

# Demographic and Health Survey 1992





Demographic and Health Surveys Macro International Inc.

# Egypt Demographic and Health Survey 1992

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November 1993

This report summarizes the findings of the 1992 Egypt Demographic and Health Survey (EDHS) conducted by the National Population Council. Macro International Inc. provided technical assistance. Funding was provided by the U.S. Agency for International Development (USAID).

The EDHS is part of the worldwide Demographic and Health Surveys (DHS) program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information about the Egypt survey may be obtained from the National Population Council, P.O. Box 1036, Cairo, Egypt (Telephone 3638207; Fax 3639818; and Telex 94086 USRAH CAIRO). Additional information about the DHS program may be obtained by writing to: DHS, Macro International Inc., 11785 Beltsville Drive, Calverton, MD 20705 (Telephone 301-572-0200 and Fax 301-572-0999).

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## FOREWORD

The 1992 Egypt Demographic and Health Survey (EDHS) is the most recent in a series of surveys carried out in Egypt to provide information on fertility and child mortality levels, family planing awareness, approval and use and basic indicators of maternal and child health. The EDHS findings are important in monitoring trends in these variables and in understanding the factors which contribute to differentials in fertility and contraceptive use among various population subgroups. The EDHS also provides a wealth of health-related information for mothers and their children. These data are especially important for understanding the factors that influence the health and survival of infants and young children. In addition to providing insights into population and health issues in Egypt, the EDHS also hopefully will lead to an improved global understanding of population and health problems as it is one of more than 50 surveys implemented through the Demographic and Health Surveys program.

A total of 22 months was spent in preparing and carrying out the various activities of the 1992 EDHS, including fieldwork, data processing, and analysis of the survey results. The main findings from the EDHS are presented in this report.

This report summarizes basic information on fertility levels, childbearing intentions, and contraceptive knowledge and use in Egypt. It also looks at key maternal and child health indicators including the extent to which mothers receive trained medical care during pregnancy and at the time of delivery and, for young children, the extent of immunization coverage and the prevalence and treatment of diarrheal disease.

The 1992 survey is the second Demographic and Health Survey to be conducted in Egypt; the first was carried out in 1988. The availability of data on a periodic basis provides analysts and policymakers with the relevant information to monitor trends. The challenge that remains is to use the information collected in the two rounds of the DHS as a basis for evaluating and modifying family planning and health service delivery in Egypt. Survey data are only truly useful when they are employed to improve the efficiency of population and health programs in Egypt.

Finally, I would like to express my appreciation to the EDHS team on their devotion and sincere efforts to complete the planned activities and this basic analysis of the findings.

Prof. Dr. Maher Mahran Minister of Population and Family Welfare 

## ACKNOWLEDGMENTS

The 1992 Egypt Demographic and Health Survey (EDHS) represents the continuing commitment in Egypt to efforts to obtain data on fertility behavior and contraceptive practice. The survey also reflects the strong interest in information on key maternal health and child survival issues. The wealth of demographic and health data that the survey provides will be of great use in evaluating the performance of the family planning and health programs and in charting future directions for these programs.

Preparations for the EDHS started in January 1992 under the supervision of the National Population Council (NPC). The Cairo Demographic Center (CDC) provided office space for the EDHS headquarters staff. Technical and financial assistance was provided by Macro International Inc. through the international Demographic and Health Surveys (DHS) program. Funds from USAID/Cairo under the Population/Family Planning II Project financed the EDHS.

I would like to express my gratitude to Dr. Maher Mahran, Minister of Population and Family Welfare. He provided strong and continuing support to the project and has shown great interest in the survey results.

Although it is not possible to acknowledge all of the individuals who contributed to the EDHS, I would like to especially acknowledge some individuals whose efforts were very important in completing the survey. Dr. Hussein A. A. Sayed, Senior Consultant, deserves my deepest gratitude for his valuable comments and advice during the various survey activities. My thanks and appreciation also are extended to Dr. Madany D. Mostafa, who served as a sampling consultant.

Dr. Hassan H. M. Zaky, the EDHS Assistant Director, Dr. Gihan A. Shawky, Associate Director for Data Processing, and Dr. Enas M. Hussein, Associate Director for Sampling, were instrumental in the successful completion of the survey activities. Mr. Abdel Hakim M. Abdel Hakim, the Fieldwork Coordinator, ably supervised the field team. Dr. Rashad Hamed coordinated the successful data processing effort. Dr. Effat Fakher El-Din and Dr. Abdel Monem Darwesh were instrumental in carrying out the anthropometric training.

My sincere gratitude and appreciation go to Dr. Ann Way who has worked closely with us on all phases of EDHS. Her spirit and devotion were instrumental throughout the survey and during the preparation of this report. My thanks also are extended to Dr. Alfredo Aliaga, for his advice and guidance in designing the sample.

Mr. Trevor Croft deserves my deepest thanks for his assistance in data processing and tabulations required for this report.

I gratefully acknowledge Dr. Carol Carpenter-Yaman, Director, and Mrs. Amani Selim, Project Management Specialist, Office of Population, USAID/Cairo, for their support and valuable input throughout the survey activities.

I am deeply indebted and grateful to all EDHS field and office staff. Without their participation and commitment, this project would have been impossible.

Finally, I would like to express my appreciation for all the assistance received from the office staff and administrative and financial departments of the National Population Council during the survey.

> Dr. Fatma H. El-Zanaty Technical Director 1992 Egypt Demographic and Health Survey

## **SUMMARY OF FINDINGS**

#### **Fertility and Family Planning**

The results of the 1992 Egypt Demographic and Health Survey (EDHS) indicate that fertility and family planning behavior in Egypt has changed dramatically since 1980. The fertility rate has fallen to 3.9 births per woman from a level of more than 5 births in 1980. Virtually all couples know about family planning, and around two-thirds have experience in using a method at some time. At the time of the survey, 47 percent of couples were using family planning to achieve their childbearing goals, which is almost double the level of current use reported in 1980 (24 percent).

Almost all users employ modern methods, principally the IUD (28 percent) and the pill (13 percent). The shift in the method mix toward greater reliance on the IUD is one of the major trends observed when the EDHS results were compared with the findings of the 1980 Egypt Fertility Survey (EFS). In 1980, two of three users relied on the pill and only one in six employed the IUD. By 1992, almost three in five users relied on the IUD and only around one in four were using the pill.

Both the public and private sectors play an important role in the provision of family planning services in Egypt. Current users of the pill obtain their supply largely from pharmacies, while users of the IUD are about equally divided between those obtaining services from private doctors or government facilities.

The EDHS results indicate that family planning methods are easily accessible to users. Overall, 58 percent of current users of modern family planning methods live less than 30 minutes from the place where they obtained their method. Physical access to services also does not appear to be a major barrier to the adoption of family planning by nonusers. There is virtually no difference between the travel times to family planning sources reported by users and nonusers, and few nonusers cite reasons relating to physical access when asked why they do not intend to use family planning in the future.

Cost also does not seem to be a major barrier to the use of family planning. Comparatively few users obtain their methods free of charge, and most indicate a willingness to pay more. Although pill users pay comparatively little for supplies (usually 50 piastres or less for a packet), more than three-quarters indicate a willingness to pay at least 1 Egyptian pound per packet and more than one-fifth are willing to pay 5 pounds or more. IUD users, for whom the median cost of services is almost 8 Egyptian pounds, also indicate a willingness to pay more. Eight in ten IUD users would pay 10 pounds for the method, and one in two would be willing to pay 25 pounds or more.

The results of the husbands' survey carried out as part of the EDHS confirm that husbands play a significant role in fertility and family planning decisionmaking. Men are concerned about limiting family size and are supportive of family planning; three in five husbands say that they do not want more children and around eight in ten approve of the use of family planning.

The age at which women first marry is another important determinant of fertility levels. The EDHS results suggest that there has been a steady increase over the past 20 years in the age at marriage in Egypt. The median age at marriage among women 25-29 (19.9 years), is 1.6 years higher than the median age among women 45-49.

Although the EDHS findings show rapid progress in lowering fertility and increasing use of family planning, there remain a number of areas of concern. One is the large variation in fertility levels and use of family planning by residence. At current fertility levels, a rural woman may expect to have an average of 4.9

children, two children more than a woman residing in an urban area. Fertility rates are much higher in rural Upper Egypt (6.0 births per woman) than in rural Lower Egypt (4.1 births per woman).

Marked differences in the level of family planning use by residence are also observed. Urban women are more likely to use family planning and to employ an IUD than rural women. The highest level of current use is found in the Urban Governorates (59 percent) and the lowest in Upper Egypt (31 percent) The differential in use between rural Lower Egypt and rural Upper Egypt is particularly striking; 51 percent of married women in rural Lower Egypt are using family planning methods compared to 24 percent in rural Upper Egypt.

A key concern for the Egyptian family planning program is the rate at which users discontinue use of contraception and the reasons for the discontinuations. The EDHS results show that almost three in ten users stop using within twelve months of starting. Six percent become pregnant unintentionally, 4 percent want to get pregnant, 13 percent stop because they experience side effects or health problems, and 7 percent stop for other reasons.

The one-year discontinuation rate for the pill (42 percent) is three times the rate for the IUD (13 percent). Side effects and health concerns are the major reasons for stopping use of both the pill and the IUD. The EDHS results also suggest that many pill users are at increased risk of an unplanned pregnancy because they fail to take the pill correctly. For some, remembering to take the pill daily is a problem, while others believe that it is necessary to take the pill only when the husband is present in the household. Other pill users do not have a pill packet available because they are "resting" from the pill.

Information collected in the EDHS on the interaction between providers and users at the time that the pill or the IUD was adopted indicates that providers in both the public and private sectors need to improve counseling for family planning clients. Increased follow-up is also needed to reduce the rate of discontinuation.

Despite the steady reduction in fertility levels, many couples are having more children than they consider ideal. At current fertility levels, the average woman in Egypt has 1.2 births more than she wants. In rural Upper Egypt, actual fertility exceeds wanted fertility by 1.7 births. Many births are not only unwanted, but more than 60 percent carry higher than average risks of morbidity and mortality for the mother and child because of the mother's age (under 18 or over 34), high birth order (3 or more) or a short birth interval (less than 24 months).

The substantial unmet need for family planning in Egypt indicates that there is potential for further increases in contraceptive use. One in five currently married women is considered to be in need of family planning. These are women who want no more children, or want to delay the next birth, but are not using family planning.

#### Maternal and Child Health

The EDHS results document the rapid decline in infant and child mortality that has been taking place in Egypt. Estimates suggest that infant mortality decreased by around half between 1972 and 1992. Nevertheless, in the five-year period preceding the EDHS, 62 of 1,000 children died before reaching their first birthday and 85 of 1,000 died before reaching age five. Mortality levels are higher in rural than in urban areas, and the highest levels are observed in rural Upper Egypt.

The EDHS results suggest that spacing births can potentially reduce childhood mortality; a child born less than two years after an older sibling is three times as likely to die before his fifth birthday as a child born

after an interval of four or more years. Reducing the number of high parity births and births to young mothers would also contribute to a lowering of childhood mortality.

The care that a mother receives during pregnancy and at the time of childbirth alfects the health and survival of both the mother and the child. The EDHS findings indicate that the majority of Egyptian mothers do not receive adequate antenatal care. For births in the five years preceding the survey, only 53 percent of the mothers reported receiving any antenatal care, and only 23 percent had four or more consultations with a medical provider during pregnancy (the minimum level of antenatal care considered acceptable). For three in five births, mothers received at least one tetanus toxoid injection during pregnancy. Although still low, the coverage rate for tetanus toxoid is more than five times the level reported in the 1988 EDHS.

Almost three-quarters of births in the five years preceding the survey took place at home. Most were assisted by dayas (traditional birth attendants) or relatives and friends. Only two in five births were assisted by doctors or nurses.

One of the primary mechanisms for improving child survival is increasing the proportion of children vaccinated against the major preventable childhood diseases. The EDHS results indicate that almost all young children receive at least some vaccinations; only 4 percent of children age 12-23 months have not had any immunizations. However, many children have not received the full primary course of immunizations; only two-thirds of young children are fully immunized.

Diarrheal disease and acute respiratory infections (ARI) are among the leading causes of infant and child deaths in Egypt. Thirteen percent of children under age five were reported to have had diarrhea during the two week period before the survey. Seven in ten mothers reported that they did something to treat the diarrhea. Forty-five percent of children suffering from diarrhea were taken to a health facility for advice or treatment, and 43 percent of children received some form of oral rehydration therapy (ORT) (i.e., a solution made from an oral rehydration salt (ORS) packet, a recommended home fluid (sugar-salt-water solution), or increased fluids). Only 29 percent of mothers of children with diarrhea reported that ORS packets were used in preparing the solution used to treat the diarrhea. However, virtually all mothers of young children know about these packets. Overall, seven in ten mothers of children under age five have used ORS packets in treating diarrhea at some time.

Eight percent of children under age five were reported to have experienced cough and rapid breathing (symptoms of acute respiratory infection (ARI)) during the two weeks before the survey. Six in ten of these children were taken to a health facility for advice or treatment. Only one in five children with ARI symptoms was given nothing to treat the illness.

Undernutrition contributes to child deaths. The EDHS found that 24 percent of Egyptian children were stunted or short in relation to their age, as compared to an international reference population. Stunting reflects the long-term effects of poor diet and may also be the outcome of chronic illness. Three percent of the children are wasted or thin for their age. Wasting is the result of acute undernutrition over a short period of time and may be an outcome of sudden, severe illness. One in eleven children are underweight for their age.

Breastfeeding practices and the timing of the introduction of supplemental foods are important determinants of the health and nutritional status of infants and young children. Almost all young children in Egypt are breastfed for some period of time. The median duration of breastfeeding (19.1 months) is moderately long. However, supplemental foods and liquids are introduced comparatively early, the median duration for which a child receives breast milk only is 1.8 months. Nearly one in five breastfeed children less than eight months of age was given a bottle with a nipple on the day before the interview.



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## **CHAPTER 1**

## **INTRODUCTION**

#### 1.1 Geography

Egypt is situated at the northeast corner of the African continent. The total area of Egypt covers approximately one million square kilometers; however, only 6 percent of this area is inhabited (Central Agency for Population Mobilization and Statistics (CAPMAS), 1993b).

Administratively, Egypt is divided into 26 governorates. Four of these governorates are totally urban (Cairo, Alexandria, Port-Said and Suez). Nine governorates are found in the Nile Delta (Lower Egypt), which extends from Cairo to the Mediterranean Sea, and eight are located in the Nile Valley (Upper Egypt). An additional five frontier governorates are found on Egypt's western and eastern boundaries (see map). Each governorate is divided administratively into smaller units (kism/shiakha in urban areas and markaz/villages in rural areas).

#### **1.2** Demographic and Health Indicators

#### **Population Size, Density and Distribution**

On the first of July, 1993, the population of Egypt was estimated to be 56,984<sup>1</sup> million, with a sex ratio of around 104.3 (CAPMAS, 1993a). This figure represents an increase of around 9 million from the reported *de facto* population in the 1986 Census. Figure 1.1 shows that, since 1937, the population has more than tripled in size, increasing from only around 16 million to 57 million in 1993. Projections indicate that, by the year 2025, the population will exceed 90 million; at that point Egypt will rank 17th among the world's most populous countries (United Nations, 1991).

Currently, the majority of Egypt's population lives in rural areas. However, the urban population has been growing rapidly; in 1990, it represented 47 percent of the total population, compared to 44 percent at the time of the 1986 Census data and 37 percent in 1960 (UNDP, 1991). If the urban growth continues at its current rate, Egypt will be mostly urban by the year 2025, with only around 25 percent of its population living in rural areas.

For Egypt as a whole, the population density averages 1,035 persons per square kilometer of inhabited area. The average density varies widely by governorate, fluctuating from a low of 22 persons per square kilometer in Sucz to a high of 31,699 in Cairo (CAPMAS, 1993b). Within Egypt's metropolitan areas, some areas are extremely crowded. For example, a number of kisms in Cairo have population densities of more than 100,000 persons per square kilometer, and population density reaches its maximum in a kism in Alexandria, where the density is 128,000 per square kilometer.

#### Fertility

According to information from the vital registration system (which was established in Egypt in 1912), fertility levels generally have been high in Egypt for the past 50 years, decreasing only gradually between the early 1930s and the mid-1980s, when the decline accelerated. Over this period, the crude birth rate (CBR)

<sup>&</sup>lt;sup>1</sup>Excludes 2,579 million who were living abroad.



fell from a level of 50 births per thousand population to 34.5 births per thousand population in 1973, when it began to rise again.<sup>2</sup> Figure 1.2 shows that, since 1985, the decline in fertility has been continuous, with the CBR falling below 30 per thousand in 1992 (CAPMAS, 1993b).

As a result of the past high fertility, the age structure of the Egyptian population is very young, with around 40 percent of the population under 15 years of age in 1993.

#### Mortality

Mortality levels started their serious decline after the World War II, with the crude death rate (CDR) dropping from around 30 deaths per thousand population to about 15 deaths per thousand during the sixties. As shown in Figure 1.3, the CDR continued to decline from 9.4 deaths per thousand in the mid-1980s to 7.4 per thousand in 1992 (CAPMAS, 1993b).

Infant and child mortality represent the majority of all deaths, and these rates still are considered high in Egypt. However, there is evidence that they have declined sharply during the period since World War II. The estimated infant mortality rate for the period 1985-90 was about 65 per thousand live births. The IMR is expected to continue to decline to a level less than 40 per thousand by the year 2000-2005 (United Nations, 1991).

<sup>&</sup>lt;sup>2</sup>The decline has been attributed to various factors, including the effects of the war and of delays in marriage. However, recent studies suggest that structural changes in the age distribution, resulting from the changes in fertility and mortality conditions during the period 1930-1950, were also responsible for the trend (Bucht and El-Badry, 1986).





The impact of mortality decline was reflected on the increased expectation of life at birth. It reached around 60.3 years in 1990, compared to 46.1 years in 1960 (UNDP, 1991).

In conjunction with the declines in both the fertility and mortality rates, the health status of the Egyptian population has improved in response to governmental efforts. The government increased the proportion of the total budget expended on health from 2.4 percent in 1980 to 2.8 percent in 1991 (World Bank, 1993). As a result, the population per physician declined from 1,900 in 1970 to 1,320 in 1990, and the population per nurse also decreased from 2,320 to 490 during the same period.

#### **1.3** Socioeconomic Indicators

The Egyptian economy has been experiencing drastic changes during the last several decades. It was characterized by a centralist approach in the fifties and sixties, when the market was mainly dominated by the public sector. In the seventies, the "open-door" policy shaped the decade. Since the eighties, the government has been adopting an economic liberalization program that gives the private sector a greater share in the economic market.

Economic reform has achieved tangible results in restoring both external and internal economic equilibria. In the fiscal year 1991/92, the Gross Domestic Product (GDP) reached 125,485 million Egyptian pounds (L.E.) (Central Bank, 1993). This figure represents an average annual increase of 3.9 percent over the GDP at the time that the second five-year plan period started in 1986/87 (at constant 1986/87 prices).

The inflation rate (based on the consumer price index) decreased drastically in 1991/92 to 9.7 percent, compared to 20.7 percent in 1990/91. The drop in the inflation rate is reflected in the stabilization of the exchange rate at 3.3 L.E. to the dollar for the past two years. As a result, the demand for the Egyptian pound increased, and savings deposits in Egyptian pounds rose.

As for the state budget of 1991/92, the deficit was less than half the 1990/91 budget deficit. As a result, the ratio of deficit to the GDP fell to 5.2 percent.

With respect to the external transactions, the surplus in the balance of payments showed a substantial increase, reaching U.S. \$3.8 hillion during 1991/92. This is compared with a surplus of U.S. \$1.4 billion recorded for the first time in the previous year (Central Bank, 1993). The leading earners of foreign currency in the economy are workers' remittances, tourism revenues, Suez Canal dues, and oil exports.

Although the economic indicators show that the economy is improving, Egypt is ranked at the lower end of the human development index (UNDP, 1991). However, a number of key human development indicators have improved over time. Among these improvements are:

- Primary enrollment rates in schools have jumped from 75 percent in 1970 to 98 percent in 1990, while for the secondary stage, the rate increased from 35 percent to 82 percent for the same period. In addition, the primary pupil/teacher ratio declined from 38 to 25 pupils/teacher.
- Female education has improved. Illiteracy among women age 10 and over decreased from 71 percent in 1976 to 63 percent in 1986, according to the 1976 and 1986 population censuses. Female enrollment rates increased dramatically, from 57 percent in 1970 to 90 percent in 1990 for the primary stage. For secondary education, the rate also increased, from 23 percent to 71 percent.

- The investment allocation for education has increased. The share in total investment during the period 1982/83-1986/87 was 1.8 percent, while the same share was 2.3 percent for the five-year period 1987/88-1991/92.
- The Gross National Product per capita has doubled during the last 20 years to reach US \$610 in 1991 (World Bank, 1993).

#### **1.4 Population Policy and Programs**

The population problem in Egypt has three interrelated dimensions; namely, high rates of population growth, unbalanced population distribution, and human resource constraints including illiteracy that affect the productivity of the labor force.

Efforts to raise awareness and discussions about the sensitivity and complexity of the population problem began in Egypt in the 1930s. A "National Committee for Population Matters" was established by the government in 1953 (one year after the revolution) to examine the population situation and identify the best course of action that should be followed by the government.

Egypt has had three formal population policies; the first national policy was introduced in 1973 and was followed by an implementation plan for the period 1973-1982 and the second population policy issued in 1980. Following the national population conference that was held in March 1984 under the chairmanship of the President of Egypt, the National Population Council (NPC) was established, and the third National Population Policy was adopted in 1986.

The 1986 population policy recognized seven principles necessary for the achievement of its basic objectives. These principles include: 1) Each family has the right to decide on the appropriate number of children to have and to obtain information about the means to enable them to achieve their decision within the framework of religion, Egypt's civilization and the values of its society; 2) the avoidance of the use of abortion or sterilization as a means of family planning; 3) recognition of the citizen's right to migrate and to move from place to place within Egypt or abroad; 4) adoption of a positive incentive system based on increased awareness of the role of the individual and the community and the avoidance of any methods of coercion, negative incentives or punitive methods; 5) educational, cultural and health development of the individuals to help them to become a source of productive energy; 6) local government bodies are considered the base for implementation of all programs; and 7) encouragement of voluntary efforts and community participation in the solution of the problem.

Targets for key indicators relating to population growth are set by the Egyptian government. The target-setting process significantly improved over the years, especially with the availability of basic population and family planning data, which has served as the basis for periodically updating the targets since the 1986 policy was adopted. In 1991, the NPC introduced a population strategy with targets for the rate of natural increase, crude birth rate, total fertility rates, and contraceptive prevalence (National Population Council, 1991). The targets are as follows:

- The crude birth rate is to be reduced to 27 per thousand in the year 1997 and 26 per thousand in 2002.
- The rate of natural increase in the years 1997 and 2002 will be reduced to 2.0 percent and 1.9 percent, respectively.

- The total fertility rate will be reduced to 3.5 in 1997 and 3.1 in 2002.
- Current contraceptive prevalence will increase to 55 percent and 59 percent in the year 1997 and 2002, respectively.

In sum, Egypt, which was one of the first countries to adopt formal population policies and objectives, has already achieved a demographic breakthrough as a result of changes in key demographic variables. The success of this process is reflected in the evaluation of the population program's performance during the 1980s. According to a review of the performance of family planning programs in 98 countries, the Egyptian program was categorized in 1989 as at the top of the moderate group, which represents a significant improvement over previous program performance which was described as weak (Mauldin and Ross, 1991).

#### **1.5 Health Policies and Programs**

Health for all by the year 2000 is the main health objective of the Egyptian Government. The Ministry of Health (MOH) has long given high priority to implementing this objective, developing a national system of health facilities providing services at all levels (central, governorate and local). The MOH is especially concerned with increasing the coverage of the health care system, especially in rural areas, emphasizing preventive care and children's immunization.

Primary health care for all, and especially maternal and child health care, have recently gained significant additional momentum from the Egyptian Government. The Egyptian health policy emphasizes:

- Provision of health services for all, with adherence to social justice and more attention to upgrading medical care suitable to the individual's income level;
- Reduction of mortality and morbidity;
- Improved health care quality;
- Increased coverage of child immunization programs;
- Expansion of the national health care financial system and introduction and/or development of other types of health insurance;
- Development of the cost-recovery system and a greater role for the private sector;
- Provision of health education and health messages and studies relating to health economics;
- Continual upgrading of the health information system;
- Review and modification of health legislation on a periodic basis to cope with social changes; and
- Improved management of the health services system.

#### 1.6 **Objectives and Organization of the Survey**

The 1992 Egypt Demographic and Health Survey (EDHS) is the latest in a series of national-level population and health surveys in Egypt.<sup>3</sup> It was implemented under the supervision of the National Population Council (NPC) with financial support from the United States Agency for International Development (USAID). Macro International Inc. provided technical assistance for the survey through the international Demographic and Health Surveys program.

<sup>&</sup>lt;sup>3</sup>In addition to the first EDHS conducted in 1988 (Sayed et al., 1989), these surveys include the 1979-1980 Egypt Fertility Survey (EFS) (Hallouda et al., 1983), the 1980 and 1984 Contraceptive Prevalence Surveys (ECPS) (Khalifa et al., 1982 and Sayed et al., 1985) and the 1991 Egypt Maternal and Child Health Survey (EMCHS) (Abdel-Azeem et al., 1993).

#### **Survey Objectives**

The primary objective of the EDHS is to provide data on fertility and mortality, family planning, and maternal and child health. The survey obtained detailed information on these issues from a sample of evermarried women in the reproductive ages. In addition, a subsample of husbands was interviewed in an effort to obtain information on their fertility preferences and the role which they play in family planning decisionmaking.

The EDHS information is intended to assist policymakers and administrators to evaluate existing programs and to design new strategies for improving family planning and health services in Egypt. A secondary objective is to enhance the capabilities of institutions in Egypt to collect, process and analyze population and health data so as to facilitate the implementation of future surveys of this type.

#### **Organization and Timetable**

Figure 1.4 presents the organizational structure of the 1992 EDHS staff. A list of the staff involved in each phase of the EDHS is included in Appendix A. A detailed timetable is shown in Table 1.1. The organization, training and supervision of the staff participating at the various stages of the survey are described below.



Table 1.1 Survey timetable, Egypt 1992			
Activity	Starting Date	Duration	
Development of the sample design	January 1992	1 month	
Quick-count operation	May 1992	3 months	
Recruitment and training of listing staff	August 1992	3 weeks	
Listing and relisting	September 1992	1 month	
Sample selection	October 1992	2 weeks	
Questionnaire design	April 1992	1 month	
Preparation of training manuals and other documents	May 1992	3 months	
Printing the pretest materials	May 1992	2 weeks	
Pretest	May 1992	2 weeks	
Finalization of questionnaires	August 1992	1 month	
Recruitment of field staff	September 1992	1 month	
Printing survey materials	September 1992	1 month	
Training of field staff	October 1992	4 weeks	
Fieldwork	November 1992	2 months	
Reinterviews	December 1992	5 weeks	
Office editing	November 1992	3 months	
Data entry	November 1992	3 months	
Computer editing	December 1992	3 months	
Preliminary report	March 1993	2 weeks	
Detailed tabulations	April 1993	1 month	
Final report preparation	July 1993	4 months	

#### Sample Design

The 1992 Egypt Demographic and Health Survey covered over 11,000 households, which were scattered in 21 governorates. One of the key concerns in the design of the sample was the need to provide reliable estimates of fertility levels and contraceptive use for Egypt as a whole, and for urban and rural areas separately. Other domains for which reliable estimates were desired included the Urban Governorates, Upper Egypt, and Lower Egypt. In addition, estimates of key indicators for the women's sample were needed at governorate level. In order to allow for the governorate-level estimates, the number of households selected from each governorate is disproportionate to the size of the population in the governorate; thus, the EDHS sample is not self-weighting at the national level.

The 1992 EDHS sample was selected in three stages. The sampling units at the first stage were shiakhas/towns in urban areas and villages in rural areas. The frame for the selection of these primary
sampling units (PSUs) was based on 1986 census data, which were provided by the Central Agency for Public Mobilization and Statistics (CAPMAS). During the first stage selection, 377 PSUs were sampled (169 in urban areas and 208 in rural areas).

The second stage of selection involved several steps. First, maps were obtained for each shiakha and village that had been selected at the first stage and divided into a number of roughly equal-sized parts. One of the parts was then selected from each PSU. In both urban and rural PSUs, a quick-count operation was earried out in the field to provide the information which was used to divide the selected part into a number of segments of roughly equal size. Two segments from urban areas and one segment from rural areas were then chosen as the secondary sampling units.

After the secondary sampling units (SSUs) were selected, a household listing was obtained for each SSU. Using the household listing, a systematic random sample of households was chosen for the EDHS. A subsample of one-third of the households in every segment was selected for the husband survey. All evermarried women 15-49 who were present in the household on the night before the interview were eligible for the survey. The husbands' sample covered men who were currently married to eligible women.

A more detailed description of the sample design is included in Appendix B. Sampling errors for key variables are presented in Appendix C.

### Sample Implementation

Two different field operations were conducted during the sample implementation phase of the 1992 EDHS. A quick count for the PSUs selected in shiakhas/towns and villages was the first field operation. The objective of the quick count was to obtain an estimate of the number of households in the part to serve as the measure of size for the second stage selection.

Experience in the 1988 EDHS, in which a quick-count operation was carried out in only the urban PSUs, indicated that there was frequently significant variation between the target and the actual number of households in rural areas. This variation was largely due to the imprecision in assigning measures of size in some rural PSUs, which involved measuring the residential area on a map, many of which were out of date. Therefore, it was decided to carry out a quick count in both urban and rural areas.

Prior to the quick-count operation, maps were obtained for each shiakha or town selected for the urban sample and for villages included in the rural sample that had more than 20,000 population. These maps were divided into approximately equal-sized parts, and one part was randomly selected for the quick-count operation. For villages with less than 20,000 population, the quick count was carried out for the entire village. It should be noted that the quick count for a rural area covered both the main village and all associated hamlets.

The one-week training course held prior to the quick-count field operation included both classroom instruction and practical training in shiakhas and villages not covered in the survey. The quick-count operation, which covered all 377 PSUs, was carried out between mid-May and mid-July 1993. A group of 52 field staff participated in the quick-count operation. The staff was divided into 15 teams, each composed of one supervisor, one cartographer and one counter.

As a quality control measure, 10 percent of the parts were selected, and a second count obtained. If the difference between the first and second counts was within 2 percent, the first count was accepted; otherwise, another visit was made to the field to resolve the discrepancy between the two counts. There were only a few cases in which a third visit was required.

The second field operation during the sample implementation phase involved a complete listing of all of the households living in the 546 segments chosen during the second stage of the sample selection. Prior to the household listing, 38 listing staff attended a one-week training course, which involved both classroom lectures and field practice. After the training, 11 listing teams were formed. Each team consisted of a supervisor and two listers.

The listing operation started on September 10th and was completed by mid-October. Segments were relisted when the number of household in the listing differed markedly from that expected based on the quick-count figures.

## **Questionnaire Development and Pretest**

The 1992 EDHS involved three types of questionnaires: a household questionnaire, an individual questionnaire for women, and an individual questionnaire for husbands. These questionnaires were based on the model survey instruments developed for the international Demographic and Health Surveys program. In particular, the household and women's questionnaires were built on the DHS model "A" questionnaire for high contraceptive prevalence countries. Additional questions on a number of topics not covered in the DHS model questionnaire were included in both the household and individual questionnaires.

The questionnaires were pretested in May 1992, following a two-week training course for supervisors and interviewers. Two supervisors, two field editors and ten interviewers participated in the pretest. Interviewer comments and tabulations of the pretest results were reviewed during the process of modifying the questionnaires. An English translation of the final Arabic language questionnaires is included in Appendix E.

The household questionnaire obtained a listing of all usual household members and visitors and identified those present in the household during the night before the interviewer's visit. For each of the individuals included in the listing, information was collected on the relationship to the household head, age, sex, marital status, educational level, occupation and work status. Finally, the household questionnaire also included questions on characteristics of the physical and social environment of the household (e.g., availability of electricity, source of drinking water, household possessions, etc.), which are assumed to be related to the health and socioeconomic status of the household.

The individual questionnaire for women was administered to all ever-married women age 15-49. It obtained information on the following topics:

- Background characteristics
- Reproduction
- Knowledge and use of family planning
- Other issues relating to contraception
- Fertility preferences
- Maternal care and breastfeeding
- Immunization and health
- Marriage
- Husband's background, residence and women's work

The women's questionnaire included a monthly calendar, which was used to record fertility, contraceptive use, marriage, spousal absence, migration, and employment histories for a nearly six-year period beginning in January 1987. In addition, the interviewing teams measured the height and weight of all children who were born since January 1987 and of their mothers.

The husbands' questionnaire was administered to all men who were currently married to an eligible woman in the households included in the husbands' survey subsample. The husbands' questionnaire was similar but shorter than the women's questionnaire. It included questions relating to background characteristics, lifetime childbearing, fertility preferences, knowledge, use and attitudes toward family planning, and the status of women.

# **Data Collection Activities**

**Staff Recruitment.** Candidates for the positions of interviewer and field editor were identified in two ways. First, advertisements in newspapers attracted a number of applicants. Second, the Ministry of Social Affairs (MOSA) nominated a number of its female personnel, who were working to fulfill the mandatory oneyear period of governmental service for university graduates. All candidates for the field staff positions were interviewed, and only those who were qualified were accepted in the training program.

All candidates for the interviewer and field editor positions were recent university graduates. Another basic qualification was a willingness to work in any of the governorates covered in the survey. With few exceptions, interviewers who had previous experience in surveys were not accepted in the training program. This decision was taken to reduce any bias that might result from their previous experience and to ensure that all trainees had a similar background. However, previous survey experience was a basic qualification for the candidates for the positions of supervisor and assistant supervisor.

**Training Materials.** A variety of materials were developed for use in training personnel involved in the fieldwork. A lengthy interviewer's manual giving general guidelines to follow in conducting an interview, as well as specific instructions for asking particular questions in the questionnaire, was prepared and given to all field staff. In addition, a chart to convert months from the Islamic calendar to the Gregorian calendar was designed for the 74 months before the EDHS and distributed to all field workers.

Other training materials included special manuals describing the duties of the team supervisors and the rules for field editing. Instructions regarding the anthropometric data collection were included in a manual that was made available to the interviewers who were trained as measurers and team supervisors.

Supervisor and Interviewer Training. Interviewer training for the 1992 EDHS data collection began in the first week of October 1992. Seventeen supervisors, 14 assistant supervisors, plus 97 interviewers participated in the training program. A special training program for supervisors and assistant supervisors was conducted during a three-day period prior to the main fieldwork training. This training focused specifically on the supervisor's duties, but also covered the questionnaire in order to give supervisors a head start prior to the main training program.

The training program, which was held in Cairo for four weeks, included:

- general lectures related to family planning and public health;
- specific sessions with visual aids on how to fill out the questionnaire;
- opportunities for role playing and mock interviews;
- four days of field practice in areas not covered in the survey; and
- five quizzes.

Trainees who failed to show interest in the survey, did not attend the training program on a regular basis, or failed the first three tests were disqualified immediately. The training was originally planned for three weeks, but because of disruptions due to the October 12 earthquake, the training program was extended for an additional week.

At the beginning of the third week of the training, a preliminary list was compiled of the 20 trainces who had performed best during both the classroom and field exercises. Those trainces were further examined in order to select 12 field editors. A special training session was held for the field editors following their selection.

About 45 trainces plus all assistant supervisors were selected for anthropometric training. This training included both elassroom lectures and practice measurement in a nursery school. At the end of the program, the 36 best trainees were selected to serve as measurers during the EDHS fieldwork.

At the end of the training course, 63 of the 97 candidates originally recruited for the interviewer training were selected to work as field editors, interviewers and measurers in the EDHS fieldwork.

*Fieldwork.* Fieldwork for the survey including initial interviews, callbacks, and reinterviews began on November 7, 1992 and was completed on February 8, 1993. A total of 91 staff, including one fieldwork coordinator, one assistant fieldwork coordinator, 13 supervisors, 13 assistant supervisors, 12 field editors and 51 interviewers were responsible for the data collection. All supervisors and assistant supervisors were male, while field editors and interviewers were female.

The field staff was divided into 12 teams; each team had a supervisor, assistant supervisor, a field editor and four or five interviewers. Usually two of the interviewers in the team and the field editor plus the assistant supervisor were specially trained to collect the height and weight measurements. During the fieldwork, each team worked in two governorates, except Cairo and Ismailia.

At the beginning of the fieldwork, visits were made to all of the areas in which earthquake damage had occurred in order to check and, if necessary, update the original household listings. Listings were checked in Cairo, Giza, Kalyubia, Fayoum, Menya, Beni Suef and Ismailia. Only a few segments had experienced significant damage, and, even in those segments, 70 percent or more of the households listed initially were found at their original addresses. Thus, the earthquake did not adversely affect the EDHS sample.

After the initial fieldwork was completed, a random sample of up to 10 percent of the interviews were reinterviewed as a quality control measure. In the reinterview, a shorter version of the questionnaires was used. Household and individual questionnaires which were incomplete or had errors that could not be corrected in the office were also assigned for callbacks. Special teams were organized to handle callbacks and reinterviews. During the reinterview and callback phase of the survey, interviewers were not allowed to work in the governorates in which they had participated in the initial fieldwork.

## **Data Processing Activities**

**Office Editing.** The central office of the EDHS was responsible for collecting questionnaires from supervisors as soon as a cluster was completed. Questionnaires were coded and reviewed for consistency and completeness by office editors. To provide feedback for the field teams, the office editors were asked to write a summary report of problems for each PSU. The report was then reviewed by one of the two senior staff assigned to supervise the work of the office editors. When there were serious errors found in one or more questionnaires from a cluster, the team supervisor was contacted in order to ensure that the problem would not occur in other clusters in which the team was working.

Machine Entry and Editing. The data were entered and edited on microcomputers using the Integrated System for Survey Analysis (ISSA), a package program specially developed to process DHS data. ISSA allows range, skip and most consistency errors to be detected and corrected at the entry stage,

substantially reducing the time required for the processing of data. The machine entry and editing phase began while interviewing teams were still in the field. The data entry personnel used eight IBM-compatible microcomputers to process the EDHS questionnaires. During the machine entry 20 percent of each segment was reentered for verification. One of the computers was assigned for this process. Working six days per week in two shifts, the data entry personnel completed the machine entry and editing of the data in three months.

## **Coverage of the Sample**

Table 1.2 summarizes the results of the household and individual interviews. A total of 11,304 households were selected; of these households, 10,760 were successfully interviewed. As noted, an eligible respondent for the women's survey was defined as an ever-married women between the age of 15 and 49 years present in the household on the night before the interview. A total of 9,978 eligible respondents were identified, and of these women, 9,864 (99 percent) were interviewed.

A total of 3,027 men were identified as eligible for the husbands' survey, i.e, they were resident in a household selected for the husband subsample and married to a woman between the ages of 15 and 49. Of the eligible men, 2,466 were successfully interviewed (82 percent).

## Table 1.2 Results of the household and individual interviews

			Place of residence							
Interview			Urban	L	ower Egy	pt	Upper Egypt			
results	Urban I	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Households sampled	6082	5222	3243	4215	1551	2664	3846	1299	2559	11304
Households found	5874	5076	3132	4121	1506	2615	3697	1236	2461	10950
Households interviewed	5726	5034	3039	4067	1481	2586	3654	1206	2448	10760
Household response rate	97.5	99.2	97.0	98.7	98.3	98.9	98.8	97.6	99.5	98.3
Eligible women	4725	5253	2517	3864	1215	2649	3597	993	2604	9978
Eligible women interviewed	4673	5191	2487	3812	1200	2612	3565	986	2579	9864
Eligible woman response rate	98.9	98.8	98.8	98.7	98.8	98.6	99.1	99.3	99.0	98.9
Eligible husbands	1426	1601	773	1175	360	815	1079	293	786	3027
Eligible husbands interviewed	1196	1270	664	947	295	652	855	237	618	2466
Eligible husband response rate	83.9	79.3	85.9	80.6	81.9	80.0	79.2	80.9	78.6	81.5

Number of households and eligible women and husbands and response rates by urban-rural residence and place of residence, Egypt 1992

# CHAPTER 2

# CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

This chapter describes the general characteristics of the sample population, including age and sex composition, residence, education, housing facilities, household possessions and exposure to mass media. The highlighted factors are those that influence nuptiality, fertility, and contraceptive behavior, as well as maternal care and child morbidity and mortality.

# 2.1 Characteristics of the Household Population

The 1992 EDHS questionnairc included two questions distinguishing between the *dejure* (persons who are usual residents in the selected household) and the *de facto* (persons who spent the night before the interview in the household) populations. This report uses the de facto definition, unless stated otherwise.

## Age and Sex

Table 2.1 and Figure 2.1 show the distribution of the de facto household population by five-year age groups,<sup>1</sup> according to sex and urban-rural residence. The sex ratio for the population as a whole is 98.5

Table 2.1	Househo	old popula	tion by as	ge, resider	nce and se	<u>x</u>							
Percent d urban-rur	Percent distribution of the de facto household population by five-year age groups, according to urban-rural residence and sex, Egypt 1992												
Age	Urban				Rural			Total					
group	Male	Female	Totai	Male	Female	Total	Male	Female	Total				
0-4	12.1	11.4	11.7	16.9	15.3	16.1	14.7	13.5	14.1				
5-9	13.0	12.8	12.9	15.8	15.2	15.5	14 5	14.1	14.3				
10-14	13.1	12.5	12.8	14.3	13.2	13.7	13.7	12.8	13.3				
15-19	10.4	10 0	10.2	11.3	10.7	11.0	10.9	10.4	10.6				
20-24	7.5	8.7	8.2	6.6	7.8	7.2	7.0	8.2	7.6				
25-29	75	8.4	7.9	6.5	7.5	7.0	7.0	7.9	7.4				
30-34	7.1	7.3	72	5.5	6.0	5.7	6.2	6.6	6.4				
35-39	5.8	6.8	63	4.8	5.2	5.0	5.3	5.9	5.6				
40-44	5.9	5.5	5.7	4.0	4.4	4.2	4.9	4.9	4.9				
45-49	4.3	4.3	4.3	3.4	3.3	3.4	3.8	3.8	3.8				
50-54	3.2	3.5	3.4	2.6	2.9	2.8	2.9	3.2	3.0				
55-59	3.1	28	2.9	2.5	2.4	2.4	2.8	2.6	2.7				
60-64	2.4	2.7	2.5	2.2	2.5	2.4	2.3	2.6	2.4				
65-69	2.0	1.5	1.8	1.6	1.6	1.6	1.8	1.5	1.7				
/0-/4	13	1.1	1.2	1.0	1.2	1.1	1.1	1.1	1.1				
15-19	0.6	0.3	0.4	0.4	0.3	0.3	0.5	0.3	0.4				
80 +	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.5				
Total Number	100.0 13517	$\frac{100.0}{13650}$	100 0 27167	100.0 15771	$100.0 \\ 16095$	100.0 31866	100.0 29288	100.0 29745	100.0 59033				

<sup>&</sup>lt;sup>1</sup>Single-year age distributions are presented in Appendix D, which reviews the quality of the EDHS data.



males for every 100 females. The age pattern is typical of a country with relatively high fertility in the recent past, i.e., a much greater concentration of the population in younger than older age groups. The urban age distribution has a narrower base (i.e., is less concentrated at the younger ages) and a broader spread than the rural distribution; the differences in the age distributions for the two groups are a result of the lower fertility and mortality levels in urban areas compared to rural areas.

Table 2.2 presents the distributions of the de facto household populations by broad age groups for the 1988 and 1992 DHS surveys. The distributions are nearly identical. Dependency ratios also are shown. The age dependency ratio is the ratio of non-productive persons (persons age 0 to 14 and age 65 and over) to persons age 15 to 64. The dependency ratio indicates that, in Egypt, for every person in the productive age groups, there are 0.8 persons under age 15 or over age 64.

### Household Size and Composition

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. Household head-

pulation b 2 EDHS	by broad age
1988 EDHS	1992 EDHS
41.2	41.7
55.0	54.6
3.8	37
100.0	100.0
81.8	83.2
	1988 EDHS 41.2 55.0 3.8 100.0 81.8

ship is another important indicator of household welfare. Households headed by females, usually have limited financial resources. Finally, the data on household composition provide the basis for an analysis of relationship structure, distinguishing nuclear from extended households.

Information on the size and composition of sampled households is shown in Table 2.3. Unlike the two earlier tables, Table 2.3 is based on de jure members, i.e., usual residents. Of all households covered, 12 percent are headed by women. There is almost no difference between urban and rural areas in the percentage of female-headed households.

There are, on average, 5.6 persons in an Egyptian household. Only one in eight households includes 2 or less persons, and one in five has 8 or more persons. Urban households are considerably smaller, on average, than rural households (4.9 persons and 6.5 persons, respectively). Many rural households are quite large. For example, around one in three rural households has 8 or more persons compared to only one in nine urban households.

Taking account of adult household members age 15 and over only, the large majority of households are composed of two related adults of the opposite sex or of three or more related adults. Single adult households are relatively rare, comprising only 6 percent of all households. In rural areas, there are almost twice as many households with three or more related adults as households with two related adults (61 percent and 32 percent, respectively). In urban areas, households are more evenly divided between these two types.

Only 1 percent of households include foster children, i.e., children under the age of 15 who live in households in which neither their natural mother nor their natural father is resident.

## Education of the Household Population

#### Table 2.3 Household composition

Percent distribution of households by sex of head of household, household size, and relationship structure, and percentage of households with foster children, according to urban-rural residence, Egypt 1992

Characteristic	Urban	Rural	Tota
Household headship			
Male	87.4	89.1	88.2
Female	12.6	10.9	11.8
Total	100.0	100.0	100.0
Number of usual members			
1	5.2	37	44
2	10.3	6.6	8.5
3	12.1	79	10 1
4	18.6	11.1	15.0
5	18.6	12.3	15.6
6	14.7	13.6	14.2
7	9.2	12.6	10.8
8	5.3	10 1	7.6
9+	5.9	22.1	13.6
Total	100.0	100.0	100.0
Mean size	4.9	6.5	56
Relationship structure			
One adult	61	5.1	5.6
Two related adults			
Of opposite sex	42.3	32.2	37.5
Of same sex	1.7	15	1.6
Three or more related adults	49.2	60.8	54.7
Other	0.6	0.3	0.4
Total	100.0	100.0	100.0
Households with foster			
children	12	12	1.2
Number of households	5651	5109	10760

neither their mother nor their father present.

Education has been identified in the literature as an important variable affecting demographic and health behavior. Higher education is usually associated with use of family planning methods and better health practices.

The education system in Egypt has evolved over a long period of time. There have been many changes, especially in the number of years of compulsory schooling. Currently, basic education is compulsory for the first 8 years, starting at age six. A further three-year period, known as the secondary

stage, is not compulsory. Although many students pay to attend private schools, particularly in urban areas, public education at all levels including universities is free.

Tables 2.4.1 and 2.4.2 present data on the educational composition of the population age five and over obtained from the EDHS household questionnaire. The results highlight the gap in educational attainment that exists between men and women in Egypt. Overall, 78 percent of men have attended school compared to only 59 percent of women. The median number of years of schooling for males (5.3 years) is more than twice the median number for females (2.3 years).

The improvements that have occurred in public education in recent decades can be examined by looking at the changes in the educational indicators across successive age cohorts (see Tables 2.4.1 and 2.4.2). Both sexes show a rapidly increasing level of education although females continued to lag behind males until recently. For example, the median number of years of schooling for men in the 25-29 age group is 11.5 years compared to 4.0 years for women in the same cohort. In younger cohorts, the sex differentials are narrower; the gap in the median number of years of schooling is less than four years for the 20-24 age group and less than one year for those under age 20 (see Figure 2.2).

Table 2.4.1 Educational level of the male household population

Percent distribution of the de facto male household population age five and over by highest level of education attended, according to selected background characteristics, Egypt 1992

Background characteristic	None	Some ртітагу	Primary through secondary	Completed secondary/ higher	Missing	Total	Number of persons	Median number of years
4 50 050Up								
S O	78.4	71.4	0.1	0.0	0.0	100.0	4749	1 1
10.14	58	42.2	51.9	0.1	0.0	100.0	4025	61
15,19	7.8	12.2	65.7	13.8	0.0	100.0	3104	0.1
20.24	110	115	204	56.0	0.0	100.0	2063	12.2
25-29	147	20.5	16.0	48.7	0.1	100.0	2005	11.5
30-34	16.9	23.0	163	43.7	01	100.0	1822	80
35.30	22.3	20.0	17.2	358	00	100.0	1546	6.4
40-44	28 9	27.7	179	30.0	0.0	100.0	1430	5 9
45-49	36.5	20.0	17.7	25.9	0.0	100.0	1128	52
50-54	423	20.8	173	19 0	0.5	100.0	846	35
55-59	489	231	113	16.7	0.0	100.0	810	1.0
60-64	561	25.5	91	94	0.0	100.0	680	00
65+	68.6	15 8	8.2	75	0.0	100.0	1165	00
Urban-rural								
residence								
Urban	15.0	29.0	27.6	28 4	0.0	100.0	11886	67
Rural	29 4	33 7	23 4	13.5	0.0	100 0	13110	4 0
Place of residence								
Urban Governorates	13.6	28 4	29.1	28.9	0.0	100.0	6130	6.9
Lower Egypt	22.9	32.6	25.8	18.6	0.0	100.0	10474	52
Urban	14.7	30.3	277	27.3	0.0	100.0	3130	6.6
Rural	26 5	33 6	25.0	14.9	0.0	100.0	7344	4.5
Upper Egypt	28.6	32.2	22 3	16.9	01	100.0	8392	4.2
Urban	18.5	28.9	24.1	28.4	0.1	100.0	2626	6.4
Rural	33 2	33 7	214	11.7	0 0	100 0	5765	3.2
Total	22 5	31.4	254	20.6	0.0	100 0	24995	53

#### Table 2.4.2 Educational level of the female household population

Percent distribution of the de facto female household population age five and over by highest level of education attended, according to selected background characteristics, Egypt 1992

Background characteristic	None	Some primary	Pnmary through secondary	Completed secondary/ higher	Missing	Total	Number of persons	Median number of years
Age group								
5-9	37.6	62.4	0.0	0.0	0 0	100.0	4199	09
10-14	16.0	35.9	48.1	0.0	0.0	100.0	3819	5.4
15-19	23.6	11.0	51.6	13.7	0.0	100.0	3090	8.9
20-24	33.9	11.7	12.7	417	0.0	100.0	2445	84
25-29	40.8	18.8	10.0	30 5	0.0	100.0	2355	4.0
30-34	42.1	24 2	8.5	25.2	0.0	100.0	1956	3.1
35-39	46 4	25.1	10.1	18.4	0.0	100.0	1768	2.3
40-44	53.6	22.9	10.9	12.5	0.1	100.0	1457	0.0
45-49	59.1	20.7	11.8	8.4	0.0	100.0	1131	0.0
50-54	65.6	22.4	6.0	6.0	0.0	100.0	948	0.0
55-59	70.7	21.3	4.0	3.9	02	100.0	759	0.0
60-64	76.6	17.0	4 5	18	0.0	100.0	763	0.0
65+	88.1	8.0	23	14	03	100.0	1040	0.0
Urban-rural								
residence								
Urban	26.0	29.2	23 2	21.6	0.0	100.0	12096	50
Rural	53.7	26.4	14.3	5.6	0 0	100.0	13638	0.0
Place of residence								
Urban Governorates	23.9	27.9	24.8	23.4	0.0	100.0	6089	5.7
Lower Egypt	40.2	29 8	18.8	11.2	0.0	100.0	10773	2.2
Urban	26.3	31.5	22.0	20.1	0.0	100.0	3173	46
Rural	46.0	29.1	17.4	74	0.0	100.0	7600	1.0
Upper Egypt	52 7	25.1	13.8	8.4	0.0	100.0	8872	0.0
Urban	30.0	29.4	21.2	19.4	0.0	100.0	2834	4.2
Rural	63 3	23.1	10.4	3.2	00	100.0	6038	0.0
Total	40.7	27.7	18.5	13 1	0 0	100 0	<b>25</b> 733	23

There is a notable difference in educational attainment between urban and rural residents. The median number of years of schooling for urban men is 6.7 years, almost 3 years more than for rural men. The differential is even greater for females. On average, urban women have spent 5 years in school compared to less than 1 year among rural women. By place of residence, the Urban Governorates show the highest medians and rural Upper Egypt the lowest medians for both females and males. The low level of educational attainment of women in rural Upper Egypt is particularly striking. For example, while around half of women in rural Lower Egypt have attended school, only about one-third of women in rural Upper Egypt have gone to school.

#### School Enrollment

Table 2.5 presents the percentage of the household population 6-24 years of age who are enrolled in school. Around eight in ten children age 6-15 are enrolled in school. Enrollment after age 15 drops substantially; only 43 percent of the population age 16-20 are attending school and, among those in their early twenties, only 11 percent are still in school. School enrollment rates are higher for urban than rural residents, particularly among those age 16 and over.



<u>Table 2.</u> Percenta sex, and	5 School e ge of the d urban-rura	enrollment e facto ho l residenci	: uschold p e, Egypt 1	opulation 1992	age 6-24	years enre	olled in sci	hool, by a	ige grouj
•	Male Female								
Age group	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10 11-15	92.5 83.6	86.0 73.6	88.7 77.9	92.0 84.0	68.1 56.1	78.2 68.3	92.2 83.8	77.0 65.1	83.5 73.3
6-15	88.1	80.0	83.5	88.2	62.5	73.6	88 2	71.4	78.6
16-20 21-24	58 3 19.4	43.8 10 4	50.4 15.0	53.4 12.9	23.3 2.4	36.7 7.7	55-8 16.0	33.3 6 1	43.5 11.1

In the population as a whole, males are more likely than females to be enrolled in school in all age groups, with the differential being greatest for the 16-20 age group. Sex differentials in school enrollment are less noticeable for urban residents than for rural residents.

# 2.2 Household Environment

The EDHS household questionnaire obtained information on basic housing characteristics and household possessions. These data contribute to an understanding of the economic status of the household and environmental conditions in which the EDHS respondents live.

# **Housing Characteristics**

Table 2.6 presents the distribution of households by selected housing characteristics. Availability of electricity, source of drinking water, type of sanitation facilities, type of flooring material, and persons per sleeping room are aspects of the household environment that relate to the socio-economic level of the household and may have important influences on the health status of household members, especially children.

Overall, more than 90 percent of households in Egypt have electricity. Rural households are somewhat less likely to have electricity in all or part of their dwelling than are urban households (88 percent and 98 percent, respectively). By place of residence, the percentage of households with electricity varies from 83 percent in rural Upper Egypt to 99 percent in the Urban Governorates.

Both access to safe drinking water and adequate sanitation facilities are important determinants of health conditions. In Egypt, four-fifths of all households have access to piped water, primarily in their residence, although 10 percent rely on a public tap. Most of the remaining households use well water; less than 5 percent obtain drinking water from the Nilc, canals or other sources. In urban areas, virtually all households have piped water, but in rural areas, only 61 percent of households have access to piped water. By place of residence, piped water is universally available to households in the Urban Governorates. Households in Lower Egypt are somewhat more likely to have access to piped water than those in Upper Egypt (76 percent and 69 percent, respectively). Households in rural Upper Egypt are the least likely to report use of piped water for drinking; only 56 percent have piped water, and about a third of these households obtain water from a public tap.

Table 2.6 also presents information on sanitation facilities. Overall, only 27 percent of households have modem flush toilets, 47 percent have traditional toilets, mainly with bucket flush, and 9 percent have no facilities. Among urban households, the variation in the percentage without toilet facilities is small, from less than 1 percent in the Urban Governorates to 5 percent in urban areas in Upper Egypt. However, households in rural Upper Egypt are five times more likely than households in rural Lower Egypt to have no toilet facilities (32 percent and 6 percent, respectively).

Regarding types of flooring material, one in two households live in dwellings having cement tile floors, 15 percent have cement floors, and three in ten have carth/sand floors. Earth/sand floors are more common in rural areas (60 percent), especially rural Upper Egypt (75 percent), than in other areas. Rural households are also more likely to have cement rather than cement tile floors. Cement tiles are the most common flooring material in urban dwellings, especially in the Urban Governorates (80 percent). It should be noted that the percentage of households in urban Upper Egypt living in dwellings with earth/sand floors is 16 percent, more than twice that in urban Lower Egypt (6 percent).

Information on the number of rooms that a household used for sleeping was collected in order to provide a measure of crowding. Table 2.6 reveals that 50 percent of households had one or two persons per sleeping room, and a third had three to four persons per sleeping room. The overall mean is 3 persons per sleeping room. Urban households appear to be somewhat less crowded than rural households; the mean number of persons per sleeping room is 2.7 in urban areas compared to 3.4 in rural areas. By place

#### Table 2.6 Housing characteristics

Percent distribution of households with eligible women by housing characteristics, according to urban-rural residence and place of residence, Egypt 1992

			Urban	l	ower Egy	/pt	ι	Jpper Egy	pt	
Characteristic	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Electricity									_	
Yes, in all	97.4	83.4	98.2	92.3	97.9	89.2	82.9	94.9	76.2	90.7
Yes, in part	1.0	4.5	0.6	2.3	1.1	2.9	4.8	1.9	6.5	2.7
No	1.6	12.1	1.2	5.4	1.0	7.8	12.3	3.2	173	6.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Source of drinking water					07.0		<i></i>		• • •	-
Piped water	96.9	61.1	99.3	76.3	97.9	64.8	68.7	90.4	26.6	/9.9
Piped into residence	91.8	44.9	95.2	65./	94.2	20.0	22.0	81.7	38.0	69.0
Public tap	5.1	10.2	4.1	10.6	5.1	14.3	15.1	8.7	18.0	10.4
Well Water	1.9	30.4	0.3	17.2	0.8	20.0	25.5	0.9	33.8	13.4
Dublic well	1.4	10.0	0.2	9.1	0.7	13.0	14 1	17	16.9	7 1
Nila/aanal	0.5	14.4	0.1	0.1	01	7.0	2.4	1.7	10.0	27
Other	11	3.5	0.1	40	13	22	2.4	2.5	3.0	$\frac{2.7}{2.0}$
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LOCAL	100.0	100,0	100.0	100.0	100.0	100.0	100.0	100.0	100 0	100.0
Sanitation facility Modern fluch toilet	163	57	57.6	16.7	35 1	6.0	14.0	34.1	12	27.0
Traditional w/tank flush	37	15	3.4	23	37	1.5	2.6	4.1	1 4	27.0
Traditional w/bucket flush	44.7	50.2	36.6	61.9	57.8	64 1	38.4	47.5	333	473
Pit toilet/latrine	3.6	24 3	2.0	14.2	1.0	20.8	21.7	03	28.6	13.4
Barrel/tank	0.1	03	<u>n</u> õ	17.5	03	0.6	00	01	20.0	0.2
No facility	1.6	17.9	0.5	4.4	1.1	61	22.4	4.5	323	9.3
Other	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1
Missing	0.0	0.0	0.0	0,0	0.1	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100,0	100.0	100.0
Flooring										
Earth/sand	5.7	60.1	1.0	33.4	5.8	48 1	53.7	16.2	74 6	31.5
Parquet/polished wood	1.9	0.1	1.9	0.9	2.2	0.2	0.6	1.5	0.1	1.0
Ceramic tiles	0.5	0.1	0.5	0.2	0.5	0.0	03	0.5	0.2	0.3
Cement tiles	75.8	18.4	79.8	41.0	733	23.8	32.4	69.5	11./	48.5
Cement	9.6	20,9	8.6	21.8	11.8	27.2	11.8	9.4	13.2	12.0
Wall-to-wall carpet	4.7	0.3	2.7	1.9	4.5	0.5	0.9	2.5	0.1	2.0
V INVI Othor	1.8	0.1	2.5	0.7	1./	0.1	0.2	0.0	0.0	1.0
Missing	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Persons per sleening room										
1-2	59.9	39.3	60.1	49.8	62.7	42.9	42.5	56.2	34.9	50.1
3-4	31.3	43.9	31.1	39.7	29.8	45.0	39.4	33 4	42.7	37.3
5-6	6.3	12.2	6.4	8.3	5.5	9.7	12.2	6.8	15.2	9.1
7 +	2.5	4.6	2.3	2.2	2.0	2.4	5.9	3 5	7.2	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean persons per room	2.7	3,4	2.7	3.0	2.6	3.1	33	2.9	3.6	3.0
Number of households	5651	5109	2879	4299	1492	2806	3582	1280	2302	10760

of residence, the mean varies from a low of 2.7 in the Urban Govemorates to a high of 3.6 in rural Upper Egypt. The latter mean is significantly greater than the mean for rural Lower Egypt (3.1), suggesting that rural households in Upper Egypt experience greater crowding than those in Lower Egypt.

### Household Durable Goods and Other Property

Table 2.7 provides information on household ownership of major durable goods and other property. With regard to durable goods, around eight in ten households in Egypt own a television, seven in ten own a washing machine, and more than half own a radio, a cooking stove and a refrigerator. There are striking differences between urban and rural areas in the percentage of households possessing various durable goods. For example, only two-thirds of rural households own a television compared to 96 percent of urban households. The largest urban-rural differential is observed in the case of cooking stoves; 83 percent of urban households have stoves, compared to only 27 percent of rural households. Households in rural Upper Egypt are the least likely to possess any of the durable goods (with the exception an electric fan).

#### Table 2.7 Household durable goods

Percent distribution of households possessing various household effects, means of transportation, property and farm animals/implements, according to urban-rural residence and place of residence, Egypt 1992

			Urban	Lower Egypt			Upper Egypt			
Characteristic	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Household effects										
Radio	72.0	50.7	76.8	61.7	68.5	58-1	50.1	65 1	417	61.9
Television	95.6	67.5	99.5	81.8	93.4	75.6	68.9	89.2	57.5	82.2
Video	10.6	0.9	14.1	2.9	6.6	0.9	3.2	7.3	0.9	6.0
Electric fan	64.7	30.4	68.1	37.5	56.4	27.5	45.7	66.9	33.9	48.4
Cooking stove	82.7	27.4	90.6	51.5	78.1	37.3	35.1	70.4	15.4	56.5
Water heater	41.3	5.5	50.0	15.0	31.9	6.1	14.9	33.0	4.8	24.3
Refrigerator	78.2	29.5	84.3	44.8	71.9	30.4	43.8	71.7	28.4	55.1
Washing machine	86.6	52.3	89.8	73.7	87.6	66.3	50.4	78.0	35.2	70.3
Sewing machine	25.0	10.9	26.0	17.1	24.8	12.9	13.5	<b>2</b> 2.7	8.5	18.3
Means of transportation										
Bicycle	12.4	13.3	8.2	14.2	14.3	14.1	14.9	19.4	12.4	12.8
Car/motorcycle	9.4	3.1	11.4	4.1	5.4	3.4	5.1	9.4	2.8	6.4
Bus/minivan/other vehicle	2.2	2.0	2.0	2.4	2.3	2.5	1. <b>9</b>	2.6	1.5	2.1
Property										
Residential/commercial bldg.	9.6	6.1	7.6	8.0	12.0	5.9	8.0	11.1	6.3	7.9
Farm/other land	6.3	38.9	3.4	29.2	10.1	39.4	27.6	8.0	38.4	21.8
Farm animals/implements										
Livestock/poultry	10.4	61.6	3.3	47.5	18.7	62.8	44.6	16.8	60.1	34.7
Farm implements	1.0	6.0	0.3	5.3	2.4	6.8	3.6	0.8	5.1	3.4
Number of households	5651	5109	2879	4299	1492	2806	3582	1280	2302	10760

With respect to ownership of a means of transportation, only 13 percent of households own a bicycle, and 6 percent or less report owning a car or motorcycle or other vehicle (bus, minivan, etc.). Urban households are more likely to own a car or motorcycle than rural households.

The EDHS also collected information on ownership of residential and commercial buildings and of farms or other land. Overall, only one in thirteen households in Egypt own residential or commercial property, and only one in five own a farm or other land. As expected, rural households have an advantage with respect to the ownership of a farm or other land and urban households are somewhat more likely to own residential/commercial buildings. Among rural households, however, only two in five own any land, and only one in ten urban households own residential or commercial property.

Finally, the EDHS collected information on the possession of livestock and poultry and of mechanized farm equipment (e.g., a tractor). Overall, 35 percent of all households in Egypt own livestock or poultry. The labor intensive nature of farming is evident in the fact that only 3 percent own mechanized farm equipment. Rural households are more likely to report ownership of these items than urban households. Six in ten rural households own livestock or poultry, and 6 percent own mechanized farm equipment.

# 2.3 Background Characteristics of Survey Respondents

# **General Characteristics**

Table 2.8 presents the distribution of the respondents to the women's questionnaire by selected background characteristics, including age, marital status, residence, education, religion and employment status. The questionnaire was administered to ever-married women age 15-49. Of the ever-married women in the sample, 93 percent are currently married, 5 percent are widowed and 2 percent are divorced.

#### Table 2.8 Background characteristics of respondents

Percent distribution of ever-married women by selected background characteristics, Egypt 1992

		Number of	of women
Background characteristic	Weighted percent	Weighted	Un- weighted
		·	
Married	02.8	0153	01//8
Widowed	5.2	510	508
Divorced	2.0	201	208
Age group			
15-19	4.3	423	437
20-24	13.8	1362	1384
25-29	20.4	2013	1993
30-34	18.6	1838	1819
35-39	17.3	1709	1721
40-44	14.3	1411	1404
45-49	11.2	1108	1106
Urban-rural residence			
Urban	46.6	4596	4673
Rural	53.4	5268	5191
Place of residence			
Urban Governorates	23 9	2357	2487
Lower Egypt	41.2	4067	3812
Urban	12.3	1210	1200
Rural	<b>29.</b> 0	2857	2612
Upper Egypt	34.9	3440	3565
Urban	10.4	1029	986
Rural	24.4	2411	2579
Education			
No education	48.4	4771	4638
Some primary	21.1	2078	2096
Primary through secondary	11.1	1093	1160
Completed secondary/higher	19.5	1922	1970
Work status			_
Working for cash	14.8	1464	1447
Not working for cash	85-2	8400	8417
Religion	0	0217	0000
Muslim	94.5	9317	9320
Christian	5.5	547	544
All women	100.0	9864	9864

Two questions were used in the individual questionnaire to ascertain the age of respondents: "In what month and year were you born?" and "How old were you at your last birthday?" Interviewers were trained to probe in those situations where respondents did not know their age or date of birth; and, as a last resort, interviewers were instructed to record their best estimate of the respondent's age. The five-year age distribution for respondents is shown in Table 2.8. The percentages in the 15-19 and 20-24 age groups are smaller than the percentages in the 25-29 group; this reflects the fact that the EDHS interviewed an ever-married sample and that there has been a trend toward delaying marriage in Egypt. This trend is described in detail in Chapter 9.

At the time of the survey, the majority of respondents were living in rural areas, while 47 percent lived in urban areas. By place of residence, 41 percent resided in Lower Egypt, 35 percent in Upper Egypt, and 24 percent in one of the four Urban Governorates.

Table 2.8 shows the distribution of the respondents according to the level of education attained. Almost one in two respondents has never attended school, around 21 percent attended but did not complete the primary level, 11 percent completed the primary level and/or some secondary, and 20 percent completed the secondary or higher level.

Table 2.8 also examines the extent to which respondents reported that they were working at a job for which they were paid in cash. Such employment is assumed to compete with childbearing and child-rearing. Only one in seven respondents is working at a job for which she is paid cash.

Nearly all of the respondents are Moslems. Only 6 percent are Christian.

#### **Differentials in Education**

Table 2.9 gives an overview of the relationship between the level of education and other background characteristics. The relationship between age and education is not uniform. The proportion of respondents with no education exhibits a U-shaped curve with age. The higher proportion of women who

### Table 2.9 Level of education

Percent distribution of ever-married women by highest level of education attended, according to selected background characteristics, Egypt 1992

		Level of	education				
Background characteristic	None	Some primary	Primary through secondary	Completed secondary/ higher	Total	Number of women	
Age group							
15-19	53.3	16.7	24.4	5.6	100.0	423	
20-24	48.1	14.8	12.4	24.7	100.0	1362	
25-29	44.1	19.4	9.7	26,9	100.0	2013	
30-34	42.4	24.3	8.6	24.7	100.0	1838	
35-39	46.8	25.1	10.3	17.8	100.0	1709	
40-44	54.0	22.5	11.2	12.3	100.0	1411	
45-49	59.7	20.0	12.2	8.1	100.0	1108	
Urban-rural residence							
Urban	29.5	22.8	15.8	31.8	100.0	4596	
Rural	64.8	19.5	6.9	8.7	100.0	5268	
Place of residence							
Urban Governorates	27.2	22.4	17.1	33.4	100.0	2357	
Lower Egypt	51.3	21.3	10.6	16.8	100.0	4067	
Urban	30.0	24.1	16.9	28.9	100.0	1210	
Rural	60.3	20.2	7.9	11.6	100.0	2857	
Upper Egypt	59 4	19.8	7.6	13.2	100.0	3440	
Urban	34 4	22.3	11.7	31.6	100.0	1029	
Rural	70.1	18.8	5.8	5.3	100.0	2411	
Work status							
Working for cash	21.2	10.0	4.6	64.2	100.0	1464	
Not working for cash	53.1	23.0	12.2	11.7	100.0	8400	
Total	48.4	21.1	11.1	19.5	100.0	9864	

never attended school in the 15-19 and 20-24 age groups than in the 25-29 group should not be interpreted as a decline in educational attainment among young females. Since only ever-married women were interviewed, the respondents in the 15-19 and 20-24 age groups include a disproportionate share of women who married early and, thus, were likely to have lower educational levels than women in the age cohort as a whole.

The level of education varies greatly according to residence. Nearly two-thirds of rural women never attended school compared to 30 percent of urban women, and more than three times as many urban women as rural women have completed the secondary level (32 percent and 9 percent, respectively). By place of residence, the percentage who have never attended school is somewhat greater among women living in urban areas in Lower Egypt (30 percent) and Upper Egypt (34 percent) than among women in the Urban Governorates (27 percent). Among rural women, the regional differences are greater, 70 percent of women in rural Upper Egypt have never attended school compared to 60 percent in rural Lower Egypt (see Figure 2.3).

As expected, working for cash is associated with higher educational attainment. The percentage of working women with at least some secondary education is 64 percent compared to only 12 percent among women who are not working.



## Access to Media

Women were asked if they usually read a newspaper at least once a week and the number of hours that they listened to the radio and television each day. This information is important because it provides an indication of the level of exposure of women to the mass media, which are used to convey family planning and health messages to the population. Table 2.10 shows that 25 percent of ever-married women read a newspaper at least once a week, 82 percent watch television daily and 67 percent listen to the radio daily. The relationship between age and exposure to mass media is not strong; however, the youngest and the oldest age groups are the least likely to be exposed to either print or broadcast media.

Reflecting lower literacy levels, rural women are much less likely to report that they read a newspaper weekly. They also are less likely to be exposed to television or radio on a daily basis. By place of residence, women residing in the Urban Governorates are more likely to have been exposed to media than their counterparts in Lower Egypt and Upper Egypt. Women in rural Upper Egypt are the group that is least exposed to any of the mass media.

As expected, there is a positive association between exposure to mass media and level of education, particularly with regard to exposure to print media. Concerning work status, women who are working for cash are more likely to be exposed to the various media than women who do not work. This probably is due at least in part to the association between education and employment discussed earlier.

Table 2.10 Access to mass media

Percentage of ever-married women who usually read a newspaper once a week, watch television daily, or listen to the radio daily, by selected background characteristics, Egypt 1992

Background characteristic	Read newspaper weekly	Watch television daily	Listen to radio daily	Number of women
Age group				
15-19	12.6	80.0	62.6	423
20-24	24.7	81.8	68.1	1362
25-29	29.1	84.6	70.0	2013
30-34	28.0	82.9	66.0	1838
35-39	23.7	81.7	65.7	1709
40-44	21.7	82.1	65.1	1411
45-49	19.1	80.1	63.9	1108
Urban-rural residence				
Urban	41.5	91.0	77.1	4596
Rural	9.7	74.8	57.4	5268
Place of residence				
Urban Governorates	45.7	92.7	82.1	2357
Lower Egypt	19.7	85.7	70.4	4067
Urban	38.7	93.5	77.3	1210
Rural	11.7	82.4	67.5	2857
Upper Egypt	15.6	71.2	51.3	3440
Urban	34.9	84.1	65.3	1029
Rural	7.3	65.7	45.3	2411
Education				
No education	04	73.3	54.7	4771
Some primary	12.7	85.6	68.4	2078
Primary through secondary	52.8	93.5	79.6	1093
Completed secondary/higher	80.8	95.0	86.6	1922
Work status				
Working for cash	59.6	87.5	76.1	1464
Not working for cash	18-4	81.4	64.9	8400
the second second		01.4		0.00
Total	24.5	82.3	66.5	9864

# **CHAPTER 3**

# FERTILITY

The fertility measures presented in this chapter are based on the retrospective reproductive histories of women age 15-49 interviewed in the Egypt DHS survey (EDHS). In collecting these histories, each woman was asked the number of sons and daughters living with her, the number living elsewhere, and the number who had died. She was then asked for a history of all her births, including the month and year each child was born, name, sex, and if dead, the age at death, and if alive, the current age and whether the child was living with the mother. Based on this information, measures of current fertility and cumulative fertility are examined.

# 3.1 Current Fertility

### **Measures of Current Fertility**

The level of current fertility is the most important topic in this report because of its direct relevance to population policies and programs. Several measures of current fertility, including age-specific fertility rates, the total fertility rate, the general fertility rate, and the crude birth rate are presented in Table 3.1 for the three-year period preceding the survey, a period covering principally the calendar years 1990-1992. The three-year period was chosen for calculation of these rates (rather than a shorter or longer period) as a compromise between three criteria: to provide the most current information, to reduce sampling error, and to avoid problems of the displacement of births.<sup>1</sup>

Age-specific fertility rates are useful in order to understand the age pattern of fertility. Numerators of age-specific fertility rates are calculated by isolating live births which occurred in the 1-36 months preceding the survey (determined from the date of interview and date of birth of the child), and classifying them by the age (in five-year age groups) of the mother at the time of birth (determined from the date of birth of mother). The denominators of these rates are the number of woman-years lived in each of the specified five-year age groups during the 1-36 months preceding the survey. Although information on fertility was obtained only for ever-married women, the age-specific rates are presented for all women (regardless of marital status); data from the household questionnaire on the age structure of the population of never-married women is used to calculate the all-women rates. This procedure assumes that women who have never been married have had no children.

The total fertility rate (TFR) shown for women 15-49 and women 15-44 is a useful means of examining the overall level of fertility. The TFR is calculated by summing the age-specific fertility rates. It can be interpreted as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the currently observed rates.

<sup>&</sup>lt;sup>1</sup>The distribution of all children by calendar year of birth shows a slight deficit of births in calendar year 1987 and an excess of births in calendar year 1986 (see Table D.4). The apparent transference of births out of 1987 was greater for dead children than for living children. This pattern has been noted in other DHS surveys; it is believed to be the result of transference of births by interviewers out of the period for which the health and calendar data were collected (January 1987 through the date of the survey).

