |
| Urban | 94.1 | 4,487 | 39.3 | 78.5 | 60.9 | 4,221 |
| Rural | 94.8 | 1,333 | 41.2 | 80.2 | 59.5 | 1,263 |
| Region |  |  |  |  |  |  |
| Central | 93.9 | 3,635 | 38.0 | 75.6 | 61.9 | 3,413 |
| North | 95.1 | 1,596 | 43.5 | 84.8 | 58.7 | 1,518 |
| South | 94.0 | 589 | 40.2 | 83.7 | 57.0 | 553 |
| Mother's education |  |  |  |  |  |  |
| No education | 92.9 | 237 | 45.8 | 80.8 | 55.7 | 220 |
| Elementary | 93.7 | 484 | 37.9 | 73.7 | 63.6 | 454 |
| Preparatory | 95.0 | 1,154 | 45.7 | 82.6 | 59.9 | 1,096 |
| Secondary | 94.4 | 2,440 | 39.4 | 79.2 | 59.2 | 2,305 |
| Higher | 93.7 | 1,504 | 35.3 | 77.0 | 63.0 | 1,409 |
| Preparatory + secondary | y 94.6 | 3,594 | 41.4 | 80.3 | 59.4 | 3,401 |
| Place of delivery |  |  |  |  |  |  |
| Health facility | 94.1 | 5,640 | 39.0 | 78.5 | 60.4 | 5,307 |
| At home/other | 98.2 | 180 | 60.4 | 92.6 | 64.0 | 177 |
| Total | 94.2 | 5,820 | 39.7 | 78.9 | 60.6 | 5,484 |
| Note: Table is based on all births whether the children are living or dead at the time of interview. <br> ${ }^{1}$ Includes children who started breastfeeding within one hour of birth <br> ${ }^{2}$ Children given something other than breast milk during the first three days of life before the mother started breastfeeding regularly. |  |  |  |  |  |  |

## Introduction of Complementary Feeding

Exclusive breastfeeding, defined as the consumption of human milk as a sole source of energy, is the preferred method of feeding for normal full-term infants from birth to 6 months. Breastfeeding complemented by the appropriate introduction of other foods is recommended for the remainder of the first year or longer if desired.

Early supplementation is discouraged for several reasons. First, it exposes infants to pathogens and increases their risk of infection, especially diarrheal disease. Second, it decreases infant's intake of breast milk and therefore suckling, which reduces breast milk production. Third, in harsh socioeconomic environments, available supplementary food is often nutritionally inferior. On the other hand, after six months of age, breastfeeding alone provides insufficient nutrition for the infant, and must be supplemented with the introduction of other appropriate foods in order to promote the best growth possible.

Information on supplementation was obtained by asking mothers about the current breastfeeding status of all children under five years of age, and about the foods (liquids and solids) given to the child the day before the survey. Although information on breastfeeding was collected for all children born in the five years preceding the survey, the tables are restricted to children born in the three years before the survey because most children are weaned by age three.

Table 10.2 shows the percent distribution of living children in the three years before the survey by breastfeeding status. According to the World Health Organization's recommendation, children should receive exclusive breastfeeding for up to first 6 months of life. However, only 55 percent of Jordanian children under 2 months of age are exclusively breastfed. While it appears to be an increase from the 1997 JPFHS, where only 20 percent of children under 2 months of age were exclusively breastfed, changes in the questionnaire wording mainly account for the increase. ${ }^{1}$

By age 4-5 months, only 3 percent of children are exclusively breastfed. After the age of five months almost no children receive exclusive breastfeeding. The table shows that less than one-fourth (22 percent) of children under 2 months of age consume other milk (e.g., fresh milk or powdered milk), 9 percent of children consume plain water and breast milk, 6 percent consume breast milk and other waterbased liquids or juices, and none are given complementary food. Weaning takes place rapidly by 4-5 months; slightly more than half of children consume complementary food by this age. By 12-15 months, little more than 50 percent of children are still breastfed.

Bottle-feeding is discouraged for very young children. It is usually associated with increased risk of illness, especially diarrheal disease, because of difficulty in sterilizing the nipples properly. Bottlefeeding also shortens the period of postpartum amenorrhea and increases the risk of pregnancy. The practice of bottle-feeding with a nipple is prevalent in 35 percent of children under 2 months of age; however, the proportion of children who are bottle-fed increases to 45 percent among children less than 4 months of age and remains at this level among children age 6-9 months.

[^5]| Table 10.2 Breastfeeding status by child's age |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of youngest children under three years living with the mother by breastfeeding status and percentage of children under three years using a bottle with a nipple, according to age in months, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | eastfeeding | nd con | ing: |  |  |  |  |
| Age in months | Not breastfeeding | sively breastfed | Plain water only | Water-based liquids/ juice | Other milk | Complementary foods | Total | Number of children | a bottle with a nipple $^{1}$ | of living children |
| $<2$ | 7.5 | 54.8 | 9.2 | 6.2 | 22.3 | 0.0 | 100.0 | 144 | 35.1 | 145 |
| 2-3 | 10.0 | 26.1 | 25.4 | 2.7 | 23.3 | 12.4 | 100.0 | 172 | 45.0 | 178 |
| 4-5 | 12.5 | 3.2 | 19.3 | 5.1 | 9.8 | 50.1 | 100.0 | 167 | 39.3 | 171 |
| 6-7 | 20.2 | 0.0 | 3.8 | 4.2 | 2.3 | 69.5 | 100.0 | 199 | 44.5 | 203 |
| 8-9 | 26.8 | 0.1 | 1.1 | 1.0 | 0.0 | 71.0 | 100.0 | 238 | 45.8 | 242 |
| 10-11 | 37.6 | 0.0 | 1.1 | 0.3 | 1.3 | 59.7 | 100.0 | 218 | 48.3 | 227 |
| 12-15 | 48.9 | 0.0 | 0.3 | 0.2 | 0.0 | 50.7 | 100.0 | 355 | 46.1 | 370 |
| 16-19 | 66.6 | 0.0 | 0.0 | 0.4 | 0.0 | 33.0 | 100.0 | 359 | 32.4 | 401 |
| 20-23 | 87.6 | 0.0 | 0.6 | 0.0 | 0.6 | 11.2 | 100.0 | 306 | 29.5 | 364 |
| 24-27 | 96.1 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 100.0 | 275 | 19.8 | 393 |
| 28-31 | 94.7 | 0.0 | 0.0 | 0.0 | 0.0 | 5.3 | 100.0 | 240 | 12.7 | 378 |
| 32-35 | 97.8 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 | 100.0 | 197 | 9.1 | 382 |
| <6 | 10.1 | 26.7 | 18.5 | 4.6 | 18.4 | 21.8 | 100.0 | 483 | 40.1 | 493 |
| 6-9 | 23.8 | 0.0 | 2.3 | 2.4 | 1.0 | 70.3 | 100.0 | 437 | 45.2 | 445 |
| Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children classified as breastfeeding and consuming plain water only consume no supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, water-based liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus, children who receive breast milk and water-based liquids and who do not receive complementary foods are classified in the water-based liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well. <br> ${ }^{1}$ Based on all children under three years |  |  |  |  |  |  |  |  |  |  |

## Duration and Frequency of Breastfeeding

The median duration of breastfeeding by background characteristics is shown in Table 10.3. Estimates of the mean and median duration of breastfeeding are based on current status data, that is, the proportion of children under three years who were being breastfed at the time of the survey.

The median and mean durations of breastfeeding are very similar: 13.1 months and 13.5 months, respectively (Table 10.3). There is a slight difference in the duration of breastfeeding by sex of the child. Female children are breastfed for a slightly longer duration than male children. There are slight variations among different regions; however, these do not appear to be significant. Mothers with elementary and higher education breastfeed their children for a shorter duration than mothers with no education.

Both duration and frequency of breastfeeding can affect the length of postpartum amenorrhea. Table 10.3 shows that the majority of children ( 91 percent) under 6 months of age were breastfed 6 or more times in the past 24 hours. Breastfeeding is more frequent in the daytime than at night, with the mean number of feeds in the daytime being 6.2 compared with 3.4 at night. Breastfeeding is slightly more frequent among children residing in rural areas and among children of mothers with no education.

Table 10.3 Median duration and frequency of breastfeeding
Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, percentage of breastfeeding children under six months living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, by background characteristics, Jordan 2002

| Background characteristic | Median duration (months) of breastfeeding ${ }^{1}$ |  |  |  | Breastfeeding children under six months ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Any breastfeeding | Exclusive breastfeeding | Predominant breastfeeding ${ }^{3}$ | Number of children | Percentage breastfed $6+$ times in last 24 hours | Mean number of day feeds | Mean number of night feeds | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { children } \end{aligned}$ |
| Sex |  |  |  |  |  |  |  |  |
| Male | 12.8 | 0.7 | 2.0 | 1,794 | 90.6 | 6.0 | 3.6 | 209 |
| Female | 13.3 | 1.2 | 2.6 | 1,746 | 91.9 | 6.3 | 3.3 | 228 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 13.0 | 0.8 | 2.2 | 2,739 | 90.2 | 6.1 | 3.4 | 330 |
| Rural | 13.2 | 1.3 | 2.7 | 801 | 94.7 | 6.4 | 3.5 | 107 |
| Region |  |  |  |  |  |  |  |  |
| Central | 12.7 | 1.1 | 2.1 | 2,218 | 89.3 | 6.2 | 3.3 | 276 |
| North | 14.0 | 0.7 | 2.8 | 969 | 96.0 | 6.1 | 3.7 | 116 |
| South | 13.0 | 0.7 | 2.7 | 352 | 91.3 | 6.2 | 3.5 | 45 |
| Mother's education |  |  |  |  |  |  |  |  |
| No education | 18.9 | 1.0 | 2.1 | 127 | 97.1 | (7.1) | (3.3) | 16 |
| Elementary | 14.1 | 0.6 | 3.4 | 289 | 94.6 | (5.9) | (3.3) | 37 |
| Preparatory | 14.6 | 0.7 | 2.2 | 694 | 93.9 | 6.4 | 3.3 | 75 |
| Secondary | 12.9 | 1.4 | 2.7 | 1,518 | 92.1 | 6.2 | 3.4 | 201 |
| Higher | 12.1 | 0.7 | 1.2 | 912 | 86.0 | 6.0 | 3.6 | 107 |
| Preparatory + secondary | 13.2 | 1.2 | 2.5 | 2,211 | 92.6 | 6.2 | 3.4 | 276 |
| Total | 13.1 | 0.9 | 2.3 | 3,539 | 91.3 | 6.2 | 3.4 | 437 |
| Mean for all children | 13.5 | 2.2 | 3.6 | na | na | na | na | na |

Note: Median and mean durations are based on current status. Figures in parentheses are based on 25-49 unweighted cases.
na $=$ Not applicable
${ }^{1}$ It is assumed that non-last-born children or last-born children not living with the mother are not currently breastfeeding
${ }^{2}$ Excludes children who do not have a valid answer on the number of times breastfed
${ }^{3}$ Either exclusively breastfed or received breast milk and plain water, water-based liquids, and/or juice only (excludes other milk)

## Types of Supplemental Food

Information on the types of food given to children under three years of age in the 24 hours preceding the survey, according to breastfeeding status, is shown in Table 10.4. In Jordan, the introduction of other liquids such as water, juice, and formula takes place earlier than the recommended age of about 6 months. Even among the youngest breastfed children (under 2 months of age), almost one in four children receives milk (infant formula) other than breast milk, and 9 percent consume other liquids. Use of other liquids increases with age, and by 12-15 months, about 79 percent of children receive other liquids.

WHO recommends the introduction of solid food to infants around the age of 6 months because by that age breast milk by itself is no longer sufficient to maintain a child's optimal growth. Among Jordanian children, cereals, grains and some solid and semi-solid foods are introduced even before 6 months of age. Breastfed children consume breads, cereals, grains and semi-solid or solid types of foods early in life. Among infants age 6-7 months, about 69 percent and 89 percent consume foods made from grains

| Percentage of children under three years of age living with the mother who consumed specific foods in the day or night preceding the interview, by breastfeeding status and age, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Solid/semisolid foods |  |  |  |  |  |  |  |  |
| Child's age in months | Infant formula | Other milk/ cheese/ yogurt | Other liquids ${ }^{1}$ | Food made from grains | Fruits/ vegetables | Food made from roots/ tubers | Food made from legumes | Meat/ fish/ shellfish/ poultry eggs | Food made with oil/fat/ butter | Fruits and vegetables rich in vitamin $A^{2}$ | Any solid or semisolid food | Number <br> of children |
| BREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |
| <2 | 24.2 | 0.0 | 8.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 133 |
| 2-3 | 28.3 | 6.1 | 8.7 | 8.2 | 2.6 | 0.4 | 0.7 | 0.0 | 1.0 | 0.4 | 17.4 | 155 |
| 4-5 | 20.0 | 41.1 | 29.4 | 34.2 | 20.2 | 6.6 | 7.5 | 5.3 | 8.1 | 5.6 | 63.9 | 146 |
| 6-7 | 22.7 | 65.9 | 43.5 | 68.8 | 52.0 | 30.2 | 16.4 | 22.4 | 36.1 | 19.1 | 89.3 | 159 |
| 8-9 | 13.6 | 82.0 | 70.4 | 84.7 | 74.2 | 48.0 | 27.7 | 40.7 | 58.5 | 27.7 | 97.0 | 174 |
| 10-11 | 8.8 | 85.3 | 61.5 | 91.0 | 75.4 | 37.2 | 33.2 | 44.1 | 70.6 | 32.9 | 97.9 | 136 |
| 12-15 | 4.0 | 89.3 | 78.9 | 94.1 | 90.2 | 41.9 | 36.5 | 67.7 | 75.8 | 37.2 | 99.1 | 182 |
| 16-19 | 0.0 | 88.5 | 87.3 | 96.2 | 91.9 | 55.6 | 40.8 | 71.0 | 82.6 | 50.0 | 98.9 | 120 |
| 20-23 | (1.5) | (83.2) | (87.0) | (85.2) | (87.3) | (45.5) | (42.8) | (69.8) | (67.6) | (30.0) | (90.2) | 38 |
| 24-27 | * | * | * | * | * | * | * | * | * | * | * | 11 |
| 28-31 | * | * | * | * | * | * | * | * | * | * | * | 13 |
| 32-35 | * | * | * | * | * | * | * | * | * | * | * | 4 |
| <6 | 24.2 | 16.0 | 15.7 | 14.4 | 7.8 | 2.3 | 2.7 | 1.8 | 3.1 | 2.0 | 27.7 | 434 |
| 6-9 | 17.9 | 74.3 | 57.6 | 77.1 | 63.6 | 39.5 | 22.3 | 32.0 | 47.8 | 23.6 | 93.3 | 333 |
| NONBREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |
| $<2$ | * | * | * | * | * | * | * | * | * | * | * | 11 |
| 2-3 | * | * | * | * | * | * | * | * | * | * | * | 17 |
| 4-5 | * | * | * | * | * | ${ }^{*}$ | * | * | * | * | * | 21 |
| 6-7 | (77.1) | (85.6) | (64.5) | (73.6) | (56.9) | (34.0) | (12.6) | (22.5) | (50.0) | (16.2) | (96.3) | 40 |
| 8-9 | 54.3 | 95.8 | 74.1 | 95.1 | 84.2 | 49.2 | 20.4 | 53.2 | 48.8 | 49.1 | 100.0 | 64 |
| 10-11 | 27.6 | 92.6 | 72.7 | 92.4 | 92.1 | 42.0 | 30.3 | 68.2 | 77.0 | 56.3 | 100.0 | 82 |
| 12-15 | 15.0 | 96.0 | 77.7 | 93.6 | 86.2 | 42.1 | 41.5 | 64.2 | 77.9 | 46.6 | 99.6 | 174 |
| 16-19 | 2.3 | 93.7 | 84.6 | 96.5 | 90.6 | 50.6 | 42.5 | 76.5 | 87.1 | 49.7 | 99.3 | 239 |
| 20-23 | 0.9 | 96.0 | 91.4 | 99.7 | 96.6 | 52.1 | 47.7 | 80.2 | 88.8 | 51.4 | 100.0 | 267 |
| 24-27 | 0.0 | 90.7 | 93.0 | 98.8 | 96.0 | 49.8 | 58.2 | 81.9 | 89.9 | 54.7 | 100.0 | 264 |
| 28-31 | 2.1 | 92.9 | 95.4 | 99.2 | 96.2 | 46.8 | 55.3 | 81.9 | 88.5 | 53.7 | 100.0 | 228 |
| 32-35 | 0.0 | 92.3 | 92.2 | 99.8 | 95.7 | 40.9 | 60.2 | 81.2 | 84.4 | 60.8 | 99.8 | 192 |
| <6 | (94.7) | (9.7) | (18.0) | (19.0) | (9.1) | (1.2) | (0.0) | (0.0) | (4.2) | (4.0) | (28.4) | 49 |
| 6-9 | 63.1 | 91.9 | 70.4 | 86.8 | 73.7 | 43.3 | 17.4 | 41.4 | 49.2 | 36.4 | 98.6 | 104 |

Note: Breastfeeding status and food consumed refer to a " 24 hour" period (yesterday and last night). 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.
${ }^{1}$ Does not include plain water
${ }^{2}$ Includes pumpkin, carrots, red sweet potatoes, green leafy vegetables, apricot, palm nuts, yellow melon, and other locally grown fruits and vegetables that are rich in vitamin A
and any solid or semi-solid food, respectively. The percentage receiving cereals, grains, and solid or semisolid food increases with age, and by age one most children are fed solid or semi-solid foods.

In addition to the above foods, by age one 68 percent of the children consume meat, fish, or poultry and more than three-fourths receive foods made with oil, fat or butter. In comparison, consumption of roots, tubers, legumes, and foods rich in vitamin A is lower in Jordanian children. As expected, the percentage of nonbreastfed children who consume supplements at an earlier age is higher than the percentage of breastfed children.

## Frequency of Food Supplementation

The nutritional requirements of young children are more likely to be met if they are fed a variety of foods. In the JPFHS, interviewers read a list of specific foods and asked the mother to report the number of times during the last seven days a child had consumed each food. For any food consumed at least once in the last seven days, the mother was also asked for the number of times the child had consumed the food in the 24 hours preceding the survey. Tables 10.5 and 10.6 show the mean number of times and the mean number of days children under age three consumed specific foods in the 24 hours before the survey and in the 7 days before the survey, by age and breastfeeding status.

| Mean number of times specific foods were consumed in the day or night preceding the interview by youngest children under three years of age living with the mother, according to breastfeeding status and age, Jordan 2002 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Solid | d/semisolid | d foods |  |  |  |
| Child's age in months | Infant formula | Other milk/ cheese/ yogurt | Other liquids ${ }^{1}$ | Food made from grains | Fruits/ vegetables | Food made from roots/ tubers | Food made from legumes | Meat/ fish/ shellfish/ poultry/ eggs | Food made with oil/fat/ butter | Fruits and vegetables rich in vitamin $A^{2}$ | Number of children |
| BREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |
| $<2$ | 0.6 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 133 |
| 2-3 | 0.9 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 155 |
| 4-5 | 0.6 | 0.6 | 0.4 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 146 |
| 6-7 | 0.5 | 0.9 | 0.7 | 1.0 | 0.9 | 0.3 | 0.2 | 0.2 | 0.5 | 0.2 | 159 |
| 8-9 | 0.3 | 1.2 | 1.0 | 1.4 | 1.4 | 0.5 | 0.3 | 0.5 | 0.7 | 0.3 | 174 |
| 10-11 | 0.2 | 1.4 | 1.1 | 1.6 | 1.6 | 0.4 | 0.4 | 0.5 | 1.0 | 0.4 | 136 |
| 12-15 | 0.1 | 1.8 | 1.5 | 1.9 | 2.3 | 0.5 | 0.4 | 0.8 | 0.9 | 0.5 | 182 |
| 16-19 | 0.0 | 1.7 | 1.9 | 2.2 | 2.3 | 0.6 | 0.5 | 0.8 | 1.2 | 0.6 | 120 |
| 20-23 | (0.1) | (1.8) | (2.7) | (2.1) | (1.9) | (0.5) | (0.6) | (0.8) | (1.0) | (0.3) | 38 |
| 24-27 | * | * | * | * | * | * | * | * | * | * | 11 |
| 28-31 | * | * | * | * | * | * | * | * | * | * | 13 |
| 32-35 | * | * | * | * | * | * | * | * | * | * | 4 |
| <6 | 0.7 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 434 |
| 6-9 | 0.4 | 1.1 | 0.8 | 1.2 | 1.2 | 0.4 | 0.2 | 0.4 | 0.6 | 0.3 | 333 |
| NONBREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |
| <2 | * | * | * | * | * | * | * | * | * | * | 11 |
| 2-3 | * | * | * | * | * | * | * | * | * | * | 17 |
| 4-5 | ${ }^{*}$ | * | * | * | * | * | * | * | * | * | 21 |
| 6-7 | (3.0) | (1.8) | (0.9) | (1.2) | (1.0) | (0.4) | (0.1) | (0.3) | (0.7) | (0.2) | 40 |
| 8-9 | 2.1 | 2.9 | 1.2 | 1.7 | 2.3 | 0.5 | 0.2 | 0.7 | 0.6 | 0.8 | 64 |
| 10-11 | 1.1 | 3.5 | 1.8 | 1.9 | 2.4 | 0.5 | 0.4 | 0.8 | 1.0 | 0.8 | 82 |
| 12-15 | 0.6 | 3.2 | 1.6 | 2.0 | 2.4 | 0.5 | 0.5 | 0.7 | 1.0 | 0.7 | 174 |
| 16-19 | 0.1 | 3.0 | 2.1 | 2.2 | 2.8 | 0.5 | 0.5 | 0.9 | 1.2 | 0.8 | 239 |
| 20-23 | 0.0 | 2.6 | 2.6 | 2.4 | 2.8 | 0.6 | 0.6 | 1.0 | 1.2 | 0.7 | 267 |
| 24-27 | 0.0 | 2.4 | 2.6 | 2.3 | 2.9 | 0.5 | 0.7 | 1.1 | 1.2 | 0.8 | 264 |
| 28-31 | 0.1 | 2.2 | 2.9 | 2.4 | 2.9 | 0.5 | 0.7 | 1.0 | 1.3 | 0.8 | 228 |
| 32-35 | 0.0 | 2.2 | 2.7 | 2.6 | 2.8 | 0.4 | 0.8 | 1.0 | 1.1 | 0.8 | 192 |
| <6 | (5.2) | (0.4) | (0.3) | (0.2) | (0.1) | (0.0) | (0.0) | (0.0) | (0.1) | (0.0) | 49 |
| 6-9 | 2.5 | 2.5 | 1.1 | 1.5 | 1.8 | 0.5 | 0.2 | 0.5 | 0.6 | 0.5 | 104 |
| Note: Breastfeeding status and food consumed refer to a "24 hour" recall period (yesterday and last night). 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. <br> ${ }^{1}$ Does not include plain water <br> ${ }^{2}$ Includes pumpkin, carrots, red sweet potatoes, green leafy vegetables, mangoes, apricot, palm nuts, yellow melon, and other locally grown fruits and vegetables that are rich in vitamin A |  |  |  |  |  |  |  |  |  |  |  |

Table 10.6 Frequency of foods consumed by children in preceding seven days
Mean number of days specific foods were received in the seven days preceding the interview by youngest children under three years of age living with the mother, by breastfeeding status and age, Jordan 2002

| Age in months | Plain water | Infant formula | Other milk | Fruit juice | Soup/ broth | Tea | Other liquids | Food made from grains | Food made from roots/ tubers | Fruits and vegetables not rich in vita$\min \mathrm{A}$ | Food made from legumes | Cheese/ yogurt | Meat/ fish/ / poultry/ eggs | Food made with oil/ fat/ butter | Apricot, palm nuts, or yellow melon | Any type of nuts or seeds | Pumpkin carrots/ red sweet potatoes | Green leafy vegetables | Number <br> of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| BREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<2$ | 1.4 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 133 |
| 2-3 | 4.0 | 2.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.3 | 0.5 | 0.0 | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 155 |
| 4-5 | 5.9 | 1.4 | 0.5 | 1.0 | 0.6 | 0.1 | 0.1 | 2.0 | 0.4 | 0.8 | 0.2 | 1.7 | 0.2 | 0.4 | 0.1 | 0.0 | 0.1 | 0.0 | 146 |
| 6-7 | 6.9 | 1.6 | 0.7 | 2.1 | 1.0 | 0.4 | 0.2 | 4.5 | 1.5 | 2.1 | 0.7 | 3.4 | 1.2 | 2.0 | 0.5 | 0.0 | 0.6 | 0.2 | 159 |
| 8-9 | 6.9 | 0.9 | 1.0 | 2.6 | 1.6 | 0.8 | 0.2 | 5.1 | 2.2 | 2.8 | 1.3 | 4.6 | 2.3 | 3.4 | 0.8 | 0.1 | 0.6 | 0.5 | 174 |
| 10-11 | 6.9 | 0.5 | 1.3 | 2.8 | 1.7 | 0.8 | 0.3 | 5.7 | 2.1 | 2.9 | 1.6 | 4.7 | 2.7 | 4.2 | 1.0 | 0.1 | 0.3 | 0.8 | 136 |
| 12-15 | 7.0 | 0.3 | 2.1 | 3.0 | 1.8 | 1.7 | 0.7 | 6.0 | 2.4 | 3.8 | 1.4 | 5.0 | 3.5 | 4.6 | 1.3 | 0.3 | 0.5 | 0.7 | 182 |
| 16-19 | 7.0 | 0.1 | 2.8 | 2.8 | 1.4 | 4.1 | 0.9 | 6.4 | 2.9 | 3.3 | 1.8 | 5.3 | 3.6 | 5.2 | 1.7 | 0.6 | 0.6 | 0.7 | 120 |
| 20-23 | (7.0) | (0.1) | (3.4) | (3.6) | (1.5) | (4.3) | (1.6) | (6.0) | (2.9) | (3.6) | (1.5) | (4.7) | (3.9) | (4.5) | (0.7) | (0.9) | (0.2) | (1.0) | 38 |
| 24-27 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 11 |
| 28-31 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 13 |
| 32-35 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 4 |
| <6 | 3.8 | 1.7 | 0.2 | 0.4 | 0.2 | 0.0 | 0.2 | 0.8 | 0.1 | 0.3 | 0.1 | 0.7 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 434 |
| 6-9 | 6.9 | 1.2 | 0.8 | 2.4 | 1.3 | 0.6 | 0.2 | 4.8 | 1.9 | 2.5 | 1.0 | 4.0 | 1.8 | 2.7 | 0.7 | 0.1 | 0.6 | 0.4 | 333 |
| Total | 5.9 | 1.0 | 1.1 | 2.0 | 1.1 | 1.1 | 0.4 | 3.9 | 1.5 | 2.1 | 0.9 | 3.3 | 1.8 | 2.6 | 0.7 | 0.2 | 0.3 | 0.4 | 1,271 |

NONBREASTFEEDING CHILDREN

| $<2$ | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-3 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 17 |
| 4-5 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 21 |
| 6-7 | (6.9) | (5.4) | (1.7) | (3.0) | (0.9) | (0.5) | (0.2) | (4.7) | (1.5) | (2.7) | (0.7) | (4.5) | (1.3) | (2.7) | (0.3) | (0.0) | (0.6) | (0.2) | 40 |
| 8-9 | 6.9 | 3.8 | 3.3 | 2.5 | 1.8 | 0.8 | 0.2 | 6.0 | 2.1 | 3.6 | 1.2 | 4.6 | 3.3 | 2.9 | 1.4 | 0.0 | 1.0 | 0.6 | 64 |
| 10-11 | 6.8 | 1.9 | 4.8 | 2.8 | 2.1 | 1.6 | 0.8 | 5.8 | 2.1 | 4.2 | 1.2 | 5.0 | 3.5 | 4.9 | 2.0 | 0.2 | 0.7 | 0.7 | 82 |
| 12-15 | 7.0 | 1.0 | 5.4 | 3.2 | 1.3 | 1.8 | 1.0 | 6.4 | 2.5 | 3.9 | 1.9 | 4.9 | 3.6 | 4.7 | 1.8 | 0.3 | 0.4 | 0.8 | 174 |
| 16-19 | 7.0 | 0.2 | 5.6 | 3.4 | 1.5 | 3.8 | 1.3 | 6.4 | 3.0 | 4.1 | 1.9 | 5.4 | 4.4 | 5.5 | 2.0 | 0.7 | 0.6 | 1.0 | 239 |
| 20-23 | 7.0 | 0.1 | 5.3 | 3.8 | 1.6 | 4.4 | 2.0 | 6.8 | 3.1 | 4.4 | 1.8 | 5.3 | 4.7 | 5.8 | 1.8 | 1.1 | 0.6 | 0.9 | 267 |
| 24-27 | 7.0 | 0.0 | 4.7 | 3.5 | 1.4 | 5.0 | 1.9 | 6.8 | 2.8 | 4.2 | 2.4 | 5.3 | 4.6 | 5.6 | 1.8 | 1.5 | 0.7 | 1.0 | 264 |
| 28-31 | 7.0 | 0.1 | 4.5 | 3.7 | 1.2 | 5.0 | 2.0 | 6.7 | 2.8 | 4.2 | 2.2 | 5.1 | 4.2 | 5.3 | 1.6 | 1.5 | 0.6 | 1.0 | 228 |
| 32-35 | 7.0 | 0.0 | 4.6 | 3.7 | 1.3 | 4.8 | 2.4 | 6.8 | 2.7 | 3.9 | 2.4 | 5.6 | 4.7 | 5.6 | 1.7 | 1.6 | 0.4 | 0.9 | 192 |
| <6 | (5.3) | (6.6) | (0.4) | (0.6) | (0.1) | (0.0) | (0.3) | (1.2) | (0.1) | (0.4) | (0.0) | (0.4) | (0.0) | (0.3) | (0.1) | (0.0) | (0.1) | (0.0) | 49 |
| 6-9 | 6.9 | 4.4 | 2.7 | 2.7 | 1.5 | 0.7 | 0.2 | 5.5 | 1.9 | 3.3 | 1.0 | 4.6 | 2.6 | 2.8 | 0.9 | 0.0 | 0.8 | 0.5 | 104 |
| Total | 6.9 | 0.8 | 4.7 | 3.4 | 1.4 | 3.7 | 1.6 | 6.4 | 2.7 | 4.0 | 1.9 | 5.1 | 4.1 | 5.1 | 1.7 | 1.0 | 0.6 | 0.9 | 1,600 |

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). 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.

As seen in Table 10.6, children under three years of age consumed foods made from grains most often during the 7 days before the survey ( 4 times a week), followed by cheese and yogurt (more than three times a week). Green leafy vegetables, fruits and other vegetables (good sources of vitamin A) are consumed less than once a week whereas meat or fish and foods made with oil, fat or butter are consumed almost twice a week. As expected, nonbreastfed and older children consumed supplements more frequently than breastfed children and younger children.

### 10.2 Nutritional Status Of Children

The nutritional status of young children is a comprehensive index that reflects the level and pace of household, community, and national development. Malnutrition (inadequate nutrition) is a direct result of insufficient food intake or repeated infectious diseases, or a combination of both. It can result in increased risk of illness and death, and can also result in a lower level of cognitive development.

In the JPFHS, anthropometric data on height and weight for children under five years were collected from all the households sampled in the survey to evaluate their nutritional status. Their standing height (for children age 24 months and older) or recumbent length (for children under age 24 months) was measured using the Shorr height board. Electronic Seca scales supplied by UNICEF were used to measure the weight of children. Based on these measurements, three internationally accepted indices were constructed and are used to reflect the nutritional status of children. These are:

Height-for-age (stunting)
Weight-for-height (wasting)
Weight-for-age (underweight)
The assessment of nutritional status is based on the concept that in a well-nourished population, the distribution of children's height and weight at a given age will approximately follow a normal distribution. Since all populations have similar genetic potential for growth (Habicht et al., 1974), for comparative purposes, the nutritional status has been determined using the International Reference Population defined by the U. S. National Center for Health Statistics (NCHS), as recommended by WHO and the U.S. Centers for Disease Control and Prevention (CDC). Children who fall below minus two standard deviations from the reference median are considered malnourished, and children who fall below minus three standard deviations from the reference median are considered severely malnourished. Since children's height and weight change with age, it is suggested that height and weight be related to age and that weight be related to height, taking the sex of the child into consideration. Each of the three indices provides information about different aspects of children's nutritional status.

The height-for-age index reflects linear growth achieved pre- and postnatally, with its deficit indicating the long-term, cumulative effects of inadequate nutrition and/or compromised health. Children who are below minus two standard deviations ( -2 SD ) from the median of the reference population are considered short for their age, or stunted. Children who are below minus three standard deviations ( -3 SD ) are severely stunted. Stunting of a child's growth may be the result of failure to receive adequate nutrition over a long period, or of sustained improper feeding practices, or of the effects of repeated episodes of illness. Height-for-age therefore represents a measure of the outcome of undernutrition in a population over a long period and does not vary appreciably with the season of data collection.

The weight-for-height index measures body mass in relation to body length. It describes a recent and severe process that has produced a substantial weight loss, usually as a consequence of acute shortage of food and/or severe disease. Children whose weight-for-height is below minus two standard deviations $(-2 \mathrm{SD})$ from the median of the reference population are too thin for their height, or wasted, while those who measure below minus three standard deviations ( -3 SD ) from the reference population median are severely wasted. Wasting represents the failure to receive adequate nutrition during the period immediately before the survey and usually shows marked seasonal patterns associated with changes in food availability or disease prevalence. It may be the result of recent episodes of illness, particularly diarrhea, improper feeding practices, or acute food shortage.

Weight-for-age is a composite index of height-for-age and weight-for-height. It represents body mass relative to age. Children whose weight-for-age measures below minus two standard deviations (SD) from the median of the reference population are underweight for their age, while those whose measurements are below minus three standard deviations ( -3 SD ) from the reference population median are severely underweight. Being underweight for one's age therefore could mean that a child is stunted or wasted or both stunted and wasted. In the absence of wasting, both weight-for-age and height-for-age reflect the long-term nutrition and health experience of the individual or population.

The JPFHS measured and weighed all children born in the five years prior to the survey who were listed in the Household Questionnaire. Table 10.7 shows the percentage of children less than five years old who are classified as malnourished according to background characteristics. The table also shows the nutritional status of children of noninterviewed mothers by whether or not the mother lives in the household. A total of 4,633 children were weighed and measured.

Out of the 5,727 eligible children, anthropometric measurements are available for 81 percent of children. Nineteen percent of children could not be measured either because they were not at home at the time of the survey, they refused to be measured, or the mother refused to allow the child to be measured. In some cases, measurements were not taken if the child was too sick. However, the data are unlikely to be biased, since missing information on anthropometry is consistent across age groups and other background characteristics.

Chronic malnutrition among Jordanian children is relatively low, with 9 percent of children moderately stunted and 2 percent severely stunted (Table 10.7). The level of stunting increases rapidly with age, from 3 percent among children less than six months of age to 13 percent among children age 12-23 months (Figure 10.1). There is little difference in the level of stunting by sex. First births are least likely to be stunted while children of birth order 6 or higher are most likely to be stunted. The length of the birth interval is inversely related to stunting: children with a birth interval of less than 24 months were most likely to be stunted ( 10 percent). As expected, rural children are more likely to be stunted than urban children, and children residing in the Central region (including the capital city Amman) are much less likely to be stunted than those in the South. Mother's education impacts children's nutritional status positively, with 5 percent of children of highly educated mothers stunted, compared with 22 percent of children of mothers with no education.

Two percent of children under five years of age are wasted (thin for their height), and less than 1 percent are severely wasted. As with stunting, the proportion of wasted children is highest in the 10-11 month age group. Rural children are more likely to be wasted than urban children. As with stunting, children residing in the South are more likely to be wasted than children residing in other regions. Variations in wasting are also seen with respect to birth order and birth intervals; however, there is no clear pattern. Mother's education has a positive impact on lowering wasting. Also, the proportion of wasting is highest in children born to young mothers (15-19 years).

Four percent of children are underweight (low weight-for-age), and less than 1 percent are severely underweight. Differentials by background characteristics are very similar to those discussed for stunting.

Children who live in households where the mother was not interviewed may not receive the quality of care and nurturance they would if they lived with their natural mother, because the natural mother may have died or is otherwise unavailable. Children of noninterviewed mothers are more likely to be stunted and wasted than children of interviewed mothers. There is no significant difference between these two groups for moderate wasting and underweight. However, children of noninterviewed mothers were four times more likely to be severely wasted and underweight than children of interviewed mothers.