#### Table 3.1 Current fertility

Age-specific and cumulative fertility rates and the crude birth rate for the three years preceding the survey, by urbanrural residence and place of residence, Egypt 1992

			Urban	1	ower Egyp	ot	ı	Jpper Egy	pt	
Age group	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
15-19	28	89	24	54	23	64	98	42	122	63
20-24	145	269	121	222	164	247	258	179	295	208
25-29	188	256	188	215	171	235	259	205	287	222
30-34	130	180	121	133	123	137	208	160	231	155
35-39	64	117	56	77	60	85	135	89	161	89
40-44	26	61	26	37	19	45	66	37	82	43
45-49	2	10	2	5	0	7	11	3	15	6
TFR 15-44	2.91	4.86	2.68	3.69	2.80	4.07	5.12	3.56	5.89	3.90
TFR 15-49	2.92	4.91	2.69	3.72	2.80	4.10	5.18	3.58	5.97	3.93
GFR	98	169	92	128	96	141	177	117	205	136
CBR	23.3	35.0	21.9	28.4	22.8	30.7	36.2	27.1	40.1	29.7

Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation.

TFR: Total fertility rate expressed per woman

GFR: General fertility rate (births divided by number of women 15-44), expressed per 1,000 women

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

The general fertility rate (GFR) represents the annual number of births in a population per 1,000 women age 15-44. The crude birth rate (CBR) is the annual number of births in a population per 1,000 persons. Both these measures are estimated using the birth history data for the three-year period before the survey and the age-sex distribution of the household population.

# **Fertility Levels**

Current fertility estimates are presented in Table 3.1 for Egypt as a whole and for major geographic areas. The total fertility rate indicates that, if fertility rates were to remain constant at the level prevailing during the period 1990-92, an Egyptian woman would bear 3.9 children during her lifetime. In rural areas, the TFR is 4.9 births per woman, two children higher than the rate for urban areas (2.9 births per woman). Considering the variation by place of residence, the TFR for the Urban Governorates (2.7 births) is one child lower than the rate for Lower Egypt (3.7 births) and more than two children lower than the level for Upper Egypt (5.1 births).

Of particular note is the much higher fertility in rural Upper Egypt than in rural Lower Egypt (see Figure 3.1). Women in rural Upper Egypt are having an average of six births, almost two births more than women living in rural areas in Lower Egypt. There is also a significant but much smaller differential in the urban fertility rates between the two regions.

According to the EDHS results, the crude birth rate for the period 1990-92 was 29.7 births per 1,000 persons, and the general fertility rate for the same period was 136 births per 1,000 women. Residential differentials in these fertility measures exhibit a pattern similar to the differentials in the TFR, with the lowest levels observed in urban areas, particularly the Urban Governorates, and the highest levels found for rural Upper Egypt.



# Age Pattern of Fertility

The age pattern of fertility indicates that Egyptian women have children early in the childbearing period. At the current age-specific rates shown in Table 3.1, an Egyptian woman will have given birth to 1.4 children-more than one-quarter of her lifetime births---by age 25 and to 2.5 births---more than 60 percent of her lifetime births---by age 30.

The age pattern of fertility varies somewhat by residence, with the peak childbearing years coming somewhat later among urban women compared to rural women. As Figure 3.2 shows, urban age-specific fertility rates are highest in the 25-29 age group (188 births per 1,000 women), followed closely by the rate for the 20-24 group (145 births per 1,000 women). Rural fertility rates peak among women 20-24 (269 births per 1,000 women), followed closely by the rate for women 25-29 (256 births per 1,000 women).

The results in Table 3.1 and Figure 3.1 also show that fertility levels among teenagers and women age 35 and over are substantially higher in rural areas than in urban areas. For example, at current levels, only one in thirty-five urban women 15-19 would give birth annually compared to around one in eleven rural women. Age-specific rates among women age 35 and over are twice as high in rural as in urban areas. The urban-rural differentials in fertility for these groups are particularly significant since women 15-19 and age 35 and over have been shown to have the highest risks of pregnancy-related morbidity and mortality.



# Fertility Trends and Differentials

Table 3.2 presents current total fertility rates and the mean number of children ever born (CEB) to women age 40-49 (completed fertility) for major subgroups of the population. Although vulnerable to understatement of parity by older women, comparisons of completed fertility among women aged 40 or more with the total fertility rate provide an indication of the direction and the magnitude of fertility change in Egypt during the past 20-25 years. Overall, the results in Table 3.2 suggest that there has been a decline of more than 30 percent in fertility levels in Egypt during this period.

The substantial residential differentials in current fertility described above are also evident in the completed fertility measures. The fertility decline implied by a comparison of the TFR with completed fertility has been relatively faster in the Urban Governorates and Lower Egypt than in Upper Egypt.

Differentials by education and work status are notable. The level of fertility is negatively associated with educational attainment. Women who completed secondary school or higher have the lowest level of current fertility (2.9 births per woman) while those with no education have the highest level (5.0 births per woman). Moreover, there is a difference of almost one child between the TFR for women with some primary education and the TFR for women who completed the primary level but not the secondary level. Lower fertility has apparently characterized women with a secondary or higher education for some time; the TFR for the three-year period before the survey is virtually identical to the mean number of children ever born to women 40-49.

#### Table 3.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey and mean number of children ever born to women age 40-49, by selected background characteristics, Egypt 1992

1 ale	age 40-49
2.01	1 66
4.91	6,84
2.69	4.44
3.70	5.81
2.80	4.64
4.10	6.37
5.17	6.72
3.58	5.29
5.97	7.46
5.03	6.45
3.98	5.73
3.03	4.60
2.91	2.91
2.90	4.05
4.10	5.98
3 93	5.71
	2.91 4.91 2.69 3.70 2.80 4.10 5.17 3.58 5.97 5.03 3.98 3.03 2.91 2.90 4.10 3.93

Current fertility levels are lower among women working for cash than among those who are not working for cash. Working women have also clearly been at the forefront of the transition to lower fertility for a long period of time; completed fertility among working women 40-49 is nearly two children lower than the completed fertility among women who were not working for cash.

Table 3.3 examines the trend in fertility in Egypt by comparing the results of the EDHS with those of earlier surveys. Fertility levels in Egypt have steadily declined, from 5.3 births per woman in the late 1970s to 4.4 births for the period 1988-91, 4.1 births for the period 1990-91 and 3.9 births for the period 1990-92 (see Figure 3.3).

#### Table 3.3 Trends in fertility

Age-specific fertility rates (per 1,000 women) and total fertility rate, Egypt 1979-1992

Age group	EFS 1979- 1980 <sup>1</sup>	ECPS 1983- 1984 <sup>1</sup>	EDHS 1986- 1988 <sup>2</sup>	EMCHS 1990- 1991 <sup>1</sup>	EDHS 1990- 1992 <sup>2</sup>
15-19	78	73	72	73	63
20-24	256	205	220	207	208
25-29	280	265	243	235	222
30-34	239	223	182	158	155
35-39	139	151	118	97	89
40-44	53	42	41	41	43
45-49	12	13	6	14	6
TFR 15-49	5.28	4.85	4.41	4.13	3.93
TFR 15-44	5 22	4.79	4.38	4.06	3.90

1984 ECFS - Onphinkled results 1988 EDHS - Sayed et al., 1989, Table 3 2 EMCHS - Abdel-Azeem et al., 1993, Table 7.14



Finally, further evidence of the decline in fertility is found in Table 3.4, which presents age-specific fertility rates for successive fiveyear periods, using data from the respondents' birth histories. The age-specific schedule of rates is progressively truncated<sup>2</sup> as the time before the survey increases. The results in Table 3.4 and Figure 3.4 confirm that fertility has fallen substantially among all age groups, with the most rapid decline occurring in the 15-19 age group. Overall, the cumulative fertility rate for women 15-30 decreased by 27 percent, from 3.6 births per women during the period 15-19 years before the survey to 2.6 births per women in the five-year period preceding the EDHS. The decline clearly gained momentum during the ten-year period immediately before the survey.

#### Table 3.4 Age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age, Egypt 1992

age	0-4	5-9	10-14	15-19
15-19	69	112	124	135
20-24	224	258	287	278
25-29	231	271	292	308
30-34	170	208	245	[243]
35-39	102	134	[164]	-
40-44	45	[49]	-	-
45-49	[5]	-	-	-



<sup>&</sup>lt;sup>2</sup>The rates are truncated because they do not include the fertility experience of women who were in the childbearing ages during the period for which the rates are calculated but who were age 50 or older at the time of the EDHS and, thus, not interviewed in the EDHS.

Table 3.5 presents fertility rates for ever-married women by duration since first marriage for five-year periods preceding the survey. These rates are similar to the ones presented in Table 3.4 and are subject to similar problems of truncation. Declines are observed in the rates for all marriage durations, with the declines being greater at longer marriage durations. For example, during the ten-year period before the survey, fertility rates declined by only 4 percent among the women married less than five years compared to 33 percent among women married 20-24 years.

marriage in years, for five-year periods preceding the survey, Egypt 1992									
Marriage duration	Numbe	r of years p	receding the	survey					
at birth	0-4	5-9	10-14	15-19					
<4	363	378	386	386					
5-9	249	301	331	346					
10-14	180	231	267	303					
15-19	127	165	233	244					
20-24	75	112	[208]	-					
25-29	38	[73]	-	-					

# 3.2 Children Ever Born and Living

brackets are truncated.

The distribution of women by the number of children ever born is presented in Table 3.6 for all women<sup>3</sup> and for currently married women. In the EDHS questionnaire, the total number of children ever born was ascertained by a sequence of questions designed to maximize recall. Lifetime fertility reflects the accumulation of births over the past 30 years and, therefore, its relevance to the current situation is limited. However, the information is useful in looking at how average family size varies across age groups and for estimating the level of primary infertility.

The results for currently married women in Table 3.6 differ markedly from those for the sample as a whole. These differences are due to the large number of women, particularly in the younger age groups, who have not yet married. Differences at older ages are minimal and generally reflect the impact of marital dissolution.

<sup>&</sup>lt;sup>3</sup>Data from the household questionnaire on the age structure of the population of never-married women is used to calculate the all-women distribution. This procedure assumes that women who have never been married have had no children.

According to Table 3.6, an Egyptian woman has an average of 2.7 births. Out of that number, 2.3 children are still alive, indicating that mortality claimed 15 percent of the children ever born to each woman. Cumulative fertility is very low among women 15-19; it increases by one birth or more for each five-year age group, among women under age 40. Women 45-49 years of age, who are approaching the end of their childbearing period, have had an average of 6 births. Reflecting the high levels of fertility prevailing during the 30-year period when these women were having their children, around one in eight has had 10 or more births.

The data also indicate that primary sterility is very low in Egypt. The percent childless among women nearing the end of the reproductive period, age 45-49, is only 4 percent.

#### Table 3.6 Children ever born and living

Percent distribution of all women and of currently married women by number of children ever born (CEB) and mean number ever born and living, according to five-year age groups, Egypt 1992

٨٠٠				Numb	er of chi	ldren e	ver born	(CEB)					Number Mean no. of of	Mean no.	Mean no
group	0	1	2	3	4	5	6	7	8	9	10+	Total	women	CEB	children
								ALL WO	OMEN						
15-19	92.5	5.8	1.4	03	0.0	0.0	0.0	0 0	0.0	0.0	0.0	100.0	3037	0.09	0.09
20-24	54.2	18.3	14.3	8.5	3.5	0.9	0.2	0.0	0.0	0.0	0.0	100.0	<b>2</b> 405	0.93	0.84
15-29	20.9	12,4	20.2	19.0	154	6.5	3.4	1.6	0.3	0.2	0.1	100.0	2324	2.41	2.15
30-34	9.6	5.9	15.2	17.6	16.4	14.2	92	6.6	2.8	1.5	0.9	100.0	1933	3.72	3.25
35-39	5.7	2.8	10.0	15.8	15.4	14.2	121	10.1	6.7	3.6	3.6	100.0	1754	4.71	4.00
40-44	5.7	3.6	7.4	11.1	12.2	117	12.2	11.0	8.0	65	10.6	100.0	444	5.48	4.52
45-49	4.3	2.4	6.0	8.3	10.2	119	14.4	11.9	103	72	13 0	100.0	1119	6.01	4.73
Total	35.8	8.2	10.7	10.9	<b>9</b> 4	7.1	5.8	4.5	2.9	19	27	100 0	14015	<b>2</b> .73	<b>2</b> 31
		**	_			CUF	RENTI	LY MA	RRIED	wомі	en				
15-19	45.9	41.9	10.1	2.0	01	00	0.0	0.0	0 0	00	0.0	100.0	415	0 68	0.64
20-24	18.6	32.1	25.5	15.4	6.3	17	04	0.0	0.0	0.0	0.0	100.0	1324	1 65	1.49
15-29	8.2	13.7	23.6	22.0	18.2	77	4.0	1.9	0.4	0.2	01	100 0	1956	2 81	2 52
30-34	4.6	5.7	15.6	18.8	17.6	151	9.6	7.2	3.0	1.7	1.0	100 0	1743	3 97	3 46
35-39	2.9	1.9	9.7	16.2	15.8	148	129	10.7	7.3	3.8	3.9	100.0	1582	4.95	4.21
40-44	2.5	2.8	7.0	115	13.0	11.7	131	11.3	8.5	7.1	11.5	100.0	1231	5.78	4.80
45-49	3.0	1.3	5.7	82	101	11.5	13.7	12 2	113	83	14.7	100.0	902	6.31	5.01
Total	8.5	11.4	15.3	158	13.6	10.0	81	63	4.2	2.8	3.9	100.0	9153	3.88	3.31

# 3.3 Birth Intervals

There is a considerable body of research to indicate that short birth intervals are deleterious to the health of babies. This is particularly true for babies born at intervals of less than 24 months. Table 3.7 shows the percent distribution of births in the five years preceding the EDHS by the number of months since the previous birth. These findings indicate that women favor long birth intervals since around 69 percent of all children are born at least two years after their siblings. Moreover, more than one in three births is born after an interval of 3 years, and almost one in five is born after 4 years or longer. The overall median birth interval is around 30 months.

## Table 3.7 Birth intervals

Percent distribution of births in the five years preceding the survey by number of months since previous birth, according to demographic and socioeconomic characteristics, Egypt 1992

		Number of u	anthe sizes	manious birth		Number	Median number of months since	
							of	previous
Characteristic	7-17	18-23	24-35	36-47	48+	Total	births	bırth
Age of mother								
15-19	29.6	32.3	34.0	4.1	0.0	100.0	59	22.8
20-29	20.2	187	36.3	15.9	89	100.0	3180	26.5
30-39	10.8	14.0	33.1	16.8	25 4	100.0	2937	33.0
40 +	6.6	10.1	24.0	17.9	41.4	100.0	679	41.4
Birth order								
2-3	18.8	17.9	32.4	16.3	14.6	100.0	3047	28.0
4-6	12.4	13.6	34.2	16.2	23 5	100.0	2538	31.6
7 +	10.5	15.8	35.5	16.9	21.2	100.0	1271	31.3
Sex of prior birth								
Male	13.9	15.9	33.8	16 2	20.3	100.0	3414	30.4
Female	16.0	16.0	33 6	16.6	179	100.0	3442	29.4
Survival of prior birth								
Living	13 3	15.5	34.6	16 8	19.8	100.0	6124	30.6
Dead	28.8	19.9	25.5	12.8	12.9	100.0	731	24 4
Urban-rural residence								
Urban	14.1	12.9	29.4	17.0	26.7	100.0	2397	33.1
Rural	15 4	17 6	36.0	16.0	15.1	100.0	44.58	28.9
Place of residence								
Urban Governorates	10.9	12.0	29.9	17.6	29.6	100.0	1157	34.8
Lower Egypt	15 2	157	31.9	17.1	20.0	100.0	2650	30,6
Urban	15.7	110	27 3	19 7	26.3	100.0	584	34.5
Rural	15.1	17.1	33 2	16.4	18 2	100.0	2066	29.9
Upper Egypt	16.2	176	36.6	15.2	143	100.0	3048	28.3
Urban	18.3	16 1	30.2	13.7	218	100.0	656	29.4
Rural	156	18.0	38.4	15.7	12.3	100.0	2392	28.2
Education			_					
No education	14.6	17.2	34.8	15.9	17.5	100.0	3790	29.4
Some primary	12.2	15 0	33.7	16.4	22 7	100.0	1495	31.5
Primary through secondary	16.3	14 9	28.3	17.9	22 7	100.0	572	31.6
Completed secondary/higher	193	13 3	32.3	17.4	177	100.0	999	29.8
Work status								
Working for cash	14 3	13 3	32 1	18 5	21.8	100.0	840	31.8
Not working for cash	15.0	163	33 9	16 1	187	100.0	6015	29 7
Total	14.9	15.9	33.7	16.4	19.1	100.0	6855	29.9

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

Regional differentials in the length of the birth interval are evident in Table 3.7. In urban areas, especially in the Urban Governorates and in Lower Egypt, almost three in four births are born 24 months or longer after the previous birth. The median birth interval in urban areas is 33 months, more than 4 months longer than the rural median. Even in rural areas, however, two in three births are born 2 years or longer after the preceding birth.

Younger women have shorter birth intervals than older women. The median birth interval for women 15-19 (23 months) is below the minimum safe interval. Among older mothers, the median interval gradually increases with the age of the mother from 27 months among women 20-29 to 41 months among women age 40 and older. The median birth interval increases slightly with birth order and is one month longer in the case of male than female births. As expected, intervals following a child who died are shorter (24 months) than those following living children (30 months).

Surprisingly, the length of the birth interval does not vary greatly with the mother's educational or her work status.

# 3.4 Age at First Birth

The age at which childbearing begins has important demographic consequences for society as a whole as well as for the health and welfare of mother and child. In many countries, postponement of first births, reflecting an increase in the age at marriage, has contributed greatly to overall fertility decline. The proportion of women who become mothers before the age of 20 also is a measure of the magnitude of adolescent fertility, which is a major health and social concern in many countries.

Table 3.8 presents the distribution of Egyptian women by age at first birth, according to their current age. For women 25 years and over, the median age at first birth is presented in the last column of the table. The results show that the proportion of women having births before age 20 decreases with the age of the mother (see Figure 3.5). Among women 45-49, for example, nearly one in two became mothers before the age of 20, one in four gave birth before age 18, and 6 percent gave birth before age 15. Among women in the 25-29 cohort, in contrast, only around one-third had given birth before age 20, one in five gave birth before age 15.

Current age	Women with no			Age at (	īrst birth				Number of	Median age at first birth
	births	<15	15-17	18-19	20-21	22-24	25+	Total	women	
15-19	92.5	0.4	4.5	2.6	NA	NA	NA	100.0	3037	a
20-24	54.2	2.2	12.3	14.2	11.8	5.4	NA	100.0	2405	а
25-29	20.9	3.4	16.6	17.0	15.6	17.8	8.9	100.0	2324	21.7
30-34	9.6	3.3	18.2	18.9	17.0	16.4	16.5	100.0	1933	21.0
35-39	5.7	4.0	15.0	19.9	17.8	17.2	20.5	100.0	1754	21.2
40-44	5.7	5.5	17.7	169	16.6	16.5	212	100.0	1444	21.0
45-49	4.3	6.2	20.4	19.5	15.5	16.9	17.1	100.0	1119	20.5

<sup>a</sup>Less than 50 percent of the women in age group x to x+4 have had a birth by age x



The median age at first birth increases across age cohorts, from 20.5 years among women 45-49 years of age to 21.7 years among women 25-29. These changes parallel the increases in the median age at first marriage that took place during this period (see Chapter 9).

Table 3.9 compares the median age at entry into motherhood for different subgroups of the population and examines the trend across age cohorts for these groups. The measures are presented only for women 25-29 years to ensure that half of the women have already had a birth.

Residential and educational differentials are in the expected direction. The median age at first birth is highest in urban areas (22.8 years), particularly the Urban Governorates (23.1 years). In rural areas, the median age at first births is more than one year higher in Lower Egypt than in Upper Egypt (20.4 years and 19.3 years, respectively). The median age at first birth is inversely associated with the level of education, ranging from 19.7 years among women with no education to 21.8 years among those who completed primary or some secondary schooling.

#### Table 3.9 Median age at first birth

Median age at first birth among women age 25-49 years, by current age and selected background characteristics, Egypt 1992

Deeleessed			Current age			•
characteristic	25-29	30-34	35-39	40-44	45-49	Ages 25-49
Urban-rural residence						
Urban	23.8	22.8	22.6	22.6	21.4	22.8
Rural	20.3	19.7	20.0	19.9	19.6	19.9
Place of residence						
Urban Governorates	23.8	23.5	23.2	22.8	21.6	23.1
Lower Egypt	21.6	20.6	21.1	20.8	20.2	20.9
Urban	24.2	(22.0)	22.7	21 9	20.9	22.6
Rural	20.9	20.1	20.4	20.4	19.8	20.4
Upper Egypt	20.3	20.1	20.2	19.9	19.7	20.1
Urban	23.3	(22.3)	21.6	22.4	21 1	22.2
Rural	19.4	19.0	19.6	18.9	19 4	19.3
Education						
No education	19.5	19.3	19.8	19.9	19.8	197
Some primary	20.7	(20.0)	20.7	20.5	19.7	20.4
Primary through secondary	21.4	(21.4)	21.8	22.7	21.8	21.8
Completed secondary/higher	а	25.9	26.8	26.3	25.8	а
Work status						
Working for cash	а	25.2	25.3	25.7	24.0	а
Not working for cash	21.1	20.3	20.5	20 5	20.1	20.5
Total	21.7	21.0	21.2	21.0	20.5	21.2

the 20-24 cohort could not be determined because half of the women have not yet had a birth. <sup>a</sup>Medians were not calculated for these cohorts because less than 50 percent of women in the age group x to x+4 have had a birth by age x.

# 3.5 Teenage Pregnancy and Motherhood

Table 3.10 shows the percentage of women age 15-19 who are mothers or pregnant with their first child. This statistic is of major social and health concern because of its association with higher morbidity and mortality for both mothers and their children. In addition, teenage pregnancy has a substantial limiting effect on the educational opportunities of young mothers.

The overall level of teenage childbearing is 10 percent, of which 8 percent have already given birth and 2 percent are pregnant with their first child. Among those teens who have given birth, two-thirds had their first child before age 18 (see Table 3.8).

#### Table 3.10 Teenage pregnancy and motherhood

Percentage of women 15-19 who are mothers or pregnant with their first child, by selected background characteristics, Egypt 1992

	Percentag	e who arc:	Percentage who have		
Background characteristic	Mothers	Pregnant with first child	begun child- bearing	Number of women	
Ασο					
15	04	0.8	12	707	
16	1.2	2.6	3.9	695	
17	5.0	1.1	6.1	671	
18	10.2	2.6	12.8	697	
19	17.1	3.7	20.8	654	
Urban-rural residence					
Urban	3.8	1.3	5.1	1304	
Rural	10 5	3.4	13.9	1691	
Place of residence					
Urban Governorates	3.8	1.2	5.0	561	
Lower Egypt	5.7	2.5	8.3	1346	
Urban	3.4	1.4	4.8	346	
Rural	6.5	2.9	9.4	1002	
Upper Egypt	12.3	3.2	15.5	1047	
Urban	4.6	1.6	6.1	352	
Rural	16.1	4.0	20.1	700	
Education					
No education	16.5	5.0	21.4	710	
Some primary	10.5	4.4	14.9	344	
Primary through secondary	4.2	0.9	5.1	1589	
Completed secondary/higher	• 1.9	2.0	3.9	425	
Work status					
Working for cash	4.1	0.0	4.1	97	
Not working for cash	7.6	2.5	10.1	2942	
Total	7.5	2.4	9.9	3037	

Significant residential differences in the level of teenage childbearing are observed in the EDHS results. The level in rural areas (14 percent) is almost three times the level in urban areas (5 percent). By place of residence, the percentage varies from only 5 percent in Urban Governorates to 20 percent in rural Upper Egypt (see Figure 3.6).

The level of teenage fertility is also strongly associated with education and work status. The lowest levels are observed for women who completed secondary school or higher (4 percent) and those who are working (4 percent). The inverse relationship between education level and teenage fertility is very evident. Women with no education and those who drop out before completing the primary level show the highest levels of teenage childbearing (21 percent and 15 percent, respectively).



Table 3.11 shows the distribution of teenagers according to the number of children ever born. Generally, teenagers who have given birth have had only one child. Only one in five teenage mothers has had two or more births. As expected, the likelihood that a teenager will have given birth increases with age, peaking at 22 percent among those 19 years of age. The likelihood that a teenage mother will have had more than one birth also increases with age, reaching a level of 30 percent among ninetecn-ycar-olds.

Table 3.11	Children born to	teenagers				
Percent distri	ibution of wome	in 15-19 by	number of	children eve	r born (CE)	3), Egypt
	chi	Number of Idren ever b	orn		Mean number Number of of	
Age	0	1	2+	Total	CEB	women
15	99.6	0.4	0.0	100.0	0 00	690
16	98.7	1.3	0.0	100.0	0.01	643
17	94.5	4.9	0.6	100.0	0.06	608
18	87.9	9.9	2.1	100.0	0.15	586
t9	78.1	15.2	6.7	100.0	0 30	509
Total	92.5	5.8	1.7	100.0	0.09	3037
# **CHAPTER 4**

# KNOWLEDGE, ATTITUDES, AND EVER USE OF FAMILY PLANNING

Knowledge of family planning methods and places to obtain them are crucial elements in the decision of whether and which methods to use. A positive attitude about family planning is an additional prerequisite to use. Data collected in the EDHS on knowledge of methods and sources, the channels through which Egyptian women receive information about family planning, and attitudes about the use of family planning methods are presented in this chapter. The chapter also looks at the level of ever use of family planning and, for ever users, the circumstances surrounding the first use of family planning, including the first method used, the source that provided this method, and the motivation for using (i.e., to space or limit).

# 4.1 Knowledge of Family Planning Methods and Source

The level of knowledge of family planning methods was measured in two ways:

- 1. Respondents were first asked an open-ended question about which contraceptive methods they had heard of. All methods named in response to this question were recorded as spontaneously recognized (unprompted knowledge).
- 2. When a respondent failed to mention any of the methods listed in the questionnaire, the interviewer would describe the method and ask if the respondent had heard about it. All methods recognized by the respondent after the method was described were recorded as known after probing (prompted knowledge).

Information on knowledge was collected for eight modern methods (the pill, IUD, injection, Norplant, vaginal methods (foam, jelly, cream, sponge or diaphragm), the condom, female sterilization, and male sterilization), and three traditional methods (periodic abstinence, withdrawal, and prolonged breastfeeding).<sup>1</sup> In addition, provision was made in the questionnaire to record any other methods named spontaneously by respondents.

In this analysis, only the overall levels of knowledge are presented, i.e., respondents are classified as knowing a method regardless of whether they recognized it spontaneously or after hearing it described. Thus, knowledge of a family planning method in the 1992 EDHS as in all other DHS surveys is defined simply as having heard of a method. No questions were asked to clicit depth of knowledge, such as how a specific method is used.

Table 4.1 indicates that knowledge of at least one method is practically universal among ever-married women. Moreover, virtually all women who recognized at least one method were familiar with a modern method. Among modern methods, the pill (99 percent) and IUD (99 percent) are the most widely known methods, followed by injection (81 percent). The proportion of ever-married women knowing about female sterilization is 70 percent, and 54 percent know about the condom. The least recognized modern method, male sterilization, was known by only 13 percent of ever-married women. The percentage of women who recognized Norplant (46 percent) seems high, particularly since Norplant was not approved for general use

<sup>&</sup>lt;sup>1</sup>Egypt and Jordan are the only two DHS countries that included prolonged breastfeeding in the list of family planning methods on which respondents were prompted.

Table 4.1 Knowledge of family planning methods and source for methods

Percentage of ever-married women and currently married women who know specific family planning methods and who know a source (for information or services), by specific methods, Egypt 1992

	Клож	method	Клож а	a source
Family planning method	Ever- married women	Currently married women	Ever- married women	Currently married women
Any method	99.5	<del>99</del> .6	92.0	92.9
Any modern method	99.4	99.5	92.0	92.9
Modern method				
Pill	99.3	99.4	89.5	90.4
IUD	98.7	98.9	86.4	87.5
Injection	81.1	81.8	59.2	60.1
Norplant	46.0	47.3	29.5	30.3
Diaphragm/foam/jelly	36.8	37.5	29.4	30.0
Condom	53.7	55.0	45.7	46.9
Female sterilization	70.0	70.6	59.9	60.6
Male sterilization	12.5	12.8	9.5	9.7
Any traditional method	77.0	77.6	19.7	20.2
Periodic abstinence	31.2	32.0	19.7	20.2
Withdrawal	27.6	28.4	NA	NA
Prolonged breastfeeding	71.8	72.3	NA	NA
Other traditional methods	2.4	2.5	NA	NA
Number of women	9864	9153	9864	9153

at the time of the survey. However, there was considerable press coverage of Norplant during the period immediately prior to EDHS, which may help to explain the relatively high level of recognition of the method. Traditional methods are less likely to be recognized than modern methods (77 percent and 99 percent, respectively). The most widely known traditional method is prolonged breastfeeding, which is recognized by 72 percent of women.

With respect to knowledge of a source for modern methods, most women (92 percent) are aware of a place where they can obtain family planning services. There is some variation in knowledge of source by method: ever-married women are most likely to know about a source for the pill (90 percent) and IUD (86 percent) and least likely to know about male sterilization (10 percent) and vaginal methods (29 percent).

### Trends in Knowledge of Methods and Sources

Using information from three earlier surveys as well as the 1992 EDHS,<sup>2</sup> Table 4.2 shows the upward trend in the level of contraceptive knowledge during the 1980s. Overall, the percentage of evermarried women knowing any method increased from 90 percent in 1980 to almost 100 percent in 1992. Considering individual methods, the largest increase is observed in the knowledge of injection; only 16 percent had heard about injection in 1980 compared to 81 percent in 1992. There also has been a significant increase in knowledge in the case of the condom, vaginal methods, female sterilization, and the IUD. The smallest increase is in pill knowledge, which was already high in 1980 (89 percent).

#### Table 4.2 Trends in knowledge of family planning methods and source

Percentage of ever-married women who know specific family planning methods and who know a source (for family planning information or services), Egypt, 1992 EDHS, 1988 EDHS, 1984 ECPS and 1980 EFS

		Клож	method		Know	source
Family planning method	EDHS 1992	EDHS 1988	ECPS 1984	EFS 1980	EDHS 1992	EDH8 1988
Any method	99.5	98.0	85.4	89.7	<b>92</b> 0	95.2
Any modern method	99.4	97.8	85.2	-	92.0	95.2
Modern method						
Pill	99.3	97.4	84.9	89.4	89.5	93.9
IUD	98.7	93.3	74.9	69.6	86.4	87.2
Injection	81.1	60.5	35.3	15.6	59.2	47.9
Vaginal methods	36.8	39.6	27.8	13.8	29.4	36.6
Condom	53.7	43.3	21.5	25.9	45.7	40.2
Female sterilization	70.0	53.5	20.5	42.5	59 9	50.2
Male sterilization	12.5	9.6	5.3	6.0	95	8.4
Any traditional method	77.0	67.3	30.0	NA	19.7	20.0
Safe period	31.2	22.1	11.3	14.0	19 7	20.0
Withdrawal	27.6	13.4	6.9	9.8	NA	NA
Prolonged breastfeeding	71.8	64.8	24.7	NA	NA	NA
Other traditional methods	2.4	4.6	1.3	NA	NA	NA
Number of women	9864	8911	10013	8788	9864	8911

<sup>&</sup>lt;sup>2</sup>Differences in the probing techniques used in the four surveys may have some effect on the observed trends. In all of the surveys, the respondent was first asked to name all of the methods about which she had heard, and the interviewer then probed to find out whether the respondent recognized methods that she had not spontaneously mentioned. In the ECPS, the interviewer used only the name when probing while, in the EFS and the EDHS, both the name of the method and a brief description were used.

Table 4.2 also shows the change in the proportion knowing a source between 1988 and 1992.<sup>3</sup> Comparing the 1992 data, there has been a small decrease in the proportion of women reporting knowledge of a source both for any method and for any modern method. This change is largely attributable to decreases in the proportions reporting knowledge of a source for the pill and vaginal methods. Source knowledge increased for most other methods, including injection, condom, female sterilization, and male sterilization.

#### Differentials in Knowledge of Methods and Sources

Table 4.3 presents the percentage of currently married women who know any method of contraception and any modern method and the percentage who know a source of a modern method by back-

Table 4.3 Knowledge of family planning methods and source for methods by background characteristics

Percentage of currently married women who know any family planning method and any modern method and who know a source (for family planning information or services), and the mean number of methods and modern methods known, by selected background characteristics, Egypt 1992

Background characteristic	Know any method	Mean no. of methods known	Know a modern method	Mean no of modern methods	Know a source for modern method	Number of women
,				<del>.</del>		
Age						
15-19	98.2	4.9	97.9	4.1	82.8	415
20-24	99.6	5.8	99.6	46	914	1324
25-29	99.7	6.5	99.7	51	93.6	1956
30-34	100.0	6.8	99.9	5.3	95 5	1743
35-39	99.6	6.5	99.6	5.1	94.1	1582
40-44	99.4	6.7	99.4	5.3	93.3	1231
45-49	99 4	6.3	99.3	49	90.5	902
Urban-rural residence						
Urban	99.8	7.3	99.8	5.6	97.9	4281
Rura!	99.4	5.6	99.3	4.5	88.5	4873
Place of residence						
Urban Governorates	99.9	75	99.9	5.7	987	2201
Lower Feyn	100.0	6.5	100.0	51	97.6	3746
Urban	100.0	7 1	100.0	5 5	991	1120
Rural	100.0	6.2	100.0	49	97.0	2626
Upper Fount	00.0	55	08.8	4.5	83.4	1207
Urban	00.5	5.5	90.0	4.J 5.A	047	960
Rural	99.7	4,9	98.5	41	78.6	2247
P.J						
Net	00.2		00.1		077	1262
No coucation	99.3	5.4	99.1	44	81.1	4363
Some primary	99.8	6.3	99.8	21	95.2	1913
Primary through secondary	100.0	7.1	100.0	5.5	98 1	1010
Completed secondary/higher	100.0	83	100.0	6.1	99.7	1867
Work status						
Working for cash	100.0	7.9	99.9	5.9	98.1	1317
Not working for cash	99.5	6.1	99.5	4.9	92.0	7836
Total	99.6	6.4	99.5	5 0	92 9	9153

<sup>&</sup>lt;sup>3</sup>The 1988 EDHS differed somewhat from the 1992 EDHS in the manner in which the information on knowledge of source was obtained. In 1988 EDHS, a woman who reported knowing about a method was asked where would she go to obtain the method if she wanted to use it, while in the 1992 EDHS, the question was: Do you know where a person could go to get (Method)?

ground characteristics. Because knowledge of any family planning method or any modern method is almost universal in Egypt, the table also includes the mean number of methods known and the mean number of modern methods known. Differentials in the proportions knowing any method, any modern method and a source for a modern method are generally minimal. Of most significance is the fact that nearly one-fifth of women living in rural areas in Upper Egypt who know about at least one modern method are not able to name a place where a person can obtain a method.

There are significant differences in the mean number of methods known across the subgroups shown in Table 4.3. By age, there is a difference of almost two methods in the mean number of methods known between women in the 15-19 age group, where the mean is lowest (4.9 methods) and the 30-34 age group, where the mean is highest (6.8 methods). A marked difference in the mean number of methods known is evident between urban and rural areas (7.3 methods and 5.6 methods, respectively). Women from rural Upper Egypt are particularly limited in the number of methods that they recognize; the mean number of the methods known among women from rural Upper Egypt is 4.9 compared to 6.2 methods for women in rural Lower Egypt (Figure 4.1).



Education level clearly is related to the number of methods recognized by a woman; the mean number of methods known varies from 5.4 among women with no education to 8.3 among women with at least a secondary education. There is a nearly two-method difference between the mean for women who are not working for cash and the women who are working for cash (6.1 methods and 7.9 methods, respectively).

# 4.2 Exposure to Family Planning Information

Activities to inform and cducate couples about use of contraception are one of the major components of the Egyptian family planning program. The EDHS obtained information on a number of aspects of women's exposure to family planning information, including the first source from which information was obtained, recent exposure to family planning messages broadcast on radio and television and of articles on family planning in newspapers or magazines, and attendance at community meetings in which family planning or Egypt's population problem were discussed.

#### First Source of Family Planning Information

The data on the first source of information about family planning is very useful to understand the avenues through which women are initially exposed to the concept of family planning. Table 4.4 shows the distribution of ever-married women by the source from which they first heard about family planning according to residence. Television clearly serves as the primary source of information for the majority of women; 70 percent of women mentioned that they first heard about family planning on television. Friends and relatives (other than the husband) were the first source for family planning information for 22 percent of the women. Relatively small percentages mentioned other sources, including the radio (1 percent), the raiyda or other family planning outreach workers (2 percent), or public/private health personnel (2 percent).

#### Table 4.4 First source of family planning information

Percent distribution of ever-married women by source from which they first heard about family planning, according to urban-rural residence and place of residence, Egypt 1992

First			Urban Gover-	1	lower Egy	рι	τ	Јррет Едуј	pt	
source	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Television	76.4	65.0	78.9	73.7	79.5	71.3	60.3	67.0	57 5	70.3
Radio	1.0	1.2	1.1	1.1	0.6	1.3	1.1	1.2	10	1.1
Print media	0.8	0.1	0.8	0.4	0.7	0.2	0.3	0.9	0.0	0.4
Spouse	0.2	0.3	0.2	0.3	02	0.3	0.3	0.2	0.3	0.3
Friends/relatives	167	26.0	159	19.9	136	22.6	277	22.4	30 0	21.7
Government doctor/clinic	1.6	1.1	1.2	1.1	1.5	0.9	1.7	2.6	1.4	1.3
Private doctor/clinic	0 8	02	0.5	0.4	1.0	02	0.5	10	0.3	0.5
Raiyda/other family										
planning worker	1.3	34	1.1	2.1	1.1	25	3.7	21	44	24
Community activity	0.3	0.3	0.1	0.3	0.5	0.2	0.4	0.6	03	0.3
Other	0.9	1.7	0.2	0.7	1.4	0.5	2.7	1.9	3.1	13
Never heard about										
family planning	0.0	0.9	0.0	01	0.0	0.2	1.2	0.1	17	05
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100 0	100.0	100.0
Number	4596	5268	2357	4067	1210	2857	3440	1029	2411	9864

The preeminence of television as the first source of family planning information is observed in all areas. However, rural women, particularly those living in Upper Egypt were somewhat less likely to hear about family planning for the first time on television and somewhat more likely to hear for the first time from friends or relatives than other women.

# Sources Influencing Women to Seek Family Planning Information

The EDHS collected information about specific sources or events that women perceived as influencing them to seek more information about family planning. Table 4.5 summarizes this information by residence for ever-married women knowing about family planning. Again, TV spots and friends or relatives are the main influences on a woman's decision to seek more information about family planning (51 percent and 44 percent, respectively). Between 10 and 15 percent of women mention private doctors/clinics, government doctors/clinics and raiydas or family planning workers as influencing them to seek information about family planning. Only around 3 percent mentioned community activities (e.g., meetings).

### Table 4.5 Sources influencing women to seek information about family planning

Percentage of ever-married women knowing about family planning who indicated various sources influenced them to seek information about family planning, according to urban-rural residence and place of residence, Egypt 1992

Sources influencing			Urban Gouar	L	.ower Egy	րւ	ι	Jpper Egyj	pt	
seeking behavior	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
TV spots	54.2	48.4	51.9	56.9	60.8	55.2	43.7	51.4	40.4	51.1
Friends/relatives	44.3	44.0	45.3	51.0	49.9	51.5	35.3	35.3	35.3	44.2
Government doctor/clinic	14.2	9.3	18.9	12.1	11.9	12.2	6.0	6.3	5.9	116
Private doctor/clinic	18.2	10.2	20.5	14.0	18.0	12.4	9.3	13.1	7.7	13.9
Raiyda/other family										
planning worker	8.8	11.3	9.2	10.5	9.0	11.2	10.2	7.5	11.4	10.1
Community activity	2.6	2.6	1.9	3.1	3.7	2.8	2.4	2.8	2.3	2.6
Other	31.2	22.8	32.1	26.0	29.4	24.6	23.9	31.3	20.7	26.7
Number of women	4596	5268	2357	4067	1210	2857	3440	1029	2411	9864

# **Exposure to Messages through Radio and Television**

Table 4.6 presents the percentage of ever-married women who had heard a message about family planning on broadcast media (radio or television) during the month prior to the interview. As might be expected given the wider coverage of television (see Chapter 2), family planning messages broadcast on the television are more successful in reaching an audience than radio messages. Almost three in four women saw a message on television in the month before the survey compared to only one in five women who had listened to a family planning message on the radio. Moreover, virtually all women who had listened to a radio message about family planning also had seen a television message. Around one-quarter of women reported that they had not listened to a radio message nor seen a television message.

Recent exposure to family planning messages through broadcast media varies by residence. Rural women are less likely to have seen or listened to a message than urban women (65 percent and 86 percent, respectively). By place of residence, the proportion who had been exposed to a family planning message during the month before the interview varied from a high of 89 percent in the Urban Governorates to 61 percent in Upper Egypt. Almost half (46 percent) of the women in rural Upper Egypt had not seen or listened to a family planning message compared to one-quarter of the women in rural Lower Egypt (see Figure 4.2).

# Table 4.6 Exposure to family planning messages on radio and television

Percent distribution of ever-married women by whether they have heard a family planning message on radio or on television in the month preceding the survey, according to selected background characteristics, Egypt 1992

		Heard fa on ra	mily planning dio or on telev	message vision			N7 1
Background characteristic	Neither	Radio only	Television only	Both	Missing	Total	Number of women
Age							
15-19	28.9	0.8	53.7	16.5	0.0	100.0	423
20-24	25.5	1.1	53.7	19.7	0.1	100.0	1362
25-29	23.4	0.7	53.0	22.8	0.1	100.0	2013
30-34	23.0	1.1	55.4	20.5	0.1	100.0	1838
35-39	24.8	1.6	53.4	20.2	0.0	100.0	1709
40-44	27.0	0.7	53.7	18.4	0.2	100.0	1411
45-49	28.8	0.8	50.1	20.3	0 0	100.0	1108
Urban-rural residence							
Urban	14.2	0.8	59.3	25 7	0.1	100.0	4596
Rural	34.8	1.2	48.3	15.6	0.1	100.0	5268
Place of residence							
Urban Governorates	11.5	0.9	63.0	24.6	0.0	100.0	2357
Lower Egypt	21.7	12	52.3	24.8	0.0	100.0	4067
Urban	13.0	0.5	57.2	29.2	0.0	100.0	1210
Rural	25.4	1.5	50.2	22.9	0.0	100.0	2857
Upper Egypt	38.7	0.9	48.1	12.1	0.2	100.0	3440
Urban	21.6	1.1	53.2	23.8	0.3	100.0	1029
Rural	46.0	0.8	46.0	7.1	0.1	100.0	2411
Education							
No education	35.7	1.1	51.6	11.5	0.1	100.0	4771
Some primary	23.6	1.3	53.2	21.8	0.1	100.0	2078
Primary through secondary	11.6	0.6	59.2	28.6	0.0	100.0	1093
Completed secondary/higher	8.7	07	54.7	35.9	0.1	100.0	1922
Work status							
Working for cash	18.1	0.7	53.4	27.8	0.1	100.0	1464
Not working for cash	26.5	1.1	53.4	19.0	0.1	100 0	<b>840</b> 0
Use of contraception							
Current user	16.2	1.0	58.4	24.3	0.1	100.0	4310
Past user	23.5	1.3	52.7	22.4	0.1	100.0	2064
Never user	37.4	0.8	47.6	14.1	0.1	100.0	3490
Total	25.2	1.0	52.4	00.7	<b>.</b> .	100.0	0044



Exposure to family planning messages varies directly with a woman's educational level. Women who work for cash also were somewhat more likely to report recent exposure to a family planning message than other women.

Finally, women who were current users of family planning were more likely to report that they had seen or heard a message about family planning recently than were past users or never users. It is not clear whether the relationship between exposure to family planning messages and user status is causal or not. Because they are practicing family planning, current users may simply be more aware of messages on the topic than other women.

# Exposure to Messages through Print Media/Community Meetings

Women were asked if they had read an article about family planning in a newspaper or magazine during the month before the interview. They also were asked if they had attended a community meeting at which family planning or population problems were discussed during the past year. Responses to these questions are presented in Table 4.7.

Few women receive information about family planning through newspapers or magazines. Overall, only about one in twenty women said that they had read an article about family planning; this represents about 14 percent of all women who were literate (data not shown in table). Only a small minority (one in seventeen women) also report attending a community meeting at which family planning or Egypt's population problems were discussed. As expected, women in rural areas, especially in Upper Egypt, were less likely to have read articles on family planning than other women. Exposure to family planning information through community meetings was more common among urban than rural women and rural women in Upper Egypt were the least likely to report attendance at such meetings.

Higher educational attainment and work in the cash economy were associated with exposure to family planning messages through newspapers or magazines or at community meetings. There is also a small but definite relationship between exposure to information through print media and community meetings and experience with the use of family planning methods.

# 4.3 Attitudinal Indicators

After acquiring knowledge, the next step in family planning adoption is to have a positive attitude about the use of contraceptive methods. Attitudinal data were collected by asking women in the sample whether, in general, they themselves approved of a couple using family planning and what they thought was their husband's opinion on the subject. In addition, respondents were asked about their attitude regarding the use of specific methods including the pill, IUD, condom, female sterilization, male sterilization and withdrawal.

# Attitudes about Use of Family Planning Methods

Table 4.8 shows the level of approval of family planning among currently married non-sterilized women who know at least one contraceptive method according to background characteristics. The table also looks at the extent to which these women say their attitude parallels that of their husband.<sup>4</sup> Over 90 percent of non-sterilized married women approve of the use of family planning, and only 5 percent disapprove. Most of the women also believe that their husband approves. Overall, according to the woman, three of four couples approve of the use of family planning. Among couples in which the wife reports differences of opinion, the husband-and not the wife-is more often

# Table 4.7 Exposure to family planning messages through print media/community meetings

Percentage of ever-married women who read an article about family planning in a newspaper or magazine during the month before the interview, and the percentage who attended a community meeting at which family planning/Egypt's population problem was discussed during the past year, according to selected background characteristics, Egypt 1992

Background	Read article on family	Attended	Number of
characteristic	planning	meeting	women
Age			
15-19	36	4.0	423
20-24	5.3	5.0	1362
25-29	6.1	7.0	2013
30-34	6.9	8.0	1838
35-39	5.8	7.0	1709
40-44	5.0	5.0	1411
45-49	4.3	5.0	1108
Urban-rural residence			
Urban	91	9.0	4596
Rural	2 6	4.0	5268
Place of residence			
Urban Governorates	8.8	10.0	2357
Lower Egypt	52	4.0	4067
Urban	10.2	6.0	1210
Rural	3.1	4.0	2857
Upper Egypt	3.9	6.0	3440
Urban	8.6	9.0	102 <b>9</b>
Rural	2.0	4.0	2411
Education			
No education	0.2	3.0	47 <b>7</b> 1
Some primary	2 1	4.0	2078
Primary through seconda	ıry 9.1	7.0	1093
Completed secondary/hig	gher 20.8	17.0	1922
Work status			
Working for cash	17.5	17.0	1464
Not working for cash	3.6	4 0	8400
Contraceptive use			
Current user	7.6	8.0	4310
Past user	5.4	6,0	2064
Never user	3.3	4.0	3490
Total	5.6	6.0	9864

reported to disapprove of family planning. Only 5 percent of women disapprove of family planning use while 13 percent of husbands are perceived by their wives to disapprove.

<sup>&</sup>lt;sup>4</sup>See Chapter 13 for a comparison with the husbands' actual attitudes.

#### Table 4.8 Attitudes toward family planning

Percent distribution of currently married, non-sterilized women who know of a family planning method by their attitude toward family planning, and their perception of their husband's attitude, according to selected background characteristics, Egypt 1992

		Woman	approves	Woman	disapproves				
Background characteristic	Both approve	Husband dis- approves	Husband's attitude unknown	Husband approves	Husband's attitude unknown	Both disapprove	Other	Total	Number of women
Age									
15-19	65.5	6.4	12.4	1.3	1.8	6.5	6.1	100.0	408
20-24	72.6	12.0	6.5	1.3	0.6	3.3	3.7	100.0	1319
25-29	76.9	10.8	4.6	1.2	0.6	2.5	3.4	100.0	1948
30-34	77.5	11.1	4.2	1.1	0.4	2.5	3.2	100.0	1730
35-39	79.8	8.6	3.4	1.1	0.4	3.0	3.8	100.0	1552
40-44	79.1	8,6	3.6	1.2	1.0	2.8	3.7	100.0	1192
45-49	73.1	7.7	7.3	1.0	1.1	3.7	6.1	100.0	865
Urban-rural residence									
Urban	83.3	8.6	3.2	0.8	0.1	1.7	2.2	100.0	4220
Rural	70.1	11.0	6.8	1.4	1.1	4.2	5.3	100.0	4794
Place of residence									
Urban Governorates	85.4	6.8	2.7	1.0	0.0	1.9	2.1	100.0	2168
Lower Egypt	79.9	10.0	5.2	0.9	0.3	1.3	2.4	100.0	3691
Urban	83.0	10.5	3.4	0.2	0.2	0.8	2.0	100.0	1104
Rural	78.5	9.8	6.0	1.3	0.3	1.5	2.6	100.0	2587
Upper Egypt	65.8	11.8	6.6	1.5	1.6	5.8	6.8	100.0	3155
Urban	78.9	10.3	4.0	1.1	0.5	2.5	2.8	100.0	948
Rural	60.2	12.5	7.7	1.6	2.1	7.2	8.6	100.0	2207
Level of education									
No education	69.9	10.6	7.0	1.2	1.2	4.2	5.9	100.0	4270
Some primary	78.7	9.9	4.7	1.2	0.4	2.4	2.7	100.0	1892
Primary through secondary	82.5	9.1	2.8	0.5	0.0	2.4	2.6	100.0	994
Completed secondary/higher	85.2	8.5	2.2	1.5	0.1	1.2	1.1	100.0	1858
Work status									
Working for cash	75.1	10.0	5.5	1.1	0.7	3.3	4.2	100.0	7709
Not working for cash	83.3	9.1	2.4	1.4	0.4	1.1	2.3	100.0	1305
Contraceptive use									
Current user	89.1	7.4	1.6	0.8	0.0	0.3	0.8	100.0	4207
Past user	80.2	10 5	3.8	1.6	0.2	1.5	2.2	100.0	1815
Never user	55.9	13.0	10.8	1.4	1.9	7.8	9.3	100.0	2992
Total	76.3	9.9	5.1	1.2	0.7	3.0	3.9	100.0	9014

The likelihood that a woman will report that both her husband and she approve of family planning increases with age, reaching a peak of 80 percent among women 35-39 before declining to 73 percent among older women. The level of approval varies between urban and rural areas; 83 percent of couples are reported by the woman to approve of the use of family planning compared to 70 percent in rural areas (see Figure 4.3). Among rural women, there are marked differences by place of residence in the proportion who report that both they and their husbands approve of the use of family planning; 79 percent of women in rural Lower Egypt say both they and their husbands approve compared to only 60 percent among women in rural Upper Egypt (see Figure 4.3). In rural Upper Egypt, women are almost twice as likely to say that their husbands disapprove of family planning as they are to say that they themselves disapprove (20 percent and 11 percent, respectively).



Approval of family planning is positively related to educational level, and it is somewhat more common among working women than among other women. Significantly, women who have never used family planning are likely to be more conservative in their attitudes than other women. Among never users, only 56 percent report that both they and their husbands approve of family planning compared to 80 percent of women who used in the past and 89 percent of current users.

# **Religion and Use of Family Planning**

Women also were asked about whether they thought that religion allows or forbids the use of family planning. Around three in four women believe that there are no religious prohibitions against family planning, and only 15 percent thought that religion definitely forbids the use of family planning (see Table 4.9). The proportion of women believing that religion allows the use of family planning varies by residence. Women in rural Lower Egypt are the most likely to say religion allows the use of family planning and women in rural Upper Egypt were the least likely to think that family planning use was allowed by religion (80 percent and 69 percent, respectively).

#### Table 4.9 Belief that religion allows or forbids family planning

Percent distribution of ever-married women according to whether they believe religion allows or forbids family planning by urban-rural residence and place of residence, Egypt 1992

Palazion's			Urban Gowar	1	Lower Egy	րì	I	Jpper Egy	pi	
position	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Allows	78.6	74.9	77.9	79. <b>9</b>	79.9	80.0	71.8	78.6	68.9	76.6
Forbids	15.8	14.7	16.5	14.6	15.6	14.2	15.2	14.7	154	15.2
Don't know	5.6	10.4	5.6	5.5	4.6	5.9	13.1	6.7	158	8.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1 <b>00</b> 0
Number	4596	5268	2357	4067	1210	2857	3440	1029	2411	9864

## Attitudes about Use of Specific Family Planning Methods

Currently married women were asked if they agree or disagree with the use of specific family planning methods; the responses to the question are shown in Table 4.10. As expected, the level of approval was highest in the case of the IUD (79 percent), followed by pills (77 percent). The method mix among users in Egypt is still heavily dominated by these two methods. As for other methods, the proportions expressing approval are much lower; condom (22 percent), female sterilization (17 percent), withdrawal (8 percent) and male sterilization (2 percent).

Table 4.10Approval of uPercent distribution of curfamily planning methods,	ise of specific rently married Egypt 1992	<u>family pla</u> women b	nning methods y approval of I	the use of s	pecific		
	Appro	Approves of use of method					
Family planning method	Yes	No	Don't know/ undecided/ missing	Does not know method	Total		
Pill	76.9	17.9	4.6	0.6	100.0		
	78.7	15.2	5.0	11	100.0		
Female sterilization	16.8	49.1	47	29.4	100.0		
Condom	21.6	25.9	7.5	45.0	100.0		
Male sterilization	2.2	9.3	1.2	87.2	100.0		
Withdrawal	8.1	16.6	3.7	716	100.0		

# 4.4 Ever Use of Family Planning Methods

The 1992 EDHS collected data on the level of ever use of family planning methods. A number of issues relating to method adoption including the first method used and the service provider also were investigated.

## Levels and Trends in Ever Use

The EDHS findings indicate that 65 percent of ever-married women and 67 percent of currently married women have used a family planning method at some time (see Table 4.11). Virtually all women who have ever used a method have experience with modern methods. The pill is the most widely adopted modern method among currently married women (45 percent), followed closely by the IUD (42 percent). Only 8 percent have tried the condom and less than 5 percent have ever used any other modern method (injection, vaginal methods, and female sterilization). The level of ever use of traditional methods is low in Egypt (10 percent).

### Table 4.11 Ever use of family planning

Percentage of ever-married women and of currently married women who have ever used any family planning method, by specific method and age, Egypt 1992

Age	Any	Any modem meth- od	ı Pıll	IUD	Injec- tion	Nor- plant	Dia- phragn foam/ jelly	) Condom	Female steri- liza- tion	Male steri- liza- tion	Any trad. method	Pen- odic absu- nence	p With- drawal	rolonge breast- feed- ing	ed Other	Number of women
						EVE	R-MAR	RIED W	OMEN							
15-19	19.8	18.5	9.7	11.3	0.5	0.0	0.3	11	0.0	0.0	1.4	0.0	0.0	1.3	0.0	423
20-24	43.7	41.6	22 0	28.2	0.5	0.0	0.4	18	0.0	0.0	4.3	0.7	1.4	2.4	0.2	1362
25-29	65.6	63.7	38.1	42 8	1.9	0.1	1.7	5.6	0.1	0.0	7.0	2.2	1.6	3.9	0.2	2013
30-34	76.0	74.0	51.9	50.2	3.3	0.3	3.2	7.9	0.7	0.0	102	3.6	2.4	5.5	0.5	1838
35-39	74.7	73.3	54.3	46.7	4.0	0.1	4.3	10. <b>2</b>	14	0.0	106	4.0	3.9	5.1	0.2	1709
40-44	70.9	69.2	54.7	40.7	4.8	0.0	7.8	12.0	2.4	0.0	14 4	5.1	3.7	7.4	1.0	1411
45-49	63.3	62.1	52.2	29.7	3.3	0.4	6.2	9.5	32	0.1	14.1	6.5	39	6.9	0.9	1108
Total	64.6	62.9	44.0	39.7	2.9	0.1	3.6	7.5	1.1	0.0	9.5	34	2.6	49	0.4	9864
					CU	RREN	TLY N	(ARRIE	D WON	AEN						
15-19	20.2	18.8	9.9	11.5	0.5	0.0	0.4	1.2	0.0	0.0	14	0.0	0.0	1.4	0.0	415
20-24	44.8	42.6	22.5	29.0	0.6	0.0	0.4	1.8	0.0	0.0	4.4	0.7	1.5	2.5	0.2	1324
25-29	66.7	64.8	38.7	43.8	2.0	0.1	1.7	5.8	0.1	0.0	72	2.3	17	4.0	0.2	1956
30-34	78.0	76.1	53.1	51.9	3.5	0.3	3.4	8.2	0.8	0.0	10.4	3.7	24	5.6	0.5	1743
35-39	77.9	76.4	56.4	49.2	4.2	0.1	4.4	10.8	1.5	0.0	11.1	4.1	40	5.5	0.3	1582
40-44	75.4	73.8	58 0	44.1	5.3	0.0	8.2	13.5	2.6	0.0	15.7	5.6	42	7.8	1.1	1231
45-49	68.7	67.5	56.5	33.2	3.9	0.5	7.0	11.1	3.6	0.2	15.7	7.5	4.5	7.6	1.1	902
Total	66.9	65.1	45.2	417	3.0	0. <b>2</b>	3.7	7.9	1.1	0.0	9.8	35	2.7	5.1	0.5	9153

Across age groups, the highest level of ever use is observed for currently married women 30-39 (78 percent) and the lowest level for women 15-19 (20 percent). Women age 30 and older are more likely to have had experience using the pill while, among younger women, experience with the IUD is more common than experience with the pill. Older women also are more likely than younger women to have ever used a traditional method.

A comparison of the 1992 EDHS findings with the results of earlier surveys is presented in Table 4.12. The level of ever use among ever-married women increased by around 8 percentage points between the 1980 and 1984 (from 40 percent to 48 percent) and then increased again by almost 10 percentage points between 1984 and 1988. By 1992, the level of ever use had reached 65 percent.

Table 4.12 Trends in ever use of family planning methods

Percentage of ever-married women 15-49 who have ever used a family planning method by specific methods, Egypt, 1992 EDHS, 1991 EMCHS, 1988 EDHS, 1984 ECPS and 1980 EFS

		Eve	er used met	thod	
Family planning method	EDHS 1992	EMCHS 1991 <sup>a</sup>	EDHS 1988	ECPS 1984 <sup>b</sup>	EFS 1980 <sup>c</sup>
Any method	64.6	63.2	57.4	48.2	39.8
Any modern method	62.9	59.8	55.9	46.7	38.9
Modern method					
Pill	44.0	44.7	46.0	41.0	35.8
IUD	39.7	32.3	25.6	14.8	8.7
Injection	2.9	-	2.3	1.1	0.5
Vaginal methods	3.6	-	5.3	3.9	1.2
Condom	7.5	-	8.6	3.4	5.0
Female sterilization	1.1	-	1.5	1.4	0.7
Male sterilization	0.0	-	0.0	0.0	0.1
Any traditional method	9.5	-	11.4	5.3	-
Safe period	3.4	-	3.7	1.4	2.7
Withdrawal	2.6	-	2.4	1.0	2.3
Prolonged breastfeeding	4.9	-	6.5	3.1	-
Other traditional methods	0.4	-	0.8	0.5	-
Number of women	9864	9073	8911	10013	8788

"Abdel-Azeem, F. et al., 1993, Table 8

<sup>b</sup>Sayed et al., 1989, Tables 5.2

<sup>c</sup>Hallouda et al., 1983, Volume IV, Table 4.3.1-1.

By method, the greatest increase was registered for the IUD. In 1992, 40 percent of ever-married women had ever used the IUD, compared to 26 percent in 1988, 15 percent in 1984 and 9 percent in 1980 (see Figure 4.4). In the case of the pill, the level of ever use increased by almost 10 percentage points between 1980 and 1988; however, between 1988 and 1992, there was a small decline (2 percentage points) in the proportion of women who have ever used the pill. These results are consistent with the trend in the method mix among current users over the same period (see Chapter 5).



# Differentials in Ever Use of Family Planning Methods

Table 4.13 looks at differences among subgroups in the overall proportions of ever-married women who have ever used family planning and in both the distribution of ever users by the number of methods ever used and the mean number of methods ever used. The table shows that older women are not only more likely to have used a method some time but they also are more likely to have had experience with a greater number of methods than younger women. For example, less than 10 percent of women age 30 and younger report that they have ever used three or more methods compared to around 25 percent of women 40-49.

Considering other differentials, a woman is more likely to have used a family planning method if she lives in urban areas, if she has at least some primary education, or if she is working for cash. Women in these categories also are generally more likely to have experience with more than one method (see Table 4.13).

#### Table 4.13 Ever use of family planning methods by background characteristics

Among ever-married women, percentage who have ever used a family planning method and, among ever-users, percent distribution by number of methods used and mean number of methods used, according to selected background characteristics, Egypt 1992

			Number of				
Destroyend	Ever	me	thods ever u	used		Mean	Number
characteristic	used any method	1	2	3+	Total	used	oi women
Age							
15-19	19.8	80.1	16.4	3.5	100.0	1.2	423
20-24	43.7	72.7	23.7	3.6	100.0	1.3	1362
25-29	65.6	61.2	30.4	8.4	100.0	1.5	2013
30-34	76.0	49.2	37.1	13.6	100.0	1.7	1838
35-39	74.7	46.6	36.4	17.0	100.0	1.8	1709
40-44	70.9	41.6	33.5	25.0	100.0	2.0	1411
45-49	63.3	45.2	30.8	24.0	100.0	1.9	1108
Urban-rural residence							
Urban	76.3	46.8	34.0	19.2	100.0	1.8	4596
Rural	54.5	58.6	31.4	10.0	100.0	1.6	5268
Place of residence							
Urban Governorates	78.0	45.3	35.2	19.5	100.0	1.9	2357
Lower Egypt	70.6	52.9	33.5	13.6	100.0	1.7	4067
Urban	79.2	47.4	34.3	18.2	100.0	1.8	1210
Rural	67,0	55.6	33.1	11.3	100.0	1.6	2857
Upper Egypt	48.4	58.3	29.0	12.7	100.0	1.6	3440
Urban	68.9	49.9	30.3	19.8	100.0	1.8	1029
Rural	39.7	64.6	28.0	7.5	100.0	1.5	2411
Level of education							
No education	54.8	58.0	31.3	10.7	100.0	1.6	4771
Some primary	71.8	48.5	36.1	15.4	100.0	1.7	2078
Primary through secondary	74.3	43.7	33.2	23.1	100.0	1.9	1093
Completed secondary/higher	75.7	50.0	31.9	18.1	100.0	1.8	1922
Work status							
Working for cash	74.2	48.1	32.9	19.0	100.0	1.8	1464
Not working for cash	63.0	52.9	32.8	14.3	100.0	1.7	8400
Total	64.6	52 1	32.8	15 1	100.0	17	9864

# 4.5 First Use of Family Planning

The Egypt DHS included questions on the first method ever used, the timing of the adoption of the method and the source from which the method was obtained. These data enable an examination of cohort changes in the timing of adoption in order to identify any trend toward earlier adoption of more effective methods.

### **First Method Used**

Overall, for the majority of Egyptian women, experience with contraception begins with adoption of the pill. Table 4.14 shows that, among ever-users almost 60 percent started family planning by using the pill, while 31 percent chose the IUD for their first method, 5 percent adopted other modern methods and 6 percent began contraception with a traditional method. Younger women (age 15-24) are somewhat more likely to have begun family planning with the IUD. This may reflect the increasing popularity of the IUD in the method mix during the period when younger women first began to use family planning (see Chapter 5).

Table 4.14 First method used

Percent distribution of ever-users by first method used, according to selected background characteristics, Egypt 1992

		First n	nethod used			
Background characteristic	Pill	IUD	Other modern method <sup>1</sup>	Traditional method <sup>2</sup>	Total	Number of women
Age						
15-19	42.4	45.4	5.2	6.9	100.0	84
20-24	43.1	45.1	3.0	8.8	100.0	595
25-29	48.9	38.9	5.2	7.0	100.0	1319
30-34	56.3	33.9	4.0	5.8	100.0	1397
35-39	63.6	26.4	5.6	4.5	100.0	1277
40-44	68,3	20.9	5.9	4.9	100.0	1000
45-49	74.4	15.3	4.7	5.6	100.0	702
Urban-rural residence						
Urban	57.0	33.5	5.0	4.6	100.0	3505
Rural	60.8	27.0	4.7	7.6	100.0	286 <b>9</b>
Place of residence						
Urban Governorates	53.4	36.9	5.1	4.6	100.0	1837
Lower Egypt	58.3	30.6	4.2	6.9	100.0	2871
Urban	61.3	30.3	4.7	3.7	100.0	958
Rural	56.9	30,8	3.9	8.5	100.0	1913
Upper Egypt	65.1	23,4	5.8	5.8	100.0	1665
Ürban	60.4	28.9	4.9	5.9	100.0	709
Rural	68.5	19.3	6.4	5.8	100.0	956
Education						
No education	63.5	26.0	4.5	6.0	100.0	2616
Some primary	66.6	24.9	3.9	4.6	100.0	1492
Primary through secondary	60.1	30,6	4.9	4.4	100.0	812
Completed secondary/higher	41.2	44.4	6.4	8.1	100.0	1454
Work status						
Working for cash	50.3	37.0	6.1	6.6	100.0	1086
Not working for cash	60.4	29.2	4.6	5.8	100.0	5288
				2.0		
Total	58.7	30.5	4.9	5.9	100.0	6374

<sup>1</sup>Includes injection, vaginal methods (diaphragm/foam/jelly), condom, female sterilization, and male sterilization. <sup>2</sup>Includes periodic abstinence, withdrawal, prolonged breastfeeding and other folk methods.

Rural users are somewhat more likely than urban users to have started family planning use with the pill (61 percent and 57 percent, respectively) and less likely to have initiated use with IUD (27 percent and 34 percent, respectively). Rural women from Upper Egypt stand out as least likely to have begun family planning use by adopting the IUD; only 19 percent of ever-users in rural Upper Egypt adopted the IUD as their first method compared to 31 percent of ever-users in rural Lower Egypt.

A woman's educational level is closely associated with the method selected when family planning use begins. Highly educated women begin use with the IUD more often than other women (see Figure 4.5). Table 4.14 also shows that women in paid employment are somewhat more likely than other women to adopt the IUD as their first method.



## Source for the First Method

The 1992 EDHS collected detailed information (name, location and address) of the source from which ever-users first obtained a method. These data are tabulated according to the type of source in Table 4.15. Private sector sources (private hospitals/clinics, private doctors, clinics operated by the Egyptian Family Planning Association (EFPA), the Clinical Services Improvement (CSI) project, and other private voluntary organizations, mosque and church health units, and pharmacies) are clearly the major sources to whom women turn when they first adopt contraception. Two-thirds of ever-users obtained family planning services for the first time from a private sector source, mainly pharmacies. Government health facilities were the source for first methods for one-third of ever-users.

#### Table 4.15 Source of first method used

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Percent distribution of ever-users by source of first method used, according to selected background characteristics, Egypt 1992

	F	irst method	used	
Source	 Pill	IUD	Other modern method <sup>1</sup>	Total
Public sector	23.2	45.0	19.5	30.1
Urban hospital	1.7	10.6	12.6	5.1
Urban health unit	9.2	19.4	30	12.2
Rural hospital	1.2	3.6	1.4	2.0
Rural health unit	9.2	6.8	13	8.0
Other MOH	0.9	0.5	0.5	0.7
Teaching hospital	0.2	1.4	0.8	0.6
Health insurance organization	0.0	1.0	0.0	0.3
Curative care organization	0.7	1.5	0.0	0.9
Other government	0.1	0.2	0.0	0.1
Private sector	74 4	54.2	72.4	67.7
Medical private sector	74.0	54.2	72.4	67.5
EFPA	0.4	2.1	0.0	0.9
CSI	0.9	5.4	2.5	2.5
Other PVO	0.5	1.3	0.0	0.8
Mosque health unit	0.1	3.8	0.0	1.3
Church health unit	0.1	0.2	0.0	0.1
Private hospital/clinic	0.3	3.8	0.8	1.5
Private doctor	2.1	36.5	9.3	13.6
Pharmacy	69 5	1.1	59.8	46.8
Other private sector	0.4	0.0	0.0	0.3
Other vendor	0.4	0.0	0.0	03
Other	1.9	0.7	5.4	1.7
Friends/Relatives	1.3	0.1	2.0	0.9
Other	0.4	0,6	0.5	0.5
Husband bought	0.3	0,0	3.0	03
Don't know	0.5	0.0	2.2	0.4
Total	100.0	100.0	100.0	100.0
Number of women	3740	1946	309	<b>5</b> 996

MOH = Ministry of Health

EFPA = Egyptian Family Planning Association CSI - Clinical Services Improvement project

PVO = Private voluntary organization

<sup>1</sup>Includes injection, vaginal methods (diaphragm/foam/jelly), condom, female sterilization and male sterilization

The source used initially by ever-users varies according to the method selected (see Table 4.15). Ever-users who chose the pill as their first method, generally relied on pharmacies for their supply, followed by public sector providers, especially urban and rural health units (70 percent and 23 percent, respectively). Among women who initiated use with the IUD, 54 percent reported that the IUD was inserted by a private sector provider compared to 45 percent who went to a public sector provider. The small percentage of IUD users who reported obtaining their IUD at a pharmacy probably confused the place of purchase with the place of insertion.

# Number of Children at First Use of Family Planning

Table 4.16 shows the percent distribution of ever-married women by the number of living children at the time of first use of contraception according to selected background characteristics. The results indicate that Egyptian women are adopting family planning fairly early in the family building process although less than 2 percent of ever-users begin using immediately after marriage or before the first birth. Overall, more than one-third of ever-users (24 percent of ever-married women) began using family planning after they had the first child, and almost two-thirds started using after they had one or two children.

#### Table 4.16 Number of children at first use of family planning

Current	Never		Number of of first	living child use of conti	dren at time raception			Number
age	contraception	0	1	2	3	4+	Total	women
Age								
Ĭ5-19	80.2	0.5	14.6	4.5	0.2	0.0	100.0	423
20-24	56.3	1.3	25.9	11.5	3.7	1.3	100.0	1362
25-29	34.4	0.9	31.8	16.9	8.8	7.2	100.0	2013
30-34	24.0	1.3	28.2	20.6	11.0	14.9	100.0	1838
35-39	25.3	1.2	23.1	15.0	11.5	24.0	100.0	1709
40-44	29.1	1.2	18.0	13.5	9.4	28.7	100.0	1411
45-49	36.7	0.7	t2.2	tt.8	11.4	27.3	t00.0	1108
Urban-rural residence								
Urban	23.7	2.1	35.1	18.5	9.2	11.4	100.0	4596
Rural	45.5	0.2	14.1	11.8	8.8	19.5	100.0	5268
Place of residence								
Urban Governorates	22.0	2.2	37.2	19.8	9.1	9.7	100.0	2357
Lower Egypt	29.4	0.6	24.9	16.4	10.7	18.0	100.0	4067
Urban	20.8	1.3	38.5	18.5	10.0	10.9	100.0	1210
Rural	33.0	0.3	19.2	15.5	11.1	21.0	100.0	2857
Upper Egypt	51.6	1.0	13.6	9.8	6.8	17.2	100.0	3440
Ürban	31.1	2.7	26.4	15.6	8.4	15.9	100.0	1029
Rural	60.3	0.2	8.2	7.4	6.1	17.8	100 0	2411
Level of education								
No education	45.2	0.3	11.1	11.6	9.6	22.2	100.0	4771
Some primary	28.2	0.8	23.6	18.1	11.7	17.5	100.0	2078
Primary through secondary	25.7	1.8	33.5	19.9	9.5	9.6	100.0	1093
Completed secondary/highe	er 24.3	3.0	50.5	16.8	4.2	1.3	100.0	1922
Work status								
Working for cash	37.0	0.8	20.9	14.6	9.4	17.2	100.0	8400
Not working for cash	25.8	2.6	40.8	16.7	6.5	7.6	100.0	1464
Total	35.4	1.1	23.9	14.9	9.0	15.7	100.0	9864

Percent distribution of ever-married women by number of living children at the time of first use of family planning, according to current age, Egypt 1992

There has been a clear downward trend over time in the parity at which women first adopt family planning, with younger users initiating use at lower parities than older women. Among ever-users, the proportion adopting family planning when they had one child increased from 20 percent among women 45-49 to 48 percent among ever-users 25-29.

There are differentials in the number of living children at the time of first use of contraception by place of residence, education level, and work status. Urban ever-users begin using at much lower parities than rural ever-users; for example, around 50 percent of urban ever-users initiated family planning use before they had two children, compared with around 25 percent of rural ever-users. Also, as shown in Table 4.16, educated ever-users and ever-users who work for cash are more likely to initiate use at lower parities than other women.

## **Reproductive Intention at First Use**

The 1992 EDHS also collected information on women's childbearing intentions at the time contraception was first adopted. These data allow an investigation of the extent to which interest in limiting as opposed to spacing births motivates women to begin using family planning. Overall, although there was substantial interest in limiting childbearing, the majority of ever-users (54 percent) began using contraception to delay the next birth. Table 4.17 shows that spacing was clearly the primary motivation among ever-users who initiated family planning use at low parities. At parity 3 or higher, however, the vast majority of ever-users adopted family planning because they wanted to limit births.

		iving childro	en at time ol	first use, E <sub>l</sub>	gypt 1993	
Paproductivo		Nu	umber of chi	ldren		
intention	0	1	2	3	4+	Tota
Want child later	<b>95</b> .1	90.6	54.4	28.2	10.0	54,0
Do not want child/						
another child	4.7	9.2	45.0	71.8	89.7	45.7
Other	0.3	0.1	0.6	0.0	0.4	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	108	2357	1471	884	1554	6374

# **CHAPTER 5**

# **CURRENT USE OF FAMILY PLANNING**

The level of current use of family planning is one of the indicators most frequently used to assess the success of family planning program activities. It is also widely used as a measure in the analysis of the determinants of fertility. This chapter focuses on the levels and differentials in family planning use among population subgroups, with a particular emphasis on the method mix among users. Trends in family planning use in Egypt are also described in this chapter. Detailed information on the service providers from which users obtain their methods is presented, and indicators of the accessibility of family planning methods are reviewed.

# 5.1 Levels and Differentials in Current Use of Family Planning

The 1992 EDHS results indicate that 47 percent of currently married women are currently using family planning in Egypt (see Table 5.1 and Figure 5.1). Almost all users rely on modern methods; 28 percent of married women are using the IUD, 13 percent rely on pills and 4 percent are using other modern methods, principally the condom (2 percent) and female sterilization (1 percent). Less than 3 percent are using a traditional method.

			Urban	L	.ower Egy	pt	U	ррет Едур	t	
Method	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Any method	57.0	38.4	59.1	53.5	60.3	50.5	31.4	48.1	24 3	47.1
Any modern method	54.1	36.6	55.6	51.3	58.5	48.2	29.7	45.4	23.0	44.8
Pill	14.0	11.9	12.5	15.1	17.3	14.1	10.7	13.8	9.3	12.9
IUD	34.6	22.0	36.8	32.6	36.3	31.0	16.4	27.6	11.6	27.9
Injection	0.5	0.5	0.3	0.5	0.7	05	0.6	0.6	0.6	0.5
Diaphragm/foam/jelly	0.5	0.2	0.6	0.2	0.2	0.2	0.3	0.6	0.2	0.4
Condom	3.2	0.9	4.1	1.4	2.4	0.9	1.2	2.1	0.8	2.0
Female sterilization	1.2	1.0	1.4	1.5	1.4	1.5	0.6	07	0.5	11
Any traditional method	2.9	1.8	3.5	2.2	1.8	2.3	1.7	2.7	1.2	2.3
Periodic abstinence	13	0.2	1.6	05	1.0	0.2	0.4	1.0	01	0.7
Withdrawal	1.1	0.3	1.3	0.5	0.6	0.5	0.5	1.2	0.2	0.7
Prolonged breastfeeding	0.4	1.2	0.6	1.2	0.2	1.6	0.7	05	0.8	0.9
Other methods	0.0	0.1	0.1	0.0	0.0	0.1	01	0.0	0.1	0.1
Not currently using	43.0	61.6	40.9	46,5	39.7	49.5	68.6	51.9	75.7	52.9

#### Table 5.1 Current use of family planning by residence

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# Residence

Marked differences in the level of family planning use by residence are observed. As Table 5.1 shows, urban women are considerably more likely to be using a method than rural women (57 percent and 38 percent, respectively). The IUD is the preferred method among both urban and rural women (35 percent and 22 percent, respectively), followed by the pill (14 percent and 12 percent, respectively).

Looking at place of residence, current use is highest in the Urban Governorates (59 percent), followed by Lower Egypt (54 percent). Upper Egypt (31 percent) lags significantly behind the other two areas. Considering both urban-rural residence and place of residence, a greater proportion of women are currently using a method in urban Lower Egypt (60 percent) than in urban Upper Egypt (48 percent). The differentials are even more striking between rural Lower Egypt and rural Upper Egypt; 51 percent of married women in rural areas in Lower Egypt are currently using a contraceptive method compared to 24 percent in rural Upper Egypt (see Figure 5.2). Throughout Egypt the IUD is the most widely used method of contraception. However, there are differentials in IUD use by residence. Users in Upper Egypt are less likely to rely on the IUD than other users (see Figure 5.2).



# **Background Characteristics**

Differentials in the level of current use by method according to selected background characteristics are shown in Table 5.2. Current use increases among the five youngest cohorts, reaching its maximum among women in the 35-39 age group, where three in five women are using a method. Women in all age groups prefer the IUD. The proportion using the IUD peaks at 37 percent among women in the 30-34 age group while the proportion using the pill peaks at 18 percent among women age 35-39.

As with age, family planning use increases rapidly with the number of living children that a woman has, reaching a peak among women with three children (59 percent). The results confirm that women in Egypt begin adopting contraception after the first child; less than 1 percent of childless women are using contraception.

Considering level of education, significant differences in family planning are observed between women who never attended school and women who did attend school, even if they did not complete the primary level. Among women who have attended school, there are only minor differences across educational categories in the level of current use. Overall, the percentage of married women currently using contraception varies from 38 percent among women with no education to 58 percent among women who completed the secondary or higher level. Finally, working women are more likely to practice family planning than women who are not working for cash (58 percent and 45 percent, respectively).

#### Table 5.2 Current use of family planning by method

Percent distribution of currently married women by family planning method currently used, according to selected background characteristics, Egypt 1992

					Modern	metho	ł			Т	raditio	nal meti	hod				
		Any modern					Dia- phragm,	/	Fernale steri-	Апу	Peri- odic	l With-	Prolonge breast-	d	Not cur-		
Background characteristic	Any method	meth- od	Pill	IUD	Injec- tion	Nor- plant	foam/ jelly	Con- dom	liza- tion	trad. method	absti- nence	draw- al	feed- ing	Other	rently using	Total	Number
Age																	
15-19	13.3	12.7	4.1	8.4	0.0	0.0	0.0	0.2	0.0	06	0.0	0.0	06	0.0	867	100.0	415
20-24	29.7	28.5	6.8	21.2	0.2	0.0	0.0	03	0.0	1.2	0.0	0.0	1.1	0.1	70.3	100 0	1324
25-29	46.0	44.2	13.3	29.3	0.2	0.1	0.4	0.9	0.1	1.8	0.2	0.5	1.0	0.0	54.0	0.001	1956
30-34	58.8	56.4	16.2	36,7	0.5	0.0	0.3	2.0	0.8	2.4	0.8	0.4	1.2	0.0	41.2	100 0	1743
35-39	59.6	57.0	18.2	34,0	0.8	0.0	0.4	2.1	1.5	2.6	1.0	0.8	0.7	01	40.4	100.0	1582
40-44	55.5	52.4	14.0	28.9	11	0.0	08	5.1	2.6	3.1	11	1.1	0.8	01	44.5	100.0	1231
45-49	34.5	30.3	79	14.9	0.5	0.0	04	3.0	3.6	4.1	1.8	1.9	02	0.2	65 5	100.0	902
Number of																	
living children																	_
0	0.5	0.5	0.3	02	00	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	99.5	100.0	830
1	31.6	30.2	6.7	22.4	0.0	0.0	0.2	0.8	0.1	14	0.2	0.6	06	0.0	68 4	100.0	1175
2	52.5	49.5	12.7	34.3	0.0	0.0	0.1	2.2	0.2	30	1.5	0.7	08	0.0	47.5	100.0	1585
3	59.3	56.2	17.1	34.8	0.5	0.1	0.5	22	11	31	12	0.6	1.1	0.2	40 7	100.0	1663
4+	54.3	518	15.8	30,0	1.0	0.0	0.5	26	21	2.5	05	09	1.0	01	457	100.0	3900
Education								_									
No education	37.5	36.0	12.0	20.7	0.5	0.0	02	12	1.4	1.5	0.1	0.4	0.9	00	62.5	100 0	4363
Some primary	53.5	510	17.6	29.4	0 5	00	0.3	22	09	2.5	0.5	06	1.2	03	46.5	100.0	1913
secondary	56.1	53.0	137	34.0	0.6	0.0	06	2.6	1.6	3.2	1.7	10	0.5	0.0	43.9	100.0	1010
Completed sec- ondary/higher	58.0	54.5	9.8	40 0	0.4	0.0	0,6	3.1	0.5	3.5	17	1.2	0.6	00	42.0	100.0	1867
Work status																	
Working for cash	58.3	55.1	10.6	39.0	0.6	0.0	0.6	3.4	1.0	3.2	1.6	1.2	04	0.0	41.7	100.0	1317
Not working for cash	45.2	430	13.3	26,1	0.5	0.0	0.3	1.7	12	2.2	0.6	0.6	09	0.1	54 8	100 0	7836
Total	47.1	44 8	12.9	27.9	0.5	0 0	0.4	2.0	1.1	23	0.7	07	09	01	52.9	100.0	9153

# 5.2 Trends in Current Use of Family Planning

Family planning use has increased steadily since 1980 (see Table 5.3 and Figure 5.3). Over the 12year period from 1980 to 1992, current use almost doubled, from 24 percent to 47 percent. The 1992 EDHS results show a somewhat lower level of current use than that reported in the 1991 PAPCHILD survey (47 percent and 48 percent, respectively). Although the apparent plateauing of use rates between 1991 and 1992 is puzzling, the overall trend has clearly been upward. The use rate reported in 1992 EDHS is almost ten percentage points greater than the level reported in 1988 EDHS. The rate of increase in current use has been steady, averaging 25 percent during the periods between the EFS, ECPS, and EDHS surveys.

#### Table 5.3 Trends in current use of family planning

Percent distribution of currently married women by the family planning method currently used, Egypt, 1992 EDHS, 1991 EMCHS, 1988 EDHS, 1984 ECPS and 1980 EFS

Method	EDHS 1992	EMCHS 1991 <sup>a</sup>	EDHS 1988 <sup>b</sup>	ECP <b>S</b> 1984 <sup>b</sup>	EFS 1980
Any method	47.1	47.6	37.8	30.3	24.2
Any modern method	44.8	44.3	35.4	28.7	22.8
Modern method					
Pill	12.9	15.9	15.3	16.5	16.6
IUD	27.9	24.1	15.7	8.4	4.1
Injection	0.5	-	0.1	0.3	-
Vaginal methods	0.4	-	0.4	0.7	-
Condom	2.0	-	2.4	1.3	-
Female sterilization	1.1	-	1.5	1.5	-
Male sterilization	0.0	-	0.0	0.0	-
Any traditional method	2.3	3.3	2.4	1.6	1.4
Safe period	0.7	-	0.6	0.6	-
Withdrawal	0.7	-	0.5	0.3	-
Prolonged breastfeeding	0.9	-	1.1	0.6	-
Other traditional methods	0.1	-	0.2	0.1	
Not using	52.9	52.4	62.2	69.7	75.8
Total percent	100.0	100.0	100.0	100.0	100,0
Number of women	9153	8406	8221	9158	8012

Table 5.3 shows not only the overall increase in contraceptive use since 1980, but also documents the changes that have been occurring in the method mix. The shift toward greater reliance on the IUD is among the most encouraging findings in the 1992 EDHS. The percentage of married women using the IUD doubled between 1984 and 1988 (from 8 percent to 16 percent), reached 24 percent in early 1991 and 28 percent in late 1992. Over the same period, there was a small decrease in the percentage using the pill (from a peak of 16 percent in 1984 to 13 percent in 1992). As a result, the method mix among users has changed dramatically (see Table 5.4). In 1984, around one in two users relied on the pill, and one in four users had an IUD. By 1988, users were as likely to use the IUD as the pill, and by 1992, almost three in five users employed the IUD while only about one in four relied on the pill (see Figure 5.4).



Table 5.4 Trends in the family planning method mix

Percent distribution of currently married women using a family planning method by the method used, Egypt, 1992 EDHS, 1988 EDHS and 1984 ECPS

Method	EDHS 1992	EDHS 1988 <sup>a</sup>	ECPS 1984 <sup>a</sup>
Pill	27.4	40.5	54.4
IUD	59.2	41.6	27.7
Condom	4.2	6.3	4.3
Female sterilization	2.3	4.0	5.0
Other modern methods	2.0	1.3	3.3
Traditional methods	4.9	6.3	5.3
Total percent	100.0	100.0	100.0
Number of women	4311	3108	2775



# 5.3 Trends in Current Use of Family Planning by Residence

# Urban-rural Residence and Place of Residence

There have been striking changes in the geographic differentials in current use of family planning (see Table 5.5). Overall, the relative increase in current use between 1984 and 1992 among rural women was greater than the increase among urban women (100 percent and 26 percent, respectively). Much of the change in rural areas occurred during the period between the two DHS surveys; the absolute increase in the rural use rate during the period 1988-92 was fourteen percentage points, almost three times the increase between the 1984 CPS and the 1988 DHS (five percentage points).

Looking at both urban-rural residence and place of residence, the relative change was greatest in rural Upper Egypt, where the use rate in 1992 was three times the rate in 1984 (8 percent and 24 percent, respectively). In absolute terms, the greatest change has been in rural Lower Egypt, where the use rate rose from 29 percent in 1984 to 51 percent in 1992. The Urban Governorates experienced the slowest growth; the use rate in the Urban Governorates in 1992 (59 percent) was only nine percentage points higher than the 1984 rate (50 percent).

#### Table 5.5 Trends in current use of family planning by residence

Percent of currently married women currently using a family planning method by urban-rural residence and place of residence, Egypt, 1992 EDHS, 1988 EDHS, and 1984 ECPS

Residence	EDHS 1992	EDHS 1988 <sup>a</sup>	ECPS 1984 <sup>a</sup>
Urban-rural residence			
Urban	57.0	51.8	45.1
Rural	38.4	24 5	19.2
Place of residence			
Urban Governorates	59.1	56.0	49.6
Lower Egypt	53.5	41.2	34.1
Urban	60.5	54.5	47.6
Rural	50.5	35.6	28.5
Upper Egypt	31.4	22.1	17.3
Urban	48.1	41.5	36.8
Rural	24.3	11.5	7.9
Total	47.1	37.8	30.3

## Governorate-level Use Rates

Table 5.6 shows the current use rates in 1988 and 1992 for 21 governorates in Egypt. According to the 1992 EDHS results, current use is higher in the four Urban Governorates than in other governorates, with the highest level found in Alexandria (62 percent) (see Figure 5.5). Among Lower Egypt governorates, current use falls below 50 percent only in Sharkia and Kafr El-Sheikh governorates (49 percent and 47 percent, respectively). In Upper Egypt, current use reaches 50 percent only in Giza governorate, it exceeds 30 percent only in Fayoum and Aswan, and it is lowest in Souhag (20 percent).

Current use increased between 1988 and 1992 in all governorates, with the exception of Cairo and Damietta, where use levels were already quite high in 1988. Among the four Urban Governorates, the absolute increase in current use was greatest in Port Said. Behera governorate registered the largest absolute increase among the 9 governorates in Lower Egypt and Assuit, the largest increase among the 8 governorates in Upper Egypt. Considering relative increases, changes in use rates among governorates in Upper Egypt are the most striking, largely because the levels of use in 1988 were quite low in these governorates.

Looking at the change in method mix by governorates, in 1988 the IUD was the predominant method only in 7 of the 21 governorates (Cairo, Alexandria, Suez, Dakahlia, Kalyubia, Behera, and Giza). By 1992, the IUD had replaced the pill as the predominant method in all but 4 governorates (Menya, Souhag, Qena, and Aswan). Increases in the use of the IUD were striking even in those governorates where the overall increase in use was below the average. For example, although the use rate in Damietta remained essentially stable between 1988 and 1992, the proportion of women relying on the IUD more than doubled from 14 percent to 29 percent.

#### Table 5.6 Current use of family planning by governorate

		1992 E	EDHS			1988 E	DHS	
Governorate	Any method	Any modern method	Pill	IUD	Any method	Any modern method	Pill	IUD
Urban Governorates	59.1	55.6	12.5	36.8	56.0	52.1	16.9	26.8
Cairo	58.1	55.5	13.3	36.4	58.9	54.7	16.7	29.1
Alexandria	62.1	56.9	9.6	39.3	51.6	47.9	16.2	23.8
Port Said	60.5	52.0	17.4	28.2	48.2	46.1	26.8	14.0
Suez	57.3	52.9	12.6	34.2	50.3	48.7	16 1	26.6
Lower Egypt	53.5	51.3	15.1	32,6	41.2	39.1	19.2	16.2
Damietta	53.4	51.1	15.6	29.3	54.1	49.4	27.3	13.9
Dakahlia	52.8	50.8	14.7	32.4	41.3	39.9	18.4	18.8
Sharkia	49.2	44.1	15.1	25.8	35.2	31.1	17.8	10.6
Kalyubia	57.9	56.8	17.4	35.1	42.3	41.3	16.6	20.8
Kafr El-Sheikh	47.2	45.4	13.9	27.6	41.7	39.9	21.5	13.2
Gharbia	55 9	55.0	18.5	34.3	50.1	48.0	25.6	17.6
Menoufia	55.7	52.8	13.8	35.5	43.9	417	20.2	17.4
Behera	54.7	53.4	11.3	38.4	32.5	31.5	13.3	15.4
Ismailia	50.2	47.7	14.4	27.0	41.0	40.0	27.6	9.5
Upper Egypt	31.4	29.7	10.7	16.4	22.1	20.5	10.0	7.9
Giza	49.9	47.7	9.9	33.4	45.7	43.2	14.5	22.1
Beni Suef	29.2	29.2	8.8	16.9	15.3	14.2	9.2	4.4
Fayoum	33.3	33.3	10.9	20.1	20.2	16.9	9.7	4.5
Menya	21.9	21.4	12.0	8.2	16.6	16.1	10.3	4.3
Assuit	28.2	24.8	8.0	13.8	12.7	12.2	4.8	5.0
Souhag	19.8	17.2	7.7	6.9	16.2	13.5	7.6	4.9
Qena	24.7	23 1	14.0	7.9	12.2	11.2	10.2	07
Aswan	31.9	28.8	17.5	9.0	18.6	16.2	11.4	2.9
Total	47.1	4 <b>4.8</b>	1 <b>2.9</b>	27.9	37.8	33.5	15.3	15.8

Percentage of currently married women currently using any method, any modern method, the pill and the IUD, by governorate, Egypt, 1992 EDHS and 1988 EDHS



# 5.4 Reasons for Choosing Current Method of Family Planning

The reasons women give for choosing their current method can provide the family planning program with important insights into the process of adoption of contraception. Table 5.7 summarizes the reasons users gave for choosing their current method; it should be noted that more than one response was possible so that the percentages in the table may add to more than 100 for a method.

In the case of the two most popular methods (the pill and IUD), convenience was the primary reason given for choosing these methods; almost 50 percent of both pill and IUD users reported that they chose their method because it was convenient to use. Other reasons cited by pill users for choosing the method included the side effects of other methods (28 percent), the ready availability of the pill (19 percent), advice from friends and relatives (16 percent) or from private medical personnel (11 percent) and the cost (11 percent). Side effects of other methods was a frequently cited reason for choosing the IUD (37 percent) as was the desire to use a permanent (18 percent) or more effective method (14 percent). Significant minorities of IUD users reported that advice from friends and relatives (18 percent) or from private medical personnel (15 percent) was important in their choice of a method.

Among users of injection and barrier methods, the side effects of other methods was the most frequently mentioned reason for choosing their current method; convenience was also frequently cited. Convenience was the reason most often reported for the use of traditional methods. Users of female sterilization reported the desire for a permanent method more often than other reasons, followed by advice from public or private health providers, concerns about the side effects of other methods and interest in an effective method.

#### Table 5.7 Reasons for choosing current method of family planning

Percentage of family planning users reporting various reasons for deciding to use their current method of family planning, by method, Egypt 1992

		F	amily plar	Family planning method								
Reason for choosing method	Pill	IUD	Female sterili- zation	Other clinical <sup>1</sup>	Other barrier <sup>2</sup>	Tradi- tional	Total					
Advice from government doctor/nurse	5.7	7.9	24.6	29.1	2.5	1.4	7.3					
Advice from private doctor/nurse	10.8	15.1	24.4	16.6	12.6	4.6	13.5					
Advice from family plan. worker/Raidya	0.8	1.6	0.0	4.6	1.1	0.6	1.3					
Advice from relatives/friends	15.7	18.3	3.3	14.5	6.2	12.2	16.3					
Side effects of other methods	27.7	37.4	21.0	56.4	59.1	46.6	36.1					
Saw TV spot	1.3	2.3	0.2	0.0	2.5	0.5	1.9					
Method convenient to use	49.7	48.2	15.3	44.8	41.0	54.7	47.7					
Easily available	18.5	4.4	1.2	5.8	12.4	12.4	9.0					
Cost	11.0	1.8	0.0	4.5	1.3	0.7	4.2					
Wanted permanent method	7.0	17.8	31.7	7.8	1.5	0.7	13.4					
Wanted more effective method	6.4	13.6	20.3	14.0	3.4	0.2	10.6					
Husband preferred	2.0	0.9	6.8	0.0	7.6	7.5	2.0					
Other	2.1	0.6	0.3	0.0	2.8	3.9	1.3					
Don't know/Missing	0.6	0.1	0.0	0.0	0.0	0.0	0.2					
Number	1181	2555	103	46	212	212	4310					

# 5.5 Problems with Current Method of Family Planning

An understanding of the problems which users experience is important in efforts to improve family planning service delivery in Egypt. Table 5.8 presents information from the EDHS on the main problem current users were experiencing with their methods. Regardless of the method, the majority of users have had no problems with their methods (from 75 percent in the case of pill users to 98 percent of users of traditional methods). Among those users eiting problems, most had experienced side effects. The proportion pointing to side effects ranged from 6 percent in the case of the small number of injection users to 20 percent of pill users. With regard to other problems, spotting and bleeding were specifically mentioned by 8 percent of IUD users as a problem, other health concerns were cited by 4 percent of pill users and 5 percent of female sterilization users, and inconvenience was reported by 5 percent of the users relying on barrier methods (diaphragm/foam/jelly and condoms).

#### Table 5.8 Problems with current method of family planning

Percent distribution of family planning users by main problem in using current method of family planning, according to specific method, Egypt 1992

Problem with method	Pill	IUD	Female stenh- zation	Other clinical <sup>1</sup>	Other barner <sup>2</sup>	Tradi Liona
No problem	74.5	81.6	80.9	90.2	84.5	97.6
Husband disapproves	0.1	0.0	0.0	0.0	1.3	1.5
Side effects	19.6	87	11 1	6.4	66	00
Spotting/bleeding	0.7	7.6	02	0.0	0 0	0 0
Period did not come	0.1	0.2	15	2.8	0.0	0.0
Other health concerns	4.2	1.6	5.1	0.6	15	0.1
Access/availability	0.3	0.0	0.0	0.0	00	0.0
Costs too much	0.0	0.1	0.0	0.0	0.0	0.0
Inconvenient to use	01	0.2	0.0	0.0	49	0.0
Sterilized/Want children	01	0.0	0.0	0.0	0.0	0.0
Other	0.2	01	1.2	0.0	12	0.6
Don't know	0 0	0 0	0 0	0 0	0.0	0.1
Total	100 0	100 0	100.0	100.0	100.0	100.0
Number	1181	2555	103	46	212	212

# 5.6 Sources for Modern Family Planning Methods

The 1992 EDHS collected more detailed information on sources of family planning services than had been obtained in previous surveys. Current users of modern methods were asked for the name and location of the source from which they had most recently obtained their method. Both the type of source and the address were recorded in the questionnaire and entered in the data file.

## **Type of Source**

The dominance of private sector sources in the provision of family planning services is evident in the results presented in Table 5.9. Overall, almost two-thirds of current users of modern methods obtain their method from a private sector source (see Figure 5.6), and 35 percent rely on government health facilities. Among users obtaining services from private sector sources, the majority went either to a pharmacy or a private hospital/clinic or doctor; however, around one in ten users are served by clinics operated by private voluntary organizations (PVOs) or mosques or churches.

The source on which family planning users rely for services varies with the method used. Among pill users, 86 percent obtain the method from private sector sources, principally pharmacies, 12 percent rely on public health facilities, and 2 percent get supplies from other sources. Among IUD users, 47 percent rely on public health facilities for their method, and 39 percent obtain the IUD from private hospitals/clinics or doctors. Clinics operated by private voluntary agencies (including the Egypt Family Planning Association (EFPA) and Clinical Services Improvement (CSI) project) or by mosques or churches provide services for 14 percent of IUD users. Users of female sterilization rely mainly on the public sector.

#### Table 5.9 Sources for modern family planning methods

Percent distribution of current users of modern family planning methods by most recent source, according to specific methods, Egypt 1992

	Modem family planning method						
Source of method	РШ	IUD	Condom	Female sterili- zation	Total <sup>1</sup>		
Public sector	11.6	46.9	3.4	65.1	350		
Urban hospital	0.6	10.9	0.8	51.9	85		
Urban health unit	2.3	20.4	26	0.0	13.7		
Rural hospital	0.8	2.5	0.0	25	1.9		
Rural health unit	7.3	8.2	0.0	0.3	7.3		
Other MOH	0.1	0.7	0.0	0.0	0.4		
Teaching hospital	0.2	1.1	0 0	9.0	1.0		
HIO	0.0	1.4	0.0	15	1.0		
CCO	0.2	1.5	0.0	0.0	1.0		
Other government	01	03	0.0	0.0	02		
Private sector	86 1	52 8	82.6	34.9	63.4		
Medical private sector	85.4	52.8	82 6	34.9	63.2		
EFPA	0.1	2.0	0.0	0.0	1.3		
CSI	0.8	6.5	0.6	0 0	4.6		
Other PVO	0.1	1.2	0.0	0.0	0.8		
Mosque health unit	0.1	3.6	0.0	0.0	2.3		
Church health unit	0.0	0.4	0.0	0.0	0.3		
Private hospital/Clinic	0.0	3.6	0.0	154	2.6		
Private doctor	0.6	35.4	0.0	19.5	23 0		
Pharmacy	83.6	0.0	82.0	0.0	28.3		
Other private sector	0.7	0.0	0.0	0.0	02		
Other vendor	0.7	0.0	0.0	0.0	0.2		
Other	2.1	0.2	7.5	0.0	1.2		
Husband bought	0.5	0.0	6.8	0.0	0.5		
Friends/Relatives	1.6	0.0	0.7	0.0	06		
Other	0.0	0.2	0.0	0.0	0.1		
Don't know	0 2	0.0	6.5	0.0	0.4		
Total	100.0	100.0	100.0	100 0	100.0		
Number	1181	2555	<b>18</b> 0	103	4098		

MOH = Ministry of Health

HIO = Health Insurance Organization

CCO = Curative Care Organization

EFPA = Egyptian Family Planning Association

CSI = Clinical Services Improvement project

PVO = Private Voluntary Organization

<sup>1</sup>Includes users of injection, Norplant and vaginal methods



# **Trends in Source**

Table 5.10 compares the distribution of current users by source in the 1992 EDHS with the distribution reported in the 1988 EDHS. As mentioned above, in the 1992 EDHS there was increased emphasis on obtaining detailed information, particularly the address of the source. This procedure undoubtedly increased the accuracy of the assignment of users to various source categories. Consequently, changes in the distribution of current users by source over the 4-year period must be interpreted with caution since such changes may be at least partially due to the differences in the way that the source information was obtained in the two surveys.

The results in Table 5.10 indicate that the percentage of users relying on pharmacies has decreased significantly since 1988; slightly more than half of all users relied on pharmacies in 1988 compared to only one-quarter in 1992. This trend is largely due to the shift that occurred in the method mix toward the IUD. Looking at trends in sources for the IUD, the table shows there has been a small increase in the percentage of users who rely on public health facilities from 43 percent in 1988 to 47 percent in 1992. The substantial increase in the percentage relying on private voluntary organizations for services is partially due to improved procedures for recording source data but it also likely reflects the contribution of the CSI project, which set up a small network of clinics during the period between the 1988 and 1992 surveys.
#### Table 5.10 Trends in the sources of family planning methods

Percent distribution of current users of modern family planning methods by source used, according to method, Egypt, 1992 EDHS and 1988 EDHS

Pauras of	All methods		Р	ill	IUD <sup>1</sup>		
method	1992	1988	1992	1988	1992	1988	
Public sector	35.0	23.1	11.6	8.2	46.9	42.6	
Private voluntary organization	6.7	0.5	1.0	0.3	9.7	1.3	
Other private medical	28.2 <sup>a</sup>	20.3	0.7 <sup>a</sup>	0.3	43.0 <sup>a</sup>	54.3	
Pharmacy	28.3	53.4	83.6	87.1	NA	NA	
Other/Not sure	1.8 <sup>b</sup>	2.6 <sup>c</sup>	3.0 <sup>b</sup>	4.0 <sup>c</sup>	0.2 <sup>b</sup>	1.7	
Total Percent	100.0	100,0	100.0	100.0	100.0	100.0	
Number of users	4098	2914	1181	1258	2555	1295	

NA = Not applicable

<sup>1</sup>Provider inserting method

<sup>a</sup>Includes private doctors/clinics and mosque and church health units

<sup>b</sup>Includes other private vendor and other sources such as friends/relatives

<sup>c</sup>Includes home delivery agency

#### Source by Residence

Table 5.11 looks at the variation in the type of source by urban-rural residence and place of residence for all methods and for the pill and IUD. In general, the distribution of all users by source does not differ greatly between urban and rural areas or by place of residence. However, there are significant variations in the source distributions by residence for both the pill and the IUD. For example, while the majority of pill users obtain the method from pharmacies, the percentage relying on sources other than pharmacies (largely government health facilities) is greater in rural areas than in urban areas.

Among IUD users, there are only minor differences between rural and urban users in the sources used for IUD insertions. However, there are marked differences by place of residence. The percentage of IUD users naming public health facilities as the source for their method varies from 30 percent in urban Upper Egypt to 52 percent in rural Lower Egypt. There is also considerable variation in the percentages relying on private hospitals/clinics and doctors and on PVO clinics. The proportion obtaining the IUD from private hospitals/clinics or doctors is highest among users in urban Upper Egypt (46 percent) and lowest among users from rural Upper Egypt (34 percent). PVO clinics are much more likely to provide IUD users with services in Lower Egypt and Upper Egypt than in the Urban Governorates. Overall, the percentage of IUD users obtaining the method from a PVO facility varies from 5 percent in the Urban Governorates to 17 percent in urban Upper Egypt.

#### Table 5.11 Sources of family planning methods by residence

Percent distribution of current users of modern family planning methods by method and source used, according to urban-rural residence and place of residence, Egypt 1992

			Urban Gover-	1	Lower Egy	pt	L	Upper Egypt		
Method	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rura	
All methods										
Public sector	323	38.6	37.6	36.7	28 6	40.9	28.5	23.3	32.9	
Medical private sector	66.1	59.4	61.0	61.4	69.5	57.2	69.7	75.5	64.8	
Private voluntary org. Private hospital/clinic	6.3	7.2	3.4	6.9	8.0	6.3	106	12.0	9.4	
or doctor	26.9	24.1	25.3	26.7	28.2	26.0	23.9	29.2	19.4	
Mosque/church clinic <sup>1</sup>	4 0	07	5.1	0.9	22	02	2.7	3.8	1.9	
Pharmacy	28.9	27.4	27.2	26.8	31.1	24.6	32.5	30.6	34.1	
Other <sup>2</sup> /Not sure	11	2.0	1.0	1.9	18	1.9	1.8	1.2	2.3	
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of users	2315	1783	1224	1921	655	1266	953	435	517	
Pill										
Public sector	6.3	17.1	5.6	12.8	4.5	17.2	14.2	101	16.8	
Medical private sector	91.9	78.7	92.9	82.5	91. <del>9</del>	77.7	84.1	89.7	80.6	
Pharmacy	90.2	76.8	91.2	82.0	91.1	77.3	80.2	87.0	75.9	
Other <sup>2</sup>	1.7	2.0	1.8	0.5	0.8	0.4	39	2.6	4.7	
Other <sup>1</sup> /Not sure	1.9	4.2	1.4	4.6	3.6	5.2	1.8	02	2.5	
Total percent	100.0	100.0	100.0	100 0	100.0	100.0	100.0	100.0	100.0	
Number of users	601	581	274	565	194	371	3 <b>42</b>	132	210	
IUD										
Public sector	44.0	50.9	50.5	48.2	40.3	52.1	38.5	30.0	47.2	
Medical private sector	55.7	48.8	49.5	51 5	59.4	47.6	61.0	69 3	52.4	
Private voluntary org.	9.1	10.8	4.8	10.4	12.3	9.4	16.1	17.4	14.8	
Private hospital/clinic										
or doctor	40.5	36.9	37.2	39.8	43 7	37.9	39.9	45.7	33.9	
Mosque/church clinic <sup>1</sup>	6.2	1.1	7.5	14	3.5	0.3	5.1	6.2	3.8	
Other <sup>2</sup> /Not sure	0.2	0.4	0.0	03	0.4	0.2	0.5	07	0.4	
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100 0	100.0	100.0	
Number of users	1481	1074	809	1221	407	814	525	265	260	

<sup>1</sup>Includes other private vendor and other sources (husband, friends and relatives, etc.)

<sup>2</sup>Includes private voluntary organization, private hospital/clinic or doctor and mosque/church clinic

## **Reasons for Choosing Current Source of Family Planning Methods**

Family planning users were asked about their reasons for obtaining services from their current source. Table 5.12 shows that the majority of pill users mentioned ease of access to the source as the main reason for choosing the current source (78 percent). Other reasons cited relatively frequently by pill users included the reputation of the source (11 percent) and previous experience with the source (10 percent). Cost was a factor in the choice of a source for only 6 percent of pill users.

ent source	of family	planning
family pla to use thei Egypt 1992	inning met ir current s 2	nods ource of
Any modern method	Pill	IUD
2.9	1.5	3.2
2.9	2.0	3.1
19.6	6.9	26.7
33.4	10.8	45.4
19.3	10.2	24.2
49.6	78.2	36.9
11.6	5.8	14.5
1.7	2.7	0.9
2.1	3.0	0.3
4098	1181	2555
	ent source family pla to use thei Egypt 1992 Any modern method 2.9 2.9 19.6 33.4 19.3 49.6 11.6 1.7 2.1 4098	ent source of family         family planning medito         to use their current s         Egypt 1992         Any         modern         method       Pill         2.9       1.5         2.9       2.0         19.6       6.9         33.4       10.8         19.3       10.2         49.6       78.2         11.6       5.8         1.7       2.7         2.1       3.0         4098       1181

Among IUD users, the reputation of the source was the most frequently cited reason for choosing the current provider (45 percent). A substantial percentage of IUD users cited other factors, including ease of access (37 percent), recommendations from friends or relatives (27 percent), and previous experience with the provider (24 percent). Cost was an issue for 15 percent of users.

## 5.7 Accessibility of Family Planning Methods

In order to obtain further information about the accessibility of family planning services, women who knew at least one family planning method were asked about the length of time (in minutes) that was required to reach the source that they named for family planning services. For current users, the source to which the question referred was the last place at which they obtained the method. For nonusers who planned to use in the future, the source was the place which they named as the source for the method that they intended to adopt. For women who knew a method but did not plan to use, the source was simply a place that they knew provided family planning methods.

Overall, 58 percent of current users live within 30 minutes of their source, and only 14 percent live an hour or more from the place where they obtained their method (see Table 5.13). The median time required by current users to reach their source is around 16 minutes. Rural users live around twice as far from a source as urban users.

Differences between the travel times reported by users and those reported by the two groups of nonusers are not significant. This suggests that physical access to services is not a major barrier to use among Egyptian women.

## Table 5.13 Time to source of supply for modern family planning methods

Percent distribution of currently married women who are current users of modern methods of family planning, who are nonusers of modern methods, and who know a method, by time (in minutes) to reach source of supply, according to urban-rural residence, Egypt 1992

Time to source	C of m	Current use wodern me	ers thods	Nonusers of modern methods			W. kno	Women who know a method		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	
0-14 minutes	44.3	21.8	34.5	36.8	14.6	23.2	40.9	17.3	28.4	
15-29 minutes	23.8	22 8	23.4	21.3	17.6	19.1	22.7	19.6	21.1	
30-59 minutes	18.5	31.8	24.3	12.6	20.6	17.5	15.8	24.8	20,6	
60+	10.0	20.0	}4,4	4.4	11.4	8.7	7.5	14.6	113	
Don't know time	1.9	2.0	20	5.5	3.8	4.5	3.6	3.2	33	
Relatives/Finends	1.3	1.6	1.4	3.5	3.8	3.7	2.3	3 0	2.7	
Don't know source	0.0	0.0	0.0	15.2	27.4	<b>2</b> 2.7	68	16.9	12.2	
Not stated	0,1	0.0	0.1	0.7	0.7	0.7	04	0.5	0.4	
Total percentage	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number	2315	1783	4098	1966	3089	5055	4273	4844	9117	
Median	15.2	30.1	158	15.0	25.8	15.7	15.1	30.1	157	

## **CHAPTER 6**

## **USE OF THE PILL AND IUD**

The majority of contraceptive users in Egypt rely on either the pill or the IUD. The EDHS included a number of special questions relating to the adoption and use of these two methods. In presenting these data, this chapter addresses a number of important issues, including the quality of use of the pill and the cost of family planning services for both pill and IUD users. Information was obtained from pill and IUD users on a number of key service delivery issues that are assumed to influence both the acceptance and use of these methods, including the waiting time for services, the sex of the provider, the information given to users at the time of acceptance and any follow-up by the provider.

## 6.1 Pill Use

Around one-third of all women currently using family planning in Egypt are pill users. In the EDHS, there were a number of questions designed to investigate the quality of pill use. Information was obtained from current users on the brand of pills used in order to assess the extent to which the brand promoted in Egypt's contraceptive social marketing program was being used. Current users also were asked several questions relating to the cost of services. In addition, information was obtained from both current users and past users on their interaction with service providers. This information largely relates to pharmacies, which are the principal source for the pill in Egypt. However, pill users who consulted another medical provider prior to obtaining the pill from a pharmacy also were asked a series of questions about their last visit to that provider.

### Quality of Pill Use

Table 6.1 and Figure 6.1 include a number of indicators of the extent to which women who reported that they were current pill users may not be taking the pill properly. Clearly, the fact that nearly one in four pill users was unable to show a pill packet to the interviewer is of major concern. When asked the reasons for not having the packet available, 48 percent had misplaced the packet, 19 percent said they did not need to take the pill because they were having their menstrual period, 15 percent had forgotten to buy the packet, 5 percent were "resting," and 3 percent said that their husband was away (table not shown). Users claiming to have misplaced the packet may simply have wanted to avoid taking the time to find the packet for the interviewer, and users reporting that they did not have a packet because they were having a period may have been planning to obtain a packet following the interview. However, other reasons given for not showing a packet ("forgot to buy," "resting," or "husband away") indicate that at least one in five pill users may not be systematically taking the pill although they regard themselves as current users.

Among pill users able to show a packet, there also was evidence that not all users are taking the pill systematically. EDHS interviewers examined the pill packets to determine if pills were taken in the proper sequence. Overall, 23 percent of all pill users showed the interviewers packets in which pills had apparently been taken out of order (Table 6.1).

Table 6.1 also shows that 22 percent of users reported that they had interrupted use for one or more days during the previous month. Among those interrupting use, two-thirds had stopped use because they forgot the pill, misplaced the packet, or run out of supplies (table not shown). Other reasons suggest that use often is interrupted because of concerns about side effects; 14 percent of pill users who missed taking the pill at least once in the month prior to the interview cited menstrual irregularity, spotting or bleeding, other side effects or illness as the reason for not taking the pill. Other reasons for interrupting use included the belief

#### Table 6.1 Quality of pill use

Percentage of current users of the pill who were unable to show a pill packet, who had taken pills out of sequence, or who had missed taking the pill one or more days during the month before the survey, by select background characteristics, Egypt 1992

Background characteristic	Unable to show packet	Pills taken out of sequence	Missed taking pill	Number of women
Age				
15-19	10.3	10.3	20.9	17
20-24	22.6	17.0	19.0	90
25-29	21.5	21.7	23.9	260
30-34	17.5	27.1	24.9	282
35-39	24.6	23.5	21.0	288
40-44	32.6	20.9	22.3	172
45-49	29.3	28.9	19.6	72
Urban-rural residence				
Urban	23.6	24.4	23.8	601
Rural	23.0	22.1	21.2	581
Place of residence				
Urban Governorates	22.7	32.0	29.6	274
Lower Egypt	25.7	24.0	20.8	565
Urban	27.2	20.1	20.1	194
Rural	24.9	26.1	21.1	371
Upper Egypt	19.8	14.9	19.7	342
Urban	20.0	14.9	17.3	132
Rural	19.6	14.9	21.2	210
Education				
No education	23.9	25.4	22.7	522
Some primary	22.8	24.8	21.5	338
Primary through secondary	17.9	19.7	25.5	138
Completed secondary/higher	26.6	16.9	21.4	184
Total	23.3	23.2	22.5	1181

that there was no need to take the pill if the husband was away or the couple was not having intercourse (11 percent).

Looking at the differentials presented in Table 6.1, there is no uniform relationship between background characteristics such as age, residence and educational level and the indicators of pill use compliance. Further investigation is needed to determine what factors relate to compliance.



Finally, forgetting to take the pill increases the risk of an unplanned pregnancy for the user. Table 6.2 looks at the action current users report they would take if they missed taking the pill. Almost two-thirds of current users respond that they would take extra pills on the following day or use another method, both of which are appropriate responses to the situation. However, around 20 percent report that they would continue as usual taking only one pill on the day if they forgot.

## **Use of Social Marketing Brands**

Contraceptive social marketing (CSM) programs distribute, promote and sell contraceptives through commercial outlets. During the period prior to the EDHS, Egypt had an active CSM program, the Family of the Future, which distributed the Norminest brand of pills through a network of pharmacies. To obtain information on the number of users purchasing the Norminest brand, the EDHS interviewers asked to see the packet of pills for each user. If the user had the packet available, the interviewer recorded the brand. If not, the interviewer asked the user which

# Table 6.2 Action taken if forgot to take the pill

Percent distribution of current users of the pill by action that they would take if they forgot to take two or more pills, Egypt 1992

Action taken	Tota
Start again as usual	18.8
Take extra pills	61.9
Use another method	0.2
Extra pills plus another method	1.7
Other	1.6
Never forgot	15.8
Total	100.0
Number of women	1181

brand she was currently using. Overall, 15 percent of current users were using the Norminest brand. In terms of market share among users, Norminest was in third place behind Microvlar (22 percent) and Nordette (18 percent), but was more widely used than Anovlar (11 percent) or Primovlar (11 percent) (see Figure 6.2).



Table 6.3 shows that the proportion using Norminest varies only slightly by residence; it is highest among users in urban areas in Lower Egypt (18 percent) and lowest among users from Upper Egypt (12 percent).

## Cost of a Pill Cycle and Willingness to Pay

Table 6.4 looks at the information provided by current users about the amount that they paid for the most recent packet of pills. Virtually all users paid something to obtain the pill although the amounts paid for a packet were not large; eight in ten users paid 50 piastres or less for a packet, and 20 percent paid 10 piastres or less.

The Egyptian family planning program is confronted with the need to consider ways in which it can increase the proportion of the cost of the services that it recovers from program users in order to enhance the program's sustainability. To investigate whether the program might charge higher prices for pill cycles, all current users of the pill were asked about whether they would be willing to pay specific amounts for each pill cycle. The suggested amounts ranged

# Table 6.3 Use of social marketing brand pill

Percentage of current users of the pill who are using a social marketing brand (Norminest), by urban-rural residence and place of residence, Egypt 1992

Residence	Total
Urban-rural residence	
Urban	15.8
Rural	13.8
Place of residence	
Urban Governorates	16.5
Lower Egypt	15.7
Urban	17.6
Rural	14.8
Upper Egypt	12.0
Urban	12.0
Rural	12.0
Total	14.8
Number of women	1181

from 50 piastres to more than 5 pounds. Table 6.5, which shows the proportion of users willing to pay specific amounts, suggests that many users would be willing to pay considerably more for a cycle of pills than they currently do. The vast majority of current users indicate that they would be willing to pay 50 piastres for each pill cycle, and more than three in four current users would be willing to pay 1 pound per cycle. The proportion willing to pay a specific amount continues to decrease directly with the suggested price per cycle, from 54 percent who express a willingness to pay 2 pounds per cycle to only 22 percent who are willing to pay more than 5 pounds.

Table 6.4 Cost of method for pill users						
Percent distribution of current the pill by cost of a cycle of piastres), Egypt 1992	ent users of f pills (in					
Cost of						
one cycle	Total					
Free	0.3					
1-10 piastres	19.9					
11-30 piastres	5.1					
31-50 piastres	56.4					
51-75 piastres	2.8					
76-100 piastres	1.8					
More than 100 plastres	9.4					
Don't know/Missing	4.2					
Total percentage	100.0					
Number of women	1181					
Median	35.8					
Mean	38.9					

## **Cost of Consultation**

In addition to paying for pill cycles, two in five current users of the pill reported that they had consulted a doctor or other health provider at the time that they began using the pill. Table 6.6 shows the distribution of pill users reporting such consultations according to the cost of the consultation and the type of provider. Typically pill users consulting a public sector provider said the consultation was free of charge (29 percent) or cost less than 3 pounds (58 percent). Pill users who consult private providers generally paid more for services, with 45 percent saying that the consultation charge was between three and five pounds and 29 percent paying a fee of six pounds or more.

Percentage of current use indicating willingness to amounts for a cycle of pil	rs of the pill pay various ls, Egypt 1992
Amount	Total
50 piastres	95.5
1 pound	78.7
2 pounds	54.2
3 pounds	39 0
4 pounds	32.1
5 pounds	29.4
> 5 pounds	21.9
Number of women	1181

#### Table 6.6 Cost of consultation for pill users

Percent distribution of current users of the pill who consulted a doctor/clinic before beginning to use the pill by the cost that they paid for the consultation, according to the type of provider, Egypt 1992

	Service		
Cost of consultation	Public	Private/ Other	Total
Free	29.3	7.7	13.6
0-2 pounds	58.2	12.4	25.0
3-5 pounds	75	44.6	34.4
6-10 pounds	1.1	23.7	17.5
11-20 pounds	0.8	3.6	2.9
21+ pounds	0.6	2.0	1.6
Don't know/Missing	2.4	5.9	5.0
Total	100.0	100.0	100.0
Number of women	131	347	479
Median	0.7	5.4	4.0
Mean	1.1	5.9	4.6

## Service Delivery Indicators

#### **Pharmacies**

The EDHS investigated a number of aspects of the interaction between the sources of pill services and users of the services. Questions were included about the pharmacy from which users purchased pill cycles and about the services received from medical providers that the user consulted. The questions were addressed to both current and past users of the pill and, for both groups, referred to the provider from which they had last obtained services. The information obtained from both groups of users is subject to recall error, with the level of error likely to vary directly with the length of time since the user adopted the method.

Table 6.7 summarizes the information obtained for pill users who reported that they had visited a pharmacy to obtain supplies during the current or most recent episode of pill use. Overall, only 66 percent of ever users of the pill reported that they themselves had obtained pill supplies at a pharmacy. Among those saying that they had never visited a pharmacy to obtain the pill, the majority (around twothirds) indicated that their husband obtained the pill packets, with the remainder saying friends or relatives, including their children obtained the supplies (table not shown).

## Table 6.7 Information received at pharmacies about the pill

Percent distribution of ever users of the pill who report ever obtaining the pill themselves from a pharmacy by type of information provided at the pharmacy where supplies were obtained for the current/most recent segment of use, according to user status, Egypt 1992

Information	Current	Past	All
received	users	users	users
Told about			
other methods			
Yes	5.4	11.4	9.8
No	94.3	88.6	90.1
Shown how to			
use pill			
Yes	10.7	23.2	20.0
No	89.3	76.8	80.0
Side effects			
described			
Yes	3.2	6.1	5.3
No	96.8	93.9	94.6
Total	99.9	100.0	100.0
Number of women	753	2129	2882

According to the results presented in Table 6.7, there is relatively little interaction between pill users and the staff at the pharmacy from which they obtain their pills. Only around one in ten were told about other methods, only one in five users were shown how to use the pill by pharmacy staff, and only one in twenty received any description of the possible side effects of the pill. Past users were about twice as likely as current users to report getting basic information from the pharmacy staff. To some degree, the limited nature of the information provided to pill users by the pharmacy staff may reflect both the fact that many pill users consult medical providers before obtaining the supplies at the pharmacy and the fact that many pill users have had previous experience with the method. Such users may not address questions to the pharmacy staff nor be perceived by the pharmacy staff as needing any advice. Nevertheless, the results in Table 6.7 suggest that staff of pharmacies might play a greater role in providing information about the pill. The targets of this IE&C effort should include husbands and other persons obtaining pill cycles as well as women who visit the pharmacy themselves.

### **Medical Providers**

The EDHS results indicate that two in five ever users of the pill consulted a doctor or clinic prior to adopting the method. Table 6.8 shows that the majority of users (83 percent) had no complaints about the time that they had to wait for services. Ninety-four percent also reported that the consultation included a physical examination; only 6 percent said they were not examined. Regarding the sex of the provider, pill users are more likely to report having been examined by a male than a female doctor. However, consultations with a female doctor were more common than with a male doctor for pill users obtaining services at a public sector provider.

Table 6.8 shows the majority of pill users who consulted a health provider before beginning use of the pill were told about how to use the method (90 percent) and about possible side effects of the method (60 percent). A significant proportion (47 percent) also were told about other methods. Two in five pill users also reported returning to the provider for additional consultation or follow-up. There are only slight differences in these measures between current and past users and between users obtaining services from public sector providers and those consulting private sector providers.

#### Table 6.8 Service delivery indicators for pill users

Percent distribution of ever users of the pill who report that they consulted a medical provider when they began using during the current/most recent segment of use by service delivery indicators, according to user status and type of provider, Egypt 1992

	I	Current user	S		Past users			All users	
Service delivery	Private/		Private/			Private/			
indicator	Public	Other	Total	Public	Other	Total	Public	Other	Total
Waiting time too l	ong								
Yes	10.9	18.9	16.7	20.6	15.6	17.3	18.3	16.6	17.1
No	89.1	81.1	83.3	79.4	84.4	82.7	81.7	83.4	82.9
Had physical exan	ination								
By male doctor	38.8	59.0	53.5	38.2	64.9	56.0	38.3	63.2	55.3
By female doctor	47.5	38.9	41.3	50.8	31.3	37.8	50.0	33.5	38.7
Not examined	12.5	2.1	5.0	11.1	3.8	6.2	11.4	3.3	5.9
Told about other 1	nethods								
Yes	43.8	53.2	50.6	46.0	44.8	45.2	45.5	47.2	46.7
No	56.2	46.8	49.4	54.0	55.2	54.8	54.5	52.8	53.3
Shown how to use	pill								
Yes	84.5	94.2	91.6	86.4	91.0	89.5	86.0	92.0	90.1
No	t5.5	5.8	8.4	13.6	8.9	10.4	14.0	8.0	9.9
Side effects descrit	oed								
Yes	60.4	57.6	58.4	56.0	63.5	61.0	57.0	61.8	60.3
No	39.6	42.4	41.6	44.0	36.5	39.0	43.0	38.2	39.7
Returned for follo	w-up								
Yes	34.4	35.9	35.5	35.1	44.0	41.1	35.0	41.7	39.6
No	65.6	64.1	64.5	64.9	56.0	58.9	65.0	58.3	60.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	131	347	479	426	852	1278	557	1199	1756

Again, caution should be used in interpreting the findings since the results are subject to recall error. The advice provided to a user at the visit in question may vary according to the experience that the user has with the pill or other methods and the number of times that the user has visited the provider. Nevertheless, the findings suggest there may be need for providers to increase both the information that they provide to clients on methods and side effects and to encourage users to return for follow-up.

## 6.2 IUD Use

Three in five women currently using family planning in Egypt arc IUD users. As was the casc with the pill, the EDHS collected information both on the actual cost of obtaining the method and on the amounts that IUD users indicate they would be willing to pay to get the method. In addition, information was obtained from both current users and past users on basic service delivery measures.

## Cost of the IUD and Willingness to Pay

Table 6.9 looks at the information provided by current users about the amount that they paid for the IUD services. Virtually all IUD users paid something to obtain the method; only 4 percent said that they had obtained the method free of any charge. Among those paying to obtain the IUD, the majority paid 10 pounds or less. The median cost of an IUD from a public sector provider was 4 pounds, compared to 9 pounds for an IUD from a provider operated by a private voluntary or religious organization and 21 pounds for an IUD from a private doctor or clinic.

Table 6.9 Cost of metho	od for IUD use	<u>:15</u>			
Percent distribution of cut type of provider, Egypt	urrent users of 1992	the IUD by co	ost of the meth	od, according	to the
Cost of method	Public health facility	Private hospital/ clinic/ doctor	Private voluntary organi- zation clinic	Mosque or church chnic/ Other	Total
Frec	3.9	4.0	1.8	0.0	3.6
< 6 pounds	74.6	5.3	37.8	17.9	41.6
6-10 pounds	12.7	11.3	17.7	38.8	13.8
11-15 pounds	5.2	16.2	33.9	26.6	13.2
16-20 pounds	1.0	15.9	52	11 1	7.7
21-30 pounds	0.8	18.4	18	3.2	7.9
31-50 pounds	0.4	14.3	0.9	0.0	5.8
51 pounds or more	0.1	9.4	0.5	1.2	38
Don't know/Missing	1.3	5.2	0.3	1.2	2.7
Total percentage	100.0	100.0	100.0	100.0	100.0
Number of women	1199	996	250	109	2555
Median	35	20.6	9.2	10.5	7.6
Mean	4.5	22 1	8.9	11.0	12.1

To investigate whether higher prices might be charged for IUD services, all current users of the IUD were asked about whether they would be willing to pay various amounts for the method. The suggested amounts ranged from 5 to more than 200 pounds. Table 6.10, which shows the proportion willing to pay various amounts, indicates that many IUD users would be willing to pay considerably more for the method than they currently do. The vast majority of current users would be willing to pay 5 pounds, and eight in ten would be willing to pay 10 pounds. The proportion willing to pay a specific amount continues to decrease directly with the suggested amount, from 50 percent who express a willingness to pay 25 pounds to only 7 percent who are willing to pay more than 200 pounds.

## Table 6.10 Amount willing to pay for IUD insertion

Percentage of current users of the IUD indicating willingness to pay various amounts to have the IUD inserted, Egypt 1992

Amount	Total
5 pounds	95.4
10 pounds	80.7
25 pounds	50.3
50 pounds	26.0
100 pounds	13.7
150 pounds	9.4
200 pounds	8.6
> 200 pounds	6.7
Number of women	2555

## Service Delivery Indicators

Again, as with the pill, the EDHS investigated a number of aspects of the interaction between the providers of IUD services and users of those services. The questions were addressed to both current and past users and referred to experience in the most recent episode of use. The responses are subject to recall error, which is assumed to increase with the length of time since the user visited the provider.

The results presented in Table 6.11 and Figure 6.3 show that only one in five IUD users complained about having to wait too long for services. Virtually all IUD users reported having a physical examination at the time they obtained the method, and the majority (60 percent) said that a female doctor had examined them. IUD users obtaining services from a public sector provider were somewhat more likely to report that they had seen a female doctor than users who got services from a private sector provider (68 percent and 53 percent, respectively).

#### Table 6.11 Service delivery indicators for IUD users

Percent distribution of ever users of the IUD by service delivery indicators, according to user status and type of provider, Epypt 1992

	I	Current users Past users						All users		
Service		Private/			Private/			Private/		
measure	Public	Other	Total	Public	Other	Total	Public	Other	Total	
Waiting time too 1	long			_						
Yes	19.3	17.6	18.4	16.5	18.9	17.8	18.4	18.1	18.2	
No	80.6	82.4	81.5	83.5	81.1	82.2	81.5	81.9	81.8	
Had physical exan	nination									
By male doctor	27.3	43.9	36.1	35.6	50.6	44.1	30.0	46.3	38.9	
By female doctor	71.4	55.8	63.1	62.1	48.6	54.4	68.4	53.2	60.1	
Not examined	1.1	0.3	0.7	2.3	0.8	1.4	1.5	0.5	1.0	
Told about other a	methods									
Yes	27.0	35.9	31.7	27.5	39.6	34.4	27.2	37.2	32.6	
No	72.9	64.1	68.2	72.4	60.4	65.6	72.8	62.8	67.3	
Shown how to che	ck IUD i	n place								
Yes	87.8	89.4	88.7	88.7	90.4	89.7	88.1	89.8	89.0	
No	12.0	10.6	11.3	11.3	9.6	10.3	11.8	10.2	10.9	
Toid about side cf	Tects									
Yes	59.9	70.6	65.6	57.2	62.6	60.2	59.0	67.7	63.7	
No	39.9	29.4	34.4	42.8	37.4	39.7	40.9	32.3	36.2	
Returned for follo	w-up									
Yes	45.2	57.1	51.5	49.6	62.4	56.9	46.7	59.1	53.4	
No	54.7	42.9	48.4	50.4	37.6	43.1	53.2	40.9	46.6	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of women	1199	1355	2554	586	771	1357	1785	2126	3911	

Looking at the other indicators of service delivery presented in Table 6.11, only one-third of IUD users reported that they were told about other methods at the time that they obtained their IUD. Most (89 percent) were given advice about how to check that the IUD was in place and 64 percent received information on the side effects that they might experience. Slightly more than half of all IUD users indicated that they had returned to the provider for additional consultation or follow-up. In general, IUD users who obtain services from private providers are somewhat more likely than users who obtain services from public providers to report receiving information about other methods and potential side effects and to say that they had returned for follow-up.

As was the case with the information from pill users, caution should be used in interpreting the findings. However, the results again suggest that both private and public sector providers offering family planning services need to improve the information that is given to clients and to encourage users to return for follow-up.



## CHAPTER 7

## NONUSE OF FAMILY PLANNING AND INTENTION TO USE

This chapter focuses on women who are not using family planning and presents information on the following topics: levels of family planning discontinuation, reasons for discontinuation, reasons for nonuse, intention to use in the future, timing of future use, and the methods preferred by potential users. The information presented in the chapter is important in evaluating the prospects for family planning acceptance among women who are not currently using a family planning method.

## 7.1 Discontinuation Rates

A key concern for family planning programs is the rate at which users discontinue use of contraception and the reasons for such discontinuation. Life table contraceptive discontinuation rates based on information collected in the calendar in the EDHS questionnaire are presented in Table 7.1. All episodes of contraceptive use between January 1987 and the date of interview were recorded in the calendar, along with the main reason for any discontinuation of use during this period. In addition, in order to obtain the duration of the first episode of use occurring in the calendar period, any woman using in January 1987 was asked about the date that she had started that period of use. These women enter the life table at their duration of use as of January 1987. Thus, the discontinuation rates presented in Table 7.1 refer to *all episodes of use* in the period of time covered by the calendar, not just those episodes that began during the calendar period. Specifically, the rates are based upon episodes of use during the 60-month period 3-63 months prior to the EDHS. In calculating the rates, the month of interview and the two preceding months are ignored in order to avoid the bias that might be introduced by an unrecognized pregnancy.

	R	eason for di	scontinuatio	n	
Method	Method failure	To become pregnant	Side effects/ health concerns	All other reasons	All reasons
Pill	8.7	5.0	19.5	8.9	42.1
IUD	1.5	2.3	7.6	1.1	12.5
Conuom Pariodic abstinence	4,4 (19,3)	0.5 (5 9)	(2.1)	20.5	47.5 (40.5)
Prolonged breastfeeding	10.3	1.4	0.1	13.2	25.1
Total	5.7	3.6	12.5	7.2	29.0

The rates presented in Table 7.1 are cumulative one-year discontinuation rates and represent the proportion of users discontinuing by 12 months after the start of use. The rates are calculated by dividing the number of discontinuations at each duration of use in single months by the number of months of exposure at that duration. The single-month rates are then cumulated to produce a one-year rate. In calculating the rates, the reasons for discontinuation are treated as competing risks (net rates). For purposes of the table, the

reasons are classified into four main categories: method failure, desire to become pregnant, side effects/health reasons, and all other reasons.

The results in Table 7.1 indicate that almost three in tcn users in Egypt stop using within 12 months of starting use; 6 percent stop using due to method failure, 4 percent because they want to become pregnant, 13 percent as a result of side effects or health concerns, and 7 percent for other reasons. The one-year discontinuation rates vary by method. The rate for the pill is considerably higher than for the IUD (42 percent and 13 percent, respectively). Rates for the condom (48 percent) and periodic abstinence (41 percent) are higher than that for prolonged breastfeeding (25 percent).

Looking at the reasons for discontinuation of the pill, 20 percent of users discontinue during the first year of use because of side effects and health concerns, 9 percent due to method failure, 5 percent as a result of the desire to become pregnant, and 9 percent for all other reasons. IUD users are most likely to discontinue during the first 12 months because they experience side effects or have health concerns(8 percent); only 2 percent report stopping because they became pregnant. Although significant proportions of condom users discontinue due to method failure (4 percent), the desire to become pregnant (6 percent), and side effects or health concerns (10 percent), other reasons (27 percent) are more important, particularly those relating to the convenience and perceived efficacy of the method. Method failure is clearly an issue for users relying on traditional methods; 19 percent of periodic abstinence users and 10 percent of users relying on prolonged breastfeeding stop use because they become pregnant.

## 7.2 Reasons for Discontinuing Use of Family Planning

Table 7.2 and Figure 7.1 present information on the reasons women give for discontinuing use of a family planning method. The table is based on all discontinuations occurring during the five years preceding

Became pregnant         22.5         8.8         18.7           To become pregnant         16.0         26.0         16.6           Husband disapproved         0.9         0.4         4.8           Side effects         32.7         38.0         11.8           Health concerns         10.9         11.7         6.1           IUD expelled         0.0         1.0         0.4           IUD expelled         0.0         1.3         0.1           Switch method/rest         0.8         3.3         4.2           More effective method         1.6         0.2         15.3           Inconvenient to use         1.0         0.6         7.5           Access/availability         0.2         0.1         0.5           Cost         0.0         0.3         0.0           Doctor's advice         0.0         0.3         0.0           Breastfeeding ends/period returns 0.1         0.0         1.5         1.7           Infrequent sex         9.5         4.1         8.3           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3 <th>50.0 29.4 19.7</th>	50.0 29.4 19.7
To become pregnant         16.0         26.0         16.6           Husband disapproved         0.9         0.4         4.8           Side effects         32.7         38.0         11.8           Health concerns         10.9         11.7         6.1           IUD expelled         0.0         1.0         0.4           IUD expired         0.0         1.0         0.4           Switch method/rest         0.8         3.3         4.2           More effective method         1.6         0.2         15.3           Inconvenient to use         1.0         0.6         7.5           Access/availability         0.2         0.1         0.5           Cost         0.0         0.3         0.0           Doctor's advice         0.0         0.3         0.0           Breastfeeding ends/period returns 0.1         0.0         1.5         1.4           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.	JUIU 27.4 [07
Husband disapproved       0.9       0.4       4.8         Side effects       32.7       38.0       11.8         Health concerns       10.9       11.7       6.1         IUD expelled       0.0       1.0       0.4         IUD expelled       0.0       1.0       0.4         IUD expelled       0.0       1.0       0.4         IUD expired       0.0       1.3       0.1         Switch method/rest       0.8       3.3       4.2         More effective method       1.6       0.2       15.3         Inconvenient to use       1.0       0.6       7.5         Access/availability       0.2       0.1       0.5         Cost       0.0       0.0       0.0         Doctor's advice       0.0       0.3       0.0         Breastfeeding ends/period returns 0.1       0.0       1.5       1.7         Infrequent sex       9.5       4.1       8.3         Marital dissolution       0.6       2.6       1.2         Menopause       1.5       0.9       2.2         Fatalistic       0.3       0.2       0.1         Other       1.2       0.6       0.3 <td>22.0 8.5 18.8</td>	22.0 8.5 18.8
Side effects       32.7       38.0       11.8         Health concerns       10.9       11.7       6.1         IUD expelled       0.0       1.0       0.4         IUD expired       0.0       1.3       0.1         Switch method/rest       0.8       3.3       4.2         More effective method       1.6       0.2       15.3         Inconvenient to use       1.0       0.6       7.5         Access/availability       0.2       0.1       0.5         Cost       0.0       0.0       0.0       0.0         Doctor's advice       0.0       0.3       0.0       15         Infrequent sex       9.5       4.1       8.3         Marital dissolution       0.6       2.6       1.2         Menopause       1.5       0.9       2.2         Fatalistic       0.3       0.2       0.1         Other       1.2       0.6       0.3         Don't know       0.1       0.1       0.0	3.7 0.0 12
Health concerns       10.9       11.7       6.1         IUD expelled       0.0       1.0       0.4         IUD expired       0.0       1.3       0.1         Switch method/rest       0.8       3.3       4.2         More effective method       1.6       0.2       15.3         Inconvenient to use       1.0       0.6       7.5         Access/availability       0.2       0.1       0.5         Cost       0.0       0.0       0.0         Doctor's advice       0.0       0.3       0.0         Breastfeeding ends/period returns       0.1       0.0       1.5         Infrequent sex       9.5       4.1       8.3         Marital dissolution       0.6       2.6       1.2         Menopause       1.5       0.9       2.2         Fatalistic       0.3       0.2       0.1         Other       1.2       0.6       0.3         Don't know       0.1       0.1       0.0	1.2 1.3 30.4
IUD expelled       0.0       1.0       0.4         IUD expired       0.0       1.3       0.1         Switch method/rest       0.8       3.3       4.2         More effective method       1.6       0.2       15.2         Inconvenient to use       1.0       0.6       7.5         Access/availability       0.2       0.1       0.5         Cost       0.0       0.0       0.0         Doctor's advice       0.0       0.3       0.0         Breastfeeding ends/period returns       0.1       0.0       1.5         Infrequent sex       9.5       4.1       8.3         Marital dissolution       0.6       2.6       1.2         Menopause       1.5       0.9       2.2         Fatalistic       0.3       0.2       0.1         Other       1.2       0.6       0.3         Don't know       0.1       0.1       0.0	0.0 3.5 10.2
IUD expired         0.0         1.3         0.1           Switch method/rest         0.8         3.3         4.2           More effective method         1.6         0.2         15.2           Inconvenient to use         1.0         0.6         7.5           Access/availability         0.2         0.1         0.5           Cost         0.0         0.0         0.0         0.0           Doctor's advice         0.0         0.3         0.0         15           Infrequent sex         9.5         4.1         8.3           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	0.0 0.0 0.4
Switch method/rest         0.8         3.3         4.2           More effective method         1.6         0.2         15.2           Inconvenient to use         1.0         0.6         7.5           Access/availability         0.2         0.1         0.5           Cost         0.0         0.0         0.0         0.0           Doctor's advice         0.0         0.3         0.0         15           Infrequent sex         9.5         4.1         8.3           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	0.0 0.0 0.4
More effective method         1.6         0.2         15.3           Inconvenient to use         1.0         0.6         7.9           Access/availability         0.2         0.1         0.5           Cost         0.0         0.0         0.0           Doctor's advice         0.0         0.3         0.0           Breastfeeding ends/period returns         0.1         0.0         1           Infrequent sex         9.5         4.1         8.3           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	0.0 0.1 1.8
Inconvenient to use       1.0       0.6       7.5         Access/availability       0.2       0.1       0.5         Cost       0.0       0.0       0.0         Doctor's advice       0.0       0.3       0.0         Breastfeeding ends/period returns       0.1       0.0       1.5         Infrequent sex       9.5       4.1       8.3         Marital dissolution       0.6       2.6       1.2         Menopause       1.5       0.9       2.2         Fatalistic       0.3       0.2       0.1         Other       1.2       0.6       0.3         Don't know       0.1       0.1       0.0	11.5 19.7 3.3
Access/availability         0.2         0.1         0.5           Cost         0.0         0.0         0.0           Doctor's advice         0.0         0.3         0.0           Breastfeeding ends/period returns         0.1         0.0         1.5           Infrequent sex         9.5         4.1         8.3           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	2.1 7.6 1.8
Cost         0.0         0.0         0.0           Doctor's advice         0.0         0.3         0.0           Breastfeeding ends/period returns         0.1         0.0         15           Infrequent sex         9.5         4.1         8.3           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	0.0 0.0 0.3
Doctor's advice         0.0         0.3         0.0           Breastfeeding ends/period returns         0.1         0.0         1         5           Infrequent sex         9.5         4.1         8.3           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	0.0 0.0 0.0
Breastfeeding ends/period returns         0.1         0.0         1.5           Infrequent sex         9.5         4.1         8.3           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	0.0 0.1 0.2
Infrequent sex         9.5         4.1         8.3           Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	0.0 26.8 1.5
Marital dissolution         0.6         2.6         1.2           Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	7.1 0.3 7.1
Menopause         1.5         0.9         2.2           Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	0.3 0.0 1.3
Fatalistic         0.3         0.2         0.1           Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	1.3 0.0 1.2
Other         1.2         0.6         0.3           Don't know         0.1         0.1         0.0	0.2 0.9 0.3
Don't know 0.1 0.1 0.0	
	0.6 1.9 1.1
T 100 0 100 0 100 0	0.6 1.9 1.1 0.0 0.0 0.1
Total 100.0 100.0 100.0	0.6 1.9 1.1 0.0 0.0 0.1



the survey, regardless of whether they occurred during the first 12 months of use or not. Taking into account all methods, side effects (30 percent) is the reason given most frequently for discontinuation, followed by the desire to get pregnant, and becoming pregnant while using (19 percent each).

Looking at the patterns for specific methods, discontinuation due to method failure is high for all methods except the IUD, peaking at 50 percent for periodic abstinence. The desire to become pregnant is mentioned somewhat more often as the reason for discontinuing use of the IUD and periodic abstinence than of other methods.

Not surprisingly, side effects and health concerns are less frequently mentioned as reasons for discontinuation of traditional methods than they are in the case of the pill (44 percent) and the IUD (50 percent). A significant proportion of condom users and users of both periodic abstinence and prolonged breastfeeding discontinue use because they want a more effective method. Around one-quarter of all discontinuations by users of prolonged breastfeeding are due to the fact that the woman's menstrual period returns or the child is weaned.

## 7.3 Future Use of Family Planning

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 interest in adopting family planning in the future. Table 7.3 presents the distribution of currently married women who were not using family planning by their intention to use in the future, according to the number of living children. Forty-six percent of nonusers said that they intended to use family planning in the future, 29 percent within the next 12 months. The proportion intending to use peaks at 53 percent among nonusers with two children. The timing of the intention to use also varies with the number of living children; nonusers with no children.

#### Table 7.3 Future use of family planning

Percent distribution of currently married women who are not using a family planning method by past experience with family planning and intention to use in the future, according to number of living children, Egypt 1992

Past experience						
with family planning and future intentions	0	1	2	3	4+	Tota
Never used family planning						
Intend to use in next 12 months	1.5	21.0	18.5	12.7	10.9	13.1
Intend to use later	23.0	14.5	4.3	5.0	3.7	8.2
Unsure as to timing	6.0	6.0	2.4	1.6	1.9	3.2
Unsure as to intention	14.7	10.2	4.7	4.6	2.3	5.9
Do not intend to use	53.3	32.9	28.7	27 3	29.0	32.2
Previously used family planning						
Intend to use in next 12 months	0.3	3.2	20.4	24.0	20.5	15.6
Intend to use later	0.0	3.7	4.9	2.7	2.9	3.0
Unsure as to timing	0.0	1.5	2.4	3.8	3.0	2.4
Unsure as to intention	0.0	1.2	3.4	3.7	2.9	2 5
Do not intend to use	1.1	5.9	10.1	14.6	22.9	14.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
All currently married nonusers						
Intend to use in next 12 months	1.7	24.2	38.9	36.7	31.4	28.7
Intend to use later	23.0	18.1	9.2	7.7	6.6	11.2
Unsure as to timing	6.1	7.6	4.8	5.4	4.9	5.6
Unsure as to intention	14.7	11.3	8.2	8.3	52	8.3
Do not intend to use	54.5	38.8	38.8	41.9	51 9	46.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	575	844	809	720	1895	4843

or only one child are much less likely than nonusers with two or more children to express an intention to use within the next 12 months.

Looking at the relationship between previous use of family planning and intention to use in the future, those who intend to use in the future are somewhat more likely to have never used than to have used in the past. This is due in part to the fact that the nonuser group includes more never-users than past-users. Considering never-users as a group by themselves, they are much less likely than past-users to express a desire to use in the future; three in five never-users do not plan to use in the future or are unsure about their intentions compared to around two in five past-users.

## 7.4 Reasons for Nonuse of Family Planning

The reasons given by women who do not use family planning are of particular interest to the family planning program in Egypt. Table 7.4 presents the distribution of currently married nonusers who do not intend to use in the future by the main reason for not using. The primary reason for not using is the desire to become pregnant; 27 percent of nonusers said that they were not using because they wanted more children. Concern about possible difficulty in becoming pregnant (24 percent) was the next most common reason for nonuse. Other often-mentioned reasons included a fatalistic attitude (9 percent), health concerns (8 percent), husband's disapproval (3 percent), and a lack of need for contraception because the woman was menopausal or had had a hysterectomy (13 percent) or the couple had sex infrequently (7 percent). Only 1 percent mentioned religion as a reason for nonuse.

There are significant differences in the answers given by women under age 30 and those 30 and over. Nonusers under age 30 are more likely than older nonusers to mention the desire

## Table 7.4 Reasons for not using family planning

Percent distribution of currently married nonusers who do not intend to use in the future by main reason for not using, according to age, Egypt 1992

Main reason for not	А	ge	
using family planning	15-29	30-49	Total
Want children	58.6	13 5	26.9
Lack of knowledge	0.2	0.4	0.3
Side effects	4.5	2.3	2.9
Health concerns	3.9	9.8	8.1
Hard to get methods	0.2	0.0	0.1
Costs too much	0.1	0.1	0.1
Inconvenient	0.3	0.5	0.4
Religion	2.4	0.5	1.0
Opposed to family planning	0.3	0.3	0.3
Husband opposed	7.1	1.8	3.4
Other people opposed	0.8	0.1	0.3
Fatalistic	5.1	11.2	9.4
Infrequent sex	4.1	8.3	7.1
Difficult to be pregnant	8.6	30.2	23.7
Menopausal/Had hysterectomy	02	18 0	12.7
Other	1.3	2.0	1.8
Don't know	2.5	1.0	1.4
Total	100.0	100.0	100.0
Number of women	665	1573	2239

to have more children (59 percent and 14 percent, respectively), while concern about possible difficulty in becoming pregnant is mentioned by more older nonusers than younger nonusers (30 percent and 9 percent, respectively). As might be expected, lack of need for contraception because the woman was menopausal or had had a hysterectomy was a reason given almost exclusively by older nonusers. Infrequent sex, a fatalistic attitude, and health concerns also were reasons mentioned more often by nonusers age 30 and over than by those under age 30.

## 7.5 Preferred Methods of Family Planning among Nonusers

Method preferences among currently married women who were not using a family planning method at the time of the survey but who intended to use a method in the future are shown in Table 7.5. The IUD and pill are the most popular methods among users in Egypt. Therefore, it is not surprising that over 40 percent of nonusers who intend to adopt a family planning method mention the IUD as the preferred method and 20 percent express a preference for the pill (see Figure 7.2). The only other modern method preferred by more than one percent of nonusers is injection (4 percent). A significant proportion of nonusers also mention prolonged breastfeeding as the method that they intend to use (14 percent).

There is little variation in method preferences according the timing of future use. Nonusers intending to use within the next 12 months are somewhat more likely to express a preference for the IUD (47 percent) than nonusers planning to use after 12 months (34 percent) or are uncertain about when they will begin using (38 percent). The proportion expressing a preference for prolonged breastfeeding also varies somewhat with the timing of future use.



The popularity of the IUD and pill among nonusers intending to use in the future raises a number of challenges for the Egyptian family planning program. Providers trained to insert the IUD must be available to meet the increased demand in both the public and private sector. Efforts must also be directed toward improved counseling for new users of both methods to reduce discontinuation.

#### Table 7.5 Preferred method of family planning for future use

Percent distribution of currently married women who are not using a family planning method but who intend to use in the future by preferred method, according to whether they intend to use in the next 12 months or later, Egypt 1992

	1	Intend to us	e	
Preferred method of family planning	In next 12 months	After 12 months	Unsure as to timing	Total
Pill	19.8	22.0	20.4	20.4
IUD	47.3	33.6	37.5	42.7
Injection	4.7	4.8	2.2	4.4
Norplant	0.4	0.5	0.7	0.5
Diaphragm/foam/jelly	0.2	0.0	0.7	0.2
Condom	0.8	0.1	0.1	0.5
Female sterilization	1.1	0.5	0.9	1.0
Periodic abstinence	0.4	0.1	0.6	0.3
Withdrawal	0.3	0.1	0.0	0.2
Prolonged breastfeeding	12.1	19.5	16.2	14.4
Other	0.1	0.0	0.0	0.1
Not sure	12.8	18.8	20.6	15.2
Total	100.0	100.0	100.0	100.0
Number of women	1388	541	269	2199

## CHAPTER 8

## FERTILITY PREFERENCES

The Egypt DHS included a number of questions to ascertain fertility preferences. The value of the responses to these questions for predicting the future childbearing behavior of individual women is questionable. Women's attitudes toward childbearing change over time. Moreover, women may not be able to act on their preferences due to societal pressures or the desires of other family members, particularly the husband. Overall, however, the data on fertility preferences provides an indicator of the direction that future fertility will take, as well as an assessment of the need for family planning and the extent of unwanted fertility.

#### 8.1 **Desire for More Children**

In order to obtain information on future childbearing intentions, currently married respondents were asked: "Would you like to have another child or would you prefer not to have any more children?" If they did indeed want another child, they were asked: "How long would you like to wait from now before the birth of another child?" If the woman had not yet had any children, these questions were appropriately phrased, and if the woman was pregnant, she was asked about her desire for more children after the baby she was expecting. The small number of respondents who reported current use of female sterilization or male sterilization were not asked about their future childbearing desires; they are classified as wanting no children in the tabulations on childbearing intentions.