Table 10.7 Nutritional status of children
Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Jordan 2002

| Background characteristic | Height-for-age (stunted) |  |  | Weight-for-height (wasted) |  |  | Weight-for-age (underweight) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below -3 SD | $\begin{gathered} \text { Percent- } \\ \text { age } \\ \text { below } \\ -2 \text { SD }^{1} \end{gathered}$ | Mean Z-score (SD) | Percentage below -3 SD | $\begin{aligned} & \text { Percent- } \\ & \text { age } \\ & \text { below } \\ & -2 \text { SD }^{1} \end{aligned}$ | Mean Z-score (SD) | Percentage below -3 SD | $\begin{aligned} & \text { Percent- } \\ & \text { age } \\ & \text { below } \\ & -2 \text { SD }^{1} \end{aligned}$ | Mean Z-score (SD) | Number of children |
| Age in months |  |  |  |  |  |  |  |  |  |  |
| <6 | 0.6 | 3.3 | -0.0 | 0.5 | 1.7 | 0.6 | 0.2 | 1.0 | 0.5 | 395 |
| 6-9 | 2.2 | 5.5 | -0.2 | 0.0 | 1.4 | 0.2 | 0.1 | 1.8 | -0.0 | 382 |
| 10-11 | 0.4 | 6.5 | -0.4 | 0.5 | 4.6 | -0.2 | 0.0 | 3.0 | -0.6 | 189 |
| 12-23 | 3.2 | 12.5 | -0.8 | 0.2 | 2.8 | 0.1 | 0.4 | 4.8 | -0.4 | 929 |
| 24-35 | 1.6 | 8.5 | -0.5 | 0.5 | 2.2 | -0.2 | 0.5 | 5.8 | -0.5 | 935 |
| 36-47 | 0.9 | 7.1 | -0.5 | 0.7 | 1.7 | -0.1 | 0.8 | 5.3 | -0.5 | 852 |
| 48-59 | 1.0 | 9.6 | -0.6 | 0.5 | 1.2 | -0.0 | 0.5 | 4.6 | -0.4 | 952 |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 1.6 | 7.8 | -0.5 | 0.5 | 2.3 | -0.0 | 0.5 | 4.1 | -0.3 | 2,325 |
| Female | 1.6 | 9.2 | -0.5 | 0.4 | 1.8 | 0.0 | 0.4 | 4.7 | -0.4 | 2,307 |
| Birth order ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| First birth ${ }^{3}$ | 1.1 | 7.3 | -0.3 | 0.2 | 2.2 | 0.0 | 0.4 | 4.1 | -0.2 | 920 |
| 2-3 | 1.3 | 7.8 | -0.5 | 0.1 | 1.9 | 0.0 | 0.2 | 4.1 | -0.3 | 1,671 |
| 4-5 | 2.2 | 8.4 | -0.5 | 1.0 | 1.8 | -0.0 | 0.7 | 4.5 | -0.4 | 1,125 |
| 6+ | 1.7 | 10.7 | -0.6 | 0.3 | 2.5 | -0.0 | 0.5 | 5.3 | -0.4 | 857 |
| Birth interval in months ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| First birth ${ }^{3}$ | 1.1 | 7.5 | -0.4 | 0.2 | 2.4 | 0.0 | 0.4 | 4.3 | -0.3 | 936 |
| $<24$ | 1.3 | 10.4 | -0.7 | 0.5 | 1.6 | -0.0 | 0.6 | 5.2 | -0.5 | 1,212 |
| 24-47 | 2.3 | 9.2 | -0.5 | 0.2 | 2.2 | -0.0 | 0.3 | 4.7 | -0.4 | 1,615 |
| 48+ | 1.0 | 4.8 | -0.3 | 0.7 | 1.9 | 0.0 | 0.4 | 2.7 | -0.2 | 810 |
| Size at birth ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| Very small | 3.4 | 20.3 | -1.0 | 0.0 | 2.7 | -0.2 | 1.5 | 11.4 | -0.9 | 200 |
| Small | 1.3 | 12.4 | -0.8 | 1.0 | 3.2 | -0.3 | 0.9 | 8.0 | -0.8 | 579 |
| Average or larger | 1.5 | 7.2 | -0.4 | 0.4 | 1.8 | 0.1 | 0.3 | 3.5 | -0.2 | 3,846 |
| Missing | * | * | * | * | * | * | * | * | * | 8 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 1.3 | 7.1 | -0.4 | 0.4 | 1.9 | 0.0 | 0.3 | 3.5 | -0.3 | 3,542 |
| Rural | 2.5 | 13.2 | -0.7 | 0.3 | 2.5 | -0.0 | 0.8 | 7.4 | -0.5 | 1,091 |
| Region 1.4 - 0.30 .5 |  |  |  |  |  |  |  |  |  |  |
| Central | 1.4 | 7.3 | -0.4 | 0.5 | 2.2 | 0.0 | 0.3 | 4.0 | -0.3 | 2,884 |
| North | 1.4 | 9.7 | -0.5 | 0.3 | 1.5 | 0.0 | 0.5 | 4.1 | -0.3 | 1,233 |
| South | 3.1 | 12.4 | -0.7 | 0.5 | 2.4 | -0.1 | 1.2 | 7.5 | -0.6 | 516 |
| Mother's education ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |
| No education | 4.7 | 21.5 | -1.1 | 1.8 | 4.3 | -0.1 | 3.0 | 12.2 | -0.8 | 190 |
| Elementary | 2.3 | 12.1 | -0.7 | 1.1 | 3.5 | 0.0 | 0.7 | 7.1 | -0.5 | 398 |
| Preparatory | 2.0 | 10.5 | -0.7 | 0.1 | 2.2 | -0.1 | 0.4 | 4.8 | -0.5 | 939 |
| Secondary | 1.3 | 7.6 | -0.4 | 0.3 | 1.6 | 0.0 | 0.4 | 3.8 | -0.3 | 1,920 |
| Higher | 0.9 | 4.9 | -0.2 | 0.4 | 1.8 | 0.0 | 0.1 | 2.9 | -0.2 | 1,149 |
| Preparatory + secondary | y 1.5 | 8.5 | -0.5 | 0.2 | 1.8 | -0.0 | 0.4 | 4.1 | -0.4 | 2,859 |
| Mother's age ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 0.3 | 7.0 | -0.5 | 1.1 | 3.6 | 0.0 | 0.0 | 3.1 | -0.4 | 88 |
| 20-24 | 1.9 | 8.1 | -0.5 | 0.0 | 2.5 | 0.1 | 0.3 | 4.3 | -0.3 | 737 |
| 25-29 | 2.0 | 9.1 | -0.5 | 0.4 | 1.6 | 0.1 | 0.5 | 4.3 | -0.3 | 1,348 |
| 30-34 | 1.3 | 7.8 | -0.5 | 0.4 | 1.9 | 0.0 | 0.5 | 4.6 | -0.3 | 1,352 |
| 35-49 | 1.3 | 9.0 | -0.5 | 0.7 | 2.2 | -0.1 | 0.5 | 4.4 | -0.4 | 1,107 |
| Children of interviewed mothers | 1.6 | 8.4 | -0.5 | 0.4 | 2.0 | 0.0 | 0.4 | 4.4 | -0.3 | 4,573 |
| Children of noninterviewed mothers ${ }^{5}$ | 4.2 | 16.8 | -0.6 | 1.7 | 1.7 | 0.2 | 1.7 | 3.6 | -0.3 | 60 |
| Total | 1.6 | 8.5 | -0.5 | 0.4 | 2.0 | 0.0 | 0.5 | 4.4 | -0.3 | 4,633 |

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO International Reference Population. The percentage of children who are more than three or more than two standard deviations below the median of the International Reference Population (-3 SD and -2 SD ) are shown according to background characteristics. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes children who are below -3 standard deviations (SD) from the International Reference Population median.
${ }^{2}$ Excludes children whose mothers were not interviewed
${ }^{3}$ First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.
${ }^{4}$ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the household schedule.
${ }^{5}$ Includes children whose mothers are deceased

Figure 10.1 Nutritional Status of Children by Age


Note: Plotted values are smoothed by a five-month moving average.

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## Nutritional Status of Women

In the JPFHS, data were collected on the height and weight of women age 15-49 in all households sampled. Women's nutritional status is important both as an indicator of overall health and as a predictor of pregnancy outcome for both mother and child. Two indices of women's nutritional status are presented in Table 10.8: height and body mass index (BMI). Maternal height is a measure of past nutritional status and reflects in part the cumulative effect of social and economic outcomes on access to nutritional foods during childhood and adolescence. It can be used to predict the risks associated with difficult deliveries, since small stature is often associated with small pelvis size and a greater likelihood of obstructed labor. Short stature is also correlated with low birth weight in infants, high risk of stillbirths, and high rates of miscarriage. A woman is considered to be at nutritional risk if her height is in the range of 140 to 150 centimeters. The BMI, which utilizes both height and weight and provides a better measure of thinness than weight alone, is defined as weight in kilograms divided by the square of the height in meters $\left(\mathrm{kg} / \mathrm{m}^{2}\right)$. The WHO Expert Committee on Physical Growth has suggested the following classifications:

Mild underweight ( $\mathrm{BMI}=17-18.49$ )
Moderate underweight $(\mathrm{BMI}=16-16.99)$
Severe underweight ( $\mathrm{BMI}<16$ )

These three groups are considered to be chronically energy deficient (CED). A body mass index of more than $25 \mathrm{~kg} / \mathrm{m}^{2}$ is considered to be overweight.

To avoid bias in the measurement of women's nutritional status, pregnant women and women who had given birth in the two months preceding the survey were excluded from the calculation of weight and body mass measures.

Table 10.8 shows the means and percent distributions of height and BMI among women 15-49 years by background characteristics.

Table 10.8 Nutritional status of women by background characteristics
Among all women age 15-49, mean height, percentage under 145 cm , mean body mass index (BMI), and percentage with specific BMI levels, by background characteristics, Jordan 2002

| Background characteristic | Height |  |  | Body mass index $\mathrm{BMI}^{1}\left(\mathrm{~kg} / \mathrm{m}^{2}\right)$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean height in cm | Percentage below 145 cm | Number of women | Mean BMI | Normal <br>  <br> $18.5-$ <br> 24.9 <br> (normal) | Thin |  |  |  | Overweight/obese |  |  | Number of women |
|  |  |  |  |  |  | $\begin{aligned} & <18.5 \\ & \text { (thin) } \end{aligned}$ | $\begin{gathered} 17.0- \\ 18.4 \\ \text { (mildly } \\ \text { thin) } \end{gathered}$ | $\begin{gathered} 16.0- \\ 16.9 \\ \text { (moderat- } \\ \text { ely thin) } \end{gathered}$ | $<16.0$ <br> (severely thin) | 25.0 (overweight/ obese) | $\begin{gathered} 25.0- \\ 29.9 \end{gathered}$ <br> (overweight) | 30.0 or higher (obese) |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 158.7 | 0.0 | 148 | 22.4 | 66.7 | 12.7 | 9.9 | 1.5 | 1.2 | 20.7 | 15.3 | 5.4 | 1,729 |
| 20-24 | 158.9 | 0.7 | 680 | 23.9 | 60.8 | 6.9 | 5.4 | 0.8 | 0.7 | 32.3 | 22.9 | 9.4 | 1,227 |
| 25-29 | 158.6 | 1.2 | 1,122 | 25.9 | 44.9 | 2.7 | 2.3 | 0.4 | 0.0 | 52.4 | 35.5 | 16.9 | 1,156 |
| 30-34 | 158.1 | 0.9 | 1,253 | 27.6 | 33.2 | 2.3 | 1.8 | 0.5 | 0.0 | 64.5 | 34.6 | 29.9 | 1,182 |
| 35-39 | 157.3 | 0.7 | 1,003 | 29.6 | 18.6 | 1.7 | 1.5 | 0.0 | 0.2 | 79.7 | 35.5 | 44.2 | 989 |
| 40-44 | 157.2 | 1.9 | 788 | 31.0 | 14.3 | 0.6 | 0.4 | 0.1 | 0.1 | 85.1 | 31.3 | 53.8 | 804 |
| 45-49 | 156.1 | 2.1 | 587 | 32.5 | 8.0 | 0.7 | 0.0 | 0.5 | 0.2 | 91.3 | 25.4 | 65.9 | 593 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 158.3 | 0.7 | 4,419 | 26.7 | 40.7 | 4.9 | 4.0 | 0.5 | 0.4 | 54.4 | 28.1 | 26.3 | 6,018 |
| Rural | 156.1 | 2.6 | 1,162 | 26.3 | 42.5 | 5.5 | 3.9 | 1.0 | 0.6 | 52.0 | 25.8 | 26.2 | 1,663 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 158.3 | 0.9 | 3,584 | 26.5 | 41.4 | 5.1 | 4.2 | 0.5 | 0.5 | 53.5 | 27.8 | 25.7 | 4,814 |
| North | 157.3 | 1.3 | 1,451 | 26.8 | 40.7 | 4.4 | 3.2 | 0.8 | 0.4 | 54.9 | 27.3 | 27.6 | 2,083 |
| South | 156.5 | 2.3 | 547 | 26.5 | 40.6 | 6.4 | 4.7 | 1.2 | 0.6 | 53.0 | 26.8 | 26.2 | 784 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 154.8 | 5.0 | 344 | 29.8 | 19.7 | 4.4 | 2.8 | 0.5 | 1.1 | 75.9 | 27.0 | 48.9 | 352 |
| Elementary | 156.1 | 1.3 | 653 | 30.4 | 20.8 | 1.3 | 1.2 | 0.1 | 0.0 | 77.9 | 28.2 | 49.7 | 763 |
| Preparatory | 157.6 | 0.9 | 1,174 | 27.6 | 35.1 | 4.3 | 2.8 | 0.9 | 0.6 | 60.6 | 28.0 | 32.6 | 1,445 |
| Secondary | 158.4 | 0.9 | 2,103 | 25.3 | 47.8 | 7.0 | 5.8 | 0.7 | 0.6 | 45.2 | 26.2 | 18.9 | 3,369 |
| Higher | 158.9 | 0.7 | 1,308 | 25.9 | 46.2 | 3.6 | 3.0 | 0.5 | 0.2 | 50.1 | 29.8 | 20.3 | 1,752 |
| Preparatory + secondary | 158.1 | 0.9 | 3,277 | 26.0 | 44.0 | 6.2 | 4.9 | 0.8 | 0.6 | 49.8 | 26.7 | 23.1 | 4,813 |
| Total | 157.8 | 1.1 | 5,582 | 26.6 | 41.1 | 5.1 | 4.0 | 0.6 | 0.5 | 53.9 | 27.6 | 26.3 | 7,681 |

${ }^{1}$ Excludes pregnant women and women with a birth in the preceding 2 months

The cut-off point for height, below which a woman can be identified as nutritionally at risk, varies among populations, but it is usually considered to be in the range of $140-150$ centimeters ( cm ). The JPFHS found a mean height of 158 cm . The mean height varies only slightly (between 155 and 159 cm ) for women in different population groups, as shown in Table 10.8. In general, younger women and women with higher education are slightly taller. Women from urban areas and the Central region are also taller than women residing in rural areas or other regions of Jordan. Only 1 percent of women are under 145 cm in height and can be considered short.

The mean BMI of women in Jordan is 26.6, higher than the normal BMI range of 18.5-24.9. Forty-one percent of women fall in the normal BMI category. Five percent of women fall below the cutoff of 18.5 , indicating that the level of chronic energy deficiency is relatively low in Jordan. However, an alarming proportion of women - more than half ( 54 percent) - have a BMI of over 25 , and thus can be considered overweight or obese. In general, very young women (15-19) are more likely than other women to suffer from chronic energy deficiency. Mean BMI is higher in women in the oldest age group
(45-49 years old). Older women and women with no education or elementary education are also more likely to be overweight or obese.

### 10.3 Micronutrient Status

Causes and consequences of early childhood deficiencies have implications for later life and may be present as risk factors for future generations. Severe iron deficiency anemia during pregnancy may even place a woman's life at risk during childbirth. Iron deficiency anemia and vitamin A deficiency (VAD) may also have significant implications for the newborn infant, born with low stores. VAD may increase morbidity and mortality risk, and affect vision, while anemia may lead to cognitive deficits.

## Iron Deficiency Anemia

Iron deficiency is the most common micronutrient deficiency in the world, affecting more than 3.5 billion people in the developing world (ACC/SCN, 2000). Iron deficiency anemia occurs when iron stores are exhausted and the supply of iron to the tissues is compromised. The prevalence of anemia, defined by low hemoglobin or hematocrit, is commonly used to assess the severity of iron deficiency in a population. The hemoglobin cutoff used to define anemia in pregnant women and preschool children (6 months to 5 years) is $11 \mathrm{~g} / \mathrm{dl}$. The cutoff for nonpregnant women (including lactating women) is $12 \mathrm{~g} / \mathrm{dl}$ of hemoglobin. Iron deficiency anemia is a severe stage of iron deficiency in which hemoglobin (or hematocrit) falls below the cutoffs.

Iron deficiency anemia is a major threat to safe motherhood: it contributes to low birth weight, lowered resistance to infection, poor cognitive development, and decreased work capacity. In children, iron deficiency anemia is associated with impaired cognitive performance, motor development, coordination, language development, and scholastic achievement. Anemia increases morbidity from infectious diseases because it adversely affects several immune mechanisms.

Hemoglobin testing is the primary method of anemia diagnosis. The JPFHS included direct measurement of hemoglobin levels in a subsample of one-fourth of all JPFHS households for children (659 months) and women (15-49 years). Hemoglobin measurements were taken in the field using the HemoCue system (HemoCue AB, Sweden). A drop of capillary blood taken from the finger (or from the heel in the case of infants under 6 months) is drawn in one continuous process directly into a reagentcoated microcuvette that serves as a blood collection device. Excess blood on the outside of the microcuvette is wiped off and the filled microcuvette is inserted into a cuvette holder of a portable, batteryoperated photometer. In less than a minute, hemoglobin concentration is indicated on a digital readout in grams per deciliter.

About 76 percent of eligible children and 74 percent of all women age $15-49$ were tested for hemoglobin levels. The remaining eligible children and women could not be measured because of various reasons such as not being available in the household at the time of interview. Before hemoglobin testing, a separate informed consent statement was read to the respondent explaining that participation in the hemoglobin testing was completely voluntary. This too could have led to refusals of testing by the mother for herself or her child. In some cases measurements were not taken if the children were too sick. However, since missing information is almost uniform by background characteristics for both children and women we can assume that the response rate has not caused any bias in the data.

## Prevalence of Anemia in Children

Table 10.9 shows anemia levels for children 6-59 months. A total of 1,503 children were tested for anemia. The mild form of anemia is more prevalent ( 21 percent) than moderate anemia ( 13 percent), together contributing to the 34 percent of Jordanian children who have any anemia. The severe form of

| Table 10.9 Prevalence of anemia in children |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 6-59 months classified as having anemia, by background characteristics, Jordan 2002 |  |  |  |  |  |
| Percentage of children with anemia |  |  |  |  |  |
| Background characteristic | Any anemia | Mild $(10.0-10.9$ $\mathrm{g} / \mathrm{dl})$ | Moderate <br> (7.0-9.9 <br> $\mathrm{g} / \mathrm{dl}$ ) | Severe (below 7.0 g/dl) | Number of children |
| Age in months |  |  |  |  |  |
| 6-9 | 47.2 | 23.1 | 23.7 | 0.4 | 152 |
| 10-11 | 64.5 | 43.3 | 21.2 | 0.0 | 71 |
| 12-23 | 51.0 | 28.5 | 21.9 | 0.6 | 326 |
| 24-35 | 31.2 | 20.0 | 11.2 | 0.0 | 349 |
| 36-47 | 22.2 | 14.2 | 7.8 | 0.2 | 284 |
| 48-59 | 18.1 | 12.6 | 5.5 | 0.1 | 321 |
| Sex |  |  |  |  |  |
| Male | 37.3 | 23.1 | 14.0 | 0.2 | 788 |
| Female | 30.8 | 17.8 | 12.7 | 0.3 | 715 |
| Birth order ${ }^{2}$ |  |  |  |  |  |
| 1 | 28.6 | 16.3 | 12.3 | 0.0 | 293 |
| 2-3 | 35.3 | 21.6 | 13.3 | 0.4 | 561 |
| 4-5 | 35.1 | 21.2 | 13.6 | 0.3 | 365 |
| 6+ | 35.4 | 22.5 | 12.8 | 0.0 | 258 |
| Birth interval in months ${ }^{1}$ |  |  |  |  |  |
| First birth ${ }^{2}$ | 29.2 | 15.9 | 13.0 | 0.3 | 301 |
| $<24$ | 34.9 | 18.9 | 15.8 | 0.3 | 390 |
| 24-47 | 37.5 | 24.1 | 13.2 | 0.2 | 531 |
| 48+ | 30.6 | 21.8 | 8.8 | 0.0 | 255 |
| Residence |  |  |  |  |  |
| Urban | 32.4 | 20.2 | 12.1 | 0.1 | 1,139 |
| Rural | 39.9 | 21.9 | 17.5 | 0.5 | 364 |
| Region |  |  |  |  |  |
| Central | 34.5 | 21.1 | 13.0 | 0.3 | 968 |
| North | 34.0 | 19.9 | 14.0 | 0.0 | 398 |
| South | 33.1 | 18.9 | 14.1 | 0.2 | 137 |
| Mother's education ${ }^{3}$ |  |  |  |  |  |
| No education | 36.9 | 12.4 | 24.5 | 0.0 | 62 |
| Elementary | 34.2 | 19.4 | 14.6 | 0.2 | 126 |
| Preparatory | 42.6 | 27.7 | 14.9 | 0.0 | 331 |
| Secondary | 31.9 | 18.4 | 13.2 | 0.2 | 617 |
| Higher | 28.9 | 19.9 | 8.6 | 0.5 | 350 |
| Preparatory + secondary | 35.6 | 21.7 | 13.8 | 0.1 | 948 |
| Mother's age ${ }^{3}$ |  |  |  |  |  |
| 15-19 | (58.5) | (29.3) | (29.2) | (0.0) | 26 |
| 20-24 | 35.7 | 18.5 | 16.9 | 0.3 | 240 |
| 25-29 | 36.2 | 23.8 | 12.0 | 0.3 | 447 |
| 30-34 | 35.5 | 19.6 | 15.7 | 0.2 | 441 |
| 35-49 | 27.3 | 18.6 | 8.7 | 0.0 | 349 |
| Children of interviewed mothers | 33.9 | 20.6 | 13.1 | 0.2 | 1,477 |
| Children of non-interviewed mothers ${ }^{4}$ | (50.0) | (18.6) | (31.3) | (0.0) | 26 |
| Total | 34.2 | 20.6 | 13.4 | 0.2 | 1,503 |
| Note: Table is based on children who stayed in the household the night before the interview. Prevalence is adjusted for altitude using CDC formulas (CDC, 1998). Figures in parenthses are based on 25-49 unweighted cases. <br> $\mathrm{g} / \mathrm{dl}=$ grams per deciliter <br> ${ }^{\top}$ Excludes children whose mothers were not interviewed <br> ${ }^{2}$ First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval. <br> ${ }^{3}$ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the household schedules <br> ${ }^{4}$ Includes children whose mothers are deceased |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

anemia ( $<7 \mathrm{gm} / \mathrm{dl}$ ) is not of public health significance in Jordan. Among infants, the highest level of anemia ( 65 percent) is found in the age group of 10-11 months, followed by 51 percent in the age group of 12-23 months. Thereafter, the level of anemia drops to 31 percent in children age 24-35 months, to about 22 percent in children age $36-47$ months; it further decreases to 18 percent in preschool age children (4859 months). UNICEF found that 20 percent of Jordanian children in the same age group were anemic (UNICEF/WHO, 1995).

Mild to moderate anemia is more prevalent among males than females. Prevalence of anemia is also higher among higher birth order children, and highest in children that are born 24-47 months after a previous birth. There is a substantial difference in anemia rates among children by mother's education. The rate of moderate anemia is higher among children born to mothers with no education. In general, children residing in rural areas have higher levels of anemia (both moderate and severe anemia). Also, younger mothers are more likely to have anemic children than older mothers. Regional variations in anemia levels are not significant.

## Prevalence of Anemia in Women and Iron Supplementation During Pregnancy

Table 10.10 shows anemia levels among all women 15-49 years of age. Twenty-six percent of women in Jordan have some degree of anemia. About 20 percent have mild and six percent have moderate forms of anemia. UNICEF found that more than 28 percent of women in their childbearing age were anemic in Jordan (UNICEF/WHO, 1995), a prevalence similar to the one found in the current survey (26 percent).

Age was associated with anemia levels, with women age 45-49 being more anemic than younger women. As was the situation with children, anemia is higher among women living in rural areas than urban. Also, women with no education had higher levels of anemia ( 39 percent) than women with secondary and higher education (23 and 26 percent, respectively). In addition, the proportion of uneducated women with severe anemia is almost ten times greater than that for women with higher education. Prevalence of anemia is slightly higher in the North region compared with the Central or South regions. Again, as in the case of children, severe anemia is not a significant public health problem among women in Jordan (Figure 10. 2).

Among the ever-married women, 29 percent of women in Jordan have some degree of anemia. About 22 percent have mild and 7 percent have moderate forms of anemia.

Pregnant women providing iron to the developing fetus are at greater risk for anemia than nonpregnant women. As expected, pregnant women had higher levels of anemia than lactating women and nonpregnant, nonlactating women. Parity was associated with anemia levels: women with 4 or more children have higher levels of anemia.

Table 10.10 Prevalence of anemia in women
Percentage of all women age 15-49 with anemia, by background characteristics, Jordan 2002

| Background characteristic | Anemia status |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Any anemia | Mild anemia | Moderate anemia | Severe anemia |  |
| ALL WOMEN IN HOUSEHOLD |  |  |  |  |  |
| Age |  |  |  |  |  |
| 15-19 | 20.0 | 15.8 | 4.0 | 0.3 | 632 |
| 20-24 | 26.9 | 22.7 | 4.2 | 0.0 | 484 |
| 25-29 | 25.4 | 20.2 | 5.1 | 0.0 | 515 |
| 30-34 | 28.8 | 19.1 | 8.7 | 1.0 | 467 |
| 35-39 | 27.0 | 21.9 | 4.9 | 0.2 | 358 |
| 40-44 | 31.9 | 20.9 | 10.6 | 0.4 | 261 |
| 45-49 | 33.0 | 26.3 | 6.6 | 0.0 | 183 |
| Residence |  |  |  |  |  |
| Urban | 25.6 | 20.1 | 5.3 | 0.1 | 2,255 |
| Rural | 28.7 | 20.3 | 7.7 | 0.8 | 645 |
| Region |  |  |  |  |  |
| Central | 25.0 | 19.2 | 5.6 | 0.2 | 1,870 |
| North | 29.2 | 22.2 | 6.6 | 0.4 | 768 |
| South | 27.0 | 21.2 | 5.6 | 0.2 | 262 |
| Educational level attended ${ }^{1}$ |  |  |  |  |  |
| No education | 39.0 | 23.6 | 13.4 | 2.0 | 129 |
| Elementary | 33.6 | 24.8 | 8.4 | 0.3 | 288 |
| Preparatory | 26.5 | 20.9 | 5.2 | 0.3 | 526 |
| Secondary | 23.3 | 18.5 | 4.8 | 0.1 | 1,275 |
| Higher | 26.2 | 20.1 | 5.9 | 0.2 | 681 |
| Preparatory + secondary | 24.3 | 19.2 | 4.9 | 0.2 | 1,801 |
| Total | 26.3 | 20.2 | 5.8 | 0.3 | 2,900 |
| INTERVIEWED EVER-MARRIED WOMEN |  |  |  |  |  |
| Children ever born |  |  |  |  |  |
| None | 22.1 | 16.8 | 5.0 | 0.3 | 148 |
| 1 | 24.8 | 18.0 | 6.8 | 0.0 | 200 |
| 2-3 | 27.6 | 22.4 | 5.0 | 0.2 | 530 |
| 4-5 | 32.6 | 25.2 | 7.3 | 0.2 | 468 |
| 6+ | 31.1 | 22.9 | 8.3 | 0.0 | 504 |
| Pregnancy/breastfeeding status |  |  |  |  |  |
| Pregnant | 37.0 | 23.5 | 13.4 | 0.1 | 228 |
| Breastfeeding | 27.4 | 23.5 | 3.9 | 0.0 | 386 |
| Neither | 28.2 | 21.8 | 6.3 | 0.2 | 1,236 |
| Using IUD |  |  |  |  |  |
| Yes | 30.1 | 21.2 | 8.8 | 0.0 | 407 |
| No | 28.8 | 22.6 | 6.0 | 0.2 | 1,442 |
| Total | 29.1 | 22.3 | 6.7 | 0.1 | 1,849 |

Note: Table is based on women who stayed in the household the night before the interview. Prevalence is adjusted for altitude using CDC formulas (CDC, 1998). Women with $<7.0 \mathrm{~g} / \mathrm{dl}$ (grams per deciliter) of hemoglobin have severe anemia, women with $7.0-9.9 \mathrm{~g} / \mathrm{dl}$ have moderate anemia, and pregnant women with $10.0-10.9 \mathrm{~g} / \mathrm{dl}$ and nonpregnant women with $10.0-11.9 \mathrm{~g} / \mathrm{dl}$ have mild anemia.
${ }^{1}$ For women who are not interviewed, information is taken from the Household Questionnaire.

Figure 10.2 Prevalence of Anemia in Children and Women


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Table 10.11 shows the prevalence of anemia for children according to the anemia status of their mothers. Among children of mothers with moderate anemia, about 2 percent have severe anemia and 19 percent have moderate anemia. Similarly, among children of mothers with mild anemia, 22 percent have mild and 17 percent have moderate levels of anemia.

Table 10.11 Prevalence of anemia in children by anemia status of mother
Percentage of children age 6-59 months classified as having anemia, by anemia status of mother, Jordan 2002

|  | Anemia status of child |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Anemia status of mother | Any <br> anemia | Mild <br> anemia | Moderate <br> anemia | Severe <br> anemia | of <br> children |
| Any anemia | 38.6 | 20.9 | 17.3 | 0.4 | 438 |
| Anemia status | 38.9 | 22.1 | 16.6 | 0.1 | 338 |
| Mild anemia <br> Moderate anemia | 37.8 | 16.9 | 19.4 | 1.5 | 101 |
| Total | 34.1 | 20.8 | 13.0 | 0.2 | 1,460 |

Note: Table is based on children who stayed in the household the night before the interview. Prevalence is adjusted for altitude using CDC formulas (CDC, 1998). Women with $<7.0 \mathrm{~g} / \mathrm{dl}$ (grams per deciliter) of hemoglobin have severe anemia, women with 7.0-9.9 g/dl have moderate anemia, and pregnant women with 10.0-10.9 $\mathrm{g} / \mathrm{dl}$ and nonpregnant women with 10.0-11.9 g/dl have mild anemia.

Pregnant women are the highest risk group for anemia, as the gap between the requirements for iron and intake during pregnancy cannot be filled by diet alone. This is the group most in need of supplementation. Twenty-eight percent of women did not consume iron supplements during pregnancy (Table 10.12). About one in six women took iron supplements for two months during pregnancy; 9 percent took them for three months; and 46 percent took iron supplements for more than three months during pregnancy.

Table 10.12 Intake of iron supplements during pregnancy
Percent distribution of women with a birth in the five years preceding the survey who took iron tablets or syrup for specific number of days, by background characteristics, Jordan 2002

| Background characteristic | Number of days iron tablets/ syrup taken during pregnancy |  |  |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None | <60 | 60-89 | 90+ | Don't know/ missing | Total |  |
| Age at birth |  |  |  |  |  |  |  |
| <20 | 30.6 | 16.1 | 5.9 | 47.4 | 0.0 | 100.0 | 171 |
| 20-24 | 24.8 | 18.5 | 10.4 | 45.4 | 0.9 | 100.0 | 799 |
| 25-29 | 27.6 | 15.2 | 8.0 | 47.3 | 1.9 | 100.0 | 1,148 |
| 30-34 | 27.7 | 13.8 | 9.2 | 48.6 | 0.7 | 100.0 | 959 |
| 35-49 | 29.3 | 16.9 | 10.3 | 42.5 | 1.0 | 100.0 | 667 |
| Number of children ever born |  |  |  |  |  |  |  |
| 1 | 18.8 | 17.2 | 8.9 | 54.8 | 0.3 | 100.0 | 555 |
| 2-3 | 24.9 | 17.1 | 8.8 | 48.1 | 1.1 | 100.0 | 1,338 |
| 4-5 | 29.0 | 15.6 | 9.4 | 44.5 | 1.6 | 100.0 | 1,011 |
| 6+ | 35.5 | 13.6 | 9.5 | 40.3 | 1.1 | 100.0 | 839 |
| Residence |  |  |  |  |  |  |  |
| Urban | 24.9 | 14.6 | 9.1 | 50.1 | 1.3 | 100.0 | 2,931 |
| Rural | 36.6 | 20.6 | 9.3 | 32.8 | 0.6 | 100.0 | 812 |
| Region |  |  |  |  |  |  |  |
| Central | 22.6 | 13.9 | 8.3 | 53.8 | 1.5 | 100.0 | 2,378 |
| North | 34.6 | 20.4 | 11.0 | 33.4 | 0.6 | 100.0 | 1,001 |
| South | 39.8 | 16.5 | 9.5 | 33.8 | 0.5 | 100.0 | 364 |
| Educational level attended |  |  |  |  |  |  |  |
| No education | 48.1 | 17.3 | 6.7 | 25.7 | 2.3 | 100.0 | 149 |
| Elementary | 42.3 | 12.2 | 9.6 | 35.7 | 0.2 | 100.0 | 306 |
| Preparatory | 36.3 | 15.3 | 7.2 | 39.6 | 1.5 | 100.0 | 741 |
| Secondary | 25.3 | 16.7 | 9.2 | 47.6 | 1.2 | 100.0 | 1,539 |
| Higher | 16.6 | 16.1 | 10.7 | 55.7 | 0.9 | 100.0 | 1,008 |
| Preparatory + secondary | 28.9 | 16.3 | 8.5 | 45.0 | 1.3 | 100.0 | 2,280 |
| Total | 27.5 | 15.9 | 9.1 | 46.4 | 1.1 | 100.0 | 3,743 |

First-time mothers took iron tablets or syrup more often than mothers who have had 2 or more children. Women residing in urban areas and in the Central region (including Amman) were more likely to take iron supplements for 90 days or more. Also, mother's education had a positive impact on taking iron supplements during pregnancy for three months or more.

## Vitamin A

Vitamin A is an essential micronutrient for the normal functioning of the visual system, for growth and development, for maintenance of epithelial cellular integrity, for immune function, and for reproduction. VAD occurs when body stores are depleted to the extent that physiological functions are impaired. At first, the integrity of epithelial barriers is impaired and the immune function system becomes compromised, followed by impairment of the visual system. Consequently, there is increased severity of infections and an increased risk of death, especially among children. Improving the vitamin A status of young children reduces mortality rates. VAD is linked to the nature of foods available and feeding practices, rather than to geochemical or other conditions affecting whole populations of geographic areas.

Table 10.13 shows the percentage of children less than three years of age who consumed foods rich in vitamin A in the seven days preceding the survey. Thirty-eight percent of children consumed foods rich in vitamin A and vegetables. Consumption of foods rich in vitamin A increases with age. Children who are not breastfed consume more foods rich in vitamin A than breastfed children. Consumption is highest in urban areas and in the Central region of Jordan. Mother's education and mother's age are strongly associated with increased intake of foods rich in vitamin A among children.

| Table 10.13 Intake of fruits and vegetables rich in vitamin A among children |  |  |
| :---: | :---: | :---: |
| Percentage of youngest children under age three living with the mother who consumed fruits and vegetables rich in vitamin A in the seven days preceding the survey, by background characteristics, Jordan 2002 |  |  |
| Background characteristic | Consumed fruits and vegetables rich in vitamin $A^{1}$ | Number <br> of children |
| Age in months |  |  |
| <6 | 2.2 | 483 |
| 6-9 | 26.7 | 437 |
| 10-11 | 41.7 | 218 |
| 12-23 | 46.7 | 1,020 |
| 24-35 | 55.9 | 712 |
| Sex |  |  |
| Male | 39.3 | 1,441 |
| Female | 36.8 | 1,430 |
| Birth order |  |  |
| 1 | 35.1 | 496 |
| 2-3 | 39.7 | 1,060 |
| 4-5 | 39.1 | 728 |
| 6+ | 36.3 | 586 |
| Breastfeeding status |  |  |
| Breastfeeding | 22.4 | 1,271 |
| Not breastfeeding | 50.4 | 1,599 |
| Residence |  |  |
| Urban | 40.1 | 2,249 |
| Rural | 30.8 | 622 |
| Region |  |  |
| Central | 40.5 | 1,820 |
| North | 33.6 | 769 |
| South | 34.7 | 282 |
| Mother's education |  |  |
| No education | 28.5 | 103 |
| Elementary | 36.1 | 228 |
| Preparatory | 35.4 | 563 |
| Secondary | 35.5 | 1,225 |
| Higher | 46.1 | 752 |
| Preparatory + secondary | 35.5 | 1,788 |
| Mother's age at birth |  |  |
| <20 | 28.4 | 148 |
| 20-24 | 38.0 | 670 |
| 25-29 | 40.2 | 871 |
| 30-34 | 36.5 | 714 |
| 35-49 | 39.5 | 468 |
| Total | 38.1 | 2,871 |
| ${ }^{1}$ Includes pumpkin, carrots, red sweet potatoes, green leafy vegetables, apricot, palm nuts, yellow melon, and other locally grown fruits and vegetables that are rich in vitamin A |  |  |

## HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS

Acquired immune deficiency syndrome (AIDS) is caused by a human immunodeficiency virus (HIV) that weakens the immune system, making the body susceptible to and unable to recover from other diseases.

HIV/AIDS is a pandemic with cases reported from every country. The current estimate of the total number of cases of HIV infection among adults worldwide is approximately 36.1 million, including 1.4 million children. The United Nations Program on AIDS (UNAIDS) estimates that approximately 17.5 million adults and 4.3 million children infected with HIV have died since the beginning of the epidemic (UNAIDS/WHO, 2000).

The first case of AIDS reported in Jordan was in 1986; by November 2002, there were about 1,000 reported HIV infections, and a total of 313 cases of HIV had been registered with the Jordanian Ministry of Health. As surveillance systems are not fully developed, and there exists pervasive fear of and stigma against HIV/AIDS in Jordan, it is believed that the number of HIV-infected individuals residing in Jordan exceeds the number of officially registered cases (USAID, 2003). According to available data, however, it is possible to discern that transmission occurs primarily among those age 25-44 years; the modes of transmission are largely via heterosexual contact ( 45 percent) and via blood or blood products (USAID, 2003).

In late 2001, Jordan launched a National AIDS Program within the Ministry of Health and is working with international bodies such as UNAIDS and the World Health Organization to combat the threat of AIDS in Jordan.

The JPFHS 2002 collected information from women on HIV/AIDS, as well as information about knowledge of symptoms of sexually transmitted infections (STIs), which are known to be important predisposing factors for HIV epidemics. This chapter summarizes information on knowledge, perceptions, and behaviors at the national level and within geographic and socioeconomic subgroups of the population.

### 11.1 Knowledge of HIV/AIDS and Methods of HIV Prevention

Table 11.1 shows the percentage of women who have heard of AIDS by background characteristics. Almost all of the respondents ( 97 percent) report that they have heard of HIV/AIDS. At least 95 percent of women of all background characteristics have heard of HIV/AIDS with the exception of women with no education ( 80 percent) or only elementary education ( 91 percent), women who live in the South region and rural areas ( 94 percent), and widowed women ( 93 percent).