Almost two-thirds of married women do no want any more children (see Table 8.1 and Figure 8.1). Among women who express a desire for another child, the majority want to delay the next birth two or more years; only 12 percent of married women want another child within two years. Not surprisingly, the desire to have a child soon is most prevalent among women who have not yet begun childbearing; 86 percent of women with no children want a birth soon. Among women with one child, the majority (62 percent) want to delay the next birth. The desire to cease childbearing rises dramatically among women with more than one

Percent distribution of cu 1992	rently married	women by d	<u>hildren</u> esire for mo	re children,	according to	number of	living child	ren, Egypt
Desire for more children			Numbe	r of living c	hildren <sup>1</sup>			
	0	1	2	3	4	5	6+	Total
Have another soon <sup>2</sup>	85.7	24.4	10.3	4.5	2.2	1.5	1.0	12.0

24.5

0.7

3.8

0.2

1.7

100.0

1641

58.8

9.7

0.7

2.5

79.5

1.0

2.1

100.0

1705

4.4

0.1

2.5

87.5

1.4

2.0

100.0

1425

2.5

0.4

1.2

88.5

2.2 3.6

100.0

1053

1.1

0.0

2.0

90.6

2.5 2.8

100.0

1535

15.9

0.7

2.2

65.6

1.1

2.3

100.0

9153

T.L. 0 1 -. . . . . . . . .

5.2

1.8

0.8

1.9

0.0

4.6

100.0

578

62.1

2.0

1.5

8.7

0.1

1.2

100.0

1215

<sup>1</sup>Includes current pregnancy

Have another, undecided when

Have another later<sup>3</sup>

Declared infecund

Number of women

Undecided

Sterilized

Total

Want no more

<sup>2</sup>Want next birth within 2 years

<sup>3</sup>Want to delay next birth for 2 or more years



child; the proportion wanting no more children increases from almost 60 percent of women with two children to over 90 percent of women with six or more children.

Table 8.2 shows the distribution of currently married women by desire for more children, according to age. The desire to space births is concentrated among young women (under age 25). Interest in limiting childbearing increases rapidly with age, from around 10 percent among women 15-19 to over 80 percent among women 40-49.

Desire for	Age of woman								
more children	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total	
Have another soon	36.5	20.1	14.5	10.8	75	5 5	2.9	12 0	
Have another later <sup>2</sup>	48.4	43.0	23.9	9.0	3.3	0.8	0.4	15.9	
Have another, undecided when	2.1	1.3	0.7	0.6	0.6	0.1	0.4	0.7	
Want no more	10.7	2.9	57.6	76.3	82.5	1.5 84.7	80.4	65.6	
Sterilized	0.0	0.0	0.1	0.8	1.5	2.6	3.6	1.1	
Declared infecund	0.3	0.2	0.1	0.7	1.7	5.1	11.8	2.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of women	415	1324	1956	1743	1582	1231	902	9153	

Table 8.3 looks at the variation in the proportion of women wanting no more children with the number of living children for various subgroups. The results suggest that urban women begin to want to limit family size at lower parities than rural women. For example, nearly 70 percent of urban women with two children say that they do not want another child compared to less than 50 percent of rural women. Urban-rural differentials narrow but remain evident as the number of living children increases.

#### Table 8.3 Desire to limit childbearing

Percentage of currently married women who want no more children, by number of living children and selected background characteristics, Egypt 1992

Deskaround			Numbe	r of living o	children <sup>1</sup>			
characteristic	0	1	2	3	4	5	6+	Total
Urban-rural residence								
Urban	2.7	13.3	68.3	88.4	94.4	94.6	94.1	70.2
Rural	1.2	4.3	47.2	71.6	83.6	88.2	92.7	63.7
Place of residence								
Urban Governorates	1.0	16.0	69.0	87.6	94.5	93.4	94.8	70.1
Lower Egypt	2.1	7.7	63.0	87.2	92.0	93.7	94.5	70.9
Urban	2.7	12.4	69.9	91.7	95.3	94.9	92.5	71.4
Rutal	1.8	5.4	59.1	84.7	90.4	93.3	94.9	70.6
Upper Egypt	2.4	5.2	43,7	63.9	81.1	85.8	91.3	59.6
Urban	(8.1)	8.9	64.6	85.6	93.2	96.7	94.3	69.0
Rural	0.7	3.1	30.8	54.6	74.9	81.7	90.5	55.7
Education								
No education	2.1	7.2	51.2	74.0	87.1	88.2	92.4	69.2
Some primary	0.2	12.5	57.5	84.4	89.4	92.7	94.7	74.2
Primary through secondary	4.0	t2.0	65.6	83.2	92.6	97.6	98.1	67.3
Completed secondary/higher	2.0	7.7	64.9	86.0	91.4	95.8	(77.7)	53.1
Work status								
Working for cash	2.2	13.4	71.8	89.3	92.7	87.5	96.8	68.5
Not working for cash	1.9	8.0	55.4	78.4	88.4	91.0	92.9	66.5
Total	1.9	8.8	59.0	80.5	88.9	90.7	93.1	66.8

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

<sup>1</sup>Includes current pregnancy

Considering the differentials by place of residence, the proportion wanting no more children among married women living in rural Upper Egypt is only 56 percent compared to around 70 among women living in the other areas. However, as Figure 8.2 shows, this proportion represents a very substantial increase over the proportion of married women from rural Upper Egypt reported as wanting no more children in the 1988 Egypt DHS (44 percent). The marked change in fertility preferences parallels the sharp increase in contraceptive practice in rural Upper Egypt discussed earlier.



The absence of a definite association between educational level and the proportion wanting no more children among all women is at least partially a result of the concentration of more educated women at lower parities, where women are more likely to express a desire for more children. Among married women with two or more children, a positive association between the number of living children and educational level is clearly evident. Women working for cash are more likely than other women to want no more children, with the relationship being particularly strong among women with two to four living children.

## 8.2 Need for Family Planning Services

Information on fertility preferences alone is not sufficient to assess the need for family planning services. Many women who do not want to have another child or who want to space the next birth are already using contraception or are not exposed to the risk of pregnancy because they are menopausal or infecund. The estimates of unmet need and of met need for family planning services, and of the total demand services presented in Table 8.4 take into account these as well other factors. Specifically, *unmet need for family planning* (shown in columns 1-3 of Table 8.4) is defined as including: a) women who are pregnant or amenorrheic and whose last birth was mistimed and b) women who are neither pregnant nor amenorrheic and who want to space the next birth, but are not using contraception. Menopausal and infecund women are excluded from the unmet need category as are pregnant or amenorrheic women who became pregnant while using a method (these women are in need of *better contraception*). Met need for family planning (shown in columns 4-6) includes women who are currently using contraception. Total demand for family planning (shown in columns 7-9) represents the sum of unmet need and met need and, in addition, includes pregnant and amenorrheic women who became pregnant while using a family planning method. The percentage of the total demand that is satisfied is shown in the last column of Table 8.4.

#### Table 8.4 Need for family planning services

Percentage of currently married women with unmet need for family planning, met need for family planning, and the total demand for family planning services, by selected background characteristics, Egypt 1992

	Unmet need for family planning <sup>1</sup>			M fan (cun	Met need for family planning (currently using) <sup>2</sup>			Total demand for family planning <sup>3</sup>			e Number
Background characteristic	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total	satis- fied	of women
Age											
15-19	21.6	2.2	23.8	10.8	2.4	13.3	33.8	4.9	38.7	38.6	415
20-24	16.2	6.7	22.9	17.1	12.6	29.7	34.4	20.3	54.7	58.1	1324
25-29	9.9	12.8	22.7	13.2	32.7	<b>46</b> .0	24.1	46.7	70.8	67.9	1956
30-34	3.6	16.1	19.8	7.2	51.6	58.8	11.3	70.2	81.5	75.8	1743
35-39	3.1	18.0	21.0	3.1	56.5	59.6	6.3	76.0	82.3	74.5	1582
40-44	0.8	16.4	17.2	0.7	54.9	55.5	1.4	72.2	73.6	76.7	1231
45-49	0.3	11.0	11.3	0.1	34.3	34.5	0.5	45.4	45.8	75.2	90 <b>2</b>
Urban-rural residence						_	_	_			
Urban	4.5	10.7	1.5.2	9.8	47.2	57.0	14.8	58.8	73.7	79.3	4281
Rural	8.8	15.5	24.3	6.1	32.3	38.4	15.4	49.4	64.8	62.5	4873
Place of residence				_					_		
Urban Governorates	4.1	9.3	13.4	10.2	48.9	59.1	15.2	59.1	74.3	82.0	2201
Lower Egypt	5.8	119	17.7	8.4	45.1	53.5	14.5	58.5	73.1	75.8	3746
Urban	3.9	10.7	14.6	10.3	50.1	60.3	14.2	61.7	75.9	80.8	1120
Rural	6.6	12.4	19.0	7.6	42.9	50.5	14.7	57.2	71.8	73.6	2626
Upper Egypt	9.8	17.7	27.5	5.5	25.9	31.4	15.8	44 7	60.5	54.6	3207
Urban	6.2	14.2	20.3	8.3	39.8	48.1	14.8	54.9	69.7	70.9	960
Rural	11.4	19.2	30.5	4.3	19.9	24.3	16,3	40.3	56.6	46.0	2247
Education	-								- <b>-</b> -		
No education	7.3	17.2	24.6	3.7	33.8	37.5	11.5	52.3	63.8	61.5	4363
Some primary	5.2	13 4	18.7	5.7	47.8	53.5	11.3	63.1	74.4	74.9	1913
Primary through secondar	у <sup>7.0</sup>	11.3	18.3	9.9	46.3	56.1	17.7	58.4	76.1	75.9	1010
ary/higher	7.1	4.9	12.0	184	39.6	58.0	26.2	45.4	71.6	83.3	1867
Work status								<b>5</b> 0 .	<b>.</b>		
Working for cash	4.7	10.1	14.8	11.0	47.2	58.3	16.1	58.4	74.5	80.1	1317
Not working for cash	7.1	13.8	21.0	1.3	37.9	45.2	15.0	53.0	68.0	69.2	/836
Total	6.8	13.3	20.1	78	39.3	47.1	15.1	53.8	69.0	70.9	9153

<sup>1</sup>Unmet need for spacing includes pregnant women whose pregnancy was mistimed, amenorrheic women whose last birth was mistimed, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait 2 or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrheic women who became pregnant while using a method (these women are in need of better

contraception). Also excluded are menopausal or infecund women. <sup>2</sup>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. <sup>3</sup>Total demand includes pregnant or amenorrheic women who became pregnant while using a method (method failure).

According to Table 8.4, one in five married women in Egypt is in need of family planning services. Combined with the 47 percent of married women who are currently using a contraceptive method, the total demand for family planning comprises almost 70 percent of married women in Egypt. Presently, 71 percent of the total demand for family planning in Egypt is met (last column). Significantly, only 52 percent of the potential demand for services to space births is being met compared to 73 percent of the demand for limiting. As is evident in the first column of Table 8.4, interest in spacing births is largely concentrated among young women (under age 25), and greater efforts are obviously required to meet the needs of these women.

Unmet need is greater among rural than urban women (24 percent and 15 percent, respectively). Considering place of residence, unmet need varies from 13 percent in the Urban Governorates to 31 percent in rural Upper Egypt. Unmet need varies inversely with educational level, from a high of 25 percent among women who never attended school to only 12 percent among women with a secondary education. This is due to the fact that a much higher proportion of educated women are using family planning, leading to a larger proportion of their demand being satisfied. Finally, unmet need is less among women who work than among other women (15 percent and 21 percent, respectively).

## 8.3 Ideal and Actual Number of Children

Table 8.5 shows the distribution of ever-married women by ideal family size, according to number of living children. In responding to the question on ideal family size, a woman was required to perform the difficult task of considering, abstractly and independently of her family size, the number of children that she would choose if she could start again. The results in Table 8.5 indicate that many women found it hard to respond to this question. Overall, 19 percent of ever-married women were unable to give a numeric response.

Table 8.5 Ideal number of children

Percent distribution of ever-married women by ideal number of children and mean ideal number of children for ever-married women and for currently married women, according to number of living children, Egypt 1992

•••	Number of living children <sup>1</sup>									
of children	0	1	2	3	4	5	6+	Total		
0	0.0	0.2	0.3	0.3	0.3	0.7	0.3	0.3		
1	7.9	4.4	2.5	3.2	1.4	0.7	0.8	2.6		
2	52.0	52.8	52.1	33.2	32.8	24.5	18.0	36.9		
3	14.1	21.4	21.4	35.5	16.2	21.3	21.2	22.6		
4	7.3	7.2	9.1	10.0	24.8	13.9	19.9	13.7		
5	1.8	0.8	1.1	1.6	1.8	7,0	3.1	2.3		
6+	1.5	1.1	1.2	1.7	1.8	3.5	6.3	2.5		
Non-numeric response	15.3	12.2	12.3	14.5	21.0	28.4	30.3	19.0		
Total	100.0	100,0	100.0	100.0	100.0	100.0	100.0	100.0		
Number of women	670	1339	1755	1810	1529	1127	1634	9864		
Mean ideal number Number of ever-married	2.4	2.5	2.5	2.8	3.0	3.2	3.5	2.9		
women Mean for currently	568	1176	1539	1548	1208	807	1139	7985		
married women	2.4	2.4	2.5	2.8	3.0	3.2	3.5	2.8		
married women	499	1083	1447	1458	1136	754	1070	7447		

Note: The mean excludes women who gave non-numeric responses. <sup>1</sup>Includes current pregnancy

Childless women were somewhat more likely than women with one or two children to give a non-numeric answer; otherwise, the proportion giving non-numeric answers increased significantly with the number of children that a woman already had.

In considering the findings in Table 8.5, it is also important to remember that the actual and ideal number of children tend to be related. There are several reasons for the relationship. First, to the extent that women implement their preferences, those who want larger families will tend to achieve larger families. Second, women may adjust upwards their ideal size of family, as the actual number of children increases (i.e., rationalization). It is also possible that women with large families, being on average older than women with small families, have larger ideal sizes, because of attitudes that they acquired 20 to 30 years ago. Despite the likelihood that some rationalization occurs, it is common to find that respondents state ideal sizes lower than their actual number of surviving children.

Table 8.5 shows that most women want small families. More than one-third of ever-married women prefer a two-child family, and another fifth consider a three-child family ideal. Less than 5 percent want five or more children. Among women giving numeric answers, the mean ideal family size is 2.9 children. As expected, higher parity women show a preference for more children; the mean ideal family size increases from 2.4 children among childless women to 3.5 among women with six or more living children.

Many women in Egypt have had more children than they would now prefer. Overall, two in five women who gave a numeric answer to the ideal family size question expressed a preference for fewer children than they actually have. As expected, the disparity between the ideal and actual number of children tends to increase with the actual number of children; among women giving numeric answers, the proportion preferring a smaller family than they actually have increases from less than 2 percent of women with two or fewer children to more than 90 percent of women with six or more children.

Table 8.6 takes age into account in examining the variation in the mean ideal family size among various subgroups. The mean ideal family size increases directly with age, from 2.5 children among evermarried women 15-19 to 3.2 children among women 45-49. Other differentials in Table 8.6 parallel the differentials observed in actual fertility levels; the mean ideal family size is greater among rural women, women from Upper Egypt, women never attending school, and women who are not working for eash than among other women. The largest mean ideal family size—3.5 children—is found among women in rural Upper Egypt. Nevertheless, comparing this figure with the total fertility rate for rural Upper Egypt—for the three-year period before the survey—5.97 births per woman—indicates that, at current fertility levels, the average rural woman in Upper Egypt is having more than two children more than she would prefer.

	Age of woman									
Background characteristic	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total		
Urban-rural residence										
Urban	2.3	2.5	2.5	2.6	2.8	2.7	2.9	2.6		
Rural	2.6	2.7	2.9	3.2	3.3	3.4	3.7	3.1		
Place of residence										
Urban Governorates	(2.4)	2.4	2.4	2.6	2.7	2.8	2.9	2.6		
Lower Egypt	2.2	2.4	2.6	2.7	2.9	2.9	3.2	2.7		
Urban	*	2.3	2.5	2.5	2.8	2.6	2.8	2.6		
Rural	2.3	2.4	2.6	2.8	3.0	3.0	3.3	2.8		
Upper Egypt	2.8	3.0	3.0	3.4	3.4	3.5	3.9	3.3		
Urban	(2.6)	2.7	2.6	2.9	3.0	2.7	3.3	28		
Rural	2.8	3.1	3.3	3.7	3.7	4.0	4.3	3.5		
Education										
No education	2.5	2.8	2.9	31	3.2	3.2	3.5	3.1		
Some primary	2.6	2.6	2.7	3.0	3.0	3.0	3.1	2.9		
Primary through secondary	2.5	2.4	2.6	2.5	2.7	2.7	2.7	2.6		
Completed secondary/higher	*	2 5	2.4	2.5	2.6	2.5	3.0	2.5		
Work status										
Working for cash	*	2.5	2.4	2.6	2.6	2.6	2.8	2.6		
Not working for cash	2.5	2.6	2.7	2.9	3.1	3.1	3.3	2.9		
Total	2.5	2.6	2.7	2.9	3.0	3.0	3.2	2.9		

Table 8.6 Mean\_ideal number of children by background characteristics

Mean ideal number of children for ever-matried women, by age and selected background characteristics, Egypt 1992

Note: Figures in parentheses are based on 25 to 49 women, while an asterisk means the figure is based on fewer than 25 women and has been suppressed.

## 8.4 Fertility Planning

There are two approaches to measuring the level of unwanted fertility using EDHS data. The first approach is based on the responses to a question as to whether each birth was planned (wanted then), unplanned (wanted later), or not wanted at all. Measures based on these data are likely to underestimate unwanted fertility because women may rationalize mistimed or unwanted pregnancies and declare them as wanted once the children are born.

Table 8.7 shows the percent distribution of births in the five years before the survey by whether the birth was wanted then, wanted later, or not wanted. Overall, more than one-third of the births in the five-year period can be considered as unplanned; 26 percent were not wanted at the time that they were conceived, and 9 percent were reported as mistimed (wanted later). The proportion of unplanned births increases directly with the birth order of the child. Half of all fourth and higher order births were unwanted. Similarly, a large proportion of births to older women are unwanted—nearly 60 percent of the births to women 35-39 and 70 percent or more of the births to women age 40 and older. At current fertility levels, almost one in six births

#### Table 8.7 Fertility planning status

Percent distribution of births in the five years preceding the survey by fertility planning status, according to birth order and mother's age, Egypt 1992

Birth order					Number		
and mother's age	Wanted then	Wanted later	Not wanted	Missing	Total	of births	
Birth order							
1	95.5	3.8	0.7	0.0	100.0	2085	
2	75.8	19.6	4.6	0.0	100.0	1826	
3	67.2	11.3	21.3	0.2	100.0	1568	
4+	44.2	6.1	49.6	0.0	100.0	4159	
Age at birth							
<b>č</b> 20	87.8	8.8	3.4	0.0	100.0	1043	
20-24	77.0	12.5	10.5	0.0	100.0	2943	
25-29	64.7	10.3	24.9	0.1	100.0	2741	
30-34	51.7	5.5	42.8	0.0	100.0	1697	
35-39	38.8	3.4	57.7	0.0	100.0	900	
40-44	28.3	1.2	70.5	0.0	100.0	302	
45-49	25.2	0.0	74.8	0.0	100.0	12	
Total	65.0	9.0	25.9	0.0	100.0	9638	

occur to women in these age groups, indicating the significant impact that the avoidance of unwanted births among older women might have on fertility levels. Childbearing among older women and high-parity mothers also involves increased mortality and morbidity risks for the mothers and their children, providing another reason for greater effort to help these mothers prevent unwanted pregnancies.

The second approach to measuring unwanted fertility is to calculate what the fertility rate would be if all unwanted births were avoided. The wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. For this purpose, unwanted births are defined as those which exceed the number considered ideal by the respondent. (Women who do not report a numeric ideal family size are assumed to want all their births). These rates may be underestimated to the extent that women are unwilling to report an ideal family size lower than their actual family size. Table 8.8 presents the total wanted fertility rate and the total fertility rate for the three-year period before the survey by selected background characteristics. A comparison of the two rates suggests the potential demographic impact of the elimination of unwanted births.

The wanted fertility rate for Egypt as a whole is 2.7 births per woman, 1.2 children less than the actual total fertility rate. This implies that the total fertility rate is 30 percent higher than it would be if unwanted births were avoided. The gap between the wanted and actual fertility rates is greatest among rural women, women from Upper Egypt (particularly those from rural areas), women who never attended school or have less than a primary education, and women who are not working for cash. It is notable that the wanted fertility rate for the Urban Governorates and for urban areas in Lower Egypt is less than 2 births, suggesting that fertility in these areas would be at the replacement level if unwanted births were prevented.

#### Table 8.8 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by selected background characteristics, Egypt 1992

Background	Total wanted fertility	Total fertility
characteristic	rate	rate
Urban-rural residence		
Urban	2.0	2.9
Rural	3.4	4.9
Place of residence		
Urban Governorates	1.8	2.7
Lower Egypt	2.5	3.7
Urban	1.9	2.8
Rural	2.7	4.1
Upper Egypt	3.7	5.2
Urban	2.4	3.6
Rural	4.3	6.0
Education		
No education	3.5	5.0
Some primary	2.5	4.0
Primary through secondary	2.0	3.0
Completed secondary/higher	2.3	2.9
Work status		
Working for cash	2.1	2.9
Not working for cash	2.8	4.1
Total	2.7	3.9

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

## **CHAPTER 9**

## PROXIMATE DETERMINANTS OF FERTILITY

This chapter addresses the principal factors, other than contraception, which affect a woman's chances of becoming pregnant: nuptiality, postpartum amenorrhea and abstinence from sexual relations, and secondary infertility.

Marriage is a primary indicator of exposure of women to the risk of pregnancy, and is, therefore, important for the understanding of fertility patterns. Populations in which the age at marriage is low tend to be populations with early childbearing and high fertility. Trends in the age at which women marry can help explain trends in fertility levels. The chapter also looks at other measures of the level of exposure to pregnancy, including breastfeeding, postpartum amenorrhea and postpartum abstinence that result in insusceptibility to the risk of pregnancy during the early months after a birth. The chapter concludes with an examination of two indicators of decreasing exposure to the risk of pregnancy with age: menopause and terminal infertility.

In the EDHS, only women 15-49 who had ever been married were interviewed with the individual questionnaire. However, a number of the tables presented in this chapter are based on all women, i.e., on both ever-married and never-married women. In constructing these tables, the number of ever-married women interviewed in the survey is multiplied by an inflation factor that is equal to the ratio of all women to ever-married women as reported in the household questionnaire. This procedure expands the denominators in the tables so that they represent all women. The inflation factors are calculated by single years of age and, where the results are presented by background characteristics, single-year inflation factors are calculated separately for each category of the characteristic.

## 9.1 Current Marital Status

Current marital status is shown in Table 9.1 for all women 15-49. Overall, 65 percent are currently married, 4 percent are widowed, 1 percent are divorced, and 30 percent are never married. The proportion ever married increases rapidly with age, from 14 percent among teenagers to 57 percent among women in their early 20s. The virtual universality of marriage for women is evident from the fact that, among women age 30 and over, more than 95 percent are, or have been married.

				is, according	ito age, Eg	ypr 1772				
		Marital status								
Age	Never married	Married	Widowed	Divorced	Total	of women				
15-19	86.1	13.7	0.1	0.2	100.0	3037				
20-24	43.4	55.0	0.4	1.2	100.0	2405				
25-29	13.4	84.1	0.7	1.7	100.0	2324				
30-34	4.9	90.2	3.0	1.9	100.0	1933				
35-39	2.5	90.2	5.0	2.2	100.0	1754				
40-44	2.3	85.3	10.4	2.0	100.0	1444				
45-49	0.9	80.7	16.6	18	100.0	1119				

Most disruption of marital unions appears to be due to the death of the husband. The proportion divorced varies between 1 and 2 percent across age groups. The proportion widowed rises from less than 1 percent among women age 30 and younger to 17 percent among women 45-49.

## 9.2 Marital Exposure

Marital exposure is looked at in greater detail in Table 9.2. The table is based on information collected in the calendar and shows the percentage of months in the five years before the survey spent in a marital union. The percentage of months married incorporates the effects of age at first marriage, marital dissolution through divorce or widowhood, and remarriage.

Overall, Egyptian women in the reproductive ages were in current marital unions around 60 percent of the time during the five-year period prior to the survey. As expected, the percentage of months married increases rapidly among younger women before peaking at 91 percent among women 35-39 and falling off to 83 percent among women 45-49. The pattern reflects the pace of entry into marriage among young women, which is most rapid in the 20-29 age cohorts, as well as the increasing incidence of widowhood among women age 40 and above.

### Table 9.2 Marital exposure

Percentage of months spent in marital union in the five years preceding the survey, by age and selected background characteristics, Egypt 1992

Daskasaus	Age at time of survey								
characteristic	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total	
Urban-rural residence									
Urban	2.5	25.5	67.2	86.4	<b>9</b> 1.9	87.3	84.5	57.5	
Rural	8.6	52.9	86.5	91.6	89.8	87 2	80.4	62.9	
Place of residence									
Urban Governorates	2.5	20.5	66.7	85.7	92.4	88-4	85.8	59.1	
Lower Egypt	4.4	38.1	78.6	91.5	89.5	85 8	81.9	58.5	
Urban	2.3	25.4	67.6	88 7	<b>9</b> 0.3	85.8	87.2	57.0	
Rural	5.1	43.8	83.2	92.9	89.1	85.8	79.4	59.2	
Upper Egypt	10.0	55.7	83.0	88 9	917	88.4	80.4	63.8	
Urban	2.9	37.0	66.8	85 9	92.8	86.3	78.1	56,0	
Rural	13.5	64.8	91. <b>2</b>	90.3	91 1	89 5	81.5	67.8	
Education									
No education	13.8	64.0	88.7	914	90.4	86.1	81.4	74,9	
Some primary	8.8	57.1	80.0	90.9	90 7	87.8	84.5	73.0	
Primary through secondary	2.8	38.4	80.0	87.6	91.3	88.5	80.5	32.8	
Completed secondary/higher	1.2	15.2	58.4	84.0	92 2	91.0	89.3	47.4	
Work status									
Working for cash	2.2	17.6	57.3	80 6	86.9	79.9	78.1	63.1	
Not working for cash	6.0	42.6	80.9	91.3	92.2	88.8	83.2	59.6	
Total	5.8	39.5	77.1	89.0	91.0	87.3	82.7	60.1	

There are significant differentials in marital exposure by residence, educational level and work status. These differentials tend to be quite large among younger women, reflecting the effect of differences in the propensity to delay marriage among the various subgroups. For example, urban women in the 20-24 age cohort spent only 26 percent of the months in the five years prior to the survey married, compared to 53 percent among rural women 20-24. In the same age group, women from the Urban Governorates and Lower Egypt spent a considerably smaller proportion of the time in the five years before the survey married than women from Upper Egypt (21 percent, 38 percent and 56 percent, respectively).

Large differentials in the proportion of months spent married by younger women are observed by level of education and work status. For example, the percentage of months spent married by women 20-24 varies from 64 percent among those with no education to 15 percent among those with at least a secondary education. Moreover, working women in the 20-24 age group only spent 18 percent of the 60 months prior to the survey married, compared to 43 percent for women in the same age cohort who were not working.

Reflecting both the near universality of marriage and the increasing prevalence of widowhood, the differentials in the percentage of months married shown in Table 9.2 narrow and, in some cases, reverse direction for older cohorts.

#### 9.3 Age at First Marriage

The percentage of women ever married by select exact ages and the median age at first marriage, according to current age, is shown in Table 9.3. The table confirms that there has been a steady increase over the past 25 years in the age at which Egyptian women first marry. Overall, the median age at marriage has increased from 18.3 years in the oldest age cohort to 19.9 years among women 25-29. There has been a particularly sharp decline in the proportion of women marrying in their early teens; the percentage marrying by exact age 18 has fallen from 47 percent among women 45-49 to 27 percent among women 20-24.

### Table 9.3 Age at first marriage

Percentage of women who were first married by exact age 15, 18, 20, 22, and 25, and median age at first marriage, according to current age, Egypt 1992

		Percentag first m	e of womer arried by ex	Percentage who had	Number	Median age at		
Current age	15	18	20	22	25	married	women	marriage
15-19	2.7	NA	NA	NA	NA	86.1	3037	а
20-24	7.2	26.7	41.3	NA	NA	43.4	2405	а
25-29	9.9	35.0	50.8	65.9	80.1	13.4	2324	19.9
30-34	11.7	39.1	55.4	69.4	82.9	4.9	1933	19.3
35-39	10.2	37.6	57.8	69.9	83.4	25	1754	19.3
40-44	14.3	41.3	59.0	71.2	83.5	2.3	1444	18.9
45-49	18.2	47.3	63.6	78.2	89.0	0.9	1119	18.3
20-49	11.1	36.4	53.0	66.1	77.3	14.0	10978	19.6
25-49	12.2	39.1	56.3	70.0	83.1	5.8	8573	19.2

NA = Not applicable <sup>a</sup>Omitted because less than 50 percent of the women in the age group x to x+4 were first married by age x

Substantial residential differentials in the age at first marriage are observed in Table 9.4. The median age at first marriage among urban women 25-49 is 20.9 years, three years greater than the median among rural women. Considering the trends across age cohorts, it is clear that the age at marriage has increased more rapidly among urban than rural women. Consequently, the difference in the age at marriage between urban and rural women has nearly doubled, increasing from 1.7 years among women 45-49 to 3.6 years among women 25-29.

The median age at first marriage among women 25-49 in the Urban Governorates is two years higher than that in Lower Egypt and more than three years higher than that in Upper Egypt (see Figure 9.1). There is only a small difference in the median age at first marriage between women from urban Lower Egypt and urban Upper Egypt (20.8 years and 20.5 years, respectively). However, the median age at marriage is much higher in rural Lower Egypt (18.5 years) than in rural Upper Egypt (17.2 years). The increases in age at marriage that are observed across age cohorts confirm the long-term nature of the upward trend in age at marriage in all areas.



Large differences in age at first marriage by educational level are evident in Table 9.4. There is an almost seven year difference in the median age at first marriage between women who never attended school and women who completed at least the secondary level. Within each education category, increases in the age at marriage across cohorts are comparatively small. This suggests that the upward trend in the age at first marriage over time is primarily a consequence of increasing educational attainment among younger women.

A woman's current work status is associated with delayed marriage. The median age at marriage for women who were working for cash at the time of the survey was 23.5 years, nearly five years higher than the median for women who were not involved in paid employment. The change in age at marriage across age cohorts also is greater for women working for cash than for other women.

#### Table 9.4 Median age at first marriage

Median age at first marriage among women age 20-49 years, by current age and selected background characteristics, Egypt 1992

Background		Women age	Women age					
characteristic	20-24	25-29	30-34	35-39	40-44	45-49	20-49	25-49
Urban-rural residence								
Urban	а	22.0	21.1	20.9	20.4	19.3	а	20.9
Rural	19.0	18.4	17.7	18.0	17.6	17.6	18.2	17.9
Place of residence								
Urban Governorates	а	22.0	21.8	21.2	20.7	19.5	а	21.1
Lower Egypt	a	19.9	19.1	19.2	18.7	18.2	19.5	19.1
Urban	а	22.4	20.4	21.2	19.9	19.3	а	20.8
Rural	a	19.1	18.3	18.5	18.3	17.9	18.8	18.5
Upper Egypt	18.7	18.3	17.8	18.3	17.6	17.5	18.1	17.9
Urban	а	21.6	20.6	19.9	20.6	18.7	a	20.5
Rural	17.5	17.4	17.1	17.5	16.5	17.1	17.2	17.2
Education								
No education	17.9	17.5	17.3	18.0	17.7	17.6	17. <b>7</b>	17.6
Some primary	18.6	19.0	18.2	19.0	18.7	17.7	18.6	18.6
Primary through secondary	a	19.7	19.9	19.7	20.3	19.9	а	19.9
Completed secondary/higher	а	23.8	24.1	25.0	24.8	24.3	а	24.3
Work status								
Working for cash	a	23.6	23.6	23.7	24.2	21.7	а	23.5
Not working for cash	a	19.2	18.4	18.6	18.4	18.0	19.0	18.6
Total	а	19.9	19.3	19.3	18.9	18.3	19.6	19.2

Note: Medians are not shown for women 15-19 because less than 50 percent have married by age 15 in all subgroups shown in the table.

<sup>a</sup>Omitted because less than 50 percent of the women in the age group were first married by age 20.

## 9.4 Marriage between Relatives

Marriages between relatives (consanguineous marriages) are common in Egypt. According to the EDHS data presented in Table 9.5, 40 percent of ever-married women report that their current or, in the case of widowed or divorced women, their most recent husband was a relative. Six in ten consanguineous marriages involve first cousins.

The percentage of marriages involving relatives generally increases with the current age of the woman. A strong inverse relationship between the percentage of marriages involving relatives and age at first marriage is evident for women who have been married only once. The proportion of women who married a relative decreases from over 50 percent among those who married before age 15 to less than 25 percent among those who married at age 24 or above. Only about one-fifth of the women who have married more than once report their current or most recent husband was a relative.

## Table 9.5 Consanguinity

Percent distribution of ever-married women by relationship to their husbands, according to background characteristics, Egypt 1992

Background characteristic	First cousin	Other relative	No relation	Don't know/ missing	Number of women
Age					
15-19	27.7	22.2	50.1	0.0	423
20-24	25.7	16.6	57.7	0.0	1362
25-29	25.2	16.2	58.5	0.1	2013
30-34	25.3	14.4	60.2	0.1	1838
35-39	21.9	14.8	63.4	0.0	1709
40-44	26.0	15.4	58.6	0.0	1411
45-49	21.6	15.1	63.3	0.0	1108
Age at first marriage					
<15	35.6	18.7	45.6	0.1	1142
15	34.0	19.1	46.9	0.0	794
16-17	28.5	17.3	54.2	0.0	2070
18-19	25 6	15.7	58.8	0.0	1822
20-21	22.5	14.7	62.8	0.0	1377
22-23	18.0	14.9	67.1	0.0	853
24+	12.6	11.5	75.8	0.0	1269
Married more than once	11.4	11.8	76 5	0.3	537
Urban-rural residence					
Urban	18.7	13.1	68.2	0.0	4596
Rural	29.5	18.0	52.4	0.1	5268
Place of residence					
Urban Governorates	17.8	13.1	69.1	0.0	2357
Lower Egypt	21.2	12.7	66.0	0.1	4067
Urban	15.5	10.2	74 3	0.0	1210
Rural	23.7	13.8	62.5	0.1	2857
Upper Egypt	33.0	21.0	46 0	0.0	3440
U <b>rba</b> n	24.7	16.4	58.9	0.0	1029
Rural	36.5	23.0	40.5	0.0	2411
Education					
No education	30.0	16.5	53.4	0.0	4771
Some primary	22.2	17.8	59.9	0.1	2078
Primary through secondary	21.6	14.0	64.3	0.0	1093
Completed secondary/higher	15.0	12.2	72.8	0.0	1922
Total	24.5	15.7	59 8	0.0	9864

As expected, consanguineous marriages are more common in rural than urban areas. Nevertheless, nearly one-third of marriages in urban areas involve relatives. Place of residence is also related to the prevalence of marriage between relatives. The percentage of women reporting contracting such marriages is considerably greater in Upper Egypt (54 percent) than in Lower Egypt (34 percent) and the Urban Governorates (31 percent). The highest level of consanguineous marriage is found in rural Upper Egypt,
where six in ten marriages are between relatives. Level of education also influences the likelihood of marriage to a relative. The percentage of marriages involving relatives decreases from 47 percent among women never attending school to 27 percent among women who completed the secondary level or higher.

## 9.5 Postpartum Amenorrhea, Abstinence and Insusceptibility

The risk of pregnancy following a birth is influenced by two factors: breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by breastfeeding through its effect on the length of amenorrhea (the period prior to the return of menses). Protection can also be prolonged by delaying the resumption of sexual relations. Women are defined as insusceptible if they are not exposed to the risk of pregnancy, either because they are amenorrheic or abstaining following a birth.

The percentage of births whose mothers are postpartum amenorrheic, abstaining and postpartum insusceptible is shown in Table 9.6 by the number of months since the birth. These distributions are based on current status data, i.e., on the proportion of births occurring x months before the survey for which mothers are still amenorrheic, abstaining or insusceptible. The median and mean duration estimates shown in Table 9.6 and Table 9.7 are calculated from the current status proportions at each time period. The data are grouped in two-month intervals to minimize fluctuations in the estimates.

Percentage of births whose mothers are postpartum amenorrheic, abstaining and insusceptible, by number of months since birth, and median and mean durations, Egypt 1992

Months since birth	Amenor- rheic	Abstaining	Insus- ceptible	Number of births
		0	<u>د</u>	
- 7	07.0	97.5	07.0	201
22	97.0	82.5	97.0	201
2-5 4 5	52.9	5.6	55.0	265
67	33.0	4.0	46.0	205
80	44.0	4.0	40.9	213
10.11	27.3	1.0	41.5	243
10-11	20.4	4.1	20.0	237
12-13	20.4	4.0	15 2	200
14-15	14.0	1.4	13.5	280
10-17	10.7	1.5	11.5	269
10-17	10.0	1.9	11.5	203
20-21	5.2	0.9	0.1	204
22-23	5.2	1.8	7.0	287
24-25	2.1	1.5	3.9	317
26-27	1.3	0.6	1.9	329
28-29	0.5	1.2	1.7	242
30-31	0.7	1.5	2.0	266
32-33	0.5	0.6	1.0	244
34-35	0.0	0.4	0.4	294
Total	20.8	63	<i>22.2</i>	4908
Median	56	18	61	4700
Mean	5.0	1.0	87	-
Prevalence/Incidence mean	0.2 7 /	2.0	70	-
i revalence/meidence mean	7.4	<i>L</i> . <i>L</i>	1.9	-

The period of postpartum amenorrhea is considerably longer than the period of postpartum abstinence and is the major determinant of the length of the period of postpartum insusceptibility to pregnancy for Egyptian women (see Figure 9.2). The percentage of births for which the mothers are amenorrheic decreases from 97 percent immediately following the delivery to 67 percent 2-3 months after birth. By 6-7 months following birth, fewer than half of women are still amenorrheic and, by 12-13 months after birth, only onefifth have not resumed their menstrual period. In Egypt, as in other Islamic countries, many couples observe a period of sexual abstinence after birth, which traditionally last 40 days. Reflecting the effect of this tradition, the percentage of mothers who are abstaining from sexual relations decreases rapidly following birth. At 2-3 months following birth, only 14 percent are still abstaining and, by 12-13 months, less than 5 percent have not yet resumed sexual relations.



Overall, around one-half of all Egyptian women are risk of pregnancy by 6 months following a birth unless they have begun to use contraception. The mean duration of the period of postpartum insusceptibility is almost 9 months.

Median durations of postpartum amenorrhea, abstinence and insusceptibility by various background characteristics are presented in Table 9.7. Average durations of postpartum abstinence do not vary greatly among population subgroups. However, there are marked differentials in the duration of postpartum amenorrhea. Median durations are longest for rural women, women living in Upper Egypt and women with less than a primary education. The differentials in the median durations of postpartum insusceptibility reflect the combined effects of amenorrhea and abstinence. On average, women over 30 are insusceptible for more than 7 months, almost two months longer than younger women. A similar although slightly greater differential is observed between the median durations for urban and rural women.

## Table 9.7 Median duration of postpartum insusceptibility by background characteristics

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility, by selected background characteristics, Egypt 1992

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insuscep- tibility	Number of births
Age				
<30	5.1	1.8	5.5	3049
30+	(6.9)	1.8	(7.3)	1859
Urban-rural residence				
Urban	4.2	1.8	4.7	1803
Rural	6.9	1.8	7.3	3105
Place of residence				
Urban Governorates	(4.1)	(1.8)	(4.5)	851
Lower Egypt	5.2	1.8	5.5	1944
Urban	*	*	*	460
Rural	(5.9)	1.8	(6.1)	1484
Upper Egypt	7.3	1.8	8.0	2113
Urban	*	*	*	493
Rural	(8.2)	1.8	8.8	1620
Education				
No education	8.3	1.8	(8.7)	2500
Some primary	(5.5)	(1.7)	•	918
Primary through secondary	*	*	*	464
Completed secondary/higher	(3.8)	(1.9)	(4.1)	1027
Total	5.6	1.8	6.1	4908

Note: Medians are based on current status. Figures in parentheses are based on 25 to 49 cases, while an asterisk indicates that the figure is based on fewer than 25 cases and has been suppressed.

## 9.6 Termination of Exposure to Pregnancy

The risk of pregnancy declines with age, particularly after age 30, as increasing proportions of women become infecund. While the onset of infecundity is difficult to determine, there are ways of estimating its effects for a population. Table 9.8 presents two indicators of decreasing exposure to the risk of pregnancy for married women age 30 years and older: menopause and terminal infertility. A woman is considered to be menopausal if she declared herself as menopausal or if she is non-pregnant, non-amenorrheic and did not have a menstrual period for six or more months before the survey. A woman falls into the terminal infertility category if she was continuously married, did not give birth, and did not use any contraceptive method during the five-year period preceding the survey and she is not currently pregnant.

As expected, the proportion menopausal rises rapidly with age, particularly among women age 40 and older. It peaks at 48 percent among women 45-49. Terminal infertility exhibits a similar direct relationship with age, increasing from 28 percent among women 30-34 to 99 percent among women 48-49.

<u>Table 9.8 T</u> Indicators of married won	ermination of exp menopause and to hen age 30-49, by	osure to the ris erminal infertil age, Egypt 199	<u>k of pregnancy</u> ity among cu <del>п</del> 92	<u>ently</u>	
	Menoj	pause <sup>1</sup>	Terminal infertility <sup>2</sup>		
Age	Percent	Number	Percent	Number	
30-34	1.8	1375	28,4	374	
35-39	2.7	1375	42.7	387	
40-41	5.8	550	60.2	177	
42-43	7.8	415	72.1	142	
44-45	17.8	533	83.5	223	
46-47	31.1	307	92.5	155	
48-49	48.3	249	98-6	147	
Total	9.1	4804	59.5	1604	

<sup>1</sup>Percentage of non-pregnant, non-amenorrheic currently married women whose last menstrual period occurred six or more months preceding the survey or who report that they are menopausal.

<sup>2</sup>Percentage of currently married women in their first union of five or more years who have never used contraception and who did not have a birth in the five years preceding the survey and who are not pregnant.

## **CHAPTER 10**

## **INFANT AND CHILD MORTALITY**

This chapter presents information on levels, trends and differentials in neonatal, postneonatal, infant and child mortality and on the prevalence of high-risk fertility behavior. This information is central to an assessment of the demographic situation in Egypt. It is also important in efforts to improve child survival programs in Egypt and in identifying those segments of the child population that are at increased risk.

#### **10.1** Assessment of Data Quality

The mortality estimates are calculated from information that was collected in the birth history section of the individual questionnaire. The section began with questions about the aggregate childbearing experience of respondents (i.e., the number of sons and daughters who live in the household, who live elsewhere, and who died). These questions were followed by a retrospective birth history in which data were obtained on sex, date of birth, survivorship status, and current age or age at death of each of the respondents' live births.

This information is used to directly estimate mortality rates. In this report, infant and child mortality are measured using five rates:

Neonatal mortality: the probability of dying within the first month of life; Postneonatal mortality: the difference between infant and neonatal mortality; Infant mortality: the probability of dying before the first birthday; Child mortality: the probability of dying between the first and fifth birthday; Under-five mortality: the probability of dying before the fifth birthday.

The reliability of the mortality estimates from retrospective birth histories depends upon the completeness with which deaths of children are reported and the extent to which birth dates and ages at death are accurately reported and recorded. Omission of births and deaths directly affects mortality estimates, displacement of dates has an impact on mortality trends, and misreporting of the age at death may distort the age pattern of mortality.

The quality of the birth history data is examined in detail in Appendix D. Table D.5 looks at evidence of underreporting of deaths, particularly of those deaths which occur in very early in infancy. If early neonatal deaths are selectively underreported, the result would be an abnormally low ratio of deaths under seven days to all neonatal deaths. The ratio of deaths in the first six days to all neonatal deaths presented in Table D.5 is high, indicating that early infant deaths have not been severely underreported in the EDHS. However, the ratio is higher for the period 0-4 years prior to the survey than for earlier periods, suggesting that some early infant deaths were not reported by older women.

The quality of the reporting of age at death for children who had died is also important. Misreporting of age at death will bias estimates of the age pattern of mortality if the net result of the misreporting is transference of deaths between age segments for which rates are calculated; for example, an overestimate of child mortality relative to infant mortality may result if children who died during the first year of life are reported as having died at age one year or older. In an effort to minimize error in the reporting of age at death, EDHS interviewers were instructed to record deaths under one month in days, and under 2 years of age in months. They were specifically asked to probe for deaths reported at one year of age to ensure that they had actually occurred at 12 months. Nevertheless, there is evidence of heaping in the reporting of age at death (see Table D.6).

With regard to the issue of date displacement, there was evidence of possible misreporting of birth dates for children born in the five-year period immediately prior to the survey. The distribution of all children by calendar year of birth showed a slight deficit of births in calendar year 1987 and an excess of births in calendar year 1986 (see Table D.4). The apparent transference of births out of 1987 was greater for dead than surviving children. This pattern has been noted in other DHS surveys; it is believed to be the result of transference of births by interviewers out of the period for which the health and calendar data were collected (January 1987 through the date of the survey). Interviewers are thought to be motivated both by a desire to reduce their workload and to avoid asking detailed questions about children who died.

This brief review of the assessment of the quality of the EDHS mortality data indicates that there are some problems with the data, particularly date displacement and heaping on certain ages at death. However, several analyses carried out by the DHS program suggest that the effect on the mortality estimates of errors in reporting of the magnitude observed in the 1992 EDHS would not be large (Sullivan et al., 1990). Moreover, an analysis of the pattern of heaping on age at death observed in the 1992 EDHS indicated that this heaping would have resulted in a downward bias in the childhood mortality of no more than 5 percent. Thus, the results in this report are unadjusted for misreporting.

## 10.2 Levels and Trends in Infant and Child Mortality

Neonatal, postneonatal, infant, child and under-five mortality rates are shown in Table 10.1 for five-year periods in the 25 years preceding the survey. Under-five mortality for the most recent period (0-4 years preceding the survey) is 85 deaths per 1,000 births. This means that about one in twelve children bom in Egypt die before they reach their fifth birthday. Roughly, three in four under-five deaths occur in the first year; infant mortality is 62 deaths per 1,000 births and child mortality is 25 deaths per 1,000 births. During infancy the risk of neonatal death (33 per 1,000) is nearly the same as the risk of postneonatal death (29 per 1,000).

The estimates in Table 10.1 indicate that mortality levels have declined rapidly in Egypt since the late 1970s. The current under-five mortality rate represents an almost 50 percent decrease from the level of 157 deaths per 1,000 births which prevailed during the period 10-14 years before the survey (approximately 1978-1982). An examination of the trend in the other mortality indicators suggests the pace

<u>Table 10.1 In</u> Infant and chi Egypt 1992	<u>fant and child</u> ld mortality ra	<u>mortality</u> tes by five-ye	ear periods	preceding 1	he survey,
Years preceding survey	Nconatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ( <sub>1</sub> q <sub>0</sub> )	Child mortality (4q1)	Under-five mortality ( <sub>5</sub> q <sub>0</sub> )
0-4	32.8	28.7	61.5	24.8	84.8
5-9	51.4	46.1	97.4	36.1	130.1
10-14	48.3	59.8	108.1	55.3	157.4
15-19	53.3	75.9	129.2	90.9	208.4
20-24	48.5	85.4	133.9	110.3	229.5

of decline was somewhat faster in the case of child mortality than infant mortality; child mortality decreased by 55 percent, from a level of 55 per 1,000 births 10-14 years before the survey while infant mortality declined by 43 percent, from a level of 108 per 1,000 births at the same point in time.

Using estimates from 1980 Egypt Fertility Survey, the 1988 Egypt Demographic and Health Survey, the 1991 Egypt Maternal and Child Health Survey, as well as the 1992 EDHS, the downward trend in infant mortality in Egypt since the early 1950s is shown in Table 10.2 and Figure 10.1. During the more than 40-year period, infant mortality declined by 67 percent, from 191 deaths per 1,000 births in 1950-1954 to 62 in 1988-1992.

Period	EFS 1980	EDHS 1988	EMCHS 1991	EDHS 1992
1950-1954	191			
1955-1959	166			
1960-1964	151			
1965-1969	141			
1970-1974	146			
1975-1979	132			
1977-1981			105	
1978-1982				108
1979-1983		119		
1982-1986			94	
1983-1987				97
1984-1988		73		
1987-1991			59	
1988-1992				62



## **10.3** Socioeconomic Differentials in Mortality

Differentials in the various mortality rates by selected background characteristics are presented in Table 10.3. The table focuses largely on basic socioeconomic characteristics including urban-rural residence, place of residence, mother's educational level and work status, but also examines the issue of whether mortality varies according to the matemity care received by the mother prior to the child's birth. A ten-year period is used to calculate the mortality estimates in order to have a sufficient number of cases in each category.

Background	Neonatal mortality	Postneonatal mortality	Infant mortality	Child mortality	Under-five mortality
characteristic	(NN)	(PNN)	( <sub>1</sub> <b>q</b> <sub>0</sub> )	( <sub>4</sub> q <sub>1</sub> )	(5 <b>q</b> 0)
Urban-rural residence					
Urban	31.5	23.0	54.4	17.6	71.1
Rural	49.3	46.9	96.2	39.1	131.6
Place of residence					
Urban Governorates	31.5	23.0	54.5	14.4	68 1
Lower Egypt	37.2	28.4	65.7	23.6	87 7
Urban	25.7	18.1	43.7	12.4	55.6
Rural	41.1	31.9	73.0	27.6	98.5
Upper Egypt	52 4	53.4	105.8	45.7	146.7
Urban	37.3	27.8	65.0	29.6	92.7
Rura!	57.3	61.8	119.1	51.5	164.4
Education					
No education	51.0	46.7	97.8	38.9	132.8
Some primary	36.3	38.4	74.7	27.6	100.3
Primary through secondary	40.5	22.0	62.4	23.5	84.4
Completed secondary/higher	22.4	13.4	35.8	6.2	41.8
Work status					
Working for cash	36 4	25.4	61.8	17.1	77.9
Not working for casb	43.3	39.4	82.7	32.4	112.4
Medical maternity care					
No antenatal/delivery care	30.9	38.3	69.1	29.8	96.9
Either antenatal or delivery	39.1	26.6	65.6	17.3	81.8
Both antenatal and delivery	28.9	20.8	49.7	10 2	59.3

Urban-rural differences are large at all ages. For example, the under-five mortality in urban areas is 71 per 1,000 births, 46 percent lower than the rural level (131 per 1,000 births). There is also considerable variation in mortality by place of residence (see Figure 10.2). Mortality for all age groups is highest in rural Upper Egypt, where infant mortality is 119 per 1,000 births and under-five mortality is 164 per 1,000 births. These levels are around 60 percent higher than the mortality observed in rural Lower Egypt (73 per 1,000 births and 99 per 1,000 births, respectively). Of interest also is the fact that mortality rates for urban Lower Egypt are somewhat lower than the rates observed for the Urban Governorates.

Differences by education are very large. For example, under-five mortality for children of mothers who have completed the secondary level or higher is 42 per 1,000 births, less than one-third of the level among children whose mothers have never attended school. The educational differential becomes larger with increasing age of the child. Children of women who work for cash have lower mortality at all ages than children of other women.

Use of basic matcrnity care services is generally associated with lower mortality. The one exception is in the case of neonatal mortality levels, where the level of neonatal mortality for children whose mothers had no antenatal care or medical assistance at delivery is lower than the level among children whose mothers had either antenatal care or medical assistance at delivery and only slightly higher than the level among children whose mothers had both antenatal care and medical assistance at delivery.



## 10.4 Demographic Differentials in Mortality

Table 10.4 presents mortality differentials according to demographic characteristics of the child and the mother that often have been shown to be related to mortality levels, including the sex of the child, mother's age at the birth, birth order, length of the previous birth interval, and the mother's perception concerning the size of the child at birth.

#### Table 10.4 Infant and child mortality by demographic characteristics

Infant and child mortality rates for the ten-year period preceding the survey, by selected demographic characteristics, Egypt 1992

Demographic	Neonatal mortality	Postneonatal mortality	Infant mortality	Child mortality	Under-fiv mortality
characteristic	(NN)	(PNN)	( <sub>1</sub> q <sub>0</sub> )	( <sub>4</sub> q <sub>1</sub> )	( <sub>5</sub> <b>q</b> <sub>0</sub> )
Sex of child					
Male	48.4	36.0	84.4	24.6	107.0
Female	36.1	39.2	75.3	36.1	108.6
Age of mother at birth					
< 20	55.8	61.8	117.6	37.4	150.6
20-29	38.2	35.0	73.2	29.0	100.1
30-39	45.7	32.4	78.1	29.4	105.2
40-49	(29.6)	(22.1)	(51.7)	*	(79.1)
Birth order					
1	37.4	32.0	69.4	18 2	86.3
2-3	37.2	35.6	72.7	26 7	97.5
4-6	43.0	35.6	78.6	37.9	113.6
7+	60.9	54.6	115.4	40.5	151.3
Previous birth interval					
< 2 yrs	66.9	61.7	128.6	52.1	174.0
2-3 утз	32.2	30.5	62.7	26.8	87.8
4 yrs +	25.3	14.3	39.6	13.1	52.2
Size at birth <sup>1</sup>					
Very small	*	*		*	*
Smaller than average	44.9	35.8	80.8	23.6	102.5
Average or larger	30.0	28.0	58.0	19.6	76.4

As expected, neonatal mortality is higher among males than females. Postneonatal mortality varies only slightly with the sex of the child, but child mortality is more than 40 percent higher among females than males (36 per 1,000 births and 25 per 1,000 births, respectively). Since mortality is typically lower among females than males, this pattern suggests that there may be gender-related difference in child-rearing practices or in the recourse to health care services during childhood that favor boys over girls.

The effect of a young maternal age at birth is clear in Table 10.4. Both infant and child mortality is substantially higher among children of mothers who were less than age 20 at the time of the child's birth. Somewhat surprisingly, the mortality of children born to mothers age 40 and over is lower than that for all other maternal categories. This may be due to the small number of births to older mothers since the relationship between mortality and maternal age is typically a U-shaped curve, with peaks for children of youngest and oldest mothers.

Mortality according to birth order shows the expected pattern of higher mortality associated with higher birth order. Also as expected, the length of the birth interval is strongly associated with higher mortality. For example, the level of under-five mortality found among children born less than two years after a previous birth (174 per 1,000 births) is more than three times the level found among children born four or more years after a previous birth (52 per 1,000 births). The effect of short birth intervals on mortality is clearly evident at all ages. These findings support the importance of child spacing for child survival.

Children who are *smaller than average* at birth, as perceived by their mothers, experience higher mortality rates than children perceived to be *average*, *larger than average*, or *very large*. Since low birth weight is known to have a strong effect on early morbidity, it is not surprising that the most pronounced effect occurs during the neonatal period and diminishes with increasing age of the child.

## 10.5 High-Risk Fertility Behavior

Previous research has shown that strong relationships exist between maternal fertility patterns and children's survival chances. Typically, infants and children have a greater probability of dying if they are born to mothers who are too young or too old, if they are born after a short birth interval, or if they are of high parity. For purposes of the analysis which follows, a mother is classified as "too young" if she is less than 18 years of age, and "too old" if she is over 34 years of age at the time of delivery. A "short birth interval" is defined by a birth occurring less than 24 months after the previous birth, and a child is of "high birth order" if the mother had previously given birth to three or more living children (i.e., if the child is of birth order 4 or higher).

Table 10.5 presents the distribution of children born in the five years preceding the survey and of currently married women according to these risk factors. The table also examines the relative risk of mortality for children by comparing the proportion dead in each high-risk category with the proportion dead among children not in any high-risk category. First births, although often at increased risk, are not included in this analysis because they are not considered an avoidable risk.

The data presented in the first two columns of Table 10.5 address the issue of high-risk fertility behavior by looking at the actual prevalence of high-risk births during the five-year period before the survey and its implications with respect to the mortality of those births. As Column 1 in Table 10.5 shows, more than 60 percent of children born in the five year period before the survey are in at least one of the elevated risk categories. A third (22 percent) of all births at elevated risk had been subject to multiple risk characteristics. A short birth interval and high birth order were the most common high-risk factors.

The risk ratios shown in Column 2 of Table 10.5 illustrate the relationship between the risk factors and mortality levels. The risk ratios for children in the single high-risk categories are generally lower than the risk ratios for children in multiple high-risk categories. The lowest risk ratio (1.0) is found for births to mothers over age 34 and the highest (3.2) for the category combining three of the four high-risk factors (short interval, higher birth order, and old maternal age).

The data presented in the final column of Table 10.5 looks to the future, addressing the question: how many married women have the potential for having a high-risk birth? The results were obtained by simulating the distribution of currently married women by the risk category into which a currently conceived birth would fall. A woman's current age, time clapsed since last birth, and parity were used to determine into which risk category the next birth would fall, if the woman were to conceive at the time of the survey. For example, if a woman age 37, who has five children, and had her last birth three years ago were to become pregnant, she would fall into the multiple high-risk category of being too old (35 or older) and at too high a parity (4 or more children).

Overall, 79 percent of women have the potential to give birth to a child with an elevated risk of mortality. A greater proportion of married women exhibit the potential for having a birth in a multiple high-risk category than in single high-risk category (33 percent and 46 percent, respectively). In terms of the risk categories themselves, the potential is greatest for births at elevated risk due to high birth order (18 percent) and old maternal age and high birth order (33 percent).

Table 10.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey who are at elevated risk of mortality, and the percent distribution of currently married women at risk of conceiving a child with an elevated risk of mortality, by category of increased risk, Egypt 1992

	Births in th preceding t	Percentage of	
Risk category	Percentage of births	Risk ratio	married women <sup>a</sup>
Not in any high-risk category	39.0	1.0	21.3
Single high-risk category			
Mother's age < 18	3.1	1.5	0.7
Mother's age > 34	1.1	10	5.4
Birth interval < 24	12.1	1.5	8.6
Birth order $> 3$	23.1	1.1	184
Subtotal	39.4	1.2	33.2
Multiple high-risk category			
Age $<18$ & birth interval $<24^{\circ}$	1.0	3.0	0.1
Age >34 & birth interval<24	0.3	2.3	0.2
Age >34 & birth order>3	9.3	1.1	33.1
Age >34 & birth interval	* 0		
<24 & birth order >3	2.0	3.2	3.0
Birth interval <24 & birth order >3	9.6	23	9.0
Subtotal	21.6	1.9	45.5
In any high-risk category	61.0	1.5	78.7
Total Number	100.0 8626	NA NA	100 0 9153

Note: Risk ratio is the ratio of the proportion dead of births in a specific highrisk category to the proportion dead of births not in any high-risk category. NA = Not applicable

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

<sup>c</sup>Includes the combined categories age < 18 and birth order >3

## CHAPTER 11

## MATERNAL AND CHILD HEALTH

Improving the health status of mothers and young children is a primary focus of the Egyptian government's health care policy and programs in Egypt. This chapter presents findings from four areas of importance to the health of Egyptian children and their mothers, which can be used in efforts to plan and monitor the outcome of maternal and child health care initiatives. The topics covered include antenatal care, delivery characteristics, immunization, and childhood illnesses and treatment.

## 11.1 Antenatal Care

One of the priorities of the Egyptian government's maternal and child health program is to provide medical care during pregnancy to ensure the survival of both mother and child. To obtain information on the utilization of antenatal care services, the EDHS included several questions relating to the source of antenatal care, number and timing of visits, and tetanus toxoid vaccinations. This section discusses these antenatal care issues.

#### Source of Antenatal Care

Table 11.1 shows the distribution of births in the five years preceding the survey by source of antenatal care received by the mother during pregnancy. A birth is considered to have received antenatal care if the mother visited a provider for such care at least once during her pregnancy. If the mother consulted more than one type of provider, only the most qualified source is recorded in the table. The survey results indicate that many mothers do not seek antenatal care. Among births in the five years before the EDHS, only 53 percent received antenatal care from a trained medical provider. In virtually all cases, the mother received antenatal care from a doctor. Antenatal care was more likely to be sought from a private sector provider than at a government health facility; mothers reported that they went to a private provider in the case of 77 percent of the births in which antenatal care was received (table not shown).

The data show that there are marked differentials in antenatal care coverage among subgroups. Antenatal care from a trained provider is much more common for urban births (69 percent) than rural births (43 percent). The proportion of births whose mothers received antenatal care from a trained provider is highest in the Urban Governorates (74 percent), followed by urban areas in Lower Egypt (68 percent) and Upper Egypt (62 percent) (see Figure 11.1). The mothers of more than half the live births in rural areas in both Lower Egypt and Upper Egypt did not receive any antenatal care during pregnancy.

With regard to the other background characteristics in Table 11.1, antenatal care is most likely to have been received for births of low birth order, births to mothers who have at least a secondary education and births to mothers who work for cash. A mother's age makes little difference in the likelihood that antenatal care will have been received prior to a birth.

#### Table 11.1 Antenatal care

Percent distribution of births in the five years preceding the survey, by source of antenatal care during pregnancy, according to selected background characteristics, Egypt 1992

Background characteristic	Doctor	Trained nurse/ midwife	Traditional birth attendant/ Other <sup>2</sup>	No one/ Missing	Total	Number of births
Mother's age at hirth						
< 20	50.9	0.0	0.0	49 1	100.0	945
20-34	53.1	0.1	0.1	46.7	100.0	6595
35+	52.3	0.0	0.0	47.7	100.0	1086
Bírth order						
1	69.7	0.0	0.0	30.3	100.0	1806
2-3	53.4	0.1	0.0	46.4	100.0	3037
4-5	46.8	0.1	0.1	53 0	100.0	1882
6+	41.7	0.1	0.1	58.1	100.0	1900
Urban-rural residence						
Urban	68.8	0.1	0.0	31.1	100.0	3237
Rural	43.2	0.1	0.1	56.7	100.0	5389
Place of residence						
Urban Governorates	73.4	0.1	0.0	26.5	100.0	1557
Lower Egypt	49.1	0.1	0.1	50.8	100.0	3408
Urban	67.5	0.0	0.0	32.5	100.0	820
Rural	43.3	0.1	0.1	56.5	100.0	2588
Upper Egypt	47.4	0.1	0.1	52.4	100.0	3661
Urban	61.8	0.2	0.0	38.0	100.0	860
Rural	43.0	0.0	0.1	56.8	100.0	2801
Mother's education						
No education	39.6	0.0	0.1	60.2	100.0	4427
Some primary	51.8	0.2	0.1	47.9	100.0	1735
Primary through secondary	68.8	0.0	0.0	31.2	100.0	806
Completed secondary/higher	81.2	0.1	0.0	18.7	100.0	1657
Work status						
Working for cash	66.1	0.0	0.2	33.7	100.0	1087
Not working for cash	50.9	0.1	0.0	49.0	100.0	7539
All births	52.8	0,1	0.1	47.1	100.0	8626

Note: Figures are for births in the period 1-59 months preceding the survey. A birth is considered to have received antenatal care if there was at least one antenatal care consultation during the pregnancy.

<sup>1</sup>If the respondent mentioned more than one provider, only the most qualified provider is considered. <sup>2</sup>Includes "Don't know"



## Number and Timing of Antenatal Care Visits

Both the number and timing of antenatal care visits are considered to be of great importance with respect to pregnancy outcome. Antenatal care can be more effective when it is sought early in the pregnancy and is received regularly throughout the pregnancy. As shown in Table 11.2, if an Egyptian mother seeks antenatal care, she is likely to make more than one visit. However, even among mothers who seek care, the median number of visits is only 3.5. Among mothers who obtained antenatal care, the majority report the first pregnancy check occurred at or before the fifth month of pregnancy. The median time at which mothers started antenatal visits is 3.2 months.

#### **Tetanus Toxoid Vaccinations**

Neonatal tetanus is one of the major causes of death in young infants. To fully protect against neonatal tetanus, it is recommended that mothers receive two tetanus toxoid injections during pregnancy. However, if a woman has been vaccinated during a previous pregnancy, she may only require a booster dose for a current pregnancy, and five doses of tetanus toxoid are considered to provide lifetime protection.

In order to estimate the extent of tetanus toxoid coverage during pregnancy, the EDHS collected data on whether the women received tetanus toxoid vaccinations for each pregnancy in the five

## Table 11.2 Number of antenatal care visits and stage of pregnancy

Percent distribution of births in the five years preceding the survey by number of antenatal care (ANC) visits, and by the stage of pregnancy at the time of the first visit, Egypt 1992

Antenatal visits/	
Stage of pregnancy	Ail
at first visit	births
Number of ANC visits	
0	471
1	12.3
2-3	174
4+	22 5
Don't know, missing	07
Total	100.0
Median no. of visits	3.5
Number of months pregna	nt at
the time of first ANC visit	
No antenatal care	47.1
<= 5 months	45 9
6-7 months	43
8+ months	2.3
Don't know, missing	0.4
Total	100.0
Median number of months	
pregnant at first visit	3.2
Number of live births	8626

Note: Figures are for births in the period 1-59 months preceding the survey. years preceding the survey and if so, the number of injections. These results are presented in Table 11.3. For more than two-fifths of the births (43 percent), mothers did not receive a tetanus toxoid vaccination; for 17 percent, the mothers received one dose, and, for 41 percent, the mothers received two or more doses. The current level of tetanus toxoid coverage is five times higher than the level reported in the 1988 EDHS when mothers reported receiving a tetanus toxoid vaccinations for only 11 percent of births (Sayed et al., 1989). The marked increase is most likely a response to a public campaign to improve tetanus toxoid coverage that was conducted during the period between the two DHS surveys.

#### Table 11.3 Tetanus toxoid vaccination

Percent distribution of births in the five years preceding the survey, by number of tetanus toxoid injections given to the mother during pregnancy, according to selected background characteristics, Egypt 1992

	1	lumber of	tetanus toxo	oid injections		
Background characteristic	None	One dose	Two doses or more	Don't know/ Missing	Total	Numbe of births
Mother's age at hirth						
	36.3	14.5	49.1	0.0	100.0	945
20-34	12.3	16.0	40.6	0.0	100.0	6505
35+	49.6	16.0	34.3	0.2	100.0	1086
Birth order						
1	33.2	11.7	54.9	0.2	100.0	1806
2-3	39.0	20.3	40.5	0.2	100.0	3037
4-5	46.5	16.1	37.2	0.2	100.0	1882
6+	53.2	15.5	31.3	0.1	100.0	1900
Urban-rural residence						
Urban	42.9	16.9	40.0	0.2	100.0	3237
Rural	42.3	16.3	41.2	0.1	100.0	5389
Place of residence						
Urban Governorates	47.8	14.9	37.1	03	100.0	1557
Lower Egypt	35.8	18.7	45.3	0.2	100.0	3408
Urban	32.0	18.4	49.4	0.2	100 0	820
Rural	37.0	18.7	44.0	0.2	100.0	2588
Upper Egypt	46.6	15.2	38.1	0.1	100.0	3661
Urban	44.6	19.0	36.3	0.2	100.0	860
Rural	47.2	14.1	38.7	0.0	100.0	2801
Mother's education						
No education	46.4	15,4	38.0	0.2	100.0	4427
Some primary	42.7	18.0	39.2	0.1	100.0	1735
Primary through secondary	35.9	16.9	47.2	0.0	100.0	806
Completed secondary/higher	35.3	17.6	46.8	0.2	100.0	1657
Work status	39.9	18.6	41.4	0.0	100.0	1 <b>087</b>
Working for cash Not working for cash	42 9	16.2	40.7	0.2	100.0	7539
All births	42.6	16,5	40.8	0.2	100.0	8626

Differentials in tetanus toxoid coverage also are shown in Table 11.3. The younger a mother is, the more likely it is that a tetanus toxoid vaccination was received during pregnancy. Vaccination coverage decreases directly with the birth order of the child. Coverage levels are the same in urban and rural areas. Surprisingly, Upper Egypt is achieving coverage similar to that in the Urban Governorates while Lower Egypt is doing better than both (see Figure 11.1).

Births to mothers who completed at least primary education are somewhat more likely to be protected against neonatal tetanus than births to mothers with less education. On the other hand, the fact that a mother works for cash makes only a slight difference in the probability that a birth was protected against neonatal tetanus.

## 11.2 Nature of Delivery

Another crucial element in reducing health risks for mothers and children is increasing the proportion of babies that are delivered in health facilities. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause death or serious illness for either the mother or the baby. This section discusses three topics related to delivery: place of delivery, type of assistance during delivery, and delivery characteristics.

#### Place of Delivery

Table 11.4 presents the distribution of births in the five years preceding the survey by the place of delivery. Almost three-quarters of all deliveries take place at home. Although the proportion of home deliveries is high, more births are occurring in health facilities (27 percent) now compared to the 1988 EDHS results, where 22 percent of births were reported to have been delivered at a health facility (Sayed et al., 1989). Among births in health facilities, more than 60 percent take place in government hospitals or health units.

Although the majority of births occur at home, there are striking differences by age of the mother and birth order of the child. Deliveries at home decrease with mother's age and increase with birth order. There also are significant differences by residence. In urban areas, the probability that a birth was delivered at home or in a health facility is almost equal. In contrast, more than eight in ten rural deliveries take place at home. Even greater differences are evident according to the place of residence. For example, in the Urban Governorates, almost six in ten deliveries occur at health facilities while, in rural Upper Egypt, almost nine in ten deliveries take place at home (see Figure 11.2).

Education clearly is positively related to the percentage of deliveries at a health facility. Also, births to women working for cash are twice as likely as births to women not working for cash to occur at a health facility.

Finally, the number of antenatal care visits is related to the likelihood that a birth occurred at a health facility. The percentage delivered at a health facility was 13 percent among births in which no antenatal care was received compared to 25 percent among births in which the mother reported 1-3 antenatal care visits and 58 percent among births in which there were 4 or more antenatal visits.

## Table 11.4 Place of delivery

Percent distribution of births in the five years preceding the survey, by place of delivery, according to selected background characteristics, Egypt 1992

Background characteristic	Public health facility	Private health facilty	At home	Other	Total	Numbe of births
Mother's use of high						
<pre>widther's age at dirth </pre>	13.6	53	91.1	0.0	100.0	045
20 34	167	2.5 10.5	01.1 72.7	0.0	100.0	6505
35+	21.3	10.5	66.5	0.1	100.0	1086
554	21.5	12.0	00.5	0.1	100.0	1000
Birth order						
1	26.4	17.0	56.5	0.1	100.0	1806
2-3	15.8	10.9	73.2	0.1	100.0	3037
4-5	12.8	7.3	79.8	0.1	100.0	1882
6+	14 1	5 0	80.9	0.0	100.0	1900
Urban-rural residence						
Urban	30.4	17 5	52.0	0.1	100.0	3237
Rural	89	57	85.3	0.1	100.0	5389
112101	0.2	5.7	05.5	0.1	10010	5507
Place of residence						
Urban Governorates	38.2	18.0	43.7	01	100.0	1557
Lower Egypt	13.4	10.3	76.2	0.0	100.0	3408
Urban	24.5	20.0	55.4	0.1	100.0	820
Rural	9.9	7.3	82.8	0.0	100.0	2588
Upper Egypt	11.2	6.6	82.1	0.1	100.0	3661
Urban	21.8	14.3	63.8	0.0	100.0	860
Rural	8.0	4.2	87. <b>7</b>	02	100.0	2801
Mother's education						
No education	11.2	3.9	84.8	0.0	100.0	4427
Some primary	17.5	7.2	75.3	0.0	100.0	1735
Primary through secondary	22.0	12.9	64.8	0.3	100.0	806
Completed secondary/higher	29.3	28.4	42.1	0.3	100.0	1657
Work status						
Working for cash	28.3	19.8	51.4	04	100.0	1087
Not working for cash	15.3	8.7	75.9	0.0	100.0	7539
Antonatal care visite						
None	10.1	3 1	86.9	0.0	100.0	4061
1.3	17.5	J.1 7 9	00.0 7/7	0.0	100.0	2560
4 or more	30.6	270	41 7	0.1	100.0	10/5
Don't know/Missing	22.3	50	72 1	0.0	100.0	50
Don't Klow/Missurg	££.J	5.0	12.1	0.0	100.0	.,,
All births	17.0	10.1	72.8	0.1	100.0	8626



#### **Assistance during Delivery**

Table 11.5 shows the percent distribution of live births in the five years preceding the survey by type of personnel assisting during delivery. If the mother was assisted by more than one type of provider, only the most qualified person is recorded in the table.

Very few births (2 percent) are delivered without assistance. Traditional birth attendants (dayas) provided assistance in delivering somewhat more than half of all births and relatives or friends assisted with 5 percent of the deliveries. Doctors (34 percent) or trained nurse-midwives (7 percent) assisted around 40 percent of births. The proportion of deliveries assisted by trained medical providers increases with mother's age and decreases with birth order of the child.

Medical personnel assisted more than six in ten urban births but were present at only one in four rural deliveries. Even more pronounced differences are observed by place of residence. The percentage of births assisted by trained personnel ranges from a high of 68 percent in the Urban Governorates to a low of 23 percent in rural Upper Egypt.

As expected, more educated women more frequently receive assistance at birth from medical personnel than less educated women; the proportion receiving medical assistance ranges from around onequarter of births to mothers with no education to three-quarters of births to mothers with at least a secondary education. Working for cash is also associated with a greater likelihood of receiving medical assistance; almost two-thirds of births of working women were assisted by trained medical providers compared to around one-third of births to women who were not working for cash.

#### Table 11.5 Assistance during delivery

Percent distribution of births in the five years preceding the survey by type of assistance during delivery, according to selected background characteristics, Egypt 1992

		Attend	dant assisting	during deliv	very <sup>1</sup>		
Background characteristic	Doctor	Trained nurse/ Midwife	Traditional birth attendant <sup>2</sup>	Relative/ Other	No one	Total	Number of births
Mother's age at birth							
< 20	27.3	6.1	60.6	5.3	0.7	100.0	945
20-34	33.4	7.6	52.8	4.5	1.7	100.0	6595
35+	39.5	5.9	46.8	5.2	2.7	100.0	1086
Birth order							
1	51.0	6.7	39.0	2.7	05	100.0	1806
2-3	33.5	8.5	52.0	4.6	1.3	100.0	3037
4-5	25.3	8.0	60.1	4.5	2.1	100.0	1882
6+	24.7	4.7	60.5	7.0	3.1	100.0	1900
Urban-rural residence							
Urban	52.6	9.9	33.4	3.2	0.8	100.0	3237
Rural	22.0	5.5	64.6	56	2.3	100.0	5389
Place of residence							
Urban Governorates	60.2	8.1	28.1	3.3	0.4	100.0	1557
Lower Egypt	32.0	7.7	56,5	2.9	0.9	100.0	3408
Urban	50.5	12.4	35.7	1.1	0.3	100.0	820
Rural	26.2	6.3	63.0	3.4	1.1	100.0	2588
Upper Egypt	23.4	6.3	60.2	7.0	3.0	100.0	3661
Urban	40.9	10.9	41.0	5.1	2.2	100.0	860
Rural	18.1	4.9	66.1	7.6	3.3	100.0	2801
Mother's education							
No education	19.3	4.8	66.6	6.8	2.5	100.0	4427
Some primary	32.8	7.0	54.5	4.4	1.3	100.0	1735
Primary through secondary	45.1	12.9	38.7	2.1	1.2	100 0	806
Completed secondary/higher	66.3	10.8	21.6	0.8	0.4	100.0	1657
Work status							
Working for cash	56.5	9.0	30.7	3.4	0.5	100.0	1087
Not working for cash	30.1	6.9	56.1	4.9	1.9	100.0	7539
Antenatal care visits							
None	17.5	5.9	67.3	6.6	2.7	0.001	4061
1-3	33.4	8.3	52.9	4.3	1.2	100.0	2560
4 or more	66.8	8.1	23.3	1.5	0.3	100.0	1945
Don't know/Missing	39.1	16.5	40.9	2.9	0.0	100.0	59
Total	33.5	7.2	52.9	4.7	1.7	100.0	8626

Note: Figures are for births in the period 1-59 months prior to the survey. If the respondent mentioned more than one attendant, only the most qualified attendant is considered.