To evaluate the level of knowledge about HIV/AIDS, respondents who had heard of the infection were asked whether there is anything a person can do to avoid getting infected with the virus that causes AIDS. The data show that although almost all women have heard of HIV/AIDS, only 75 percent of women believe there is a way to avoid HIV/AIDS, 8 percent believe there is no way to avoid AIDS, and 18 percent do not know if there is a way to avoid AIDS (Table 11.2). This indicates a decline in public understanding of HIV/AIDS from the JPFHS 1997, which found that less than 2 percent of women believed there was no way to avoid AIDS. Young women, residents of rural areas, and those who are not currently married are less likely to believe there is a way to avoid getting HIV/AIDS. There is a strong positive correlation between educational background and the belief that there is a way to avoid HIV/AIDS: 32 percent of those with no education believe that there is a way to avoid HIV, while 94 percent of those who are educated beyond secondary education believe the same.

| Table 11.1 Knowledge of HIV/AIDS |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of all ever-married women who have heard of HIV/AIDS and percentage who believe there is a way to avoid HIV/AIDS, by background characteristics, Jordan 2002 |  |  |  |
| Background characteristic | Has heard of HIV/ AIDS | Believes there is a way to avoid HIV/AIDS | Number <br> of <br> women |
| Age |  |  |  |
| 15-19 | 97.0 | 51.6 | 158 |
| 20-24 | 98.5 | 70.5 | 728 |
| 25-29 | 98.5 | 75.7 | 1,175 |
| 30-39 | 98.1 | 78.4 | 2,424 |
| 40-49 | 94.8 | 73.1 | 1,520 |
| Marital status |  |  |  |
| Married | 97.6 | 75.3 | 5,706 |
| Divorced | 94.8 | 67.6 | 130 |
| Widowed | 93.2 | 66.0 | 170 |
| Residence |  |  |  |
| Urban | 98.2 | 76.6 | 4,799 |
| Rural | 94.2 | 67.9 | 1,207 |
| Region |  |  |  |
| Central | 98.2 | 74.9 | 3,898 |
| North | 96.6 | 76.2 | 1,542 |
| South | 93.9 | 71.1 | 566 |
| Educational level attended |  |  |  |
| No education | 80.0 | 31.8 | 363 |
| Elementary | 91.0 | 48.3 | 689 |
| Preparatory | 98.9 | 67.4 | 1,231 |
| Secondary | 99.6 | 81.5 | 2,247 |
| Higher | 100.0 | 94.1 | 1,476 |
| Preparatory + secondary | 99.3 | 76.5 | 3,478 |
| Total | 97.4 | 74.9 | 6,006 |

If respondents reported that HIV infection could be prevented, they were asked to indicate the ways of prevention. Two types of questions were asked about means to prevent HIV infection. First, an open-ended question was asked and respondents were allowed to indicate any means that they know without prompting. Next, women were asked specific questions on whether condom use, having only one sexual partner, and abstaining from sex can reduce their chances of becoming infected with HIV.

Table 11.2 shows the percentage of all women who spontaneously mentioned specific ways to avoid contracting the disease. The most frequently reported means to prevent HIV/AIDS is avoidance of blood transfusions (41 percent), with limiting sex to one partner being the next most frequently mentioned way to prevent HIV ( 39 percent). Fifteen percent of women believed that abstinence from sex and avoidance of injections would help to avoid AIDS, and 14 percent mentioned avoidance of sex with prostitutes; less than one percent spontaneously mentioned condoms as a means of avoiding HIV.

Table 11.2 Knowledge of ways to avoid HIV/AIDS
Percentage of all ever-married women who spontaneously mentioned ways to avoid HIV/AIDS, Jordan 2002

| Ways to avoid HIV/AIDS | Percentage <br> of <br> women |
| :--- | :---: |
| Does not know of AIDS or if AIDS can be avoided | 17.6 |
|  |  |
| Believes no way to avoid AIDS | 7.6 |
|  |  |
| Does not know specific way ${ }^{1}$ |  |
|  |  |
| Abstain from sex | 14.5 |
| Use condoms | 0.8 |
| Limit number of sexual partners | 2.9 |
| Limit sex to one partner/stay faithful to one partner | 39.3 |
| Avoid sex with prostitutes | 14.1 |
| Avoid sex with persons who have many partners | 11.7 |
| Avoid sex with homosexuals | 6.1 |
| Avoid sex with persons who inject drugs intravenously | 6.1 |
| Avoid blood transfusions | 41.1 |
| Avoid injections | 14.6 |
| Avoid sharing razor/ blades | 2.5 |
| Avoid kissing | 2.0 |
| Avoid mosquito bites | 0.1 |
| Seek protection from traditional healer | 0.2 |
| Other | 6.7 |
| Number of women | 6,006 |

${ }^{1}$ Believes there is something a person can do to avoid AIDS, but cannot spontaneously mention any specific way

AIDS prevention programs focus their messages and efforts on three important aspects of behavior: condom use, limiting the number of sexual partners/staying faithful to one partner, and delaying the first sexual intercourse in young persons (i.e., abstinence). Table 11.3 presents the results on these key aspects. It should be noted that this table is based on prompted questions on these three aspects of AIDSprevention behavior, while Table 11.2 is based on spontaneous answers. In the first three columns of Table 11.3, the percentage of women who reported 0,1 , or 2-3 of these ways to avoid AIDS is shown. Overall, 72 percent of women were able to mention spontaneously or to recognize at least one programmatically important way to avoid HIV/AIDS (Figure 11.1).

The table shows the level of awareness of ways to prevent HIV/AIDS by education and by place of residence. There is a strong relationship between education and knowledge of ways to prevent HIV: only 29 percent of women with no education know at least one way to avoid AIDS, versus 92 percent of women with higher education. More urban than rural residents are aware of the practices of safer sexual behavior.

Table 11.3 Knowledge of programmatically important ways to avoid HIV/AIDS
Percent distribution of all ever-married women by knowledge of three programmatically important ways to avoid HIV/AIDS, and percentage of women who know of two specific ways to avoid HIV/AIDS, according to background characteristics, Jordan 2002

| Background characteristic | Knowledge of programmatically important ways to avoid HIV/AIDS |  |  |  | Specific ways to avoid HIV/AIDS |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None ${ }^{1}$ | One way | Two or three ways | Total | Use condoms | Limit number of sexual partners ${ }^{2}$ |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 52.3 | 23.6 | 24.1 | 100.0 | 19.3 | 45.5 | 158 |
| 20-24 | 33.1 | 32.2 | 34.7 | 100.0 | 29.2 | 64.4 | 728 |
| 25-29 | 27.7 | 32.6 | 39.7 | 100.0 | 34.2 | 69.7 | 1,175 |
| 30-39 | 24.2 | 34.3 | 41.5 | 100.0 | 35.6 | 73.2 | 2,424 |
| 40-49 | 29.5 | 32.0 | 38.5 | 100.0 | 33.9 | 67.8 | 1,520 |
| Marital status |  |  |  |  |  |  |  |
| Married | 27.5 | 33.1 | 39.4 | 100.0 | 34.0 | 69.9 | 5,706 |
| Divorced | 36.0 | 34.5 | 29.5 | 100.0 | 28.5 | 58.3 | 130 |
| Widowed | 39.4 | 24.6 | 36.0 | 100.0 | 28.2 | 58.4 | 170 |
| Residence |  |  |  |  |  |  |  |
| Urban | 26.4 | 33.5 | 40.0 | 100.0 | 34.4 | 71.2 | 4,799 |
| Rural | 34.4 | 30.2 | 35.4 | 100.0 | 30.9 | 62.2 | 1,207 |
| Region |  |  |  |  |  |  |  |
| Central | 28.5 | 32.8 | 38.7 | 100.0 | 33.2 | 68.8 | 3,898 |
| North | 25.9 | 34.0 | 40.2 | 100.0 | 35.6 | 72.3 | 1,542 |
| South | 31.0 | 30.1 | 38.9 | 100.0 | 32.2 | 65.6 | 566 |
| Educational level attended |  |  |  |  |  |  |  |
| No education | 71.1 | 14.5 | 14.3 | 100.0 | 10.4 | 27.5 | 363 |
| Elementary | 53.5 | 21.5 | 25.0 | 100.0 | 22.0 | 44.9 | 689 |
| Preparatory | 35.5 | 30.8 | 33.7 | 100.0 | 27.1 | 62.0 | 1,231 |
| Secondary | 22.3 | 34.7 | 43.1 | 100.0 | 37.0 | 74.6 | 2,247 |
| Higher | 8.1 | 41.6 | 50.3 | 100.0 | 45.4 | 89.2 | 1,476 |
| Preparatory + secondary | 27.0 | 33.3 | 39.8 | 100.0 | 33.5 | 70.2 | 3,478 |
| Total | 28.0 | 32.8 | 39.1 | 100.0 | 33.7 | 69.4 | 6,006 |

Note: Programmatically important ways are abstaining from sex, using condoms, and limiting the number of sexual partners. Abstinence from sex is measured from a spontaneous response only, and using condoms and limiting the number of sexual partners is measured from spontaneous and probed responses.
${ }^{1}$ Those who have not heard of HIV/AIDS or do not know of any programmatically important ways to avoid HIV/AIDS.
${ }^{2}$ Refers to limiting number of sexual partners and limiting sex to one partner/staying faithful to one partner.

Figure 11.1 Knowledge of at Least One Programmaticaly Important Way to Avoid HIV/AIDS


Note: Programmatically important ways to avoid HIV/AIDS include
sexual abstinence, staying faithful to one partner, and condom use.
JPFHS 2002

Respondents who had heard of HIV/AIDS were asked a number of questions on their knowledge of HIV/AIDS-related issues. The information is presented in Table 11.4. When asked whether a healthylooking person can have the AIDS virus, only 46 percent of women responded in the affirmative. Young women, residents of rural areas, and those with lower levels of education were less likely to respond to this question correctly. There is significant variation by region, with those in the Central region ( 50 percent) more aware of the fact that healthy-looking people can be infected with HIV than those living in the North or South regions ( 38 percent). It is surprising that in a country with such a high level of awareness of HIV, the majority of women do not know whether a healthy-looking person can have HIV. Five percent of respondents reported personally knowing someone who had AIDS or who had died of AIDS.

The JPFHS 2002 asked respondents whether they thought the AIDS virus could be transmitted from mother to child during pregnancy, during delivery, and during breastfeeding (Table 11.4). The results indicate that while a little over two-thirds ( 70 percent) know that HIV can be transmitted from mother to child during pregnancy, only about half know that the virus can be transmitted during delivery ( 55 percent), and fewer know that it can be transmitted through breastfeeding ( 43 percent).

| Table 11.4 Knowledge of HIV/AIDS-related issues |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all ever-married women who gave specific responses to questions on various HIV/AIDS-related issues, according to background characteristics, Jordan 2002 |  |  |  |  |  |  |
|  | Percentage who say a healthylooking person can have the AIDS virus | Percentage who say HIV/AIDS can be transmitted from a mother to a child: |  |  | Percentage who know someone personally who has AIDS or has died of AIDS | Number of women |
| Background characteristic |  | During delivery | During pregnancy | Through breastfeeding |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 35.3 | 46.0 | 65.8 | 58.0 | 3.7 | 158 |
| 20-24 | 42.3 | 48.8 | 66.9 | 48.8 | 3.1 | 728 |
| 25-29 | 48.4 | 49.5 | 67.6 | 40.0 | 5.5 | 1,175 |
| 30-39 | 48.1 | 58.9 | 73.0 | 41.3 | 4.3 | 2,424 |
| 40-49 | 43.0 | 55.6 | 69.4 | 40.8 | 4.6 | 1,520 |
| Marital status |  |  |  |  |  |  |
| Married | 45.6 | 54.4 | 70.2 | 41.9 | 4.4 | 5,706 |
| Divorced | 57.5 | 55.7 | 65.1 | 46.1 | 6.0 | 130 |
| Widowed | 43.0 | 60.7 | 70.2 | 52.5 | 4.6 | 170 |
| Residence |  |  |  |  |  |  |
| Urban | 47.6 | 56.2 | 71.6 | 41.9 | 4.4 | 4,799 |
| Rural | 38.9 | 48.4 | 64.2 | 43.9 | 4.8 | 1,207 |
| Region |  |  |  |  |  |  |
| Central | 49.8 | 57.1 | 71.9 | 42.9 | 4.6 | 3,898 |
| North | 38.5 | 49.9 | 66.7 | 40.6 | 4.5 | 1,542 |
| South | 38.4 | 51.0 | 67.4 | 42.6 | 3.4 | 566 |
| Educational level attended |  |  |  |  |  |  |
| No education | 23.6 | 36.3 | 45.0 | 34.0 | 2.9 | 363 |
| Elementary | 32.3 | 45.3 | 59.0 | 43.0 | 5.1 | 689 |
| Preparatory | 37.4 | 50.7 | 66.3 | 44.5 | 4.7 | 1,231 |
| Secondary | 48.2 | 55.4 | 73.1 | 44.9 | 4.2 | 2,247 |
| Higher | 61.1 | 65.6 | 80.2 | 38.2 | 4.8 | 1,476 |
| Preparatory + secondary | y 44.3 | 53.8 | 70.7 | 44.7 | 4.3 | 3,478 |
| Total | 45.8 | 54.6 | 70.1 | 42.3 | 4.5 | 6,006 |

Currently married women were also asked whether they had ever discussed HIV/AIDS prevention with their husband (Table 11.5), since discussing HIV prevention with one's partner is an important aspect of preventive behavior. Again, young, rural, and less educated women were least likely to have talked to their spouses about this important issue. Overall, only about one-fourth of respondents had broached the topic with their husband. Those most likely to have done so were women age 30-49 (30 percent), and women who had attained education beyond secondary school ( 35 percent).

Table 11.5 Discussion of HIV/AIDS with husband
Percent distribution of all ever-married women who are currently married or living with a partner by whether they ever discussed HIV/AIDS prevention with their husband, according to background characteristics, Jordan

| Background characteristic | Discussed <br> HIV/AIDS <br> prevention <br> with <br> husband | Never discussed HIV/AIDS prevention with husband | Has not heard of AIDS | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |
| 15-19 | 10.4 | 86.5 | 3.1 | 100.0 | 154 |
| 20-24 | 15.8 | 82.7 | 1.5 | 100.0 | 710 |
| 25-29 | 23.2 | 75.2 | 1.6 | 100.0 | 1,136 |
| 30-39 | 30.0 | 68.1 | 1.9 | 100.0 | 2,348 |
| 40-49 | 29.7 | 65.8 | 4.6 | 100.0 | 1,358 |
| Residence |  |  |  |  |  |
| Urban | 27.0 | 71.4 | 1.6 | 100.0 | 4,546 |
| Rural | 23.5 | 70.9 | 5.6 | 100.0 | 1,160 |
| Region |  |  |  |  |  |
| Central | 26.5 | 71.8 | 1.6 | 100.0 | 3,683 |
| North | 26.2 | 70.6 | 3.2 | 100.0 | 1,480 |
| South | 24.6 | 69.4 | 6.0 | 100.0 | 542 |
| Educational level attended |  |  |  |  |  |
| No education | 11.9 | 67.7 | 20.3 | 100.0 | 324 |
| Elementary | 15.9 | 76.1 | 8.0 | 100.0 | 638 |
| Preparatory | 23.6 | 75.3 | 1.1 | 100.0 | 1,144 |
| Secondary | 27.3 | 72.2 | 0.4 | 100.0 | 2,159 |
| Higher | 34.6 | 65.4 | 0.0 | 100.0 | 1,441 |
| Preparatory + secondary | 26.0 | 73.3 | 0.7 | 100.0 | 3,303 |
| Total | 26.3 | 71.3 | 2.4 | 100.0 | 5,706 |

### 11.2 Social Aspects of HIV/AIDS

Social aspects of HIV/AIDS include, among others, negative attitudes toward people living with AIDS. The stigma is related to the public's perception of HIV/AIDS as associated with marginalized groups such as injecting drug users, prostitutes, and homosexuals. The stigma is sometimes expressed by open discrimination, which is of concern because it affects HIV/AIDS prevention efforts. Fear of being stigmatized has been implicated as an important barrier to HIV-testing and programs aimed at assisting persons living with AIDS and their families.

Table 11.6 shows that among women who have heard of AIDS, 29 percent would not be willing to care for a relative with AIDS at home. There is some minor variation by background characteristics; however, the most striking differences are by region: 38 percent of women in the North region would not take care of a relative sick with AIDS, compared with about 25 percent of women in the rest of the country. There is little difference by age, education, or residence.

Respondents also were asked "If a member of your family got infected with the virus that causes AIDS, would you want it to remain secret or not?" Table 11.6 also shows the proportion of women who have heard of AIDS who believe that the HIV-positive status of a family member should be kept secret. Overall, 41 percent believe the status should be kept secret. There is no difference according to urban or rural residence ( 41 percent), and those with the highest level of education are most likely to advocate keeping the HIV-positive status secret ( 45 percent).

| Table 11.6 Social aspects of HIV/AIDS |  |  |  |
| :---: | :---: | :---: | :---: |
| Among all ever-married women who have heard of AIDS, percentage providing specific responses to questions on social aspects of HIV/AIDS, by background characteristics, Jordan 2002 |  |  |  |
|  Be <br> pos <br> a fa <br> Background <br> characteristic sho | Believes HIVpositive status of family member should be kept secret | Not willing to care for relative with AIDS at home | Number of women |
| Age |  |  |  |
| 15-19 | 38.3 | 28.1 | 153 |
| 20-24 | 39.5 | 25.3 | 717 |
| 25-29 | 42.0 | 29.7 | 1,158 |
| 30-39 | 43.1 | 29.3 | 2,378 |
| 40-49 | 37.4 | 29.1 | 1,442 |
| Marital status |  |  |  |
| Married | 41.0 | 29.0 | 5,566 |
| Divorced | 41.6 | 25.8 | 123 |
| Widowed | 36.2 | 25.4 | 159 |
| Residence |  |  |  |
| Urban | 40.9 | 28.4 | 4,712 |
| Rural | 40.9 | 30.5 | 1,137 |
| Region |  |  |  |
| Central | 40.6 | 25.7 | 3,827 |
| North | 41.6 | 38.0 | 1,489 |
| South | 40.9 | 25.3 | 532 |
| Educational level attended |  |  |  |
| No education | 39.0 | 25.5 | 290 |
| Elementary | 37.6 | 28.6 | 627 |
| Preparatory | 36.4 | 28.7 | 1,217 |
| Secondary | 41.8 | 30.1 | 2,238 |
| Higher | 45.0 | 27.7 | 1,476 |
| Preparatory + secondary | dary 39.9 | 29.6 | 3,455 |
| Total | 40.9 | 28.8 | 5,848 |

### 11.3 Knowledge of Symptoms of Sexually Transmitted Infections

Sexually transmitted infections (STIs) are important predisposing factors of HIV/AIDS transmission. As such, the presence of STIs in a population increases the likelihood of the occurrence of HIV. AIDS prevention programs should therefore also address the prevention and treatment of STIs. Additional questions were included in the JPFHS to assess the level of awareness of STIs and knowledge of the symptoms of STIs among both men and women.

Table 11.7 shows that 73 percent of women had no knowledge of sexually transmitted infections. As expected, the youngest respondents, rural residents, and women with lower levels of education are more likely than others to know nothing about STIs. Only 15 percent of women were able to name at least one symptoms of an STI in a man; the same proportion was able to name at least one symptom in a woman.

Table 11.7 Knowledge of symptoms of STIs
Percent distribution of all ever-married women by knowledge of symptoms associated with sexually transmitted diseases (STIs) in a man and in a woman, according to background characteristics, Jordan 2002

| Background characteristic | No knowledge of STIs | Knowledge of symptoms of STIs in a man |  |  | Knowledge of symptoms of STIs in a woman |  |  | Number <br> of <br> women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | No symptoms mentioned | One symptom mentioned | Two or more symptoms mentioned | No symptoms mentioned | One symptom mentioned | Two or more symptoms men- <br> tioned |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 84.3 | 5.6 | 3.6 | 6.5 | 6.2 | 2.6 | 6.9 | 158 |
| 20-24 | 77.1 | 10.3 | 3.3 | 9.3 | 10.6 | 3.1 | 9.2 | 728 |
| 25-29 | 78.3 | 10.6 | 3.3 | 7.8 | 10.6 | 3.9 | 7.2 | 1,175 |
| 30-39 | 68.7 | 15.0 | 5.4 | 10.9 | 14.1 | 5.0 | 12.3 | 2,424 |
| 40-49 | 70.9 | 13.3 | 5.6 | 10.2 | 12.1 | 4.7 | 12.2 | 1,520 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 71.9 | 13.1 | 4.9 | 10.1 | 12.6 | 4.5 | 11.0 | 5,706 |
| Divorced | 84.3 | 8.8 | 1.0 | 5.9 | 7.4 | 0.6 | 7.7 | 130 |
| Widowed | 85.3 | 8.6 | 2.3 | 3.9 | 6.3 | 3.0 | 5.4 | 170 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 70.4 | 13.9 | 5.1 | 10.7 | 13.2 | 4.7 | 11.7 | 4,799 |
| Rural | 81.4 | 9.0 | 3.2 | 6.3 | 8.7 | 3.1 | 6.8 | 1,207 |
| Region |  |  |  |  |  |  |  |  |
| Central | 69.3 | 14.2 | 5.8 | 10.6 | 13.5 | 5.1 | 12.1 | 3,898 |
| North | 79.5 | 10.0 | 2.3 | 8.3 | 9.7 | 2.7 | 8.1 | 1,542 |
| South | 76.1 | 11.5 | 3.6 | 8.7 | 11.0 | 4.0 | 8.8 | 566 |
| Educational level attended |  |  |  |  |  |  |  |  |
| No education | 97.0 | 2.2 | 0.6 | 0.2 | 1.8 | 0.8 | 0.4 | 363 |
| Elementary | 92.9 | 3.6 | 0.8 | 2.7 | 3.4 | 0.9 | 2.8 | 689 |
| Preparatory | 86.0 | 7.4 | 2.9 | 3.7 | 7.0 | 2.3 | 4.6 | 1,231 |
| Secondary | 73.6 | 12.0 | 4.5 | 9.9 | 12.6 | 3.5 | 10.3 | 2,247 |
| Higher | 44.3 | 25.8 | 9.4 | 20.5 | 22.8 | 10.0 | 22.8 | 1,476 |
| Preparatory + secondary | 78.0 | 10.4 | 3.9 | 7.7 | 10.6 | 3.1 | 8.3 | 3,478 |
| Total | 72.6 | 12.9 | 4.7 | 9.8 | 12.3 | 4.4 | 10.8 | 6,006 |

### 11.4 KNowledge and Use Of Condoms

In Chapter 5, the data indicated that 90 percent of ever-married women know about male condoms. Because of the important role that the condom plays in combating the transmission of HIV, respondents were asked if they knew where condoms could be obtained.

Table 11.8 shows that 78 percent of women knew about condoms and could cite a place where they could obtain a condom. Knowledge of a source for condoms follows expected patterns by background characteristics, with the exception being that women in the North region were somewhat more likely to know of a source for condoms than women in the Central and South regions ( 82 percent compared with 77 and 75 percent, respectively). Knowledge of where to obtain condoms does not seem to translate into condom use in Jordan: among women who had sexual intercourse in the past year, only 4 percent say that they used a condom during the last sexual intercourse with their partner (Table 11.9). Women residing in urban areas, living in the Central region, with higher education, or age 25-39 are somewhat more likely than other women to have used condoms.

| Percentage of ever-married women who know a source for male condoms, by background characteristics, Jordan 2002 |  |  |
| :---: | :---: | :---: |
| Background characteristic | Knows source for male condoms | Number of women |
| Age |  |  |
| 15-19 | 56.2 | 158 |
| 20-24 | 77.1 | 728 |
| 25-29 | 80.1 | 1,175 |
| 30-39 | 82.2 | 2,424 |
| 40-49 | 73.4 | 1,520 |
| Marital status |  |  |
| Married | 79.3 | 5,706 |
| Divorced | 68.0 | 130 |
| Widowed | 52.6 | 170 |
| Residence |  |  |
| Urban | 80.0 | 4,799 |
| Rural | 71.4 | 1,207 |
| Region |  |  |
| Central | 77.3 | 3,898 |
| North | 81.7 | 1,542 |
| South | 75.3 | 566 |
| Educational level attended |  |  |
| No education | 43.7 | 363 |
| Elementary | 68.1 | 689 |
| Preparatory | 75.0 | 1,231 |
| Secondary | 81.8 | 2,247 |
| Higher | 88.8 | 1,476 |
| Preparatory + secondary | 79.4 | 3,478 |
| Total | 78.3 | 6,006 |

## Table 11.9 Use of condoms

Among all ever-married women who had sexual intercourse in the past year, percentage who used a condom during last sexual intercourse, by background characteristics, Jordan 2002

|  | Percentage <br> who used <br> a condom <br> during last <br> sexual | Number <br> of <br> Background <br> characteristic |
| :--- | :---: | :---: |
| Age |  |  |
| 15-19 | 2.7 | 153 |
| $20-24$ | 4.7 | 711 |
| $25-29$ | 4.2 | 1,133 |
| $30-39$ | 4.5 | 2,319 |
| $40-49$ | 2.7 | 1,293 |
|  |  |  |
| Marital status | 4.0 | 5,584 |
| Married | $*$ | 10 |
| Divorced | $*$ | 16 |
| Widowed |  |  |
| Residence | 4.3 | 4,465 |
| Urban | 3.0 | 1,144 |
| Rural |  |  |
| Region | 4.3 | 3,618 |
| Central | 3.7 | 1,460 |
| North | 3.2 | 531 |
| South |  |  |
| Educational level attended | 1.0 | 305 |
| No education | 2.0 | 614 |
| Elementary | 3.3 | 1,134 |
| Preparatory | 4.7 | 2,146 |
| Secondary | 5.1 | 1,410 |
| Higher |  |  |
| Preparatory + secondary | 4.2 | 3,280 |
| Total | 4.0 | 5,609 |

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

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## SAMPLE DESIGN

## A. 1 Objectives of the Sample Design

The primary objective of the sample design for the 2002 Jordan Population and Family Health Survey (JPFHS) was to provide reliable estimates of most variables, such as fertility, contraceptive prevalence, selected health indicators and infant mortality, for a variety of health and demographic analyses at the national level and for major subpopulations. The major subpopulations that have been defined include those of urban and rural domains, as well as those of the three regions in Jordan: North (consisting of Irbid, Jarash, Ajloun, and Mafraq governorates), Central (consisting of Amman, Madaba, Balqa, and Zarqa governorates), and South (consisting of Karak, Tafielah, Ma'an, and Aqaba governorates). The population to be covered by the 2002 JPFHS is defined as the universe of all evermarried women age 15-49 in Jordan; as such, a sample of households was selected and all ever-married women age 15-49 identified in the selected households were interviewed.

## A. 2 Sample Frame

Administratively, Jordan is divided into 12 governorates. Each governorate is subdivided into district units; in turn, each district is divided into subdistricts, which are divided into localities. In addition to these administrative units, during the last 1994 Population and Housing Census, each locality was subdivided into convenient areas called census blocks. The list of census blocks contains census information on households and population, grouped by each administrative unit. The sample of the 2002 JPFHS is based on the frame provided by the 1994 Population and Housing Census. The frame excludes the population living in remote areas (most of whom are nomads), as well as those living in collective dwellings, such as hotels, hospitals, work camps, prisons, and the like.

A master sample was developed for Jordanian household surveys with selected PSUs (census blocks) in different sample replicates for national estimates. Four of these replicates were updated a few months ago for the Employment and Unemployment Survey. For the purposes of the survey, the sampling frame was updated by preparing a current list of buildings and housing unit numbers, as well as the names of occupants therein (households). This set of four replicates from the master sampling frame was taken to be the sampling frame for the 2002 Jordan DHS, and three of these four replicates were selected for the survey.

In all households of one of the selected replicates, anemia testing was implemented for all eligible women and for all children under the age of five; the resultant anemia indicator is representative at the national level as well as for all of the above-specified subpopulations.

## A. 3 Stratification

For the purposes of sample design, each of the twelve governorates in Jordan was considered an independent stratum. The population localities in each governorate were divided into urban (a locality with population of 5,000 or more) and rural (except for the five major cities, namely: Amman, Wadi Essier, Zarqa, Russeifa, and Irbid, each of which formed an independent stratum), with a resultant 29 strata. The localities in each governorate were divided into categories according to the population size in the locality; then they were ordered according to their geographical succession.

The primary sampling units (PSUs) in each of the five major cities were divided into four categories according to their socioeconomic characteristics, based on the results of the 1994 Population and Housing Census. A variety of variables were taken into account, such as type of building material, type of housing unit, source of drinking water, type of sewage system, and educational level of household members. These variables were classified in four levels: low level, medium low level, high medium level, and high level. The PSUs were ranked and categorized according to the score calculated for each of them.

In addition, the PSUs in each governorate and for each stratum were ordered by urban and rural status according to a specific geographical procedure, and the five major cities were stratified according to socioeconomic characteristics.

## A. 4 SAMPLE ALLOCATION

The sample was selected in two stages. In the first stage, 166 PSUs were selected, which formed a replicate. These units were distributed across governorates, urban and rural residences in each governorate, and across the five major cities, according to the weight of each unit in terms of total households therein, and according to the variance within each stratum. Slight modifications regarding the number of these units were made to cope with the multiple of four. The PSUs were selected using the probability proportionate to size (PPS) with systematic selection procedure. The number of households in each cluster served as its weight.

In the second stage, after updating the frame of the selected PSUs, a constant number of households (16 households) was selected from each PSU selected in the first stage.

The sample for the three replicates consisted of 498 PSUs (block), out of which 16 households were selected as ultimate sampling units (USUs) using a systematic random procedure.

The number of PSUs in each governorate was not allocated proportionally among governorates since the sample size was increased in the smallest governorates. The following table (Table A.1) shows the proportional and final allocation for a sample size of about 8,000 selected households using three out of the four sample replicates from the Jordan Employment and Unemployment Survey.

The target of the 2002 JPFHS sample was to select about 8,000 households for the interviewing process. Based on the level of non-response found in the 1997 Jordan DHS, the 2002 JPFHS was expected to have approximately 5,500 completed interviews of ever-married women age 15-49. The selected households are distributed in 498 clusters; 351 clusters are in urban areas, and 147 clusters are in the rural areas. Under this final allocation, it was expected that each of the twelve governorates of Jordan would have a minimum of 350 completed interviews.

| Table A. 1 Proportional allocation and final allocation by governorate |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Census 1994 |  | Final allocation of PSUs |  |
| Governorate | Number of households | Percent | Number of PSUs | Percent |
| Amman | 279,701 | 41.2 | 99 | 19.9 |
| Balqa | 43,618 | 6.4 | 42 | 8.4 |
| Zarqa | 100,713 | 14.8 | 66 | 13.3 |
| Madaba | 16,400 | 2.4 | 24 | 4.8 |
| Irbid | 118,472 | 17.4 | 75 | 15.0 |
| Mafraq | 24,974 | 3.7 | 27 | 5.4 |
| Jarash | 18,721 | 2.8 | 24 | 4.8 |
| Ajloun | 14,833 | 2.2 | 24 | 4.8 |
| Karak | 26,333 | 3.9 | 33 | 6.6 |
| Tafiela | 9,585 | 1.4 | 24 | 4.8 |
| Ma'an | 12,149 | 1.8 | 33 | 6.6 |
| Aqaba | 13,740 | 2.0 | 27 | 5.4 |
| Total | 679,239 | 100.0 | 498 | 100.0 |

## A. 5 SAMPLE IMPLEMENTATION

The fieldwork for the household interview was carried out from July 1 through September 30, 2002. A total of 7,968 occupied housing units were selected, of which 7,907 households were found. Of those households, 7,825 were interviewed successfully, yielding a response rate of 99.0 percent. The number of women eligible for individual interview (ever-married women age 15 to 49) identified in the household interviews was 6,151 , of whom 6,006 were successfully interviewed, with a response rate of 97.6 percent. Thus, the overall response rate for the 2002 JPFHS (the product of the household and the individual response rates) was 96.6 percent.

Household response rates ranged from 98.8 percent in the Central region to 99.2 percent in the North region (see Table A.2). The rate of response to the individual interview is lowest in the Central region ( 96.6 percent) and highest in the South region ( 98.8 percent). Considering the combined household and individual response rates, the Central region shows the lowest rate ( 95.4 percent), while the South region has the highest ( 97.9 percent).

## Table A. 2 Sample implementation

Percent distribution of households and eligible women by results of the houshold and individual interviews, and household, eligible women, and overall response rates, according to urban-rural residence and region, Jordan 2002

| Result of interview and response rate | Residence |  | Region |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Central | North | South |  |
| Selected households |  |  |  |  |  |  |
| Completed (C) | 98.0 | 98.7 | 98.3 | 97.4 | 99.0 | 98.2 |
| Household present but no competent respondent at home (HP) | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| Refused (R) | 1.1 | 0.4 | 1.1 | 0.7 | 0.8 | 0.9 |
| Household absent (HA) | 0.4 | 0.2 | 0.4 | 0.4 | 0.1 | 0.3 |
| Dwelling vacant/address not a dwelling (DV) | 0.4 | 0.6 | 0.1 | 1.4 | 0.0 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 5,616 | 2,352 | 3,696 | 2,400 | 1,872 | 7,968 |
| Household response rate (HRR) ${ }^{1}$ | 98.8 | 99.4 | 98.8 | 99.2 | 99.1 | 99.0 |
| Eligible women |  |  |  |  |  |  |
| Completed (EWC) | 97.3 | 98.5 | 96.6 | 98.4 | 98.8 | 97.6 |
| Not at home (EWNH) | 1.1 | 0.7 | 1.6 | 0.5 | 0.5 | 1.0 |
| Refused (EWR) | 0.5 | 0.4 | 0.5 | 0.6 | 0.3 | 0.5 |
| Partly completed (EWPC) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Incapacitated (EWI) | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 | 0.2 |
| Other (EWO) | 0.9 | 0.1 | 1.1 | 0.2 | 0.3 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 4,314 | 1,837 | 2,886 | 1,789 | 1,476 | 6,151 |
| Eligible women response rate (EWRR) ${ }^{2}$ | 97.3 | 98.5 | 96.6 | 98.4 | 98.8 | 97.6 |
| Overall response rate (ORR) ${ }^{3}$ | 96.1 | 98.0 | 95.4 | 97.5 | 97.9 | 96.6 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100 \times C}{C+H P+R}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$
\frac{100 \times E W C}{E W C+E W N H+E W R+E W P C+E W I+E W O}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as:
ORR = HRR * EWRR/100

## A. 6 Sample Selection

The 2002 JPFHS sample was selected using a stratified two-stage cluster design consisting of 498 clusters (PSUs): 351 in the urban and 147 in the rural areas. Once the number of households was allocated to each province by urban and rural areas, the number of clusters was calculated based on an average sample take of 16 selected households. The clusters were by selected taking three out of the four replicates for the Jordan Employment and Unemployment Survey; the PSUs in each of the replicates were selected with probability proportional to size from the total master frame. The PSU selection probability based on the master sample is giving in the following formula:

$$
P_{1 i}=a * M_{i} / \Sigma M_{i}
$$

where
$a \quad$ is the number of clusters to be selected for DHS in a given governorate,
$M_{i} \quad$ is the total number of households according to the 1994 census in the selected cluster.
$\Sigma M_{i}$ is the total number of households according to the 1994 census in a given governorate
In each selected PSU, a complete household listing operation was carried out and households were selected to achieve a fixed sample take of 16 households per cluster. However, since the 2002 JPFHS sample is unbalanced among governorates, it required a final weighing adjustment procedure to provide estimates at every other domain of study.

In a given governorate, if c is the fixed number of households selected out of the total households $\left(L_{i}\right)$ - found in the 2002 listing process - for the $i^{\text {th }}$ cluster, then the household probability of being in the selected $i^{\text {th }}$ cluster can be expressed as:

$$
P_{2 i}=\left(c / L_{i}\right)
$$

The final household's overall probability of being in the $i^{\text {th }}$ cluster could be calculated as:

$$
f_{i}=P_{1 i} * P_{2 i}
$$

and the sampling design weight for the $\mathrm{i}^{\text {th }}$ cluster is given as:

$$
1 / f_{i}=1 /\left(P_{1 i} * P_{2 i}\right)
$$

## ESTIMATES OF SAMPLING ERRORS

## Appendix $\mathbf{B}$

The estimates from a sample survey are affected by two types of errors: 1) nonsampling errors and 2) sampling errors. Nonsampling errors are the result 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 2002 JPFHS 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 2002 JPFHS 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 2002 JPFHS sample is the result of a multistage stratified design and, consequently, it was necessary to use more complex formulas. The computer software used to calculate sampling errors for the 2002 JPFHS is the ISSA Sampling Error Module (ISSAS). 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:

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

in which

$$
z_{h i}=y_{h i}-r . x_{h i} \text {, and } z_{h}=y_{h}-r \cdot x_{h}
$$

where $h \quad$ represents the stratum which varies from 1 to $H$,
$m_{h} \quad$ is the total number of enumeration areas selected in the $h^{t h}$ stratum,
$y_{h i} \quad$ is the sum of the values of variable $y$ in EA $i$ in the $h^{\text {th }}$ stratum,
$x_{h i} \quad$ is the sum of the number of cases in EA $i$ in the $h^{t h}$ stratum, and
$f \quad$ 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 cluster in the calculation of the estimates. Pseudoindependent replications are thus created. In the 2002 JPFHS, there were 498 nonempty clusters (PSUs). Hence, 498 replications were created. The variance of a rate $r$ is calculated as follows:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1}{k(k-1)} \sum_{i=1}^{k}\left(r_{i}-r\right)^{2}
$$

in which

$$
r_{i}=k r-(k-1) r_{(i)}
$$

where $r$ is the estimate computed from the full sample of 498 clusters, $r_{(i)} \quad$ is the estimate computed from the reduced sample of 497 clusters $\left(i^{t h}\right.$ cluster excluded), and
$k \quad$ is the total number of clusters.
In addition to the standard error, ISSAS 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. ISSAS also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2002 JPFHS women 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 each of the 3 regions in the country. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B. 2 to B. 7 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 ( $\mathrm{R} \pm 2 \mathrm{SE}$ ) for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1 ).

In general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. There are some differentials in the relative standard error for the estimates of subpopulations. For example, for the variable "currently using any contraceptive method" for currently married women age 15-49, the relative standard errors as a percentage of the estimated mean for the whole country, for urban areas, and for rural areas are 1.6 percent, 1.8 percent, and 2.5 percent, respectively.

The confidence interval (e.g., as calculated for "currently using any contraceptive method" for currently married women age 15-49) can be interpreted as follows: the overall national sample proportion is 0.558 and its standard error is 0.009 . Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e. $0.558 \pm 2(0.009)$. There is a high probability ( 95 percent) that the true average proportion of contraceptive use for currently married women age $15-49$ is between 0.540 and 0.575 .

| Variable | Estimate | Base population |
| :---: | :---: | :---: |
| Urban residence | Proportion | Ever-married women |
| No education | Proportion | Ever-married women |
| Secondary education or higher | Proportion | Ever-married women |
| Currently married | Proportion | Ever-married women |
| Married before age 20 | Proportion | Ever-married women |
| Currently pregnant | Proportion | All women |
| Children ever born | Mean | All women |
| Children surviving | Mean | All women |
| Children ever born to women age 40-49 | Mean | All women age 40-49 |
| Knows any contraceptive method | Proportion | Currently married women |
| Ever used any contraceptive method | Proportion | Currently married women |
| Currently using any contraceptive method | Proportion | Currently married women |
| Currently using pill | Proportion | Currently married women |
| Currently using IUD | Proportion | Currently married women |
| Currently using female sterilization | Proportion | Currently married women |
| Currently using periodic abstinence | Proportion | Currently married women |
| Using public sector source | Proportion | Current users of modern method |
| Want no more children | Proportion | Currently married women |
| Want to delay birth at least 2 years | Proportion | Currently married women |
| Ideal family size | Mean | Ever-married women |
| Mother received tetanus injection for last birth | Proportion | Women with at least one live birth in five years before survey |
| Mother received medical assistance at delivery | Proportion | Births in past 5 years |
| Had diarrhea in the 2 weeks before survey | Proportion | Children age 0 to 59 months |
| Treated with oral rehydration salts (ORS) | Proportion | Children with diarrhea in two weeks before interview |
| Taken to a health provider | Proportion | Children with diarrhea in two weeks before interview |
| Vaccination 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 |
| Received all vaccinations (excluding BCG) | Proportion | Children 12-23 months |
| Height-for-age (-2 SD) | Proportion | Children 0-59 months |
| Weight-for-height(-2 SD) | Proportion | Children 0-59 months |
| Weight-for-age (-2 SD) | Proportion | Children 0-59 months |
| Anemia among children | Proportion | Children 6-59 months |
| Anemia among women | Proportion | All women |
| $\mathrm{BMI}<18.5$ | Proportion | All women |
| Total fertility rate (3 years) | Rate | All women |
| Perinatal mortality (0-4 years) | Ratio | Number of pregnancies of $7+$ months |
| Neonatal mortality | Rate | Children exposed to the risk of mortality |
| Postneonatal mortality | Rate | Children exposed to the risk of mortality |
| Infant mortality | Rate | Children exposed to the risk of mortality |
| Child mortality | Rate | Children exposed to the risk of mortality |
| Under-five mortality | Rate | Children exposed to the risk of mortality |


| Table B.2 Sampling errors for selected variables, total sample, Jordan | 2002 |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |


| Table B.3 Sampling errors for selected variables, urban | area sample, Jordan 2002 |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence intervals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  | $\begin{aligned} & \text { Value- } \\ & 2 S E \\ & \text { (R-2SE) } \end{aligned}$ | $\begin{aligned} & \text { Value+ } \\ & 2 S E \\ & (\mathrm{R}+2 \mathrm{SE}) \end{aligned}$ |
| Urban | 0.000 | 0.000 | 1810 | 1207 | na | na | 0.000 | 0.000 |
| No education | 0.142 | 0.012 | 1810 | 1207 | 1.471 | 0.085 | 0.118 | 0.166 |
| Secondary education | 0.510 | 0.016 | 1810 | 1207 | 1.352 | 0.031 | 0.478 | 0.542 |
| Currently married | 0.961 | 0.006 | 1810 | 1207 | 1.245 | 0.006 | 0.950 | 0.973 |
| Married before age 20 | 0.350 | 0.009 | 2583 | 1728 | 1.078 | 0.027 | 0.331 | 0.369 |
| Currently pregnant | 0.073 | 0.008 | 3333 | 2285 | 1.425 | 0.111 | 0.057 | 0.090 |
| Children ever born | 2.373 | 0.203 | 3333 | 2285 | 1.390 | 0.086 | 1.967 | 2.780 |
| Children surviving | 2.258 | 0.194 | 3333 | 2285 | 1.395 | 0.086 | 1.870 | 2.646 |
| Children ever born to women 40-49 | 7.102 | 0.201 | 452 | 296 | 1.309 | 0.028 | 6.701 | 7.503 |
| Know any contraceptive method | 1.000 | 0.000 | 1732 | 1160 | na | 0.000 | 1.000 | 1.000 |
| Ever used any contraceptive method | 0.770 | 0.012 | 1732 | 1160 | 1.225 | 0.016 | 0.745 | 0.795 |
| Currently using any contraceptive method | 0.505 | 0.013 | 1732 | 1160 | 1.045 | 0.025 | 0.479 | 0.530 |
| Currently using pill | 0.068 | 0.008 | 1732 | 1160 | 1.285 | 0.114 | 0.053 | 0.084 |
| Currently using IUD | 0.172 | 0.009 | 1732 | 1160 | 1.024 | 0.054 | 0.153 | 0.190 |
| Currently using female sterilization | 0.033 | 0.004 | 1732 | 1160 | 0.948 | 0.124 | 0.025 | 0.041 |
| Currently using periodic abstinence | 0.047 | 0.007 | 1732 | 1160 | 1.353 | 0.146 | 0.033 | 0.061 |
| Used public sector source | 0.530 | 0.025 | 518 | 360 | 1.138 | 0.047 | 0.480 | 0.580 |
| Want no more children | 0.376 | 0.013 | 1732 | 1160 | 1.144 | 0.035 | 0.350 | 0.403 |
| Want to delay birth at least 2 years | 0.346 | 0.013 | 1732 | 1160 | 1.106 | 0.037 | 0.321 | $0.371$ |
| Ideal family size | 4.546 | 0.070 | 1744 | 1166 | 1.490 | 0.015 | 4.407 | 4.686 |
| Mothers received tetanus injection for last birth | 0.308 | 0.021 | 1214 | 812 | 1.568 | 0.067 | 0.267 | 0.350 |
| Mothers received medical assistance at delivery | 0.983 | 0.007 | 1984 | 1333 | 1.989 | 0.007 | 0.969 | 0.998 |
| Had diarrhea in two weeks before survey | 0.162 | 0.014 | 1919 | 1288 | 1.526 | 0.086 | 0.134 | 0.190 |
| Treated with oral rehydration salts (ORS) | 0.201 | 0.037 | 315 | 209 | 1.481 | 0.182 | 0.128 | 0.274 |
| Taken to a health provider | 0.558 | 0.033 | 315 | 209 | 1.103 | 0.059 | 0.492 | 0.623 |
| Vaccination card seen | 0.841 | 0.021 | 388 | 256 | 1.135 | 0.025 | 0.798 | 0.884 |
| Received BCG | $0.068$ | $0.020$ | 388 | 256 | 1.586 | 0.299 | 0.027 | 0.109 |
| Received DPT (3 doses) | 0.973 | $0.008$ | 388 | 256 | 0.945 | 0.008 | 0.957 | $0.989$ |
| Received polio (3 doses) | 0.975 | 0.007 | 388 | 256 | 0.943 | 0.008 | 0.960 | $0.990$ |
| Received measles | 0.942 | 0.011 | 388 | 256 | 0.963 | 0.012 | 0.919 | 0.965 |
| Received all vaccinations | 0.068 | 0.020 | 388 | 256 | 1.586 | 0.299 | 0.027 | 0.109 |
| Height-for-age (-2SD) | 0.132 | 0.012 | 1625 | 1091 | 1.323 | 0.093 | 0.108 | 0.157 |
| Weight-for-height (-2SD) | 0.025 | 0.005 | 1625 | 1091 | 1.217 | 0.185 | 0.016 | 0.034 |
| Weight-for-age (-2SD) | 0.074 | 0.008 | 1625 | 1091 | 1.203 | 0.109 | 0.058 | 0.090 |
| Anemia among children | 0.399 | 0.033 | 499 | 364 | 2.067 | 0.083 | 0.333 | 0.465 |
| Anemia among women | 0.287 | 0.017 | 914 | 645 | 1.755 | 0.059 | 0.253 | 0.321 |
| $\mathrm{BMI}<18.5$ | 0.055 | 0.005 | 2513 | 1663 | 1.011 | 0.088 | 0.046 | 0.065 |
| Total fertility rate (last 3 years) | 4.153 | 0.109 | na | 6437 | 0.988 | 0.026 | 3.935 | 4.372 |
| Perinatal mortality (0-4 years) | 27.026 | 4.609 | 2011 | 1349 | 1.230 | 0.171 | 17.808 | 36.244 |
| Neonatal mortality (last 10 years) | 19.736 | 3.097 | 4119 | 2731 | 1.277 | 0.157 | 13.543 | 25.929 |
| Post-neonatal mortality (last 10 years) | 10.424 | 1.816 | 4120 | 2732 | 1.077 | 0.174 | 6.793 | 14.055 |
| Infant mortality (last 10 years) | 30.16 | 3.455 | 4122 | 2733 | 1.152 | 0.115 | 23.249 | 37.071 |
| Child mortality (last 10 years) | 6.474 | 1.546 | 4119 | 2731 | 1.06 | 0.239 | 3.383 | 9.566 |
| Under 5 mortality (last 10 years) | 36.439 | 4.165 | 4124 | 2734 | 1.239 | 0.114 | 28.109 | 44.769 |


| Table B.5 Sampling errors for selected variables, Central region sample, Jordan 2002 |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |


| Table B.6 Sampling errors for selected variables, North region sample, Jordan 2002 |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |


| Table B.7 Sampling errors for selected variables, South region sample, Jordan 2002 |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |


| Table C. 1 Household age distribution |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Single-year age distribution of the de facto household population by sex (weighted), Jordan 2002 |  |  |  |  |  |  |  |  |  |
| Age | Male |  | Female |  | Age | Male |  | Female |  |
|  | Number | Percentage | Number | Percentage |  | Number | Percentage | Number | Percentage |
| 0 | 576 | 2.6 | 597 | 2.7 | 37 | 259 | 1.2 | 294 | 1.3 |
| 1 | 563 | 2.6 | 588 | 2.6 | 38 | 246 | 1.1 | 225 | 1.0 |
| 2 | 615 | 2.8 | 544 | 2.4 | 39 | 242 | 1.1 | 225 | 1.0 |
| 3 | 522 | 2.4 | 544 | 2.4 | 40 | 202 | 0.9 | 215 | 1.0 |
| 4 | 607 | 2.7 | 571 | 2.6 | 41 | 190 | 0.9 | 198 | 0.9 |
| 5 | 608 | 2.8 | 527 | 2.4 | 42 | 169 | 0.8 | 177 | 0.8 |
| 6 | 675 | 3.1 | 626 | 2.8 | 43 | 145 | 0.7 | 175 | 0.8 |
| 7 | 636 | 2.9 | 677 | 3.0 | 44 | 189 | 0.9 | 170 | 0.8 |
| 8 | 594 | 2.7 | 642 | 2.9 | 45 | 156 | 0.7 | 154 | 0.7 |
| 9 | 618 | 2.8 | 608 | 2.7 | 46 | 155 | 0.7 | 162 | 0.7 |
| 10 | 559 | 2.5 | 513 | 2.3 | 47 | 118 | 0.5 | 120 | 0.5 |
| 11 | 553 | 2.5 | 540 | 2.4 | 48 | 128 | 0.6 | 146 | 0.7 |
| 12 | 547 | 2.5 | 513 | 2.3 | 49 | 135 | 0.6 | 129 | 0.6 |
| 13 | 522 | 2.4 | 549 | 2.5 | 50 | 110 | 0.5 | 135 | 0.6 |
| 14 | 570 | 2.6 | 553 | 2.5 | 51 | 78 | 0.4 | 113 | 0.5 |
| 15 | 530 | 2.4 | 533 | 2.4 | 52 | 121 | 0.5 | 133 | 0.6 |
| 16 | 502 | 2.3 | 537 | 2.4 | 53 | 83 | 0.4 | 115 | 0.5 |
| 17 | 546 | 2.5 | 528 | 2.4 | 54 | 111 | 0.5 | 144 | 0.6 |
| 18 | 511 | 2.3 | 506 | 2.3 | 55 | 112 | 0.5 | 138 | 0.6 |
| 19 | 478 | 2.2 | 459 | 2.1 | 56 | 110 | 0.5 | 106 | 0.5 |
| 20 | 526 | 2.4 | 457 | 2.0 | 57 | 103 | 0.5 | 98 | 0.4 |
| 21 | 486 | 2.2 | 448 | 2.0 | 58 | 128 | 0.6 | 108 | 0.5 |
| 22 | 482 | 2.2 | 460 | 2.1 | 59 | 138 | 0.6 | 82 | 0.4 |
| 23 | 402 | 1.8 | 436 | 2.0 | 60 | 128 | 0.6 | 144 | 0.6 |
| 24 | 385 | 1.7 | 384 | 1.7 | 61 | 96 | 0.4 | 77 | 0.3 |
| 25 | 388 | 1.8 | 392 | 1.8 | 62 | 115 | 0.5 | 113 | 0.5 |
| 26 | 363 | 1.6 | 357 | 1.6 | 63 | 78 | 0.4 | 72 | 0.3 |
| 27 | 326 | 1.5 | 385 | 1.7 | 64 | 73 | 0.3 | 75 | 0.3 |
| 28 | 341 | 1.5 | 334 | 1.5 | 65 | 71 | 0.3 | 104 | 0.5 |
| 29 | 362 | 1.6 | 375 | 1.7 | 66 | 70 | 0.3 | 93 | 0.4 |
| 30 | 356 | 1.6 | 393 | 1.8 | 67 | 73 | 0.3 | 77 | 0.3 |
| 31 | 243 | 1.1 | 418 | 1.9 | 68 | 48 | 0.2 | 43 | 0.2 |
| 32 | 313 | 1.4 | 342 | 1.5 | 69 | 57 | 0.3 | 43 | 0.2 |
| 33 | 288 | 1.3 | 280 | 1.3 | 70+ | 467 | 2.1 | 503 | 2.2 |
| 34 | 283 | 1.3 | 298 | 1.3 | Don't' know/ |  |  |  |  |
| 35 | 251 | 1.1 | 285 | 1.3 | missing | 0 | 0.0 | 1 | 0.0 |
| 36 | 232 | 1.1 | 241 | 1.1 |  |  |  |  |  |
|  |  |  |  |  | Total | 22,062 | 100.0 | 22,350 | 100.0 |

## Table C. 2 Age distribution of eligible and interviewed women

De facto household population of all women and ever-married women age 10-54, interviewed ever-married women age 15-49, and percentage of eligible women who were interviewed (weighted), by five-year age groups, Jordan 2002

| Age group | Household population of women 10-54 |  | Interviewed women age 15-49 |  | Percentage of eligible women interviewed (weighted) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | All women | Evermarried women |  |  |  |
|  |  |  | Number | Percent |  |
| 10-14 | 2,668 | 0 | na | na | na |
| 15-19 | 2,564 | 158 | 156 | 2.6 | 99.0 |
| 20-24 | 2,186 | 743 | 719 | 12.1 | 96.8 |
| 25-29 | 1,843 | 1,202 | 1,161 | 19.6 | 96.5 |
| 30-34 | 1,731 | 1,378 | 1,339 | 22.6 | 97.2 |
| 25-39 | 1,270 | 1,108 | 1,061 | 17.9 | 95.7 |
| 40-44 | 937 | 867 | 849 | 14.3 | 97.9 |
| 45-49 | 711 | 677 | 651 | 11.0 | 96.1 |
| 50-54 | 642 | 623 | na | na | na |
| 15-49 | 11,241 | 6,133 | 5,935 | 100.0 | 96.8 |

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule. na $=$ Not applicable

| Table C. 3 Completeness of reporting |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of observations missing information for selected demographic and health questions, Jordan 2002 |  |  |  |
| Subject | Reference group | Percentage of reference group with missing information | Number of cases |
| Birth Date | Last 15 years |  |  |
| Month only |  | 0.49 | 16,941 |
| Month and year |  | 0.04 | 16,941 |
| Age at death | Last 15 years | 0.00 | 517 |
| Age/date at first union ${ }^{1}$ | Ever-married respondents | 0.01 | 6,006 |
| Respondent's education | All respondents | 0.00 | 6,006 |
| Diarrhea in last 2 weeks | Living children age 1-59 months | 0.16 | 5,878 |
| Anthropometry | Living children age 1-59 months |  |  |
| Child's height |  | 18.03 | 5,727 |
| Child's weight |  | 16.76 | 5,727 |
| Height or weight |  | 18.30 | 5,727 |
| Anemia |  |  |  |
| Children |  | 23.76 | 1,866 |
| Women |  | 25.41 | 3,805 |
| ${ }^{1}$ Both year and age missing |  |  |  |

Table C. 4 Births by calendar years
Distribution of births by calendar years since birth for living, dead, and all children, according to completeness of birth dates, sex ratio at birth, and ratio of births by calendar year (weighted), Jordan 2002

| Year | Number of births |  |  | Percentage with complete birth date ${ }^{1}$ |  |  | Sex ratio at birth ${ }^{2}$ |  |  | Calendar year ratio ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Living | Dead | Total | Living | Dead | Total | Living | Dead | Total | Living | Dead | Total |
| 2001 | 1,231 | 28.0 | 1,259 | 100.0 | 100.0 | 100.0 | 89.5 | 99.2 | 89.7 | na | na | na |
| 2000 | 1,140 | 31.0 | 1,171 | 100.0 | 100.0 | 100.0 | 116.7 | 102.1 | 116.3 | na | na | na |
| 1999 | 1,115 | 24.0 | 1,139 | 100.0 | 100.0 | 100.0 | 105.5 | 169.2 | 106.6 | 98.9 | 73.0 | 98.2 |
| 1998 | 1,113 | 35.0 | 1,149 | 100.0 | 100.0 | 100.0 | 109.4 | 153.3 | 110.6 | 101.2 | 150.4 | 102.3 |
| 1997 | 1,085 | 23.0 | 1,108 | 99.9 | 100.0 | 99.9 | 107.4 | 111.8 | 107.5 | 91.1 | 57.3 | 90.0 |
| 1996 | 1,268 | 44.0 | 1,312 | 99.7 | 95.6 | 99.6 | 112.8 | 97.9 | 112.3 | 107.6 | 123.7 | 108.0 |
| 1995 | 1,272 | 49.0 | 1,321 | 99.4 | 93.9 | 99.2 | 97.0 | 82.0 | 96.4 | 102.8 | 100.0 | 102.6 |
| 1994 | 1,208 | 53.0 | 1,261 | 99.6 | 85.9 | 99.0 | 94.7 | 105.4 | 95.1 | 99.9 | 134.3 | 101.0 |
| 1993 | 1,147 | 31.0 | 1,178 | 99.5 | 78.1 | 99.0 | 104.5 | 182.2 | 106.0 | 99.6 | 65.5 | 98.3 |
| 1992 | 1,096 | 40.0 | 1,136 | 99.2 | 97.7 | 99.2 | 99.8 | 64.2 | 98.3 | 104.7 | 112.4 | 104.9 |
| 1997-2001 | 5,684 | 141.0 | 5,825 | 100.0 | 100.0 | 100.0 | 105.0 | 124.0 | 105.4 | na | na | na |
| 1992-1996 | 5,991 | 218.0 | 6,208 | 99.5 | 90.7 | 99.2 | 101.6 | 96.6 | 101.4 | na | na | na |
| 1987-1991 | 4,626 | 156.0 | 4,782 | 99.3 | 87.9 | 99.0 | 105.6 | 97.0 | 105.3 | na | na | na |
| 1982-1986 | 3,489 | 170.0 | 3,659 | 99.2 | 82.1 | 98.5 | 102.7 | 138.0 | 104.1 | na | na | na |
| < 1982 | 2,918 | 248.0 | 3,166 | 96.8 | 68.6 | 94.6 | 110.3 | 153.7 | 113.2 | na | na | na |
| All | 22,708 | 933.0 | 23,641 | 99.2 | 84.2 | 98.6 | 104.5 | 121.0 | 105.1 | na | na | na |

na $=$ Not applicable
${ }^{1}$ Both year and month of birth given
${ }^{2}\left(B_{m} / B_{f}\right)^{*} 100$, where $B_{m}$ and $B_{f}$ are the numbers of male and female births, respectively ${ }^{3}\left[2 B_{x} /\left(B_{x-1}+B_{x+1}\right)\right]^{*} 100$, where $B_{x}$ is the number births in calendar year $x$

## Table C. 5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey, Jordan 2002

| Age at death (days) | Number of years preceding the survey |  |  |  | Total$0-19$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-4 | 5-9 | 10-14 | 15-19 |  |
| <1 | 12 | 20 | 19 | 15 | 66 |
| 1 | 15 | 22 | 27 | 23 | 87 |
| 2 | 15 | 15 | 13 | 18 | 61 |
| 3 | 12 | 14 | 4 | 5 | 35 |
| 4 | 10 | 4 | 5 | 1 | 20 |
| 5 | 5 | 8 | 0 | 1 | 14 |
| 6 | 1 | 3 | 0 | 0 | 4 |
| 7 | 7 | 14 | 9 | 6 | 36 |
| 8 | 2 | 1 | 2 | 0 | 5 |
| 9 | 1 | 1 | 0 | 1 | 3 |
| 10 | 2 | 3 | 1 | 0 | 7 |
| 11 | 0 | 1 | 2 | 1 | 4 |
| 12 | 2 | 1 | 1 | 1 | 5 |
| 13 | 0 | 0 | 1 | 1 | 2 |
| 14 | 2 | 3 | 0 | 1 | 7 |
| 15 | 0 | 3 | 2 | 1 | 7 |
| 16 | 1 | 1 | 1 | 0 | 3 |
| 17 | 0 | 1 | 1 | 0 | 1 |
| 19 | 0 | 0 | 0 | 2 | 2 |
| 20 | 1 | 1 | 0 | 2 | 3 |
| 21 | 2 | 1 | 1 | 0 | 3 |
| 22 | 0 | 1 | 0 | 0 | 1 |
| 23 | 0 | 0 | 0 | 0 | 1 |
| 24 | 1 | 0 | 1 | 0 | 1 |
| 25 | 0 | 0 | 0 | 1 | 1 |
| 27 | 0 | 0 | 0 | 1 | 1 |
| 28 | 1 | 0 | 0 | 2 | 3 |
| 29 | 0 | 0 | 1 | 0 | 1 |
| 30 | 1 | 0 | 0 | 0 | 1 |
| $31+$ | 1 | 0 | 0 | 0 | 1 |
| Total 0-30 | 94 | 117 | 91 | 83 | 385 |
| Percent early neonatal ${ }^{1}$ | 75 | 74 | 75 | 74 | 75 |

${ }^{1} 0-6$ days/0-30 days

## 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 under one month, for five-year periods of birth preceding the survey, Jordan 2002

| Age at death (months) | Number of years preceding the survey |  |  |  | $\begin{aligned} & \text { Total } \\ & 0-19 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-4 | 5-9 | 10-14 | 15-19 |  |
| $<1^{1}$ | 94 | 117 | 91 | 83 | 385 |
| 1 | 10 | 11 | 8 | 6 | 34 |
| 2 | 6 | 7 | 5 | 8 | 25 |
| 3 | 1 | 5 | 6 | 7 | 18 |
| 4 | 2 | 7 | 5 | 2 | 15 |
| 5 | 2 | 3 | 4 | 4 | 13 |
| 6 | 8 | 3 | 7 | 8 | 26 |
| 7 | 3 | 3 | 2 | 7 | 14 |
| 8 | 2 | 4 | 1 | 3 | 10 |
| 9 | 1 | 3 | 0 | 2 | 5 |
| 10 | 0 | 0 | 1 | 0 | 1 |
| 11 | 1 | 0 | 4 | 3 | 8 |
| 12 | 4 | 6 | 3 | 2 | 14 |
| 13 | 1 | 1 | 0 | 0 | 1 |
| 14 | 2 | 0 | 0 | 0 | 2 |
| 15 | 0 | 0 | 1 | 1 | 2 |
| 18 | 2 | 5 | 1 | 3 | 11 |
| 20 | 1 | 1 | 2 | 0 | 4 |
| 21 | 1 | 0 | 0 | 0 | 1 |
| 22 | 0 | 0 | 0 | 0 | 0 |
| 23 | 0 | 0 | 0 | 0 | 0 |
| 1 year | 0 | 0 | 0 | 1 | 2 |
| Total 0-11 | 128 | 164 | 133 | 130 | 556 |
| Percent neonatal ${ }^{2}$ | 73 | 71 | 68 | 64 | 69 |

${ }^{1}$ Includes deaths under one month reported in days
${ }^{2}$ Percent neonatal $=$ under one month/under one year

The Hashemite Kingdom of Jordan


HOUSEHOLD SCHEDULE


| $\begin{aligned} & \text { LINE } \\ & \text { NO. } \end{aligned}$ | EDUCATION |  |  |  |  |  | $\begin{aligned} & \text { IF AGE } 15 \\ & \text { YEARS OR } \\ & \text { OLDER } \\ & \hline \end{aligned}$ | ELIGIBILITY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF AGE 6 YEARS OR OLDER |  |  |  | IF AGE 624 YEARS |  | What is (NAME) marital status? <br> 1: NEVER MARRIED/ SIGNED CONTRACT <br> 2: MARRIED <br> 3: DIVORCED <br> 4: WIDOWED <br> 5: SEPARATED | CIRCLE LINE NUMBER OF <br> ELIGIBLE WOMEN <br> FOR THE <br> INDIVIDUAL <br> SURVEY (EVER <br> MARRIED WOMEN <br> AGE 15-49) | CIRCLE LINE NUMBER OF NEVER MARRIED WOMEN AGE 15-49 | CIRCLE LINE NUMBER OF ALL CHILDREN BORN IN 1997 OR LATER, OR CHILDREN UNDER AGE 6 (IF DATE OF BIRTH UNKNOWN). |
|  | Has (NAME) ever attended school? | Can (NAME) read and write? | What is the highest level of school (NAME) has attended?*** | What is the highest grade (NAME) completed at that level?**** | Did <br> atten <br> scho <br> any <br> durin <br> last <br> year? |  |  |  |  |  |
|  | (14A) | (14B) | (14C) | (14D) |  |  | (20A) | (20B) | (20C) | (20D) |
|  | YES NO | YES NO | LEVEL | GRADE | YES | No |  |  |  |  |
| 01 | $\begin{array}{lr} 1 & 2 \\ \text { L> } \upharpoonright \text { GO TO } \\ & 14 \mathrm{C} \end{array}$ | ${ }_{\substack{1 \\ \text { GO TO } \\ 20 \mathrm{~A}}}^{2}$ |  |  | $1$ | 2 | $\cdots$ | 01 | 01 | 01 |
| 02 | $\begin{array}{cc} 1 & 2 \\ \mathrm{~L}>\mathrm{GO} \text { TO } \\ & 14 \mathrm{C} \end{array}$ | $\begin{gathered} 1 \text { GO TO } \\ 20 \mathrm{~A} \end{gathered}$ |  |  |  | 2 |  | 02 | 02 | 02 |
| 03 | $\begin{array}{cc} 1 & 2 \\ \mathrm{~L}>\mathrm{GO} \mathrm{TO} \\ 14 \mathrm{C} \end{array}$ | $\begin{gathered} 1 \text { GO TO } \\ 20 \mathrm{~A} \end{gathered}$ |  | $\square$ |  | 2 |  | 03 | 03 | 03 |
| 04 | $\begin{array}{lr} 1 & 2 \\ \text { L> GO TO } \\ 14 \mathrm{C} \end{array}$ | $\begin{gathered} 1 \text { GO TO } \\ \text { 20A } \end{gathered}$ |  |  |  | 2 | $\square$ | 04 | 04 | 04 |
| 05 | $\begin{array}{lr} 1 & 2 \\ \text { L> } \begin{array}{c} \text { GO TO } \\ 14 \mathrm{C} \end{array} \end{array}$ | $\begin{gathered} 1 \\ \text { GO TO } \\ \text { 20A } \end{gathered}$ |  | $\square$ |  | 2 | $\square$ | 05 | 05 | 05 |
| 06 | $\begin{array}{cc} 1 & 2 \\ \mathrm{~L}>\mathrm{GO} \text { TO } \\ 14 \mathrm{C} \end{array}$ | $\begin{gathered} 1 \\ \text { GO TO } \\ \text { 20A } \end{gathered}$ |  |  |  | 2 |  | 06 | 06 | 06 |
| 07 | $\begin{array}{cc} 1 & 2 \\ \text { L> GO TO } \\ 14 \mathrm{C} \end{array}$ | $\begin{gathered} 1 \\ \text { GO TO } \\ \text { OOA } \end{gathered}$ |  |  |  | 2 |  | 07 | 07 | 07 |

** CODES FOR Q. 10 THROUGH Q. 13
THESE QUESTIONS REFER TO THE BIOLOGICAL PARENTS OF THE CHILD.
. AND Q. 13 , RECORD '00’ IF PARENT NOT LISTED IN HOUSEHOLD SCHEDULE.
***CODES FOR Q. 14C
EDUCATION LEVEL:
$01=$ OLD ELEMENTARY
$02=$ OLD PREPARATORY
$02=$ OLD PREPARATORY
$04=$ NEW BASIC
$05=$ NEW SECONDAR
$06=$ INTERMEDIATE
DIPLOMA
$07=$ UNIVERSITY
$08=$ HIGHER
$98=$ DON'T KNOW
**** CODES FOR Q. 14D EDUCATION GRADE: $00=$ LESS THAN 1 YEAR COMPLETED $98=$ DON'T KNOW


CODES FOR Q. 3
RELATIONSHIP TO HEAD OF HOUSEHOLD:
$02=$ WIFE OR HUSBAND
03 = SON OR DAUGHTER

04 = SON-IN-LAW OR DAUGHTER-IN-LAW
$05=$ GRANDCHILD
PARENT
$08=$ BROTHER OR SISTER
$09=$ GRANDFATHER/GRANDMOTHER
$10=$ OTHER RELATIVE
$10=$ OTHER RELATIVE
$11=$ ADOPTED/STEPCHILD
$11=$ ADOPTED/STEPCHILD
98 = DON'T KNOW

| $\begin{aligned} & \text { LINE } \\ & \text { NO. } \end{aligned}$ | EDUCATION |  |  |  |  |  | IF AGE 15 YEARS OR OLDER | ELIGIBILITY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF AGE 6 YEARS OR OLDER |  |  |  | IF AGE 6-24 YEARS |  | What is (NAME) marital status? <br> 1: NEVER MARRIED/ SIGNED CONTRACT <br> 2: MARRIED <br> 3: DIVORCED <br> 4: WIDOWED <br> 5: SEPARATED | CIRCLE LINE NUMBER OF ELIGIBLE WOMEN FOR THE INDIVIDUAL SURVEY (EVER MARRIED WOMEN AGE 15-49) | CIRCLE LINE NUMBER OF NEVER MARRIED WOMEN AGE 15-49 | CIRCLE LINE NUMBER OF ALL CHILDREN BORN IN 1997 OR LATER, OR CHILDREN UNDER AGE 6 (IF DATE OF BIRTH UNKNOWN). |
|  | Has (NAME) ever attended school? | Can (NAME) read and write? | What is the highest level of school (NAME) has attended?*** | What is the highest grade (NAME) completed at that level?**** | Did attend at an durin last year? | ME) <br> school <br> ime <br> the <br> ool |  |  |  |  |
|  | (14A) | (14B) | (14C) | (14D) |  |  | (20A) | (20B) | (20C) | (20D) |
|  | yes No | YES NO | LEVEL | GRADE | YES | No |  |  |  |  |
| 08 | $\begin{array}{\|lr} 1 & 2 \\ \text { L }>\text { GO TO } \\ & 14 \mathrm{C} \end{array}$ | ${ }_{\substack{1 \\ \text { GO TO } \\ \text { 20A }}}^{2}$ |  |  | $1$ | $2$ | $\square$ | 08 | 08 | 08 |
| 09 | $\begin{array}{ll} 1 & 2 \\ \text { L> GO TO } \\ & 14 \mathrm{C} \end{array}$ | ${ }_{\substack{1 \\ \text { GO TOA } \\ 20}}^{2}$ | $\square$ |  |  | 2 |  | 09 | 09 | 09 |
| 10 | $\begin{array}{cc} 1 & 2 \\ \text { L> GO TO } \\ & 14 \mathrm{C} \end{array}$ | $\begin{gathered} 1 \\ \text { GO TOA } \\ 204 \end{gathered}$ |  |  |  | 2 |  | 10 | 10 | 10 |
| 11 | $\begin{array}{ll} 1 & 2 \\ \text { L> GO TO } \\ & 14 \mathrm{C} \end{array}$ | ${ }_{\substack{\text { GO TO }}}^{2}$ |  |  |  | 2 |  | 11 | 11 | 11 |
| 12 | $\begin{array}{ccc} 1 & 2 \\ \text { L> }>\text { GO TO } \\ & 14 \mathrm{C} \end{array}$ | $\begin{gathered} 1 \\ \mathrm{GOTOA}_{20 \mathrm{~A}} \end{gathered}$ | $\ldots$ |  |  | 2 |  | 12 | 12 | 12 |
| 13 | $\begin{array}{lll} 1 & 2 \\ \text { L> } & \text { GO TO } \\ & 14 \mathrm{C} \end{array}$ | $\begin{gathered} 1 \mathrm{GO} \mathrm{TO} \\ 20 \mathrm{~A} \end{gathered}$ |  |  |  | 2 |  | 13 | 13 | 13 |
| 14 | $\begin{array}{\|lrl} 1 & 2 \\ \text { L> } & \text { GO TO } \\ & 14 \mathrm{C} \end{array}$ | ${ }_{c}^{1 \text { GO TO }}$ |  |  |  | 2 |  | 14 | 14 | 14 |

** CODES FOR Q. 10 THROUGH Q. 13
THESE QUESTIONS REFER TO THE BIOLOGICAL PARENTS OF THE CHILD.
IN Q. 11 AND Q. 13 , RECORD ' 00 ' IF PARENT NOT LISTED IN HOUSEHOLD SCHEDULE.
***CODES FOR Q. 14C
EDUCATION LEVEL: $01=$ OLD ELEMENTARY $02=$ OLD PREPARATORY
$04=$ NEW BASIC
$04=$ NEW BASIC
O6 SNECONDARY
$06=$ INTERMEDIA
$07=$ UNIVERSITY
$08=$ HIGHER
$98=$ DON'T KNOW
${ }^{* * * *}$ CODES FOR Q. 14D EDUCATION GRADE:
$00=$ LESS THAN 1 YEAR COMPLETED
98 = DON'T KNOW

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?
) In addition, are there any other people who may not be members of your family, such as domestic servants, lodgers or friend who usually live here?
3)

Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed?
YE$\square$ ENTER EACH IN TABLE NO

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 21 | What is the main source of drinking water for members of your household? ${ }^{1}$ |  |  |
| 21A | TYPE OF HOUSING UNIT <br> RECORD OBSERVATION. |  |  |
| 23 | What kind of toilet facilities does your household have? |  |  |
| 23A | Is your house connected with : <br> Electricity? <br> Public Sewage? |  YES NO <br> ELECTRICITY .............................. 1 2  <br> PUBLIC SEWAGE................... 1 2  |  |
| 25 | Does your household have: <br> Radio or tape recorder? <br> Television? <br> Satellite? <br> Telephone? <br> Refrigerator? <br> Washing machine? <br> Solar heater? <br> Computer? <br> Internet access? |  YES NO <br> RADIO ........................................ 1 2  <br> TELEVISION ................................ 1 2  <br> SATELLITE.................................... 1 2  <br> TELEPHONE................................ 1 2  <br> REFRIGERATOR ......................... 1 2  <br> WASHING MACHINE................... 1 2  <br> SOLAR HEATER.......................... 1 2  <br> COMPUTER ................................. 1 2  <br> INTERNET.................................... 1 2  |  |
| 25A | Does your household have a mobile? <br> IF YES: How many? <br> IF NONE, RECORD ‘0’. IF 7 OR MORE, RECORD 7. | NUMBER OF MOBILE................ $\square$ |  |
| 25B | Does your household have a private car or pick-up? <br> IF YES: How many? <br> IF NONE, RECORD '0‘0’. IF 7 OR MORE, RECORD 7 | NUMBER OF CARS .................. $\square$ |  |
| 26 | What type of fuel does your household mainly use for cooking? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 27 | MAIN MATERIAL OF THE FLOOR. <br> RECORD OBSERVATION. |  |  |
| 27A | How many rooms do you have in your house? | NUMBER OF ROOMS........... |  |
| 27B | How many rooms in your household are used for sleeping? | ROOMS FOR SLEEPING....... $\square$ |  |

CHECK COLUMNS (20B), (20C) AND (20D): RECORD THE LINE NUMBER, NAME AND AGE OF ALL WOMEN AGE 15-49 AND ALL CHILDREN BORN IN 1997 OR LATER, OR CHILDREN UNDER AGE 6 (IF DATE OF BIRTH UNKNOWN).

| ALL WOMEN 15-49 |  |  |  | WEIGHT AND HEIGHT MEASUREMENT OF WOMEN 15-49 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { LINE NO. } \\ & \text { FROM } \\ & \text { COL. } \\ & \text { (20B) OR } \\ & \text { 20C) } \end{aligned}$ | NAME <br> FROM COL.(2) | AGE <br> FROM COL.(7) |  | WEIGHT (KILOGRAMS) | HEIGHT (CENTIMETERS) |  | RESULT <br> 1 MEASURED <br> 2 NOT PRESENT <br> 3 REFUSED <br> 6 OTHER |
| (36) | (37) | (38) | (39) | (40) | (41) | (42) | (43) |
|  |  | YEARS |  |  |  |  |  |
|  |  |  |  |  |  $\square$ |  | $\square$ |
|  |  |  |  |  |  |  | $\square$ |



## IF DATE OF BIRTH IS MISSING IN COL (6A):

- CHECK IF THE CHILD IS INCLUDED IN ANY BIRTH HISTORY OF THE INDIVIDUAL QUESTIONNAIRE. THEN COPY MONTH AND YEAR FROM 215 IN MOTHER'S BIRTH HISTORY AND ASK DAY.
IF THE CHILD IS NOT INCLUDED IN ANY BIRTH HISTORY, PROBE TO GET AN ESTIMATED DATE OF BIRTH.