<sup>2</sup>Includes both trained and untrained traditional birth attendants

#### **Delivery Characteristics**

The EDHS collected information on several other aspects relating to the delivery of births, including the extent of caesarean section and premature deliveries. Questions on birth weight and the size of the baby at birth were included to estimate the proportion of low birth weight infants. Table 11.6 summarizes the data on these delivery characteristics for births in the five years before the survey. The results indicate that only 5 percent of deliveries were by caesarean section and, according to the respondents, only 3 percent of the births were delivered prematurely. Birth weight are not available for 92 percent of the births. Among the small number of births for which mothers were able to provide birth weights, 11 percent weighed less than 2.5 kilograms and, thus, can be classified as low birth weight infants. According to the respondents' own assessment of their infant's size, about 15 percent of the births were smaller than average or very small in size and 7 percent were larger than average or very large.

#### 11.3 Immunization of Children

An essential part of improving child survival is increasing the percentage of children immunized against the major preventable childhood diseases. The worldwide Expanded Program on Immunization (EPI)<sup>1</sup> has established guidelines on childhood immunizations. The guidelines call for all children to receive: a BCG vaccination against tuberculosis; three doses of DPT vaccine to prevent diphtheria, pertussis, and tetanus; three doses of polio vaccine; and a measles vaccination.<sup>2</sup> Children should receive all of these vaccinations by the time that they are 12 months of age.

#### Levels of Vaccination Coverage

In the EDHS, information on childhood vaccinations was collected for all children born during the five years preceding the

#### Table 11.6 Characteristics of delivery

Percent distribution of births in the five years preceding the survey by whether the delivery was by caesarean section, whether premature, birth weight and the mother's estimate of baby's size at birth, Egypt 1992

Delivery characteristic	Percent of births
Caesarcan	
Yes	4.6
No	95.3
Don't know/Missing	0.1
Total	100.0
Premature birth	
Yes	2.9
No	97.0
Don't know/Missing	0.2
Total	100.0
Birth weight	
Less than 2.5 kg	0.9
2.5 kg or more	7.1
Don't know/Missing	92.0
Total	100.0
Size at birth	
Very small	0.7
Smaller than average	14.6
Average	77.9
Larger than average	6.2
Very large	0.6
Don't know/missing	0.1
Total	100.0
Number of hirths	8626

survey. In Egypt, immunizations are recorded on a child's birth certificate. For each child born during the five-year period before the survey, mothers were asked whether they had the birth certificate for the child and, if so, to show the certificate to the interviewer. When the mother was able to show the certificate, the dates of vaccinations were copied from the record to the questionnaire. In cases where the vaccination record on the certificate was incomplete, the mother was asked a further question about whether the child had received any other vaccinations. If the vaccination record was not available for the child, the mother was asked specific questions about whether the child had received each vaccine.

<sup>&</sup>lt;sup>1</sup>The Egyptian EPI program is managed by the Communicable Disease Department of the Ministry of Health and receives assistance from USAID and UNICEF.

<sup>&</sup>lt;sup>2</sup>The Egyptian government recently added the hepatitis vaccine to its child immunization program. The EDHS included hepatitis in the list of vaccines for which information was collected. However, because the hepatitis immunization component was launched only a short time before the survey fieldwork, only a few children were reported as having received the vaccine, and it is not included in the immunization tables in this report.

Table 11.7 summarizes vaccination coverage for children age 12 to 23 months. The first indicator shows the proportion of the children who had been vaccinated at any age up to their age at the time of the survey. These results are presented according to the source of the information used to determine coverage, i.e., vaccination record or mother's report. The second indicator shows the proportion of children who had been vaccinated by age 12 months, the age at which vaccination coverage should be complete.

According to information from both the vaccination records and mother's recall, 90 percent of children age 12-23 months have received a BCG vaccination. Coverage for the first dose of DPT is somewhat higher (93 percent), and it is also higher for the first dose of polio (95 percent). Coverage deelines for subsequent doses of the vaccines. Only 76 percent of the children received the third dose of DPT and 79 percent, the third dose of polio; the dropout rates<sup>3</sup> between the first and third doses of DPT and of polio are 18 and 17 percent, respectively. The coverage rate for measles vaccine (82 percent) is only slightly higher than that for the third dose of DPT or polio. Overall, 67 percent of the children were fully vaccinated, while 4 percent had not received any vaccination.

As mentioned earlier, it is recommended that children complete the schedule of immunizations during their first year of life, i.e., by 12 months of age. Table 11.7 shows that, among children aged 12-23 months at the time of interview, 57 percent had been fully vaccinated before their first year of life. This represents 85 percent of all of the children 12-23 months who had ever received the full schedule of immunizations. With regard to specific vaccines, children were least likely to have received the measles vaccine by age 12 months. Seventy percent of all children had received the measles vaccine by age 12 months.

Table	11.7	Vaccinations	by	source o	f information
			_		

Percentage of children 12-23 months who had received specific vaccines at any time before the survey and the percentage vaccinated by 12 months of age, by whether the information was from a vaccination record or from the mother, Egypt 1992

	Percentage of children who received:										
			DPT			Polio	····-				Number
Source of information	BCG	1	2	3+	1	2	3+	Measles	All <sup>1</sup>	None	ol children
Vaccinated at any time before the survey											
Vaccination record	519	53.5	52 0	47.6	53.7	52 1	47.9	47 3	43.1	0.8	880
Mother's report	37.5	39.3	35.8	28.8	40 8	37.9	31.0	34 2	24.3	3.0	714
Either source	89 5	92.8	87.8	76.4	94.5	90.1	78.9	81.5	674	3.8	1594
Vaccinated by 12 months											
ofage	88.8	92.2	86.4	72.7	93.8	88.6	750	70.3	572	4.8	1594

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

<sup>3</sup>Dropout rate = (Dose 1 - Dose 3) \* 100/Dose 1

#### Vaccination Coverage during the First Year of Life

Table 11.8 is based on children 12 to 59 months of age and shows the percentage of children who have a vaccination record, as well as the percentage who have received each vaccine during the first year of life, according to information from birth certificates and mothers' reports. For children whose information was based on the mother's recall, the distribution of vaccinations during the first year of life was assumed to be the same as that for children for whom a vaccination record was available.

The first row in Table 11.8 shows the proportion of children age 12-59 months for whom a vaccination record was seen by the interviewer. Overall, records were seen for slightly less than half of all of the children. The percentage of children for whom a vaccination record was seen decreases with age, from 55 percent among children 12-23 months to 42 percent among those age 48-59 months. This decline probably reflects a greater tendency for mothers to have misplaced the vaccination records for older children.

Table 11.8 Vaccinations in the first year of life

Percentage of children one to four years of age for whom a vaccination record was seen by the interviewer and the percentage vaccinated for BCG, DPT, polio, and measles during the first year of life, by current age of the child, Egypt 1992

Vaccination	Cui	rrent age of	child in mo	nths	All children 12-59
status	12-23	24-35	36-47	48-59	months
Vaccination record					
seen by interviewer	55.2	50.3	45.9	42.3	48.3
Percent vaccinated at 0-11 months <sup>a</sup>					
BCG	88.8	86.8	87.8	83.6	86.7
DPT 1	92.2	90.6	89.6	88.0	90.0
DPT 2	86.4	86.7	85.9	82.3	85.2
DPT 3	72.7	75.4	76 7	75.1	75.0
Polio 1	93.8	91.8	91.3	89.4	91 5
Polio 2	88.6	88.0	88.0	83.9	87 0
Polio 3	75.0	78.2	78.4	77.1	77 2
Measles	70.3	69 3	71.4	69.6	70.1
All vaccinations <sup>b</sup>	57.2	57.3	61.5	61.0	59.3
No vaccinations	4.8	6.1	62	8.6	6.5
Number of children	1594	1583	1628	1788	6593

<sup>a</sup>Information was obtained either from a vaccination record or from the mother if there was no written record. 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 that for children with a written vaccination record. <sup>b</sup>Children who have received BCG, measles, and three doses of DPT and polio vaccines. No clearcut trend over time is evident in the patterns of vaccination coverage by the child's age. Older children (age 36-59 months) are somewhat more likely to have been fully immunized during the first year of life than younger children. However, the proportion of children with no vaccinations in the first year of life appears to have decreased slightly over time, declining from 9 percent among children age 48-59 months to 5 percent among children 12-23 months.

#### **Differentials in Vaccination Coverage**

Table 11.9 looks at vaccination coverage among children age 12 to 23 months by selected background characteristics, including the child's sex and birth order, urban-rural residence, place of residence, and the mother's educational level and working status. The figures in the table refer to the percentage of children receiving the vaccinations at any time up to the date of the survey, and they are based both on information from vaccination records and mothers' reports. The table includes information on the proportion of children for whom a vaccination record was seen.

#### Table 11.9 Vaccinations by background characteristics

Percentage of children 12-23 months who had received specific vaccines by the time of the survey (according to the vaccination card or the mother's report) and the percentage with a vaccination record, by selected background characteristics, Egypt 1992

	Percentage of children who received:									I	e	
Background		DPT Polio									vacci- nation	Number
characteristic	BCG	1	2	3+	1	2	3+	Measles	All <sup>1</sup>	None	record	children
Sex												
Male	89.0	92 7	87,8	77.6	94.7	90.1	80.1	81.7	68.9	3.5	55.6	850
Female	89.9	92.8	87.8	75.0	94.4	90.0	77.6	81 2	657	42	54.8	743
Birth order												
1	94.7	96.4	92.8	83.5	97.8	94.4	85.2	87.4	751	14	58.4	369
2-3	91.6	94.1	88.4	76.4	95.5	90.5	79.2	85.1	699	25	56.1	557
4-5	88.1	92.1	88.1	77.8	94.3	90.6	79.3	79.4	66 1	4.0	53.8	359
6+	80.8	86.9	80.3	66.3	89.1	83.5	70.4	70.4	552	8.8	51.4	308
Urban-rural residence												
Urban	94.0	95 6	92 8	83 9	96.5	95.0	87.4	877	77.1	25	57.3	592
Rural	86 7	911	84.9	72.0	93 4	87 2	74 0	77.9	617	4.6	54.0	1002
Place of residence												
Urban Governorates	95 9	96.0	94.2	87.3	96.8	96.1	89.6	90.9	81.7	23	59 3	278
Lower Egypt	93.4	95.0	90.9	82.3	96.6	91.9	83.3	87.3	74 4	25	56 1	642
Urban	96.4	96.4	96.4	90.6	97.3	97.3	93.4	89 9	83.4	18	62.6	148
Rural	92.5	94 5	89 2	79.8	96.4	90.3	80.3	86 6	71.7	27	54.2	493
Upper Egypt	83.0	89.3	82.2	66.3	91.6	85.9	70.4	72.1	54.8	57	52.7	674
Urban	88.8	94 2	87.1	72.1	953	912	78.2	80.2	63.6	34	49.1	165
Rural	81.2	87.8	80 6	64 4	90.5	84.1	67.8	69.4	52 0	64	53.9	509
Mother's education												
No education	85.0	89.4	82.3	69.4	92.5	85.2	71.4	74 9	59.6	56	53.7	780
Some primary	88 3	94 3	91.2	79.6	94.6	92.6	83.3	82.5	66.7	34	58 7	332
Primary through secondary	96 8	95 4	93.3	79.4	95.8	93.4	81.7	89.7	75.0	2.0	617	152
Completed secondary/higher	97.7	98-1	94.8	88.5	98.8	97.6	91.0	92.4	83.1	06	52 2	329
Work status												
Working for cash	95.7	97.8	93.0	87.5	98.4	96.3	90.3	89.5	79 8	3.3	42.3	186
Not working for cash	88 6	9 <b>2</b> .1	87.1	75 0	94.0	89.3	77.4	80.4	65 8	4.2	56.9	1407
All children	89.5	92.8	87.8	76.4	94.5	90.1	78.9	81 5	67 4	38	55.2	1594

Males have a slight advantage over females in vaccination coverage; 69 percent of males have received all vaccinations compared to only 66 percent among females. The discrepancies between sexes are greatest in the case of the third doses of polio and of DPT. Vaccination coverage levels decrease with the child's birth order.

Striking differentials are apparent by residence, as shown in Figure 11.3. Urban children are more likely to be fully vaccinated than rural children (77 percent and 62 percent, respectively). The largest differences again occur for the third doses of DPT and polio. By place of residence, coverage levels vary from 82 percent in Urban Governorates to 74 percent in Lower Egypt and 55 percent in Upper Egypt. Coverage levels are higher in rural Lower Egypt than in urban Upper Egypt, and levels are lowest in rural Upper Egypt, where only 52 percent of children have received all vaccinations.

As expected, the percentage of children that have received all vaccines increases with education of mother. It is also higher among children whose mothers work for eash than among children of women not working for eash.



## 11.4 Childhood Illness and Treatment

Two main illnesses, as well as their treatment, are discussed in this section due to their importance for infant and child survival. They are acute respiratory infection and diarrhea.

#### Table 11.10 Prevalence and treatment of acute respiratory infection

Percentage of children under five years who were ill with a cough accompanied by short, rapid breathing during the two weeks preceding the survey, and the percentage of ill children who were treated with specific remedies, by selected background characteristics, Egypt 1992

- -

				Атс	ng childa	ren with a	ough and	l short, ra	ipid breat	hing			
	Percentage of chil- dren with	Pe facil by	rcentage t to a healt hty or pro type of fa	aken h ovider, cility			Рс	rcentage	treated w	uth			
Background characteristic	cough and sbort, rapid breathing	Public <sup>1</sup>	Pnvate <sup>2</sup>	Public and Private	Anu- biotic	Injec- tion	Cough syrup	Other pill/ syrup	Unknowi pill/ syrup	n Home remedy	Other	None	Number of chuldren
Child's age													
< 6 months	8.8	17.3	27.4	2.4	20.1	13.2	419	6.6	10.9	0.5	6.5	379	688
6-11 months	117	16.5	477	0.2	212	22.4	78.9	16.8	16.4	16	13	12.0	737
12-23 months	113	20.4	47.0	10	25.3	28.4	61.8	23.0	210	1.0	1 1	18.8	1504
24.35 months	7.8	10.4	26.4	0.0	25.5	20.4	67.7	16.2	176	02	00	150	1583
24-35 months	6.0	16.5	20.4	1.5	21.1	12.8	50.4	202	16.0	02	1.0	30.2	1628
48-59 months	6.2	16.7	37.6	2.3	29.2	22 5	65.3	17.3	16.4	22	01	193	1788
Sex													
Male	8.8	15.6	43 5	20	28.5	23.6	65.3	18.8	20.2	12	14	16.8	4144
Female	7.6	21.4	34.1	0.1	19 5	196	58,5	17.7	14.6	0.8	11	25 5	3874
Birth order						. – .							
1	92	11.8	49.1	0.3	28.2	17.9	69 3	148	26.1	10	0.2	16.8	1700
2-3	7.9	18.6	39.6	0.1	26.9	20.9	64 9	169	119	11	0.8	215	2835
4-5	6.6	22.1	39.6	0.0	22.4	21.2	63.7	19.1	198	21	33	169	1761
6+	9.5	20.9	29.1	4.3	19.0	27.3	50.8	22 9	16 1	02	1.3	26 1	1722
Urban-rural residence	2												
Urban	8.0	18.4	43 5	2.6	34 9	199	67.8	15.1	172	11	0.3	15.1	3087
Rural	8.4	18.1	36 7	03	18.3	22.9	58 9	20.2	18.0	1.0	18	24 0	4931
Place of residence	3.0					107					0.7		
Urban Governorates	7.0	28.1	37.5	6.2	42.1	196	6/4	16.4	15.0	1.6	07	18.0	1484
Lower Egypt	8.4	151	46.4	0.4	23.8	25.6	69.2	182	21.1	0.7	0.3	1/4	3208
Urban	8.8	15,4	58.2	0.0	30.8	25.2	67.9	15.6	194	0.0	0.0	16.2	789
Rural	8.2	15.0	42.4	0.5	21.4	23.0	69.6	191	217	0.9	0.4	179	2419
Upper Egypt	8.6	17.5	33.2	0.0	18.8	21.0	53.9	19 0	15.5	11	23	24 8	3326
Urban	9.0	7.6	38 4	0.0	28.5	15.3	684	129	181	13	0.0	10.2	813
Rural	8.5	20.9	31.4	0.0	15.4	22.9	48 9	212	146	11	31	29.8	2512
Mother's education													
No education	8.2	20.1	29.9	13	17.9	22.7	5/7	18.3	14 4	1.6	1.7	25.9	4054
Some primary Primary through	9.0	24.0	37.2	2.0	26.5	24 9	60.7	21.6	19.4	00	14	179	1619
secondary Completed second-	8.6	12.5	56.0	0.0	294	20.2	73 0	107	20.9	0.5	0.0	14.8	756
ary/higher	7.4	87	59.1	0.3	37 8	16 4	71.0	183	23 0	1.0	03	131	1589
Work status									_				
Working for cash Not working for cash	8.6 8.2	19.7	44 1 38 5	15	326	20.5	63.3	16.0 18.6	178	13	02	134	1020
HOL WOLKING TOT CASE	0.2	10.0	505	1 1	<u>6</u> 3 <u>6</u>	22 U	021	10.0	177	ΤŪ	14	210	0770
All children	8.2	18.2	39.3	11	24.5	21.8	62 2	183	177	1.0	12	207	8018

Note: Figures are for children born in the period 1-59 months preceding the survey <sup>1</sup>Includes government hospitals and health units <sup>2</sup>Includes private hospitals/clinics and private doctors

#### Acute Respiratory Infection

Acute respiratory infection (ARI) is a common cause of morbidity and death among children under five years of age in Egypt. A large proportion of the deaths caused by pneumonia can be prevented by early diagnosis and treatment of ARI with antibiotics. ARI prevalence was estimated in the EDHS by asking mothers if their children under age five had been ill with coughing accompanied by short, rapid breathing,<sup>4</sup> during the two weeks preceding the survey. Mothers whose children experienced these symptoms were asked about what they had done to treat the illness. Information on the prevalence of ARI and treatment practices are presented in Table 11.10.

The EDHS results indicate that the prevalence of cough with rapid breathing in the two weeks prior to the survey is 8 percent among children under five years of age. Advice or treatment was sought from a health facility in the case of 59 percent of children with ARI symptoms. Mothers who reported that a health facility was consulted were twice as likely to have consulted a private sector facility as a public sector facility. The most common treatment is cough syrup (62 percent) followed by antibiotics (25 percent) and injection (22 percent). One in five children with cough and short, rapid breathing were not given anything to treat the illness.

Table 11.10 also looks at differentials in the prevalence of ARI symptoms and treatment practices for children suffering from these symptoms by selected characteristics of the child and the mother. The prevalence differentials are generally small. The largest differences are by the child's age, with children 6-23 months being somewhat more likely to have had cough and short, rapid breathing than younger or older children.

Treatment practices are more variable across subgroups. Health facilities are more likely to have been consulted and treatments given (especially cough syrup and antibiotics) for male children, urban children (particularly those from the Urban Governorates and urban Lower Egypt), and children of educated mothers or of mothers who are working for cash than for other children. It also is evident that mothers are less likely to treat cough and short, rapid breathing in young children (under 6 months of age).

#### Diarrhea

Dehydration brought on by severe diarrhea remains a major cause of child death in Egypt. This section discusses the prevalence of diarrhea as well as treatment practices. Of particular interest is the knowledge and use of oral rehydration therapy (ORT), which has been widely promoted in Egypt. ORT solution (used in oral rehydration therapy) may be prepared from commercially produced packets of oral rehydration salts (ORS) or a homemade mixture usually prepared with sugar, salt and water.

Table 11.11 summarizes the prevalence of diarrhea in children under five years of age and treatment practices. Thirteen percent of children had diarrhea at some time in the two weeks preceding the survey, including 1 percent with bloody diarrhea. Six percent were still having an episode of diarrhea at the time of the survey (i.e within the last 24 hours).

Children age 6-23 months are more likely to have experienced diarrhea, including bloody diarrhea than children in other age groups. Differentials in the prevalence of diarrhea by the other background

<sup>&</sup>lt;sup>4</sup>Cough and short, rapid breathing arc signs and symptoms of pneumonia. The EDHS estimate of ARI prevalence thus corresponds to an estimate of the prevalence of children who need treatment for presumed pneumonia and does not include other ARI-related conditions (coughs and colds, wheezing, car infection, and streptococcal sore throat) covered under the WHO guidelines for ARI case management.

characteristics in Table 11.11 are not marked; however, levels tend to be highest for male children, first-born children and children of sixth or higher birth order, children living in Upper Egypt (especially urban areas), children of mothers at intermediate educational levels and of mothers who are not working for cash than other children.

#### Table 11.11 Prevalence of diarrhea

Percentage of children under five years who had diarrhea and diarrhea with blood in the two weeks preceding the survey, and the percentage of children who had diarrhea in the preceding 24 hours, by selected background characteristics, Egypt 1992

	Diarrho preceding	ea in the g 2 weeks <sup>1</sup>	All diamhea in the	Number
Background characteristic	All diarrhea	Diarrhea with blood	preceding 24 hours <sup>2</sup>	of childrer
Child's age				
< 6 months	19.0	0.3	99	688
6-11 Months	27 8	1.2	120	737
12-23 Months	217	1.2	94	1594
24-35 Months	12.5	0.8	49	1583
36-47 Months	6.8	0.8	23	1628
48-59 Months	47	0.3	15	1788
Sex				
Male	14.4	0.8	64	4144
Female	12.3	07	47	3874
Birth order				
1	15.1	0.7	6.1	1700
2-3	12.9	0,7	5.1	2835
4-5	111	06	54	1761
6+	14.9	1.1	59	1722
Urban-rural residence				
Urban	13.4	0.5	53	3087
Rural	13.4	09	58	4931
Place of residence				
Urban Governorates	12.0	0.4	4.4	1484
Lower Egypt	12.1	0.6	49	3208
Urban	12.1	0.5	46	789
Rural	12 1	07	5.0	2419
Upper Egypt	15.3	11	67	3326
Urban	173	0.8	74	813
Rural	14.6	1.2	65	2512
Mother's education	_		_	
No education	13.3	0.8	59	4054
Some primary	14.1	09	57	1619
Primary through secondary	14.8	11	52	756
Completed secondary/higher	12 1	0.4	47	1589
Work status				
Working for cash	111	05	44	1020
Not working for cash	13 7	0.8	57	6998
All children	13 4	0.8	56	8018

<sup>1</sup>Includes diarrhea in the past 24 hours

<sup>2</sup>Includes diarrhea with blood

The Egyptian diarrheal disease control program has placed considerable emphasis on the use of oral rehydration therapy in cases of childhood diarrhea. Table 11.12 looks at overall levels of knowledge and ever use of ORS packets among women who have given birth in the five years prior to the survey. It is clear that knowledge is virtually universal; 99 percent of mothers know about ORS packets. Ever use levels are also high at 70 percent among all mothers. Ever use generally increases with the age of the respondent. Rural mothers, less educated mothers, and mothers not working for cash are more inclined to use ORS packets as compared to other women. This may be due to the greater availability of other treatments among urban, educated mothers, and those mothers working for cash.

Treatment practices for diarrhea are further assessed in Table 11.13, which looks at the extent to which advice or treatment was sought from medical providers and also details the percentage of children with recent bouts of diarrhea who were given various treatments, including ORT. Forty-five percent of children under five years of age who had diarrhea in the two weeks preceding the survey were taken for treatment to a medical provider. Mothers were twice as likely to have sought treatment from a private provider than from a public health facility. The percentage seeking medical advice or treatment was higher for young children under two years of age than for older children, peaking at 60 percent among children age 6-11 months. No significant differences in the tendency to seek advice or treatment are observed by the sex of the child, but mothers are more inclined to take their first order children to a health facility than children of any other birth order. Mothers in Upper Egypt are less likely to take children for treatment to a health faciliTable 11.12 Knowledge and use of ORS packets

Percentage of mothers with births in the five years preceding the survey who know about and have ever used ORS packets, by selected background characteristics, Egypt 1992

Background	Know about ORS	Have ever used ORS	Number of
characteristic	packets	packets	mothers
Age			
15-19	98.2	50.4	227
20-24	98.9	65.7	1081
25-29	98.4	73.5	1672
30-34	99.5	73.3	1286
35+	98.4	70.8	1410
Urban-rural residence			
Urban	99.3	66 3	2309
Rural	98.3	73.2	3367
Place of residence			
Urban Governorates	99.3	65.0	1126
Lower Egypt	99.2	71.2	2317
Urban	99.4	62.5	608
Rural	99.1	74.3	1709
Upper Egypt	98.0	72.2	2233
Urban	99.4	72.8	575
Rural	97.5	72.0	1658
Education			
No education	98.1	71.8	2767
Some primary	99.1	75.2	1163
Primary through secondary	99.1	70.1	579
Completed secondary/highe	r 99.5	62.4	1167
Work status			
Working for cash	99.1	67.5	748
Not working for cash	98.7	70.8	4928
All mothers	98.7	70.4	5676

Note: Figures include mothers who have given ORS for diarrhea during the preceding two weeks, although they were not asked about knowledge of ORS packets.

ty than mothers in either the Urban Governorates or Lower Egypt. The probability of taking the child for treatment increases with mother's education and is higher when the mother is working for eash than when she is not.

Table 11.13 also considers the types of treatments that mothers reported. Overall, only 29 percent of mothers had done nothing to treat the diarrhea. Mothers of children under 6 months of age and those age 3 years and above were more likely to report doing nothing to treat the diarrhea than mothers of children in the other age groups. Marked differences in the propensity to treat the diarrhea are observed by place of

#### Table 11.13 Treatment of diarrhea

Percentage of children under five years who had diarrhea in the two weeks preceding the survey who were taken for treatment to a health facility or provider, the percentage who received oral rehdyration therapy (ORT), the percentage who received increased fluids, the percentage who received neither ORT nor increased fluids, and the percentage receiving other treatments, according to selected background characteristics, Egypt 1992

	Per facil by t	centage to to a healt ity or pro ype of fa	aken h vider, cılity	Oral reh therapy	ydrauon (ORT)	Per- centage	Percent- age re- ceiving		Perce	ntage rec	eiving où	her treatm	ients:		
Background		D 2	Public and	ORS	DUID	ing in-	ORT nor increased	Anti-	In- jec-	Other pill/	Ілга-	Home	0.1	N	Children with
characteristic	Public	Private-	private	packet	KHI!			DIOLICS	lion	syrup	venous	remeay	Ouner	None	
Child's age															
< 6 months	14.0	34.9	0.0	23 6	2.2	14.0	65.3	12.8	5.2	31.9	0.9	30	0.0	37.7	131
6-11 months	187	40.8	0.0	42.3	54	16.1	51.0	28.3	70	32.3	15	2.9	1.2	24.9	205
12-23 months	13.8	34.9	1.0	32.4	7.1	20.9	50.8	24.0	5.6	40.0	11	0.8	0.8	22.9	345
24-35 months	13.6	26.9	0.0	24.9	4.6	20 4	57.7	23 3	3.0	32.0	1.7	19	0.7	263	197
36-47 months	6.9	17.0	0.0	14 2	3.3	191	68.1	18.2	4.1	32.2	14	1.2	02	40 7	111
48-59 months	10.0	17 2	00	203	13.5	16.1	64.2	20.1	49	19.6	02	0.0	0 0	42 1	84
Sex															
Male	12.7	33 6	0.6	30 5	4.7	17.7	57.4	23.8	6.5	32.4	0.8	1.9	0.9	29.4	598
Female	15 1	28.5	0.0	27.1	72	19.6	55 8	20 7	34	35.3	17	1.3	0.3	28.6	476
Birth order															
1	9.1	419	03	27 0	3.2	188	60.1	24 5	5.6	38 0	0.8	21	1.0	276	257
2-3	13.8	31.8	0.3	27 3	5.3	178	58.4	23.4	3.6	33.9	2.0	21	01	27.9	365
4-5	12.3	29 0	0.0	<b>28</b> 2	8.5	199	57.4	24 8	55	33 0	09	22	05	28.9	196
6+	19.4	217	0.6	34.2	7.2	181	50.3	17.2	6.5	29.4	07	01	12	32.3	256
Urban-rural residence															
Urban	12.0	351	0.6	23 5	3.5	17.9	62 0	<b>2</b> 4 0	3.7	37.1	1.2	2.4	1.1	28.7	414
Rural	148	28.9	01	32.5	73	18.9	53.4	21 5	6.0	31 5	1.2	12	0.3	29 3	659
Place of residence															
Urban Governorates	16.5	34 3	08	27.3	24	13.4	61.5	26.9	4.1	33.0	1.8	3.5	07	27.4	178
Lower Egypt	11.4	39 8	0.5	353	8.7	26 2	45.1	24 5	69	38.2	22	14	04	20.8	387
Urban	5.9	47 8	11	27 1	71	32.6	48 0	26.1	56	44.0	18	38	16	18.7	95
Rural	13.2	37 2	0.3	38 0	9.2	24.1	44 2	24.0	74	36.2	24	06	00	21.5	291
Upper Egypt	14.5	23.8	00	24.8	49	14.4	63 9	19.3	41	30 5	0.2	12	0.8	35.9	509
Urban	10 5	27.6	0.0	16.2	25	13.5	72.1	188	2.0	37 6	0 0	02	13	37.1	141
Rural	16.0	22 3	00	28.0	58	14.8	60 7	19.5	4.9	27.8	03	16	0.6	35 4	368
Mother's education															
No education	16.6	26.9	0.4	32.7	6.3	174	54.8	190	6.3	30.0	0.8	11	10	31.7	541
Some primary Primary through	9.0	25 5	0.0	24 3	5.7	139	64.4	21.2	5.2	32.2	1.9	16	06	34.0	228
secondary	14.3	313	09	25.8	8.3	153	59.9	27 4	0.8	33.6	1.8	2.6	0 0	26.5	112
ary/higher	10.8	506	0.0	26 0	3.3	<b>2</b> 9 0	51.3	30.6	4.1	45 8	11	28	0.0	17.4	193
Work status	10.0	10.0	0.0	20.0		<b>77</b> N	40 1	26.2	4 7	46.3	~ •	1.0	0.2	10.1	112
working for cash	10.6	39.0	0.0	30.8	2.1	174	48.1	25.2	4.7	40.5	5.1	19	0.2	191	113
not working for cash	14 1	50.4	0.5	20.8	0.2	1/4	51.1	22 1	5.2	52.2	10	1.0	07	30 Z	נטע
All children	13.7	31 3	0.3	29 0	5.8	18.5	56.7	22.4	51	33.7	1.2	16	0.6	29 1	1074

Note: Figures are for children born in the period 1-59 months preceding the survey. Oral rehydration therapy (ORT) includes solution prepared from ORS packets, and recommended home fluids (RHF), e.g., sugar-salt-water solution. Increased fluids includes increased frequency of breastfeeding. Includes government hospitals and health units.

<sup>2</sup>Includes private hospitals/clinics and private doctors

residence. Children from Lower Egypt have a better chance of receiving some type of treatment than those from the Urban Governorates or Upper Egypt. The percentage not receiving treatment clearly decreases with mother's education and is lower for mothers who work for cash than those who are not working.

An oral rehydration salt (ORS) packet was used to treat diarrhea in 29 percent of the cases, 6 percent were given recommended home fluid (RHF), and 19 percent were given increased fluids. If oral rehydration therapy is defined broadly to include ORS, recommended home fluids, and increased fluids, then 43 percent of children with diarrhea received some form of oral rehydration therapy. Antibiotics (22 percent) and other pills or syrups (34 percent) also were commonly used to treat children with diarrhea.

The EDHS also directly investigated the extent to which mothers made changes in the amount of fluids that a child received during a diarrheal episode. To obtain these data, mothers who reported that they were still breastfeeding a child who had diarrhea during the two-week period were asked whether they increased the number of breastfeeds, reduced them, or made no change at the time the child had diarrhea. All mothers who had a child with diarrhea also were asked whether they had changed the amount that the child was given to drink during the diarrheal episode. Table 11.14 shows that, among those children who were breastfed, although the majority (84 percent) continued to be breastfed as usual or were given additional feedings, 14 percent were given fewer feedings and breastfeeding was stopped for 2 percent. Among children receiving fluids other than breast milk, the majority (63 percent) continued as usual or increased the amount of fluids during the diarrhea episode. However, more than one-quarter of mothers reduced the amount of fluid supplements. These results suggest that further education is needed to ensure that children receive enough fluids during a diarrheal episode.

# Table 11.14 Feeding practices during diarrhea

Percent distribution of children under five years who had diarrhea in the two weeks preceding the survey, by feeding practices during diarrhea, Egypt 1992

Feeding practices	Percent
during diarrhea	of children
Breastfeeding frequency <sup>1</sup>	
Same as usual	76.6
Increased	7.5
Reduced	13.6
Stopped	1.5
Don't know/missing	0.7
Total	100.0
Number of children	908
Amount of fluids given	
Same as usual	46.7
More	16 1
Less	26.5
Breast milk only	8.6
Don't know/missing	2.1
Total	100.0
Number of children	
with diarrhea <sup>2</sup>	1074

<sup>1</sup>Applies only to children who are still breastfed. <sup>2</sup>Children born in the period 1-59 months

preceding the survey.

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## **CHAPTER 12**

## INFANT FEEDING AND MATERNAL AND CHILD NUTRITION

This chapter focuses on several aspects related to the nutritional status of mothers and children under age five. The EDHS data allow an assessment of infant feeding practices (including breastfeeding practices, introduction of supplementary wearing foods, and use of feeding bottles), nutritional status of children (based on height and weight measurements of the respondents' children under the age of five years) and nutritional status of mothers.

## **12.1** Breastfeeding and Supplementation

Infant feeding has an impact on both the child and the mother. Feeding practices are an important determinant of the child's nutritional status, which influences the child's growth and development. Poor nutritional status is related to increased risk of morhidity and mortality for the child. In addition to the direct effects on the child, feeding practices have an indirect effect on the postpartum fertility of the mother. More frequent breastfeeding for longer durations as well delays in the age at which supplementary foods are introduced are associated with longer durations of postpartum amenorrhea and, thus, longer birth intervals and lower fertility.

#### Prevalence of Breastfeeding

The data presented in Table 12.1 indicate that almost all Egyptian children (94 percent) are breastfed for some period of time. Differentials in the proportion of children breastfed are quite small, with at least 92 percent of children in every subgroup reported as having been breastfed.

The timing of initiation of breastfeeding for the last-born child also is examined in Table 12.1. Early initiation of breastfeeding is important for both the mother and the child. From the mother's perspective, early suckling stimulates the release of a hormone that helps the uterus achieve a contracted state. From the child's perspective, the first breast milk (colostrum) is important since it is very rich in antibodies. Onequarter of children were put to the breast within an hour of birth and 64 percent within the first day. The most striking differential in the timing of initiation of breastfeeding is observed for rural Upper Egypt; only 53 of children from rural Upper Egypt were breastfeed during the first day following birth compared to around 70 percent of children living in other areas.

#### **Introduction of Supplements**

Mothers were asked about the current breastfeeding status of all last-born children under age five and, if the child was being breastfed, whether various types of liquids or solid foods had been given to the child "yesterday" or "last night." This information is used to derive the percentages of children breastfeeding and exclusively breastfeeding that are shown in Table 12.2 and Figure 12.1. Children who are *exclusively* breastfed receive breast milk only. Children who are *fully* breastfed includes those who are exclusively breastfed and those who receive only plain water in addition to breast milk. Exclusive breastfeeding is recommended for the first 4-6 months of a child's life because it limits exposure to disease agents and because breast milk is the optimal source of nutrients for infants in this age group.

#### Table 12.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and the percentage of last-born children who started breastfeeding within one hour of birth and within one day of birth, by selected background characteristics, Egypt 1992

	Among all children:		Among last-born children, percentage who started breastfeeding:			
Background characteristic	Percentage ever breastfed	Number of children	Within 1 hour of birth	Within 1 day of birth	Number of children	
Sex						
Male	93.7	4502	23.9	64.6	3031	
Female	94.5	4195	25.4	63.0	2721	
Urban-rural residence						
Urban	93.2	3255	25.3	68.6	2344	
Rural	94.6	5442	24.2	60.6	3408	
Place of residence						
Urban Governorates	92.2	1564	25.0	68.5	1142	
Lower Egypt	95.0	3438	27.7	69.0	2347	
Urban	93.6	825	26.2	70.7	616	
Rural	95.4	2612	28.2	68.4	1731	
Upper Egypt	94.0	3695	21.3	56.2	2263	
Urban	94.8	866	24.9	66.5	586	
Rural	93.8	2829	20.1	52.6	1677	
Mother's education						
No education	94.6	4470	23.4	59.2	2800	
Some primary	94.0	1745	26.0	65.7	1182	
Primary through secondary	92.9	813	27.1	74.9	584	
Completed secondary/highe	r 93.3	1668	25.0	67.5	1185	
Work status						
Working for cash	94.2	1093	24.0	63.4	764	
Not working for cash	94.1	7604	24.7	63.9	4988	
Assistance at delivery						
Medically trained person Traditional birth	92.7	3536	22.6	64.4	2555	
attendant	94.9	4601	26.9	63.8	2858	
Other or none	96.2	560	20.3	60.4	2000	
other of none	90.2	500	20.5	60.4	559	
Place of delivery	01.9	2256	10.6	<b>41</b> 7	1700	
At home/Other	91.ð 04.0	2330	14.0	01.7	1709	
At nome/Uner	94.9	ددده	20.8	04.8	4040	
All children	94.1	8697	24.6	63.9	5752	

Note: Figures are based on all children born in the five years preceding the survey, whether living or dead at the time of the interview.

#### Table 12.2 Breastfeeding status

Percent distribution of living children by breastfeeding status, according to child's age in months, Egypt 1992

	Breastfed and given:					Numbar
Age in months	Not breast- fed	Exclusively breast- fed	Plain water only	Supple- ments	Total	of living children
<2	1.8	59.5	0.6	38.0	100.0	204
2-3	3.9	49.7	1.7	44.7	100.0	306
4-5	4.2	28.6	6.8	60.4	100.0	249
6-7	6.4	15.0	11.2	67.4	100.0	266
8-9	14.0	3.9	4.5	77.6	100.0	238
10-11	14.1	3.7	5.5	76,7	100.0	233
12-13	20.2	4.4	3.9	71.5	100.0	265
14-15	28.2	1.8	4.2	65.8	100.0	290
16-17	31.2	0.4	6.1	62.3	100.0	280
18-19	42.2	2.1	2.1	53.6	100.0	244
20-21	52.7	0.0	0.9	46.4	100.0	244
22-23	72.2	0.0	0.8	27.1	100.0	271
24-25	84.5	0.4	0.0	15.1	100.0	302
26-27	89.9	0.0	1.3	8.8	100.0	305
28-29	93.6	0.0	0.0	6.4	100.0	228
30-31	92.9	0.5	0.0	6.6	100.0	247
32-33	94.7	0.0	0.0	5.3	100.0	229
34-35	95.2	0.0	0.8	4.0	100.0	272



Exclusive breastfeeding is common but not universal among children under four months of age in Egypt. The results in Table 12.2 indicate that 60 percent of children who were less than two months of age and 50 percent of children age 2-3 months receive only breast milk. The percentage exclusively breastfed then drops rapidly to 29 percent among children 4-5 months of age and 15 percent among children 6-7 months of age. The percentage of children who receive breast milk and water only increases from less than 1 percent among those less than two months of age to a peak of 11 percent among children 6-7 months of age.

Supplements other than plain water are given to many children at an early age. Among children less than two months of age, 38 percent are given supplements other than plain water, and the proportion receiving such supplementation increases rapidly to nearly 70 percent among children 6-7 months of age.

Table 12.3 looks in more detail at the type of supplements received by breastfed children. Infant formula is given to children, particularly to those over three months of age, but children are more likely to receive fresh milk or other liquids than formula. Solid or mushy food begins to be introduced into the diet at ages 4-5 and 6-7 months. By 8-9 months of age, more than 70 percent of children receive solid or mushy food along with breast milk or are fully weaned.

Table 12.3 also indicates the extent to which bottles are used to feed young children. Bottle feeding increases the risk that a young child will develop diarrhea or other diseases since it is difficult to properly sterilize the nipple. The use of a bottle also contributes to shortening of the period of postpartum amenorrhea for mothers since it is associated with a lessening of the intensity of breastfeeding. The majority of young children are not fed with a bottle in Egypt. However, nearly one-fifth of breastfeed children less than eight months of age were given a bottle with a nipple on the day before the interview.

Table 12.3 Breastfeeding and supplementation by age

cases.

	Perce					
Age in months		Receiving	Using a bottle	Number		
	Infant formula	Other milk	Other liquid	Solid/ Mushy	with a nipple	of children
<2	1.6	12.8	32.7	0.1	16.1	200
2-3	7.6	14.8	34.6	3.9	21.3	294
4-5	17.0	27.0	33.4	33.7	21.0	239
6-7	18.5	30.6	43.3	45.8	16.6	249
8-9	18.8	39.7	48.1	72.1	93	205
10-11	14.8	40.4	49.3	75.1	9.1	200
12-13	18.6	34.4	52.5	73.5	7.5	211
14-15	15.1	36.9	47.4	85.2	3.1	208
16-17	13.3	34.4	53.5	80.9	7.4	193
18-19	17.0	46.7	58.0	86.9	4.0	141
20-21	10.7	43.5	54.7	88.7	4.8	115
22-23	16.5	50.2	67.5	93.1	5.6	75
24-25	(11.7)	(42.2)	(65.4)	(90.0)	(0.0)	47
## **Duration and Frequency of Breastfeeding**

The duration and frequency of breastfeeding are described in Table 12.4. The estimates of *mean* and *median* durations presented for subgroups in this table generally are based on current status data. The prevalence/incidence mean is provided for the total population in order to allow for comparison with the results of earlier surveys in Egypt.

The median duration of breastfeeding is 19.1 months. The early introduction of supplements is reflected in the short duration of exclusive breastfeeding (1.8 months). Few children who are supplemented receive only plain water in addition to breast milk and thus, the median duration of full breastfeeding (2.0 months) also is quite short.

Differentials in the duration of breastfeeding also are shown in Table 12.4. There is little difference in the median duration between male and female children, suggesting that the breastfeeding practices of mothers in Egypt are not influenced by the child's gender. Rural children are breastfeed for a somewhat longer period than urban children (19.7 months and 18.2 months, respectively). By place of residence, median breastfeeding durations vary from a low of 17.3 months in urban Lower Egypt to 20.2 months in rural Upper Egypt (see Figure 12.2). Better educated mothers wean their babies sooner than less educated mothers; nevertheless, the median duration of breastfeeding among mothers who have completed the primary level or higher is fairly long (16.8 months). There is little variation in the duration of breastfeeding by work status of the mother. Children whose mothers had medical assistance at the time of delivery are breastfeed for a somewhat shorter duration than children whose mothers were attended by a daya (traditional birth attendant).

As noted above, the duration of the period of postpartum amenorrhea for a mother is related not only to the duration of breastfeeding but also to the frequency of breastfeeding. Around nine in ten children under the age of six months were breastfed at least six times in the 24 hours preceding the interview. There are only small differences among subgroups in this indicator.

# 12.2 Nutritional Status of Children

Nutritional status is a major determinant of children's susceptibility to disease and, thus, of the risk of dying. A child's nutritional status in influenced by feeding practices as well as by infections. To assess nutritional status, all children of women interviewed in the EDHS who had been born since January 1987 were weighed<sup>1</sup> and their height<sup>2</sup> measured. These data as well as information on the child's age in months obtained from the birth history was used to construct the following indices:

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

The nutritional status of children in the EDHS is evaluated by calculating the extent to which these three anthropometric indices deviate from measurements for a standard population of healthy, well-fed children. As recommended by the World Health Organization (WHO), the international reference population defined by the U.S. National Center for Health Statistics (NCHS) and accepted by the U.S. Centers for Disease Control (CDC) is used as the reference population. The use of this reference population is based on

<sup>&</sup>lt;sup>1</sup>For the measurement of weight a digital scale with accuracy of  $\pm$  100 grams was used.

<sup>&</sup>lt;sup>2</sup>Although the term "height" is used throughout this analysis, children younger than 24 months were measured lying on a measuring board (recumbent length) while standing height was measured for older children.

#### Table 12.4 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and full breastfeeding, and the percentage of children under six months of age who were breastfed six or more times in the 24 hours preceding the survey, by selected background characteristics, Egypt 1992

	Media	n duration in	months	Number	Percentage	Number
Background characteristic	Any breast- feeding	Exclusive breast- feeding	Full breast- feeding <sup>1</sup>	children <3 years of age	breastfed 6+ times in last 24 hours	of children <6 months
Sex						
Male	19.2	1.7	1.9	2608	88.5	388
Female	18.9	1.8	2.2	2365	89.9	371
Urban-rural residence						
Urban	18.2	0,7	0.8	1826	88 1	272
Rural	19.7	2.5	3.0	3147	89.8	487
Place of residence						
Urban Governorates	18.5	0.6	0.6	861	90.9	130
Lower Egypt	18.9	1.8	2.0	1970	90.1	312
Urban	17.3	0.6	0.7	465	85.4	76
Rural	19.1	2.4	2.6	1504	91.6	237
Upper Egypt	19.6	2.6	3.4	2143	87.6	317
Urban	17.9	2.4	2.7	500	85.6	66
Rural	20.2	2.7	3.8	1643	88.1	251
Mother's education						
No education	19.6	2.1	2.6	2530	90.3	395
Some primary	20-3	2.9	36	937	90.5	123
Primary through secondary	16.8	2.0	2.2	469	91.8	70
Completed secondary/higher	16.8	11	1.1	1037	84.6	171
Work status						
Working for cash	18.8	0.7	0.7	613	83.1	100
Not working for cash	19.1	2.0	2.4	4360	90.1	659
Assistance at delivery						
Medically trained person	18.1	1.4	1.6	2141	88.9	340
Traditional birth attendant	19.7	2.1	2.6	2530	88.6	374
Other or none	19.8	2.6	2.9	303	(95.8)	45
All children	19.1	1.8	2.0	4974	89.2	759
Mean	18.4	3.8	4.7	94.8	NA	NA
Prevalence/Incidence mean	17.6	3.1	4.0	NA	NA	NA

Note: Medians and means are based on current status. Figures in parentheses are based on 25-49 cases. NA = Not applicable

<sup>1</sup>Either exclusively breastfed or received plain water only in addition to breastfeeding.



the finding that well-nourished young children of all population groups (for which data exist) follow very similar growth patterns (see Martorell and Habicht, 1986). Although there are inherent variations in height and weight, these variations approximate a normal distribution when the population is large.

Each of the standard indices provides somewhat different information about the nutritional status of a population of children. The height-for-age index is an indicator of linear growth retardation. Children whose height-for-age is below minus two standard deviations (-2 SD) from the median of the reference population are considered "stunted" (i.e., they are short for their age) and children who are below minus three standard deviations (-3 SD) from the median of the reference population are considered severely stunted. Stunting is an outcome of a failure to receive adequate nutrition over a long period of time, and is also affected by recurrent and chronic illness. Height-for-age, therefore, represents a measure of the long-term effects of undernutrition in a population and does not vary appreciably according to the season of data collection.

The weight-for-height index measures body mass in relation to body length, and describes current nutritional status. Children who are below minus two standard deviations (-2 SD) from the median of the reference population are considered "wasted" (or thin) and children whose weight-for-height is below minus three standard deviations from the median of the reference population are considered severely wasted. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of recent episodes of illness, causing loss of weight and the onset of undernutrition. Wasting may also reflect acute food shortage.

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic undernutrition; however, it does not distinguish between a child who is underweight

because of stunting and one who is underweight because of wasting. Children whose weight-for-age is below minus two standard deviations from the median of the reference population are classified as "underweight," and children whose weight-for-height is below minus three standard deviations (-3 SD) from the median of the reference population are considered to be severely underweight. Weight-for-age is commonly used in elinical settings for continuous assessment of nutritional progress and growth.

In a healthy well-fed population of children, it is expected that only 2.3 percent of children will fall below minus two (-2 SD) from the median of the reference population for each of the three indices. Less than one percent of children are expected to be below minus three standard deviations.

Information on the three indices is presented in Table 12.5 by age and other demographic characteristics of the child and in Table 12.6 by socioeconomic characteristics of the child's mother. The two tables are based on information from 7,279 children under five years of age. These children represent 90 percent of all eligible children. Six percent of eligible children were excluded from the analysis of these data

#### Table 12.5 Nutritional status by demographic characteristics

Percentage of children under five years who are classified as undernourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by selected demographic characteristics, Egypt 1992

	Height	for-age	Weight-f	or height	Weight	-for-age		
Demographic characteristic	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage below -3 SD	Percentage below - 2 SD <sup>1</sup>	Number of children	
Age								
Under 6 months	2.5	57	0.3	2.0	0.0	2.1	577	
6-11 months	7,3	16.9	1.4	5.3	2.1	10.7	685	
12-23 months	12.4	35.8	1.3	4.8	2.8	14.9	1448	
24-35 months	12.1	28.4	0.6	3.2	2.7	12.0	1460	
36-47 months	9.9	24.2	0.4	2.8	1.3	6.4	1473	
48-59 months	6.0	20.6	0.5	2.1	05	60	1636	
Sex								
Male	9,1	24.4	09	3.2	1.6	9.1	3761	
Female	9.1	24.4	0.6	3.3	1.7	9.3	3519	
Birth order								
1	7.7	22.1	0.8	3.3	1.2	8.4	1525	
2-3	9.0	23.0	0.5	2.9	1.6	8.4	2586	
4-5	7.7	25.0	0.9	3.5	1.4	8.5	1607	
6+	12.3	28.3	1.0	3.7	2.6	12.0	1562	
Birth interval								
First birth	7.7	22.1	0.8	3.3	1.2	8.4	1538	
< 24 months	11.7	28.1	0.9	3.2	2.1	10.4	1703	
24-47 months	9.7	25.9	0.6	3.3	1.9	10.4	2909	
48+ months	5.8	18.2	0.7	3.3	0.9	56	1129	
All children	9.1	24.4	0.7	3.3	1.7	9.2	7279	

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

#### Table 12.6 Nutritional status by socioeconomic characteristics

Percentage of children under five years who are classified as undernourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height and weight-for-age, by selected socioeconomic characteristics, Egypt 1992

	Height-	for-age	Weight-f	or-height	Weight-for-age			
Socioeconomic characteristic	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Number of childrer	
Urban-rural residence								
Urban	6.7	18.8	0.7	3.3	1.1	6.8	2743	
Rural	10.6	27.8	0.8	3.2	2.0	10.6	4537	
Place of residence								
Urban Governorates	5.7	16.1	0.9	4.3	1.4	7.4	1240	
Lower Egypt	9.4	25.6	0.6	2.5	1.3	7.7	3002	
Urban	6.3	19.5	0.2	2.3	0.4	4.4	752	
Rural	10.5	27.6	0.7	2.5	1.6	8.8	2250	
Upper Egypt	10.3	26.7	0.8	3.7	2.2	11.4	3037	
Urban	8.8	22.7	0.8	2.9	1.3	8.3	751	
Rural	10.7	28.0	0.8	3.9	2.4	12 4	2287	
Mother's education								
No education	11.0	28.2	0.9	3.8	2.2	10.6	3713	
Some primary	9.8	27.0	0.7	2.8	1.6	10.5	1478	
Primary through secondary	6.9	18.7	0.7	3.6	1.0	6.3	677	
Completed secondary/higher	4.7	14.4	0.3	2.2	0.7	5.5	1412	
Work status								
Working for cash	8.3	19.1	0.8	1.9	2.1	6.8	910	
Not working for cash	9.3	25.2	0.7	3.5	1.6	9.5	6369	
All children	9.1	24.4	0.7	3.3	1.7	9.2	7279	

reference population. Children are classified as undernourished if their z-scores are below minus two or minus three standard deviations (-2 SD or -3 SD) from the median of the reference population.

<sup>1</sup>Includes children who are below -3 SD

because information on one or both measurements was not available. The most common reason for nonmeasurement was that the child was not at home when the interviewer visited the household. Also excluded from the analysis are children with grossly improbable weight or height measurements due to recording error or age misreporting (4 percent) and children whose month and year of birth were not reported by the mother (less than 0.5 percent).

Height-for-age. Children whose height-for-age is below minus two standard deviations (-2SD) from the median of the reference population are stunted or short for their age. As discussed above, stunting is the result of a state of chronic undernutrition over a long period of time. Overall, 24 percent of Egyptian children under five years of age can be classified as stunted, and 9 percent are considered to be severely stunted. A child's age is significantly correlated with the prevalence of stunting. Stunting increases rapidly during the first year of life, peaking in the second year of life, where 36 percent of children are stunted. Although the level of stunting declines among older children, one in five children age 48-59 months still is considered to be stunted. There is no difference in the level of stunting between male and female children. Stunting increases with birth order, and it occurs more frequently among children born after a short birth interval (less than 24 months) than those born after a long interval (48 months or longer) (28 percent and 18 percent, respectively).

Rural areas had higher levels of stunting than urban areas (28 percent and 19 percent, respectively). Stunting is less prevalent in the Urban Governorates (16 percent) than in Lower Egypt (26 percent) and Upper Egypt (27 percent). Educational differences in stunting are pronounced; stunting was twice as common among children of mothers who never attended school as among children of mothers who had completed at least the secondary level. Stunting is less evident among children of mothers who work for cash than among children of mothers not employed in an occupation for which they receive a cash income.

**Weight-for-height.** Children whose weight-for-height is below minus two standard deviations (-2SD) from the median of the reference population are wasted (or thin). As discussed above, wasting is the result of a state of acute undernutrition over a short period of time. Overall, 3 percent of children under five years of age are moderately wasted and around 1 percent are severely wasted. The level of wasting peaks at 5 percent among children in the age categories 6-11 and 12-23 months.

Weight-for-age. Children whose weight-for-age is below minus two standard deviations (-2SD) from the median of the reference population are considered underweight. Weight-for-age provides an index of the joint effect of chronic and acute undernutrition. Overall, 9 percent of Egyptian children under five years of age are underweight, with 2 percent classified as severely underweight. By age, the percentage underweight exceeds 10 percent of children 6-35 months of age, peaking at 15 percent among children age 12-23 months. Virtually no difference is observed in the percentage underweight between boys and girls. Variations by birth order and birth interval show no definite pattern although the percentage underweight is highest for children of birth order six or higher and lowest for children are less likely than rural children to be underweight and the percentage underweight varies by place of residence from a low of 4 percent among children from urban Lower Egypt to 12 percent among children from rural Upper Egypt. The percentage underweight among children whose mothers completed at least primary school is 6 percent compared to 11 percent among children of mothers who never attended school or did not complete the primary level. The small differential by work status favors children of mothers who work in the cash economy.

## 12.3 Nutritional Status of Mothers

All mothers of children born since January 1987 were eligible to be weighed and measured<sup>3</sup> in the EDHS. In reviewing the results of the maternal anthropometric data collection, it is important to note that information is presented only for women who had a live birth during the five-year period before the survey and is not representative of the entire EDHS sample. In particular, older women tend to be underrepresented in the group for which the height and weight measures are available.

Table 12.7 shows the distribution of mothers by height, weight, and body mass index, along with the means and standard deviations for each of these measures. Height and weight measures are missing from Tahle 12.7 for about 5 percent of eligible women, who were not available at the time that the measurer visited the household. In addition, women who were pregnant at the time of the survey or who had delivered within the two months preceding the survey were excluded from the calculation of the weight and body mass measures.

Maternal height is useful for identifying mothers at nutritional risk and also provides a good indicator of the socioeconomic status of the mother. In addition, height is used to predict the risk of difficult delivery, since short stature is associated with small pelvic size. The risk of low birth weight also is higher for children

<sup>&</sup>lt;sup>3</sup>The measuring boards and scales used for adult anthropometry were the same as those used to collect anthropometric measurements of children; as with older children, standing height was obtained for adults using a specially designed extension for the measuring board.

of short women. Although the cutoff point, i.e., the height below which a mother can be considered to be at nutritional risk, varies between populations, it is likely to be in the range of 140-150 centimeters. The mean height of mothers measured in the EDHS was 157 centimeters. Less than 2 percent were shorter than 145 centimeters and 9 percent were in the 145-150 centimeter range.

Low prepregnancy weight generally is associated with unfavorable pregnancy outcomes, although maternal height also must be taken into account. Excluding women who were pregnant or had had a recent birth, the mean weight of mothers is 66 kilograms. Only 9 percent of the mothers weighed less than 50 kilograms, while one-third weighed 70 kilograms or more.

Indices of body mass are used to assess thinness or obesity. The most commonly used index is the body mass index (BMI), which is defined as the weight in kilograms divided by the square height in meters. For the BMI, a cut-off point of 18.5 has been recommended for defining chronic energy deficiency. Obesity has not been clearly defined. The mean BMI for Egyptian mothers who were not pregnant and had not given birth within two months prior to the survey was 26.9, and only 2 percent had a BMI below 18.5.

Table 12.8 shows the variation in the maternal nutrition status indicators according to basic demographic and socioeconomic characteristics. In general, there is little variation in either the mean height of mothers or the percentage with height below 145 centimeters. However, the differences in height show a consistent pattern: the shortest mothers were those from rural Upper Egypt and those without education. Somewhat greater variation is observed in the BMI figures although the differences are still not very large. The percentage of mothers with a BMI below 18.5 reaches 4 percent only among women in the 15-19 age group and those living in rural Upper Egypt.

# Table 12.7 Anthropometric indicators of maternal nutritional status

Percent distribution and mean and standard deviation for women who had a birth in the five years preceding the survey by selected anthropometric indicators (height, weight, and body mass index (BMI)), Egypt 1992

Total	Distribution including missing
0.1	0.1
1.2	1.2
8.9	8.5
60.7	57.9
277	26.5
11	1.1
0.2	0.2
-	4.6
100.0	100.0
5417	5676
157.0	-
5.8	-
0.2	0.0
0.3	0.2
9.1	8.7
27.8	26.4
29.0	27.5
3.3.9	32.3
-	4.9
100.0	100.0
4627	4864
66 3	-
14 0	-
02	0.2
1.3	1.2
3.8	3.0 19.5
19.5	18.5
26.5	25.2
20.0	19.0
28.8	21.4
-	4.9
100.0	100.0
4624	4804
26.9	-
	Total           0.1           1.2           8.9           60.7           27.7           1           0.2           100 0           5417           157.0           5.8           0.3           9.1           27.8           29.0           33.9           100.0           4627           66 3           14 0           0 2           1.3           3.8           19.5           26.5           20.0           28.8           -           100.0           4624           26.9

<sup>1</sup>Excludes pregnant women and those who gave birth in the two months preceding the survey

#### Table 12.8 Differentials in maternal anthropometric indicators

Mean height and percentage of women shorter than 145 centimeters, mean body mass index (BMI), and the percentage of women whose BMI is less than 18.5, according to selected background characteristics, Egypt 1992

		Height		BMI			
Background		Percent			Percent		
characteristic	Mean	<145 cm	Number	Mean	<18.5	Number	
Age							
15-19	156.6	0.8	218	23.9	42	173	
20-24	157.5	1.3	1047	25.0	21	798	
25-29	157.2	09	1594	26.3	1.8	1351	
30-34	157.0	2.0	1221	27.6	11	1065	
35-39	156.6	0.9	828	28.1	1.3	745	
40-44	156.2	24	407	29.2	1.2	391	
45-49	155.7	14	102	28.0	0.9	101	
Urban-rural residence							
Urban	157.3	16	2165	28.6	11	1912	
Rural	156.8	1.2	3253	25.6	2.0	2711	
Place of residence							
Urban Governorates	157.4	16	1011	29.0	1.4	892	
Lower Egypt	1577	0.7	2252	27.5	0.5	1960	
Urban	1576	1.1	599	29.2	0.3	541	
Rural	157.7	0.6	1653	26.8	0.6	1419	
Upper Egypt	1561	19	2154	25.1	3.0	1771	
Urban	1567	19	555	27.1	1.4	479	
Rural	155.9	1.9	1600	24 3	3 5	1292	
Education							
No education	156.6	1.3	2654	25 7	23	2198	
Some primary	156 5	1.7	1116	27.8	1.3	999	
Primary through secondary	1574	1.3	547	28 0	0.1	479	
Completed secondary/higher	158 2	1.1	1099	28.0	1.0	<b>9</b> 48	
Work status							
Working for cash	1577	1.0	709	28-1	11	625	
Not working for cash	156 9	1.4	4708	26 7	1.7	3 <b>9</b> 99	
Children ever born							
1	1574	1.5	904	25 7	17	695	
2-3	157.3	1.0	1917	26 7	1.8	1639	
4-5	157.1	1.7	1288	27.3	1.8	1114	
6+	156.3	1.4	1308	27.3	1.1	1175	
Total	157.0	13	5417	26.9	1.6	4624	

# **CHAPTER 13**

# **HUSBANDS' SURVEY**

The Egypt DHS interviewed a subsample of husbands of cligible women in order to obtain insights into the role that men play in the fertility and family planning decision-making processes. This chapter presents basic information obtained from the husband's survey relating to a number of topics including family planning knowledge, practice and attitudes and fertility preferences.

## 13.1 Husbands' Sample

A systematic sample of one of every three households in the women's survey was chosen for inclusion in the husbands' sample. All husbands of eligible currently married women in these households were eligible for the husbands' survey, even if the woman herself was not interviewed. As noted in Chapter 1, response rates for the husbands' survey were lower than for the women's survey. Overall, 2,466 husbands—82 percent of those eligible for the husbands' survey-were successfully interviewed. Since this chapter focuses on comparison of the attitudes of husbands with those of their wives, results are presented only for the 2,406 husbands whose wives also were interviewed in the survey.

# 13.2 Background Characteristics of Husbands

## **General Characteristics**

Table 13.1 presents selected background characteristics of husbands, including age, residence, place of residence, and educational status. The age distribution is skewed toward older ages; nearly one-half of the husbands interviewed were age 40 and over, more than one-third were in their thirties and only 15 percent were under age 30. This pattern reflects the tendency for men to marry later than women.

#### Table 13.1 Husbands' background characteristics

Percent distribution of husbands by selected background characteristics, Egypt 1992

		Number of husbands			
Background characteristic	Weighted percent	Weighted	Un- weighted		
Age					
<25	3.5	85	78		
25-29	11.7	281	290		
30-34	17.8	429	424		
35-39	17.7	427	420		
40-44	16.8	405	405		
45-49	13.5	324	319		
50-54	9.3	224	227		
55+	9.7	233	243		
Urban-rural residence					
Urban	45.4	1093	1159		
Rural	54.6	1313	1247		
Place of residence					
Urban Governorates	23.8	573	655		
Lower Egypt	41.0	986	925		
Urban	11.4	274	281		
Rural	29.6	711	644		
Upper Egypt	35.2	847	826		
Urban	10.2	245	223		
Rural	25 0	602	603		
Education					
No education	28.7	690	670		
Some primary	24.9	599	586		
Primary through secondary	17.2	415	412		
Completed secondary/higher	29.2	702	738		
Husband's occupation					
Technical/professional	119	286	293		
Administrative	(2.0)	(49)	46		
Clerical	8.6	208	213		
Sales	6.8	164	163		
Services	7.7	185	182		
Agriculture	28 8	694	680		
Production	28.4	683	695		
Other	3.2	77	76		
Missing	2.6	62	58		
All husbands	100.0	2406	2406		

With regard to the husbands' educational attainment, more than one-quarter have received no formal education. Another quarter attended school but did not complete the primary level, 17 percent completed the primary but not the secondary level, and 29 percent completed at least the secondary level.

The distribution of occupations shows that more than one-quarter of husbands are agricultural workers and around another quarter are production workers. The percentages working in the clerical, sales, and services sectors are similar (7-9 percent), 12 percent work in professional/technical occupations, and 2 percent in administrative positions. The "other" category (3 percent) includes husbands who reported that they were retired, were students, were not working, or were in the military.

## **Differentials in Education**

Table 13.2 presents the distribution of husbands by education according to selected characteristics. The proportion of husbands who are not educated exhibits a U-shaped curve with age. The lower educational

Table 13.2 Husbands' level of education

Percent distribution of husbands by highest level of education attended, according to selected background characteristics, Egypt 1992

		Level of				
Background characteristic	None	Some primary	Primary through secondary	Completed secondary/ higher	Total	Number of husbands
Age						
<25	34.0	21.6	22.8	21.5	100.0	85
25-29	22.4	30,0	16.3	31.3	100.0	281
30-34	15.7	28,6	17.5	38.1	100.0	429
35-39	21.6	22.2	19.8	36.3	100.0	427
40-44	30.2	20.1	17.3	32.4	100.0	405
45-49	34.9	21.1	18.7	25.3	100.0	324
50-54	41.8	25.4	16.2	16.6	100.0	224
55+	47.4	30.9	10.0	11.7	100.0	233
Urban-rural residence						
Urban	172	21.2	20.3	41.2	100.0	1093
Rural	38.2	27.9	147	19.2	100.0	1313
Place of residence						
Urban Governorates	12.8	20.2	21 0	46.0	100.0	573
Lower Egypt	29.0	28.9	18.3	23.8	100.0	986
Urban	18 O	25.9	22.3	33.9	100.0	274
Rural	33.3	30.1	16.8	19.9	100.0	711
Upper Egypt	39-1	23 4	13.4	24.1	100.0	847
Urban	26.8	18.4	16 6	38.2	100.0	245
Rural	44.1	25,4	12 1	18.4	100.0	602
Husband's occupation						
Technical/professional	27	2.3	2.2	92.9	100.0	286
Administrative	(2.2)	(4.4)	(5.3)	(88.1)	100.0	49
Clerical	1.6	5.6	17.1	75.7	100.0	208
Sales	28.3	25.7	23.5	22.5	100.0	164
Services	29.9	39.7	21.8	8.7	100.0	185
Agriculture	54.7	28.2	9.9	7.2	100.0	694
Production	24.2	34.4	27.9	13.4	100.0	683
Other	13-7	16.9	33.9	35.4	100.0	77
Missing	34-3	31.7	10.0	23.9	100.0	62
Fotal	28.7	24.9	17.2	29.2	100.0	2406

attainment among husbands under age 30 than among older husbands is related to the fact that men who marry earlier are likely to be less educated than those who delay marriage.

Urban husbands are clearly better educated than those in rural areas. As seen in Table 13.2, urban husbands are more than twice as likely to have attended school as rural husbands and, among those who have attended school, urban husbands are more likely to attain the higher levels of education than rural husbands. By place of residence, the proportion of husbands without any education is only 1 in 8 in the Urban Governorates compared to almost 1 in 6 husbands in urban Lower Egypt and more than 1 in 4 husbands in urban Upper Egypt (Figure 13.1). Within rural areas, only 33 percent of husbands in Lower Egypt have had no education compared to almost 44 percent in Upper Egypt.



Not surprisingly, educational attainment is highest among husbands in professional/technical, administrative or clerical occupations. Three-quarters or more of husbands in these occupations have at least a secondary education. Husbands working in agriculture are the least educated; more than half have never attended school.

## **Exposure to Mass Media**

The information on media exposure of husbands shown in Table 13.3 is useful for targeting media messages on health and family planning to men. Almost half of all husbands read a newspaper at least once a week, 87 watch television daily, and 80 percent listen to radio everyday.

#### Table 13.3 Husbands' access to mass media by background characteristics

Percentage of husbands who usually read a newspaper once a week, watch television daily, or listen to radio daily, by selected background characteristics, Egypt 1992

Background characteristic	Read newspaper weekly	Watch television daily	Listen 10 radio daily	Number of husbands
Age				
<25	25.5	91.9	78.1	85
25-29	42.7	88.8	78.8	281
30-34	55.0	88.7	82.4	429
35-39	54.2	89.6	80.8	427
40-44	51.1	85.1	80.1	405
45-49	48.6	86.6	79.8	324
50-54	35.7	85.9	75 6	224
55+	33.7	76 5	78.5	233
Urban-rural residence				
Urban	62.8	94.3	86 0	1093
Rural	33.9	80 3	74.6	1313
Place of residence				
Urban Governorates	68.0	95.0	89.1	573
Lower Egypt	43.6	90.4	84.2	986
Urban	58.3	95.5	84.4	274
Rural	37.9	88.4	84.2	711
Upper Egypt	36.8	76.7	68.3	847
Urban	55.6	91.2	80.6	245
Rural	29.2	70.8	63.3	602
Education				
No education	6.5	73.3	66.4	690
Some primary	29.7	85.6	78 5	599
Primary through secondary	65.9	93.2	85.4	415
Completed secondary/highe	r 90.5	96.8	90.7	702
Total	47.0	86.7	79.8	2406

The relationship between age and the media exposure indicators is not uniform. For example, the percentage of husbands reading a newspaper weekly increases with age, reaching a peak among men in the 30-34 age group and then generally declines among older men. Exposure to radio on a daily basis exhibits a similar relationship with age, while there is a small hut steady decrease in exposure to television as age increases.

Exposure to mass media clearly is greater among husbands in urban areas compared to rural areas. By place of residence, media exposure is greatest in the Urban Governorates and least common in rural Upper Egypt. The differences tend to be greater in the case of exposure to print media, which is probably due to the lower educational attainment of husbands in rural Egypt. As expected, educational attainment is positively related to all of the media exposure indicators. The educational effect is strongest in the case of newspaper reading.

## 13.3 Comparison between Characteristics of Husbands and Wives

This section includes a comparison of the age and education distributions of husbands and wives. These comparisons are presented for two reasons: first, to gain some insight into the couple's characteristics rather than those of each spouse separately and, second, to provide a background for the discussion later in this chapter of the couple's practices and attitudes towards contraception, their fertility desires, and their perceptions concerning women's roles in the household.

As shown in Table 13.4, husbands generally are older than their wives. In only about 1 in 20 couples, the wife is older than the husband. In the case of 31 percent of the couples, the husband is less than five years older than the wife, for 38 percent, there is a 5-9 year difference, and for 26 percent, the difference is ten years or more. The mean difference between the couple's ages is 7.5 years.

Table 13.4 Co Percent distribu according to wi	uples' age diff tion of couple fe's age, Egyp	ference es by age di pt 1992	ifference be	tween spous	es and mea	n agc diffe	rence between	n spouses,
Husband's age - wife's age (in years)			****					
Wife Wife's age older	Wife older	0-4	5-9	10-14	15+	Total	Mean difference	Number of husbands
15-19	0.0	23.0	41.0	27.5	8.5	100.0	8.6	113
20-24	1.6	28.2	41.3	19.1	9.8	100.0	8.2	331
25-29	3.3	34.9	39.4	14.0	8.4	100.0	7.2	481
30-34	8.4	31.7	36.0	17.8	6.1	100.0	6.8	448
35-39	6.7	33.6	40.2	9.8	9.7	100.0	7.0	412
40-44	8.5	25.2	33.1	18.8	14.3	100.0	7.9	376
45-49	3.6	31.6	34.4	17.5	12.9	100.0	7.7	242
Total	5.3	30.7	37.8	16.4	9.8	100.0	7.5	2406

Regarding educational differences between husbands and wives, the EDHS results indicate that around half of all couples attained the same educational level. As shown in Table 13.5 and Figure 13.2, among more than one-fifth of couples, both the husband and wife never attended school, among one-tenth, the husband and wife had similar intermediate levels of education, and among slightly less than one-fifth of the couples, both had at least a secondary education. When there is a difference in the level of educational attainment between spouses, the difference generally is due to the higher educational level of the husband. Overall, the husband had attained a higher level of education than his wife in the case of almost 2 in 5 couples while the wife attained a higher level in the case of only around 1 in 10 couples.

## Table 13.5 Couples' level of education

Percent distribution of couples by highest level of education attended, according to selected background characteristics, Egypt 1992

		Wife's educ				
Husband's educational level	None	Some primary	Primary through secondary	Completed secondary/ higher	Total	Number of couples
No education	22.6	4.9	1.0	0.1	28.7	690
Some primary	15.1	7.6	1.9	0.3	24.9	599
Primary through secondary	7.5	5.1	2.8	1.8	17.2	415
Completed secondary/higher	3.6	2.9	4.3	18.4	29.2	702
Total	48.8	20.6	9.9	20 7	100.0	2406
Number	1173	496	239	497	2406	2406



# 13.4 Knowledge of Family Planning

## Level of Knowledge

Knowledge of at least one family planning method is almost universal among husbands, as shown in Table 13.6. However, knowledge varies greatly by specific method. Ninety-five percent or more of husbands know about the pill and IUD. Between 60 and 70 percent of husbands are aware of the condom, injection, and female sterilization, and 30 to 40 percent report knowing about Norplant and vaginal methods. Vasectomy is the least widely recognized modern method, with only 25 percent of husbands saying that they are aware of the method. Three times as many husbands know at least one traditional method. The most widely known traditional methods are prolonged breastfeeding and withdrawal, known by 59 and 47 percent of husbands, respectively.

Most husbands are not only knowledgeable about family planning methods but they also know a place where they can obtain a method. Knowledge of a source for any method is 92 percent among husbands. Around 9 in 10 husbands who know about the pill, IUD, condom and female sterilization are able to name a source for these methods. With regard to the other modern methods, only in the case of Norplant and injection, does the proportion of husbands knowing the method who also know a source fall below 8 in 10.

## **Sources of Family Planning Information**

Husbands knowing about family planning were asked a number of questions concerning the sources from which they had received family planning information including the first source from which they had obtained information and sources to which they may have been exposed recently. In addition, they were asked their opinion as to the acceptability of radio and television broadcasts of family planning messages. As noted in Chapter 4, there is an on-going mass media program in Egypt designed to increase awareness about family planning. The EDHS data on sources of family planning information provide insight into the extent to which the public media campaigns reach men (as well as women) and on male acceptance of such awareness-raising activities.

Table 13.7 discusses the first source of family planning information named by husbands who knew at least one contraceptive method. Television is the most frequently cited source for family planning information (75 percent), followed by relatives (other than the wife) or friends (15 percent). Family planning providers were named by very few husbands as the first source.