ANEMIA TEST

| 43A | CHECK COVER PAGE TO DETERMINE IF HOUSEHOLD IS INCLUDED IN THE SUBSAMPLE FOR ANEMIA TESTING.: <br> CHECK COLUMNS (20B), (20C) AND (20D): RECORD THE LINE NUMBER (IN COL. 45), AND AGE OF ALL WOMEN AGE 15-49 AND ALL CHILDREN BORN IN 1997 OR LATER, OR CHILDREN UNDER AGE 6 (IF DATE OF BIRTH UNKNOWN). |
| :---: | :---: |
| * CONSENT STATEMENT |  |
| As part of this survey, we are studying anemia among women and children. Anemia is a serious health problem that results from poor nutrition. This survey will assist the government to develop programs to prevent and treat anemia. |  |
| We request that you (and all children born in 1997 or later) participate in the anemia testing part of this survey and give a few drops of blood from a finger. The test uses disposable sterile instruments that are clean and completely safe. The blood will be analyzed with new equipment and the results of the test will be given to you right after the blood is taken. The results will be kept confidential. |  |
| May I now ask that you (and NAME OF CHILD[REN]) participate in the anemia test. However, if you decide not to have the test done, it is your right and we will respect your decision. Now please tell me if you agree to have the test(s) done. |  |


| HEMOGLOBIN MEASUREMENT OF WOMEN 15-49 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CHECK COLUMN (38): | LINE NO. OF PARENT/RESPONSIBLE ADULT. RECORD '00' IF NOT LISTED IN HOUSEHOLD SCHEDULE | READ CONSENT STATEMENT TO WOMAN/PARENT/RESPONSIBLE ADULT* CIRCLE CODE (AND SIGN) | hemoglobin LEVEL (G/DL) | CHECK (20A): IF EVER MARRIED ASK FOR CURRENT PREGNANCY, IF SINGLE, CIRCLE ' 3 ’ | RESULT <br> 1 MEASURED <br> 2 NOT <br> PRESENT <br> 3 REFUSED <br> 6 OTHER |
| (44) | (45) | (46) | (47) | (48) | (49) |
| AGE 15-17 AGE 18-49 <br> 1 |  | GRANTED REFUSED <br> 1 2 <br> $r^{\prime}$  <br> SIGN  |  | YES No/DK SINGLE <br> 13 | $\square$ |
| $1 \quad \text { GO TO } 46 \ll{ }^{1}$ |  |  |  | 12 | $\square$ |
| $1 \quad$ GO TO $46 ३<{ }^{2}$ |  | $\stackrel{1}{v}$ SIGN _ NEXT LINE < - ${ }_{-}^{1}$ |  | 12 | $\square$ |


| HEMOGLOBIN MEASUREMENT OF CHILDREN BORN IN 1997 OR LATER |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LINE NO. OF PARENT/RESPONSIBLE ADULT. RECORD '00' IF NOT LISTED IN HOUSEHOLD SCHEDULE | READ CONSENT STATEMENT TO PARENT/RESPONSIBLE ADULT* CIRCLE CODE (AND SIGN) | HEMOGLOBIN LEVEL $(\mathrm{G} / \mathrm{DL})$ | $\begin{aligned} & \text { RESULT } \\ & 1 \text { MEASURED } \\ & \text { 2 NOT } \\ & \text { PRESENT } \\ & 3 \text { REFUSED } \\ & \text { 6 OTHER } \end{aligned}$ |
|  |  | GRANTED REFUSED <br> 1 2 <br> $\gamma$  <br> SIGN 1 |  | $\square$ |
|  |  |  |  | $\square$ |
|  |  |  |  | $\square$ |
|  |  |  |  | $\square$ |
|  |  |  |  | $\square$ |
|  |  |  |  |  |


| 50 | CHECK 47 AND 48: <br> NUMBER OF PERSONS WITH HEM <br> ONE OR MORE $\square$ <br> GIVE EACH WOMAN/PARENT/RES RESULT OF HEMOGLOBIN MEASU CONTINUE WITH 51.** | BIN LEVEL <br> IBLE ADULT <br> NT AND | OW THE CUTOFF P <br> GIVE EACH WOMA HEMOGLOBIN ME INTERVIEW. | NNE $\square$ <br> RENT/RESPONSIBLE ADULT RESULT OF EMENT AND END HOUSEHOLD |
| :---: | :---: | :---: | :---: | :---: |
| 51 | We detected a low level of hemoglobi CHILD(REN)) have developed severe obtaining appropriate treatment for the blood of NAME OF CHILD(REN)) ma | your blood/the mia, which is a bout (your con dition. Do you iven to the do | d of NAME OF CHIL ious health problem. n/the condition of N e that the informatio ? | N)). This indicates that (you/NAME OF ould like to inform the doctor at OF CHILD(REN)). This will assist you in ut the level of hemoglobin in (your blood/the |
|  | E OF PERSON WITH HEMOGLOBIN BELOW THE CUTOFF POINT | NAME OF P | ENT/RESPONSIBLE DULT | AGREES TO REFERRAL? |
| WOMEN AGE 18-49 |  |  |  |  |
|  |  |  |  | YES............................................................................................................. |
|  |  |  |  | $\begin{aligned} & \text { YES .................................................................................................................. } \\ & \text { NO....... } \end{aligned}$ |
|  |  |  |  | $\begin{aligned} & \text { YES .............................................................................................................. } \\ & \text { NO....... } \end{aligned}$ |
|  |  |  |  | $\begin{aligned} & \text { YES .............................................................................................................. } \\ & \text { NO...... } \end{aligned}$ |
| WOMEN AGE 15-17 AND CHILDREN |  |  |  |  |
|  |  |  |  | YES............................................................................................................ |
|  |  |  |  | YES ............................................................................................................... |
|  |  |  |  | $\begin{aligned} & \text { YES ............................................................................................................. } \\ & \text { NO....... } \end{aligned}$ |
|  |  |  |  | YES ....................................................................................................... |
|  |  |  |  | $\begin{aligned} & \text { YES ............................................................................................................. } \\ & \text { NO....... } \end{aligned}$ |
|  |  |  |  | $\begin{aligned} & \text { YES ............................................................................................................... } \\ & \text { NO...... } \end{aligned}$ |
|  |  |  |  | $\begin{aligned} & \text { YES ............................................................................................................... } \\ & \text { NO...... } \end{aligned}$ |
|  |  |  |  | $\begin{aligned} & \text { YES ................................................................................................................... } \\ & \text { NO...... } \end{aligned}$ |
|  |  |  |  | $\begin{aligned} & \text { YES ......................................................................................................... } \\ & \text { NO....... } \end{aligned}$ |

[^6]The Hashemite Kingdom of Jordan



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 108 | What is the highest level of school you attended: Old elementary, old preparatory, old secondary, new basic, new secondary, intermediate diploma, the university, or higher? |  |  |
| 109 | What is the highest grade you completed at that level? | GRADE $\qquad$ |  |
| 114 | How often do you read a Jordanian newspaper or magazine? Would you say: almost every day, 3-5 times a week, once or twice a week, once a month, few times a year, or never? |  |  |
| 115 | How often do you listen to the Jordanian radio? Would you say: almost every day, at least once a week, at least once a month, few times a year, or never? |  |  |
| 116 | How often do you watch the Jordanian television? Would you say: almost every day, at least once a week, at least once a month, few times a year, or never? | ALMOST EVERY DAY ....................................... 1 AT LEAST ONCE A WEEK................. 3 AT LEAST ONCE A MONTH ................................................................ 5 |  |
| 117 | What is your religion? | $\begin{aligned} & \text { ISLAM............................................................................................. } \\ & \text { CHRISTIAN....... } \\ & \text { OTHER } \\ & \hline \end{aligned}$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 201 | Now I would like to ask about all the births you have had during your life. Have you ever given birth? | YES............................................................................................................... 2 NO....... | ->206 |
| 202 | Do you have any sons or daughters to whom you have given birth who are now living with you? | YES.............................................................................................................. NO...... | ->204 |
| 203 | How many sons live with you? <br> And how many daughters live with you? <br> IF NONE, RECORD '00'. | SONS AT HOME DAUGHTERS AT HOME |  |
| 204 | Do you have any sons or daughters to whom you have given birth who are alive but do not live with you? | $\begin{aligned} & \text { YES.................................................................................................................. } \\ & \text { NO....... } \end{aligned}$ | $\rightarrow 206$ |
| 205 | How many sons are alive but do not live with you? <br> And how many daughters are alive but do not live with you? <br> IF NONE, RECORD '00'. | SONS ELSEWHERE DAUGHTERS ELSEWHERE... |  |
| 206 | Have you ever given birth to a boy or girl who was born alive but later died? <br> IF NO, PROBE: Any baby who cried or showed signs of life but did not survive? | YES............................................................................................................... 1 NO...... | $\rightarrow 208$ |
| 207 | How many boys have died? <br> And how many girls have died? <br> IF NONE, RECORD '00'. | BOYS DEAD <br> GIRLS DEAD $\qquad$ |  |
| 208 | SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD ' 00 '. | TOTAL $\qquad$ $\square$ |  |
| 209 | CHECK 208: <br> Just to make sure that I have this right: you have had in TOTAL $\qquad$ births during your life. Is that correct? NO <br> PROBE AND <br> YES <br> CORRECT <br> 201-208 AS NECESSARY. |  |  |
| 210 | CHECK 208: <br> ONE OR MORE <br> NO BIRTHS BIRTHS B |  | ->226 |


| 211 Now I would like to record the names of all your births you have had during your marriage(s), whether still alive or not, starting with the first one you had. <br> RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $212$ | 213 | 214 | 215 | 216 | $\begin{aligned} & 217 \\ & \text { IF ALIVE: } \end{aligned}$ | $\begin{array}{\|l\|} \hline 218 \\ \text { IF ALIVE } \end{array}$ | $\begin{aligned} & 219 \\ & \text { IF ALIVE: } \end{aligned}$ | $220$ |  | 221 |
| What name was given to your (first/next) baby? <br> (NAME) | Were <br> any of these births twins? | Is <br> (NAME) a boy or a girl? | In what month and year was (NAME) born? <br> PROBE: <br> What is his/her birthday? | Is <br> (NAME) <br> still <br> alive? | How old was (NAME) at his/her last birthday? <br> RECORD AGE IN COMPLETED YEARS. <br> IF LESS THAN 1 YEAR, RECORD '00' | Is (NAME) living with you? | RECORD <br> HOUSEHOLD LINE <br> NUMBER OF CHILD <br> (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD) | How old was when he/she <br> IF '1 YR', PR How many m was (NAME) RECORD DA LESS THAN MONTH; MO LESS THAN YEARS; OR | (NAME) died? <br> OBE: <br> onths old ? Y IF 1 NTHS IF TWO YEARS. | Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)? |
| 01 | SING ... 1 <br> MULT .. 2 | $\begin{aligned} & \text { BOY... } 1 \\ & \text { GIRL.. } 2 \end{aligned}$ | MONTH $\square$ YEAR |  | AGE IN YEARS $\square$ | $\begin{aligned} & \text { YES ....... } 1 \\ & \text { NO......... } 2 \end{aligned}$ |  | DAYS $\qquad$ <br> MONTHS . 2 <br> YEARS..... 3 |  |  |
| 02 | SING ... 1 <br> MULT .. 2 | $\begin{aligned} & \text { BOY... } 1 \\ & \text { GIRL.. } 2 \end{aligned}$ | MONTH YEAR $\square$ |  | AGE IN YEARS | $\begin{aligned} & \text { YES ....... } 1 \\ & \text { NO ......... } 2 \end{aligned}$ | LINE NUMBER | DAYS ....... 1 <br> MONTHS . 2 <br> YEARS..... 3 |  | $\left\|\begin{array}{l} \text { YES ......... } 1 \\ \text { NO........... } 2 \end{array}\right\|$ |
| 03 | SING ... 1 <br> MULT .. 2 | $\begin{aligned} & \text { BOY... } 1 \\ & \text { GIRL.. } 2 \end{aligned}$ | MONTH <br> YEAR |  | AGE IN YEARS | $\begin{array}{\|l} \text { YES ....... } 1 \\ \text { NO......... } 2 \end{array}$ | LINE NUMBER | DAYS ....... 1 <br> MONTHS . 2 <br> YEARS..... 3 |  | $\begin{aligned} & \text { YES ......... } 1 \\ & \text { NO........... } 2 \end{aligned}$ |
| 04 | SING ... 1 <br> MULT .. 2 | $\begin{aligned} & \text { BOY... } 1 \\ & \text { GIRL.. } 2 \end{aligned}$ | MONTH YEAR |  | AGE IN YEARS $\square$ | $\begin{array}{\|l} \text { YES ....... } 1 \\ \text { NO......... } 2 \end{array}$ | LINE NUMBER | DAYS ....... 1 <br> MONTHS . 2 <br> YEARS..... 3 |  | $\begin{aligned} & \text { YES ......... } 1 \\ & \text { NO............ } 2 \end{aligned}$ |
| 05 | SING ... 1 <br> MULT .. 2 | $\begin{aligned} & \text { BOY... } 1 \\ & \text { GIRL.. } 2 \end{aligned}$ | MONTH YEAR $\square$ |  | AGE IN YEARS | $\begin{array}{\|l} \text { YES ....... } 1 \\ \text { NO ......... } 2 \end{array}$ | LINE NUMBER | DAYS $\qquad$ <br> MONTHS . 2 <br> YEARS..... 3 | $\begin{array}{l\|l\|} \hline & \\ \hline & \\ \hline & \\ \hline \end{array}$ | $\left\|\begin{array}{l} \text { YES ......... } 1 \\ \text { NO........... } 2 \end{array}\right\|$ |
| 06 | SING ... 1 <br> MULT .. 2 | $\begin{aligned} & \text { BOY... } 1 \\ & \text { GIRL.. } 2 \end{aligned}$ | MONTH $\square$ YEAR |  | AGE IN YEARS | $\begin{array}{\|l} \text { YES ....... } 1 \\ \text { NO ......... } 2 \end{array}$ |  | DAYS ....... 1 <br> MONTHS . 2 <br> YEARS..... 3 |  | $\begin{aligned} & \text { YES ......... } 1 \\ & \text { NO........... } 2 \end{aligned}$ |
| 07 | SING ... 1 <br> MULT .. 2 | $\begin{aligned} & \text { BOY... } 1 \\ & \text { GIRL.. } 2 \end{aligned}$ | MONTH $\square$ YEAR $\square$ |  | AGE IN YEARS $\square$ | $\begin{aligned} & \text { YES ....... } 1 \\ & \text { NO......... } 2 \end{aligned}$ |  | DAYS ....... 1 <br> MONTHS . 2 <br> YEARS..... 3 |  | $\begin{gathered} \text { YES ......... } 1 \\ \text { NO............ } 2 \end{gathered}$ |
| 08 | SING ... 1 <br> MULT .. 2 | $\begin{aligned} & \text { BOY... } 1 \\ & \text { GIRL.. } 2 \end{aligned}$ | MONTH $\square$ YEAR $\square$ |  | AGE IN YEARS | $\begin{array}{\|l} \text { YES ....... } 1 \\ \text { NO ......... } 2 \end{array}$ | LINE NUMBER | DAYS ....... 1 <br> MONTHS . 2 <br> YEARS..... 3 |   <br>   <br>   <br>   | $\begin{aligned} & \text { YES ......... } 1 \\ & \text { NO............ } 2 \end{aligned}$ |




| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 235 | Have you had any pregnancies that terminated before 1997 that did not result in a live birth? | $\begin{aligned} & \text { YES......................................................................................................................... } \\ & \text { NO..... } \end{aligned}$ | ->237 |
| 236 | When did the last such pregnancy that terminated before 1997 end? | MONTH $\qquad$ <br> YEAR |  |
| 237 | When did your last menstrual period start? <br> (DATE, IF GIVEN) |  <br> IN MENOPAUSE/ <br> HAS HAD HYSTERECTOMY $\qquad$ 994 <br> BEFORE LAST BIRTH. $\qquad$ 995 <br> NEVER MENSTRUATED $\qquad$ 996 |  |
| 238 | From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant? |  | $\xrightarrow{\longrightarrow}>301$ |
| 239 | Is this time just before her period begins, during her period, right after her period has ended, or half way between two periods? | JUST BEFORE HER PERIOD BEGINS........................................................ 1 DURING HER PERIOD.............. RIGHT AFTER HER PERIOD HAS ENDED ........................ 3 HALF WAY BETWEEN TWO PERIODS .................................. 4 OTHER DON'T KNOW........................................ 8 |  |

SECTION 3. CONTRACEPTION

Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.

| 301 | Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)? |  | 302 Have you ever used (METHOD)? |
| :---: | :---: | :---: | :---: |
| 01 | FEMALE STERILIZATION Women can have an operation to avoid having any more children. | $\begin{aligned} & \text { YES ............................................................. } 2 \text { ป } \\ & \text { NO } \end{aligned}$ | Have you ever had an operation to avoid having any more children? |
| 02 | MALE STERILIZATION Men can have an operation to avoid having any more children. | $\begin{aligned} & \text { YES ................................... } 1 \\ & \text { NO ........................ } 2 \text { ন } \end{aligned}$ | Have you ever had a husband who had an operation to avoid having any more children? <br> YES $\qquad$ <br> NO. $\qquad$ |
| 03 | PILL Women can take a pill every day to avoid becoming pregnant. | $\begin{aligned} & \text { YES .............................................................. }{ }^{\text {ป }} \text { V } \\ & \text { NO } \end{aligned}$ | YES .................................................. 1 NO ....................................................... 2 |
| 04 | IUD Women can have a loop or coil placed inside them by a doctor or a nurse. | $\begin{aligned} & \text { YES ................................... } 1 \\ & \text { NO ........................ } 2 \text { ন } \end{aligned}$ | YES .................................................. 1 NO ....................................................... 2 |
| 05 | INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months. | $\begin{aligned} & \text { YES .................................... } 1 \\ & \text { NO ....................... } 2 \text { ন } \end{aligned}$ | YES ................................................. 1 NO ....................................................... 2 |
| 06 | IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years. | $\begin{aligned} & \text { YES ............................................................ } 2 \text { ป } \\ & \text { NO ....... } \end{aligned}$ | YES .................................................. 1 NO ....................................................... 2 |
| 07 | CONDOM Men can put a rubber sheath on their penis before sexual intercourse. | $\begin{aligned} & \text { YES .............................................................. }{ }^{2} \text { V } \\ & \text { NO ........ } \end{aligned}$ | YES .................................................. 1 NO ....................................................... 2 |
| 08 | FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse. | $\begin{aligned} & \text { YES ...................................... } 1 \\ & \text { NO ...................... } 2 \text { ป } \end{aligned}$ | YES ................................................... 1 |
| 09 | DIAPHRAGM Women can place a thin flexible disk in their vagina before intercourse. | $\begin{aligned} & \text { YES .................................... } 1 \\ & \text { NO ....................... } 2 \text { ন } \end{aligned}$ | YES .................................................. 1 NO ....................................................... 2 |
| 10 | FOAM OR JELLY Women can place a suppository, jelly, or cream in their vagina before intercourse. | $\begin{aligned} & \text { YES ........................................................... } 2 \text { ป } \\ & \text { NO ........ } \end{aligned}$ | YES .................................................. 1 NO ....................................................... 2 |
| 11 | LACTATIONAL AMENORRHEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds frequently, day and night, and that her menstrual period has not returned. | $\begin{aligned} & \text { YES ............................................................ } 2 \text { ᄀ } \\ & \text { NO ........ } \end{aligned}$ | YES .................................................. 1 NO ....................................................... 2 |
| 12 | RHYTHM OR PERIODIC ABSTINENCE Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant. | $\begin{aligned} & \hline \text { YES ...................................... } 1 \\ & \text { NO ..................... } 2 \text { ন } \end{aligned}$ | YES .................................................. 1 NO ....................................................... 2 |
| 13 | WITHDRAWAL Men can be careful and pull out before climax. | $\begin{aligned} & \text { YES ............................................................. }{ }^{2} \text { ป } \\ & \text { NO } \end{aligned}$ | YES ................................................. 1 NO ....................................................... 2 |
| 14 | EMERGENCY CONTRACEPTION Women can take pills up to three days after sexual intercourse to avoid becoming pregnant. | $\begin{aligned} & \text { YES ................................................................. } \\ & \text { NO } \end{aligned}$ | YES ................................................. 1 NO ....................................................... 2 |
| 15 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? | YES ................................. 1 <br> (SPECIFY) <br> NO ................................. 2 |  |
| 303 | CHECK 302: <br> NOT A SINGLE <br> AT LEAST ONE <br> "YES" "YES" <br> (NEVER USED) <br> (EVER USED) |  | ->307 |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 304 | Have you ever used anything or tried in any way to delay or avoid getting pregnant? | YES ............................................................................................................ 2 | $\rightarrow 306$ |
| 305 | ENTER '0' IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH |  | $\rightarrow 328 \mathrm{~A}$ |
| 306 | What have you used or done? <br> CORRECT 302 AND 303 (AND 301 IF NECESSARY). |  |  |
| 307 | Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. <br> How many living children did you have at that time, if any? <br> IF NONE, RECORD '00'. | NUMBER OF CHILDREN ...... $\square$ |  |
| 308 | CHECK 302 (01): <br> WOMAN NOT <br> WOMAN <br> STERILIZED STERILIZED |  | $\rightarrow 311 \mathrm{~A}$ |
| 309 | CHECK 226: <br> NOT PREGNANT <br> PREGNANT OR UNSURE |  | ->318 |
| 310 | Are you currently doing something or using any method to delay or avoid getting pregnant? | $\begin{aligned} & \text { YES ................................................................................................................. } \\ & \text { NO...... } \end{aligned}$ | ->318 |
| 311 | Which method are you using? <br> CIRCLE '01' FOR FEMALE STERILIZATION. |  | $\underset{-}{\underset{\sim}{n}>313}$ |
| 312A | Why are you using (CURRENT METHOD)? Is it mainly for birth spacing for limiting births, or for any other reason? |  |  |
| 312B | Would you like to use a different method of family planning than the one you are currently using? | YES ............................................................................................................. NO | $\rightarrow 312 \mathrm{E}$ |
| 312C | Which method would you prefer to use or to try? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 312D | What is the main reason why you are not currently using your preferred method (MENTIONED IN 312C)? |  |  |
| 312E | CHECK 311: <br> IUD <br> OTHER METHOD |  | >316A |
| 312F | Who inserted your IUD? | DOCTOR $\qquad$ <br> NURSE/MIDWIFE $\qquad$ <br> OTHER $\qquad$ 6 <br> (SPECIFY) |  |
| 313 | In what facility did the sterilization take place? <br> IF SOURCE IS HOSPITAL, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) |  |  |
| 314 | CHECK 311: | YES .......................................................................................................................................................... NO...... DON'T KNOW ...... |  |
| 315A | Do you regret that (you/your husband) had the operation not to have any (more) children? | $\begin{aligned} & \text { YES................................................................................................................. } 1 \\ & \text { NO ......... } \end{aligned}$ | $\rightarrow 316$ |
| 315B | Why do you regret the operation? | RESPONDENT WANTS ANOTHER $\qquad$ <br> HUSBAND WANTS ANOTHER CHILD.... 2 <br> SIDE EFFECTS ....................................... 3 <br> CHILD DIED ........................................... 4 <br> OTHER $\qquad$ 6 <br> (SPECIFY) |  |
| 316 $316 A$ | In what month and year was the sterilization performed? <br> For how long have you been using (CURRENT METHOD) now without stopping? <br> PROBE: In what month and year did you start using (CURRENT METHOD) continuously? | MONTH <br> YEAR $\qquad$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 316B | CHECK 316/316A, 215 AND 230: <br> ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 316/316A <br> GO BACK TO 316/316A, PROBE AND RECORD MONTH AND YEAR USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR P | YES <br> NO <br> TART OF CONTINUOUS ANCY TERMINATION). |  |
| 317 | CHECK 316/316A: <br> YEAR IS 1997 OR LATER <br> $\checkmark$ <br> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING <br> ENTER METHOD SOURCE CODE IN COLUMN 2 OF CALENDAR IN MONTH STARTED USING | 96 OR EARLIER $\square$ <br> E FOR METHOD USED IN MONTH OF IN COLUMN 1 OF THE CALENDAR AND TH BACK TO JANUARY 1997 TO ——327 |  |
| 318 | I would like to ask you some questions about the times you or your husb getting pregnant during the last few years. <br> USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND RECENT USE, BACK TO JANUARY 1997 <br> USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF <br> IN COLUMN 1, ENTER METHOD USE CODE OR '0' FOR NONUSE IN <br> ILLUSTRATIVE QUESTIONS: <br> COLUMN 1: - When was the last time you used a method <br> - When did you start using that method? How <br> - How long did you use the method then? <br> IN COLUMN 2, ENTER METHOD SOURCE CODE IN FIRST MONTH <br> ILLUSTRATIVE QUESTIONS: <br> COLUMN 2: - Where did you obtain the method when you <br> - Where did you get advice on how to use the <br> IN COLUMN 3, ENTER CODES FOR DISCONTINUATION NEXT TO L NUMBER OF CODES IN COLUMN 3 MUST BE SAME AS NUMBER O COLUMN 1. <br> ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METH GET PREGNANT. <br> ILLUSTRATIVE QUESTIONS: <br> COLUMN 3: - Why did you stop using the (METHOD)? <br> - Did you become pregnant while using (MET you stop for some other reason? <br> IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: <br> - How many months did it take you to get pregn AND ENTER '0' IN EACH SUCH MONTH IN | d may have used a method to avoid <br> NUSE, STARTING WITH MOST <br> GNANCY AS REFERENCE POINTS. <br> ACH BLANK MONTH. <br> Which method was that? <br> ng after the birth of (NAME)? <br> EACH USE. <br> arted using it? <br> ethod [for LAM, rhythm, or withdrawal]? <br> T MONTH OF USE. <br> NTERRUPTIONS OF METHOD USE IN <br> LLOWED, ASK WHETHER SHE <br> OR DELIBERATELY STOPPED TO <br> D), or did you stop to get pregnant, or did <br> ant after you stopped using (METHOD)? <br> OLUMN 1. |  |
| 321 | CHECK 311/311A: <br> CIRCLE METHOD CODE: |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 322 | You obtained (CURRENT METHOD) from (SOURCE OF METHOD FROM CALENDAR) in (DATE). <br> At that time, were you told about side effects or problems you might have with the method? | YES ................................................................................................................. NO | ->324 |
| 323 | Were you ever told by a health or family planning worker about side effects or problems you might have with the method? | YES ......................................................................................................... 2 NO....... | ->325 |
| 324 | Were you told what to do if you experienced side effects or problems? | $\begin{aligned} & \text { YES ................................................................................................................. } \\ & \text { NO...... } \end{aligned}$ |  |
| 325 |  | YES ......................................................... 1 NO ............................................................. 2 | ->327 |
| 326 | Were you ever told by a health or family planning worker about other methods of family planning that you could use? | $\begin{aligned} & \text { YES ................................................................................................................. } \\ & \text { NO. } \end{aligned}$ |  |
| 327 | CHECK 311/311A: <br> CIRCLE METHOD CODE: |  |  |
| 328 | Where did you obtain (CURRENT METHOD) the last time? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. | PUBLIC SECTOR <br> GOVT. HOSPITAL $\qquad$ <br> GOVT. HEALTH CENTER .................. 12 <br> GOVT. MCH. $\qquad$ 13 <br> UNIVERSITY HOSPITAL/CLINIC ....... 14 <br> ROYAL MEDICAL SERVICES <br> (ARMED FORCES). $\qquad$ 15 <br> MOBILE CLINIC. $\qquad$ 16 <br> OTHER PUBLIC $\qquad$ 17 (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC ............. 21 <br> PRIVATE DOCTOR ............................ 22 <br> PHARMACY. $\qquad$ 23 <br> JORDANIAN AS. OF FP AND <br> PROTECTION (JAFPP) ............... 24 <br> UNRWA HEALTH CENTER................ 25 <br> OTHER NON GOV. ORGANIZATION 26 OTHER PRIVATE <br> MEDICAL $\qquad$ 27 <br> OTHER SOURCE <br> FRIEND/RELATIVE $\qquad$ 33 <br> OTHER $\qquad$ 96 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 328A | What is the main reason you are not using a method of contraception to avoid pregnancy? |  |  |
| 329 | Do you know of a place where you can obtain a method of family planning? | YES ................................................................................................................ NO | $\rightarrow 332$ |
| 330 | Where is that? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> Any other place? <br> RECORD ALL PLACES MENTIONED. |  |  |
| 332 | In the last 12 months, have you visited a health facility for care for yourself (or your children)? | $\begin{aligned} & \text { YES ...................................................................................................................... } \\ & \text { NO....... } \end{aligned}$ | $\rightarrow 401$ |
| 333 | Did any staff member at the health facility speak to you about family planning methods? |  |  |


| 401 | CHECK 224: <br> ONE OR MORE BIRTHS <br> IN 1997 |  | ->487 |
| :---: | :---: | :---: | :---: |
| 402 | ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 1997 OR LATER. <br> ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. <br> (IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRES). <br> Now I would like to ask you some questions about the health of all your children born since January 1997. (We will talk about each separately) |  |  |
| 403 | LINE NUMBER FROM 212 | LAST BIRTH <br> LINE NUMBER $\qquad$ | NEXT-TO-LAST BIRTH <br> LINE NUMBER $\qquad$ |
| 404 | FROM 212 AND 216 | NAME $\qquad$ <br> LIVING <br> DEAD | NAME $\qquad$ <br> LIVING <br> DEAD |
| 405 | At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all? | THEN .......................................... 1 (SKIP TO 407) $<1$ LATER ............................................ 2 | THEN ........................................... 1 (SKIP TO 423) 4 LATER............................................. 2 |
| 406 | How much longer would you like to have waited? | MONTHS $\qquad$ <br> YEARS $\qquad$ 2 <br> DON'T KNOW $\qquad$ 998 | MONTHS $\qquad$ <br> YEARS $\qquad$ 2 <br> DON'T KNOW $\qquad$ 998 |
| 407 | Did you see anyone for antenatal care for this pregnancy? <br> IF YES: Whom did you see? <br> Anyone else? <br> PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN. |  |  |
| 408 | How many months pregnant were you when you first received antenatal care for this pregnancy? | MONTHS $\qquad$ $\square$ DON'T KNOW $\qquad$ 98 |  |
| 409 | How many times did you receive antenatal care during this pregnancy? | NO. OF TIMES $\qquad$ $\square$ DON'T KNOW $\qquad$ |  |
| 410 | CHECK 409: <br> NUMBER OF TIMES RECEIVED ANTENATAL CARE |  |  |
| 411 | How many months pregnant were you the last time you received antenatal care? | MONTHS $\qquad$ $\square$ DON'T KNOW $\qquad$ 98 |  |


|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: |
| 412 | During this pregnancy, were any of the following done at least once? <br> Were you weighed? <br> Was your height measured? <br> Was your blood pressure measured? <br> Did you give a urine sample? <br> Did you give a blood sample? | YES NO <br> WEIGHT........................... 1 2 <br> HEIGHT ....................... 1 2 <br> BLOOD PRESSURE....... 1 2 <br> URINE SAMPLE .............. 1 2 <br> BLOOD SAMPLE........... 1 2 |  |
| 413 | Were you told about the signs of pregnancy complications? | YES.................................................. 1 NO................................... 2 (SKIP TO 415) \& DON'T KNOW............................... 8 |  |
| 414 | Were you told where to go if you had these complications? | YES............................................................................................................................................ |  |
| 415 | During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth? | YES....................................................................................................................... 8 (SKIP TO 417) |  |
| 416 | During this pregnancy, how many times did you get this injection? | TIMES $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ |  |
| 417 | During this pregnancy, were you given or did you buy any iron tablets or iron syrup? <br> SHOW TABLET | YES...................................................................................................................... 8 (SKIP TO 423) NO................. |  |
| 418 | During the whole pregnancy, for how many days did you take the tablets or syrup? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS. | NUMBER OF <br> DAYS $\qquad$ <br> DON'T KNOW $\qquad$ 998 |  |
| 423 | When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small? |  | VERY LARGE ................................. 1 LARGER THAN AVERAGE ........... 2 AVERAGE............................... 3 SMALLER THAN AVERAGE ......... 4 VERY SMALL............................ 5 DON'T KNOW .......................... 8 |
| 424 | Was (NAME) weighed at birth? | YES...................................................................................................................... 8 (SKIP TO 426) |  |
| 425 | How much did (NAME) weigh? <br> RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE. |  |  |
| 426 | Who assisted with the delivery of (NAME)? <br> Anyone else? <br> PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING. <br> IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY. | HEALTH PROFESSIONAL DOCTOR .................................. A NURSE/MIDWIFE................... B OTHER PERSON TRADITIONAL BIRTH ATTENDANT ...........................C RELATIVE/FRIEND ................ OTHER NO ONE ....................................... Y |  |


|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 427 | Where did you give birth to (NAME)? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER OR CLINIC, WRITE THE NAME OF THE PLACE, PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. | HOME <br> YOUR HOME $\qquad$ <br> (SKIP TO 429) $\square$ <br> OTHER HOME......................... 12 <br> PUBLIC SECTOR <br> GOVT. HOSPITAL ..................... 21 <br> GOVT. HEALTH CENTER.......... 22 <br> UNIVERSITY HOSPITAL $\qquad$ <br> ROYAL MEDICAL SERVICES <br> (ARMED FORCES)................ 24 <br> OTHER PUBLIC $\qquad$ 26 <br> PRIVATE MEDICAL SECTOR <br> PVT. HOSPITAL/CLINIC . $\qquad$ 31 <br> OTHER PVT. $\qquad$ 36 $\qquad$ <br> OTHER $\qquad$ 96 <br> (SKIP TO 429) |  |
| 428 | Was (NAME) delivered by caesarian section? | YES................................................................................................ | YES ............................................................................................... NO |
| 428A | For the delivery of (NAME), who paid for most of the cost? | GOVERNMENT INSURANCE ........ 1 PRIVATE INSURANCE ................................................................................................... 8 UNRWA RESPONDENT/FAMIY | GOVERNMENT INSURANCE ........ 1 <br> PRIVATE INSURANCE.................. 2 <br> UNRWA........................... 3 <br> RESPONDENT/FAMILY ............... 4 <br> OTHER $\quad$ <br> DON'T KNOW............................... 8 |
| 428B | Did anyone in the health facility talk to you or advise you about family planning after the delivery of (NAME)? | YES............................................... 1 NO................................................... 2 | YES ............................................... 1 NO................................................... 2 |
| 428C | After you left the health facility where you gave birth to (NAME), during the next months did you seek a health professional to check on your health? | YES............................................ 1 NO......................................... 2 .............(SKIP TO 429A) «ఒ | YES ............................................. 1 (SKIP TO 435) < NO............................................... 2 |
| 429 | After (NAME) was born, did a health professional check on your health? | YES.............................................. 1 (SKIP TO 430) $-\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ | $\begin{aligned} & \text { YES ................................................................................................ } \\ & \text { NO....... } \end{aligned}$ |
| 429A | Why did not you seek a health professional check on your health after (NAME) was born? | HEALTH FACILITY TOO FAR. 01 TOO EXPENSIVE.................... 02 WAITING TIME TOO LONG .... 03 FACILITY NOT WELL <br> EQUIPED ... $\qquad$ 04 NOT ENOUGH QUALIFIED <br> PERSONNEL. $\qquad$ 05 <br> NOT WELL RECEIVED ........... 06 NO NEED TO GO/NOT SICK .. 07 NOT AWARE OF AVAILA- <br> BILITY OF POSTNATAL <br> SERVICES. $\qquad$ 08 HUSBAND/FAMILY <br> OPPOSED .. $\qquad$ 09 <br> NOT SUPPOSED TO GO OUT < 40 DAYS.. $\qquad$ 10 NO ONE TO TAKE CARE OF BABY DURING VISIT....... 11 OTHER $\qquad$ 96 <br> (SPECIFY) <br> (SKIP TO 434) $\qquad$ . |  |


|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: |
| 430 | How many days or weeks after the delivery did the first check take place? <br> RECORD '00’ DAYS IF SAME DAY. | DAYS AFTER DEL... 1 <br> WEEKS AFTER DEL2 <br> DON'T KNOW <br> 998 |  |
| 431 | Who checked on your health at that time? <br> PROBE FOR MOST QUALIFIED PERSON. | HEALTH PROFESSIONAL DOCTOR .......................................... 2 NURSE/MDWIFE............ OTHER PERSON TRADITIONAL BIRTH ATTENDANT ........................... 3 OTHER (SPECIFY) |  |
| 432 | Where did this first check take place? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. |  |  |
| 432A | Did anyone in the health facility talk to you or advise you about family planning during the postnatal visit? | YES................................................ 1 |  |
| 432B | CHECK 430: <br> NUMBER OF DAYS/WEEKS AFTER DELIVERY |  |  |
| 432C | Why did not you seek earlier for health professional check on your health after (NAME) was born? | NO NEED TO GO/NOT SICK ........ 01 NOT AWARE OF AVAILABILITY OF POSTNATAL SERVICES 02 NOT SUPPOSED TO GO <br> OUT BEFORE 40 DAYS ........ 03 NO ONE TO TAKE CARE OF <br> BABY DURING VISIT............. 04 <br> OTHER $\qquad$ 96 (SPECIFY) |  |
| 434 | Has your period returned since the birth of (NAME)? |  |  |
| 435 | Did your period return between the birth of (NAME) and your next pregnancy? |  |  |

\begin{tabular}{|c|c|c|c|}
\hline \& \& \begin{tabular}{l}
LAST BIRTH \\
NAME
\end{tabular} \& \begin{tabular}{l}
NEXT-TO-LAST BIRTH \\
NAME
\end{tabular} \\
\hline 436 \& For how many months after the birth of (NAME) did you not have a period? \& MONTHS \(\qquad\)
\(\square\) DON'T KNOW \(\qquad\) 98 \& \begin{tabular}{l}
MONTHS \(\qquad\)
\(\square\) \\
DON'T KNOW \(\qquad\)
\end{tabular} \\
\hline 437 \& \begin{tabular}{l}
CHECK 226: \\
IS RESPONDENT PREGNANT?
\end{tabular} \& \[
\begin{aligned}
\& \text { NOT } \\
\& \text { PREG- } \\
\& \text { NANT }
\end{aligned} \square \begin{gathered}
\text { PREGNANT } \\
\text { OR UNSURE } \\
\text { (SKIP TO 439) }
\end{gathered} \quad \square \square . \square
\] \& \\
\hline 438 \& Have you resumed sexual relations since the birth of (NAME)? \& YES......................................................................................................
(SKIP TO 440) \& \& \\
\hline 439 \& For how many months after the birth of (NAME) did you not have sexual relations? \& MONTHS \(\qquad\)
\(\square\) DON'T KNOW \(\qquad\) \& MONTHS \(\qquad\)
\(\square\) DON'T KNOW \(\qquad\) \\
\hline 440 \& Did you ever breastfeed (NAME)? \& YES ....................................................................................................
(SKIP TO 447) \& YES ...................................................................................................
(SKIP TO 447)
NO \\
\hline 441 \& \begin{tabular}{l}
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.
\end{tabular} \& \begin{tabular}{l}
IMMEDIATELY \(\qquad\) 000 \\
HOURS \(\qquad\) 1 \\
DAYS \(\qquad\) 2
\end{tabular} \& \begin{tabular}{l}
IMMEDIATELY \(\qquad\) .000 \\
HOURS \(\qquad\) 1 \\
DAYS \(\qquad\) 2
\end{tabular} \\
\hline 442 \& In the first three days after delivery, before your milk began flowing regularly, was (NAME) given anything to drink other than breast milk? \& YES.............................................. 1
NO......................................... 2

(SKIP TO 444) \& YES ............................................... 1
NO......................................... 2

(SKIP TO 444) <br>

\hline 443 \& | What was (NAME) given to drink before your milk began flowing regularly? |
| :--- |
| Anything else? |
| RECORD ALL LIQUIDS MENTIONED | \&  \&  <br>


\hline 444 \& | CHECK 404: |
| :--- |
| IS CHILD LIVING? | \& | LIVING |
| :--- |
| DEAD |
| (SKIP $\square$ |
| (SKIP TO 446) | \& | LIVING |
| :--- |
| DEAD |
| (SKIP TO 446) | <br>

\hline 445 \& Are you still breastfeeding (NAME)? \& YES............................................. 1

NO.......................................... 2 \& $$
\begin{aligned}
& \text { YES ............................................................................................ } 2 \\
& \text { NO............... } \\
& \hline
\end{aligned}
$$ <br>

\hline 446 \& For how many months did you breastfeed (NAME)? \& MONTHS $\qquad$
$\square$ DON'T KNOW $\qquad$ 98 \& MONTHS $\qquad$
$\square$ DON'T KNOW $\qquad$ <br>

\hline 447 \& | CHECK 404: |
| :--- |
| IS CHILD LIVING? | \&  \&  <br>

\hline
\end{tabular}

|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 448 | How many times did you breastfeed last night between sunset and sunrise? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER. | NUMBER OF NIGHTTIME FEEDINGS $\square$ | NUMBER OF NIGHTTIME FEEDINGS $\square$ |
| 449 | How many times did you breastfeed yesterday during the daylight hours? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER. | NUMBER OF DAYLIGHT FEEDINGS. $\square$ | NUMBER OF DAYLIGHT FEEDINGS. $\square$ |
| 450 | Did (NAME) drink anything from a bottle with a nipple yesterday or last night? |  |  |
| 451 | Was sugar added to any of the foods or liquids (NAME) ate yesterday? | YES......................................................... 1 <br> NO....................................... 2 <br> DON | YES ........................................................................................................................................ |
| 452 | How many times did (NAME) eat solid, semisolid, or soft foods other than liquids yesterday during the day or at night? <br> IF 7 OR MORE TIMES, RECORD ' 7 ’. | NUMBER OF TIMES $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 8 | NUMBER OF TIMES $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ |
| 453 |  | GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 454. | GO BACK TO 405 IN LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 454. |

SECTION 4B. IMMUNIZATION, HEALTH AND NUTRITION


|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: |
| 461 | Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a national immunization day campaign? <br> RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-4, POL. Booster 1, DPT 1-3, DPT Booster 1, HEPATITIS 1-3, Hib 1-3, MEASLES 1-2 AND/OR MMR VACCINE(S). |  |  |
| 462 | Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign? | YES............................................................................................................................ 8 (SKIP TO 466) | YES...................................................................................................................................................... (SKIP TO |
| 463 | Please tell me if (NAME) received any of the following vaccinations: |  |  |
| 463A | A BCG vaccination against tuberculosis, that is an injection in the arm or shoulder that usually causes a scar | YES....................................................................................................................................... | YES ...................................................................................................................................... |
| 463B | Polio vaccine, that is, usually drops in the mouth or sometimes an injection given in the thigh |  | YES .................................................................................................................................................. |
| 463C | When was the first polio vaccine received, just after birth or later? | JUST AFTER BIRTH ......................................................... 12 LATER ............. | JUST AFTER BIRTH....................................................................... LATER ....... |
| 463D | How many times was the polio vaccine received? | NUMBER OF TIMES .......... $\square_{\square}^{\square}$ | NUMBER OF TIMES.......... $\square_{\square}^{\square}$ |
| 463E | A DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops to prevent diphtheria, pertusis, and tetanus | YES.......................................................................................................................................................... | YES .................................................................................................................................................. (SKIP TO |
| 463F | How many times? | NUMBER OF TIMES .......... $\square_{\square}^{\square}$ | NUMBER OF TIMES.......... $\square$ |
| 463G | A vaccination to prevent Hepatitis, that is, an injection given sometimes at the same time as polio drops and DPT injection | YES.......................................................................................................................... 8 (SKIP TO 463I) | YES.................................................................................................................................................. (SKIP TO 463I) |
| 463H | How many times? | NUMBER OF TIMES ........... $\square_{\square}^{\square}$ | NUMBER OF TIMES.......... $\square_{\square}^{\square}$ |
| 463I | A Hib vaccination, that is, an injection given sometimes at the same time as polio drops, DPT and Hepatitis to prevent meningitis | YES................................................................................................................................................. | YES ................................................................................................................................................... |
| 463J | How many times? | NUMBER OF TIMES .......... $\square_{\square}^{\square}$ | NUMBER OF TIMES .......... $\square$ |
| 463K | An injection to prevent measles | YES................................................................................................................................................... (SKIP TO | YES .................................................................................................................................................... (SKIP TO 463M) |
| 463L | How many times? | NUMBER OF TIMES .......... $\square_{\square}^{\square}$ | NUMBER OF TIMES.......... $\square_{\square}^{\square}$ |
| $\begin{aligned} & 463 \\ & \mathrm{M} \end{aligned}$ | A MMR vaccination, that is, an injection given at the age of 18 months to prevent Measles, Mumps, and Rubella | YES...................................................................................................................................... | YES ..................................................................................................................................... |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: |
| 463N | CHECK 460 AND 463E DPT INJECTION |  |  |
| 4630 | Where did (NAME) receive the first vaccination to prevent DPT? | ANY PUBLIC FACILITY................... 1 <br> ANY PRIVATE FACILITY ................. 2 <br> UNRWA $\qquad$ <br> OTHER $\qquad$ 6 (SPECIFY) DON'T KNOW. $\qquad$ .8 |  |
| 463P | CHECK 460 AND 463F DPT INJECTION |  |  |
| 463Q | Where did (NAME) receive the second vaccination to prevent DPT? | ANY PUBLIC FACILITY.................. 1 <br> ANY PRIVATE FACILITY ................ 2 <br> UNRWA $\qquad$ <br> OTHER $\qquad$ 6 (SPECIFY) DON'T KNOW. $\qquad$ 8 |  |
| 463R | CHECK 460 AND 463F DPT INJECTION | AT <br> LESS <br> LEAST <br> THAN 3 <br> THREE <br> (SKIP TO 463T) |  |
| 463S | Where did (NAME) receive the third vaccination to prevent DPT? | ANY PUBLIC FACILITY................... 1 <br> ANY PRIVATE FACILITY ................ 2 <br> UNRWA $\qquad$ <br> OTHER $\qquad$ 6 (SPECIFY) DON'T KNOW. $\qquad$ .8 |  |
| 463T | CHECK 460 AND 463K <br> MEASLES INJECTION | $\begin{array}{lll}\text { AT } & \square & \begin{array}{l}\text { NONE } \\ \text { LEAST } \\ \text { OR DK } \\ \text { ONE }\end{array} \\ \square & \square \\ & \checkmark & \text { (SKIP TO 466) }\end{array}$ |  |
| 463 U | Where did (NAME) receive the first injection to prevent Measles? | ANY PUBLIC FACILITY................... 1 <br> ANY PRIVATE FACILITY ................ 2 <br> UNRWA $\qquad$ <br> OTHER $\qquad$ 6 (SPECIFY) DON'T KNOW. $\qquad$ 8 |  |
| 463 V | CHECK 460 AND 463L <br> MEASLES INJECTION |  |  |
| 463W | Where did (NAME) receive the second injection to prevent Measles? | ANY PUBLIC FACILITY.................. 1 <br> ANY PRIVATE FACILITY ................ 2 <br> UNRWA $\qquad$ <br> OTHER $\qquad$ 6 (SPECIFY) <br> DON'T KNOW. $\qquad$ 8 |  |
| 466 | Has (NAME) been ill with fever at any time in the last 2 weeks? | YES........................................................................................................................................ | YES ............................................................................................................................................. |
| 467 | Has (NAME) had an illness with a cough at any time in the last 2 weeks? | YES.................................................................................................................................................. | YES ............................................................................................................................. 8 (SKIP TO 469) |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 468 | When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, fast breaths? | YES...................................................................................................................................... | YES....................................................................................................................................... |
| 469 | CHECK 466 AND 467: <br> FEVER OR COUGH? | "YES" IN 466 <br> OR 467 <br> OTHER $\square$ <br> (SKIP TO 475) |  |
| 470 | Did you seek advice or treatment for the fever/cough? | YES....................................................................................................... (SKIP TO 475) «- | YES ........................................................................................................ (SKIP TO 475) |
| 471 | Where did you seek advice or treatment? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> Anywhere else? <br> RECORD ALL PLACES MENTIONED. | PUBLIC SECTOR <br> GOVT. HOSPITAL $\qquad$ <br> GOVT. HEALTH CENTER........... B <br> GOVT. MCH.. $\qquad$ <br> UNIVERSITY HOSPITAL. $\qquad$ <br> ROYAL MEDICAL SERVICES <br> (ARMED FORCES) $\qquad$ E <br> MOBILE CLINIC. $\qquad$ <br> COMMUN. HEALTH WORKER..G <br> OTHER PUBLIC $\qquad$ H (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PVT. HOSPITAL/CLINIC $\qquad$ <br> PRIVATE DOCTOR $\qquad$ <br> PHARMACY. $\qquad$ <br> UNRWA HEALTH CENTER ........L <br> OTHER PVT. <br> MEDICAL $\qquad$ M (SPECIFY) <br> OTHER SOURCE <br> SHOP.. $\qquad$ <br> TRAD. PRACTITIONER $\qquad$ N O <br> OTHER $\qquad$ X | PUBLIC SECTOR <br> GOVT. HOSPITAL ...................... A <br> GOVT. HEALTH CENTER.......... B <br> GOVT. MCH. $\qquad$ <br> UNIVERSITY HOSPITAL............. D <br> ROYAL MEDICAL SERVICES <br> (ARMED FORCES) .................. E <br> MOBILE CLINIC. $\qquad$ F <br> COMMUN. HEALTH WORKER ..G <br> OTHER PUBLIC $\qquad$ H (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PVT. HOSPITAL/CLINIC $\qquad$ <br> PRIVATE DOCTOR $\qquad$ <br> PHARMACY. $\qquad$ <br> UNRWA HEALTH CENTER ........L <br> OTHER PVT. <br> MEDICAL $\qquad$ M (SPECIFY) <br> OTHER SOURCE $\qquad$ <br> TRAD. PRACTITIONER $\qquad$ 0 <br> OTHER $\qquad$ X |
| 475 | Has (NAME) had diarrhea in the last 2 weeks? |  | YES................................................................................................................................................. (SKIP TO |
| 476 | Now I would like to know how much (NAME) was offered to drink during the diarrhea. Was he/she offered less than usual to drink, about the same amount, or more than usual to drink? <br> IF LESS, PROBE: Was he/she offered much less than usual to drink or somewhat less? |  |  |
| 477 | When (NAME) had diarrhea, was he/she offered less than usual to eat, about the same amount, more than usual, or nothing to eat? <br> IF LESS, PROBE: Was he/she offered much less than usual to eat or somewhat less? |  |  |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 478 | Was he/she given any of the following to drink: | YES NO DK | YES NO DK |
| a | A fluid made from a special packet called Aquacell or Paralait? | AQUACELL/PARALAIT ..... 128 | AQUACELL/PARALAIT ..... 128 |
| b | Thin watery gruel made from rice, carrots, wheat, etc? | THIN WATERY GRUEL..... 128 | THIN WATERY GRUEL.... 128 |
| c | Soup? | SOUP............................. 128 | SOUP............................. 128 |
| d | Home made sugar-salt-water solution? | SUG.-SALT-WAT. SOL...... 1 2 | SUG.-SALT-WAT. SOL...... 128 |
| e | Milk or infant formula? | MILK/INFANT FORMULA.. 1 2 | MILK/INFANT FORMULA .. 128 |
| $f$ | Yoghurt-based drink? | YOGHURT-BASED........... 128 | YOGHURT-BASED ........... 128 |
| g | Water? | WATER .......................... 128 | WATER .......................... 128 |
| h | Any other liquid? | OTHER LIQUID ............... 128 | OTHER LIQUID................ 128 |
| 479 | Was anything (else) given to treat the diarrhea? | YES........................................................................................................... 8 (SKIP TO 481) 8 | YES.............................................................................................................................................. (SKIP TO 481) |
| 480 | What (else) was given to treat the diarrhea? <br> Anything else? <br> RECORD ALL TREATMENTS MENTIONED. |  |  |
| 481 | Did you seek advice or treatment for the diarrhea? | YES.................................................................................................... (SKIP TO 483) | YES .................................................................................................... (SKIP TO 483) |
| 482 | Where did you seek advice or treatment? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> Anywhere else? <br> RECORD ALL PLACES MENTIONED. | PUBLIC SECTOR <br> GOVT. HOSPITAL $\qquad$ <br> GOVT. HEALTH CENTER.......... B <br> GOVT. MCH. $\qquad$ <br> UNIVERSITY HOSPITAL. $\qquad$ <br> ROYAL MEDICAL SERVICES <br> (ARMED FORCES) $\qquad$ <br> MOBILE CLINIC. $\qquad$ F <br> COMMUN. HEALTH WORKER..G <br> OTHER PUBLIC $\qquad$ H <br> PRIVATE MEDICAL SECTOR <br> PVT. HOSPITAL/CLINIC $\qquad$ <br> PRIVATE DOCTOR $\qquad$ <br> PHARMACY. $\qquad$ <br> UNRWA HEALTH CENTER ........L <br> OTHER PVT. <br> MEDICAL $\qquad$ M (SPECIFY) <br> OTHER SOURCE <br> SHOP.. $\qquad$ <br> TRAD. PRACTITIONER ............. O <br> OTHER $\qquad$ X | PUBLIC SECTOR <br> GOVT. HOSPITAL $\qquad$ <br> GOVT. HEALTH CENTER........... B <br> GOVT. MCH $\qquad$ C <br> UNIVERSITY HOSPITAL $\qquad$ <br> ROYAL MEDICAL SERVICES <br> (ARMED FORCES) $\qquad$ <br> MOBILE CLINIC. $\qquad$ F <br> COMMUN. HEALTH WORKER..G <br> OTHER PUBLIC $\qquad$ H <br> PRIVATE MEDICAL SECTOR <br> PVT. HOSPITAL/CLINIC $\qquad$ <br> PRIVATE DOCTOR $\qquad$ <br> PHARMACY. $\qquad$ <br> UNRWA HEALTH CENTER $\qquad$ <br> OTHER PVT. <br> MEDICAL $\qquad$ M (SPECIFY) <br> OTHER SOURCE <br> SHOP. $\qquad$ <br> TRAD. PRACTITIONER $\qquad$ .0 <br> OTHER $\qquad$ x |
| 483 |  | GO BACK TO 456 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 486. | GO BACK TO 456 IN LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 486. |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 486 | CHECK 478a, ALL COLUMNS: <br> NO CHILD RECEIVED AQUACELL $\square$ OR PARALAIT | ANY RECEIV AQUAC OR PAR | LD LAIT |  | ->488 |
| 487 | Have you ever heard of a special product called Aquacell or Paralait you can get for the treatment of diarrhea? | $\begin{aligned} & \text { YES. } \\ & \text { NO .. } \end{aligned}$ |  | $\begin{aligned} & \text {................ } 1 \\ & \text {........... } 2 \end{aligned}$ |  |
| 488 | CHECK 218: <br> HAS ONE OR MORE <br> HAS NO CHILDRE CHILDREN LIVING LIVING WITH HER WITH HER |  |  |  | $\rightarrow 490$ |
| 489 | When (your child/one of your children) is seriously ill, can you decide by yourself whether or not the child should be taken for medical treatment? <br> IF SAYS NO CHILD EVER SERIOUSLY ILL, ASK: <br> If (your child/one of your children) became seriously ill, could you decide by yourself whether the child should be taken for medical treatment? | $\begin{aligned} & \text { YES............ } \\ & \text { NO .......... } \\ & \text { DEPENDS } \end{aligned}$ |  | $\begin{aligned} & . . . . . . . . . . . . . . . . . . ~ \\ & \hline \end{aligned}$ |  |
| 490 | Now I would like to ask you some questions about medical care for you yourself. <br> Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not? <br> Knowing where to go. $\qquad$ <br> Getting permission to go. $\qquad$ <br> Getting money needed for treatment. $\qquad$ <br> The distance to a health facility. $\qquad$ <br> Having to take transport. $\qquad$ <br> Not wanting to go alone. $\qquad$ <br> Concern that there may not be a female health provider. $\qquad$ | WHERE <br> PERMISSION <br> MONEY <br> DISTANCE <br> TRANSPORT <br> ALONE <br> FEMALE | BIG <br> PRO- <br> BLEM <br> 1 <br> 1 <br> 1 <br> 1 <br> 1 <br> 1 <br> 1 | NOT A BIG PROBLEM <br> 2 <br> 2 <br> 2 <br> 2 <br> 2 <br> 2 <br> 2 |  |
| 490A | Have you had a breast cancer self exam or an exam by a health specialist to detect breast cancer in the last twelve months? | YES <br> NO |  | .............. 1 <br> 2 |  |



SECTION 5. MARRIAGE

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 500 | CHECK 101A: <br> WIDOWED/ SEPARATED <br> MARRIED DIVORCED |  | ->510 |
| 505 | Is your husband living with you now or is he staying elsewhere? | LIVING WITH HER ................................... 1 STAYING ELSEWHERE .................... 2 |  |
| 506 | RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. | NAME <br> LINE NO. $\qquad$ |  |
| 507 | Does your husband have another wife (other wives) besides you? | YES.......................................................... 1 NO.............................................................. 2 | $\overline{0}>51$ |
| 508 | How many wives does he have? | NUMBER $\qquad$ <br> DON'T KNOW $\qquad$ |  |
| 510 | Have you been married only once, or more than once? | ONCE ......................................................................................... MORE THAN ONCE...... |  |
| 511 | CHECK 510: | MONTH. $\qquad$ DON'T KNOW MONTH $\qquad$ 98 <br> YEAR $\qquad$ $\square$ DON'T KNOW YEAR. $\qquad$ 9998 | $\rightarrow$ 512A |
| 512 | How old were you when you started living with him? | AGE $\qquad$ $\square$ |  |
| 512A | Before you got married, was your [first] husband related to you in any way? | YES ....................................................................................................................................... NO | $\rightarrow 513$ |
| 512B | What type of relationship was it? | FIRST COUSIN ON BOTH FATHER <br> AND MOTHER'S SIDE <br> FIRST COUSIN ON BOTH MOTHER AND <br> FATHER'S SIDE. <br> FIRST COUSIN ON FATHER'S SIDE <br> (IBN AL AMM).. <br> FIRST COUSIN ON MOTHER'S SIDE <br> (IBN AL KHAL).. $\qquad$ <br> FIRST COUSIN ON FATHER'S SIDE <br> (IBN AL AMMA) $\qquad$ <br> FIRST COUSIN ON MOTHER'S SIDE <br> (IBN AL KHALA) ............................ 06 <br> SECOND COUSIN (FATHER'S SIDE) .. 07 <br> SECOND COUSIN (MOTHER'S SIDE) . 08 <br> OTHER RELATIVE <br> DON'T KNOW |  |
| 513 | DETERMINE MONTHS MARRIED SINCE JANUARY 1997. ENTER ‘X' MONTH MARRIED, AND ENTER 'O’ FOR EACH MONTH NOT MARRIED JANUARY 1997. <br> FOR WOMEN WITH MORE THAN ONE UNION: PROBE FOR DATE W FOR STARTING AND TERMINATION DATES OF ANY PREVIOUS UN <br> FOR WOMEN NOT CURRENTLY IN UNION: PROBE FOR DATE WHEN TERMINATION DATE AND FOR THE STARTING AND TERMINATION | IN COLUMN 4 OF CALENDAR FOR EACH D/NOT LIVING WITH A MAN, SINCE <br> HEN CURRENT UNION STARTED AND ONS. <br> N LAST UNION STARTED AND FOR DATES OF ANY PREVIOUS UNIONS. |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 513A | Did you and/or your husband have a premarital medical exam? | YES ............................................................................................................... |  |
| 515 | When was the last time you had sexual intercourse? <br> RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO. IF 12 MONTHS OR MORE, ANSWER MUST BE RECORDED IN YEARS. | DAYS AGO $\qquad$ <br> WEEKS AGO $\qquad$ <br> MONTHS AGO $\qquad$ <br> YEARS AGO $\qquad$ .4 | ->524 |
| 516 | The last time you had sexual intercourse, was a condom used? | YES................................................................................................................ |  |
| 524 | Do you know of a place where a person can get condoms? | YES.............................................................................................................. | $\rightarrow 601$ |
| 525 | Where is that? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> Any other place? <br> RECORD ALL SOURCES MENTIONED. | PUBLIC SECTOR <br> GOVT. HOSPITAL $\qquad$ <br> GOVT. HEALTH CENTER................... B <br> GOVT. MCH . $\qquad$ C <br> UNIVERSITY HOSPITAL $\qquad$ D <br> ROYAL MEDICAL SERVICES <br> (ARMED FORCES). $\qquad$ E <br> MOBILE CLINIC $\qquad$ F <br> OTHER PUBLIC $\qquad$ G <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC $\qquad$ H <br> PRIVATE DOCTOR. $\qquad$ <br> PHARMACY $\qquad$ <br> JORDANIAN AS. OF FP AND <br> PROTECTION (JAFPP) $\qquad$ <br> UNRWA HEALTH CENTER $\qquad$ <br> OTHER NON GOV. ORGANIZATION M OTHER PRIVATE <br> MEDICAL $\qquad$ N <br> OTHER SOURCE <br> FRIEND/RELATIVE $\qquad$ 0 <br> OTHER $\qquad$ X <br> (SPECIFY) |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 601 | CHECK 311/311A: <br> HE OR SHE STERILIZED |  | >614 |
| 602 | CHECK 226: | HAVE (A/ANOTHER) CHILD ..................... 1 <br> NO MORE/NONE..................................... 2 <br> SAYS SHE CAN'T GET PREGNANT ........ 3 <br> UNDECIDED/DON'T KNOW <br> AND PREGNANT ............................. 4 <br> UNDECIDED/DON'T KNOW AND <br> NOT PREGNANT OR UNSURE........ 5 | —>604 $->614$ $->610$ $->608$ |
| 602A | Would you prefer to have a boy, a girl or it does not matter to you? | BOY.......................................................... 1 GIRL............................................................. 2 DOES NOT MATTER.................................. 3 |  |
| 603 | CHECK 226: <br> NOT PREGNANT <br> PREGNANT OR UNSURE After the birth of the child you are from now before the birth of expecting now, how long would (a/another) child? you like to wait before the birth of another child? |  | $\begin{aligned} & ->609 \\ & ->614 \\ & \operatorname{LB}^{-} \rightarrow 609 \end{aligned}$ |
| 604 | CHECK 226: <br> NOT PREGNANT OR UNSURE | EGNANT | -610 |
| 608 | In the next few weeks, if you discovered that you were pregnant, would that be a big problem, a small problem, or no problem for you? | BIG PROBLEM ........................................................................................................................................... |  |
| 609 | CHECK 310: USING A CONTRACEPTIVE METHOD? <br> CURRE | YES, <br> NTLY <br> SING | >614 |
| 610 | Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future? |  | $\neg_{>617}$ |
| 611 | Which contraceptive method would you prefer to use? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 611A | CHECK 611: <br> OTHER <br> CODES |  | ->614 |
| 611B | Would you prefer to have the IUD inserted by a male or female health professional, or it does not matter to you? | MALE ......................................................................................................................................................... | $\square \rightarrow 614$ |
| 612 | What is the main reason that you think you will not use a contraceptive method at any time in the future? | NOT CURRENTLY MARRIED |  |
| 614 | CHECK 216: <br> HAS LIVING CHILDREN <br> 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? <br> NO LIVING CHILDREN <br> If you could choose exactly the number of children to have in your whole life, how many would that be? <br> PROBE FOR A NUMERIC RESPONSE. | NUMBER $\qquad$ $\square$ <br> OTHER $\qquad$ 96 (SPECIFY) | $\rightarrow 615$ A |
| 615 | How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter? |  |  |
| 615A | How many children should a couple have before starting using a contraceptive method? <br> PROBE FOR A NUMERIC RESPONSE |  |  |
| 616 | Would you say that you approve or disapprove of couples using a method to avoid getting pregnant? |  |  |
| 616A | CHECK 301 (01): <br> KNOW FEMALE STERILIZATION | OES NOT <br> FEMALE <br> IZATION $\qquad$ | $\rightarrow 617$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 616B | Would you say that you approve or disapprove of women using female sterilization to avoid getting pregnant? | APPROVE................................................. 1 APPROVE ONLY UNDER CERTAIN CIRCUMSTANCES ............................................................................................................. | $\mapsto_{->614}$ |
| 616C | What is the main reason you disapprove women using female sterilization? | ILLEGAL. <br> AGAINST RELIGION $\qquad$ <br> CAUSE HEALTH PROBLEMS. <br> CAUSES FAMILY PROBLEMS <br> (HUSBAND MIGHT DIVORCED) ..... 4 <br> CULTURAL BARRIERS <br> OTHER $\qquad$ <br> DON'T KNOW $\qquad$ |  |
| 617 | In the last 6 months have you heard about family planning: <br> On the radio? <br> On the television? <br> In a newspaper or magazine? <br> Posters? <br> Bulletins/booklets <br> Lectures? |  |  |
| 618 | CHECK 616: <br> APPROVE FAMILY PLANNING | PROVE <br> NNING | $\rightarrow 619$ |
| 618A | Where or from whom would you prefer to get information about family planning? <br> CIRCLE ONLY ONE ANSWER |  |  |
| 619 | In the last 12 months, have you discussed the practice of family planning with your friends, neighbors, or relatives? | YES .................................................................................................................. | $\rightarrow 621$ |
| 620 | With whom? <br> Anyone else? <br> RECORD ALL PERSONS MENTIONED. | HUSBAND $\qquad$ A <br> MOTHER. $\qquad$ <br> FATHER. $\qquad$ B <br> SISTER(S) $\qquad$C <br> D <br> BROTHER(S) $\qquad$ E <br> DAUGHTER $\qquad$ <br> SON $\qquad$ <br> MOTHER-IN-LAW $\qquad$ G H H <br> OTHER $\qquad$ X (SPECIFY) |  |
| 621 | CHECK 101A: <br> CURRENTLY $\square$ <br> MARRIED | NTLY WED, $\square$ | ->628 |
| 622 | CHECK 311/311A: <br> ANY CODE CIRCLED <br> NO CODE | RCLED $\square$ | ->624 |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 623 | You have told me that you are currently using contraception. Would you say that using contraception is mainly your decision, mainly your husband's decision or did you both decide together? | MAINLY RESPONDENT ............................ 1 <br> MAINLY HUSBAND ................................. 2 <br> JOINT DECISION ..................................... 3 <br> OTHER $\qquad$ 6 |  |
| 624 | Now I want to ask you about your husband's views on family planning. <br> Do you think that your husband approves or disapproves of couples using a contraceptive method to avoid pregnancy? | APPROVES ........................................................................................................................................ DISAPPROVES DON'T KNOW....... |  |
| 625 | How often have you talked to your husband about family planning in the last 12 months? | NEVER.............................................................................................................................................. |  |
| 626 | CHECK 311/311A: <br> NEITHER STERILIZED | R SHE RILIZED | ->628 |
| 627 | Do you think your husband wants the same number of children that you want, or does he want more or fewer than you want? |  |  |
| 628 | Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when: <br> She knows her husband has a sexually transmitted disease? <br> She has recently given birth? <br> She is tired or not in the mood? |  YES NO  <br>  DK  <br> HAS STD......................................... 2 8 <br> RECENT BIRTH................ 2 8 <br> TIRED/MOOD ................... 1 2 8 |  |
| 628A | Were you ever encouraged to have more children by your mother or by your mother-in-law? | YES ........................................................................................................................................................................ |  |

SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 701 |  | D/ <br> $\square$ | ->703 |
| 702 | How old was your husband on his last birthday? | AGE IN COMPLETED YEARS. $\square \square$ |  |
| 703 | Did your (last) husband ever attend school? | $\begin{aligned} & \text { YES................................................................................................................. } 2 \text {. } \\ & \text { NO....... } \end{aligned}$ | $\rightarrow 706 \mathrm{~A}$ |
| 704 | What is the highest level of school he attended: Old elementary, old preparatory, old secondary, new basic, new secondary, intermediate diploma, the university, or higher? |  | $\rightarrow 706 \mathrm{~A}$ |
| 705 | What was the highest grade he completed at that level? | GRADE $\qquad$ $\square$ <br> DON'T KNOW. $\qquad$ 98 |  |
| 706A |  |  | $\rightarrow 709 \mathrm{~A}$ |
| 706B | Has your husband done any work in the last seven days, even for one hour? By "work", I mean any paid work, any work in a business completely or partially owned by your husband, any work in a business owned by the household without payment, or work in other business? | YES............................................................... 1 NO............................................................ 2 | $\longrightarrow 706 \mathrm{D}$ |
| 706C | Does your husband have any job, but he did not practice it during the last seven days for a reason such as vacation, travel, or illness? | YES................................................................. 1 NO............................................................ 2 | $\rightarrow 709 \mathrm{~A}$ |
| 706D | What is your husband's current occupation, that is, what kind of work does he mainly do? | $\qquad$ $\qquad$ |  |
| 706E | What is your husband's employment status: is he an employee, an employer, is he self-employed, is he working for his family without payment, or is he working for someone else without payment? |  |  |
| 709A | Have you done any work in the last seven days, even for one hour? By "work", I mean any paid work, any work in a business completely or partially owned by yourself, any work in a business owned by the household without payment, or work in other business? | YES................................................................................................................ | $\rightarrow 710$ |
| 709B | Do you have any job, but you did not practice it during the last seven days for a reason such as vacation, travel, or illness? | YES.................................................................................................................. NO...... | $\rightarrow 719$ |
| 710 | What is your current occupation, that is, what kind of work do you mainly do? |  |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 801 | Now I would like to talk about something else. Have you ever heard of an illness called AIDS? | YES <br> NO. | $\text { ................... } 1$ | ->817 |
| 802 | Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS? | $\begin{aligned} & \text { YES................... } \\ & \text { NO................ } \\ & \text { DON'T KNOW } \end{aligned}$ | $\text { ................................... } 2$ | $\mathfrak{L}_{>809}$ |
| 803 | What can a person do? <br> Anything else? <br> RECORD ALL WAYS MENTIONED. | ABSTAIN FROM SEX USE CONDOMS . <br> LIMIT SEX TO ONE PAR <br> FAITHFUL TO ONE PA LIMIT NUMBER OF SEXU PARTNERS <br> AVOID SEX WITH PROS AVOID SEX WITH PERS HAVE MANY PARTNER AVOID SEX WITH HOMO AVOID SEX WITH PERS INJECT DRUGS INTRA AVOID BLOOD TRANSF AVOID INJECTIONS AVOID SHARING RAZOR AVOID KISSING $\qquad$ AVOID MOSQUITO BITE SEEK PROTECTION FRO TRADITIONAL PRACTIT <br> OTHER $\qquad$ (SPECIF <br> OTHER $\qquad$ (SPECIFY) DON'T KNOW $\qquad$ |  |  |
| 804 | Can people reduce their chances of getting the AIDS virus by having just one sex partner who has no other partners? | YES <br> NO. <br> DON'T KNOW | ................................. 2 |  |
| 805 | Can a person get the AIDS virus from mosquito bites? | ```YES. NO.. DON'T KNOW``` | $\begin{aligned} & . .1 \\ & . .2 \\ & . .8 \end{aligned}$ |  |
| 806 | Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex? | $\begin{aligned} & \text { YES................. } \\ & \text { NO............... } \\ & \text { DON'T KNOW } \end{aligned}$ | $\begin{aligned} & \text {...................... } 11 \\ & \hline . . . . . . . . . . . . . . . . . . . . . . . . . ~ \\ & \hline \end{aligned}$ |  |
| 807 | Can people get the AIDS virus by sharing food with a person who has AIDS? | $\begin{aligned} & \text { YES..................................................................................... } \\ & \text { NO...... } \\ & \text { DON' } \end{aligned}$ | ........................ 12 |  |
| 808 | Can people protect themselves from getting the AIDS virus by not having sex at all? | YES NO. DON'T KNOW | $\begin{aligned} & \text {................... } 1 \\ & \text {.................. } 2 \\ & . . . . . . . . . . . . . ~ \end{aligned}$ |  |
| 809 | Is it possible for a healthy-looking person to have the AIDS virus? | $\begin{aligned} & \text { YES.................................... } \end{aligned}$ | $\text { ................................... } 2$ |  |
| 810 | Do you know someone personally who has the virus that causes AIDS or someone who died from AIDS? | YES <br> NO. | $\text { ......................... } 1$ |  |
| 811 | Can the virus that causes AIDS be transmitted from a mother to a child? | YES <br> NO. <br> DON'T KNOW | ...................$~$ ...............$~$ 2 ..............$~$ 8 | $\neg_{>}>813$ |
| 812 | Can the virus that causes AIDS be transmitted from a mother to a child: <br> During pregnancy? <br> During delivery? <br> By breastfeeding? | YES DURING PREG........... 1 DURING DELIVERY ... 1 BREASTFEEDING..... 1 | NO DK <br> 2 8 <br> 2 8 <br> 2 8 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 813 |  | WED/ <br> EPARATED $\stackrel{\square}{\square}$ | $\rightarrow 815$ |
| 814 | Have you ever talked about ways to prevent getting the virus that causes AIDS with your husband? | $\begin{aligned} & \text { YES...................................................................................................................... } 2 \end{aligned}$ |  |
| 815 | If a member of your family got infected with the virus that causes AIDS, would you want it to remain a secret or not? | YES............................................................................................................................................................. NO...... DKINOT |  |
| 816 | If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household? | YES ........................................................................................................................................................ |  |
| 817 | Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? | $\begin{aligned} & \text { YES................................................................................................................ } 1 \\ & \text { NO....... } \end{aligned}$ | $\rightarrow 820$ |
| 818 | If a man has a sexually transmitted disease, what symptoms might he have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |
| 819 | If a woman has a sexually transmitted disease, what symptoms might she have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |
| 820 | RECORD THE TIME. | HOUR $\qquad$ <br> MINUTES $\qquad$ |  |

## INTERVIEWER'S OBSERVATIONS

## TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
COMMENTS ON SPECIFIC QUESTIONS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
ANY OTHER COMMENTS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
SUPERVISOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
NAME OF THE SUPERVISOR:
DATE: $\qquad$

EDITOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

NAME OF EDITOR:
DATE: $\qquad$

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX
FOR COLUMNS 1 AND 4, ALL MONTHS SHOULD BE FILLED IN.
INFORMATION TO BE CODED FOR EACH COLUMN
COL.1:

| BIRTHS, PREGNANCIES, CONTRACEPTIVE USE |  |  |
| :--- | :--- | :---: |
| B | BIRTHS |  |
| P | PREGNANCIES |  |
| T | TERMINATIONS |  |
| 0 | NO METHOD |  |
| 1 | FEMALE STERILIZATION |  |
| 2 | MALE STERILIZATION |  |
| 3 | PILL |  |
| 4 | IUD |  |
| 5 | INJECTABLES |  |
| 6 | IMPLANTS |  |
| 7 | CONDOM |  |
| 8 | FEMALE CONDOM |  |
| 9 | DIAPHRAGM |  |
| J | FOAM OR JELLY |  |
| K | LACTATIONAL AMENORRHEA METHOD |  |
| L | PERIODIC ABSTINENCE |  |
| M WIHDRAWAL |  |  |
| X | OTHER |  |

COL 2: SOURCE OF CONTRACEPTION
GOVT. HOSPITAL
GOVT. HEALTH CENTER
GOVT. MCH
UNIVERSITY HOSPITAL
ROYAL MEDICAL SERVICES
MOBILE CLINIC
OTHER PUBLIC
PVT. HOSPITAL/CLINIC
PRIVATE DOCTOR
PHARMACY
JAFPP
UNRWA
OTHER NGO
OTHER PRIVATE
FRIENDS/RELATIVES
X OTHER $\qquad$
(SPECIFY)
COL 3: DISCONTINUATION OF CONTRACEPTIVE USE INFREQUENT SEX/HUSBAND AWAY BECAME PREGNANT WHILE USING WANTED TO BECOME PREGNANT HUSBAND/PARTNER DISAPPROVED WANTED MORE EFFECTIVE METHOD HEALTH CONCERNS
SIDE EFFECTS
LACK OF ACCESS/TOO FAR
COSTS TOO MUCH
INCONVENIENT TO USE
F FATALISTIC
A DIFFICULT TO GET PREGNANT/MENOPAUSAL
D MARITAL DISSOLUTION/SEPARATION
OTHER $\qquad$ (SPECIFY)
Z DON'T KNOW
COL.4: MARRIAGE

## X MARRIED <br> 0 NOT MARRIED




## مسح (السكان والصحة الأسرية 2002 استمارة الأسرة

## البيانات سرية بموجب قانون الإحصاءات



| \|__|__|__|_-_| |  | \|رقم الاستمارة: | \|__| | رقم المجموعة: |
| :---: | :---: | :---: | :---: | :---: |
| \|__|__|_|__|__| |  | \|رقم البلوك: | \|__|__| | المحافظــة: |
|  | ( | ) رقم المبنى: | \|__|__| | اللـــواء |
|  | ( | ) رقم المسكن: | \|__| | القضــــاء: |
| \|__|__|_-| |  | رقم العنقود: | \|__|_|_| | التجمع السكاني: |
| \|__|_| |  | رقم الأسرة: | \|__1 | رقم الطبقـة |
|  |  | ) رقم الهاتف (إن وجد): | \|__| | حضر/ ريف (حضر =1 1 ريف =2) |
|  |  |  | . 2 | اختيار الأسرة لفحص الأنيميا |


| زيارات الباحثّة |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| الزيارة النهائية |  | 3 | 2 | 1 |  |
| $\mid$ | شيومر <br> *النتيجة |  |  |  | التـاريـــــخ: <br> اسم الباحثة: النتيجــــة * : |
| \|_| | (العدد الكلي للزيارات |  |  |  | الزيارة التلالية: التاريخ الوقت |
|  | عدد أفراد الأسرة <br> عدد السيدات المؤهلات <br> في استمارد الالستجرة | تصفة الاشغال | 5. رفضت <br> 6. المسكن خالي/تغبر <br> 7. المسكن هدم <br> 8. 8. لم يتم الوصول للا <br> 9. أخرى (حددي) | نور مؤهل لِّرة طويلة\| | * نتيجة الزيارة 1. تـت 2. لا يوجد أحد/لا يوجد . 3. الأسرة غير موجودة المسكن مغق 4. أرجئت |
|  |  |  | \| الاسنريخ المدققة الميدانية | \|__|-_ |  |


| بيانــــــات افــــــراد الأســــــرة |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7 | 6A |  |  |  |  |  |  |  |  | 2 | 1 |
|  | اللعمر | تاريخ الميلاد | الإقامة |  |  |  |  |  | مـا علاقة (الاسم) برب <br> الاسسرة؟ $02 \text { زو رب/زوجهـه الأسرة }$ <br> 98 ابن/ابنة <br> 04ابن/ابنة الزوج/ الزوجة <br> 05 حفيد/حفيده <br> 06 إ/اب <br> 07 حمو/حماه <br> 08 اخ/أخت <br> 09 جد/ جده <br> 10 أقارب آخرون <br> 11 11بن/ابنة القرين بالتبني <br> 12 لا توجد قرابة <br> 98 لا اعرف |  | الاسم |  |
|  | كم عمر 1 عمر ها بالسنوات الكاملة؟؟ | ما تاريخ ميلاد (الاسم) بالثشُهر واللنـةّج <br> لا يعرف العمر: 98 <br> لا يعرف السنة: 9998 | هل(الاسم) <br> أمضى/ <br> أمضت <br> الليلة <br> السابقة هنا؟ |  | هل (الاسم) <br> يعيش/ <br> تعيش هنا <br> عادة؟ |  |  |  | اذكري لي من فضلك أسماء أفراد الأسرة المعتادين والزائرين الذين امضوا الليلة <br> الماضية مع هذه الأسرة ابتداءً من رب الأسرة |  |
|  | x $\times$ | شهر | V | نع | $\gamma$ | نــ | أنثّ | ذكر |  |  | $x \times$ |  |  | $\times \times$ |
| 14A لجميع الأفراد الأين أعمار هم 15 سنة فأكثر انتقلي إلى السؤال | \|_-|_| | \|__|_-_ | 2 | 1 | 2 | 1 | 2 | 1 | \|_0_|_1_| | رب الأسرة |  | 01 |
|  | \|__|_| |  | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 02 |
|  | \|_-_-| |  | 2 | 1 | 2 | 1 | 2 | 1 | \|_-_-| |  |  | 03 |
|  | \|__|_| | \|__|__|__|_| | | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 04 |
|  | \|__| | \|__|_-_|_| | -_|_-| | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 05 |
|  | \|__|_| | \|__|_-|_|__| | _ | _ | | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 06 |
|  | \|__|_| | $\text { \|__\|_\|__\|_\| \| } \mid$ | 2 | 1 | 2 | 1 | 2 | 1 | \|_-_-| |  |  | 07 |
|  | \|_-|_| |  | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 08 |
|  | \| _ | |  | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 09 |
|  | \|__|_| | \|__|_-|__| |__|_-| | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 10 |
|  | \|_-__| |  | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 11 |
|  | - _ - | _\|__|__|_| | | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 12 |
|  | \|__|_| | \|__|__|__|_| | | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 13 |
|  | \|__|_| | \|__|__|__|_| | | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 14 |
|  | - _- |  | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 15 |
|  | _\|_| | $\mid \text { \|__\|__\|__\|_\| \| } \mid \text { _ } \mid$ | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 16 |
|  | \|__|_| | \|__|__|__|_| | | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 17 |
|  | \|__|_| | \|__|__|__|_| | | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 18 |
|  | \|__|_| | \|__|_-|__|__| |__|__| | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 19 |
|  | \|__|_| | \|__|_|_-|_| | _ | _ | | 2 | 1 | 2 | 1 | 2 | 1 | \|__|_| |  |  | 20 |

الباحثّة: للتأكد من انك سجلت جميع أفراد الاسرة اطرحي الأسئلة التالية:

1. هل هنالك أفراد آخرون كالأطفال الصغار والرضع لم يتم تسجيلهم؟ 2. هل هنالك أفراد آخرون ليسوا من أفراد الأسرة مثل الخدم او المستأجرين او الأصدقاء يعيشون هنا عادة؟
2. هل يوجد ضيوف او زوار مؤقتين أو غير هم ناموا هنا ليلة أمس؟

4 ـ إذا ظهرت إجابة نـع في أي من الحالات الثلاثة اللسابقة، أضيفي الأفراد في استمارة الأسرة

*ملاحظة للباحثة: الأسئلة من سؤال 10 إلى سؤال 13 تتعلق بالوالاين الفعيين للفرد.