There are some interesting differences by residence in the percentages of husbands citing both television and relatives and friends as the first source. For example, the importance of television decreases and that of relatives and friends increases slightly among rural husbands compared to urban husbands. By place of residence, the percentage reporting relatives (other than the wife) and friends is highest among

Table 13.6 Husbands' knowledge of family planning methods and source for methods

Percentage of husbands knowing any family planning method and knowing a source (for information or services), by specific method, Egypt 1992

Method	Know method	Know source
Any method	96.7	92.3
Any modern method	96.7	92.1
Modern method		
Pill	96.2	88.2
IUD	94.8	83.7
Injection	65.8	49.5
Norplant	34.7	24.9
Diaphragm/foam/jelly	30.0	25.2
Condom	69.0	63.1
Female sterilization	64.1	56.7
Male sterilization	25.1	20.4
Any traditional method	75.2	23.9
Periodic abstinence	38.0	23.9
Withdrawal	47.4	0.0
Prolonged breastfeeding	59.2	0.0
Other	1.1	0.0
Number of husbands	2406	2406

#### Table 13.7 Husbands' first source of family planning information

Percent distribution of husbands knowing about family planning by source from which they first heard about family planning, according to urban-rural residence and place of residence, Egypt 1992

			Urban Gover	I	.ower Egy	pt	τ	Jpper Egy	pt	
Source	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Television	79.7	71.1	78.9	75.6	82.0	73.0	71.8	79.0	68 8	75.1
Radio	2.2	2.8	2.0	3.3	2.1	3.7	1.9	2.8	1.5	2.5
Print media	3.6	1.4	3.8	2.0	2.3	1.9	1.9	4.6	07	2.4
Spouse	0.7	0.5	0.6	0.6	0.5	0.7	0.7	1.4	0.4	0.6
Other relatives/friends	10.9	19.3	11.8	14.3	9.7	16.2	19.3	10.3	23.1	15.4
Government doctor/clinic	0.4	0.8	0.3	0.7	0.5	0.8	0.8	0.5	1.0	0.6
Private doctor/clinic	0.3	0.2	02	0.3	0.7	0.1	02	0.0	0.2	0.2
Raiyda/other FP worker	03	2.5	03	1.7	0.0	24	2.0	0.8	2.6	15
Community meeting	0.2	0.3	0.3	0.3	0.3	0.3	0.1	0.0	0.2	0.3
Other	1.5	1.2	1.7	1.2	1.9	09	1.3	0.8	1.5	13
Total	100.0	100.0	100.0	100 0	100.0	100.0	100.0	100.0	100.0	100.0
Number of husbands	1076	1250	569	969	273	696	787	234	553	2326

husbands from rural Upper Egypt, and the percentage citing television as the first source is the lowest. Thus, although television remains the initial source of family planning information for the majority of husbands in all geographic areas, peers and relatives are important in transmitting family planning knowledge in rural areas, particularly in Upper Egypt.

The family planning information and education program in Egypt includes messages transmitted through the mass media (television, radio, and newspapers and magazines) and at community meetings. The level of recent exposure of husbands to messages about family planning through these sources is described in Table 13.8. Among husbands knowing about family planning, 6 in 10 have seen a family planning message on television during the month preceding the survey. Radio reaches about one-third of knowledge-able husbands. The sources of family planning information with the lowest coverage are community meetings and articles on family planning in newspapers or magazines; only 12 percent of husbands attended a community meeting on family planning in the year preceding the survey, and only 10 percent reported reading a family planning article in a newspaper or magazine during the month before the survey.

Differentials in exposure to messages about family planning by selected background characteristics also are highlighted in Table 13.8. The most striking differences are observed by urban-rural residence, place of residence, and education. Urban husbands are somewhat more likely than rural husbands to receive information through all of the sources except radio, with the urban-rural difference being greatest in the case of television. In general, husbands from Upper Egypt, particularly the rural areas, are less likely than husbands from other areas to have been exposed to family planning messages. There clearly is a positive relationship between husband's education and exposure to messages. With regard to community meetings, urban husbands and husbands with a secondary or higher education are slightly more likely to have attended a meeting than other husbands.

#### Table 13.8 Husbands' exposure to media messages about family planning

Among husbands knowing about family planning, the percentage who have heard a message about family planning on the radio or on the TV in the last month, who have read an article about family planning in a newspaper or magazine in the last month, who have attended a community meeting about family planning in the past year, and the percentage who consider it acceptable to broadcast family planning messages on the radio or TV, according to selected background characteristics, Egypt 1992

		Source of	f message		Family planning message on	Number
Background characteristic	Saw on TV	Heard on radio	Read article	Attended meeting	radio/TV acceptable	of husbands
Ace						
<25	66.1	110	2.2	8.0	92.9	80
25-29	58.1	32.2	5.1	9.5	90.4	265
30-34	59.1	36.9	10.6	12.7	86.5	422
35-39	68.4	35.1	11.4	14.9	87.2	418
40-44	61.8	31.6	11.8	10.6	85.3	395
45-49	63.4	36.0	11.3	12.5	85.8	313
50-54	54.3	34.3	7.8	12.8	83.3	215
55+	54.2	33.7	7.1	9.9	77.1	217
Urban-rural residence						
Urban	68.5	31.5	12.2	13.3	86.7	1076
Runal	54.6	36.9	7.2	10.8	85.1	1250
Place of residence						
Urban Governorates	74.2	25.5	14.3	16.2	85 1	569
Lower Egypt	57.3	48.0	9.2	9.8	89.8	969
Urban	59.4	53.1	10.7	9.5	91.2	273
Rural	56.4	45.9	8.7	9.9	89.3	696
Upper Egypt	56.1	24.1	6.5	11.5	81.4	787
Urban	65.3	21.0	9.0	10.8	85.4	234
Rural	52.3	25.4	5.4	11.8	79.8	553
Education						
No education	<b>5</b> 1.7	31.4	3.9	9.6	84.0	1112
Some primary	61.7	37.1	6.9	8.8	87.2	484
Primary through secondary	70.5	37.5	14.3	8.2	89.7	236
Completed secondary/higher	76.8	37.0	22.6	22.1	86.7	494
Total	61 0	34.4	9.5	11.9	85.8	2326

Husbands were asked whether it is acceptable for family planning messages to be provided on radio or television. Table 13.8 shows that 86 percent of the husbands knowing about family planning find it acceptable to have media broadcasts on family planning. Differences in the acceptability of media broadcasts by age, residence, and education are minimal. By place of residence, urban Lower Egypt and rural Upper Egypt represent the extremes with regard to the acceptability of broadcast messages on family planning (91 percent and 80 percent, respectively).

# 13.5 Use of Family Planning

## Levels of Ever Use and Current Use

The pattern of ever use and current use of family planning reported by husbands is shown in Table 13.9. Two-thirds of husbands reported that they or their wives had used a family planning method at some time. The most widely used method is the pill (44 percent) closely followed by the IUD (41 percent). Only

9 percent of husbands reported that they had ever used a condom. The level of ever use of periodic abstinence and withdrawal, which also require active male participation, is even lower, and no husband has had a vasectomy.

With regard to the level of current use, almost 50 percent of husbands reported that they (as a couple) were using a method of family planning at the time of the interview. The majority of current users—47 percent of all husbands—were using modern methods. The IUD was the most common method (30 percent), followed by the pill (14 percent) and condom (2 percent).

## Consistency in the Reporting of Use of Family Planning by Husbands and Wives

The consistency in reporting of ever use and current use of family planning methods is examined in Tables 13.10 and 13.11, respectively. More than 90 percent of couples gave consistent responses about ever use of family planning, 65 percent agreeing that they had used a method and 29 percent agreeing that they never used a method. Thus, the proportion of couples for which there is a discrepancy between the husband's and wife's responses is only 6 percent (5 percent for modern methods, 11 percent for traditional methods).

#### Table 13.9 Husbands' use of family planning methods

Percentage of husbands who have ever used a family planning method, and the percentage who are currently using a method, by specific methods, Egypt 1992

Method	Ever used	Currently using
Any method	66.8	49.8
Any modern method	64.7	47.1
Modern method		
Pill	44.4	13.8
IUD	41.2	29.6
Injection	2.5	0.5
Norplant	0.1	0.0
Diaphragm/foam/jelly	2.7	0.3
Condom	8.7	2.3
Female sterilization	0.8	0.7
Male sterilization	0.0	0 0
Any traditional method	12.4	2.7
Periodic abstinence	5.7	0.9
Withdrawal	4.0	0.9
Prolonged breastfeeding	5.8	0.9
Other	0.1	0.0
Not currently using		50.2
Number of husbands	2406	2406

<b>Fable 13.10</b>	Ever use of	f family p	lanning amo	ng couples

Percent distribution of couples by husband's and wife's reported ever use of family planning, according to specific methods, Egypt 1992

	E	ver use of fai	nily plann	ing		
Method	Both used	Husband only used	Wife only used	Both never used	Total	Numher of couples
Any method	64.8	2.0	4 0	29.2	100.0	2406
Any modern method	63.1	1.6	33	32.0	100.0	2406
Pill	42.2	2.2	3.9	51.7	100.0	2406
IUD	40.2	1.0	2.1	56.6	100.0	2406
Injection	2.0	0.4	0.9	96.6	100.0	2406
Norplant	0.0	0.1	0.0	99.9	100.0	2406
Diaphragm/foam/jelly	2.0	0.7	1.8	95.5	100.0	2406
Condom	6.2	2.5	2.5	88.8	100.0	2406
Female sterilization	0.7	0.1	0.0	<b>99.2</b>	100.0	2406
Male sterilization	0.0	0.0	0.0	100.0	100.0	2406
Any traditional method	6.3	6.1	4.8	82.7	100.0	2406
Periodic abstinence	2.9	2.8	1.8	92.6	100.0	2406
Withdrawal	1.7	2.3	1.3	94.7	100.0	2406
Prolonged breastfeeding	2.2	3.6	3.0	91.1	100.0	2406
Other	0.0	0.1	0.5	99.4	100.0	2406

#### Table 13.11 Current use of family planning among couples

Percent distribution of couples by husband's and wife's reported current use of family planning, according to specific methods, Egypt 1992

	Cu	rrent use of fa	amily plan	ning		
Method	Both using	Husband only using	Wife only using	Both not using	Total	Number of couples
Any method	47.2	3.0	3.2	46.6	100.0	2406
Any modern method Pill IUD Injection Norplant Diaphragm/foam/jelly Condom Female sterilization	44.3 12.2 28.1 0.4 0.0 0.3 1.8 0.6	2.8 1.5 1.6 0.0 0.0 0.1 0.5 0.1	2.2 0.9 1.4 0.0 0.0 0.1 0.5 0.1	50.7 85.3 69.0 99.5 100.0 99.6 97.3 99.2	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	2406 2406 2406 2406 2406 2406 2406 2406
Any traditional method Periodic abstinence Withdrawal Prolonged breastfeeding Other	1.7 0.5 0.7 0.5 0 0	0.9 0.4 0.2 0.3 0.0	1.4 0.5 0.5 0.3 0.1	95.9 98.6 98.6 98.8 99.9	100,0 100,0 100,0 100,0 100,0	2406 2406 2406 2406 2406 2406

The level of disagreement in the responses regarding current use also is small. Overall, there is agreement about current use among 94 percent of all couples, with 47 percent saying that they are currently using and the same percentage reporting no current use (see Table 3.11). The small proportion of couples among whom there is a discrepancy in the responses concerning current use of contraception are evenly divided between those couples in which the husband reported use and the wife did not (3 percent) and those couples in which the percentage of couples among whom there is disagreement in the responses of the husband and wife about current use is highest for the IUD (3 percent).

## 13.6 Differentials in Knowledge and Use of Family Planning

Table 13.12 highlights differences in knowledge and use of methods and knowledge of sources by selected background characteristics of the husbands, including age, urban-rural residence, place of residence, and education. Knowledge of any method or any modern method and knowledge of a source for a modern method is fairly uniform across age groups, peaking in the 30-39 age group. The age pattern is similar for both ever use and current use of family planning; use levels increase with age through the 40-44 age group, before declining among older men.

Knowledge of family planning methods is almost as high among rural husbands as urban husbands; however, rural husbands are less likely to know where to get a method than their urban counterparts. The gap between urban and rural areas is even greater with regard to use of family planning. The likelihood that a husband is a current user of modern methods is nearly 1.5 times greater in urban than in rural areas.

Differences in the level of knowledge of any method or any modern method among husbands from the five regions in Egypt do not exceed 8 percent. Regarding knowledge of a source, however, the differences increase to almost 20 percent; 99 percent of husbands in urban Lower Egypt know of a source for modern methods compared to only 80 percent in rural Upper Egypt. Differences among regions become more striking when use is considered. Rural Upper Egypt has the lowest prevalence of current use among husbands, almost half the rate for urban Lower Egypt, which has the highest use rate.

#### Table 13.12 Husbands' knowledge and use of family planning methods by background characteristics

Percentage of husbands knowing any family planning method and knowing a source for a modern method, and the percentage who have ever used and are currently using any method and any modern method, by selected background characteristics, Egypt 1992

Background characteristic	Know any method	Know modern method	Know source for modern method	Ever used any method	Ever used modem method	Currently using any method	Currently using modem method	Number of husbands
Age								
<25	93.9	93.9	86.9	19.3	16.6	11.4	11.4	85
25-29	94.6	94.6	90.8	41.2	39.9	28.1	26.8	281
30-34	98.5	98.5	94.9	69.5	66.1	52.9	49.9	429
35-39	98.1	98.1	95.0	70.9	68.5	54.1	51.7	427
40-44	97.4	97.4	93.4	76.9	75.6	62.5	60.6	405
45-49	96.6	96.6	91.5	76.3	74.6	57.0	53.6	324
50-54	96.3	96.3	90.1	72.8	70.7	52 4	46.7	224
55+	93.4	93.4	85.8	65.7	64.2	41.3	38.9	233
Urban-rural residence								
Urban	98.5	98.5	96.7	78.2	76.2	60.4	56.9	1093
Rural	95.2	95.2	88.3	57.3	55.2	41.0	39.0	1313
Place of residence								
Urban Governorates	99.3	99.3	98.4	80.3	78.5	63.4	59.3	573
Lower Egypt	98.3	98.3	96.5	75.5	72.8	56.8	53.9	986
Urban	99.4	99.4	99.3	87.3	85.1	65.2	62.6	274
Rural	97.9	97.9	95.4	70.9	68.1	53.5	50.5	711
Upper Egypt	93.0	93.0	82.8	47.5	46.0	32.4	31.0	847
Urban	95.5	95.5	89.6	63.1	61.0	47.9	44.8	245
Rural	91.9	91.9	80.0	41.1	<b>39.9</b>	26.1	25.4	602
Education								
No education	94.7	94.7	87.8	57.3	55.3	39.7	37.6	1173
Some primary	97.6	97.6	94.8	72.1	70.4	54.9	53.0	496
Primary through secondary	98.4	98.4	94.9	79.7	78.1	63.0	60.8	239
Completed secondary/higher	99.4	99.4	98.3	77.6	74.9	62.1	57.1	497
Total	96.7	96.7	92.1	66.8	64.7	49.8	<b>47</b> .1	2406

The educational differentials show the expected pattern: knowledge and use of family planning generally increase with the husband's level of education. However, the greatest differences are observed between husbands with no education and those who have ever attended school. Among educated husbands, knowledge and use levels tend to increase with the level of education but the pattern is not uniform and the differences between educational categories are frequently small.

# 13.7 Intention to Use Family Planning

Husbands who knew about family planning but were not currently using any method were asked about their intention to use family planning in the future. As shown in Table 13.13, more than onc-third of all husbands expressed an intention to use in the future. A somewhat greater percentage (43 percent) said they did not intend to use a method, and the remainder either were uncertain about use or they did not know any method. Rural husbands were almost as likely to say that they intended to use as urban husbands (38 percent and 39 percent, respectively) and, surprisingly, somewhat less likely to say that they would not use family planning in the future. This is largely due to the fact that husbands in the Urban Governorates were much more likely to say that they did not intend to use than husbands from other areas. By place of

#### Table 13.13 Husbands' future use of family planning

Percent distribution of husbands who are not currently using any family planning method by intention to use in the future and preferred method, according to urban-rural residence and place of residence, Egypt 1992

Intention to use			Urban	I.	Lower Egypt			Upper Egypt			
family planning	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total	
Intend to use	<b>39</b> .0	38.0	36.5	41.9	44.9	41.1	36.3	38 5	35.7	38 3	
Unsure about use	9.4	13.6	9.2	13.7	9.3	15.0	12.0	9.9	12.6	12.1	
Do not intend to use	47.7	40.2	52.2	40.5	44.2	39.4	41.3	42.9	40.8	42.9	
Do not know method	3.9	8.2	2.0	3.9	1.7	4.5	10.4	8.6	109	6.6	
Total	100.0	100.0	100 0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of husbands	433	775	210	426	95	331	572	128	445	1209	

residence, the proportion of husbands intending to use in the future was as high or higher in urban Upper Egypt (39 percent) and in rural Upper Egypt (36 percent) as in the Urban Governorates (37 percent). In turn, both urban and rural Lower Egypt had higher proportions intending to use (45 percent and 41 percent, respectively) than the other areas.

The EDHS also investigated the reasons husbands had for not intending to use at any time in the future. The main reason was the desire to have children (27 percent), followed by fatalism (18 percent), the wife being menopausal (17 percent) and the wife being considered as unable to get pregnant (14 percent) (see Table 13.14). Only 5 percent mentioned that religion was the main reason for not using, which is very low in comparison with Pakistan, where 18 percent of husbands who did not intend to use in the future cited religion as the reason for not using (National Institute of Population Studies and IRD/Macro International Inc., 1992, Table 12.8).

# 13.8 Attitudes about Family Planning

Husbands were asked about their approval, in general, of the use of family planning by couples and their perception of their wife's attitude. Similar information was collected in the women's questionnaire (see Chapter 8). These data are used not only to look at the extent to which husbands support the use of family planning, but also to look at how accurate are the perceptions of both husbands and wives regarding their spouse's attitude toward family planning. In addition in this section, the husband's opinion as to whether religion forbids or allows family planning is considered. Finally, other attitudinal information collected from husbands, including their opinions about the use of specific family planning

#### Table 13.14 Husbands' reasons for nonuse

Percent distribution of husbands who are not currently using any family planning method and who intend not to use at any time in the future by reasons for nonuse, Egypt 1992

Reason for nonuse	Total
Want children	26.7
Lack of knowledge	0.3
Costs too much	0.2
Side effects	0.9
Health concerns	5.8
Hard to get methods	0.3
Inconvenient	2.0
Religion	5.1
Opposed to family planning	3.1
Partner opposed	0.1
Other people opposed	0.2
Fatalistic	17.6
Infrequent sex	3.0
Wife can't get pregnant	13.8
Wife menopausal/	
had hysterectomy	16.5
Other	2.2
Don't know	2.0
Total	100.0
Number of husbands	518

methods, perceptions about problems in using specific methods and preferences regarding the sex of the doctor providing family planning services to their wives, are summarized.

## Husbands' Attitudes about Use of Family Planning

In general, the majority of husbands (84 percent) approve of family planning, and only 1 in 10 disapproves (see Table 13.15). The likelihood that husbands disapprove of family planning is somewhat greater in rural than in urban areas (12 percent and 9 percent, respectively). By place of residence, the differentials are even more marked (see Figure 13.3). The likelihood that the husband disapproves varies from a high of 19 percent in rural Upper Egypt to a low of 6 percent in rural Lower Egypt. This pattern indicates the need for quite different motivational campaigns to encourage adoption of family planning in rural areas in the two regions.

#### Table 13.15 Husbands' approval of family planning

Percent distribution of husbands by their approval of the use of family planning, according to urban-rural residence and place of residence, Egypt 1992

Approval of			Urban	Lower Egypt			I			
family planning	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Approve	88.2	80.0	89.7	90.1	91.3	89.7	72 2	81.5	68.5	83.7
Disapprove	8.7	11.7	9.0	61	70	5.7	16.2	10 0	18.8	10.3
Don't know/Undecided/Mis	ssing 1.5	3.5	0.6	21	1.1	2.5	4.5	39	4.7	2.6
Do not know method	1.5	4.8	0.7	1.7	0.6	2.1	7.0	4.5	8.1	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of husbands	1093	1313	573	986	274	711	847	245	602	2406



## Wives' Perceptions of Husbands' Attitudes

The EDHS women questionnaire included a question about the wife's perception concerning her husband's attitude about the use of family planning, and the husband questionnaire included a similar question about the husband's perception of his wife's attitude. Perceptions about a spouse's attitude toward family planning use are clearly important in shaping a couple's decision to use family planning.

As shown in Table 13.16, 81 percent of wives believe that their husbands approve of the use of family planning, 12 percent believe that their husbands disapprove of family planning and 7 percent are uncertain. In three-quarters of the cases, the wife was accurate in her perceptions. In those cases in which the wife was wrong about the husband's attitude, 52 percent believed that the husband disapproved of or was unsure about the use of family planning when the husband actually approved.

#### Table 13.16 Wives' perceptions of husband's approval of family planning

Percent distribution of couples by wife's perception of husband's approval or disapproval of family planning and husband's actual attitude, according to urban-rural residence and place of residence, Egypt 1992

Wife's exception and			Urban	1	Lower Egypt			Upper Egypt			
husband's attitude	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total	
Wife: Husband approves	86.8	75 3	87.8	83.9	87.3	82.6	71.6	84 0	66.6	80.5	
Husband approves	79.3	65 5	81.7	77.4	80.7	76 1	58.5	72.2	52.9	71.7	
Husband disapproves	5.2	5.0	5.2	3.6	4.8	3.1	6.7	5.6	7.2	51	
Husband unsure/Don't know	2.3	4.8	1.0	2.9	1.7	3.4	64	6.2	6.5	3.7	
Wife: Husband disapproves	8.6	15.6	7.0	9.8	9.2	10.0	19.1	11.5	22.2	12 4	
Husband approves	5.6	8.6	4.1	7.8	7.5	7.9	8.8	7.2	9.5	7.3	
Husband disapproves	2.5	5.2	2.9	1.8	1.7	1.8	7.3	2.4	9.3	40	
Husband unsure/Don't know	0.5	1.8	0.1	0.3	0.0	0.4	3.0	1.9	3.4	1.2	
Wife: Husband unsure	4.6	9.1	5.2	6.3	35	7.4	9.2	4.5	11.1	71	
Husband approves	3.3	5.8	3.9	4.9	3.0	5.7	4.9	2.2	6.1	4.7	
Husband disapproves	1.1	1.5	1.0	0.7	0.5	0.8	2.2	2.1	2.2	1.3	
Husband unsure/Don't know	0.2	1.8	03	0.6	0.0	0.9	2.1	0.2	2.8	1.1	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of couples	1093	1313	573	986	274	711	847	245	602	2406	

Husbands were somewhat more likely to accurately predict their wife's attitude. According to Table 13.17, 85 percent of the husbands believed that their wives approved of the use of family planning, 7 percent thought that the wife disapproved, and 8 percent reported that their wife was uncertain about her attitude toward the use of family planning. Husbands were correct in their perceptions in 83 percent of the cases. Among those who did not accurately predict the wife's attitude, almost 8 in 10 believed that their wife disapproved or was uncertain about family planning when the wife actually approved of family planning.

The residential patterns follow expected patterns. Husbands and wives from rural Upper Egypt were more likely than husbands or wives from the other areas to be wrong in their perceptions concerning their spouse's attitude. Among couples from rural Upper Egypt, one-third of wives and 29 percent of husbands were wrong in their perception of their spouse's attitude.

#### Table 13.17 Husbands' perceptions of wife's approval of family planning

Percent distribution of couples by husband's perception of wife's approval or disapproval of family planning and wife's actual attitude, according to urban-rural residence and place of residence, Egypt 1992

		Rural	Urban Gover	I	lower Egy	pt	l	Jpper Egy	Upper Egypt			
and wife's attitude	Urban		norates	Total	Urban	Rural	Total	Urban	Rural	Total		
Husband: Wife approves	89.6	81.7	92.5	89.7	91.2	89.1	75.2	81.0	72.8	85.3		
Wife approves	86.2	75.0	88.5	86.0	89.6	84.6	67.5	77.1	63.7	80.1		
Wife disapproves	1.7	4.0	2.1	2.1	0.4	27	4.5	2.1	5.4	2.9		
Wife unsure/Don't know	1.7	2.7	1.9	16	13	1.8	32	1.8	37	2.2		
Husband: Wife disapproves	5.5	80	37	4.6	48	4 5	11.7	10.5	12.2	6.9		
Wife approves	4.2	5.2	2.9	3.7	33	39	71	8.1	67	47		
Wife disapproves	1.1	20	07	0.6	07	0.5	3.4	2.4	3.8	1.6		
Wife unsure/Don't know	0.2	0.8	0.0	0.3	08	0.1	12	0.0	17	0,5		
Husband: Wife unsure	4.9	10.3	3.8	5.7	4 0	64	13-1	8.5	15.0	7.9		
Wife approves	3.8	6.8	3.1	4.7	3.4	5.2	7.9	61	8.7	5.4		
Wife disapproves	03	17	0.0	0.4	0.0	0.5	2.6	12	3.2	11		
Wife unsure/Don't know	0.8	1.8	0.8	0.7	0.6	07	2.6	12	3.2	1.4		
Total	<b>100</b> .0	100.0	100.0	100.0	100.0	100-0	100.0	100.0	100.0	100.0		
Number of couples	1093	1313	573	986	274	711	847	245	602	2406		

## Religion

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Table 13.18 examines the husband's opinion on whether religion allows family planning or not. Seventy-one percent of husbands believe that religion allows family planning, and only 19 percent say it does not. The proportion of husbands who think that religion forbids the use of family planning is similar in urban and rural areas (19 percent and 20 percent, respectively). By place of residence, the percentage of husbands holding the opinion that religion forbids family planning use varies from 16 percent in rural Lower Egypt to a high of 24 percent in rural Upper Egypt.

#### Table 13.18 Husbands' belief that religion allows or forbids family planning

Percent distribution of husbands by their opinion as to whether religion allows or forbids the use of family planning, according to urban-rural residence and place of residence, Egypt 1992

Religion's position			Urban	Lower Egypt			1			
	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Allows	74.7	68.5	76.1	77.3	77 4	77 3	61 1	68.6	58.1	71.3
Forbids	18.8	19.7	18.2	16.7	18.9	15.9	23.0	20.2	24 2	19.3
Don't know/Missing	4.9	7.0	5.0	43	3.1	4.8	88	67	97	61
Do not know method	1.5	4.8	0.7	17	0.6	21	7.0	4.5	8 1	33
Total	100.0	100.0	100,0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of husbands	1093	1313	573	986	274	711	847	245	602	2406

## Attitudes about the Use of Specific Methods

As shown in Table 13.19, fewer than 1 in 5 husbands express disapproval of the use of the pill (19 percent) and IUD (14 percent). However, the likelihood of disapproval increases dramatically for male methods such as the condom (41 percent) and withdrawal (33 percent). Disapproval levels also are high for both female sterilization (48 percent) and male sterilization (21 percent).

Percent distribution of husbands by approval of the use of specific methods of family planning, Egypt 1992										
	н	usband ap	proves of meth	od						
Method	Yes	No	Don't know/ undecided/ missing	Does not know method	Total					
Pill	73.0	18.8	4.4	3.8	100.0					
IUD	75.8	14.0	5.1	5.2	100.0					
Female sterilization	11.9	48.2	4.0	35.9	100.0					
Condom	21.0	41.3	6.8	31.0	100.0					
Male sterilization	2.6	20.8	1.7	74.9	100.0					
Withdrawal	9.7	33.0	4.6	52.6	100.0					

Husbands who knew about family planning were further asked about their opinion on the main problem regarding the use of specific contraceptive methods. Table 13.20 summarizes the problems that husbands reported by method. With regard to use of the pill, although the majority of husbands (55 percent) said that there are no problems, almost 1 in 4 husbands are concerned about the pill's side effects. A similar pattern is exhibited for the IUD. For both condoms and withdrawal, inconvenience is the most frequently cited problem, with about 1 in 4 husbands giving this response in the case of each of these methods. A significant proportion of husbands (around 10 percent) also see condoms and withdrawal as ineffective. Finally, religious objections are the most often cited problem for both female sterilization and male sterilization.

## **Attitude about Male Providers**

The husband was further asked whether he objects or does not object to his wife seeing a male doctor for family planning. In general, the majority of husbands have no problem with male providers. However, 3 in 10 husbands do object to their wives obtaining family planning services from a male doctor, as shown in Table 13.21. The likelihood that a husband would object is higher in rural areas, especially in rural Upper Egypt (36 percent), as compared to urban areas. In urban areas, the proportion of husbands objecting to a male provider is lowest in urban Lower Egypt (23 percent) and highest in the Urban Governorates (see Figure 13.4).

#### Table 13.20 Husbands' problems with specific methods of family planning

Percent distribution of husbands who know about family planning by the main problem identified with the method, according to specific methods, Egypt 1992

Problem	Pill	IUD	Female sterili- zation	Condom	Male sterili- zation	With- drawal
None	54.6	57.0	14.2	20.6	9.5	19.9
Spouse disapproves	1.0	1.5	5.0	3.7	6.9	3.1
Community disapprove	0.0	0.0	1.6	0.7	5.7	2.2
Religion disapproves	2.7	2.3	48.0	3.0	45.4	9.4
Side effects	27.4	19.0	3.1	7.0	1.8	4.9
Access/availability	0.1	0.1	0.3	0.0	0.2	1.3
Costs too much	0.1	0.2	0.8	0.4	0.9	0.0
Inconvenient to use	4.4	3.9	5.5	25.5	7.1	28.9
Not effective	1.7	3.1	0.4	9.2	0.3	11.4
Permanent/irreversible	0.1	0.0	7.3	0.0	8.0	01
Other	0.6	0.9	1.3	2.3	0.6	2.0
Don't know	7.5	11.9	12.4	27 6	13.5	16 8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of husbands	2315	2281	1542	1660	603	1140



#### Table 13.21 Husbands' objection to wife seeing male doctor

Percentage of husbands who know about family planning by attitude toward wife obtaining family planning services from a male doctor, according to urban-rural residence and place of residence, Egypt 1992

	Н	usband's a	ıttitude			
		Would			Number	
Background characteristic	Would object	not object	Don't know/ missing	Total	of husbands	
Urban-rural residence						
Urban	27.8	71.5	0.8	100.0	1076	
Rural	33.8	65.2	0.9	100.0	1250	
Place of residence						
Urban Governorates	31.0	68.3	0.7	100.0	569	
Lower Egypt	29.8	69.4	0.8	100.0	969	
Urban	23.0	76.8	0.1	100.0	273	
Rural	32.5	66.5	1.0	100.0	696	
Upper Egypt	32.6	66.4	1.0	100.0	787	
Urban	25.5	72.9	1.6	100.0	234	
Rural	35.6	63.7	0.8	100.0	553	
Education						
No education	36.1	63.2	0.7	100.0	642	
Some primary	29.6	70.1	0.3	100.0	579	
Primary through secondary	34.3	64.0	1.7	100.0	407	
Secondary +	25.6	73.5	0.9	100.0	698	
Total	31.0	68.1	0.8	100.0	2326	

## 13.9 Fertility Desires

A number of questions were included in the Egypt DHS to obtain information on various aspects of the fertility preferences of husbands, including the desire for another child and the ideal number of children. In addition, there were questions addressed both to women and husbands as to who had the main influence on childbearing decisions. The results of these questions are described in this section.

## **Desire for Children**

In the 1992 EDHS, husbands were asked about their desire for additional children. The results reveal that six in ten husbands do not want any more children (see Figure 13.5). The proportion desiring an additional child decreases with the number of living children that the husband has, ranging from 98 percent among husbands with no children to only 8 percent among husbands with 7 or more children (see Table 13.22).



Table 13.22 Husbands' des Percent distribution of hust	sire for more	e children sire for mo	re children,	according	to the num	iber of livi	ng children	, Egypt 19	92
		<u>_</u>	N	umber of 1	living child	lren			
future children	0	1	2	3	4	5	6	7+	Total
Want another child Want no more/none Undecided/Don't know	95.7 3.5 0.9	87.7 10.4 1.9	39.1 50.7 10.2	20.2 73.6 6.2	14.7 76.0 9.3	10.8 85.3 3.9	11.2 81.2 7.6	7.5 86.9 5.6	33.0 60.8 6.1
Total Number of husbands	100.0 193	100.0 279	100.0 401	$\begin{array}{c} 100 \ 0 \\ 408 \end{array}$	100.0 332	100.0 306	100.0 210	100.0 277	100.0 2406

# **Son Preference**

The issue of whether son preference influences the desire for children is examined in Table 13.23, which shows the variation in the proportion wanting no more children according to the number of living sons and daughters. At each parity, the proportion of husbands desiring to limit childbearing increases with the number of living sons. For example, among husbands with two children, those who have two sons are much more likely to say that they want no more children than those husbands with two daughters (53 percent and 36 percent, respectively).

and daughters, E	gypt 1992		<b>,</b> -	<i>y</i> <b>na</b> n <i>oo</i> r e	1 111116 5
Number of	N	umber of liv	ing daughte	rs	
living sons	0	1	2	3+	Total
0	3.5	9.2	36.0	57.9	17.8
1	11.5	54.8	67.9	77.0	53.3
2	53.0	81.0	80.2	81.5	75.6

## Ideal Number of Children

As mentioned above, husbands also were asked about the ideal number of children they would like to have. The results in Table 13.24 show the distribution of husbands by their ideal number of children according to the actual number of children that they have. Overall, there was a clear preference among husbands for either a two child (28 percent) or three child (21 percent) family. An additional 20 percent considered four or more children as ideal. The table also indicates that a substantial proportion of husbands (28 percent) were unable to specify the number of children that they considered ideal. Among those giving numeric reposes, the mean ideal family size was 3.3. This average generally increases with the number of children that a man already has, peaking at 4.7 among men with 7 or more children.

#### Table 13.24 Husbands' ideal number of children

Percent distribution of husbands by ideal number of children and mean ideal number of children, according to number of living children, Egypt 1992

Ideal mumber			Ν	lumber of	living chil	dren			
of children	0	1	2	3	4	5	6	7+	Tota
0	0.0	0.0	0.2	0.3	0.1	1.9	0.7	0.0	0.4
1	6.3	2.7	1.0	0.9	1.5	0.6	1.3	1.2	1.7
2	44.4	46.7	43.4	24.6	21.2	16.1	15.0	11.1	27.9
3	18.5	20.7	23.3	38.4	14.1	17.6	15.8	12.1	21.2
4	61	69	95	8.9	28.0	12 5	9.9	14.5	12.4
5+	6.4	3.8	3.5	4.2	6.6	14.7	14.6	13.8	7.9
Non-numeric answers	18 2	19.3	19.2	22.6	28.6	36.5	42.6	47.3	28.5
Total	100.0	100.0	100.0	100 0	100.0	100.0	100.0	100.0	100.0
Number	193	279	401	408	332	306	210	277	2406
Mean	29	26	2.8	3.0	3.6	4.2	4.3	4.7	3,3

Note: The mean excludes husbands who gave non-numeric responses.

## Main Influence on Decision to Have Another Child

Table 13.25 and Figure 13.6 consider the opinions of husbands and wives as to the person who should have the main influence on the decision to have another child. The results indicate that around half of all husbands believe that both the husband and wife should have an equal say in the decision to have a child, and 40 percent feel that the husband should have the main influence. Only a small proportion of husbands believe that the wife should have the main influence on childbearing decisions; husbands are in fact somewhat more likely to say that other individuals (e.g., relatives or medical personnel) should have the main influence than they are to accord the wife the main decision-making role (6 percent and 4 percent, respectively).

#### Table 13.25 Husbands' and wives' perceptions of main influence on decision to have another child

Percent distribution of couples by husband's and wife's perceptions as to the person who has the main influence on the decision to have another child, according to urban-rural residence and place of residence, Egypt 1992

Husband's perception and wife's attitude         Urban         Rural         Total         Urban         Rural         Total         Urban         Rural           Husband: Husband main Wife: husband main         36.5         43.0         37.0         38.2         38.6         38.1         44.2         33.2         48.7           Wife: husband main         35         2.7         5.2         1.9         2.2         1.8         3.0         1.2         3.7           Wife: both equal         18.3         16.1         17.4         16.3         18.5         15.5         17.8         20.3         16.8           Wife: both equal         18.3         16.1         17.4         16.3         18.5         15.5         17.8         20.3         16.8           Wife: both equal         0.7         1.4         0.9         1.1         0.0         1.5         1.1         0.9         1.2           Husband: Wife main         3.4         3.9         4.3         2.9         1.7         3.4         4.2         3.0         4.6           Wife: husband main         0.6         0.6         0.7         0.8         0.6         0.9         1.8         1.8         1.8           Wife: both e		n	Jpper Egyp	L	ot	ower Egyj	L	Urban			H.I.D. 2
Husband: Husband main       36.5       43.0       37.0       38.2       38.6       38.1       44.2       33.2       48.7         Wife: husband main       14.0       22.8       13.5       18.9       18.0       19.3       22.3       10.7       27.1         Wife: wife main       3.5       2.7       5.2       1.9       2.2       1.8       3.0       1.2       3.7         Wife: both equal       18.3       16.1       17.4       16.3       18.5       15.5       17.8       20.3       16.8         Wife: other       0.7       1.4       0.9       1.1       0.0       1.5       1.1       0.9       1.2         Husband: Wife main       3.4       3.9       4.3       2.9       1.7       3.4       4.2       3.0       4.6         Wife: husband main       1.0       1.9       1.3       0.5       1.6       1.8       1.1       2.1         Wife: wife main       0.6       0.6       0.7       0.8       0.6       0.8       0.4       0.0       0.0       0.2       0.0       0.2         Wife: wife main       8.0       14.0       5.8       15.3       10.6       17.1       10.4       1	Total	Rural	Urban	Total	Rural	Urban	Total	norates	Rural	Urban	and wife's attitude
Wife: husband main14.022.813.518.918.019.322.310.727.1Wife: wife main3.52.75.21.92.21.83.01.23.7Wife: both equal18.316.117.416.318.515.517.820.316.8Wife: other0.71.40.91.10.01.51.10.91.2Husband: Wife main3.43.94.32.91.73.44.23.04.6Wife: husband main0.60.60.70.80.60.80.40.10.5Wife: both equal1.51.31.90.80.60.91.81.81.81.8Wife: other0.20.10.40.00.00.10.20.00.2Husband: Both equal55.846.255.952.653.552.344.558.338.9Wife: both equal42.628.244.433.640.431.029.540.924.9Wife: both equal42.628.244.433.640.431.029.540.924.9Wife: Other1.61.91.61.60.12.22.03.11.6Husband: Other1.61.91.61.60.12.22.03.11.6Husband: Other1.61.91.61.60.12.22.03.11.6 <tr< td=""><td>40 1</td><td>48.7</td><td>33.2</td><td>44.2</td><td>38.1</td><td>38.6</td><td>38.2</td><td>37.0</td><td>43.0</td><td>36.5</td><td>Husband: Husband main</td></tr<>	40 1	48.7	33.2	44.2	38.1	38.6	38.2	37.0	43.0	36.5	Husband: Husband main
Wife: wife main $3.5$ $2.7$ $5.2$ $1.9$ $2.2$ $1.8$ $3.0$ $1.2$ $3.7$ Wife: both equal $18.3$ $16.1$ $17.4$ $16.3$ $18.5$ $15.5$ $17.8$ $20.3$ $16.8$ Wife: other $0.7$ $1.4$ $0.9$ $1.1$ $0.0$ $1.5$ $1.1$ $0.9$ $1.2$ Husband: Wife main $3.4$ $3.9$ $4.3$ $2.9$ $1.7$ $3.4$ $4.2$ $3.0$ $4.6$ Wife: husband main $1.0$ $1.9$ $1.3$ $1.3$ $0.5$ $1.6$ $1.8$ $1.1$ $2.1$ Wife: wife main $0.6$ $0.6$ $0.7$ $0.8$ $0.6$ $0.8$ $0.4$ $0.1$ $0.5$ Wife: both equal $1.5$ $1.3$ $1.9$ $0.8$ $0.6$ $0.9$ $1.8$ $1.8$ $1.8$ $1.8$ Wife: other $0.2$ $0.1$ $0.4$ $0.0$ $0.0$ $0.1$ $0.2$ $0.0$ $0.2$ Husband: Both equal $55.8$ $46.2$ $55.9$ $52.6$ $53.5$ $52.3$ $44.5$ $58.3$ $38.9$ Wife: husband main $8.0$ $14.0$ $5.8$ $15.3$ $10.6$ $17.1$ $10.4$ $10.4$ $10.4$ Wife: wife main $3.6$ $2.1$ $4.1$ $2.2$ $2.4$ $2.1$ $2.6$ $3.9$ $2.0$ Wife: both equal $42.6$ $28.2$ $44.4$ $33.6$ $40.4$ $31.0$ $29.5$ $40.9$ $24.9$ Wife: Other $1.6$ $1.9$ $1.6$ $1.$	18.8	27 1	10.7	22.3	19.3	18.0	18.9	13.5	22.8	14.0	Wife: husband main
Wife: both equal Wife: other18.3 $0.7$ 16.1 $1.4$ 17.4 $0.9$ 16.3 $1.1$ 18.5 $0.0$ 15.5 	3.1	3,7	1.2	3.0	1.8	2.2	1.9	5.2	2.7	35	Wife: wife main
Wife: other $0.7$ $1.4$ $0.9$ $1.1$ $0.0$ $1.5$ $1.1$ $0.9$ $1.2$ Husband: Wife main $3.4$ $3.9$ $4.3$ $2.9$ $1.7$ $3.4$ $4.2$ $3.0$ $4.6$ Wife: husband main $1.0$ $1.9$ $1.3$ $1.3$ $0.5$ $1.6$ $1.8$ $1.1$ $2.1$ Wife: wife main $0.6$ $0.6$ $0.7$ $0.8$ $0.6$ $0.8$ $0.4$ $0.1$ $0.5$ Wife: both equal $1.5$ $1.3$ $1.9$ $0.8$ $0.6$ $0.9$ $1.8$ $1.8$ $1.8$ Wife: other $0.2$ $0.1$ $0.4$ $0.0$ $0.0$ $0.1$ $0.2$ $0.0$ $0.2$ Husband: Both equal $55.8$ $46.2$ $55.9$ $52.6$ $53.5$ $52.3$ $44.5$ $58.3$ $38.9$ Wife: husband main $8.0$ $14.0$ $5.8$ $15.3$ $10.6$ $17.1$ $10.4$ $10.4$ $10.4$ Wife: husband main $3.6$ $2.1$ $4.1$ $2.2$ $2.4$ $2.1$ $2.6$ $3.9$ $2.0$ Wife: both equal $42.6$ $28.2$ $44.4$ $33.6$ $40.4$ $31.0$ $29.5$ $40.9$ $24.9$ Wife: Other $1.6$ $1.9$ $1.6$ $1.6$ $0.1$ $2.2$ $2.0$ $3.1$ $1.6$ Husband: Other $4.3$ $6.9$ $2.9$ $6.2$ $6.1$ $6.2$ $7.1$ $5.5$ $7.7$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ <td>17.1</td> <td>16 8</td> <td>20.3</td> <td>17.8</td> <td>15.5</td> <td>18.5</td> <td>16.3</td> <td>17.4</td> <td>16 1</td> <td>18.3</td> <td>Wife: both equal</td>	17.1	16 8	20.3	17.8	15.5	18.5	16.3	17.4	16 1	18.3	Wife: both equal
Husband: Wife main $3.4$ $3.9$ $4.3$ $2.9$ $1.7$ $3.4$ $4.2$ $3.0$ $4.6$ Wife: husband main $1.0$ $1.9$ $1.3$ $1.3$ $0.5$ $1.6$ $1.8$ $1.1$ $2.1$ Wife: wife main $0.6$ $0.6$ $0.7$ $0.8$ $0.6$ $0.8$ $0.4$ $0.1$ $0.5$ Wife: both equal $1.5$ $1.3$ $1.9$ $0.8$ $0.6$ $0.9$ $1.8$ $1.8$ $1.8$ Wife: other $0.2$ $0.1$ $0.4$ $0.0$ $0.0$ $0.1$ $0.2$ $0.0$ $0.2$ Husband: Both equal $55.8$ $46.2$ $55.9$ $52.6$ $53.5$ $52.3$ $44.5$ $58.3$ $38.9$ Wife: husband main $8.0$ $14.0$ $5.8$ $15.3$ $10.6$ $17.1$ $10.4$ $10.4$ Wife: wife main $3.6$ $2.1$ $4.1$ $2.2$ $2.4$ $2.1$ $2.6$ $3.9$ $2.0$ Wife: both equal $42.6$ $28.2$ $44.4$ $33.6$ $40.4$ $31.0$ $29.5$ $40.9$ $24.9$ Wife: Other $1.6$ $1.9$ $1.6$ $1.6$ $0.1$ $2.2$ $2.0$ $3.1$ $1.6$ Husband: Other $4.3$ $6.9$ $2.9$ $6.2$ $6.1$ $6.2$ $7.1$ $5.5$ $7.7$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: wife main $0.1$ $0.3$ $0.2$ $0.2$ $0.0$ $0.2$ <td>11</td> <td>1.2</td> <td>0.9</td> <td>1.1</td> <td>1.5</td> <td>0.0</td> <td>1.1</td> <td>0.9</td> <td>1.4</td> <td>0.7</td> <td>Wife: other</td>	11	1.2	0.9	1.1	1.5	0.0	1.1	0.9	1.4	0.7	Wife: other
Wife: husband main $1.0$ $1.9$ $1.3$ $1.3$ $0.5$ $1.6$ $1.8$ $1.1$ $2.1$ Wife: wife main $0.6$ $0.6$ $0.7$ $0.8$ $0.6$ $0.8$ $0.4$ $0.1$ $0.5$ Wife: both equal $1.5$ $1.3$ $1.9$ $0.8$ $0.6$ $0.9$ $1.8$ $1.8$ $1.8$ $1.8$ Wife: other $0.2$ $0.1$ $0.4$ $0.0$ $0.0$ $0.1$ $0.2$ $0.0$ $0.2$ Husband: Both equal $55.8$ $46.2$ $55.9$ $52.6$ $53.5$ $52.3$ $44.5$ $58.3$ $38.9$ Wife: husband main $8.0$ $14.0$ $5.8$ $15.3$ $10.6$ $17.1$ $10.4$ $10.4$ $10.4$ Wife: wife main $3.6$ $2.1$ $4.1$ $2.2$ $2.4$ $2.1$ $2.6$ $3.9$ $2.0$ Wife: both equal $42.6$ $28.2$ $44.4$ $33.6$ $40.4$ $31.0$ $29.5$ $40.9$ $24.9$ Wife: Other $1.6$ $1.9$ $1.6$ $1.6$ $0.1$ $2.2$ $2.0$ $3.1$ $1.6$ Husband: Other $4.3$ $6.9$ $2.9$ $6.2$ $6.1$ $6.2$ $7.1$ $5.5$ $7.7$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: wife main $0.1$ $0.3$ $0.2$ $0.2$ $0.0$ $0.2$ $0.3$ $0.1$ $0.3$ Wife: both equal $1.8$ $2.3$ $0.9$ $2.2$ <td>3.7</td> <td>4.6</td> <td>3.0</td> <td>4.2</td> <td>3.4</td> <td>1.7</td> <td>2.9</td> <td>4.3</td> <td>3.9</td> <td>3.4</td> <td>Husband: Wife main</td>	3.7	4.6	3.0	4.2	3.4	1.7	2.9	4.3	3.9	3.4	Husband: Wife main
Wife: wife main $0.6$ $0.6$ $0.7$ $0.8$ $0.6$ $0.8$ $0.4$ $0.1$ $0.5$ Wife: both equal $1.5$ $1.3$ $1.9$ $0.8$ $0.6$ $0.9$ $1.8$ $1.8$ $1.8$ Wife: other $0.2$ $0.1$ $0.4$ $0.0$ $0.0$ $0.1$ $0.2$ $0.0$ $0.2$ Husband: Both equal $55.8$ $46.2$ $55.9$ $52.6$ $53.5$ $52.3$ $44.5$ $58.3$ $38.9$ Wife: husband main $8.0$ $14.0$ $5.8$ $15.3$ $10.6$ $17.1$ $10.4$ $10.4$ Wife: wife main $3.6$ $2.1$ $4.1$ $2.2$ $2.4$ $2.1$ $2.6$ $3.9$ $2.0$ Wife: both equal $42.6$ $28.2$ $44.4$ $33.6$ $40.4$ $31.0$ $29.5$ $40.9$ $24.9$ Wife: Other $1.6$ $1.9$ $1.6$ $1.6$ $0.1$ $2.2$ $2.0$ $3.1$ $1.6$ Husband: Other $4.3$ $6.9$ $2.9$ $6.2$ $6.1$ $6.2$ $7.1$ $5.5$ $7.7$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: wife main $0.1$ $0.3$ $0.2$ $0.2$ $0.0$ $0.2$ $0.3$ $0.1$ $0.3$ Wife: both equal $1.8$ $2.3$ $0.9$ $2.2$ $2.7$ $2.0$ $2.7$ $2.7$ $2.6$ Wife: other $0.4$ $1.5$ $0.2$ $1.1$ $0.6$ $1.3$ $1.$	1.5	2.1	1.1	1.8	1.6	0.5	1.3	1.3	1.9	1.0	Wife: husband main
Wife: both equal Wife: other $1.5$ $1.3$ $1.9$ $0.8$ $0.6$ $0.9$ $1.8$ $1.8$ $1.8$ $1.8$ Husband: Both equal Wife: other $55.8$ $46.2$ $55.9$ $52.6$ $53.5$ $52.3$ $44.5$ $58.3$ $38.9$ Wife: husband main Wife: both equal $8.0$ $14.0$ $5.8$ $15.3$ $10.6$ $17.1$ $10.4$ $10.4$ $10.4$ Wife: both equal Wife: both equal $42.6$ $28.2$ $44.4$ $33.6$ $40.4$ $31.0$ $29.5$ $40.9$ $24.9$ Wife: Other $1.6$ $1.9$ $1.6$ $1.6$ $0.1$ $2.2$ $2.0$ $3.1$ $1.6$ Husband: Other $4.3$ $6.9$ $2.9$ $6.2$ $6.1$ $6.2$ $7.1$ $5.5$ $7.7$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: husband main $0.1$ $0.3$ $0.2$ $0.2$ $0.0$ $0.2$ $0.3$ $0.1$ $0.3$ Wife: both equal $1.8$ $2.3$ $0.9$ $2.2$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: both equal $1.8$ $2.3$ $0.9$ $2.2$ $2.7$ $2.0$ $2.7$ $2.7$ $2.6$ $3.1$ $0.4$ $1.7$ Total $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $1$	0.6	0.5	01	0.4	0.8	0.6	0.8	0.7	0.6	0.6	Wife: wife main
Wife: other $0.2$ $0.1$ $0.4$ $0.0$ $0.0$ $0.1$ $0.2$ $0.0$ $0.2$ Husband: Both equal $55.8$ $46.2$ $55.9$ $52.6$ $53.5$ $52.3$ $44.5$ $58.3$ $38.9$ Wife: husband main $8.0$ $14.0$ $5.8$ $15.3$ $10.6$ $17.1$ $10.4$ $10.4$ $10.4$ Wife: wife main $3.6$ $2.1$ $4.1$ $2.2$ $2.4$ $2.1$ $2.6$ $3.9$ $2.0$ Wife: both equal $42.6$ $28.2$ $44.4$ $33.6$ $40.4$ $31.0$ $29.5$ $40.9$ $24.9$ Wife: Other $1.6$ $1.9$ $1.6$ $1.6$ $0.1$ $2.2$ $2.0$ $3.1$ $1.6$ Husband: Other $4.3$ $6.9$ $2.9$ $6.2$ $6.1$ $6.2$ $7.1$ $5.5$ $7.7$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: wife main $0.1$ $0.3$ $0.2$ $0.0$ $0.2$ $0.3$ $0.1$ $0.3$ Wife: other $0.4$ $1.5$ $0.2$ $1.1$ $0.6$ $1.3$ $1.3$ $0.4$ $1.7$ Total $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$	1.4	1.8	1.8	18	0.9	0.6	0.8	1.9	1.3	1.5	Wife: both equal
Husband: Both equal Wife: husband main $55.8$ $8.0$ $46.2$ $14.0$ $55.9$ $5.8$ $52.6$ $15.3$ $52.3$ $10.6$ $44.5$ $17.1$ $58.3$ $10.4$ $38.9$ $10.4$ Wife: husband main Wife: wife main $3.6$ $2.1$ $2.1$ $4.1$ $4.2$ $2.2$ $2.4$ $2.4$ $2.1$ $2.6$ $2.6$ $3.9$ $32.0$ $2.0$ Wife: both equal Wife: Other $42.6$ $1.6$ $28.2$ $1.6$ $44.4$ $1.6$ $33.6$ $1.6$ $40.4$ $1.6$ $31.0$ $2.2$ $29.5$ $2.0$ $40.9$ $24.9$ Husband: Other Wife: husband main Wife: husband main $2.0$ $2.0$ $2.9$ $2.9$ $6.2$ $2.7$ $6.1$ $2.8$ $6.2$ $2.7$ $2.8$ $7.1$ $2.8$ $5.5$ $2.7$ $2.8$ $7.7$ $2.8$ $2.3$ $3.0$ Wife: husband main Wife: both equal $1.8$ $2.3$ $0.9$ $2.2$ $2.2$ $2.7$ $2.0$ $2.0$ $2.7$ $2.7$ $2.7$ $2.6$ $2.8$ $2.3$ $3.0$ Wife: other $0.4$ $1.5$ $0.2$ $0.2$ $0.0$ $0.2$ $0.2$ $0.3$ $0.1$ $0.3$ $0.3$ $0.4$ Wife: other $0.4$ $1.5$ $0.2$ $0.2$ $10.0$ $100.0$ $100.0$ $100.0$ $100.0$	0.2	02	0.0	0.2	0.1	0.0	0,0	0.4	0.1	0.2	Wife: other
Wife: husband main $8.0$ $14.0$ $5.8$ $15.3$ $10.6$ $17.1$ $10.4$ $10.4$ $10.4$ Wife: wife main $3.6$ $2.1$ $4.1$ $2.2$ $2.4$ $2.1$ $2.6$ $3.9$ $2.0$ Wife: both equal $42.6$ $28.2$ $44.4$ $33.6$ $40.4$ $31.0$ $29.5$ $40.9$ $24.9$ Wife: Other $1.6$ $1.9$ $1.6$ $1.6$ $0.1$ $2.2$ $2.0$ $3.1$ $1.6$ Husband: Other $4.3$ $6.9$ $2.9$ $6.2$ $6.1$ $6.2$ $7.1$ $5.5$ $7.7$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: wife main $0.1$ $0.3$ $0.2$ $0.2$ $0.0$ $0.2$ $0.3$ $0.1$ $0.3$ Wife: other $0.4$ $1.5$ $0.2$ $1.1$ $0.6$ $1.3$ $1.3$ $0.4$ $1.7$ Total $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$	50.6	38 9	58.3	44.5	52.3	53.5	52.6	55.9	46.2	55.8	Husband: Both equal
Wife: wife main $3.6$ $2.1$ $4.1$ $2.2$ $2.4$ $2.1$ $2.6$ $3.9$ $2.0$ Wife: both equal $42.6$ $28.2$ $44.4$ $33.6$ $40.4$ $31.0$ $29.5$ $40.9$ $24.9$ Wife: Other $1.6$ $1.9$ $1.6$ $1.6$ $0.1$ $2.2$ $2.0$ $3.1$ $1.6$ Husband: Other $4.3$ $6.9$ $2.9$ $6.2$ $6.1$ $6.2$ $7.1$ $5.5$ $7.7$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: wife main $0.1$ $0.3$ $0.2$ $0.2$ $0.0$ $0.2$ $0.3$ $0.1$ $0.3$ Wife: both equal $1.8$ $2.3$ $0.9$ $2.2$ $2.7$ $2.0$ $2.7$ $2.7$ $2.6$ Wife: other $0.4$ $1.5$ $0.2$ $1.1$ $0.6$ $1.3$ $1.3$ $0.4$ $1.7$ Total $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$	113	10.4	10.4	10.4	17.1	10.6	15.3	5.8	14.0	8.0	Wife: husband main
Wife: both equal Wife: Other $42.6$ $1.6$ $28.2$ $1.6$ $44.4$ $1.6$ $33.6$ $1.6$ $40.4$ $0.1$ $31.0$ $2.2$ $29.5$ $2.0$ $40.9$ $24.9$ $3.1$ $24.9$ $1.6$ Husband: Other $4.3$ $2.0$ $6.9$ $2.9$ $2.9$ $2.7$ $6.2$ $2.8$ $6.1$ $2.7$ $6.2$ $2.8$ $7.1$ $2.7$ $5.5$ $2.8$ $7.7$ $2.8$ Wife: husband main Wife: wife main Wife: both equal $1.8$ $2.3$ $0.2$ $2.3$ $0.2$ $0.2$ $0.0$ $0.2$ $0.2$ $0.3$ $0.1$ $0.3$ $0.3$ $0.2$ $0.2$ $0.2$ $0.0$ $0.2$ $0.2$ $0.3$ $0.1$ $0.3$ $0.3$ $0.4$ $0.2$ $0.2$ $0.0$ $0.2$ $0.2$ $0.3$ $0.1$ $0.3$ $0.3$ $0.1$ $0.3$ $0.2$ $0.2$ $0.2$ $0.0$ $0.2$ $0.2$ $0.3$ $0.1$ $0.3$ $0.3$ $0.1$ $0.1$ $0.3$ $0.3$ $0.2$ $0.2$ $0.2$ $0.2$ $0.0$ $0.2$ $0.2$ $0.3$ $0.1$ $0.1$ $0.3$ $0.3$ $0.1$ $0.1$ $0.3$ $0.3$ $0.1$ $0.1$ $0.3$ $0.3$ $0.1$ $0.1$ $0.3$ $0.2$ $0.2$ $0.1$ $0.3$ $0.2$ $0.2$	2.8	2.0	3.9	2.6	21	2.4	22	4.1	2.1	3.6	Wife: wife main
Wife: Other $1.6$ $1.9$ $1.6$ $1.6$ $0.1$ $2.2$ $2.0$ $3.1$ $1.6$ Husband: Other $4.3$ $6.9$ $2.9$ $6.2$ $6.1$ $6.2$ $7.1$ $5.5$ $7.7$ Wife: husband main $2.0$ $2.9$ $1.5$ $2.7$ $2.8$ $2.7$ $2.8$ $2.3$ $3.0$ Wife: wife main $0.1$ $0.3$ $0.2$ $0.2$ $0.0$ $0.2$ $0.3$ $0.1$ $0.3$ Wife: both equal $1.8$ $2.3$ $0.9$ $2.2$ $2.7$ $2.0$ $2.7$ $2.7$ $2.6$ Wife: other $0.4$ $1.5$ $0.2$ $1.1$ $0.6$ $1.3$ $1.3$ $0.4$ $1.7$ Total $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$ $100.0$	347	24.9	40.9	29.5	31.0	40.4	33.6	44.4	28.2	42.6	Wife: both equal
Husband: Other4.36.92.96.26.16.27.15.57.7Wife: husband main2.02.91.52.72.82.72.82.33.0Wife: wife main0.10.30.20.20.00.20.30.10.3Wife: both equal1.82.30.92.22.72.02.72.72.6Wife: other0.41.50.21.10.61.31.30.41.7Total100.0100.0100.0100.0100.0100.0100.0100.0	1.8	16	3.1	2.0	2.2	01	1.6	1.6	19	1.6	Wife: Other
Wife: husband main         2.0         2.9         1.5         2.7         2.8         2.7         2.8         2.3         3.0           Wife: wife main         0.1         0.3         0.2         0.2         0.0         0.2         0.3         0.1         0.3           Wife: both equal         1.8         2.3         0.9         2.2         2.7         2.0         2.7         2.7         2.6           Wife: other         0.4         1.5         0.2         1.1         0.6         1.3         1.3         0.4         1.7           Total         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0	57	77	5.5	7.1	6.2	6.1	6.2	2.9	6.9	4.3	Husband: Other
Wife: wife main         0.1         0.3         0.2         0.2         0.0         0.2         0.3         0.1         0.3           Wife: both equal         1.8         2.3         0.9         2.2         2.7         2.0         2.7         2.7         2.6           Wife: other         0.4         1.5         0.2         1.1         0.6         1.3         1.3         0.4         1.7           Total         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0	25	3.0	2.3	2.8	2.7	2.8	2.7	1.5	2.9	2.0	Wife: husband main
Wife: both equal         1.8         2.3         0.9         2.2         2.7         2.0         2.7         2.7         2.6           Wife: other         0.4         1.5         0.2         1.1         0.6         1.3         1.3         0.4         1.7           Total         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0	0.2	03	0.1	0.3	0.2	0.0	0.2	0.2	0.3	0.1	Wife: wife main
Wife: other         0.4         1.5         0.2         1.1         0.6         1.3         1.3         0.4         1.7           Total         100.0	2.1	26	2.7	2.7	2.0	2.7	2.2	0.9	2.3	1.8	Wife: both equal
Total 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	1.0	1.7	0.4	13	1.3	0.6	1.1	0.2	15	0.4	Wife: other
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Total
Number of couples 1093 1313 573 986 274 711 847 245 602	2406	602	245	847	711	274	986	573	1313	1093	Number of couples

The marked differences among couples in their opinions as to the role husbands and wives should have in childbearing decisions also are highlighted in Table 13.25. Overall, there is agreement on this topic in the case of only 55 percent of the couples interviewed in the EDHS. Of particular interest is the fact that fewer than half of the wives of men who believe that the husband should have the main influence on childbearing decisions agree with their husbands.

Looking at residential patterns, husbands from rural Upper Egypt are considerably more likely than husbands from other areas to believe that the husband should have the main influence on childbearing decisions and less likely to believe that these decisions should be made jointly. As in the other areas, husbands and wives in rural Upper Egypt do not always share the same view of the fertility decision-making process. For example, 45 percent of the wives of men who say that the husband has the main influence on



the decision to have a child disagree with their husbands; the majority of wives who disagree see childbearing as a joint decision.

# 13.10 Wife's Status in the Family

The 1992 EDHS collected information in both the women's and husbands' surveys on a number of indicators of the wife's position in the family. One series of questions focused on the freedom wives are given to go out alone, express disagreement with the husband in family discussions and to work. The results presented in Table 13.26 indicate that wives are more likely than husbands to say that a wife should be able to go out alone or with children to buy household items or to visit relatives (85 percent and 78 percent, respectively). Wives also are much more likely than their husbands to accord a woman the right to work (74 percent and 49 percent, respectively). Husbands are, however, somewhat more likely than their wives to accord the wife the right to express disagreement with the husband in family (67 percent and 57 percent, respectively). Residential differentials in the responses to these questions indicate that both husbands and wives are more conservative in their attitudes in rural areas, especially in Upper Egypt, than in urban areas.

Perceptions concerning husband-wife roles in making various household decisions are shown in Table 13.27. The majority of husbands and wives believe that the husband should have the final word on decisions regarding visiting relatives/friends, the household budget, and the wife's employment. With regard to children's education and marriage plans, husbands and wives tend to be more evenly divided between the opinion that the husband has the final say and the belief that the decision should be made jointly. Interestingly, more than half of both husbands and wives believe that the decision to have another child or to use family planning should be made jointly.

#### Table 13.26 Husbands' and wives' perceptions of wife's position in family

Among husbands and wives, the percentage saying that the wife can go out alone, that the wife should express an opinion when she disagrees with her husband, and that a woman should be able to work, according to urban-rural residence and place of residence, Egypt 1992

Indicator of			Urban	Lower Egypt			Upper Egypt			
wife's position	Urban	Rural	noraies	Total	Urban	Rural	Total	Urban	Rural	Total
Wife can go out alone										
Husband	84.3	73.0	89.2	81.3	76.0	83.3	67.0	82.2	60.8	78.1
Wife	88.6	81.6	89.9	89.7	87.2	90.7	75.6	87.2	70.8	84.8
Wife should express opinion										
Husband	78.7	57.2	80.8	68.5	78.8	64.5	55.8	73.6	48.5	66.9
Wife	74.1	42.5	81.0	55.0	70.4	49.0	42.7	62.2	34.8	56.8
Wife should be able to work										
Husband	50.5	47.8	49.4	52.6	53.2	52.4	44.6	50.1	42.3	49.0
Wife	75.9	72.4	74.0	78.7	81.0	77.8	68.4	74.5	65.9	74.0
Number of couples	1093	1313	573	986	274	711	847	245	602	2406

#### Table 13.27 Husbands' and wives' opinions as to who should have the last word on household decisions

Percent distribution of couples by husbands' and wives' opinions as to who should have the last word in various household decisions, Egypt 1992

Household	Hus		w w		Number						
decision	Husband	Wife	Both	Other	Total	Husband	Wife	Both	Other	Total	couples
Visit friends/relatives	61.1	2.7	35.8	0.4	100.0	59.9	3.0	36.6	0.5	100.0	2406
Household budget	68.1	9.6	20,4	1.9	100.0	60.2	11.9	25.1	28	100.0	2406
Having another child	41.1	3.1	52.2	3.6	100.0	37.4	4.8	55.6	2.2	100.0	2406
Children's education	47.3	1.6	48.3	2.8	100.0	41.4	2.2	53.1	32	100.0	2406
Children's marriage Use of family	47.0	1.4	40,1	11.5	100.0	44.8	1.0	43.9	10.3	100.0	2406
planning methods	37.2	6.7	54,7	1.3	100.0	33.6	80	57.0	1.4	100.0	2406
Wife's employment	77.6	3.5	18.8	0.2	100.0	71.1	49	23.8	0.3	100.0	2406

The proportions of husbands and wives saying that husbands should have the last word in important household decisions are shown in Table 13.28 by residence. The proportions of both husbands and wives saying that the husband should have the final say are generally more similar among rural than urban couples. Among urban couples, the greatest disagreement is observed with regard to decisions about the household budget, children's education, use of family planning, and the wife's employment. In all cases, rural couples, especially those from rural Upper Egypt are more likely than urban couples to see the husband as having the final say in family decisions.

#### Table 13.28 Husbands' and wives' belief that husband should have last word on household decisions, according to residence

Among husbands and wives, the percentage saying that the husband should have the last word on important household decisions, according to urban-rural residence and place of residence, Egypt 1992

Household			Urban Gover-	I	.ower Egy	pt	ι	Jpper Egyj	pt	
decision	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Visit friends/relatives										
Husband	50.2	70.2	46.1	62.7	55.1	65.6	69.5	54.4	75.6	61.1
Wife	47.7	70.0	39.5	65.7	57.2	69.0	66.9	56,4	71.1	59.9
Household budget										
Husband	58.4	76.2	52.0	69.7	65.4	71.4	77.2	65.7	81.8	68.1
Wife	47.1	71.1	40.2	65.8	57.4	69.0	67.1	51.6	73.5	60.2
Having another child										
Husband	32.7	48.1	28.1	36.9	32.4	38.6	54.9	43.8	59.4	41.1
Wife	28.0	45.3	25.6	35.8	29.2	38.4	47.3	32.3	53.4	37.4
Children's education										
Husband	34.6	58.0	27.2	45.7	38.0	48.7	62.9	48.0	68.9	47.3
Wife	24.6	55.4	20.8	41.2	27.3	46.5	55.6	30.6	65.8	41.4
Children's marriage										
Husband	34.3	57.6	29.2	47.4	37.2	51.3	58.7	43.1	65.1	47.0
Wife	28.4	58.4	22.6	45.9	34.0	50.5	58.5	35.8	67.7	44.8
Use of family planning methods										
Husband	27.5	45.3	21.3	34.0	31.2	35.0	51.7	37.7	57.4	37.2
Wife	20.1	44.9	16.1	32.3	19.3	37.3	47.0	30.1	53.9	33.6
Wife's employment										
Husband	71.2	82.9	69.2	81.1	78.3	82.2	79.0	67.6	83.6	77.6
Wife	60.1	80.2	56.3	74.6	64.0	78.7	76.9	64.5	81.9	71.1
Number of couples	1093	1313	573	986	274	711	847	245	602	2406

## 13.11 Typical Family Expenditure and Wife's Contribution to the Household Budget

In the 1992 EDHS, the husband was asked about what he thought that a typical family in the same situation as his family spent in a month. The distribution of husbands according to the estimated typical monthly expenditure and the median typical family expenditure is shown in Table 13.29. Overall, the median expenditure for a typical family in Egypt is 252 pounds. Thirty percent of families are estimated to spend less than 200 pounds and 19 percent are seen as spending 400 or more pounds.

Looking at the variation in the typical family expenditure by selected background characteristics, the median expenditure increases with the husband's age, peaking at slightly over 300 pounds among those age 40 and over. Considering residential differentials, the median typical family expenditure is around 100 pounds greater among urban families than rural families (305 pounds and 204 pounds, respectively). The median expenditure by a typical family exceeds 300 pounds only in the Urban Governorates and urban areas in Lower Egypt.

#### Table 13.29 Husbands' opinions as to the typical family expenditure

Percent distribution of husbands by opinion as to the total monthly expenditure of a family similar to his, according to selected background characteristics, Egypt 1992

			Total m	onthly exp	enditure						Number
Background	<100	100-	200- 299	300- 399	400-	500- 599	600+	Don't	Total	Median	of
	100										
Age											
<25	16.5	40.5	17.7	12.0	0.0	1.3	2.5	95	100.0	155.4	85
25-29	8.6	36.1	26.8	15.7	3.9	3.0	1.5	4.4	100.0	201.4	281
30-34	5.9	28.7	29.2	20.6	7.5	3.3	2.0	2.7	100.0	207 9	429
35-39	2.6	21.0	28.3	28.2	8.7	6.0	2.3	2.8	100.0	256.3	427
40-44	3.1	20.8	24.3	25.0	8.0	10.5	7.0	1.4	100.0	300.5	405
45-49	2.4	19.9	23.2	22.2	123	8.0	7.7	4.4	100.0	301.3	324
50-54	2.3	19.1	21.9	25.2	11.7	8.2	7.3	4.3	100.0	302.2	224
55+	5.8	21.6	17.7	26.7	8.0	10.3	6.3	3.8	100.0	301.3	233
Urban-rural residence											
Urban	1.6	13.4	22.4	29.1	12.1	10.6	81	2.7	100.0	304.6	1093
Rural	7.3	33.8	27.0	18.0	5 0	3.4	16	4.0	100.0	203.4	1313
Place of residence											
Urban Governorates	0.6	6.0	21.0	314	15.8	13.5	10.1	1.7	100.0	308.5	573
Lower Egypt	6.4	30.1	27.3	22.4	5.7	4.7	1.4	2.0	100.0	206.1	986
Urban	3.6	22.1	22.5	31.3	7.9	7.9	3.8	09	100.0	300.5	274
Rural	7.5	33.2	29.1	19.0	4.8	3.4	0.5	2.5	100 0	203.5	711
Upper Egypt	5.5	30.5	24.8	18.1	6.0	4.4	4.4	6.2	100 0	206.3	847
Urban	2.0	20.9	257	21.1	8.0	6.8	8.1	73	100.0	257.8	245
Rural	7.0	34,4	24.5	16.9	5.2	3.3	29	5.8	100.0	203 2	602
Education											
No education	7.1	34.6	25.4	18.0	36	3.6	2.4	5.3	100.0	202.9	690
Some primary	5.4	30.3	26.5	198	5.9	56	2.3	4.0	100 0	206.5	599
Primary through secondary	5.5	18.9	24.0	30.5	10.5	50	3.6	2.1	100.0	300.2	415
Completed secondary/higher	1.2	12.9	23.6	26.4	13.3	11.5	9.1	19	100.0	305.5	702
Husband's occupation											
Technical/professional	1.5	12.2	26.0	24.0	10.2	15.1	10.3	0.6	100.0	305.4	286
Administrative	0.0	5.3	10.7	22.8	10.9	69	31.3	12.1	100.0	404.7	49
Clencal	0.9	16.0	29.5	26.8	17.2	4.6	3.0	1.9	100.0	301.2	208
Sales	3.9	25 0	21.0	23 9	6,4	9.6	6.3	3.9	100.0	257.1	164
Services	32	27.5	29.1	23.9	6.8	58	1.8	21	100.0	209.0	185
Agnculture	9.8	35.7	25.9	16.2	2.9	2.5	16	5.5	100.0	2009	694
Production	3.6	22.0	24.4	27.4	10.7	6.9	3.1	1.8	100.0	258.6	683
Other	2.5	6.6	17.2	26.3	9.1	17.7	13 2	7.5	100.0	307.8	77
Missing/Not specified	0.6	39.3	178	26.1	64	0.3	2 5	6.9	100.0	204.1	62
All husbands	4.7	24.5	24.9	23.0	82	6.7	4 5	3.4	100.0	251.6	2406

As expected, typical family expenditures increase with the husband's educational level. With regard to occupation, husbands working in technical, professional and administrative jobs report higher typical family expenditures than husbands in other occupations. The median expenditure for these occupations exceeds 300 pounds, and husbands in administrative occupations report that the median expenditure among households in situations similar to their own is more than 400 pounds. Agricultural workers report the lowest typical expenditure at just over 200 pounds.

Husbands also were asked if their wife made any contribution to the household budget. In general, nearly 6 in 10 husbands reported that the wife made some contribution to the household budget. The proportion reporting that the wife made a contribution generally increases with the typical family expenditure,

as shown in Table 13.30. The proportion also generally increases with the husband's age, peaking at 65 percent in the 45-49 age group. Variations by urban-rural residence, and place of residence are not especially marked. However, the proportion of wives making some contribution to the households budget is significantly higher among husbands with a secondary or higher education than among husbands with less education. Similarly, husbands involved in professional and administrative jobs are more likely to report that their wives contribute to the household budget than agricultural or production workers.

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Table 13.30 Wives' contribu	ations to the	househhold
Percentage of husbands whose the household budget, by sel- characteristics, Egypt 1992	se wives con ected backgr	uribute to round
		Number
Background characteristic	Wife contributes	of husbands
Monthly expenditure		
<100	59.2	114
100-199	54.4	590
200-299	50.8	600 554
400-399	65 3	334 107
500-599	68.5	160
600+	66.1	109
Not sure/Don't know	44.8	82
Age	10.1	
<25	49.4	85
20-29	51.Z	281
35-39	54.4 62 Q	429
40-44	59.8	405
45-49	65.2	324
50-54	58.5	224
55+	59.3	233
Urban-rural residence		
Urban Rural	57.4 59.6	1093 1313
Place of residence		
Urban Governorates	58.5	573
Lower Egypt	60.5	986
Urban	57.4	274
Rural	61.7	711
Upper Egypt	56.5	847
Urban	54.9	245
Kural	57.1	602
Education	50.5	400
Some primery	58 1	500
Primary through secondary	52.5	415
Completed secondary/highe	r 68.6	702
Husband's occupation		
Technical/professional	74.4	286
Administrative	75.1	49
Clerical	63.6	208
Sales Sapuicas	46.7	164
A griculture	52.U 58.1	185
Production	54.8	683
Other	60.6	77
Missing/Not specified	51.7	62
All husbands	58.6	2406
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# APPENDIX A

SURVEY STAFF

## **APPENDIX** A

## SURVEY STAFF: 1992 EGYPT DEMOGRAPHIC AND HEALTH SURVEY

### **Technical and Administrative Staff**

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Maha Mohamady Manal Amr Mahmoud Nermin Mohamed El-Sayed Sahar Ahmed Farghaly Seham Mohamed Ismail Soheir El-Badry Atef

Manal Mahrous Manal Mohamed El-Hady Manal Mohamed Mokhtar Mervat Ismail Senousy Mervat Mostafa Mervat Shafik Mona Ahmed Hassan Mona Ahmed Radwan Mona Kamal Mahmoud Mona Mohamed Abdel-Khalek Monira Abdalla El-Sayed Nagat Hassan Aly Nahed Sayed Salem Nora Refai Omeima Mostafa Pakinam Kamal Safaa Abdel-Halim Safeya Anwar Kaldas Sahar Abdel-Monem Metwally Sahar Ahmed Abdel-Fattah Sahar Ahmed Abdel-Moety Samar Yassin Mohamed Sherin Sobhy Saleh Taghrid Sabry Zeinab Fathy El-Sayed

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## **APPENDIX B**

## **SAMPLE DESIGN**

## **APPENDIX B**

## SAMPLE DESIGN

The major objective of the Egypt Demographic and Health Survey sample design was to provide estimates with acceptable precision for important population characteristics such as fertility, infant and child mortality, contraceptive prevalence, and maternal and child health indicators. These estimates were required at the national level, for urban and rural areas and for five major residential subgroups (Urban Governorates, Lower Egypt (urban and rural) and Upper Egypt (urban and rural)). In addition, estimates of contraceptive prevalence and the basic health indicators were required for each of 21 governorates.

To achieve these objectives, a three-stage probability sample was adopted. The following is a detailed description of the 1992 EDHS sample design. A description of the field activities involved in the implementation of the sample design is included in Chapter 1 of this report.