بيانـات المسكن والأسرة


قياسات الوزن، الطول

|  |  |  |  | اللساء اللاتي أعمارهن 15-49 سنـة |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 43 | 42 | 41 | 40 | 39 | 38 | 37 | 36 |
|  |  | (بالسنتمترات) | (الوزن |  | $\text { سؤا ل } 7$ | $\text { سؤال } 2$ |  |
| \|_| |  | \|-_|_|_| $\mid$ \| | \|_|_-|_| $\cdot$ \| $\mid$ \| |  | \|_|_| | - | \| _|_-| |
| \|-| |  | \|_-|_|_| $\cdot$ \| -1 | \|_|_|_-|.|_| |  | \|_L_| | - | \|__|_-| |
| \|_| |  |  | \|-_|_|_-| $\cdot \mid$ - $\mid$ |  | \|_|_| | - | \| _-|_| |
| \|_| |  | \| - | - | - | $\cdot$ \|-| | \|-1-|_|-| $\mid$ \| |  | \|_|_| | - | \| _ | _ | |


| قياس الوزن والطول للاططفال اللولودين في عام 1997 فما بعغ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 43 |  |  | 41 | 40 | 39 | 38 | 37 | 36 |
|  <br> 1. تم القياس <br> 2. الطفل غير <br> هوجود <br> 3. 3 رفض <br> 6. أخرى |  | مس | (بالسنتمترات) | (بالكيلو غزام) | تاريخ الهيلاد 6A من سؤال | $\text { سؤعر } 7$ | $\text { سؤالك } 2 \text { من }$ |  |
| \|_| | 2 | 1 | \|_-_-|_||.|_| | L_0_\|_|_| $\cdot$ •\|_| | \|_-|_|_|_| | - | - | | - | - | | \|_-|_| |  | \|_-|_| |
| \|_-| | 2 | 1 | \|_|_-|_|.|_| | \|_0_|_|_| $\cdot$ \| $-\mid$ | \| - | _ | - | - | - | - | |_-_| | \| _-|_| |  | \| _-|_| |
| \|_| | 2 | 1 | \|_-_ | | - | $\mid$ \|_| | \|_0_|_|_| $\cdot$ • | \| _|_ | - | - | | - _ | |_|_| | \|_-|_| |  | \|_-|_| |
| \|_| | 2 | 1 | \|_|_-|_|.|_| | \|_0_|_|_|.|.|_| | \|-_|_-_|_| | - | - | |_-_-| | \|_-|_| | - | \|_-|_| |
| \|__| | 2 | 1 | -\|_-|_|.|_| |  | \| - | _ | _ | - | | - | - | |_-_| | \|_-|_| |  | \|_-|_| |
| \|_| | 2 | 1 |  | \|_0_|_| | \| - | - | - | - | - | - | |_|_| | \| _-|_| |  | \|_-|_| |

الباحثة: لجميع الأطفال المسجلين ولم ترد لهم تاريخ الميلاد بالشهر والسنة من سؤ ال6A، تثصي لمعرفة تاريخ الميلاد للطفلل باليوم والشهر والسنة ما أمكن، او للشهر والسنة على الأقل. الباحثة: ضعي إشارة في المربع ان كان هناك حاجة إلى استخدام صفحة إضافية

| انهي المقابلة |  |  |  |  |  | 43A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 49 | 48 | 47 | 46 | 45 | 44 |  |
|  | الباحثة: انظري 20A اذا سبق لها الزو اج: هل هل هي حامل حاليا <br>  | نسبة <br> الهيموجلوبين <br> (G/DL) | * الباشثة: : اقرإي الملاحظة للسبية؛، الوالد/ الوالدة او الثشخص السسؤول وضعي دائرة حول رمز الإجابة | رقم سطر الو الد/ الوالدة او الثخص المسؤول، سجلي 00 إذا لم يكن مسجلا ضمن أفراد الأسرة | بكّ: انظري السؤ 38 | الباحثّ: |
| \|_| |  | \| - | - | $\mid$ \|-| |  | \|_-| |  | $\begin{aligned} & \hline \text { العمر } 715 \\ & 7 \\ & \hline \end{aligned}$ |
| \|_| |  | \| - | - | $\mid$ \|_| |  | \|-|-| |  |  |
| \|_| |  | \|-_|_| $\mid$ \|_| |  | \|-|-| |  | $\begin{gathered} \hline \text { العقر } 17 \\ 17 \\ \text { 1-\| } \end{gathered}$ |
| \|_| |  | \| - | - | $\mid$ \|-| |  | \|_-| |  |  |


|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 49 | 48 | 47 | 46 | 45 | 44 |
|  |  | $\begin{gathered} \hline \text { الهيموجنوبين } \\ \text { (G/DL) } \end{gathered}$ | * الباحثّة: اقرابي الملاحظة للوالد/ للوالةا او للثخصن السّؤول، وضتي دائرة حول رمز الإجابة | رقم سطر الو الد/ الوالدة او الثخص المسؤول سجلي 00 إذا لم يكن مسجلا ضمن أفراد الأسرة |  |
| \|_| |  | \| - | _ | $\mid$ \|_| | تو توقيع الباحثة: | \|_-_| |  |
| \|-| |  | \| - - _ | $\mid$ \|_| |  | \|_-_| |  |
| \|-| |  | \| - | _ | $\mid$ \|_| |  | \|_|_| |  |
| \|_| |  | \|_|_|.|-_| |  | \|_-_| |  |
| \|_| |  | \|_-|_|.|_| | تونقيع الباحثة: | \|_-_| |  |
| \|-| |  | \| - - _ | $\mid$ \|_| | مو انقّ | \|_-_| |  |



* النقطة الحرجة هي نسبة الهيموجلوبين في الام للنساء الحوامل 9g/dl وللاطفال والنساء غير الحوامل او اللاتي لا

يعرفن انهن حوامل هي 7 m هي
** ان كانت اكثر من امراة او طفل تحت النقطة الحرجة، اقرإي العبارة في السؤ ال رقم (51) لكل امر أة تحت النقطة الحرجة ولكل امر أة/ احد الوالاين / الشخص البالغ المسؤول عن الطفل تحت النقطة الحرجة.



|  |  | ما اعلى مرحلة دراسية التحقت بها: <br> هل هي ابتدائي، إعدادي، ثانوي قايم، أساسي، ثانوي جديد، دبلوم متوسط، بكالوريوس، دراسات عليا؟ | 108 |
| :---: | :---: | :---: | :---: |
|  | \|__| ال_| ........................| | ما أعلى صف اكملته بنجاح في هنه المرحلة؟ | 109 |
|  |  | هل تقرئين جر ائد او مجلات أردنية عادية كل يوم، (3-5) مرات في الاسبوع، مرة او مرتين في الاسبو ع، مرة في الثهر، بعض مرات في السنة، ام لا تقر أين أبداء؟ | 114 |
|  |  | هل تستمعين للاذاعة الاردنية عادة كل يوم، مرة في الاسبوع على الاقل، مرة في الشهر على الاقل، بعض مرات في السنة، ام لا تستمعين أبدا؟؟ | 115 |
|  |  | هل تلثاهدين برامج التلفزيون الاردني عادية كل يوم، مرة في الاسبوع على الاقلى، مرة في الثهر على الاقل، بعض مرات في السنة، ام لا تنتاهدين أبدا؟ | 116 |
|  |  | ما ديانتك؟ | 117 |


| $206 \leftarrow$ | $\begin{array}{ll} 1 & \text {....................................................... } \\ 2 \end{array}$ | أود ان أسألك الآن عن كل الهو اليد الذين انجبتهم طيلة حباتكا هل سبق لك الإنجاب في حباتكّك | 201 |
| :---: | :---: | :---: | :---: |
| $204 \leftarrow$ | $\begin{array}{ll} 1 & \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \\ 2 & \text { ن...... } \end{array}$ |  | 202 |
|  |  | كم عدد أبناتائك الذكور الذين يعيشون معك؟ <br> كم عدد بناتك الإناث اللاتي يششن معك؟ <br> الباحثة: إذا كانت الإجابة " لا أحد" لأي من الذكور <br> اووالإنات سجلي الرمز "00" في الخانة <br> الدخصصة للاجبابة | 203 |
| $206 \leftarrow$ | $\begin{array}{ll} \hline 1 & \text {..................................................... } \\ \hline \end{array}$ | هل لديك أبناء أو بنات احياء ولكهُم لا يعيشون معك الان؟ | 204 |
|  |  | كم عدد أبناثكّك الذكور الذين لا يعيشون معك؟ <br> كم عدد بناتك الإناث اللاتي لا يعشن معك؟ <br> الباحثة: إذا كانت الإجابة " لا أحد" لأي من الذكور اوالإناث سجلي الرمز "00" في الخانة المخصصة للإجابة. | 205 |
| $208 \leftarrow$ | $\begin{array}{ll} 1 & \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \end{array}$ | هل سبق لك ان أنجبت ولأ او بنتّا ولكنّ/ لكنيا توفي/ توفيت بعد ذلك حتى ولو ان الهولود لم يش <br> سوى فترة قصيرة؟؟ <br> الباحثة: اذا كانت الاجابة لا، تتصي مستخذمة بعض الإيضاحات حول تعريف المّولود حيا. فهل حدث ان انجبت أي مولود ظهرت عليه احدى عالامات الحياة كالبكاء او الحركة حتى وان لم يعش سوى ايام او ساعات قليلة ولكنه توفي بعد ذلك؟ | 206 |
|  |  | كم عدد أبنائكَك الذكور الذين توفو <br> كم عدد بناتكّ الإناث اللاتي توفين؟ <br> الباحثة: إذا كانت الإجابة " لا أحد" لأي من الذكور او الاناث سجلي الرمز "00" في المربعات الكخصصة للاجابابة. | 207 |
|  | اللجموع..............\| | الباحثة: إجمعي الإجابات في الأسئلة 203، 205 و 207 وسجلي ناتج عمليّة الجمع في المربعات <br> الهخصصة لَّلكك. إذا كان ناتج عملية الجمع " <br> 00" سجليها أيضأ في المربعات المخصصة <br> للمجموع. | 208 |
|  |  |  | 209 |
| $226 \leftarrow$ | لا مواليه \| |  | 210 |


|  |  |  |  |  |  |  |  |  |  | 211 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 221 | 220 | 219 | 218 | 217 | 216 | 215 | 214 | 213 | 212 |  |
| هل هناك مو اليد احياء آخرون | لللمو اليد المتوفين | للمو اليد الباقين على قيد الحياة |  |  |  |  |  |  |  |  |
|  | كم كان عمر (انسم المولود) وقت الوفاه:؟ الباحثة: اذا كان العمر سنة واحدة تقصي عن عدد الالشهر التي عاشها، بقولك: كم شهرأ كانٍ عمر(اسم الهولود) وقّت الوفاة؟ سجلي العمر بالايام اذا كان عمر الهولود اللتوفي وقت الوفاةً اقل من شهر واحد وسجليه بالاشهر اذا كان عمره اقل من سنتين، اما اذا كان العمر سنتين فأكثر فسجليه بالسنوات. |  | يعيش (اسكـ؟ المولود) | كم كان عمر (اسم المولود) في الخر عيد ميلاد له// لها؟ (سجلي العمر بالسنوات الكاملة، وسجلي 00 لـن كان عمره اقل من سنة) | الحبياة؟؟ | في أي شهر وسنة ولا (اسم المولود)؟ <br> الباحثة: نتصي ما هو تاريخ ميلاده/ ميلادها | ذلك (اسم ام المثولود) | 2. هـ ـوأل هود: | ما اسم المولود <br> الاول، الثاني، <br> الثالث،...؟؟ | $\begin{aligned} & 9 \\ & 0 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 7 \end{aligned}$ |
|  |  |  | 1. <br> نعم......... <br> 2. $\qquad$ |  |  | شنهر \| شه| |  | $\text { موأمرد......... } 2$ | (الاسم) | . 1 |
| $\text { نعم .................. } 1 \text { ( }$ |  | رقم الفرد \|ـ_ـ_| | نعم.......... <br> 2. $\qquad$ | العمر بالسنواتة الـامل\|_1 |__| |  |  | $\begin{aligned} & \hline \text { انثى..................... } \\ & \text { 2.... } \end{aligned}$ | نوأمرد........ |  | . 2 |
| $\text { نا.................. } 1$ |  | رقم الفرد \|ـ_|_ـ_| | نعم......... <br> 2. $\qquad$ | العمر بالسنوات الكاملة \|__|__| |  |  |  | $\begin{aligned} & \text { مفرد........... } \\ & \hline \text { مو } \end{aligned}$ | (الاسم) | . 3 |
| $\text { نعم .................. } 1 \text { }$ |  | رقم الفرد \|ـ_ـ_| | 1. <br> نعم......... <br> 2. $\qquad$ |  |  |  |  | $\text { مفورد.......... } 2$ | (الاسم) | . 4 |
| $\text { نعم ................. } 1$ |  | رقم الفرد \|ـ_ـ_| | $\begin{aligned} & \hline \text { نعم..................... } \\ & 2 . \end{aligned}$ | العمر بالسنواتة الكامل_\|_1 |__| |  |  |  | $\text { مفورد........... } 2$ | (الاسم) | . 5 |
| $\text { نعم ................. } 1$ |  | رقم الفرد \|ـ_|_ـ_| | 1. |  |  |  |  | $\begin{aligned} & \text { مفرأم......... } \\ & \text { مف } \end{aligned}$ | (الاسم) | . 6 |
|  |  | رقم الفرد \|ـ_ـ_| | 1. |  |  | شنه \| شه| |  | $\begin{aligned} & \text { مفرأم......... } \\ & \text { مف } \end{aligned}$ | (الاسم) | . 7 |
| $\text { نعم ................ } 1$ |  |  | 1. <br> نعم......... <br> 2 $\qquad$ |  | $\begin{aligned} & \hline 1 \ldots . . . . . . . . . . ~ \\ & 2 \\ & \downarrow \\ & 220 \end{aligned}$ |  | $\begin{aligned} & \text { 1........................ } \\ & \text { ا.... } \end{aligned}$ | $\text { مفورد........... } 2$ | $\begin{aligned} & \hline \text { (الاسم) } \\ & \hline \end{aligned}$ | . 8 |


| 221 | 220 | 219 | 218 | 217 | 216 | 215 | 214 | 213 | 212 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | للمواليد المتوفين | للمو اليد الباقين على قيد الحياة |  |  | الحياة؟؟ | في أي شهر وسنة ولا (اسم المولود)؟ <br> الباحثة: تقصي ما ما هو تاريخ ميلادم/ ميلادها | هك (اسم ام المؤوْ؟ | 2. هـ من هود : هو | ما اسم المولود <br> الاول، الثاني، <br> الثالث،....؟ |  |
| هل هن هناك مو اليد احياء آخرون بين (اسم (المولود السابق) و, (اسم المولود (الحالي)؟ |  الاششهر التي عاثشها، بقولك: كم شهرأ كان عمر(اسم الكولود) وقتّ الوفاة؟ سجلي العمر بالايام اذا كان عمر الهولود المتوفي وقت الوفاة اقل من شهر واحد وسجليه بالاشهر اذا كأن عمره اققل من سنتين، اما اذا كان العقر سنتين فأكثر فسجليه بالسنوات. |  | لهيش (اسكم؟ المولود) | كم كان عمر(اسم الكولود) في أخر عيد ميلاد لـة/ لها؟ (سجلي العمر بالسنوات الكاملة، وسجلي 00 لمن كان عمره اقل من سنة |  |  |  |  |  |  |
| $\text { نعم ................ } 1$ |  | رقم الفرد \|ـ_ـ_| | 1. <br> نعم......... <br> 2. $\qquad$ | العمر بالسنوات <br> الكاملة <br> \|__|__| | $\begin{aligned} & \hline 1 \ldots . . . . . . . . . . . ~ \\ & 2 \\ & \downarrow \\ & 220 \\ & \hline \end{aligned}$ |  |  |  |  | . 9 |
| $\text { نعم ................ } 2 \text { ن }$ |  |  | 1. $\qquad$ 2 $\qquad$ | العمر بالسنوات <br> الكاملة | $\begin{aligned} & \hline 1 \ldots . . . . . . . . . . ~ \\ & 2 \\ & \downarrow \\ & 220 \\ & 2 \\ & \hline \end{aligned}$ | شنهر \| |  | مفوأمر......... |  | 10 |
| $\text { نعم ................. } 1$ |  | رقم الفرد \|ـ_|_ـ_ـ| | 1.......... <br> 2 $\qquad$ | العمر بالسنوات الكاملة $\qquad$ \|__|_| | $\begin{aligned} & \hline 1 \text {............ } 2 \text { ن } \\ & \downarrow \\ & \downarrow \\ & 220 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \hline \text { 1...................... } \\ & \text { 2.... } \end{aligned}$ | $\text { موأمرد......... } 2$ |  | 11 |
| $\text { نعم ................. } 1$ |  |  | 1. $\qquad$ 2 $\qquad$ | العمر بالسنوات <br> الكاملة <br> \|__|__| | $\begin{aligned} & \hline 1 \ldots . . . . . . . . . . ~ ن ع ~ \\ & 2 . . . . . . \\ & \downarrow \\ & 220 \end{aligned}$ | شنهر \| |  | منوأ.......... |  | 12 |
| $\text { نعم ................. } 1 \text { } 1$ |  |  | 1. <br> نعم......... <br> 2. $\qquad$ | العمر بالسنوات <br> الكاملة | $\begin{aligned} & \hline 1 \ldots . . . . . . . . . . ~ \\ & 2 \\ & \downarrow \\ & 220 \\ & \hline \end{aligned}$ | شنهر \| |  | مفوأم.......... |  | 13 |
| $\text { نعم ................. } 1$ |  |  | 1. $\qquad$ 2 $\qquad$ | العمر بالسنوات <br> الكاملة $\qquad$ \|__|_| | $\begin{aligned} & \hline 1 \ldots . . . . . . . . . . ~ \\ & 2 \\ & \downarrow \\ & 220 \\ & 22 \\ & \hline \end{aligned}$ | شنه \| شـ| |  | $\begin{aligned} & \text { مفرد........... } 2 \\ & \text { مف } \end{aligned}$ |  | 14 |
| $\text { نعم ................ } 1$ |  | رقم الفرد \|ـ_ـ_| | 1. $\qquad$ <br> 2 $\qquad$ | العمر بالسنوات <br> الكاملة \|__|_| $\qquad$ | $\begin{gathered} \hline 1 \ldots . . . . . . . . . . ~ \\ 2 \\ \downarrow \\ 220 \\ 2 \\ \hline \end{gathered}$ | $\text { شنهر \| } \mid$ | $\begin{aligned} & \text { 1....................... } \\ & \text { ا.... } \end{aligned}$ | $\begin{aligned} & \text { مفرأم......... } \\ & \hline \end{aligned}$ | (الاسم) | 15 |


|  | $\begin{array}{ll} 1 & \text {....................................................... } \\ 2 \end{array}$ | هلل أنجبت أي مولود حي منذ ولادة (اسم أخر مولود)؛ | 222 |
| :---: | :---: | :---: | :---: |
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| $229 \leftarrow$ |  | هل أنت حامل حاليا؟ | 226 |
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| $237 \leftarrow$ | $\begin{array}{ll} 1 & \text {....................................................... } \\ 2 \end{array}$ | هل سبق وان حصل معك اية احمال انتهت بالإسقاط او الإجهاض او بانجاب مولود ميت؟ | 229 |
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| $237 \leftarrow$ | 1 ...............................................................  <br> 2 بغير  <br> 2   | هل سبق لك وأن حصل معك احمال اخرى انته مولود حي غير المرة التي أشرت اليها؟ | 233 |
|  | 1997 القويم في الخانة المخصصة للشهر الذي انتهى فيه الحمل، (الكاملة) التي كانت فيها السبية حاملا. | الباحثة: اسألىى عن تاريخ ومدة الحمل لكل حمل سار وأدخلي الرمز(T) في العمود الأول من وادخلي الرمز (P) لباقي اشهر الحمل (بالألم | 234 |
| $237 \leftarrow$ | 1 <br> 2 | 1997؟ هبق وان انتهى حملك بمولود غير حي قبل | 235 |
|  |  | ما تاريخ حدوث آخر مرة حدث مكك ذلك قبل <br> ؟1997 | 236 |
|  |  | منى بدأت آخر دورة شهريه لديك؟ <br> الناريخ إذا اعطت : | 237 |
| $301 \leftarrow$ | $\left\{\begin{aligned} 1 & \text {..................................................................................................................... } \mathrm{V} \end{aligned}\right.$ | من الدورة الثهرية للاورة التي تليها، هل هنالك ايام معينة تكون فيها المر أة معرضة للحمل اكثر من أي وقت آخر؟ | 238 |
|  |  | هل ذلك الوقت هو فبل بداية الدورة مباشنرة، ام خلال الدورة، ام بعد الدورة مباشرة، ام في منتصف المدة بين الدورتين المتتاليتين؟ | 239 |


|  <br>  <br>  السستجية السؤال رقم (302) لكل وسبله كانت الإجابة عليها هي الرمز (1) في السؤال (301). |  |  |  |
| :---: | :---: | :---: | :---: |
| 302 | ما الطرق والوسائلّ النتي سمت بها؟ <br> (الباحثّة: بالنسبة للوسائلّ التي لم يتم ذكر ها تلقائيا، إسألي: هل سبق لك وان سمت بـ (اسم الوسيلة)؟ |  | 301 |
|  | $\begin{aligned} & \text { 1...................... نع } \\ & 2 . . . . . . . . . . . . . . . . . . . . . . . ~ ע ~ \\ & \downarrow \end{aligned}$ |  | 01 |
|  | $\begin{aligned} & \text { 1.......................... نم } \\ & \text { 2......................... } \downarrow \text { ע } \end{aligned}$ | يسنظيّع الرجزلّ ان يجري عملية لتجنب الإنجاب. | 02 |
| $\begin{aligned} & \text { 1................................................................... } \\ & \text { نع..... } \end{aligned}$ | $\begin{aligned} & 1 . . . . . . . . . . . . . . . . . . . . . . . . ~ ن ع ~ \\ & 2 . . . . . . . . . . . . . . . . . . . . . . . ~ ע ~ \\ & \downarrow \end{aligned}$ | تسنطيع المر أة تناول حبة يوميَّا لتنجب الحمل. | 03 |
| $\begin{aligned} & \text { 1................................................................... } \\ & \text { نع..... } \end{aligned}$ | $\begin{aligned} & 1 . . . . . . . . . . . . . . . . . . . . . . . . ~ ن ع ~ \\ & 2 . . . . . . . . . . . . . . . . . . . . . . . ~ ע ~ \\ & \downarrow \end{aligned}$ |  | 04 |
| $\begin{aligned} & \text { 1..................................................................... } \\ & \text { 2..... } \end{aligned}$ | $\begin{aligned} & 1 . . . . . . . . . . . . . . . . . . . . . . . . . ~ ن ع ~ \\ & 2 . . . . . . . . . . . . . . . . . . . . . . . ~ ل ا ~ \\ & \downarrow \end{aligned}$ |  | 05 |
| $\begin{aligned} & \text { 1....................................................................... } \\ & \text { 2..... } \end{aligned}$ | $\begin{aligned} & 1 . . . . . . . . . . . . . . . . . . . . . . . . . ~ ن ع ~ \\ & 2 . . . . . . . . . . . . . . . . . . . . . . . ~ ע ~ \\ & \downarrow \end{aligned}$ |  <br>  | 06 |
| $\begin{aligned} & \text { 1................................................................... } \\ & \text { 2..... } \end{aligned}$ | $\begin{aligned} & 1 . . . . . . . . . . . . . . . . . . . . . . . . . ~ ن ع ~ \\ & 2 . . . . . . . . . . . . . . . . . . . . . . . ~ ل ا ~ \\ & \downarrow \end{aligned}$ |  | 07 |
| $\begin{aligned} & \text { 1................................................................... } \\ & \text { 2..... } \end{aligned}$ | $\begin{aligned} & 1 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \\ & \downarrow \\ & \downarrow \end{aligned}$ |  | 08 |
| $\begin{aligned} & \text { 1............................................................................. } \\ & \text { ن..... } \end{aligned}$ | $\begin{aligned} & 1 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \\ & \downarrow \\ & \downarrow \end{aligned}$ |  | 09 |
| $\begin{aligned} & \text { 1............................................................................. } \\ & \text { ن..... } \end{aligned}$ | $\begin{aligned} & \text { 1....................... نحم } \\ & \text { 2........................ ע } \\ & \downarrow \end{aligned}$ |  | 10 |
| $\begin{aligned} & \text { 1............................................................................. } \\ & \text { ن..... } \end{aligned}$ | $\begin{aligned} & \text { 1............................................................. } \\ & \text { 2..... } \\ & \downarrow \end{aligned}$ | وسيلة انحباس الطمث بسبب الرضاعة (LAM). لمدة اقل من سنّة اشهر بعد الولادة، لكي تستطيع المرأة ستعمال هذه الوسبلة يتوجب عليها الاستمر ار فَي عملية <br>  | 11 |
| $\begin{aligned} & \text { 1....................................................................... } \\ & \text { 2..... } \end{aligned}$ | $\begin{aligned} & 1 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ ע ~ \\ & 2 . . . . . . . . . . . . . . . . . . ~ \\ & \downarrow \end{aligned}$ |  النزرجيّة في الايام أنتيْ تتوقع ان نَحمل بها من كل شل شهر. | 12 |
| $\begin{aligned} & \text { 1......................................................................... } \\ & \text { 2..... } \end{aligned}$ | $\begin{aligned} & \text { 1.......................................... } \\ & \text { 2........ } \\ & \downarrow \end{aligned}$ |  | 13 |
| $\begin{aligned} & \text { 1........................................................................ } \\ & \text { 2..... } \end{aligned}$ | $\begin{aligned} & \text { 1.............................. ע } \\ & \text { 2.............. } \\ & \downarrow \end{aligned}$ |  | 14 |
| $\qquad$ | 1. $\qquad$ |  | 15 |


| $307 \leftarrow$ |  <br> (سبق لها الاستعمال) | ```الباحثة: انظري 302 لا توجد إجابة " نعم " واحدة``` <br>  <br> ```\(\downarrow\)``` | 303 |
| :---: | :---: | :---: | :---: |
| $306 \leftarrow$ | $\begin{array}{ll} 1 & \text {..................................................................................... } \\ 2 & \text {...... } \end{array}$ | هل سبق لك ان استعملت أي شيء او حاولت بأي طريقه تأخير او تجنب وقوع الحمل؟ | 304 |
| $328 \mathrm{~A} \leftarrow$ | \|الباحثّة : أدخلمي الرمز (0) في العمود رقم (1) مـن التقويم لكل شهر كان فار غأ وانتقلي إلى السؤ ال رقم |  | 305 |
|  |  | ماذا استعمت أو فعلت؟ <br> الباحثة: صححي الأجابـات في السؤ الين 302 و 303 <br> 303 (و السؤال 301 إذا كان ذلكك ضرورياً) | 306 |
|  | \|__| عدد الأطفال الاحياء .|.................| | أود الآن ان اسألّك حول المرة الأولى التّي عملت فيها شيئًا او استعطت فيها وسيلة لتجنب وقوع الحمل: كم كان لديك من اطفال على قيد الحياة في ذلك الوقت؟ الباحثة: اذا لم بكن لديها اطفال سجلي (00) (01) | 307 |
| $311 \mathrm{~A} \leftarrow$ | اجري للمستجيية عملية تعقيم\|_ـ| | آلباحثُّة: انظري السؤ ال (302) الوسيلة (01) <br>  | 308 |
| $318 \leftarrow$ | المستجيية حامل \|_ـ_ | آلباحثُّة: انظّري السؤُ ال (226) <br> المستجيبة غير حامل او غير منا | 309 |
| $318 \leftarrow$ | $\begin{array}{ll} 1 & \text {.................................................................................... } \\ 2 & \text {....... } \end{array}$ | هل تعملين اي شيء الآن او تستعملين أي وسيلة حاليأ لتأخير او لتجنب وقوع الحمل؟ | 310 |
| $313 \leftarrow$ |  | ما الوسيلة التي تستعملينها؟ <br> الباحثة: (إذا كانت السيدة تستعمل اكثر من وسيلة فضعي دائرة حول الوسيلة الاكثر فعالية) <br> ضعي دائرة حول الرمز (01) للتعقيم الأنثوي إذا أجري للسيدة عملية تعقيم. | 311 <br> 311A |
|  |  | لماذا تستعملين (اسم الوسيلة)؟ هل هي بشكل رئيسي للمباعدة بين المو اليد ام لللتوقف عن الانجاب ام لاسباب اخرى؟ | 312A |
| $312 \mathrm{E} \leftarrow$ | $\begin{array}{ll} 1 & \text {................................................................................. } \\ 2 \end{array}$ | هل تر غبين في استعمال وسيلة لتنظيم الأسرة غير الوسيلة التي تستعملينها حاليأ (اسم الوسيلة)؟ | 312B |


|  |  | اليها اسم الوسيلة التني تفضلين استعمالها او التحول | 312C |
| :---: | :---: | :---: | :---: |
|  |  | ما السبب الرئيسي الذي يحول حاليأ دون استعمالك لهذه (اسم الوسيلة الوارد في سؤ ال 312C)؟ | 312D |
| $316 \mathrm{~A} \leftarrow$ | السيدة تستخدم وسيلة اخرى \|ـــ| |  | 312E |
| $316 \mathrm{~A} \leftarrow$ |  | من الذي قام بتركيب اللولب لكّ | 312F |
|  | القطاع (العام: $\qquad$ <br> 12 $\qquad$ مستشفى جامعي <br> 13 $\qquad$ الخدمات الطبية الملكية . <br> 16 <br>  <br> (القطاع الخاص: <br> 21 $\qquad$ مستشفى <br> 26 <br>  <br> 98 $\qquad$ لا اعرف | في أي مكان اجريت عملية التعقيج؟ <br> الباحثة: إذا كان المكان الذي أجريت فيه عملية التعقيم (مستشفى او عيادة) أكتبي اسم ذلك المكان و تتقي لتحديد نوع الدكان وضعي دائرة حول الرمز الذي ينطبق. | 313 |
|  |  | الباحثّة: انظري السؤ ال 311 <br> توجد دائرة حول الرمز (01) \|ــــ $\downarrow$ <br> قبل اجراء عملية التعقيم لكّ، هل تم إخبارك بأنك لن لن تستطيعي إنجاب أي (مزيد) من الاطفال بسبب | 314 |
| $316 \leftarrow$ | $\begin{array}{ll} 1 & \text {........................................................................ } \\ 2 & \text {...... } \end{array}$ | هل انت نادمة على عملية التعقيم التي حصلت لك او لزوجك من اجل عدم القدرة على انجاب أي <br> (المزيد) من الاطفال؟ | 315A |


|  |  | 315B |
| :---: | :---: | :---: |
|  |  | 316 $316 A$ |
| 317 |  | 316B |
| أدظلي رمز الوسيلة المستعملة في شهر المقابلة في العمود الأول من التّقويم وفي كل شهر رجو عا إلى كانون الثاني 1997 ومن ثم انتقلي إلى السّؤ ال رقم 327. <br> الباحثّة: انظري السؤ ال 316A/316 البد <br> أدخلي رمز الوسيلة المستعملة في شهر المقابلة في العمود الأول من التقويم ولكل شهر رجو عا إلى بدء الاستعمال. واديلخي رئي رمز مصدر الوسيلة في العمود الثاني من التقويم في شهر بدء الاستُعمال ثم استمري في طر ح السؤ ال رقم 318. |  | 317 |
|  | أود الآن ان اسألك بعض الأسئلة حول الاوقات الني قمت فيها أنت او زوجك باستعمال وسيلة من وسائل تنظيم الأسرة لتجنب الحمل خلال السنوات القليلة الماضبة <br> الباحثة: استخدمي التقويم لللتقي عن الاستعمال او عدم الاستعمال خلال الفترات الزمنية السابقة ابتداء من احدث استعمال ورجو عأ إلى كانون الثانتي 1997. استخدمي أسماء المو اليد وتو اريخ ميلادهم وفترات الحمل كنقاط زمنية <br> مرجعيا. <br> في العمود الأول من التقويم: ادخلي رمز الوسيلة المستعملة او الرمز "0" لعدم الاستعمال في كل شهر من الأشهر الفار غة. <br> أسئلة توضيحية: <br> العمود الاول من النقويم: <br> * * متى كانت آخر مرة استععلت فيه وسيلة من الوسائل؟ وما هي تلك الوسيلة؟ <br>  <br> الكولود)؟ <br> * ما هي مدة استعمال تللك الوسيلة؟ <br> في العمود الثاني من التقويم: ادخلي رمز مصدر الحصول على الوسيلة في الثهر الأول لكل استعمال. <br> أسئلة توضيحية: <br> العمود الثاني من التقويم <br> * من أبن حصلت على الوسيلة عندما بدأت باستعمالها؟ <br>  الطبيعية، الامتناع الدوري، او القذف الخارجي) <br> في العمود الثالث: ادخلي رموز التوقف عن استعمال الوسيلة في الشهر الذي تم فيه الاستعمال. ويجب ان يكون عدد الرموز في العمود الثالث مساويأ لعدد مرات التوقف عن استعمال الوسيلة في العمود الأول من التقويم. <br> لـة: اسألي السيدة عن سبب توقفها عن استعمال الوسيلة. وإذا كان هنالك حمل بعد التوقف، اسألكي هل حدث ذللك $\qquad$ الحمل دون قصد أثناء استعمال الوسيلة او ان السيدة تو قفت عن قصد لتتمكن من الحمل. <br> أسئلة توضيحية: <br> العمود الثثالث من الثتقويم: <br> * لماذا تو قفت عن عن استُعمال (اسم الوسبلة)؟ <br> * هل حملت أثنـاء استعمال (اسم (الوسبلّة)، ام انك توقفت عن استعمالها كي تتمكني من الحمل؟ ام انك نو فقت عن استعمالها لسبب أخر؟؟ <br> إذا كانت السيدة قد تو فقت متعمدة لتتمكن من الحمل ، اسألي: <br>  <br> اشهر عدم الاستعمال وذللك في العمود الأول من النتقويم. | 318 |




| $332 \leftarrow$ | 1 2 | $\qquad$ | الأسرت؟ تعرفين مكانأ يمكنك الحصول منه على وسيلة لتنظيم | 329 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | القطاع (العام: <br> مركز $\qquad$ مستشفى حكومي صحي حكومي. $\qquad$ مركز امومة وطفولة $\qquad$ $\qquad$ $\qquad$ عيادة متنقلة <br>  <br> (القطاع الخاص: $\qquad$ $\qquad$ $\qquad$ <br> الجمعية الاردنية لتتظيم وحماية الأسرة...... $\qquad$ مر اكز وكالة الغوث ................. منظمات أخرى غير حكومية <br>  $\qquad$ | ما هو هذا المكان ؟ <br> الباحثة: إذا كان الصصدر (مستشفى، مركز صحي او عيادة) سجلي اسم ذلك المكان. وتقصي لتحددي نوع المصدر وضعي دائرة حول الرمز المناسب <br> (اسم المكان) $\qquad$ <br> أي مكان أخر؟ <br> الباحثة: سجلي جميع الأماكن التي تذكر ها المستجيية | 330 |
| $401 \leftarrow$ |  |  | هل سبق ان راجعت مرفقأ صحيأ للر عاية الصحية لنفسك او لأطفالك خلال الـ12 شهر أ السابقة؟ | 332 |
|  | 2 | $\qquad$ | هل تحدث اليك أي شخص في المرفق الصحي حول وسائل <br> تنظيم الأسرة؟ | 333 |

القسم الرابع: أـ الحمل والرعاية الصحية بعد الولادة والرضاعة



| اللولود الثاني فبل الاخير | الالهولود قبل الاخير | الوولود الاخير | ترتيب الهولود |  |
| :---: | :---: | :---: | :---: | :---: |
| -الاسم | الاسم -- | الاسم | اسم المولود من 212 إلوا |  |
|  |  |  | أين تمت ولادة (اسم المولود)؟ <br> الباحثة: اذا كان الدكان الذي تمت <br>  صحيا او عيادة) سجلي اسم ذلك الككان وتقصي لمعرفة القطاع الذي يتبعه ذلك المكان وضعي دائرة حول الرمز المناسب. <br> (اسم المكان ) | 427 |
|  |  | $\begin{array}{ll} 1 & . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \end{array}$ | هل تمت و لادة (اسم المولود) بعملية قيصريةّ؟ | 428 |
|  |  | $\begin{aligned} & 1 \\ & 2 \\ & 2 \\ & 3 \\ & 3 \\ & 4 \\ & 4 \\ & 6 \\ & 8 \\ & 8 \\ & 8 \end{aligned}$ | (اسن غطى معظم ؟ تكاليف و لادة | 428A |
|  |  | $1 \text {................................................... } 1$ | هل تحدث اليك أي شخص في <br> المرفق الصحي او قام للك أي <br> نصيحة بعد ولادة (اسم المولود) <br> فى مجال تنظيم الأسرة؟ | 428B |
| $435 \begin{cases}1 & \ldots . . . . . . . . . . . . . . . . . ~ \\ \text { ¢ }\end{cases}$ | $435 \begin{cases}1 & \ldots . . . . . . . . . . . . . . . . . . . . . . . ~ \\ \text { v }\end{cases}$ | $\begin{aligned} 430 & \leftarrow 1 & \text {............................................ } \end{aligned}$ | هل بحثت عن مختص طبي لفحصك صحيأ خلال الاشهر اللاحقة لو لادة (اسم المولود)؟ | 428C |
| $\begin{array}{cc} 1 & \text {..................................... } \\ 2 & \text {..... } \end{array}$ | $\begin{array}{ll} 1 & \text {.................................. } \\ 2 & \text {...... } \end{array}$ | $430 \leftarrow 1$ <br> 2 $\qquad$ | هل فحصك مختص طبي بعد ولادة (اسم المولود)؟ | 429 |


| المولود الثاني قبل الاخير | المولود قبل الاخير | المولود الاخير | ترتيب المولود 312 |  |
| :---: | :---: | :---: | :---: | :---: |
| الاسم | الاسم | -الاسم | اسم المولود من 312 |  |
|  |  |  | لماذا لم تقومي بالبحث عن مختص طبي الفحصك بعد و لادة (اسم المولود)؟ | 429A |
|  |  |  | بعد كم يوم أو أسبوع من الو لادة تلقيت الفحص لاول مرة؟ الباحثة: سجلي (00) ايام ان كان في نفس اليوم | 430 |
|  |  |  | من الذي فحصك آنذاك؟ <br> الباحثة: (تقصي لمعرفة الثخص الأكثر تأهيلا) | 431 |
|  |  |  | ففي أئ؟ مكان تم الفحص <br> الباحثة: اذا كان المكان الذي تم فيه الفحص (مستشفى او مركز صحي او عيادة) سجلي اسم ذللك المكان وتنقي لمعرفة القطاع الذي يتبعه ذلك الككان وضعي دائرة حول الرمز المناسب. <br> (اسم المكان) | 432 |
|  |  | $1 \text {............................................................................. }$ |  <br> نصـيحة بُد و ولادة (السم <br> الالؤؤود) في مجال تنظيم | 432A |


| الكولود الثاني فبل الاخير | الكولود قبل الاخير | الكولود الاخير | ترتيب الهولود 312 |  |
| :---: | :---: | :---: | :---: | :---: |
| الاسم | الاسم | الاسم | اسم الهولود من 312 |  |
|  |  |  | الباحثة: انظري السؤ ال 430 عدد الايام/ الاسابيع بعد الو لادة | 432B |
|  |  |  | لماذا لم تقومي بالبحث عن مخنص طبي قبل هذه المدة لفحصك طبيًا بعد ولادة (الاسم)؟ | 432C |
|  |  | $\begin{array}{ll} 436 \leftarrow 1 & \text {................................ } \\ 437 & \leftarrow 2 \end{array} \quad \text {.............. }$ | هلا علادت لك الدورة الشهرية منذ ولادة (اسم المولود)؟ | 434 |
| $\begin{aligned} \hline 1 & \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \end{aligned}$ | $\begin{aligned} & \hline 1 \text { ن........... } \\ & 439 \leftarrow 2 \text {............ } \\ & \hline \end{aligned}$ |  |  | 435 |
|  |  |  | لمدة كم شهر أ بعد ولادة (اسم الهولود) لم تأتيك الدورة الشهرية؟ | 436 |
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| المولود الثاني قبل الاخير | الهولود قبل الاخير | المولود الاخير | ترتبب الكولود |  |
| :---: | :---: | :---: | :---: | :---: |
|  | الاسم -- | -الاسم - | من سؤ ال 212 وسؤ ال 216 |  |
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| الكولود الثاني | الهولود قبل الإخير | الهولود الأخير | ترتبّ الهولود |  |
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| \|--_-_-| |-_| |-_| | \|-- - - - - - - - - - | | \|-_-_-_-| |--| |-|-| | P3 الجرعة الثاثهة |  |
| \|--|-|-| |-| |-|-| | \|--L-|- - - - - - - |  | P4 الجرعة الرابعة |  |
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|  | \|-_-_-_ |-_- |-_- | \|-_-_-_| -_-_ |-_- | DTP. 1 الثثلاثئي الجر عة الاولئى |  |
| \|-----| |---| |--| | \|----|-| |--| ---| | \|----|-| ---| ---| |  |  |
| \|-L-|-| |--| |-- | \|-L-|-| - - - - - - | \|--_-|-| --| - - - - |  |  |
| \|-- - - - - - | - - | | \|-|-|-|-| |-|-| |-_| | \|-|-|-| |-|-| |--| |  |  |
| - | - | \|-_-_-|-| |-|-| |-_-| |  |  |
| \|--|-|-| |-|-| |--| | \|--_-|-| |-|-| |-|-| | \|-- - - - - - - - |-_| | HEP. 2 التهاب الككب البآيّي2 |  |
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|  |  | \|-- - - - - - - - - - - | |  |  |
| \|--|-|-| - - - - - |  |  |  |  |
| \|-|-|-| |-|-| |-| | \|-|-|-| - - - - - - | | \|-|-|-| - - |-| |-| |  |  |
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|  |  |  | * الثلاثي الفيروسي |  |
| \|--|-|-| |-|-| |-| | \|-L-_-| - - - - - - | | L-\|-|-| - | - - | - - - |  |  |
| \|-|-| - |-| |-|-| |-|-| | \|-|-|-|-| |_|-| |-|-| | \|-|_|-|-| |-|-| |-|-| | MMR2 الثّاذثي النبرو |  |


| الكولود الثاني قبل الأخير | الهولود قبل الأخير | الكولود الأخير | ترتيب المولود |  |
| :---: | :---: | :---: | :---: | :---: |
| الاسم | الاسم - الا | الاسم - | من سؤ ال 212 وسؤ الـ 216 |  |
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| \|__| ...............|ت | \|_| عدد المرات | \|_| ع | ................| | كم مرة نلقى مطعوم النتهاب الكبد البائي؟ | 463H |


| المولود الثاني قبل الأخير | الكولود قبل الأخير | الكولود الأخير | ترتيب الكولود |  |
| :---: | :---: | :---: | :---: | :---: |
| الاسم - | الاسم - | الاسم - | من سؤ ال 212 وسؤ ال 216 |  |
|  | $\text { 463K }\left\{\left.\begin{array}{rr} 1 & \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \\ 2 & \text { עرف } \end{array} \right\rvert\,\right.$ | $463 \mathrm{~K}\left\{\left.\begin{array}{cc} 1 & \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \\ 2 & \text { עرف } \end{array} \right\rvert\,\right.$ | مطعوم المستندية النزليه (السحايا)، وهو عبارة عن حقنة تعطى أحيانأ في نفس الوقت مع مطعوم شلل الاطفال و الثلاثي و التهاب الكبد البائي؟ | 463I |
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|  |  |  | الباحثّة: انظري السؤ ال 460 و 463E المطعوم الثلاثي (DPT) | 463N |
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|  |  |  | من أين حصل (الاسم) على الجر عة الثالثة من المطعوم الثلاثي. | 463 S |


| المولود الثاني قبل الأخير | المولود قبل الأخير | المولود الأخير | ترتبب المولود |  |
| :---: | :---: | :---: | :---: | :---: |
|  | الاسم _- | الاسم - | من سؤ ال 212 وسؤ ال 216 |  |
|  |  | جر عة واحدة على ولا مرة، لا |  | 463 T |
|  |  |  | من أين حصل (الاسم) على الجر عة الاولى من مطعوم الحصبة؟ | 463 U |
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| $\begin{array}{ll} 1 & \text {.............................................................................. } ا \text { עعرف } \\ 2 & \text { ل...... } \\ 8 & \end{array}$ | $\begin{array}{ll} 1 & \text {........................................................................... } ا \text { ل.... } \\ 2 & \text { اعرف } \\ 8 \end{array}$ |  | عندما أصيب (اسم المولود) بالسعال هل كان يتنفس بشكل أسر ع من المعناد مع تنفس قصير وسريع؟ | 468 |
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| الكولود الثاني فبل الأخير | الكولود قبل الأخبر | الكولود الأخير | ترتيب المولود |  |
| :---: | :---: | :---: | :---: | :---: |
| الاسم | الاسم - | الاسم | من سؤ ال 212 وسؤ ال 216 |  |
|  |  |  | ألمعالجة؟ <br> الباحثة: إذا كان مصدر الاستشارة او المعالجة (مستشفى او مركز صحيا او عيادة) سجلي اسم ذلك المكان وتقصي لتحديد تبعية ذلك المصدر وضعي دائرة حول الرمز الذي ينطبق. <br> (اسم المكان ) <br> أي مكان أخر؟ <br> الباحثة: (سجلي جميع الأمكنة التي تذكر ها السيدة) | 471 |
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| الكولود الثاني قبل الأخير | الكولود قبل الأخير | المولود الأخبر | ترتيب المولود |  |
| :---: | :---: | :---: | :---: | :---: |
| الاسم --. | الاسم | الاسم - | من سؤ ال 212 وسؤ ال 216 |  |
|  |  |  | اثناء اصـابة (اسم المولود) بالاسهال هل أعطي أي من التالية للثرب: | 478 |
| $481\left\{\begin{array}{cc} 1 & \text {......................................................... } \\ 2 & \text {.......... } \end{array}\right\}$ | $481\left\{\begin{array}{cc} 1 & \text {.......................................................... } \\ 2 & \text {.......... } \end{array}\right\}$ | $481\left\{\begin{array}{ll} 1 & \text {......................................................... } \\ 2 & \text {.......... } \end{array}\right\}$ | هل تم إعطاء (اسم المولود) أي شيء (شيء آخر) لمعالجة الإسهال؟ | 479 |
|  |  |  |  | 480 |
| $\begin{array}{rr} 1 & \text {................................. } \\ 483 \leftarrow 2 & \ldots . . . . \end{array}$ | $\begin{array}{rr} 1 & \text {................................ } \\ 483 \leftarrow 2 & \ldots \end{array}$ |  | علاج بلاسهالْ عن استشارة طبية او | 481 |
|  |  |  | أين بحثت عن الاستشارة الطبية او العلاج للإسهال؟ <br> الباحثة: إذا كان مصدر الاستشارة او المعالجة (مستشفى او مركزا صحيأ او عيادة) سجلي اسم ذلك الدكان وتقصي لتحديد تنبية ذلك المصدر وضعي دائرة حول الرمز الذي ينطبق. <br> (اسم الدكان ) <br> أي مكان آخر؟ <br> الباحثة: سجلي جميع الأمكنة التي تذكر ها السيبة | 482 |
| الباحثة: ارجعي إلى س 456 في العمود النتالي من الاستمارة، واذا لم يكن هنالكّ مو اليب استمري في س 486 | الباحثةّ: ارجعي (إلى س 456 في العمود النّلي من الاستمارة، واذا لم يكن هنالك مو اليد استمري في س 486 |  |  | 483 |



| نـهار أمس/ليلّة 'أمس (عدل) (المرات) | الأيام <br> اللبجعة <br> الأخيرة <br> (عدد الآيام) | اسم المادة | والأن أود ان اسالكك عن السو ائل الني شربها (اسم الطفل من سؤ ال 491) خلال الأيام الكّبعة السابقة بما في ذلك يوم أمس. كم يومأ شرب (اسم الطفل ) أي من التالية خلال الأيام السبعة السابقة؟ | 492 |
| :---: | :---: | :---: | :---: | :---: |
| L__a | \|__|a | a | الباحثة: لكل مادة تم إعطؤُ ها مرة واحدة على الأقل في |  |
| \|__| b | \|__| b | b b. حليب خاص للاطفال الرضع؟ | الاليام السبعة الأخيرة وقبل الانتقال للمادة النالية <br> اسألكي: |  |
| L__\|c | \|__|c | c. أي حليب أخر مثل حليب العلب او الجاف او الطازج ج | في المجموع ، كم مرة شرب (اسم الططل ) يوم امس خالد النهار او الليل (السم المادة)؟ |  |
| \|__|d | \|__|d | d | الباحثة: إذا كان عدد المرات (7) او اكثر سجلي (7) وإذا |  |
| \|__|e | \|__e | e | كانت الإجابة " لا اعرف " سجي الرمز "8". |  |
| \|__|f | \|__|f | f f .f. |  |  |
| \|__| g | \|__| g | g. أي سو ائل أخرى كمحول السكر، القهوة، مشروبات غازية، او شوربه أخرى؟ |  |  |
| \|نهار (امس/ المراتيّ) | $\begin{aligned} & \hline \text { الأيام السبعبة } \\ & \text { (عدي الأيام) } \\ & \hline \end{aligned}$ | اسم المادة | أود ان اسألكك الآن عن أنواع الأطعمة التني تناولها (اسم الطفل من السؤ ال 491) خلال الأيام السبعة الماضية، بما في ذلك يوم أمس؟ | 493 |
| \|__|a | \|__|a | a أرز، معكرونه،،الذرة الصفراء، أي طعام مصنوع من الحبوب؟ | كم عدد الأيام خلال الأيام السبعة الماضية التي تنتاول خلالها (اسم الطفل من السؤ ال491) كلٍ من |  |
| \|__| b | \|__| b | b b. الجزر، البطاطا الحلوة الحمراء، القرع الاصفر؟ |  |  |
| \|__|c | \|__|c | c (مثال: البطاطا العادية، لفت)؟ | الباحثة: لكل مادة تم تققيمها مرة واحدة على الأقل خلال السبعة أيام الماضية قبل الانتقال إلى البند التاللي اسألي: |  |
| \|__|d | \|__|d |  |  |  |
| \|__|e | \|__|e | e | - ما هو مجموع المرات التي اكل فيها (اسم الطفل من السؤ ال 491) يوم أمس خلال الليل أو النهار |  |
| \|__|f | \|__|f | f الار اق، الفو اكة المطبوخة، الفاصوليا الخضراء، والبندورة)؟ | من مادة (السم المادة)؟ <br> رالباحثة: إذا كانت عدد المرات (7) أو اكثر، سحلي(7)، وفي حالة لا أعرف سجلي (8) |  |
| \|__|g | \|__|g | g g. اللحم، الدواجن، السمك، كبدة أو البيض؟ |  |  |
| \|__ $/ \mathrm{h}$ | \|__| h | h حمص، الفاصوليا، الفول)؟ |  |  |
| L__\|i | L__\|i | i الشمس، بزر بطيخ، فسنق؟ |  |  |
| \|__ ${ }^{\text {j }}$ | L__ ${ }^{\text {j }}$ | j . |  |  |
| \|__| k | \|__| k | k |  |  |

## القسم الخامس: الزواج

| 510 |  | 500 |
| :---: | :---: | :---: |
|  | ها | 505 |
|  | $\qquad$ | 506 |
| $510 \leftarrow$ |  | 507 |
|  |  | 508 |
|  |  | 510 |
| $512 \mathrm{~A} \leftarrow$ |  | 511 |
|  |  | 512 |
| $513 \leftarrow$ |  | 512A |
|  |  | 512B |
|  | الباحثة:حددي الأشهر التي كانت السيدة متزوجة فيها منذ كانون الثاني 1997 وأدخلي الرمز " X " في العمود الرابع من النقويم <br> لكل شهر كانت متزوجة فيه، وأدخلي الرمز " 0 " لكل شهر لم تكن فيه السيدة متزوجة منذ كانون الثاني 1997. <br> بالنسبة للسيدات اللاتي سبق لهن الزواج اكثر من مرة: نقصي عن تاريخ بدء الزواج الفعلي الحالي، وعن تاريخ بدء الزواج و انتهائه للزيجات السابقة. <br> بالنسبة لللسيدات اللاتي غير متزوجات حالياً:نتصي عن تاريخ بدء آخر زواج، وتاريخ انتهائه، وعن تاريخ بدء الزواج وانتهائه للزيجات السابقة ان وجدت. | 513 |


|  | 1 | $\qquad$ | هل اجريت انت و/ او زوجك فحصأ طبيأ فبل الزواج؟ | 513A |
| :---: | :---: | :---: | :---: | :---: |
| $524 \leftarrow$ | $\begin{aligned} & \|\ldots\| \ldots \mid \\ & \|\ldots\| \ldots \mid \\ & \|\ldots\| \ldots \mid \\ & \left\|\_\|\quad\|\right. \end{aligned}$ | $\qquad$ منذ أيام $\qquad$ منذ أسابيع. $\qquad$ منذ أشهر $\qquad$ منذ سنوات | منذ متى كانت آخر معانشرة زوجيه؟ الباحثة: سجلي "منذ سنوات" في حالة ما إذا كانت آخر معاشرة قد تمت منذ سنة او اكثر، واذا كانت الاجابة هي 12 شهرأ او اكثر فيجب تسجيلها باللسنوات. | 515 |
|  |  | $\qquad$ | هل تم استخدام الواقي الذكري أثناء المعانثرة الزوجية الاخيرة؟ | 516 |
| $601 \leftarrow$ |  | $\qquad$ | هل تعرفين مكانٔا يمكن للفرد الحصول منه على الواقي الذكري؟ | 524 |
|  | A <br> B <br> C <br> D <br> E <br> F <br> G <br> H <br> I <br> J <br> K <br> L <br> M <br> N <br> O <br> X | القطاع (العام: مستشفى حكومي. مركز صحي حكومي مركز امومة وطفولة مستثففى جامعي. الخدمات الطبية الملكية عيادة متنقلة <br>  <br> (القطاع الخاص: <br> مستشفى خاص/ عيادة خاصة $\qquad$ صيدلية. <br> الجمعية الاردنية لتنظيم وحماية الأسرة. $\qquad$ مر اكز وكالة الغوث منظمات أخرى غير حكومية ............ ــطاع خاص آخر (حددي) ــري $\qquad$ | ما هو ذلك المكان؟ <br> للباحثّة: إذا كان المصدر مستشفى او مركزا اصحياّ، او عيادة سجلي اسم ذلك المكان وتقصي لتحددي تبعية المصدر وضعي دائرة حول الرمز الذي ينطبق. (اسم الدكان) <br> هل هناك مكان آخر؟ <br> (سجلي جميع الصصادر التي تشير اليها السيدة) | 525 |

(القسم السادس: تفضيلات الإنجاب

| $614 \leftarrow$ |  | الباحثةّ : انظري السؤ الين (311) و (311A) <br> لا احد من الزوجين معقم | 601 |
| :---: | :---: | :---: | :---: |
| $604 \leftarrow$ <br> $614 \leftarrow$ <br> $610 \leftarrow$ <br> $608 \leftarrow$ | تفضل إنجاب طفل (او طفل آخر).... 1 <br> لا تفضل انجاب المزيد من الاطفال/ <br> 2 $\qquad$ عدم الانجاب البتة <br> لا تستطيع الحمل (غير قادرة على <br> 3 $\qquad$ (الحمل <br> لم تقرر / لا تعرف وحامل الآن ..... <br> لم تقرر/ لا تعرف وليست حامل او <br> 5 $\qquad$ غير متأكدة انها حامل | (الباحثة: انظري السؤ ال (226) <br> السيدة حامل <br> لاي بعض الأسئلة حول المستقبل، بعد إنجابك للطفل الذي تتوقعيينه الان، هل تر غبين في إنجاب طفل <br>  <br> لدي بعض الأسئلة حول المستقبل، هل لديك الر غبة في إنجاب طفل او مزيد من الاطفال، ام انك تفضلين الاطمفال؟ | 602 |
|  |  | ماذا تفضلين ان يكون جنس المولود القاده؟ | 602A |
| $\begin{aligned} & 609 \leftarrow \\ & 614 \leftarrow \\ & 609 \leftarrow \end{aligned}$ |  |  | 603 |
| $610 \leftarrow$ | السيدة حامل \|ــ| | الباحثّة: انظري السؤ ال (226) <br>  $\downarrow$ | 604 |
|  |  | في الأسابيع القليةة القادمة، إذا اكتثففت انكا حامل، هل سيكون هذا مشكلة كبيرة، ام مشكلة بسيطة (صغيرة)، ام ان هذا ليس مشكلة بالنسبة لك؟ | 608 |
| $614 \leftarrow$ | تستعمل حاليأوسيلة \|ـ_ | الباحثةّ : انظري السؤال (310) السيدة تستعمل وسيلة تتظيم الأسرة؟ <br> لا تستعمل اي وسيلة حاليا \|_ـ_ <br>  <br> $\downarrow$ $\downarrow$ | 609 |
| $612 \leftarrow$ | $\left\{\begin{array}{l} 1 \\ 2 \\ 8 \end{array}\right.$ | هل تعتققين انكك سوف تستعملين وسيلة من وسائل تنظيم الأسرة لتأخير أو لتجنب الحمل في أي وفت مستقبال؟ | 610 |


|  |  | اي وسيلة من وسائلل تنظيم الأسرة تفضلين استعمالها؟ | 611 |
| :---: | :---: | :---: | :---: |
| $614 \leftarrow$ | أي وسيلة اخرى \| | الباحثةٌ: انظري السؤال (611) | 611A |
| $614 \leftarrow$ |  | هل تفضلين ان يقوم بتركيب اللولب لك مختص صحي ذكر ام انثى، ام ان الجنس ليس مشكلة؟ | 611B |
|  | $\qquad$ <br>  $\qquad$ المعاشرة متقطعة $\qquad$ $\qquad$ استئصـال الرحم $\qquad$ $\qquad$ $\qquad$ الشائعات $\qquad$ <br> اسباب متعلقة بالوسيلة: $\qquad$ $\qquad$ $\qquad$ $\qquad$ تكاليف باهظة $\qquad$ $\qquad$ $\qquad$ |  | 612 |


| $615 \mathrm{~A} \leftarrow$ | $\qquad$ العدد | الباحثّة : انظري السؤال 216 <br>  على قيد الحياة <br> السيدة لديها أطفال على قيد الحياة <br> لـو كانتـ لديك إمكانية إختـيار عـد معيـن مـن الأطفــل الذيـنـ تودين إنجـابهم طيلة حياتكا فــا العدد الذي تر غبين به؟ <br> إذا مـا عدت إلـى الوقت الذي لـم يكن لديك فيه أطفال وكانت لديك إمكانية اختيار بالضبط(بدقة) عدد الأطفال الذي تر غبين في إنجابهم <br>  تودين إنجابه؟ <br> الباحثة: تقصي لمعرفة العدد | 614 |
| :---: | :---: | :---: | :---: |
|  |  | كم من بين هؤ لاء الأطفال تودين ان يكونوا ذكور ا وكم من بينهم تودين ان يكونوا إناثا، وكم من بينهم الجنس (ذكر ، أنثى ) ليس مهمأ؟ | 615 |
|  |  | ما عدد الاطفال الذي يجب على الازواج انجابهم قبل البدء باستخدام وسائل تنظيم الأسرة؟ الباحثة: تقصي لمعرفة العدد | 615A |
|  |  | هـل تؤيديـن او تعارضـين اسـتعمال الأزواج لوســائل تتظـيم الأسـرة لتجنب الحمل؟ | 616 |
| $617 \leftarrow$ | لم تسمع السيدة بالتعقيم الانثوي \|ـ._| | الباحثّة: انظري 301 البند (1) <br>  $\downarrow$ | 616A |
| $617 \leftarrow$ $617$ |  | هل يمكن القول بأنك تؤيدين ام تعارضين استخدام السيدات لللتعقيم الانثوي (ربط المواسير) من اجل تجنب الانجاب؟ | 616B |
|  |  | التعا السبم الانثوي؟ الرئبيي الذي يجعلك تعارضبن استخدام السيدات لطريقة | 616C |
|  |  | هل سمعت عن تتظيم الأسرة خلال الـ 6 اشهر الماضية <br> من الــراديـو؟ <br> من الثلفزيـون؟ <br> من الصحف والمجلات؟ <br> من الملصقات؟ <br> من النشرات او الكتيبات؟ <br> من المحاضرات؟ | 617 |
| $619 \leftarrow$ | تعارض تنظيم الأسرة \| | الباحثة: انظري السؤ ال 616 تؤيد تنظيم الاسرة\| |ـــا | 618 |


|  | العلاقات الشخصبة <br> 11 العاملون بالصحة الحكومية. $\qquad$ طبيب خاص/ ممرضة العاملون بجمية تتظيم وحماية الأسرة...... $\qquad$ $\qquad$ $\qquad$ الاصدقاء <br> وسائل الاتصال $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ | من اين أو من مَن تفضلين الحصول على معلومات عن تنظيم الأسرة؟ <br> الباحثة: ضعي دائرة حول رمز \| جابة واحدة فقط. | 618A |
| :---: | :---: | :---: | :---: |
| $621 \leftarrow$ | 1 $\qquad$ | هل ناقشت موضوع تتظيم الأسرة مع أصدقائك، جير انك او أقاربك، خلال الـ 12 شهر أ الماضيةّ؟ | 619 |
|  |  | مع من تناقثت؟؟ <br> أي شخص أخر؟ <br> "البحثةة: سجلي جميع الأشخاص الذين تذكر هم السيدة. | 620 |
| $628 \leftarrow$ | السيدة حاليأ (مطلة، أرملة، منفصلة) \|ـــ| | الباحثة: انظري السؤال رقم 101A \| السيدة حاليأ متزوجة | $\downarrow$ | 621 |
| $624 \leftarrow$ | لم يتم وضع دائرة حول أي رمز \|ـــ| | الباحثّة: انظري السؤ ال (311)/ (311A): <br>  $\downarrow$ | 622 |
|  |  | لقد قلت بأنك تستعملين حاليأ وسيلة من وسائل تنظيم الأسرة، هل يمكن القول ان قرار استعمال الوسيلة هو قرارك بشكل رئيسي ، ام قرار زوجك بشكل رئيسي، ام أنكما اتخذتما القرار بشكل مشترك؟ | 623 |
|  |  | الآن، أود أن اسألكك عن رأي زوجك حول تنظيم الأسرة. هل تعتققين بان زوجك يؤيد او يعارض (لا يؤيد) استعمال الأزواج لوسائل تتظيم الأسرة لتجنب الحمل؟ | 624 |
|  |  | كم مره سبق ان تناقشت مع زوجك حول وسائل تنظيم الأسرة خلال الـ 12 شهرأ السابقة؟؟ | 625 |


| $628 \leftarrow$ | السيدة معقمة او زوجها معق \|ـ_ـ| | الباحثة: انظري السؤال (311)/ (311A): لا أحد من الزوجين معقم \|ـــ| <br> $\downarrow$ | 626 |
| :---: | :---: | :---: | :---: |
|  |  | هل تعتقتاين ان زوجك ير غب في نفس عدد الأطفال الذين ترغبين بإنجابهم، ام اكثر، ، ام اقل مما ترغبين؟ | 627 |
|  | y <br> البدائل <br> اعرف <br> $8 \quad 2 \quad 1$ <br> لدية مرض جنسي معدٍ ..... <br> $8 \quad 2 \quad 1$ <br>  <br> $8 \quad 2 \quad 1$ <br> متعبة/ مزاجها غير طبيعي. | لا ينفق الزوجان دائمأ على كل شيء، أرجو ان تخبريني اذا كنت تتنققين ان الزوجة لها الحق في رفض ممارسة المعانشرة مع زوجها: - إذا كانت تعلم بأن زوجها مصاب بالأمر اض المنقولة جنسياّ؟ <br> - إذا كانت قد أنجبت مولوداً حديث؟؟ <br> - ان كانت متعبة ومز اجها غير طبيعي؟ | 628 |
|  |  | هل سبق وان شجتانك و الدتك او حماتك على انجاب مزيد من الاطفال؟ | 628A |

## القسم السابع: خلفية الزوج وعمل المرأة

| $703 \leftarrow$ | \|السيدة حاليا (مطلقة ،أرملة ، منفصلة) |ــــل| | $\qquad$ <br> البّاحثّة : انظري السؤ ال (500): <br> $\downarrow$ | 701 |
| :---: | :---: | :---: | :---: |
|  | \| العمر (بالسنوات الكاملة)............| | كم كان عمر زوجك في عو بي ميلاده الاخير ¢ | 702 |
| 706A $\leftarrow$ | $\begin{array}{ll} 1 & \text {........................................................................... } \\ 2 & \text { ע..... } \end{array}$ | هل سبق ان التحق زوجك الحالي (الأخبر) بالمدرسة ¢ | 703 |
| $706 \mathrm{~A} \leftarrow$ |  | ماذا كان أعلى مستوى تعليمي التحق به الزوج ؟ | 704 |
|  | $\qquad$ الصف <br> 98 <br> لا اعرف | ما هو أعلى صف أكله بنجاح في ذلك المسنوى | 705 |
| 709A $\leftarrow$ |  | الباحثة : انظري السؤال 701 <br> السيدة حاليا متزوجة \|ـــ| <br> $\downarrow$ | 706A |
| $706 \mathrm{D} \leftarrow$ | $\begin{array}{ll} 1 & \text {.............................................................................................. } \\ 2 & \text { ע } \end{array}$ | هل عمل زوجك خلال السبعة أيام الماضية حتى ولو ساعة واحدة؟ - في أي عمل مقابل اجر - أو في مصلحة خاصـة يملكها أو يملك جز ها منها <br>  ـ أو فئ أي عمل آخر؟ | 706B |
| 709A $\leftarrow$ | $\begin{array}{ll} 1 & \text {....................................................................................... } \\ 2 & \text { ע..... } \end{array}$ | هل كان لدى زوجك عمل ولكنه لم يزاوله خلال الـ 7 ابام السابقة (أي كانِ غائبَا عنه بشكل مؤفتّ) بسبب مرض او اج اجازة أو سفر أو ما آلى ذلك ؟ | 706C |
|  |  | ما المهنة الحالية لزوجك؟ <br> (أي ما نوع العمل الذي يقوم به بشكل رئبسي) | 706D |
|  | $\qquad$ مستخدم بأجر صاحب عمل مع وجود مستخدمين آخرين ..... يعمل لحسابه دون وجود مستخدمين آخرين...... $\qquad$ يعمل لدى الأسرة دون اجر $\qquad$ يعمل دون اجر | ما الحالة العملية لزوجك: هل هو مستخدم باجر ، صاحب عمل مع وجود مستخديمين، يعمل لحسابه دون وجود مستخدمين، يعمل لایى الأسرة دون اجر، يعمل لدى شخص آخر دون اجر؟ | 706E |
| $710 \leftarrow$ | $\begin{array}{ll} 1 & \text {............................................................................................... } \\ 2 \end{array}$ | هل كان لديك عمل خلال السبعة أيام الماضية حتى ولو ساعة واحدة؟ - في أي عمل مقابل آجر <br>  <br>  <br> ـ ـ أو في أي عمل آ آخر؟ | 709A |
| $719 \leftarrow$ | $\begin{array}{ll} 1 & \text {.......................................................................................... } \\ 2 & \text { ע.... } \end{array}$ | هل كـان لابك عمل ولكن لم تز اوليه خـلال الـ 7 ايام الماضبة <br>  | 709B |
|  |  | ما هي مينتك الرئيسية <br> أي ما نو ع العمل الذي تقومين به بشكل رئيسي؟ | 710 |



القسم الثامن: الإيدز والامراض المنقولة جنسياً


| $815 \leftarrow$ | \| السيدة حاليأ (مطلة، أرملة، منفلة) | الباحثّة: انظري السؤ ال رقم (500) <br>  $\downarrow$ | 813 |
| :---: | :---: | :---: | :---: |
|  | $\begin{array}{ll} \hline 1 & \text {................................................................................. } \\ 2 & \text {....... } \\ \hline \end{array}$ | هل سبق لك ان تحدثت مع زوجك حول الطرق لتجنب الإصابة بالفيروس المسبب لمرض الإيدز؟ | 814 |
|  |  | إذا ما أصيب أي من أفراد أسرتك بالفيروس المسبب لمرض الإيدز هل ستبقين هذا سر أ ام لاء | 815 |
|  |  | إذا ما أصيب قريب لك بالفيروس المسبب لمرض الإيبز هل ستكونين مستعدة لر عايته/ لر عايتها في أسرتك؟ | 816 |
| $820 \leftarrow$ | $1 \begin{array}{ll}8 & \text {............................................................................ } \\ 2\end{array}$ | عدا عن الايدز، هل سمعت عن أمر اض جنسية معدية اخرى يمكن ان نتتقل من خلال ممارسة الجنس؟ | 817 |
|  |  | إذا كان الرجل مصاباً بمرض منقول جنسياً، ما هي الأعراض التي تظهر عليه؟ <br> اية اعراض أخرى؟ <br> الباحثة: ضعي دائرة حول جميع رموز الإجابات التي تنلي بها | 818 |
|  |  | إذا كانت المرأة مصابة بمرض منقول جنسيأ، ما هي الأعراض التي تظهر عليها؟ <br> اية اعراض أخرى؟ <br> الباحثة: ضعي دائرة حول جميع رموز الإجابات التي تدلي بها | 819 |
|  | الالـقاعة | الباحثّ: سجلي وفت انتهاء المقابلة | 820 |

العمود 1
-此 B T ا. انتهاء الحمل الحلاء
0. لا وسيلة 1. التعقيم الأنثوي 2. 2. التعقيم الذكري 3. حبوب 4. 5 4. اللولب . 8. الواقرساتي الذكري 9. 8. الوشأَي الوطاطني لـ الرغوة الجيلـي الرضاعة الطّبيعية المطولة .K الالمتناع الدوري. L . M
مصدر الوسيلة
 2. 2. مركز صحي حكو مـية
$\qquad$
5. الخدمات الطبي 6. 6 عياده مانت
 9. 8. مبيب خاص خاص B
مر اكز وكالة الغوث . C D
 F
سبب التوفق عن استعمال وسائل تنظيم الأسرة
0. المعانشرة المنقطعة/ الزو ج بعيد 1. أصبحت حاملا أثناء الاستُعمالّ 2. تريد ان تحمل
3. معارضة الزو 4. 3. تريد وسيلة فعالة اكثر 5. اسباب صحية 6. اثار جانبية 7. صعوبة التنقل/ بعد المسافة 9. 8. عدم ملاع اعنتهاليفا
F.
ـ. .ـ صـوبة ان تحمل / سن اليأس
D. الانفصــال عن الزوج (مطلقة، أرملة، منفصلة)
Z. لا اعرفـ
العمود 4 الزواج
X
تعليمات:

* يجب ان يظهر رمز واحد فقط في أي مربع,



|  | 10 | تشربن الأول |  |
| :---: | :---: | :---: | :---: |
|  | 9 | ايلول |  |
|  | 8 | اب |  |
|  | 7 | تموز |  |
|  | 6 | حزيران |  |
|  | 5 | ايار | N |
|  | 4 | نبسان |  |
|  | 3 | اذار |  |
|  | 2 | شباط |  |
|  | 1 | كانون الثناني |  |




|  | 12 | كانون الاول |  |
| :---: | :---: | :---: | :---: |
|  | 11 | تشرين الثاني |  |
|  | 10 | تشرين الاولّ |  |
|  | 9 | ايلول |  |
|  | 8 | اب |  |
|  | 7 | تموز |  |
|  | 6 | حزيران | $\bigcirc$ |
|  | 5 | إيار |  |
|  | 4 | نيسان |  |
|  | 3 | اذار |  |
|  | 2 | شباط |  |
|  | 1 | كانون الثناني |  |



|  | 12 | كانون الأول |  |
| :---: | :---: | :---: | :---: |
|  | 11 | تشرين الثانين |  |
|  | 10 | تشرين الاولّ |  |
|  | 9 | ابلول |  |
|  | 8 | اب |  |
|  | 7 | تموز |  |
|  | 6 | حزيران | $\bigodot$ |
|  | 5 | ايار |  |
|  | 4 | نبسان |  |
|  | 3 | اذار |  |
|  | 2 | شباط |  |
|  | 1 | كانون الثاني |  |





[^0]:    ${ }^{1}$ Rate for women age 15-49 years

[^1]:    ${ }^{1}$ Discontinuation rates presented in Table 5.12 refer to all episodes of contraceptive use in the period of time covered by the calendar, not just the episodes that began during the period. They are cumulative one-year discontinuation rates that represent the proportion of users discontinuing a method by 12 months after the start of use. The rates are calculated by dividing the number of discontinuations for each reason at each duration of use in single months by the number of months of exposure at that duration. The single-month rates are then cumulated to produce a one-year rate. The reasons for discontinuation are treated as competing risks (net rates).

[^2]:    ${ }^{1}$ Exludes women who had sexual intercourse within the last 4 weeks

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

[^4]:    * For women whose last birth occured in a health facility, postnatal checkup refers to a checkup after discharge from the health facility.

[^5]:    ${ }^{1}$ In the 1997 JPFHS, mothers were asked if their young children were given any of a list of liquids and specific foods in the preceding 24 hours. A final question concerned "any other solid or semi-solid foods." In the 2002 JPFHS, mothers were asked only about specific food groups, with no final "any other food" category. This may have resulted in an overestimation of exclusive breastfeeding.

[^6]:    * The cutoff point is $9 \mathrm{~g} / \mathrm{dl}$ for pregnant women and $7 \mathrm{~g} / \mathrm{dl}$ for children and women who are not pregnant (or who don't know if they are pregnant.)
    ** If more than one woman or child is below the cutoff point, read the statement in Q. 51 to each woman who is below the cutoff point and to each woman/parent/responsible adult of a child who is below the cutoff point.