## **B.1** Sample Coverage

Administratively, Egypt is divided into 26 governorates. The 1992 EDHS sample covered 21 of these 26 governorates. Only the Frontier governorates were excluded from the sample frame because of the disproportionate resources required to survey the population in these governorates; the net effect on national estimates of excluding these governorates is negligible because they include only about 1 percent of Egypt's population.

#### **B.2** Sample Design

The main concern in developing the sample design for the 1992 EDHS was to secure a sufficient number of cases in each domain in order to increase the precision of estimates and reduce sampling error. Sampling error has two components, one corresponding to variation between primary sampling units (PSUs) and the other to variation within PSUs; the major component is usually the variation between PSUs. Thus, the total number of PSUs is an important factor in controlling the size of the sampling error since the variation between PSUs.

The DHS sampling policy recommends a minimum of 1000 women per domain. Moreover, with an optimal sample take of about 25 cases per PSU, it is recommended that a minimum of 40 PSUs be selected per domain. This recommendation reflects a balancing of the desire to increase the "spread" of the sample (i.e., to increase the number of PSUs) and the interest in avoiding oversampling, which can result in unnecessarily high costs and increased problems in controlling the quality of the interview process.

The standard DHS approach had to be modified in the design of the Egypt DHS sample because estimates were required for each governorate. The main variables for which governorate-level estimates were needed involved proportions rather than rates (e.g., contraceptive prevalence). Thus, a smaller sample could be selected from each governorate than would have been needed for the calculation of fertility or mortality measures. The EDHS sample design called for a minimum of 450 women in each governorate, and a minimum of 25 clusters per governorate.

The target sample was fixed at 10,000 interviews with ever-married women age 15-49. Using information from the 1988 EDHS on the number of eligible women per household and response rates, it was estimated that 12,030 households had to be selected in order to yield the desired number of interviews. The EDHS design called for these households to be selected from a total of 378 primary sampling units (209

villages and	169 shiakhas/towns).	Table B.1 presents the	distribution of th	ne PSUs and the targe	t sample by
governorate.					

	Sample size		Urban			Overall sampling		
Governorate		Sample	Segment	PSUs	Sample	Segment	PSUs	fraction
Urban Governor	ates							
Cairo	1400	1400	70	35				1/1390
Alexandria	600	600	30	15				1/1220
Port Said	560	560	28	14				1/ 200
Suez	590	590	30	15				1/ 160
Lower Egypt								
Damietta	540	135	10	5	405	14	14	1/ 330
Dakahlia	550	143	10	5	407	14	14	1/1460
Sharkia	500	115	8	4	385	13	13	1/1530
Kalyubia	500	220	14	7	280	9	9	1/1280
Kafr El-Sheikh	500	115	8	4	385	13	13	1/ 760
Gharbia	510	168	12	6	342	11	11	1/1280
Menoufia	500	100	6	3	400	13	13	1/1030
Behera	500	115	8	4	385	13	13	1/1390
Ismailia	560	274	18	9	286	10	10	1/ 250
Upper Egypt								
Giza	550	314	20	10	236	8	8	1/1810
Beni Suef	500	125	8	4	375	13	13	1/ 650
Fayoum	500	115	8	4	385	13	13	1/ 690
Menya	500	105	8	4	395	13	13	1/1250
Assiut	500	140	10	5	360	12	12	1/1000
Souhag	570	125	8	4	445	15	15	1/ 920
Qena	500	115	8	4	385	13	13	1/1050
Aswan	600	240	16	8	360	12	12	1/ 300
fetoT	12030	5814	338	169	6216	209	209	

## **B.3** Sample Frame

For each governorate, a list of shiakhas/towns constituted the initial primary sample frame for urban areas, and a list of villages constituted the frame for the rural area. The Central Agency for Public Mobilization and Statistics provided updated population information for each of the administrative units in the frame.

For the second stage selection, a frame was required for the selected PSUs only. Before carrying out the second stage selection, detailed maps were obtained for each PSU.

## **B.4** Sample Selection

#### **First Stage**

In this stage, a total of 377<sup>1</sup> PSUs were selected from 21 governorates (169 urban, 208 rural). A list of PSUs allocated according to governorate and residential sector (urban/rural) is shown in Table B.2. Figures B.1.1-B.1.3 show the geographical distribution of the 377 sampling selected in the 1992 EDHS.

<sup>&</sup>lt;sup>1</sup> One of the rural primary sampling units (El-Sebaiaa village in Aswan) had become a town and was excluded from the sample.

### **URBAN GOVERNORATES**

#### Cairo

El-Barad	El-Teraa El-Boulakia
Sherif	Roud El-Farag El-Balad
El-Ezab	El-Sabua
Mahmasha	El-Sakaycon
Masaken El-Zawia El-Hamraa	El-Birkadar
El-Amiria	Nasser
El-Zatoun El-Keblia	Nasr El-Keblia
Masaken El-Amiria El-Shamalia	El-Kadria
El-Ezab	El-Baghalaa
Arab Abo-Tawila	Abo-El-Scoud And El-Madabegh
El-Zahraa And Masaken El-Helmia	El-Manial El-Gharbi
Tolumbate Ain Shams	El-Basatin El Gharbia
El-Salam El Sharkia	Dar El-Salam
Kafr El-Shorafaa	El-Hagaraa
El-Bostan	El-Massara El-Balad
El-Abasia El keblia	Helwaen El-Balad
Hadayek El Koba	15 <sup>th</sup> Mayou (Town)
Masaken EL-Amiria El Ganoubia	
	Alexandria
El-Bitash Gharb	El-Mandarah Kebly
Zawiat El-Kabania	Sidi Beshr Kebly
El-Hadraa Kebly	Mergham
Ezbat Saad	Embrouzo and Moharam Beck
El-Kassee Kebly	El-Mesalah Gharb and Sherif Basha
Dana El-Gadida And Ezbat El-Wastania	Gheet EL-Enab Gharb
San Estifano	El-Wardiaan Shark
El- Scouf Kebly	

### Port Said

Ibrahim Hassanin Port Fouad(Town) Gazirat Pohairet El-Manzalah El-Kabouti

#### Suez

Kism Rabia Sheikha Owlaa Sheikha Taniaa

#### LOWER EGYPT

#### Damietta

<u>Urban</u> Kism Awal Kism Tani Kism Rabia

EL-Galaa

El-Saraye

El-Manaakh Abo El-Hassan

Fisal (City)

Kism Talcet

El-Ganaen (City)

Montazah Saad El-Arab

> Faraskour (Town) El-Zarkaa (Town)

Rural El-Mohamdia (Monshet Farouk) Kafr El-Morabian El-Sharkia Kafr El-Wastany El-Sawalem El-Sananiah Shat El-Khayata Shat El-Sheikh Dorgham

#### Urban

Sherbine (Town) Manzalaa (City) Kism Awal Meet Talkha

#### <u>Rural</u>

El-Satamouni El-Dahria El-Bousraat El-Azzazna El-Salam Taranis El-Bahrc El-Tawcla

#### <u>Urban</u> Fakouse (Town) <u>Urban</u> Sherbine (Town) Manzalaa (City)

Manzalaa (City) Kism Awal Meet Talkha

#### <u>Rural</u>

El-Satamouni El-Dahria El-Bousraat Elnahal

Rural Shenbaraa Mankelaa Manshat Ebn-El-Aas El-Monagaa Al-Kobra Akiaad El-Keblyia Dawamah

Manshat El-Manesterli El-Nakhase

<u>Urban</u> Kafr Manaker El-Kanater El-Khayria (Town) Bahtim

#### <u>Rural</u> Kafr Sharaf El-Deen Kafr El-Gazzar El-Shoubak Nobe Taha Dandana

Shat Ezbet-El-Lahm Shat Mouheb and El-Sayale El-Barashia El-Tarha Sharabas Dakahla Kafr Turky

#### Dakahlia

Kafr El-Berdmaase Aggaa (Town)

Kafr Demiraa El-Gadida Kafr El-Kordi Berkin Manshat Helal Kafr Derabe Baktaress Olilah Kafr Meet El-Azz

#### Sharkia

Youssef Beck

Kafr El-Berdmaase Aggaa (Town)

Kafr Demiraa El-Gadida Kafr El-Kordi Berkin Belbeese (City)

Kafr Abazah Kafr El-Sheikh El-Zawahri El-Horria Shoubra El-Nakhlaa El-Naahamna Meet Bashaar

#### Kalyubia

Mostorod Bigam

Abo Al-Ghite Kafr Al-Shorafaa El-Gharbi Meet Halfaa Saryakouse

#### Kafr El-Sheikh

Urban Baltim (Town) Fouah (Town)

Desouk (City) Awade El-Zawawi Rural **EI-Komision Shark** Abo Ghenima Koume El-Dahab (Zobaida El-Bahari) El-Rasif El-Sahel El-Bahari (Dabloosh) Kafr El-Garaydah Ketah El-Hamoul

<u>Urban</u> Katoure (Town) Naser Habibe Youssef Al-Sengawy

Rural Ketamet El-Ghabaa Shoubra Baloulah El-Sakhaweya Bashbishe Mahalet Abo Ali Al-Kantarah Kafr Al-Azyzia Sandbaste

Urban Hassan Hassan Amer El-Kammash Menouf (City)

Rural Kafr Betcbs Toukh Tanbasha Shoubra Bakhoume Meet Abo Shiha Dakma Meet Affiah Kafr El-Shabaa

Urban Kafr El-Daware (City) Edko (City)

Rural Ezzab Dafashou El-Meadya Fisha Balakhah Botorus Zawyt sakr Abaadiat Damanhoure Ezbet Al-Sarwe

<u>Urban</u> El-Kantarah Shark (Town) Haye El-Sheikh Zayed El-Temsah El-Arayshah El-Gadidah

Sandalaa El-Safiaa And Meet El-Hamide Shabase El-Shohadaa Manshat Zahlouk El-Manshaa El-Kobra

Gharbia

Menoufia

El-Santa (Town) Waboure El-Noure Ali Aghaa

Al-Khadimia

El-Bandarah Monshat Abo Abd Allah Shabshir El-Hessah Maneil El-Howishat Kolaibe Abyaare

Ashmoune (City)

Scdoude Abo Senita Kafr Shoubra Zengi Derouah Shanshoure and Hessetha Manial Arouse

#### Behera

Houshe Issa (City) Kartassaa

Abo Yehya El-Ovounc Nakla El-Enab Ibrahim Mehana Kherbeta El-Azzimah

#### Ismailia

Monshat El-Shohadaa El-Haikre El-Tale El-Kabire (Town) Rural Al-Akharsa Abo Khalifa Abo Sowaire El-Mahatah El- sabaa Abaare El-Gharbia Eine Ghosine

Nafisha El-Manayof Saraabiume El-Kassassin El-Gadida El-Kassassin El-Kadima

## **UPPER EGYPT**

Giza

Urban El-Mounira Gezirat Embabah Gezirat Meet Okbah El-Dokki Zenine

## Rural

Bortos Oum Dinaar Kerdasah Warak El-Arab El-Omraniah El-Gharbia Harah Oulaa El-Mounibe Monshat El-Bakari El-Saff (Town)

Tamouah Mazghouna Kafr Turkey and Kafr Tourkhan El-Beremble

#### Beni Suef

Beba (Town) El-Feshne (Town)

Damoushia Beni Kasem Konboshe El-Hammra Dashashah El-Gafadune Shenery

#### Fayoum

Kism Tanı Kism Rahia

Masaret Sawi El-Mandarah Amirict El-Fayoum (El-Masloub) Abo Sire Defnou El-Menya Kalmashah

#### Мепуа

El-Fekriah (Town) Daire Mouase (Town)

#### <u>Urban</u> Nasser (Town) Al-Mermah and El-Ezab

<u>Rural</u> Aboyatc Gazirat El-Masadah Maydoume Gazirat Abo Saleh Bani Hani Mayyanah Baroute

<u>Urban</u> Abshwaye (Town) Taamiah (Town)

#### Rural Abo Kassah El-Mosharak Senrou El-Bahriah Kasr Bayade Terssa Matar Tarres El-Mazatly

<u>Urban</u> Mataye (Town) Kism Talet Rural Beni Warkaan Dahroute Atou El-Wakef Masaret Hagag Ibrahim Dafash El-Bergayah <u>Urban</u> Manfaloute (City) Shiakha Oulaa Shiakha El-Hamraa <u>Rural</u> Kharka

Kharka Nazlet Sarakna Tanagha Al-Mandara Kebly Al-Hamaame Koum El-Mansourah

<u>Urban</u> Tamma (Town) Gohinah (Town)

<u>Rural</u> El-Aghanna Fao Gharb Bengga El-Nazzah El-Bahariah El-Samarnah Fazarra BelKariah El-Hamadiah Tounes

<u>Urban</u> Nagaa Hamadi (Town) Kism Tani

Rural Al-Awsate Samhoude Al-Beharzah Koum Al-Begga Al-Gharbi Bahgoura Houah Fao Bahari El-Daire Al-Hogayrate

Urban Edfou (Town) Koum Ombo (City) Drawc (Town)

<u>Rural</u> El-Bousaylia El-Wasta El-Hagze Bahari El-Redissia Bahari Al-Kalh Gharbe Al-Alaki Aklite Saft El-Khmaar Sharkiah Atlidem Mantoute Al-Rairamoon Sengerg Beni Omraan

#### Assuit

El Naseria (Town) El-Badari (Town)

Drenka Al-Akrade Nazlet El-Assara El-Nekhila El-Dawir El-Nawawrah

#### Souhag

Shiakha El-Kabshe El-Monshaa (Town)

El-Hawawishc El-Horayzate El-Gharbia Aoulad Salama Al-Masayde El-Balabishe Bahari Aoulad Yehya Bahari El-Sheikh Marzouk

#### Qena

Luxor (City) Armante (City)

Dandara Al-Kharanka Hegazzah Bahari El-Baghdadi El-Rouzaykate

Aswan

Shiakha Oulaa Shiakha Tania Shiakha Talta

Al-Abbassia Almansouriah Fares Nemra Sabaa Bahari El-Akkabe



Figure B.1.2 Distribution of Sampling Points, Lower Egypt, Egypt Demographic and Health Survey, 1992



Figure B.1.3 Distribution of Sampling Points, Upper Egypt, Egypt Demographic and Health Survey, 1992



Within each governorate and residential sector (urban/rural), the list of first-stage units was arranged in serpentine order, beginning from the northwest corner of the governorate, using the map of each governorate. The sample of PSUs was selected systematically with probabilities proportional to 1986 Census population using the equation;

 $P_{1i}=aMos/\sum_{i}Mos_{i}$ 

where

а	=	the total number of PSUs to be selected from the residential sector in the governorate,
Mos <sub>i</sub>	=	the measure of size for the PSU, which was obtained by dividing the total population in the PSU by 5000 for urban units or 1500 for rural units and rounding the result to the nearest integer, and
Σ <sub>t</sub> Mos,	=	the sum of the Mos, values for all PSUs in the governorate-residential sector.

#### Second Stage

The second stage of selection involved several steps. First, detailed maps were obtained for each shiakha and for villages with populations over 20,000. These maps were divided into a number of parts (with equal size). One part was then selected from each PSU.

In both urban and rural PSUs, a quick-count operation was carried out in the field to provide information about the number of dwelling units (see Chapter 1 for a description of the quick-count operation). These counts were used to divide the selected parts (or the entire village in the case of rural PSUs with less than 20,000 population) into a number of roughly equal size segments. Two segments from urban areas and one segment from rural areas were then selected systematically from each PSU with probability proportional to size using the following equations:

$$P_{2j} = \frac{2M_{ij}}{N_i \sum M_{ij}}$$

for urban

 $P_{2j} = \frac{M_{ij}}{N_i \sum M_{ij}}$ 

for rural

where

 $M_{\mu}$ 

= the estimated housing units assigned to the j-th segment in the i-th PSU,

 $\Sigma M_y$  = the estimated number of housing units in the selected part in the PSU, and

 $N_i$  = the number of parts in the PSU.

#### Third Stage

A list of all the households living within the selected segments was prepared for third stage selection (see Chapter 1 for a description of the household listing operation). Using the household lists, a systematic sample of households was selected with the selection interval,

$$I = \frac{P_{1l}P_{2l}}{f_g}$$

where

 $P_{I_1}$  and  $P_{2_j}$  = as calculated above, and  $f_g$  = the overall sampling fraction for each governorate based on estimated 1992

A systematic subsample of one-third of the household sample was selected for the husband survey.

population for the governorate (see Table B.1).

#### **B.5** Results of Sample Implementation

Results of the sample implementation are presented for the women's survey in Table B.3.1. The results indicate that of the 11,304 households selected, the EDHS field teams successfully interviewed 10,761. The household response rate was 98 percent. In the interviewed households, 9,978 eligible women were found, of whom 99 percent were interviewed.

Response rates for the husband's survey were somewhat lower than for the women's survey. Table B.3.2 shows that 3,027 eligible husbands were found, of which 82 percent were interviewed.

#### Table B.3.1 Sample implementation: Women

Percent distribution of households and eligible women by results of the interview, and household response rates, eligible woman response rates, and overall response rates, according to sample domain and urban-rural residence, Egypt 1992

			Urban	I	Lower Egy	pt	1	Upper Egy	pt		
Result	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total	
Selected households					• • • • • •			<del>,</del>			
Completed (C) Household present but no competent respondent	94.1	96.4	93.7	96.5	95.5	97.1	95.0	93.6	95.7	95.2	
at home (P)	2.1	0.7	2.5	1.1	1.5	0.9	0.9	1.8	0.5	1.5	
Postnoned	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	
Refused (R)	0.3	0.0	0.3	0.1	0.1	0.0	0.2	0.4	0.0	0.2	
Dwelling not found (DNF)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	
Household absent (IIA) Dwelling vacant/address	1.9	1.5	2.0	1.0	1.4	0.8	2.1	1.9	2.2	1.7	
not a dwelling (DV)	1.3	12	1.0	1.1	1.3	1.0	1.6	1.9	1.4	1.3	
Dwelling destroyed (DD)	0.2	0.1	0.2	0.1	0.2	0.0	0.2	0.2	0.2	0.1	
Other (O)	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number	6082	5222	3243	4215	1551	2664	3846	1288	2558	11304	
Household response											
rate (HRR)'	97.5	<del>9</del> 9.2	97 0	98.7	98.3	98.9	98.8	97.6	99.5	98.3	
Eligible women											
Completed (EWC)	98 9	98 8	98.8	98.7	98.8	98.6	<b>99</b> .1	99.3	99.0	98.9	
Not at home (EWNH)	0.8	0.8	0.8	1.0	0,8	1.1	0.6	0.6	0.6	0.8	
Refused (EWR)	0.2	0.1	0.2	0.1	0.2	0,1	0.1	0.0	0.2	0.2	
Partly completed (EWPC)	0,0	0.1	0.0	0.1	0.2	0.0	0.1	0.0	0.1	0.1	
Other (EWO)	0.1	02	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number	4725	5253	2517	3864	1215	2649	3597	993	2604	9978	
Eligible woman response rate (EWRR) <sup>2</sup>	98.9	98.8	98.8	98.7	98.8	98.6	99.1	99.3	99.0	98.9	
Overall response											
rate (ORR) <sup>3</sup>	96 4	98.0	95.9	97.4	<b>97</b> .1	97.5	98.0	96.9	98.5	97.1	

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, postponed, refused, dwelling not found and household absent. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed and "other." The overall response rate is the product of the household and woman response rates. <sup>1</sup>Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

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

<sup>2</sup>Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

EWC

EWC + EWNH + EWP + EWR + EWPC + EWO

<sup>3</sup>The overall response rate (ORR) is calculated as:

ORR = HRR \* EWRR

#### Table B.3.2 Sample implementation: Husbands

Percent distribution of households and eligible husbands by results of the interview, and household response rates, eligible husband response rates, and overall response rates, according to sample domain and urban-rural residence, Egypt 1992

			Urban Gover-	1	.ower Egy	pt	Į	J <mark>pper</mark> Egy	рł	
Result	Urban	Rural	norates	Total	Urban	Rural	Total	Urban	Rural	Total
Selected households	-									
Completed (C) Household present but	94.5	96.5	94.8	96.7	95.1	97.7	94.5	93.1	95.2	95.4
at home (P)	1.5	0.8	1.5	0.9	1.4	0.7	1.3	1.8	0.9	12
Refused (R)	0.2	0.0	0.3	0.0	0.0	0.0	0.1	0.2	0.0	0.1
Household absent (HA) Dwelling vacant/address	1.7	1.5	1.6	1.1	1.4	1.0	2.2	2.5	2.0	1.6
not a dwelling (DV)	1.8	1.1	1.4	1.1	2.1	0.6	2.0	2.3	1.8	15
Dwelling destroyed (DD)	0.1	01	0.2	0.1	0.0	0.1	0.1	0.0	0.1	0.1
Other (O)	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0 0	0.1
Total percent	100.0	100,0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2026	1748	1079	1415	514	901	1280	433	847	3774
Household response rate (HRR) <sup>1</sup>	98.2	99.2	98.2	<b>99</b> .1	98.6	99.3	98.6	97 8	<b>9</b> 9.0	98.7
Eligible husbands										
Completed (EHC)	83.9	79.3	85.9	80.6	81.9	80.0	79.2	80.9	78.6	81.5
Not at home (EHNH)	15.1	192	12.9	17.5	16.4	18.0	20.1	19.1	20.5	173
Postponed (EHP)	0.2	06	0.3	0.9	0.3	1.1	0.0	0.0	0.0	0.4
Refused (EHR)	0.4	05	0.6	0.3	0.3	0.2	06	0.0	0.8	0.5
Other (EHO)	0.5	03	0.3	0.8	1.1	06	0.1	0.0	01	0.4
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1426	1601	773	1175	360	815	1079	293	786	3027
Eligible husband response rate (EHRR) <sup>2</sup>	83.9	79.3	85 9	80.6	81.9	80.0	79.2	80.9	78.6	81.5
Overall response rate (ORR) <sup>3</sup>	82.4	78.7	84.3	79.8	80.8	79.5	78.1	79.1	77.9	80.4

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, postponed, refused, dwelling not found and household absent. The eligible husband response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed and "other." The overall response rate is the product of the household and man response rates. <sup>1</sup>Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as

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

<sup>2</sup>Using the number of eligible men falling into specific response categories, the eligible man response rate (EWRR) is calculated as:

EHC

$$EHC + EHNH + EHP + EHR + EHPC + EHO$$

<sup>3</sup>The overall response rate (ORR) is calculated as

ORR = HRR \* EHRR

## **APPENDIX C**

## **ESTIMATES OF SAMPLING ERRORS**

## **APPENDIX C**

## ESTIMATES OF SAMPLING ERRORS

The results from sample surveys are affected by two types of errors, nonsampling error and sampling error. Nonsampling error is due to mistakes made in carrying out field activities, such as failure to locate and interview the correct household, errors in the way the questions are asked, misunderstanding on the part of either the interviewer or the respondent, data entry errors, etc. Although efforts were made during the design and implementation of the EDHS 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 measured statistically. The sample of women selected in the EDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each one would have yielded results that differed somewhat from the actual sample selected. The sampling error is a measure of the variability between all possible samples; although it is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of *standard error* of 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, apart from nonsampling errors, 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 same statistic as measured in 95 percent of all possible samples with the same design (and expected size) will fall within a range of plus or minus two times the standard error of that statistic.

If the sample of women had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the EDHS sample design depended on stratification, stages and clusters. Consequently, it was necessary to utilize more complex formulas. The computer package CLUSTERS, developed for the World Fertility Survey program by the International Statistical Institute, was used to assist in computing the sampling errors with the proper statistical methodology.

The CLUSTERS program 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:

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

in which

$$z_{hi} = y_{hi} - r_{\cdot} x_{hi} , and \quad z_{h} = y_{h} - r_{\cdot} x_{hi}$$

where

*h* represents the stratum which varies from 1 to H,

 $m_k$  is the total number of EAs selected in the h<sup>th</sup> stratum,

 $y_{hi}$  is the sum of the values of variable y in EA i in the h<sup>th</sup> stratum,

- $x_{hi}$  is the sum of the number of cases (women) in EA i in the h<sup>th</sup> stratum, and
  - is the overall sampling fraction, which is so small that CLUSTERS ignores it.

In addition to the standard errors, CLUSTERS 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. CLUSTERS also computes the relative error and confidence limits for the estimates.

f

In addition to the standard errors, CLUSTERS program also 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; 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.

Sampling errors are presented in Tables C.2-C.11 for variables considered to be of major interest. Results are presented for the whole country, for urban and rural areas separately, and for the Urban Governorates, Lower Egypt (total/urban/rural) and Upper Egypt (total/urban/rural). For each variable, the type of statistic (mean or proportion) and the base population are given in Table C.1. For each variable, Tables C.2-C.11 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted eases (WN), the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R $\pm$ 2SE).

The confidence limits have the following interpretation. For the proportion of currently married women currently using a contraceptive method (CUSE), the overall average from the sample is .471 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.,  $.471 \pm (2 \times 0.009)$ , which means that there is a high probability (95 percent) that the *true* proportion currently using is between .453 and .489.

The relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. The magnitude of the error increases as estimates for subpopulations such as geographical areas are considered. For the variable CUSE, for instance, the relative standard error (as a percentage of the estimated proportion) for the whole country and for urban and rural areas is 1.9 percent, 1.9 percent, and 3 percent, respectively.

Table C.1_Lis	t of selected variables for sampling errors, Egyp	u <u>1992</u>	
Variable	Variable name	Estimate	Base population
URBRUR	Urban	Proportion	Ever-married women
SECOND	With secondary education or higher	Proportion	Ever-married women
CUWORK	Currently working	Proportion	Ever-married women
AGEM20	Married before age 20	Proportion	Ever-married women
EVBORN	Children ever born	Mean	Currently married women
EVB40	Children ever born to women 40-49	Mean	Currently inarried women aged 40-49
SURVIV	Children surviving	Mean	Currently married women
КМЕТНО	Knowing any contraceptive method	Proportion	Currently married women
KSRCE	Know source for any method	Proportion	Currently married women
EVUSE	Ever used any contraceptive method	Proportion	Currently married women
CUSE	Currently using any contraceptive method	Proportion	Currently married women
CUMODE	Currently using a modern method	Proportion	Currently married women
CUPILL	Currently using pill	Proportion	Currently married women
CUIUD	Currently using IUD	Proportion	Currently married women
PSOURC	Using public sector source	Proportion	Current users of modern methods
NOMORE	Want no more children	Proportion	Currently married women
DELAY	Want to delay 2 or more years	Proportion	Currently married women
IDEAL	Ideal number of children	Mean	Currently married women giving
			numeric response
ANTCAR	Had antenatal checkup	Proportion	Births in last five years
NTETAN	Mother received tetanus injection	Proportion	Births in last five years
MEDELI	Received medical care at delivery	Proportion	Births in last five years
VACREC	Vaccination record seen	Proportion	Children under five
BCG	Received BCG vaccination	Proportion	Children under five
DPT3	Received third BCG dose	Proportion	Children 12-23 months
POL3	Received third DPT dose	Proportion	Children 12-23 months
MEASLE	Received measles vaccination	Proportion	Children 12-23 months
FULLIM	Fully immunized	Proportion	Children 12-23 months
RESPIR	Had cough and difficulty breathing	Proportion	Children under five in last 2 weeks
DIARR2	Had diarrhea in last 2 weeks	Proportion	Children under five
DIARR1	Had diarrhea in last 24 hours	Proportion	Children under five
ORSTRE	Treated with ORS packets	Proportion	Children under 5 with diarrhea in last 2 weeks
MEDTRE	Consulted a medical facility	Proportion	Children under 5 with diarrhea in last 2 weeks

		Standard	Number of cases		Design	Relative	Confidence limits	
Variable	Value (R)	crror (SE)	Unweighted (N)	Weighted (WN)	(DEFT)	error (SE/R)	R-2SE	R+2SI
URBRUR	.466	.017	9864	9864	3.447	.037	.431	.50
SECOND	.259	.012	9864	9864	2.726	.046	.235	.283
CUWORK	.148	.008	9864	9864	2.360	.057	.131	.16
AGEM20	.617	.011	9427	9441	2.185	.018	.595	.63
EVBORN	3.882	.043	9148	9153	1.495	.011	3.797	3.96
E <b>VB</b> 40	6.007	.101	2122	2134	1.574	.017	5.805	6 21
SURVIV	3.310	.034	9148	9153	1.491	.010	3.242	3.37
KMETHO	.996	.000	9148	9153	NAC	.000	.996	99
KSRCE	.929	.005	9148	9153	1.939	.006	.919	.93
EVUSE	.669	.009	9148	9153	1.797	.013	.651	68
CUSE	.471	.009	9148	9153	1.740	.019	.453	.48
CUMODE	.448	.009	9148	9153	1.735	.020	.430	.46
CUPILL	.129	.005	9148	9153	1.397	.038	.119	13
CUIUD	.279	.007	9148	9153	1.526	.026	.265	29
CUCOND	.020	.002	9148	9153	1 253	.093	.016	.02
SOURC	.350	.012	3985	4098	1.620	.035	.326	37.
NOMORE	.656	.006	9148	9153	1.302	.010	.643	.66
DELAY	.159	.005	9148	9153	1.236	.030	.150	.16
DEAL	2.850	.023	7416	744 <b>7</b>	1.419	.008	2.804	2.89
NTCAR	.529	.011	8692	8626	1.746	021	.506	.55
TETAN	.426	.009	8692	8626	1.399	021	.408	.44
MEDELI	.406	.015	8692	8626	2.248	036	.377	.43
/ACREC	.552	.017	1563	1594	1.365	.031	.518	.58
BCG	.895	.010	1563	1594	1.235	.011	.875	.91
OPT3	764	.016	1563	1594	1.473	.021	.733	.79
POL3	.789	.015	1563	1594	1.462	.019	.759	.82
MEASLE	815	.014	1563	1594	1.432	.017	.787	.84
FULLIM	.674	.017	1563	1594	1.408	.025	.641	.70
ESPIR	082	.003	8067	8018	1.060	.042	.075	.08
DIARR2	.134	.006	8067	8018	1.384	042	.123	.14
DIARR1	.056	.003	8067	8018	1.279	061	.049	.06
ORSTRE	290	018	1119	1074	1.214	.060	.255	.32
MEDTRE	.453	.018	1119	1074	1.152	.041	.416	.49

	Value (R)	Standard error (SE)	Number	of cases	Design	Relative	Confider	nce limits
Variable			Unweighted (N)	Weighted (WN)	effect (DEFT)	ептог (SE/R)	R-2SE	R+2SI
URBRUR	1.000	.000	4673	4596	NAC	.000	1.000	1.00
SECOND	.408	.019	4673	4596	2.660	.047	.370	.44
CUWORK	.206	.015	4673	4596	2.511	.072	.176	.23
AGEM20	.478	.015	4585	4516	2.079	.032	.447	.509
EVBORN	3.378	.058	4352	4281	1.610	.017	3.262	3.493
EVB40	4.910	.132	1151	1127	1.723	.027	4.645	5.174
SURVIV	3.004	.046	4352	4281	1.569	.015	2.911	3.09
(METHO	.998	.000	4352	4281	NAC	.000	.998	.99
<b>(SRCE</b>	.979	.004	4352	4281	1.649	.004	.972	.98
EVUSE	.782	.011	4352	4281	1.679	.013	.761	.80
CUSE	.570	.011	4352	4281	1.467	.019	.548	.592
CUMODE	.541	.011	4352	4281	1.475	.021	.518	.563
CUPILL	.140	.006	4352	4281	1.127	.042	.128	.15:
CUIUD	.346	.010	4352	4281	1.417	.030	.326	.36
CUCOND	.032	.003	4352	4281	1.285	.107	.025	.039
SOURC	.323	.019	2299	2315	1.932	.058	.286	.36
OMORE	.690	.009	4352	4281	1.237	.013	.672	.70
DELAY	.146	.007	4352	4281	1.361	.050	.131	.160
DEAL	2.638	.025	3824	3783	1.246	.009	2.589	2.688
NTCAR	.689	.018	3358	3237	1.849	.026	.654	.725
TETAN	.429	.013	3358	3237	1.308	.030	.403	.45:
<b>IEDELI</b>	.625	.024	3358	3237	2.332	.038	.577	.673
ACREC	.573	.023	582	592	1.108	.039	.527	.618
BCG	.940	.013	582	592	1.350	.014	.914	.96
OPT3	.839	.019	582	592	1.296	.023	.800	.878
OL3	.874	.015	582	592	1.121	.017	.843	.90
MEASLE	.877	.018	582	592	1.354	.021	.840	.913
ULLIM	.771	.024	582	592	1.390	.031	.723	.818
RESPIR	.080	.006	3191	3087	1.163	.076	.068	.092
DIARR2	.134	.011	<b>319</b> 1	3087	1.640	.080	.113	.156
DIARR1	.053	.006	3191	3087	1.421	.113	.041	.064
)RSTRE	.235	.031	449	414	1.455	.132	.173	.297
MEDTRE	.478	.034	449	414	1.310	.070	.411	.545

NAC = Not able to compute

		<b>6</b>	Number of cases		Design	DIA			
	Value	Standard error	Unweighted	Weighted	effect (DEFT)	Relative error			
Variable	( <b>R</b> )	(SE)	(N)	(WN)		(SE/R)	R-2SE	R+2SE	
URBRUR	000	.000	5191	5268	NAC	.000	.000	.00	
SECOND	.129	.009	5191	5268	1.927	.070	.111	.147	
CUWORK	.098	.007	5191	5268	1.606	.067	.085	.112	
AGEM20	.744	010	4842	4925	1.560	.013	.724	.763	
EVBORN	4.325	.047	4796	4873	1.100	.011	4.232	4.419	
EVB40	7.237	.113	971	1007	1.230	.016	7.011	7.462	
SURVIV	3.579	.040	4796	4873	1.189	.011	3.499	3.659	
кметно	.994	.001	4796	4873	1.178	.001	.992	997	
KMDMET	.993	.001	4796	4873	1.184	.001	.990	.996	
KSRCE	.885	.008	4796	4873	1.832	.010	.868	902	
EVUSE	570	.011	4796	4873	1.538	.019	.548	592	
CUSE	.384	.011	4796	4873	1.620	.030	.361	.407	
CUMODE	.366	011	4796	4873	1.579	030	.344	.388	
	.119	3007	4796	4873	1 021	004	.104	.134	
	.220	.007	4796	4573	1.200	.03.3	206	233	
BOURC	.009	015	4790	4075	1 201	. 135	255	414	
NOMORE	500 677	000	1080	1765	1.301	.040	608	646	
	.027	005	4796	4873	1.045	037	150	18/	
IDFAI	3.068	029	3592	3664	1.105	010	3,009	3 126	
ANTCAR	432	011	5334	5389	1 319	025	410	454	
NTETAN	.423	.012	5334	5389	1.440	.027	.400	447	
MEDELI	.275	.014	5334	5389	1 908	.052	.246	304	
VACREC	.540	.024	981	1002	1 487	044	492	588	
BCG	.867	.013	981	1002	1.185	.015	842	893	
OPT3	.720	.022	981	1002	1.530	.031	676	764	
POL3	.740	.022	981	1002	1.546	.030	.696	783	
MEASLE	.779	.019	981	1002	1.423	.024	.741	817	
FULLIM	.617	.022	981	1002	1.395	035	.574	661	
RESPIR	.084	.004	4876	4931	.984	.050	.075	.092	
DIARR2	.134	.006	4876	4931	1.193	.046	.121	146	
DIARR1	.058	.004	4876	4931	1.192	072	()49	066	
ORSTRE	.325	.019	670	660	1.008	.060	286	363	
MEDTRE	.438	.022	670	<b>6</b> 60	1.066	.050	.394	482	

		Standard	Number of cases		Design	Palativa	Confidence hmus		
	Value (R)	error	Unweighted	Weighted	effect	ct error	Daap		
Variable		(SE)	(N)	(WN)	(DEFT)	(SE/R)	R-25E	K+28E	
URBRUR	1.000	.000	2487	2357	NAC	.000	1.000	1.000	
SECOND	.430	.030	2487	2357	2.989	.069	.370	.489	
CUWORK	.200	.026	2487	2357	3.289	.132	.147	.253	
AGEM20	.458	.025	2449	2322	2.447	.054	.409	.507	
EVBORN	3.296	.084	2322	2201	1.753	.026	3.128	3.465	
EVB40	4.684	.181	664	627	1.817	.039	4.322	5.046	
SURVIV	2.938	.066	2322	2201	1.673	.022	2.807	3.070	
(METHO	.999	.000	2322	2201	NAC	.000	.999	.999	
<b>KSRCE</b>	.987	.003	2322	2201	1.355	.003	.981	.993	
EVUSE	.801	011	2322	2201	1.343	014	.779	.824	
CUSE	.591	.014	2322	2201	1.358	.023	.564	.619	
CUMODE	.556	.014	2322	2201	1.386	.026	528	.585	
CUPILL	.125	.008	2322	2201	1.131	.062	.109	.140	
CUIUD	.368	.013	2322	2201	1.342	.037	341	.395	
CUCOND	.041	.005	2322	2201	1.316	.132	.030	.052	
SOURC	.376	029	1269	1224	2.159	.078	.317	.434	
NOMORE	.687	012	2322	2201	1.223	.017	.664	.711	
DELAY	.138	010	2322	2201	1.425	.074	.117	.158	
DEAL	2.611	.035	2086	1988	1.307	.013	2.541	2.680	
NTCAR	.735	.029	1684	1557	2.290	.040	.677	.794	
NTETAN	.478	.015	1684	1557	1.110	.032	.447	.508	
<b>MEDELI</b>	.683	.038	1684	1557	2.768	.056	.606	.759	
ACREC	.593	.035	296	278	1.222	.060	.522	.664	
BCG	.959	.013	296	278	1.157	.014	.932	.986	
OPT3	.873	.028	296	278	1.454	032	.817	.930	
POL3	.896	.020	296	278	1.149	.023	.855	.937	
<b>1EASLE</b>	909	.022	296	278	1.323	024	865	.954	
ULLIM	817	.039	296	278	1 714	048	739	.894	
RESPIR	070	.009	1602	1484	1 280	.130	.052	.088	
DIARR2	.120	.011	1602	1484	1.276	.093	.098	.142	
DIARR1	.044	.005	1602	1484	.899	.110	.034	.053	
ORSTRE	.273	049	208	178	1.416	.178	.176	.371	
<b>MEDTRE</b>	.516	.044	208	178	1.154	.085	.429	.604	

NAC = Not able to compute

		Standard	Number of cases		Design	Relative	Confidence limits		
Variable	Value (R)	enor (SE)	Unweighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	R-2SE	R+2SI	
URBRUR	.298	.019	3812	4067	2.572	.064	259	.336	
SECOND	.227	.012	3812	4067	1,780	.053	.203	.251	
CUWORK	.156	.008	3812	4067	1 293	.049	.141	.172	
AGEM20	.629	.011	3673	3915	1.429	.018	.606	.652	
EVBORN	3.839	.049	3518	3746	1.120	.013	3.742	3.930	
EVB40	6.090	.146	775	831	1.513	.024	5.797	6.382	
SURVIV	3.370	.046	3518	3746	1.273	.014	3.279	3.462	
KMETHO	1.000	.000	3518	3746	NAC	.000	1.000	1.000	
KSRCE	.976	.003	3518	3746	1.317	003	.969	.98	
EVUSE	.734	.010	3518	3746	1.392	.014	.713	.75	
CUSE	.535	.012	3518	3746	1 429	.022	.511	.559	
CUMODE	.513	.011	3518	3746	1.356	.022	.490	.530	
CUPILL	.151	009	3518	3746	1 459	058	133	.168	
CUIUD	.326	.010	3518	3746	1 246	030	.306	.340	
CUCOND	.014	.002	3518	3746	1 071	154	.009	.018	
PSOURC	.367	.013	1789	1921	1.159	.036	.341	.393	
NOMORE	.694	.009	3518	3746	1 210	.014	.675	.71	
DELAY	.148	.006	3518	3746	1.047	.042	.135	.160	
IDEAL	2.716	.022	3010	3163	1.018	.008	2.672	2.759	
ANTCAR	.492	.015	3178	3408	1.465	.031	.461	.522	
NTETAN	.358	.015	3178	3408	1 529	042	.329	.388	
MEDELI	.398	.020	3178	3408	1.949	051	.357	.438	
VACREC	.561	.028	583	642	1.367	.050	.505	.61	
BCG	.934	.011	583	642	1.102	.012	.911	.950	
DPT3	.823	.021	583	642	1.327	.025	.782	.864	
POL3	.833	.021	583	642	1.351	.025	.792	.87	
MEASLE	.873	.018	583	642	1.298	.020	.838	.90	
FULLIM	.744	.024	583	642	1.363	.033	.696	.79	
RESPIR	.084	006	2994	3208	1.043	.068	072	.09	
DIARR2	.121	.008	2994	3208	1.288	.066	.105	.13	
DIARR1	.049	.004	2994	3208	1.018	085	.041	.057	
ORSTRE	.353	027	414	387	1.063	.077	.299	.408	
MEDTRE	.517	.028	414	387	1 025	054	.461	.57	
			Number	of cases					
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		Standard			Design	Relative	Confider	nce limits	
	Value	епог	Unweighted	Weighted	effect	error			
Variable	(R)	(SE)	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SI	
URBRUR	1.000	.000	1200	1210	NAC	.000	1.000	1.000	
SECOND	.388	.025	1200	1210	1.803	.065	.337	.439	
CUWORK	.203	.009	1200	1210	.749	.043	.186	.220	
AGEM20	.472	.021	1180	1190	1.452	.045	.430	.514	
EVBORN	3.245	.083	1118	1120	1.295	.026	3.079	3.41	
EVB40	4.863	.253	274	275	1.799	.052	4.358	5.368	
SURVIV	2.977	.072	1118	1120	1.289	.024	2.832	3.121	
КМЕТНО	1.000	.000	1118	1120	NAC	.000	1.000	1.000	
KSRCE	.991	.004	1118	1120	1.384	.004	.983	.999	
EVUSE	.811	.017	1118	1120	1.424	.021	.777	.844	
CUSE	.603	.017	1118	1120	1.132	.027	.570	.636	
CUMODE	.585	.016	1118	1120	1.088	.027	.553	.61	
CUPILL	.173	.013	1118	1120	1.128	.074	.148	.199	
CUIUD	.363	.019	1118	1120	1.340	.053	.325	.402	
CUCOND	.024	.005	1118	1120	1.091	.208	014	.034	
PSOURC	.286	.021	636	655	1.155	.072	.245	.32	
NOMORE	.700	.015	1118	1120	1.059	.021	.671	.729	
DELAY	.143	.011	1118	1120	1.035	.076	.122	.16	
IDEAL	2.556	.035	1004	1001	.937	.014	2.485	2.620	
ANTCAR	.675	.032	827	820	1.627	.047	.611	.739	
NTETAN	.320	.026	827	820	1.341	.080	.269	.37	
MEDELI	.629	.039	827	820	1.945	.062	.551	.701	
VACREC	.626	.036	137	148	.875	.058	.554	.698	
BCG	.964	.022	137	148	1.453	.023	.919	1.009	
DPT3	.906	.028	137	148	1.162	.031	.850	.96	
POL3	.934	.018	137	148	.886	.019	.897	.97(	
MEASLE	.899	.017	137	148	.690	.019	.865	.934	
FULLIM	.834	.031	137	148	1.013	.037	.772	.890	
RESPIR	.088	.014	795	789	1.291	.158	.060	.11:	
DIARR2	.121	.016	795	789	1.301	.131	.089	.15	
DIARR1	.046	.008	795	789	1.030	.172	.030	.06;	
ORSTRE	.271	.059	112	95	1.263	.218	.153	.389	
MEDTRE	.548	.064	112	95	1.223	.117	.420	.67	

		Standard	Number	of cases	Design	Relative	Confide	nce hmits
Variable	Value (R)	error (SE)	Unweighted (N)	Weighted (WN)	effect (DEFT)	спог (SE/R)	R-2SE	R+2SF
UKBRUR	.000	.000	2612	2857	NAC	.000	000	.000
SECOND	.159	.013	2612	2857	1 846	.083	.133	.186
CUWORK	.137	.010	2612	2857	1 512	.074	.116	.157
AGEM20	.698	.014	2493	2725	1.472	.019	.671	725
EVBORN	4.093	.059	2400	2626	1 068	.014	3 975	4.210
EVB40	6.697	.160	501	556	1.346	.024	6.377	7.017
SURVIV	3.538	056	2400	2626	1.248	.016	3.426	3.651
CMETHO	1.000	.000	2400	2626	NAC	000	1.000	1.000
KMDMET	1.000	.000	2400	2626	NAC	000	1.000	1.000
<b>CSRCE</b>	970	005	2400	2626	1.307	.005	.960	.975
EVUSE	.701	.012	2400	2626	1.309	.017	.677	.726
CUSE	.505	.015	2400	2626	1.482	.030	.475	.536
	482	.014	2400	2626	1.394	.029	.454	.51
	.141	.011	2400	2626	1.608	.081	.118	.164
	.310	.011	2400	2626	1.148	.035	.288	.332
LUCOND	.009	.002	2400	2626	995	.212	.005	.013
SOURC	.409	.018	1153	1266	1.254	.044	.372	44:
NOMORE	.692	.012	2400	2626	1 261	.017	668	.716
DELAY	.150	.008	2400	2626	1 052	.051	.134	165
DEAL	2.790	.026	2006	2162	990	.009	2,738	2.841
ANICAK	.434	.016	2351	2588	1.350	037	.401	460
VIETAN	.370	.018	2351	2588	1.543	_047	.335	406
MEDELI	.324	.023	2351	2588	1.959	.069	.279	365
VACKEC	.542	.035	446	493	1 463	064	.473	611
	.925	013	446	493	1 031	.014	899	.951
	. /98	.025	446	493	1.345	032	.747	845
	.803	.026	446	493	1.386	033	.751	853
MEASLE	.866	.022	446	493	1 385	.026	.821	910
	.717	030	446	493	1414	042	.657	778
LESPIK	.082	.006	2199	2419	.956	.073	.070	.095
JAKK2	.121	009	2199	2419	1 278	077	.102	139
	.050	005	2199	2419	1 012	.097	.040	059
JRSTRE	.380	.029	302	292	.965	077	.322	439
MEDTRE	.507	031	302	292	975	.061	.444	569

		Standard	Number	of cases	Design	Relative	Confider	nce limits
Variable	Value (R)	е <del>п</del> ог (SE)	Unweighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	R-2SE	R+2SE
URBRUR	.299	.029	3565	3440	3.757	.096	.241	.357
SECOND	.179	.017	3565	3440	2.606	.093	.146	.212
CUWORK	.103	.011	3565	3440	2.198	.108	.081	.126
AGEM20	.716	.017	3305	3204	2.209	.024	.682	.751
EVBORN	4.335	.089	3308	3207	1.656	.020	4.157	4.512
EVB40	7.133	.140	683	676	1.166	.020	6.854	7.413
SURVIV	3.494	.062	3308	3207	1.518	.018	3.370	3.619
KMETHO	.990	.002	3308	3207	1.259	.002	.985	.994
KMDMET	.988	.002	3308	3207	1.268	.002	.983	.993
KSRCE	.834	.014	3308	3207	2.111	.016	.807	.861
EVUSE	.503	.016	3308	3207	1.882	.033	.470	.535
CUSE	.314	.015	3308	3207	1.918	.049	.283	.345
CUMODE	.297	.016	3308	3207	2 033	.054	.265	.329
CUPILL	.107	.007	3308	3207	1.386	.070	.092	.122
CUIUD	.164	.012	3308	3207	1.897	.075	.139	.188
CUCOND	.012	.002	3308	3207	1.187	.188	007	.016
PSOURC	.285	.023	927	953	1.539	.080	.239	.331
NOMORE	.591	.011	3308	3207	1.305	.019	.568	.613
DELAY	.188	.008	3308	3207	1.240	.045	.171	.205
IDEAL	3.241	.058	2320	2296	1.663	.018	3.125	3.356
ANTCAR	.475	.013	3830	3661	1.337	.028	.448	.502
NTETAN	.466	.013	3830	3661	1.343	.028	.440	.492
MEDELI	.297	.018	3830	3661	1.979	.062	.260	.334
VACREC	.527	.028	684	674	1.456	.053	.471	583
BCG	.830	.019	<b>68</b> 4	674	1.357	.023	.792	.869
DPT3	.663	.030	684	674	1.643	045	,603	.723
POL3	.704	.028	684	674	1.621	.040	.647	.761
MEASLE	.721	.027	684	674	1.573	.037	.667	.775
FULLIM	.548	.027	684	674	1.441	.050	.494	.603
KESPIK	.086	.005	3471	3326	.921	.054	.077	.096
DIARR2	.153	.010	3471	3326	1.474	.064	133	.173
DIARR1	.067	.007	3471	3326	1.516	.101	054	.081
OKSTRE	.248	.024	497	509	1.203	.096	200	.295
MEDTRE	.383	.027	497	509	1.196	.072	.328	.437

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		Standard	Number of a		Design	Relative	Confide	nce limits
Variable	Value (R)	error (SE)	Unweighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	R-2SE	R+251
URBRUR	1.000	.000	986	1029	NAC	.000	1.000	1.00
SECOND	.382	.038	986	1029	2.479	101	.305	.45
CUWORK	222	.026	986	1029	1.975	.118	.170	.27
AGEM20	.532	.029	956	1004	1.777	.054	.475	.59
EVBORN	3.720	.169	912	960	1.898	.045	3.382	4.05
EVB40	5.595	.261	213	225	1.310	047	5.073	6.11
SURVIV	3.184	.125	912	960	1.800	.039	2.933	3.43
кметно	.995	.003	912	960	1.438	.003	.988	1.00
KSRCE	.947	.014	912	960	1.838	014	.919	.97
EVUSE	.702	.028	912	960	1 832	.040	647	.75
CUSE	.481	.026	912	960	1.595	.055	.428	.53
CUMODE	.454	.028	912	960	1.727	.063	.397	.51
CUPILL	.138	.014	912	960	1.245	.103	.109	.16
CUIUD	.276	.024	912	960	1.606	.086	.229	.32
CUCOND	.021	.006	912	960	1.321	.302	.008	.03
PSOURC	.233	.038	394	435	1.759	.161	.158	.30
NOMORE	.682	.021	912	960	1.383	.031	.640	.72
DELAY	.166	.017	912	960	1.343	.100	.133	.20
DEAL	2.810	.070	734	794	1.477	.025	2 669	2.95
ANTCAR	.620	020	847	860	.940	.032	.581	.65
NTETAN	.446	.025	847	860	1.230	.057	.395	.49
Medeli	.517	.038	847	860	1.735	.074	.441	.59
VACREC	.491	.055	149	165	1.395	.113	.380	.60
BCG	.888	.038	149	165	1.517	.043	.812	.96
DPT3	.721	.050	149	165	],408	.070	.620	82
POL3	.782	041	149	165	1.252	052	700	86
MEASLE	.802	.053	149	165	1.675	.066	.695	.90
FULLIM	.636	.054	149	165	1.412	.085	.528	.74
RESPIR	.090	.007	794	813	.624	.074	.077	.10
DIARR2	.173	031	794	813	2.067	178	111	.23
DIARR1	.074	.019	794	813	1.891	253	.037	.11
ORSTRE	.162	.041	129	141	1.292	.251	.081	.24
MEDTRE	.381	.060	129	141	1.315	.158	.260	.50

		Standard	Number	of cases	Design	Relative	Confider	nce limits
Variable	Value (R)	error (SE)	Unweighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	R-2SE	R+2SE
URBRUR	.000	.000	2579	2411	NAC	.000	.000	.000
SECOND	.093	.012	2579	2411	2.095	.129	.069	.116
CUWORK	.053	.008	2579	2411	1.802	.150	.037	.069
AGEM20	.801	.014	2349	2200	1.641	.017	.774	.828
EVBORN	4.597	.075	2396	2247	1.144	.016	4.448	4.746
EVB40	7.903	.144	470	451	1.053	.018	7.616	8.190
SURVIV	3.627	.056	2396	2247	1.125	.015	3.514	3.739
KMETHO	.987	.003	2396	2247	1.196	.003	.982	.993
KMDMET	.985	003	2396	2247	1.213	.003	.979	.991
KSRCE	.786	.016	2396	2247	1.934	.021	.754	.81
EVUSE	.417	.017	2396	2247	1.688	.041	.383	.451
CUSE	.243	.015	2396	2247	1.725	.062	.212	.273
CUMODE	.230	.015	2396	2247	1.802	.067	.199	.261
CUPILL	.093	.009	2396	2247	1.522	.097	.075	.112
CUIUD	.116	.009	2396	2247	1.405	.079	.097	.134
CUCOND	.008	.002	2396	2247	.982	.222	.005	.012
PSOURC	.329	.029	533	517	1.429	.088	.271	.387
NOMORE	.552	.014	2396	2247	1.383	.025	.523	.580
DELAY	.197	.010	2396	2247	1.266	.052	.176	.217
IDEAL	3.468	.059	1586	1502	1.309	.017	3.349	3.587
ANTCAR	.431	.015	2983	2801	1.301	.034	.401	.460
NTETAN	.472	.016	2983	2801	1.405	.033	.441	.504
MEDELI	.229	.018	2983	2801	1.914	.080	.193	.266
VACREC	.539	.033	535	509	1.516	.061	.473	.604
BCG	.812	.022	535	509	1.276	.027	.768	.855
DPT3	.644	.035	535	509	1.677	.054	.574	.714
POL3	678	.034	535	509	1.674	.050	.610	.746
MEASLE	.694	.030	535	509	1.492	.043	.635	.754
FULLIM	.520	.030	535	509	1.371	.057	.460	.579
RESPIR	.085	.006	2677	2512	1.012	.068	.074	.097
DIARR2	.146	.008	2677	2512	1.098	.055	.130	.163
DIARR1	.065	.007	2677	2512	1.328	102	.052	.078
ORSTRE	.280	.025	368	368	1.038	.089	.230	.331
MEDTRE	.383	.030	368	368	1.137	.078	.323	.443

NAC = Not able to compute

# APPENDIX D DATA QUALITY TABLES

### APPENDIX D

## DATA QUALITY TABLES

	м	ales	Fer	nales		М	ales	Fer	nales
lge	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
:1	798	2.7	733	2.5	36	253	0.9	277	0.9
	854	2.9	767	2.6	37	256	0.9	336	1.1
	839	2.9	777	2.6	38	336	1.1	328	1.1
	846	2.9	811	2.7	39	219	0.7	259	0.9
	955	3.3	925	3.1	40	472	1.6	496	1.7
	912	3.1	898	3.0	41	217	0.7	202	0.7
	887	3.0	887	3.0	42	306	1.0	305	1.0
	768	2.6	783	2.6	43	211	0.7	211	0.7
	800	2.7	786	2.6	44	224	0.8	243	0.8
	882	3.0	845	2.8	45	365	1.2	429	1.4
0	843	2.9	824	2.8	46	211	0.7	177	0.6
1	851	2.9	740	2.5	47	216	0.7	214	0.7
2	838	2.9	746	2.5	48	204	0.7	198	0.7
3	754	2.6	753	2.5	49	131	0.4	114	0.4
ļ	739	2.5	756	2.5	50	228	0.8	241	0.8
5	723	2.5	691	2.3	51	128	0.4	158	0.5
5	695	2.4	669	2.2	52	226	0.8	306	1.0
7	624	2.1	619	2.1	53	137	0.5	125	0.4
3	582	2.0	603	2.0	54	126	0.4	119	0.4
)	570	1.9	508	1.7	55	267	0.9	457	1.5
)	478	1.6	642	2.2	56	176	0.6	90	0.3
1	383	1.3	444	1.5	57	124	0.4	75	0.3
2	452	1.5	502	1.7	58	122	0.4	72	0.2
3	349	1.2	487	1.6	59	121	0.4	65	0.2
1	401	1.4	369	1.2	60	261	0.9	530	1.8
5	454	1.6	653	2.2	61	77	0.3	37	0.1
6	416	1.4	413	1.4	62	148	0.5	101	0.3
	430	1.5	485	1.6	63	113	0.4	50	0.2
3	426	1.5	455	1.5	64	82	0.3	45	0.2
<b>)</b>	309	1.1	349	1.2	65	303	1.0	343	1.2
)	528	1.8	619	2.1	66	56	0.2	33	0.1
[	303	1.0	316	1.1	67	80	0.3	41	0.1
2	422	1.4	410	1.4	68	55	0.2	30	0.1
5	287	1.0	321	1.1	69	36	0.1	14	0.0
	281	1.0	290	1.0	70+	636	2.2	579	1.9
,	482	1.6	267	1.9		,			
					Don't k	now/	<b>a</b>	-	
					Missin	g 2	0.0	3	0.0
					m - 1	00000	100.0	00745	100.0

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.

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

Five-year age distribution of the de facto household population of women aged 10-54, fiveyear age distribution of interviewed ever-married women aged 15-49, and percentage of eligible women who were interviewed (weighted), Egypt 1992

	Houschold j of wo	population men	Ever-n wor	narried nen	Intervi women aj	Percentage	
Age	Number	Percent	Number	Percent	Number	Percent	(weighted)
10-14	3819	NA	NA	NA	NA	NA	NA
15-19	3090	21.8	429	4.3	423	4.3	98.5
20-24	2445	17.2	1386	13.9	1371	13.9	98.9
25-29	2355	16.6	2043	20.5	2013	20.4	98 5
30-34	1956	13.8	1860	18.6	1842	18.7	<b>99</b> .0
35-39	1768	12.4	1723	17.3	1704	17.3	98.9
40-44	1457	10.3	1425	14.3	1409	14.3	98.9
45-49	1131	8 0	1118	11.2	1107	11.2	99.0
50-54	948	NA	NA	NA	NA	NA	NA
15-49	14203	100.0	9985	100.0	9868	100.0	98.8

Note: The de facto population includes all residents and nonresidents who slept in the household the night before interview.

NA = Not applicable

### Table D.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Egypt 1992

Subject	Reference group	Percentage missing information	Number of cases
_			
Birth date	Births in last 15 years	111	0(2)(5
Month only		11.1	26365
Month and year		0.0	26365
Age at death	Deaths to births in last 15 years	0.1	3046
Age/date at first union <sup>1</sup>	Ever-married women	0.0	9864
Respondent's education	Ever-married women	0.0	9864
Child's size at birth	Births in last 59 months	0.5	1048
Anthropometry <sup>2</sup>	Living children age 0-59 months		
Height		5.5	8089
Weight		5.2	8089
Height and weight missing		5.5	8089
Diarrhea in last 2 weeks	Living children age 0-59 months	0.3	8089
<sup>1</sup> Both year and age missing <sup>2</sup> Child not measured			

### Table D.4 Births by calendar year since birth

Distribution of births by calendar years since birth for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year, Egypt 1992

	Nur	nber of	binths	Per comp	rcentage dete bir	e with th date <sup>1</sup>	5	Sex ratio at birth <sup>2</sup>	)	Calc	endar ra	цо <sup>3</sup>		Male	:		Fema	le
Year	L	D	Т	L	D	Т	L	D	Т	L	D	T	L	D	T	L	D	Т
92	1459	51	1511	<del>99</del> .9	100.0	<del>99</del> 9	107 8	124.3	108.3	NA	NA	NA	757	29	786	702	23	725
91	1587	120	1707	100.0	<b>98.8</b>	99.9	115.1	115.8	115.2	104.9	135.2	106.5	849	64	914	738	55	793
<b>9</b> 0	1568	125	1694	99.9	100.0	99.9	105.5	124.9	106.8	97.6	93.5	97.3	805	70	875	763	56	819
89	1626	149	1774	<b>99</b> .9	99.3	<del>99</del> .9	101 5	91.3	100.6	96 4	104.9	97 0	819	71	890	807	78	884
88	1806	158	1964	100.0	100.0	100.0	106.6	119.1	107.6	107.6	105.0	107.3	932	86	1018	874	72	946
87	1732	152	1884	99.8	98.3	<b>99</b> .7	99.6	108.1	100.2	97.1	75.8	94.9	864	- 79	943	868	73	941
86	1763	244	2008	90.3	65.0	87.2	96.9	140.4	101.3	108.7	125.0	110.5	868	143	1010	896	102	<b>99</b> 7
85	1512	239	1751	89.7	63 6	86.2	95.9	91.8	95.4	92.2	96 9	92.8	740	114	855	772	124	896
84	1518	248	1766	86.0	53 1	81.4	102 0	100 5	101.8	96 4	98.6	96.7	767	124	891	752	124	875
83	1637	265	1902	85.5	61.3	82.1	105.4	90.8	103 3	NA	NA	NΛ	840	126	966	797	139	936
88-92	8046	603	8649	99.9	99.6	99.9	107.2	112.4	107.5	NA	NA	NΛ	4162	319	4481	3884	284	4168
83-87	8163	1149	9312	90.4	65.7	87.4	99.9	104.4	100.4	NA	NA	NA	4079	587	4666	4084	562	4646
78-82	7088	1288	8376	83.5	55 7	79 2	104.3	96.8	103.1	NA	NA	NA	3619	634	4253	3469	655	4123
73-77	4830	1240	6070	83.6	51.6	77.0	109.6	107.0	109.0	NΛ	NA	NA	2525	641	3166	2305	599	2904
< 73	4281	1521	5802	79.2	47.7	70.9	109.2	106.4	108.5	NA	NA	NA	2235	784	3019	2046	737	2783
All	32408	5801	38209	88 7	59-3	84 3	105.3	104.5	105.2	NA	NA	NA	16620	2965	19585	15787	2836	18624

NA = Not applicable

<sup>1</sup>Both year and month of birth given

 $^{2}(B_{m}/B_{f})^{*}100$ , where  $B_{m}$  and  $B_{f}$  are the numbers of male and female births, respectively

 $^{(3)}_{3}[2B_{x}/(B_{x+1}+B_{x+1})]*100$ , where B<sub>x</sub> is the number of births in calendar year x

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

Distribution of reported deaths under 1 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, Egypt 1992

Age at death			F9	,	Tota
(in days)	0-4	5-9	10-14	15-19	0-19
<1	44	67	63	36	210
1	48	47	39	38	171
2	21	30	21	15	87
3	23	43	26	27	120
4	9	11	9	4	32
5	16	10	12	22	61
6	9	17	19	15	60
7	57	172	123	110	463
8	2	4	10	0	16
9	10	7	14	3	33
10	7	1	8	9	25
11	3	2	2	3	10
12	2	4	5	5	17
13	2	3	5	0	10
14	5	5	9	4	23
15	5	26	23	15	69
16	3	1	2	1	7
17	0	1	0	3	4
18	0	2	1	1	4
19	0	1	1	0	3
20	1	4	7	6	18
21	1	0	0	2	3
22	5	1	2	1	9
23	0	0	0	2	2
24	0	0	1	0	2
25	7	5	3	1	16
26	0	0	0	1	1
27	1	0	1	1	3
29	0	0	0	0	1
30	0	3	5	0	9
31+	0	2	0	0	2
Total 0-30	283	468	410	327	1489
Percent early neonatal <sup>1</sup>	60.6	47.9	45.8	47.9	49.7

### Table D.6 Reporting of age at death in months

Distribution of reported deaths under 2 years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods of birth preceding the survey, Egypt 1992

Age at death	Numb	er of years p	receding the	survey	Tota
(in months)	0-4	5-9	10-14	15-19	0-19
<] <sup>a</sup>	283	468	410	327	1489
1	21	46	43	42	152
2	28	62	54	54	198
3	29	41	69	53	191
4	26	37	63	47	172
5	18	43	26	33	121
6	32	38	66	66	202
7	31	49	47	40	168
8	10	23	40	54	127
9	22	34	54	32	143
10	3	9	11	6	29
11	6	11	14	15	47
12	32	51	94	119	296
13	0	3	6	4	13
14	5	4	9	10	28
15	2	6	2	3	14
16	3	4	4	5	16
17	0	3	0	1	4
18	24	54	62	68	208
19	1	1	1	0	3
20	1	0	2	1	5
21	1	0	0	0	1
22	1	0	0	1	2
23	0	0	0	3	3
24+	3	2	1	0	6
l year	2	8	3	11	23
Total 0-11	508	861	898	<b>77</b> 0	3038
Percent neonatal <sup>b</sup>	55.7	54.3	45.7	42.5	<b>49</b> .0

# **APPENDIX E**

## QUESTIONNAIRES

### EGYPT DEMOGRAPHIC AND HEALTH SURVEY HOUSEHOLD SCHEDULE

10	ENTIFICATION	
GOVERNORATE	PSU/SEGMENT NO	GOVERNORATE
KI SM/MARQAZ	BUILDING NO	
SHIAKHA/VILLAGE	HOUSE NO	PSU/SEGMENT NO.
HOUSEHOLD NO		
URBAN1 RURAL2 LARGE CITY1 SMALL CITY SUBSAMPLE: YES1 NO2	2 TOWN3 VILLAGE4	HOUSEHOLD NO. URBAN/RURAL
NAME OF HOUSEHOLD HEAD		LOCALITY SUBSAMPLE

	10154	VILWER VIS	113		
	1	2	3	FINA	L VISIT
DATE				DAY MO	NTH YEAR
TEAM				TEAM	
INTERVIEWER'S NAME				INTERVIEWE	R
SUPERVISOR'S NAME				SUPERVISOR	
RESULT				RESULT	·
NEXT VISIT: DATE				TOTAL VISIT	s
RESULT CODES: 1 COMPLETED 2 NO HOUSEHOLD MEMB AT HOME AT THE TI 3 ENTIRE HOUSEHOLD 4 POSTPONED	ER AT HOME OR N ME OF VISIT ABSENT FOR AN E	O COMPETEN	T PERSON RIOD	TOTAL IN HOUSEHOLI TOTAL ELIGII WOMEN	
5 REFUSED 6 DWELLING VACANT O	R ADDRESS NOT A	DWELLING		TOTAL ELIGI MEN	
7 DWELLING DESTROYE 8 DWELLING NOT FOUN 9 OTHER	CSPECIFY	)		LINE NO. OF RESPONDENT HOUSEHOLD SC	
ADDRESS CHECKED (by	NAME :		)	YES 1 1	10 2
REINTERVIEW	_			1	2
		OFFICE	EDITOR	CODEP	KEYED
	FILLD LUTION		LUTION	CODER	NEIER

FIELD EDITOR	UFFICE EDITOR	CODER	KETER
	<u> </u>		

HOUSEHOLD SCHEDULE We would like some information about the people who usually live in your household or who are staying with you now.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELJ	ATIONSHIP TO '	THE HOUSEHOLD	HEAD	RESI	DENCE
				, <u> </u>			
001	002	006	007	008	009	010	011
	Please give me the names of the persons who usually live your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?	GENERATION NUMBER	COUPLE NUMBER	RELATIONSHIP TO HEAD OF HOUSEHOLD	Does (NAME) usually live here?	Did (NAME) sleep here last night?
	AFTER LISTING NAMES, ASK QUESTIONS 003-005 TO BE SURE THAT THE LISTING IS COMPLETE. THEN GO ON TO QUESTION 006.						
		-	FOR CODER	FOR CODER	FOR CODER	YES NO	YES NO
01						1 2	1 2
02						1 2	1 2
03		. <u></u>				12	12
04						1 2	1 2
05						_1 2	1 2
06						1 2	1 2
07						1 2	1 2
08						1 2	1 2
09						1 2	1 2
10						1 2	1 2
Just	to make sure that I have a comp	lete listing:	<b>-</b>				
00 <b>3</b>	Are there any other persons suc infants that we have not listed	h as small childrer !?	י סר	YES	ENTER EACH IN TA	NBLE N	10
004	In addition, are there any othe members of your family, such as lodgers or friends who usually	r people who may no domestic servants, live here?	ot be	YES .	ENTER EACH IN TA	BLE N	10
005	Do you have any guests or tempo here, or anyone else who siept	orary visitors stayi here last night?	ing	YES	ENTER EACH IN TA		o 🗆

LINE NO.	SEX	AGE	MARITAL STATUS
			IF AGE 15 YEARS OR OLDER
001	012	013	014
	Is (NAME) male or female?	How old was (NAME) at his/ her last birthday?	What is (NAME'S) current marital status? 1 MARRIED 2 WIDOWED 3 DIVORCED 4 NEVER MARRIED/ SIGNED CONTRACT
	MF	IN YEARS	
01	1 2		
02	12		
03	1 2		
04	1 2		
05	12		
06	12		
07	1 2		
08	1 2		
0 <b>9</b>	1 2		
10	1 2		

0-2B

LINE NO.	ELIGIE	BILITY		EDUCATION		
		HUSBAND SUBSAMPLE		IF AGE 3 YEARS OR OLDER		
001	015	016	017	018	019	020
	CIRCLE LINE	FOR HOUSEHOLDS	Has (NAME)	IF ATTE	NDED SCHOOL	
	WOMEN ELIGIBLE FOR INDIVIDUAL INTERVIEW (i.e., EVER- MARRIED WOMEN AGE 15-49 YEARS WHO ARE USUAL RESIDENTS OR STAYED THERE ON THE NIGHT BEFORE INTERVIEW)	SURVEY SUBSAMPLE: CIRCLE LINE NUMBER OF MEN ELIGIBLE FOR INDIVIDUAL INTERVIEW (I.E., MEN WHOSE WIVES ARE ELIGIBLE)	to school? IF YES, ASK QUESTIONS 018-020. IF NO, SKIP TO QUESTION 021.	What is the highest level of school (NAME) attended? 0 NURSERY 1 PRIMARY 2 PREPARATORY 3 SECONDARY 4 UPPER INTER- MEDIATE 5 UNIVERSITY 6 MORE THAN UNIVERSITY	What is the highest grade he/she success- fully completed at that level?	FOR PERSONS UNDER AGE 25: Is (NAME) still in school?
			YES NO	LEVEL	GRADE	YES NO
01	01	01	1 2			1 2
02	02	02	1 2			12
03	03	03	12			1 2
04	04	04	1 2			1 2
05	05	05	12			1 2
06	06	06	1 2			1 2
07	07	07	1 2			1 2
08	08	08	1 2			12
09	09	09	1 2			1 2
10	10	10	1 2			1 2
025 ENTER THE TOTAL NUMBER OF ELIGIBLE:				WOMEN	MEN	
026	TICK HERE IF CO	NTINUATION SHEET	USED :			

0-3A

LINE NO.	OCCUPATIO	)N	WORK	STATUS
	IF AGE 6 YEARS	OR OLDER	IF AGE & OLDER AN	YEARS OR D WORKING
001	021	022	023	024
	What is the main work that (NAME) does?	OCCUPA- TIONAL GROUP	Did (NAME) work during the last month?	ls (NAME) usually paid in cash or kind for the work he/she does? 1 CASH 2 KIND 3 BOTH 4 NOT PAID
		FOR CODER	YES NO	
01			1 2	1 2 3 4
02			1 2	1234
03			12	1 2 3 4
04			12	1234
05			12	1234
06			1 2	1 2 3 4
07			1 2	1 2 3 4
08			1 2	1 2 3 4
09			1 2	1 2 3 4
10			1 2	1 2 3 4



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES TO
027	What type of dwelling does your household live in?	APARTMENT
028	Is your dwelling owned by your household or not? IF OWNED: Is it owned solely by your household or jointly with someone else?	OWNED
029	MAIN MATERIAL OF THE FLOOR. RECORD YOUR OBSERVATIONS.	NATURAL FLOOR EARTH/SAND
030	How many rooms are there in your dwelling (excluding the bathrooms, kitchens and stairway areas)?	ROOMS
031	How many of the rooms are used for sleeping?	ROOMS
032	Is there a special room used only for cooking inside or outside the dwelling?	YES1 NO2
033	What is the source of water your household uses for drinking?	PIPED WATER PIPED INTO RESIDENCE/YARD/PLOT.11
034	Now long does it take to go there, get water, and come back?	MINUTES
	Does your household get water for other uses (e.g., for	YES1

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
			<u>.</u>
036	What is the source of water your household uses for for handwashing or dishwashing or other uses?	PIPED WATER   PIPED INTO RESIDENCE/YARD/PLOT.11   PUBLIC TAP	
		(SPECIFY)	
037	What kind of toilet facility does your household have?	MODERN FLUSH TOILET11 TRADITIONAL WITH TANK FLUSH12 TRADITIONAL WITH BUCKET FLUSH13 PIT TOILET/LATRINE21 NO FACILITY	
038	Are there electrical connections in all or only part of the dwelling unit?	YES, IN ALL1 YES, IN PART2 HAS NO ELECTRICAL CONNECTIONS3	
039	Does your household have:	YES NO	
	A radio with cassette recorder? A black and white television? A color television? A video?	RADIO12BLACK AND WHITE TELEVISION.12COLOR TELEVISION12VIDEO12	
040	Does your household have:	YES NO	
	An electric fan? A gas/electric cooking stove? A water heater? A refrigerator? A washing machine? A sewing machine?	ELECTRIC FAN	
041	Do you or any member of your household own: A bicycle? A private car/motorcycle? Transport equipment (truck, taxi, van, bus, etc.)? Residential or commercial buildings other than the dwelling unit? Farm or other land? Livestock(donkeys, horses, cows, sheep, etc.)/poultry? Mechanical face ourgent (tractor, etc.)?	YES NO BICYCLE	

### OBSERVATIONS

THANK THE RESPONDENT FOR PARTICIPATING IN THE SURVEY. COMPLETE QUESTIONS 042-043 AS APPROPRIATE. BE SURE TO REVIEW THE QUESTIONNAIRE FOR COMPLETENESS BEFORE LEAVING THE HOUSEHOLD.

042	DEGREE OF COOPERATION.	POOR,
043	INTERVIEWER'S COMMENTS:	
044	FIELD EDITOR'S COMMENTS:	
045	SUPERVISOR'S COMMENTS:	
046	OFFICE EDITOR'S COMMENTS:	

### EGYPT DEMOGRAPHIC AND HEALTH SURVEY WOMAN QUESTIONNAIRE

	IDE	NTIFICATION		
GOVERNORATE		PSU/SEGMENT BUILDING NO	NO	GOVERNORATE
SHIAKHA/VILLAGE		HOUSE NO		PSU/SEGMENT NO.
HOUSEHOLD NO URBAN1 RU	RAL2			HOUSEHOLD NO. URBAN/RURAL
LARGE CITY1 SM	ALL CITY2 EAD	2 TOWN3	VILLAGE	
NAME OF WOMAN				
LINE NUMBER OF WOMA	N			
	İNTE	RVIEWER VIS	ITS	
	1	2	3	FINAL VISIT
DATE				DAY MONTH YEAR
TEAM				TEAM
INTERVIEWER'S NAME				
RESULT				RESULT
NEXT VISIT: DATE Time				TOTAL VISITS

	FIELD EDITOR	OFFICE EDITOR	CODER	KEYER
NAME			. <u> </u>	
DATE	<u></u>			
SIGNATURE				

RESULT CODES: 1 COMPLETED 2 NOT AT HOME 3 POSTPONED

4 REFUSED 5 PARTLY COMPLETED 6 INCAPACITATED 7 OTHER

(SPECIFY)

### SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	S CODING CATEGORIES	KIP TO
101	RECORD THE TIME.	HOUR	
102	In what month and year were you born?	MONTH	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS	
104	What is your current marital status?	MARRIED	
105	Have you ever attended school?	YES1	►110
106	Are you currently attending school or the university?	YES1 NO2	
107	What is the highest level of school you attended?	PRIMARY	
108	What is the highest grade which you successfully completed at that level?	GRADE	
109	CHECK 107: PRIMARY PREPARATORY PREPARATORY PREPARATORY		<b>▶11</b> 1
110	Can you read and understand a letter or newspaper easily, with difficulty, or not at all?	EASILY	+112
111	Do you usually read a newspaper or magazine at least once a week?	YES	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES TO
112	How many hours on average do you listen to the radio each day?	NUMBER OF HOURS PER DAY
	IF LISTENS LESS THAN 1 HOUR, WRITE "OO".	ALL OF THE TIME
113	How many hours on average do you watch television each day?	NUMBER OF HOURS PER DAY
	IF WATCHES LESS THAN 1 HOUR, WRITE "OO".	ALL OF THE TIME
114	What is your religion?	MOSLEM
115	CHECK QUESTION 010 IN THE HOUSEHOLD QUESTIONNAIRE.	
	THE WOMAN INTERVIEWED TH IS NOT A USUAL RESIDENT IS (I.E., IF SHE IS A VISITOR)	E WOMAN INTERVIEWED 201
116	Now I would like to ask about the place in which you usually live.	
	Do you usually live in Cairo, Giza, Alexandria, another city or town, or in a village?	LOCALITY
	NAME OF CITY/TOWN/VILLAGE	OUTSIDE EGYPT5
117	In which governorate is that located?	GOVERNORATE
	GOVERNORATE	
118	Now I would like to ask some questions about the household in which you usually live.	APARTMENT
	In what type of dwelling does your household live?	OTHERS
119	Is your dwelling owned by your household or not?	OWNED
	IF OWNED: Is it owned solely by your household or jointly with someone else?	RENTED
120	Could you describe the main material of the floor in your dwelling?	NATURAL FLOOR EARTH/SAND

NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
121	How many rooms are there in your dwelling (excluding the bathrooms, kitchen, and stairway areas)?	ROOMS
122	How many of the rooms are used for sleeping?	ROOMS
123	Is there a special room used only for cooking inside or outside of the dwelling?	YES1 NO2
124	What is the source of water your household uses for drinking?	PIPED WATER PIPED INTO RESIDENCE/YARD/PLOT.11
125	How long does it take to go there, get water, and come back?	
126	Does your household get water for other uses (e.g., for handwashing and dishwashing) from the same source?	YES1 NO2
127	What is the source of water for such uses?	PIPED WATER PIPED INTO RESIDENCE/YARD/PLOT.11 PUBLIC TAP12 WELL WATER WELL IN RESIDENCE/YARD/PLOT21 PUBLIC WELL22 SURFACE WATER NILE/CANALS
128	What kind of toilet facility does your household have?	MODERN FLUSH TOILET11   TRADITIONAL WITH TANK FLUSH12   TRADITIONAL WITH BUCKET FLUSH13   PIT TOILET/LATRINE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
129	Does the dwelling unit have electrical connections in all or only part of the dwelling unit?	YES, IN ALL	
130	Does your household have: A radio with cassette recorder? A black and white television? A color television? A video?	YES   NO     RADIO1   2     BLACK AND WHITE TELEVISION.1   2     COLOR TELEVISION1   2     VIDEO1   2	
131	Does your household have: An electric fan? A gas/electric cooking stove? A water heater? A refrigerator? A washing machine? A sewing machine?	YES NO ELECTRIC FAN	
132	Do you or any member of your household own: A bicycle? A private car/motorcycle? Transport equipment (truck, taxi, van, bus, etc.)? Residential or commercial buildings other than the dwelling unit? Farm or other land? Livestock(donkeys, horses, cows, sheep, etc.)/poultry? Mechanical farm equipment (tractor, etc.)?	YES NO BICYCLE	

### SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES1 NO2—	206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES1 NO2—	204
203	How many sons live with you? And how many daughters live with you? IF NONE RECORD '00'.	SONS 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?	YES1 NO2—	206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you?	SONS ELSEWHERE	
206	Have you ever given birth to a boy or a girl who was	YES1	
	born alive but later died? IF NO, PROBE: Any baby who cried or showed any sign of life but only survived a few hours or days?	NO2—	<b> </b> →208
207	In all, how many boys have died? And how many girls have died?	BOYS DEAD	
	IF NONE RECORD '00'.	GIRLS DEAD	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE RECORD '00'.	TOTAL	
209	СНЕСК 208:		
	Just to make sure that I have this right: you have had in TOTAL births during your life. Is that correct?		
	YES NO NO CORRECT 201-209 AS NECESSARY		
210	CHECK 208:		
	ONE OR MORE NO BIRTHS		→225
	v	2	- 1

211 Now I would like to talk to you about all of your births, whether still alive or not, starting with the first one you had.								
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES. COMPLETE QUESTIONS 213-220 AS APPROPRIATE FOR EACH BIRTH. AFTER COMPLETING ALL BIRTHS, GO TO 221.								
212 What name was given to your (first,next) baby?	213 RECORD SINGLE OR MULTIPLE BIRTH STATUS.	214 [s (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/ her birthday?	216 Is (NAME) stil alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF LESS THAN 15 YEARS OF AGE: With whom does he/she live? IF 15 YEARS OR OLDER, GO TO NEXT BIRTH.	220 IF DEAD: How old was he/she when he/she died? IF "1 YEAR", PROBE: How many months old was (NAME)? RECORO DAYS IF LESS THAN 1 MONTH, MONTHS IF LESS THAN TWO YEARS, OR YEARS.
01 (NAME)	SING1 MULT2	BOY1 GIRL2	MONTH	YES1 NO2   220	AGE IN YEARS	YES1 (GO TO NEXT BIRTH)4 NO2	FATHER1 OTHER RELATIVE.2 SOMEONE ELSE3 (GO NEXT BIRTH)	DAYS1 MONTHS2 YEARS3 (GO NEXT BIRTH)
02(NAME)	SING1 MULT2	BOY1 GIRL2	MONTH	YES1 NO2 j 220	AGE IN YEARS	YES1 (GO TO NEXT BIRTH) 4 NO2	FATHER1 OTHER RELATIVE.2 SOMEONE ELSE3 (GO NEXT BIRTH)	DAYS1 MONTHS2 YEARS3 (GO NEXT BIRTH)
03] (NAME)	SING1 MULT2	BOY1 GIRL2	MONTH	YES1 NO2   220	AGE IN YEARS	YES1 (GO TO NEXT) BIRTH)*J NO2	FATHER1 OTHER RELATIVE.2 SOMEONE ELSE3 (GO NEXT BIRTH)	DAYS1 MONTHS2 YEARS3 (GO NEXT BIRTH)
04] (NAME)	SING1 Mult2	BOY1 GIRL2	MONTH	YES1 NO2   220	AGE IN YEARS	YES1 (GO TO NEXT BIRTH)4 NO2	FATHER1 OTHER RELATIVE.2 SOMEONE ELSE3 (GO NEXT BIRTH)	DAYS1 MONTHS2 YEARS3 (GO NEXT BIRTH)
05 (NAME)	SING1 Mult2	BOY1 GIRL2	MONTH	YES1 NO2   220	AGE IN YEARS	YES1 (GO TO NEXT BIRTH) 4 NO2	FATHER1 OTHER RELATIVE.2 SOMEONE ELSE3 (GO NEXT BIRTH)	OAYS1 MONTHS2 YEARS3 (GO NEXT BIRTH)
06 (NAME)	SING1 Mult2	BOY1 GIRL2	MONTH	YES1 NO2   220	AGE IN YEARS	YES1 (GO TO NEXT BIRTH)4 NO2	FATHER1 OTHER RELATIVE.2 SOMEONE ELSE3 (GO NEXT BIRTH)	DAYS1 MONTHS2 YEARS3 (GO NEXT BIRTH)

( <u> </u>								
212	213	214	215	216	217 IF ALIVE:	218 1f Alive:	219 1F LESS THAN 15 YEARS OF AGE	220 IF DEAD:
What name was given to your next baby?		is (NAME) a boy or a girl?	In what month and year was (NAME) born?	ls (NAHE) still alive?	How old was (NAME) at his/her last birthdav?	ls (NAME) living with you?	With whom does he/she live?	How old was he/she when he/she died? IF "1 YEAR", PROBE:
	RECORD SINGLE OR	•••••	PROBE: What is his/		RECORD AGE		IF 15 YEARS OR OLDER, GO TO NEXT BIRTH.	How many months old was (NAME)?
	MULTIPLE BIRTH STATUS.		her birthday?		YEARS.			RECORD DAYS IF LESS THAN 1 MONTH, MONTHS IF LESS THAN TWO YEARS OR YEARS
	<u>.</u>							
07	SING1	BOY1		YES1	AGE IN YEARS	YES1 (GO TO NEXT BIPTH)	FATHER1	DAYS1
(NAME)		G		220		NO2	SOMEONE ELSE 3	YEARS3
				220			(GO NEXT BIRTH)	(GO NEXT BIRTH)
08	SING1	BOY1	MONTH	YES1	AGE IN YFARS	YES1	FATHER1	DAYS1
	MULT2	GIRL2	YEAR	NO2		BIRTH)4	OTHER RELATIVE.2	MONTHS2
				220		NO2	SOMEONE ELSE3	YEARS3
							(GO NEXT BIRTH)	(GO NEXT BIRTH)
09	SING1	воу1		YES1	AGE IN	YES1	FATHER	DAYS1
	MULT2	GIRL2	YEAR	NO2	YEARS	(GO TO NEXT BIRTH) 4	OTHER RELATIVE.2	MONTHS2
(NAME)				Į		NO2	SOMEONE ELSE3	YEARS3
				220			(GO NEXT BIRTH)	(GO NEXT BIRTH)
10						×50 1		
10	SINU	BUT1		TES1	YEARS	GO TO NEXT	FATHER	DATS1
(NAME)	- MULT2	GIKLZ		NU2		RIKIH)43	OTHER RELATIVE.2	
				220		NU2	SOMEONE ELSES	YEARS3
							(GO TO 221)	(GO TO 221)
221 COMP	ARE 208 WITH	NUMBER OF	BIRTHS IN HISTOP	Y ABOVE AN	) MARK:			
NUMB	ERS ARE		AND I ILE) /		7			
	CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED.							
	FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED.							
	FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED.							
	FOR AGE AT DEATH 12 MONTHS: PROBE TO DETERMINE EXACT NUMBER OF MONTHS.						OF MONTHS.	
	FOR BIRTH INTERVALS OF FOUR YEARS OR MORE: PROBE FOR UNREPORTED BIRTHS.							
222 CHEC	K 215 AND ENT	IER THE NUR	IBER OF BIRTHS SI	NCE JANUARI	1987. IF NOM	NE, ENTER 101 A	ND GO TO QUESTION	224.
223 FOR 8 PR	EACH BIRTH SI ECEDING MONTH	INCE JANUAR IS. WRITE	NAME OF THE CHIL	IN MONTH	OF BIRTH IN CO FT OF THE "B"	DLUMN 1 OF CALE CODE.	NDAR AND "P" IN EA	ACH OF THE
224 1 47 7								
CC4 AL	224 AT THE BUTTUM OF THE CALENDAR, ENTER NAME AND BIRTH DATE OF THE LAST CHILD BORN PRIOR TO JANUARY 1987, IF APPLICABLE.							

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SK1P TO
225	Are you pregnant now?	YE\$1 NO2—	
226	How many months pregnant are you?	UNSURE8     MONTHS	
226A	ENTER "P" IN COLUMN 1 OF CALENDAR IN MONTH OF INTERVIEW A	NND IN EACH PRECEDING MONTH PREGNANT.	
227	At the time you became pregnant, did you want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not</u> want to become pregnant at all?	THEN1 LATER2 NOT AT ALL3	
228	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES1 NO2—	234
229	When did the last such pregnancy end?	MONTH	
230	CHECK 229: LAST PREGNANCY ENDED	LAST PREGNANCY ENDED BEFORE JANUARY 1987	→234
231	W How many months pregnant were you when the pregnancy ended?	MONTHS	
231A	ENTER "T" IN COLUMN 1 OF CALENDAR IN MONTH PREGNANCY TERM PRECEDING MONTH PREGNANT.	IINATED, AND "P" IN EACH	
232	Did you ever have any other such pregnancies?	YES1 NO2—	→234
233	ASK FOR DATES AND DURATIONS OF ANY OTHER PREGNANCIES BACK ENTER "T" IN COLUMN 1 OF CALENDAR IN MONTH PREGNANCY TERM PRECEDING MONTH PREGNANT.	TO JANUARY 1987. IINATED, AND "P" IN EACH	



NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
234	When did your last menstrual period start?	DAYS AGO
235	How old were you when you had your first menstrual period?	AGE
236	Between the first day of a period (i.e., menstrual cycle) and the first day of her <u>next</u> period, are there certain times when she has a greater chance of becoming pregnant than other times? PROBE: Are there any days during this time when the woman has a greater chance of becoming pregnant than on other days?	YES1 NO2 DON'T KNOW8 301
237	During which times of the monthly cycle does a woman have the greatest chance of becoming pregnant? PROBE: What are the days of each month when the woman should be more careful so as not to get pregnant during them?	DURING HER PERIOD

#### SECTION 3: CONTRACEPTIVE KNOWLEDGE AND USE

301 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. Which ways or methods have you heard about? CIRCLE CODE 1 IN 302 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN THE COLUMN, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 2 IF METHOD 1S RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 302, ASK 303-304 SEFORE PROCEEDING TO THE NEXT METHOD.

		302 Have you ever heard of (METHOD)? READ DESCRIPTION OF EACH METHOD.	303 Have you ever used (METHOD)?	304 Do you know where a person could go to get (METHOD)?
01	PILL Women can take a pill every day.	YES/SPONT1 YES/PROBED2 NO	YE\$1 NO2	YES1 NO2
02	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES/SPONT1 YES/PROBED2 NO3	YES1 NO2	YES1 NO2
03	INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	YES/SPONT	YES1 NO2	YES1 NO2
<u>~</u>	NORPLANT Women can have small rods placed in their arm by a doctor which stops them from becoming pregnant for several years.	YE\$/SPONT1 YE\$/PROBED2 NO3	YES1 NO2	YES1 NO2
05	DIAPHRAGN,FOAM,JELLY Women can place a sponge, suppository, diaphragm, jelly or cream in- side them before intercourse.	YES/SPONT	YES1 NO2	YE\$1 NO2
06	CONDOM Men can use a rubber - covering during sexual intercourse.	YES/SPONT1 YES/PROBED2 NO	YES1 NO2	YES1 NO2
07	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES/SPONT1 YES/PROBED2 NO	Have you ever had an operation to avoid having any more children?	Do you know a place where a person can have such an operation?
			YES1 NO2	YES1 NO2
08	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES/SPONT1 YES/PROBED2 NO	YES1 NO2	YES1 No2

### CONTRACEPTIVE METHOD TABLE CONTINUED

		302 Have you ever heard of (METHOD)? READ DESCRIPTION OF	303 Have you ever used (METHOD)?	304 Do you know where a person could go to get (METHOD)?	
		EACH METHOD.			
09	RHYTHM, PERIODIC ABSTINENCE , Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to become pregnant.	YE\$/SPONT1 YE\$/PROBED2 NO3	YES1 NO2	Do you know where a person can obtain advice on how to use periodic abstinence? YES1 NO2	
10	WITHDRAWAL Hen can be careful and pull out before ejaculation.	YE\$/SPONT1 YE\$/PROBED2 NO	YES1 NO2		
<u>יי</u>	PROLONGED BREASTFEEDING Women can prolong the time that they breastfeed their babies to delay the next pregnancy.	YES/SPONT1 YES/PROBED2 NO	YES1 NO2		
12	Have you heard of any other ways or methods that women or men can use to avoid pregnancy? 1	YES/SPONT1 NO3	YES1 NO2 YES1 NO2 YES1 NO2		
r	1				
3	05 CHECK 303: NOT A SINGLE ") (NEVER USED)	AT LEAST ONE "YES	S" □ → SKIP TO 3	09	
	306 Have you ever used an delay or avoid getting	ything or tried in any way to g pregnant?	YES	1 <u> </u>	
	307 ENTER "O" IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH				
	308 What have you used or CORRECT 303-305 (AND )	done? 302 (F NECESSARY).		3-2	
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO		
-----	---	--	------------		
309	What is the first thing you ever did or method you ever used to delay or avoid getting pregnant?	PILL01         IUD02         INJECTIONS03         NORPLANT04         DIAPHRAGM/FOAM/JELLY05         CONDOM	 		
310	Where did you go to get (FIRST METHOD USED) the first time? WRITE THE NAME AND ADDRESS OF THE SOURCE FROM WHICH THE RESPONDENT OBTAINED THE METHOD. PROBE IF NECESSARY TO IDENTIFY THE TYPE OF SOURCE AND THEN CIRCLE THE APPROPRIATE CODE. (NAME AND ADDRESS OF PLACE)	MINISTRY OF HEALTH FACILITY         URBAN HOSPITAL			
311	At the time when you first used, how many living children did you have, if any? IF NONE, RECORD '00' AND SKIP TO 313.	NUMBER OF CHILDREN			
312	How many sons did you have? How many daughters? IF NONE RECORD '00'.	SONS			
313	When you first began to use family planning, did you want to have another child but at a later time, or did you not want to have another child at all?	WANTED CHILD LATER1 DID NOT WANT ANOTHER CHILD2 OTHER3 (SPECIFY)			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	10
314	CHECK 104:		
	CURRENTLY WIDOWED/ MARRIED DIVORCED		→338
315	CHECK 225:		
	NOT PREGNANT PREGNANT OR UNSURE		→344
316	CHECK 303:		1
	WOMAN NOT WOMAN STERILIZED STERILIZED		+318A
317	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES1	→ 344
318	Which method are you using?	PILL         01-           IUD         02           INJECTIONS         03           NORPLANT         04           DIAPHRAGM/FOAM/JELLY         05	<b>↓</b> →320
318A	CIRCLE '07' FOR FEMALE STERILIZATION.	CONDOM	
319	Why did you decide to use (CURRENT METHOD) rather than some other method of family planning? PROBE: Any other reasons? RECORD ALL MENTIONED.	RECOMMENDATION OF GOVERNMENT         DOCTOR/NURSE.         RECOMMENDATION OF PRIVATE         DOCTOR/NURSE.         BRECOMMENDATION OF FAMILY         PLANNING WORKER/RAIDYA.         CRECOMMENDATION OF FAMILY         PLANNING WORKER/RAIDYA.         CRECOMMENDATION OF RELATIVES/         FRIENDS.         DOTO FOR OF THE METHODS.         SIDE EFFECTS OF OTHER METHODS.         SAW TV SPOT PROMOTING METHOD.         FNETHOD CONVENIENT TO USE.         GEASILY AVAILABLE.         HUSBAND PREFERRED.         WANTED PERMANENT METHOD.         JHUSBAND PREFERRED.         KANTED MORE EFFECTIVE METHOD.         OTHER         (SPECIFY)         DON'T KNOW.	+336
320	Why did you decide to use (CURRENT METHOD) rather than some other method of family planning? PROBE: Any other reasons? RECORD ALL MENTIONED.	RECOMMENDATION OF GOVERNMENT         DOCTOR/NURSE	

Ų.	QUESTIONS AND FILTERS	CODING CATEGORIES	TO
	1		
21	CHECK 318:	MINISTRY OF HEALTH FACILITY	
		URBAN HOSPITAL	
	SHE/HE STERILIZED	URBAN HEALTH UNIT12	
	take place?	RURAL HOSPITAL	
		RURAL HEALTH UNIT14	
	USING 100 $\longrightarrow$ where did you have the 100	UTHER GOVERNMENTAL FACILITY	
	inserted?	TEACHING HUSPITAL	
		REALTH INSURANCE ORGANIZATION. 17	
	WETHOD WETHOR	CURATIVE CARE ORGANIZATION18	
	Method the last time?		
		FRIVATE VOLONTART ORGANIZATION	
		ASSOCIATION 71	
	WRITE THE NAME AND ADDRESS OF THE SOURCE FROM UNITED	COL DDO JECT 22	
	THE RESONNENT OFTATION THE METHON DRORE IS NECESSARY	OTUED 23	
	TO IDENTIES THE TYPE OF SOUDCE AND THEN CIPCLE THE	MEDICAL PRIVATE SECTOR	
	APPROPRIATE CODE	PRIVATE HOSPITAL/CLINIC	
		PRIVATE DOCTOR	
		PHARMACY	
	(NAME AND ADDRESS OF PLACE)	OTHER PRIVATE SECTOR	
		MOSQUE HEALTH UNIT	
		CHURCH HEALTH UNIT	
		OTHER VENDOR (SHOP, KIOSK,	
		ETC.)	
-		FRIENDS/RELATIVES	→324
		OTHER	
		DON'T KNOW	→326
۷	HOW LONG does it take to travel from your home to	MINUIES	
	this place?		
		HUUKS	
	OTHERWISE RECORD HOURS	DON 1 KNOU 0008	
		DON 1 KNOW	
323			
	Is it easy or difficult to get there?	EASY1	
5	Is it easy or difficult to get there?	EASY1	
5	Is it easy or difficult to get there?	EASY1 DIFFICULT2	
5	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT	
,	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some	OTHER GOVERNMENTAL FACILITY TEACHING HOSPITAL	
5	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason?	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE	
;	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason?	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB	
5	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason?	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF	
	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason?	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEC	
	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEC REPUTATION OF SOURCE AS	
	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEC REPUTATION OF SOURCE AS GOOD PROVIDERD	
	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEC REPUTATION OF SOURCE AS GOOD PROVIDERD PREVIOUS EXPERIENCEE	
	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEC REPUTATION OF SOURCE AS GOOD PROVIDERD PREVIOUS EXPERIENCEE EASY ACCESS TO SOURCEF	
5	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEB RECOMMENDATION OF PREVIATION OF SOURCE AS GOOD PROVIDERD PREVIOUS EXPERIENCEE EASY ACCESS TO SOURCEF COST OF SERVICES REASONABLEG	
5	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEC REPUTATION OF SOURCE AS GOOD PROVIDERD PREVIOUS EXPERIENCEE EASY ACCESS TO SOURCEF COST OF SERVICES REASONABLEG OTHERH	
5	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEC REPUTATION OF SOURCE AS GOOD PROVIDERD PREVIOUS EXPERIENCEE EASY ACCESS TO SOURCEF COST OF SERVICES REASONABLEG OTHERH (SPECIFY)	
3	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEB RECOMMENDATION OF FRIEND/RELATIVEB RECOMMENDATION OF FRIEND/RELATIVEB REPUTATION OF SOURCE AS GOOD PROVIDERD PREVIOUS EXPERIENCEE EASY ACCESS TO SOURCEF COST OF SERVICES REASONABLEG OTHERH (SPECIFY) DON'T KNOWI	
3	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES)	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEC REPUTATION OF SOURCE AS GOOD PROVIDERD PREVIOUS EXPERIENCEE EASY ACCESS TO SOURCEF COST OF SERVICES REASONABLEG OTHERH (SPECIFY) DON'T KNOWI	
3	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES) Since you obtained the method from (CURRENT SOURCE), here you obtained there for follow to be advice the	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEB RECOMMENDATION OF FRIEND/RELATIVEC REPUTATION OF SOURCE AS GOOD PROVIDERD PREVIOUS EXPERIENCEE EASY ACCESS TO SOURCEF COST OF SERVICES REASONABLEG OTHERH (SPECIFY) DON'T KNOWI	
3	Is it easy or difficult to get there? Why did you decide to obtain your (CURRENT METHOD) from (CURRENT SOURCE IN 321) rather than from some other place? Any other reason? (RECORD ALL RESPONSES) Since you obtained the method from (CURRENT SOURCE), have you returned there for follow-up or advice about the method?	EASY1 DIFFICULT2 RECOMMENDATION OF GOVERNMENT DOCTOR/NURSEA RECOMMENDATION OF PRIVATE DOCTOR/NURSEB RECOMMENDATION OF FRIEND/RELATIVEB RECOMMENDATION OF FRIEND/RELATIVEB RECOMMENDATION OF FRIEND/RELATIVEB RECOMMENDATION OF PREVIOUS EXPERIENCEB GOOD PROVIDERD PREVIOUS EXPERIENCEE EASY ACCESS TO SOURCEF COST OF SERVICES REASONABLEG OTHERH (SPECIFY) DON'T KNOWI	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SK1P TO
326	CHECK 318:	USING PILL	 → 333
		USING OTHER METHODS	 →335 
327	Did you get the IUD at the place where you had it inserted or did you buy it from somewhere else?	YES, FROM THE SAME PLACE1- NO, FROM SOMEWHERE ELSE2	<b> </b> →331
328	From where did you obtain the IUD? WRITE THE NAME AND ADDRESS OF THE SOURCE FROM WHICH THE RESPONDENT OBTAINED THE METHOD. PROBE IF NECESSARY TO IDENTIFY THE TYPE OF SOURCE AND THEN CIRCLE THE APPROPRIATE CODE. (NAME AND ADDRESS OF PLACE)	MINISTRY OF HEALTH FACILITY         URBAN HOSPITAL         URBAN HEALTH UNIT         RURAL HOSPITAL         RURAL HOSPITAL         RURAL HEALTH UNIT         OTHER         OTHER GOVERNMENTAL FACILITY         TEACHING HOSPITAL         TEACHING HOSPITAL         16         HEALTH UNIT         17         OTHER GOVERNMENTAL FACILITY         TEACHING HOSPITAL         16         HEALTH INSURANCE ORGANIZATION.17         CURATIVE CARE ORGANIZATION.17         CURATIVE CARE ORGANIZATION.17         CURATIVE VOLUNTARY ORGANIZATION         EGYPT FAMILY PLANNING         ASSOCIATION         21         CSI PROJECT         22         OTHER         MEDICAL PRIVATE SECTOR         PRIVATE HOSPITAL/CLINIC         24         PRIVATE SCTOR         MOSQUE HEALTH UNIT         31         CHURCH HEALTH UNIT         32         OTHER VENDOR (SHOP, KIOSK,         ETC.)         33         FRIENDS/RELATIVES         41         OTHER         DON'T KNOW	
329	How much did it cost to buy the IUD from that place?	COST (IN POUNDS)	
330	Would you be willing to pay the following to buy the IUD from this source: (IF YES, CONTINUE WITH NEXT AMOUNT. IF NO, SKIP TO 331.) 5 pounds? 7 pounds? 10 pounds? 15 pounds? 20 pounds? 30 pounds? More than 30 pounds?	YES         NO           5         POUNDS	→331 ]

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES TO
331	Kow much did it cost to have the IUD inserted (including any extra fee for a physical examination)?	COST (IN POUNDS)
332	Would you be willing to pay the following to have an IUD inserted: (IF YES, CONTINUE WITH NEXT AMOUNT. IF NO, SKIP TO 336. FOR AMOUNT MORE THAN 200 POUNDS, SKIP TO 336 IF YES OR NO.)	
	5 pounds? 10 pounds? 25 pounds? 50 pounds? 100 pounds? 150 pounds? 200 pounds? More than 200 pounds?	YES       ND         5       POUNDS
333	How much does one cycle of pills cost you?	COST (IN PIASTRES)
334	Would you be willing to pay for a cycle of pills if it cost: (IF YES, CONTINUE WITH NEXT AMOUNT. IF NO, SKIP TO 336. FOR AMOUNT MORE THAN 5 POUNDS, SKIP TO 336 IF YES OR NO.)	
	50 piastres per cycle? 1 pound per cycle? 2 pounds per cycle? 3 pounds per cycle? 4 pounds per cycle? 5 pounds per cycle? More than 5 pounds per cycle?	50 PIASTRES.       1       2         1 POUND.       1       2         2 POUNDS.       1       2         3 POUNDS.       1       2         4 POUNDS.       1       2         5 POUNDS.       1       2         MORE THAN 5 POUNDS.       1       2         →336
335	How much did it cost to get your method?	COST (IN PIASTRES).1
	(IF LESS THAN I POUND, RECORD IN PLASTRES.)	COST (IN POUNDS)2
336	Are you having any problems in using (CURRENT METHOD)?	YES1 NO2→338
337	What is the main problem?	HUSBAND DISAPPROVES01         SIDE EFFECTS/ILLNESS CAUSED         BY METHOD02         SPOTTING/BLEEDING03         PERIOD DID NOT COME04         OTHER HEALTH CONCERNS05         RAN OUT OF SUPPLIES06         ACCESS/AVAILABILITY07         COSTS TOO MUCH08         FORGET TO TAKE/MISPLACE09         INCONVENIENT TO USE10         STERILIZED,         WANTS CHILDREN11         OTHER12         (SPECIFY)         DON'T KNOW

- 3-7

NO.	QUESTIONS AND FILTERS CODING CATEGORIES	SK I P TO
338	CHECK 303 AND 318: WOMAN OR HUSBAND STERILIZED HUSBAND STERILIZED	→342
339	In what month and year was the sterilization performed? MONTH	
340	ENTER STERILIZATION METHOD CODE IN MONTH OF INTERVIEW IN COLUMN 1 OF CALENDAR AND IN EACH MONTH BACK TO THE DATE OF THE OPERATION OR TO JANUARY 1987 IF OPERATION OCCURRED BEFORE 1987.	
341	CHECK 339: STERILIZED BEFORE JANUARY 1987 STERILIZED SINCE JANUARY 1987	_→401 _→344
342	CHECK 104: CURRENTLY WIDOWED/ MARRIED DIVORCED	→344
343	ENTER METHOD CODE FROM 318 IN CURRENT MONTH IN COLUMN 1 OF CALENDAR. THEN DETERMINE WHEN SHE STARTED USING THIS METHOD THIS TIME. ENTER METHOD CODE IN EACH MONTH OF USE. ILLUSTRATIVE QUESTIONS: - When did you start using this method continuously? - How long have you been using this method continuously?	
344	I would like to ask some questions about all of the (other) periods in the last few years during which you or your husband used a method to avoid getting pregnant. PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH THE MOST PERIOD OF USE AND GOING BACK TO JANUARY 1987. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. RECORD PERIODS OF USE AND NONUSE IN COLUMN 1 OF THE CALENDER. FOR EACH MONTH IN WHICH A METHOD WAS USED, ENTER THE CODE FOR THE METHOD; ENTER "O" IN THOSE MONTHS WHEN NO METHOD WAS USED. FOR EACH PERIOD OF USE, ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT. FOR EACH PERIOD OF USE, RECORD THE CODE FOR THE REASON FOR DISCONTINUATION IN COLUMN 2 OF THE CALENDAR NEXT TO LAST MONTH OF USE. NUMBER OF CODES ENTERED IN COLUMN 2 MUST BE THE SAME AS THE NUMBER OF INTERRUPTIONS OF CONTRACEPTIVE USE IN COLUMN 1. ILLUSTRATIVE QUESTIONS: COLUMN 1: -When was the last time you used a method? Which method was that? -When did you use the method then?	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
344A	COLUMN 2: -Why did you stop using the (METHOD)? -Did you become pregnant while using (METHOD), or did yo or stop for some other reason?	pu stop to get pregnant,	
	IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: "How many months did it take you to get pregnant after y AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.	you stopped using (METHOD)?	
345	CHECK CALENDAR:		
	METHOD USED NO METHOD USED IN MONTH OF IN MONTH OF JANUARY 1987	]	<b> </b> →347
346	I see that you were using (METHOD) in January 1987.	MONTH	L 351
	When did you start using (METHOD) <u>that time</u> ?	YEAR	
	THIS DATE SHOULD NOT PRECEDE THE DATE OF BIRTH OF ANY CHILD BORN BEFORE JANUARY 1987.		
347	I see that you were not using any method of contraception in January 1987. Did you ever use a method before that?	YES1 NO2—	<b> </b> →351
348	CHECK 215:		
	HAD BIRTH NO BIRTH		
			<b>↓</b> 350
349	Did you use a method between the birth of (NAME OF LAST CHILD BORN BEFORE JANUARY 1987) and January 1987?	YES1 NO2—	→ 351
350	When did you stop using a method the last time prior to January 1987?	MONTH	
	THIS DATE SHOULD NOT PRECEDE THE DATE OF BIRTH OF ANY CHILD BORN BEFORE JANUARY 1987.	7EAX	
351	СНЕСК 104:		
	CURRENTLY WIDOWED/		<b> </b> →401
351A	CHECK 318:		
	NOT CURRENTLY CURRENTLY USING USING A METHOD PERIODIC ABSTINENCE, WITHDRAWAL, OTHER TRADITIONAL METHOD V (SKIP TO	CURRENTLY USING A MODERN METHOD	<b> </b> →401
352	V Do you intend to use a method to delay or avoid pregnancy at any time in the future?	YES	<b>I</b> → 354 <b>I</b> → 357
		3	-9

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
353	What is the main reason you do not intend to use a method in the future?	WANTS CHILDREN.       01         LACK OF KNOWLEDGE       02         HUSBAND OPPOSED.       03         COSTS TOO MUCH.       04         SIDE EFFECTS.       05         HEALTH CONCERNS.       06         HARD TO GET METHODS.       07         RELIGION.       08         OPPOSED TO FAMILY PLANNING.       09         FATALISTIC.       10         OTHER PEOPLE OPPOSED.       11         INFREQUENT SEX.       12         DIFFICULT TO GET PREGNANT.       13         MENOPAUSAL/HAD HYSTERECTOMY.       14         INCONVENIENT.       15         OTHER       16         (SPECIFY)       98	<b>Ⅰ</b> →357
354	Do you intend to use a method within the next 12 months?	YES1 NO2 DON'T KNOW8	
355	When you use a method, which method would you prefer to use?	PILL	<b>→</b> 357
356	Where can you get (METHOD MENTIONED IN 355)? WRITE THE NAME AND ADDRESS OF THE SOURCE FROM WHICH THE RESPONDENT WOULD GET THE METHOD. PROBE IF NECESSARY TO IDENTIFY THE TYPE OF SOURCE AND THEN CIRCLE THE APPROPRIATE CODE. (NAME AND ADDRESS OF PLACE)	MINISTRY OF HEALTH FACILITY         URBAN HOSPITAL	► 359

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
357	Do you know of a place where you can obtain a method of family planning?	YES1 NO2—	<b>↓</b> 401
358	Where is that? WRITE THE NAME AND ADDRESS OF THE SOURCE FROM WHICH THE RESPONDENT WOULD GET THE METHOD. PROBE IF NECESSARY TO IDENTIFY THE TYPE OF SOURCE AND THEN CIRCLE THE APPROPRIATE CODE. (NAME AND ADDRESS OF PLACE)	MINISTRY OF HEALTH FACILITY         URBAN HOSPITAL	▶40'
359	How long does it take to travel from your home to this place? IF LESS THAN 2 HOURS, RECORD MINUTES. OTHERWISE, RECORD HOURS.	MINUTES	
360	Is it easy or difficult to get there?	EASY1 DIFFICULT2	

	SECTION 4: OTHER ISSUES RELATING TO CONTRACEPTION		
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	TO
401	CHECK 303: EVER USED NEVE FAMILY FAMI PLANNING PLAN	R USED LY NING	→440
402	CHECK 318: CURRENTLY NOT USING CURR PILL USIN	ENTLY	→416
403	Is this the first time that you have ever used the pill or have you used before?	FIRST TIME USED PILL1	<b> </b> →405
404	At the time you used the pill for the first time, did you consult a doctor or a nurse before you began using it?	YES1 NO2	
405	May I see the package of pills you are using now? RECORD NAME OF BRAND.	PACKAGE SEEN1           BRAND NAME	→408
406	COUNT AND RECORD THE TOTAL NUMBER OF PILLS IN THE CYCLE (PACKET) REGARDLESS OF THE PILLS ALREADY TAKEN.	211 282	
407	OBSERVE SEQUENCE IN WHICH PILLS TAKEN FROM CYCLE (PACKET) AND CIRCLE CORRECT CODE.	PILLS MISSING IN SEQUENCE1 PILLS MISSING OUT OF SEQUENCE2 NO PILLS MISSING	<b>+</b> 410
408	Do you know the brand name of the pills which you are using now? RECORD NAME OF BRAND.	BRAND NAME DON'T KNOW98	
409	Why don't you have a cycle (packet) of pills available?	HAS PERIOD, DOESN'T NEED YET01 COST TOO MUCH TO BUY CYCLE02 FORGOT TO BUY NEXT CYCLE03 RESTING FROM PILL04 MISPLACED/CAN'T FIND05 HUSBAND AWAY/ILL06 OTHER07 (SPECIFY)	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
410	At any time in the past month did you fail to take a pill for <u>more than one day</u> for any reason?	YES1 NO2-	↓412
411	What was the main reason you stopped taking the pill?	SIDE EFFECTS/ILLNESS01 SPOTTING/BLEEDING02 PERIOD DID NOT COME03 RAN OUT OF PILLS04 HUSBAND AWAY05 FORGOT TO TAKE/MISPLACED06 OTHER07 (SPECIFY)	
412	Just about everyone misses taking the pill sometime. What do you do when you forget to take two or more pills?	START TAKING AGAIN AS USUAL01 TAKE EXTRA/MISSED PILLS02 USE ANOTHER METHOD03 TAKE EXTRA PILL AND USE ANOTHER METHOD04 OTHER05 (SPECIFY) NEVER FORGOT06	
413	CHECK 321: CURRENT SOURCE: ALL OTHER PHARMACY SOURCES		 →417A
414	Do you usually obtain the pill yourself? IF NO: Who obtains the method usually?	RESPONDENT HERSELF1- HUSBAND2 OTHER3 (SPECIFY)	∎ →419
415	Since you began using the pill this time, have you have you yourself ever gone to a pharmacy to obtain the method?	YES1 NO2	↓ 419 ↓ ↓ 422
416	CHECK 303:	R USED	→431
417	Now I would like to ask some questions about the last time that you used the pill. During that time, did you yourself ever go to a pharmacy to obtain the pill?	YES1-	↓ ↓419
417A	Since you began using the pill this time, have you		1

NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
418	Did anyone else obtain the pill for you at a pharmacy? IF YES: Who obtained the pill for you from a pharmacy?	HUSBAND1 OTHER2 (SPECIFY) NO ONE ELSE
419	Now I would like to talk with you about the service which you received at the pharmacy. Did the anyone at the pharmacy tell or show you how to use the pill?	YES1 NO2
420	Did anyone at the pharmacy describe side effects or other problems which you might have while using the the pill?	YES1 NO2
421	Did anyone at the pharmacy ever tell you about other family planning methods which you might use?	YES1 NO2
422	When you began to use the pill (this/that) time, did you consult a doctor or a nurse?	YES1 NO2→431
423	Where did you go for this consultation? WRITE THE NAME AND ADDRESS OF THE SOURCE. PROBE IF WECESSARY TO IDENTIFY THE TYPE OF SOURCE AND THEN CIRCLE THE APPROPRIATE CODE. (NAME AND ADDRESS OF PLACE)	MINISTRY OF HEALTH FACILITY         URBAN HOSPITAL

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
424	Now I would like to talk with you about the service which you received at (SOURCE IN 423). Did you think that the wait for services was too long?	YES1 NO2	
425	Were you given a physical examination? IF YES: Was the doctor male or female?	EXAMINED BY MALE DOCTOR1 EXAMINED BY FEMALE DOCTOR2 NOT EXAMINED	
426	How much did it cost for the consultation (including any extra fee for a physical examination)? IF LESS THAN ONE POUND, RECORD '000'.	COST (IN POUNDS)	
427	In addition to the pill, were you told about other methods?	YES1 NO2	
428	Were you told how to use the pill?	YES1 NO2	
429	Were you told about problems or side effects which you might experience in using the pill?	YES1 NO2	
430	After you began using the pill, did you return to (SOURCE IN 423) for consultation or follow-up?	YES1 No2	
431	CHECK 318: NOT CURRENTLY CURRE	ENTLY	
		)	 →433A
432	CHECK 303 (IUD): EVER USED NEVER IUD IUD	R USED [	→440
			4-4

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
433	Now I would like to ask some questions about the last time that you used the IUD. Where did you obtain the IUD? WRITE THE NAME AND ADDRESS OF THE SOURCE. PROBE IF NECESSARY TO IDENTIFY THE TYPE OF SOURCE AND THEN CIRCLE THE APPROPRIATE CODE.	MINISTRY OF HEALTH FACILITY URBAN HOSPITAL
433a	(NAME AND ADDRESS OF PLACE) CHECK 321 AND CIRCLE THE CODE FOR THE SOURCE AT WHICH THE CURRENT USER HAD THE IUD INSERTED.	OTHER
		PRIVATE HOSPITAL/CLINIC24 PRIVATE DOCTOR
434	Now I would like to talk with you about the service which you received at (SOURCE 1N 432). Did you think that the wait for services was too long?	YES1 NO2
435	Were you given a physical examination? IF YES: Was the doctor male or female?	EXAMINED BY MALE DOCTOR1 EXAMINED BY FEMALE DOCTOR2 NOT EXAMINED
436	In addition to the IUD, were you told about other methods?	YES1 NO2
437	Were you told how to be sure that the IUD was in place?	YES1 NO2
438	Were you told about problems or side effects which you might experience in using the IUD?	YES1 NO2
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	ТО
440	There are many factors which help to influence the decision to use family planning. Can you tell me if any of the following ever caused you to seek more information about family planning? Advice from friends/relatives? Informational spots on television?	YES NO FRIEND/RELATIVES1 2 TV SPOTS1 2	
	Advice from government doctor/clinic staff? Advice from private doctor/clinic staff? Advice from raiyda or other family planning extension worker? A community pativity (o g _ o meeting)?	GOVERNMENT DOCTOR/CLINIC1       2         PRIVATE DOCTOR/CLINIC1       2         RAIYDA/OTHER FP WORKER1       2         COMMUNITY ACTIVITY       1	
ĺ	Other?	OTHER	
441	How did you first hear about family planning?	TELEVISION       .01         RADIO       .02         PRINT MEDIA       .03         HUSBAND       .04         OTHER RELATIVES OR FRIENDS       .05         GOVERNMENT DOCTOR/CLINIC       .06         PRIVATE DOCTOR/CLINIC       .06         PRIVATE DOCTOR/CLINIC STAFF       .06         PRIVATE DOCTOR/CLINIC STAFF       .07         RAIYDA/OTHER FP WORKER       .08         COMMUNITY MEETING       .09         OTHER       .10         (SPECIFY)	
442	In the last month, have you heard a message about family planning on: the radio? television?	YES NO RADIO1 2 TELEVISION1 2	
443	CHECK 105, 107 AND 110: ATTENDED PREPARATORY OR HIGHER LEVEL ABLE TO READ	NOT ABLE TO READ	
			4 
444	In the last month have you read an article about family planning in a newspaper or magazine?	YES1 NO2	
444	In the last month have you read an article about family planning in a newspaper or magazine? There are many spots or messages regarding family planning on television. Can you tell me about the spots or messages which you have found most informative or helpful for you?	YES1 NO2	
444	In the last month have you read an article about family planning in a newspaper or magazine? There are many spots or messages regarding family planning on television. Can you tell me about the spots or messages which you have found most informative or helpful for you? RECORD THE RESPONSE IN DETAIL. IF THE ANSWER IS A SERIES (E.G., KAREEMA MUHKTAR OR THE DOCTOR), PROBE TO FIND OUT WHICH SPECIFIC SPOTS IN THE SERIES WERE MOST HELPFUL OR INFORMATIVE. RECORD UP TO THREE SPOTS.	YES1 NO2 1 2 3 NEVER SAW FP MESSAGES997	

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NO. QUESTIONS AND FILTERS		CODING CATEGORIES	SKIP TO	
447	In general, do you approve or disapprove of couples using a method to avoid pregnancy?	APPROVES	$\overline{ }$	
448	If couples wish to avoid pregnancy, do you approve or disapprove of their using:	APPR DISAPPR DK		
	the condom?	CONDOM1 2 8		
	the IUD?	1UD1 2 8		
	female sterilization?	FEMALE STER1 2 8		
	withdrawal?	WITHDRAWAL1 2 8	1	
	male sterilization?	MALE STER1 2 8		
	the pill?	PILL1 2 8		
449	In general do you think that your religion allows couples to use family planning or it forbids it?	ALLOWS		
450	Do you think that your husband approves or disapproves of couples using a method to avoid pregnancy?	APPROVES		

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
507	Have you and your husband ever discussed the number of children you would like to have?	YES1 NO2	
508	Do you think your husband wants the <u>same</u> number of children that you want, or does he want <u>more</u> or <u>fewer</u> than you want?	SAME NUMBER	
509	CHECK 203 and 205: HAS LIVING CHILD(REN) V 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? HAS LIVING CHILD(REN) V If you could choose exactly the number of children to have in your whole life, how many would that be?	NUMBER	÷511
	RECORD SINGLE NUMBER OR OTHER ANSWER.	DON'T KNOW98	]
510	How many boys and how many girls?	BOYS         Image: Constraint of the second seco	
511	When a couple is making a decision, sometimes the husband has more influence, in some cases, the wife has more influence, while other decisions are made jointly. In your family, who has (had) the most influence in deciding whether or not to have another you or your husbandor do (did) you have equal say?	RESPONDENT HAS MORE INFLUENCE1 BOTH HUSBAND AND REPONDENT EQUAL2 HUSBAND HAS MORE INFLUENCE3 OTHER4 (SPECIFY)	
512	What do you think is the best number of months or years between the birth of one child and the birth of the next child?	MONTHS	
513	Do you expect your children (if you would have any) to help you financially when you get old?	YES1 NO2 NOT SURE/DOESN'T KNOW8	
514	What is the highest level of school you would like for your daughter(s) to attain?	PRIMARY01PREPARATORY02SECONDARY03UPPER INTERMEDIATE04UNIVERSITY05MORE THAN UNIVERSITY06DEPENDS ON CHILD95NO ASPIRATIONS FOR EDUCATION96DON'T KNOW98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SK I P TO
515	What is the highest level of school you would like for your son(s) to attain?	PRIMARY.01PREPARATORY.02SECONDARY.03UPPER INTERMEDIATE.04UNIVERSITY.05MORE THAN UNIVERSITY.06DEPENDS ON CHILD	
516	Does (did) your husband allow you to go out alone (or with your children) to buy household items or visit relatives?	YES, ALONE1 YES, WITH CHILDREN2 NOT ALLOWED TO GO OUT3 OTHER4 (SPECIFY)	
517	In general, if a wife disagrees with her husband, do you think she should express her opinion or keep quiet?	EXPRESS OPINION	
518	Some say that a woman's place is not only at home but she should be able to work. Do you agree?	AGREE	
519	Who should have the last word on the followingthe husband, the wife, both, or someone else? Visits to friends or relatives? Household budget? Having another child? Children's education? Children's marriage plans? Use of family planning methods? Wife's employment?	HUSB WIFE BOTH OTHER VISITS TO FRD/RL.1 2 3 4 HOUSEHOLD BUDGET.1 2 3 4 HAVING CHILD1 2 3 4 CHILD'S EDUC1 2 3 4 CHILD'S MARR1 2 3 4 FAMILY PLANNING.1 2 3 4 WIFE'S EMPLOYM'T.1 2 3 4	

## SECTION 6. PREGNANCY AND BREASTFEEDING

601	CHECK 222: OWE OR MORE BIRTHS SINCE JANUARY 1987	NO BIRTHS SINCE JANUARY 1987	□ (SKIP TO 644)	
602	ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1987 IN THE TABLE. BEGIN WITH THE LAST BIRTH AND RECORD TWINS OR TRIPLETS IN SEPARATE COLUMNS. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE ADDITIONAL FORMS).			
	Now I would like to ask you som (We will talk about one child a	me more questions about the heat inc.)	alth of all your children bor	n in the past five years.
	LINE NUMBER FROM Q. 212			
	FROM 9. 212	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
	AND Q. 216			
603	At the time you became pregnant with (NAME), did you want to become	THEN1 (SKIP TO 605)	THEN1 (SKIP TO 605)	THEN1 (SKIP TO 605)
	pregnant <u>then</u> , did you want to wait until <u>later</u> or did you want <u>no (more)</u> children at ail?	LATER2 NO MORE3 (SKIP TO 605)	LATER2 NO MORE	LATER2 NO MORE
604	How much longer would you like to have waited?	MONTHS1 YEARS2	MONTHS	MONTHS1
605	When you were pregnant with (NAME), did you see anyone for antenatal care for this pregnancy? IF YES: Whom did you see? Anyone else? RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL DOCTORA MURSE/MIDWIFEB OTHER PERSON TRADITIONAL BIRTH ATTENDANTC OTHERD (SPECIFY) NO ONEE	HEALTH PROFESSIONAL           DOCTOR.           NURSE/MIDWIFEB           OTHER PERSON           TRADITIONAL BIRTH           ATTENDANTC           OTHER           OTHER           DOTOR	HEALTH PROFESSIONAL DOCTOR
606	Where did you receive this antenatal care?	PUBLIC SECTOR GVT. HOSPITALA GVT. HEALTH UNITB PRIVATE SECTOR PVT. HOSPITAL/CLINICC PVT. DOCTORD OTHERE (SPECIFY)	PUBLIC SECTOR GVT. HOSPITALA GVT. HEALTH UNITB PRIVATE SECTOR PVT. HOSPITAL/CLINICC PVT. DOCTORD OTHERE (SPECIFY)	PUBLIC SECTOR GVT. HOSPITALA GVT. HEALTH UNITB PRIVATE SECTOR PVT. HOSPITAL/CLINICC PVT. DOCTORD OTHERE (SPECIFY)
607	How many months pregnant were you when you first saw someone for an antenatal check on this pregnancy?	MONTHS	MONTHS	MONTHS

		NAME	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
608	How many antenatal visits did you have during this pregnancy?	NO. OF VISITS	NO. OF VISITS	NO. OF VISITS
609	When you were pregnant with (NAME) were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES1 NO	YES1 NO2- (SKIP TO 611)	YES1 NO2 (SKIP TO 611)
610	During this pregnancy how many times did you get this injection?	TIMES	TIMES	TIMES
611	Where did you give birth to (WAME)?	HOME         11           OTHER HOME	HOME         YOUR HOME	HOME YOUR HOME
612	Who assisted with the delivery of (MAME)? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.	HEALTH PROFESSIONAL DOCTOR	HEALTH PROFESSIONAL           DOCTORA           NURSE/MIDWIFEB           OTHER PERSON           TRADITIONAL BIRTH           ATTENDANTC           RELATIVES/FRIENDSD           OTHER           (SPECIFY)           NO ONEF	HEALTH PROFESSIONAL DOCTORA NURSE/MIDWIFEB OTHER PERSON TRADITIONAL BIRTH ATTENDANTC RELATIVES/FRIENDSD OTHERE (SPECIFY) NO ONEF
613	Was (NAME) born on time or prematurely?	ON TIME1           PREMATURELY2           DOW'T KNOW	ON TIME	ON TIME
614	Was (NAME) delivered by caesarian section?	YES1	YES1	YES1 NG2
615	When (NAME) was born, was he/she: very large, larger than average, average, smaller than average, or very small?	VERY LARGE1 LARGER THAN AVERAGE2 AVERAGE3 SMALLER THAN AVERAGE4 VERY SMALL5 DON'T KNOW8	VERY LARGE1 LARGER THAN AVERAGE2 AVERAGE3 SMALLER THAN AVERAGE4 VERY SMALL5 DON'T KNOW8	VERY LARGE

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
616	Was (MAME) weighed at birth?	YES1 NO2 (\$K1P TO 618)+	YES1 NO2 (SKIP TO 620)+	YES1 NO2 (SKIP TO 620)
617	How much did (NAME) weigh?	KILOGRAMS	KILOGRAMS	KILOGRAMS
618	Nas your period returned since the birth of (NAME)?	YES1 (SKIP TO 620)+ NO2		
619	ENTER "X" IN COL.3 OF CALENDAR AND IN EACH MONTH TO CURRENT MON (OR TO CURRENT PREGNANCY)	IN MONTH AFTER BIRTH NTH (SKIP TO 621)		
620	For how many months after the birth of (NAME) did you <u>not</u> have a period?	ENTER "X" IN COL.3 OF CALEN WITHOUT A PERIOD, STARTING IF LESS THAN ONE MONTH WITH ENTER "O" IN COL.3 IN MONTH	DAR FOR THE NUMBER OF SPECIFIL IN THE MONTH AFTER BIRTH. OUT A PERIOD, AFTER BIRTH.	ED MONTHS
621	CHECK 225: RESPONDENT PREGNANT?	NOT PREGNANT PREGNANT OR UNSURE USLIE (SKIP TO 624)		
622	Have you resumed sexual relations since the birth of (NAME)?	TES1 (SKIP TO 624)		
623	ENTER "X" IN COL.4 OF CALENDAR AND IN EACH MONTH TO CURRENT MO	IN MONTH AFTER BIRTH NTH. (SKIP TO 625)		
624	For how many months after the birth of (NAME) did you <u>not</u> have sexual relations?	ENTER "X" IN COL.4 OF CALEN WITHOUT SEXUAL RELATIONS, S IF LESS THAN ONE MONTH WITH ENTER "O" IN COL.4 OF CALEN	DAR FOR THE NUMBER OF SPECIFI TARTING IN THE MONTH AFTER BI OUT SEXUAL RELATIONS, DAR IN THE MONTH AFTER BIRTH.	ED MONTHS RTH.
625	Did you ever breastfeed (NAME)?	YES	YES	YES
626	ENTER "N" IN COL.5 OF CALENDAR	IN MONTH AFTER BIRTH		

_				
		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
627	Why did you not breastfeed (NAME)?	MOTHER ILL/WEAK01         CHILD ILL/WEAK02         CHILD DIED03         NIPPLE/BREAST PROBLEM04         INSUFFICIENT MILK05         MOTHER WORKING06         CHILD REFUSED07         OTHER08         (SPECIFY)         (SKIP TO 638)	MOTHER ILL/WEAK01 CHILD ILL/WEAK02 CHILD DIED03 NIPPLE/BREAST PROBLEM04 INSUFFICIENT MILK05 MOTHER WORKING06 CHILD REFUSED07 OTHER08 (SPECIFY) (SKIP TO 638) 4	MOTHER ILL/WEAK01 CHILD ILL/WEAK02 CHILD DIED03 NIPPLE/BREAST PROBLEM04 INSUFFICIENT MILK05 NOTHER WORKING06 CHILD REFUSED07 OTHER08 (SPECIFY) (SKIP TO 638)4
628	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.	IMMEDIATELY000 HOURS1		
629	CHECK 216: Child Alive?	ALIVE DEAD (SKIP TO 636)		
630	Are you still breast- feeding (NAME)?	YES1 NO2 (SKIP TO 636)		
631	ENTER "X" IN COL.5 OF CALENDAR And in Each Month to current Mo	IN MONTH AFTER BIRTH NTH.		
632	Now many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC,	NUMBER OF NIGHTTIME FEEDINGS		
633	PROBE FOR APPROXIMATE NUMBER Now many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER	NUMBER OF DAYLIGHT FEEDINGS		

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH NAME
634	At any time yesterday or last night was (NAME) given any of the following?: Plain water? Sugar water? Juice? Herbal tea? Baby formula? Fresh milk? Tinned or powdered milk? Other liquids? Any mushy or solid food?	YES         NO           PLAIN WATER		
635	CHECK 634: FOOD OR LIQUID GIVEN YESTERDAT?	"YES" TO ONE OR "NO" TO ALL MORE		
636	For how many months did you breastfeed (NAME)?	ENTER "X" IN COL.5 OF CALENI BREASTFEEDING, STARTING IN IF BREASTFED LESS THAN ONE I	DAR FOR THE NUMBER OF SPECIFIE The Month After Birth. Nonth, Enter "O" in Col.5 in P	D MONTHS OF
637	Why did you stop breastfeeding (NAME)?	MOTHER ILL/WEAK01           CHILD ILL/WEAK02           CHILD DIED03           NIPPLE/BREAST PROBLEM04           INSUFFICIENT MILK05           MOTHER WORKING06           CHILD REFUSED07           WEANING AGE08           BECAME PREGNANT09           STARTED USING           CONTRACEPTION10           OTHER11           (SPECIFY)	MOTHER ILL/WEAK01           CHILD ILL/WEAK02           CHILD DIED03           NIPPLE/BREAST PROBLEM04           INSUFFICIENT MILK05           MOTHER WORKING06           CHILD REFUSED07           WEANING AGE08           BECAME PREGNANT09           STARTEO USING           CONTRACEPTION10           OTHER           (SPECIFY)	MOTHER ILL/WEAK01           CHILD ILL/WEAK02           CHILD DIED03           NIPPLE/BREAST PROBLEM04           INSUFFICIENT MILK05           MOTHER WORKING06           CHILD REFUSED07           WEANING AGE08           BECAME PREGNANT09           STATED USING           CONTRACEPTION10           OTHER           (SPECIFY)

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH NAME
638	CHECK 216: Child Alive?	ALIVE DEAD (SKIP TO 640)	ALIVE DEAD	ALIVE DEAD (SKIP TO 640)
639	Was (NAME) ever given water or anything else to drink or eat (other than breastmilk)?	YES1 NO2] (SKIP TO 643)∢	YES1 NO2_ (SKIP TO 643)∢	YES1 NO2 (SKIP TO 643)4
640	How many months old was (NAME) when you started giving the following on a regular basis?:			
	Formula or milk other than breastmilk?	AGE IN MONTHS	AGE IN MONTHS	AGE IN MONTHS
	Plain water?	AGE IN MONTHS	AGE IN MONTHS	AGE IN MONTHS
	Other liquids?	AGE IN MONTHS	AGE IN MONTHS	AGE IN MONTHS
	Any mushy or solid food?	AGE IN MONTHS	AGE IN MONTHS	AGE IN MONTHS
	IF LESS THAN 1 MONTH, RECORD '00'.		(SKIP TO 643)	(SKIP TO 643)
641	CHECK 216: CHILD ALIVE?	ALIVE DEAD (SKIP TO 643)		
642	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES1 NO2 DON'T KNOW8		
643	GO BACK TO 603 FOR NEXT BIRTH;	OR, IF NO MORE BIRTHS, GO TO (	544.	

644       CHECK 215: ANY BIRTH IN 1984, 1985, OR 1986?         YES       NO         AMME OF LAST BIRTH PRIOR TO JANUARY 1987;         (MAME)         645       Did you ever feed (MAME) at the breast?         646       How many months did you breastfeed (MAME)?         646       How many months did you breastfeed (MAME)?         647       For how many months after the birth of (MAME)         648       for how many months after the birth of (MAME)         649       What should be the first food on Liquid a baby gets after birth?         649       What should be the first food on Liquid a baby gets after birth?         650       Mhet health problems might be caused by bottlefeeding?         650       Mhet health problems might be caused by bottlefeeding?         651       How old should an infant before he/she is first goven uter foods on Liquids in addition to breastmill?         652       CHECK 222:         064       NO BIRTHS SINCE         652       CHECK 222:         064       NO BIRTHS SINCE         652       CHECK 222:         064       NO BIRTHS SINCE         652       CHECK 222:         064       OBIRTHS SINCE         652       CHECK 222:         064       NO BIRTHS SINCE	NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
645       Did you ever feed (NAME) at the breast?       YES	644	CHECK 215: ANY BIRTH IN 1984, 1985, OR 1986? YES NAME OF LAST BIRTH PRIOR TO JANUARY 1987: (NAME)	NO	→649
646       How many months did you breastfeed (NAME)?       MONTHS	645	Did you ever feed (NAME) at the breast?	YES1 NO2—	647
647       For how many months after the birth of (NAME) did you not have a period?       MONTHS	646	How many months did you breastfeed (NAME)?	MONTHS	
648       For how many months after the birth of (NAME) did you not have sexual relations?       MONTHS	647	For how many months after the birth of (NAME) did you <u>not</u> have a period?	MONTHS	
649       What should be the first food or liquid a baby gets after birth?       BREAST MILK/COLOSTRUM	648	For how many months after the birth of (NAME) did you <u>not</u> have sexual relations?	MONTHS	
650       What health problems might be caused by bottlefeeding?       UNSANITARY WATER USED TO MIX FORMULA	649	What should be the first food or liquid a baby gets after birth?	BREAST MILK/COLOSTRUM	
651       How old should an infant before he/she is first given other foods or liquids in addition to breastmilk?       MONTHS	650	What health problems might be caused by bottlefeeding? RECORD ALL MENTIONED.	UNSANITARY WATER USED TO MIX FORMULAA FORMULA DILUTED SO BABY NOT ADEQUATELY NOURISHEDB COLICC DIARRHEAD POOR WEIGHT GAINE TOOTH DECAYF OTHERG (SPECIFY) NONE/DON'T KNOWH	
652 CHECK 222: ONE OR MORE BIRTHS SINCE JANUARY 1987 JANUARY 1987 741	651	How old should an infant before he/she is first given other foods or liquids in addition to breastmilk?	MONTHS	
	652	CHECK 222: ONE OR MORE BIRTHS SINCE JANUARY 1987		→741

701	ENTER THE LINE NUMBER AND NAME C Record twins or triplets in Sepa The last birth. (If there are mo	OF EACH BIRTH SINCE JANUARY 19 KRATE COLUMNS. ASK THE QUESTI WRE THAN 3 BIRTHS, USE ADDITIC	187 IN THE TABLE. BEGIN WITH ONS ABOUT ALL OF THESE BIRTHS WAL FORMS).	THE LAST BIRTH. 6. Begin With
	LINE NUMBER FROM Q. 212			
			NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
702	Do you have a birth certificate where (NAME'S) vaccinations are written down?	YES, SEEN	YES, SEEN	YES, SEEN
	IF YES: May I see it, please?	(SKIP TO 706)	(SKIP TO 706)	(SKIP TO 706)
703	Did you ever have a vaccination certificate for (NAME)?	YES1 (SKIP TO 706) ← NO2	YES1 (\$K1P TO 706)	YES1 (SKIP TO 706)
704	(1) COPY VACCINATION DATES FOR EACH VACCIME FROM THE CERTIFICATE.			
	(2) WRITE '44' IN 'DAY' COLUMN IF CERTIFICATE SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE RECORDED.	DAY MO YR	DAY NO YR	DAY <del>n</del> o yr
	BCG	800	BCG	BCG
	POLIO 1	P1	P1	P1
	POLIO 2	PZ	P2	P2
	POLIO 3	P3	P3	TH THE LAST BIRTH.         THS. BEGIN WITH         SECOND-FROM-LAST BIRTH         ALIVE       DEAD         1       YES, SEEN.         2       YES, NOT SEEN.         3       NO CARD.         1       YES.         2       YES, NOT SEEN.         3       NO CARD.         1       YES.         2       YES.         1       YES.         2       YES.         3       NO CARD.         1       YES.         93       OAY         93       OAY         93       OA         93       OA         93       OA         93       OA         93       OA         94       OA         95       OA         96       OA         97       OA         98       OA         99       OA         93       OA         94       OA         95       OA         96       OA         97       OA         98       OA         99       OA
	DPT t	D1	D1	D1
	DPT 2	D2	D2	02
	DPT 3	D3	D3	03
	MEASLES	MEA	NEA	MEA
	HEPATITIS 1	H1 H1	H1	н1
	HEPATITIS 2	H2	82	H2
	HEPATITIS 3	нз	нз	нз
705	Has (NAME) received any vaccinations that are not recorded on this certificate? REFORD LYESL ONLY 15	YES1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 704)	YES1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 704)	YES1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 704)
	RECORD TEST ONLY IF RESPONDENT MENTIONS BCG, DPT 1-3, POLIG 1-3, HEPATITIS 1-3 AND/OR MEASIES VACCINF(S)	NO	NO	NO
				7-1

## SECTION 7. IMMUNIZATION AND HEALTH

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH NAME
706	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases?	YES1 NO2 (SKIP TO 708)- DON'T KNOW8	YES1 NO	YES1 NO2 (SKIP TO 708)
707	Please tell me if (NAME) (has) received any of the following vaccinations:			
	A BCG vaccination against tuberculosis, that is, an injection in the left shoulder that caused a scar?	YES1 NO2 DON'T KNOW8	YES1 NO2 DON'T KNOW8	YES1 No2 Don't know8
	Polio vaccine, that is, drops in the mouth?	YES	YES1 NO	YES1 NG
	IF YES: How many times?	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
	A DPT injection?	YES	YES	YES
	JF YES: How many times?	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
	An injection against measles at nine months?	YES1 NO2 DON'T KNOW8	YES1 NO2 DON'T КИСЫ8	YES
	An injection against hepatitis?	YES	YES1 NO	YES1 NO
	JF YES: How many times?	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
708	CHECK 216: Child Alive?	ALIVE DEAD	ALIVE DEAD	ALIVE DEAD
709	GO BACK TO 702 FOR NEXT BIRTH;	DR, IF NO MORE BIRTHS, SKIP TO	) 740.	V
710	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES1 NO2 DON'T KNOW8	YES	YES1 NO2 DON'T KNOW8
711	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES1 NO2 (SKIP TO 715)	YES1 NO2 (SKIP TO 715)◀ DON'T KNOW8	YES1 NO2 (SKIP TO 715)◀ DOM'T KNOW8

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	ļ	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
712	Has (NAME) been ill with s cough in the last 24 hours?	YES1 NO2 DON'T KNOW8	YES1 NO2 DON'T KNOW8	YES1 NO2 DON'T KNOW8
713	For how many days (has the cough lasted/did the cough last)? IF LESS THAN 1 DAY, RECORD '00'	DAYS	DAYS	DAYS
714	When (NAME) had the	YES1	YES1	YES1
	illness with a cough,			_
	did he/she breathe	NO2	NO2	NO2
	short, rapid breaths?			DON'T KNOW
715	CHECK 710 AND 711:	"YES" IN EITHER	"YES" IN EITHER	"YES" IN EITHER
	FEVER OR COLIGH?			
		(SKIP	└→ (SK1P	
		TO 720)	TO 720)	1 10 720)
716	Was anything given to treat	YES	1 YES	YES1
	the fever/cough?	NO21	NO21	NO2-
		(SKIP TO 718)	(SKIP TO 718)	(SKIP TO 718)
	1		DUN'T KNOW	UUN-1 KNOW
717	What was given to treat	INJECTIONA	INJECTIONA	INJECTIONA
	the fever/cough?	ANTIBIOTIC	ANTIBIOTIC	ANTIBIOTIC
	Anything else?	(PILL OK SYRUP)B	(PILL OR SYRUP)B	(PILL OR STRUP)B
	ing craci	OTHER PILL OR SYRUPD	OTHER PILL OR SYRUPD	OTHER PILL OR SYRUPD
	RECORD ALL MENTIONED.	UNKNOWN PILL OR SYRUPE	UNKNOWN PILL OR SYRUP E	UNKNOWN PILL OR SYRUPE
		HOME REMEDY/	HOME REMEDY/	HOME REMEDY/
		OTHER G	OTHER G	OTHER G
		(SPECIFY)	(SPECIFY)	(SPECIFY)
718	Did you seek advice or	YES1	YES1	YES1
	fever/cough?	NO2	NO2	NO
		(SKIP to 720)	(SK1P TO 720)	(SKIP TO 720)
710	t Uhara did you apak			
117	advice or treatment?	GVT. HOSPITALA		GVT. HOSPITAL
		GVT. HEALTH UNITB	GVT. HEALTH UNITB	GVT. HEALTH UNITB
	Anywhere else?	MEDICAL PRIVATE SECTOR	MEDICAL PRIVATE SECTOR	MEDICAL PRIVATE SECTOR
	RECORD ALL MENTIONED.	PVI. HUSPITAL/CLINICC	PVI. HOSPITAL/CLINICC	PRIVATE DOCTOR
		PHARMACYE	PHARMACYE	PHARMACYE
	1	OTHER PRIVATE SECTOR	OTHER PRIVATE SECTOR	OTHER PRIVATE SECTOR
			TRADITIONAL PRACTITIONER 5	
		RELATIVES/FRIENDS	RELATIVES/FRIENDS	RELATIVES/FRIENDS
	1	OTHERH	OTHERH	OTHERH
	1	(SPECIFY)	(SPECLEY)	(SPECIEY)

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH NAME
720	Has (NAME) had disrrhea in the last two weeks?	YES1 (SKIP TO 722)↓	YES1 (SKIP TO 722)1 NO2 DON'T KNOW8	YES1 (SKIP TO 722)1 NO2 DON'T KNOW8
721	GO BACK TO 702 FOR NEXT BIRTH; (	DR, IF NO MORE BIRTHS, SKIP TO	) 740.	
722	Has (NAME) had diarrhea in the last 24 hours?	YES1 NO2 DON'T KNOW8	YES	YES1 NO2 DON'T KHOW8
723	For how many days (has the diarrhea lasted/did the diarrhea last)? IF LESS THAN 1 DAY, RECORD '00'.	DAYS	DAYS	DAYS
724	Was there any blood in the stools?	YES1 NO2 DON'T KNOW8	YES	YES1 NO2 DON'T KNOW8 (SKIP TO 728)
725	CHECK 625/630: LAST CHILD STILL BREASTFED?	YES NO ( (SK1P TO 728)		
726	During (NAME)'s diarrhea, did you change the frequency of breastfeeding?	YES1 NO2 (SKIP TO 728) 4		-
727	Did you <u>increase</u> the number of breastfeeds or <u>reduce</u> them, or did you <u>stop completely</u> ?	INCREASED1 REDUCED2 STOPPED COMPLETELY3		
728	(Aside from breastmilk) Was he/she given the same amount to drink as before the diarrhea, or more, or less?	SAME	SAME1 MORE2 LESS	SAME1 MORE2 LESS
729	Was anything given to treat the diarrhea?	YES1 NO2 (SKIP TO 731) DON'T KNOW8	YES1 NO2 (SKIP TO 731)4 DON'T KNOW8	YES1 NO2 (SKIP TO 731)+ DON'T KNOW

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME	NAME	NAME
	I .			<b>_</b>
730	What was given to treat	MAHLOUL MOALGET	MAHLOUL MOALGET	MAHLOUL MOALGET
1	the diarrhea?	EL-GAFFEFA	EL-GAFFEFA	EL-GAFFEFA
		HOMEMADE SUGAR, SALT	HOMEMADE SUGAR, SALT	HOMEMADE SUGAR, SALT
		AND WATER SOLUTIONB	AND WATER SOLUTIONB	AND WATER SOLUTIONB
	Anything else?	ANTIBIOTIC	ANTIBLOTIC	ANTIBIOTIC
		(PILL OR SYRUP)C	(PILL OR SYRUP)C	(PILL OR SYRUP)C
	RECORD ALL MENTIONED.			
		(T.V.) INTRAVENCUS E	(I.V.) INTRAVENOUS	(1.V.) INTRAVENCUS
		HOME REMEDIES/	HOME REMEDIES/	HOME REMEDIES/
		HERBAL MEDICINESG	HERBAL MEDICINESG	HERBAL MEDICINESG
		OTHERH	OTHERH	OTHERH
		(SPECIFY)	(SPECIFY)	(SPECIFY)
781	Did you seek advise on		1 450 1	
121	treatment for the	165	165	163
	diarrhea?	NO	NO	NO21
		(SKIP TO 733)-	(SKIP TO 733)	(SKIP TO 733)4
	-		•	
732	Where did you seek	PUBLIC SECTOR	PUBLIC SECTOR	PUBLIC SECTOR
	advice or treatment?	GVT. HOSPITALA	GVT. HOSPITALA	GVT. HOSP1TALA
	Anthono elso?	GVT. HEALIN UNITB	GVI. HEALIN UNITB	GVI. NEALIH UNIIB
	Anymere etse?	DVT HOSPITAL/CLINIC C	DVT HOSPITAL/CLINIC	
	RECORD ALL MENTIONED.	PRIVATE DOCTOR	PRIVATE DOCTORD	PRIVATE DOCTORD
		PHARMACYE	PHARMACYE	PHARMACY
		OTHER PRIVATE SECTOR	OTHER PRIVATE SECTOR	OTHER PRIVATE SECTOR
		TRADITIONAL	TRADITIONAL	TRADITIONAL
			DELATIVES/EDIENDS	PRACTITIONER
		OTHER H	OTHER H	OTHER
		(SPECIFY)	(SPECIFY)	(SPECIFY)
733	CHECK 730:	NO, YES,	NO, YES,	NO, YES,
		MANLOUL MANLOUL	MANLOUL MANLOUL	MANLOUL MANLOUL
	NANLONI MOALCET EL-	NOT MENTIONED MENTIONED		
	GAFFEF MENTIONED?			
			ا لہـا ا	ا لہنا ا
		↓   ¥	V V	v
		(SKIP TO 735)	(SKIP TO 735)	(SKIP TO 735)
74	Ver (NAME) given mehloul			
	moalget el-gaffef when he/she	NO	NO. 2-	NO. 23
	had the diarrhea?	(SK1P TO 736)	(SKIP TO 736)	(SK1P TO 736)
		DON'T KNOW	DON'T KNOW	DON'T KNOW
	- 		<u>.</u>	· · · · · · · · · · · · · · · · · · ·
735	For how many days was			
	NAME) given manioul moaiget	UATS	UNIS	UATS
	er-Asiisit			
	IF LESS THAN 1 DAY.			
	RECORD '00'.			
	•		·	,

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH NAME
736	CHECK 730: HOMEMADE SUGAR, SALT AND WATER SOLUTION MENTIONED?	NO, YES, HOME SOL'N HOME SOL'N NOT MENTIONED MENTIONED (SKIP TO 738)	NO, YES, HOME SOL'N HOME SOL'N NOT MENTIONED MENTIONED (SKIP TO 738)	NO, YES, HOME SOL'N HOME SOL'N NOT MENTIONED MENTIONED V (SKIP TO 738)
737	Was (NAME) given a solution made from sugar, salt and water when he/she had the diarrhea?	YES	YES1 NO2 (SKIP TO 739) DON'T KNOW8	YES
738	For how many days was (NAME) given the solution made from suger, salt and water? IF LESS THAN 1 DAY, RECORD '00'.	DAYS	DAYS	DAYS
739	GO BACK TO 702 FOR NEXT BIRTH; (	DR, IF NO MORE BIRTHS, GO TO 7	740.	7.4



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
740	CHECK 730 AND 734 (ALL COLUMNS): MAHLOUL MOALGET EL-GAFFEF GIVEN TO ANY CHILD MOT GI OR 730	L MOALGET EL-GAFFEF VEN TO ANY CHILD AND 734 NOT ASKED	→743
741	Have you ever heard of a special product called mahloul moalget el-gaffaf you can get for the treatment of diarrhea?	YES1 NO2	<b> </b> →801
742	Have you ever prepared mahloul moalget el-gaffaf to treat diarrhea in yourself or someone else?	YES1 NO2	<b> </b> <b>►8</b> 01
743	The last time you prepared the mahloul moalget el- gaffaf did you prepare the whole packet at once or only part of the packet?	WHOLE PACKET AT ONCE1 PART OF PACKET2	
744	How much water did you use to prepare mahloul moalget el-gaffaf the last time you made it?	1\2 LITER01         1 LITER02         1 1\2 LITERS03         2 LITERS04         FOLLOWED PACKAGE INSTRUCTIONS05         OTHER06         (SPECIFY)         DON'T KNOW	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
801	Now I would like to ask some questions about your marriage(s). How many times have you been married?	NUMBER OF TIMES	
802	In what month and year did you first enter into a marriage contract?	MONTH	
803	How old were you when you first entered into a marriage contract?	AGE DON'T KNOW AGE	
804	In what month and year did you start living with your (first) husband?	MONTH	
805	How old were you when you started living together with your (first) husband?	AGE	
806	CHECK 804 AND 805: YEAR AND AGE YES GIVEN?		
807	RECORD CURRENT YEAR IN BOX ON RIGHT AND COMPLETE THE FOLLOWING IN ORDER TO CHECK THE CONSISTENCY OF 804 AND 805: YEAR OF BIRTH (102) PLUS + AGE AT MARRIAGE (805) CALCULATED YEAR OF MARRIAGE (805) IS THE CALCULATED YEAR OF MARRIAGE WITHIN ONE YEAR OF THE YES NO	IF NECESSARY, CALCULATE YEAR OF BIRTH CURRENT YEAR MINUS - CURRENT AGE (103) = CALCULATED YEAR OF BIRTH E REPORTED YEAR OF MARRIAGE (804)? BE AND CORRECT 804 AND 805.	
808	DETERMINE MONTHS MARRIED OR IN UNION SINCE JANUARY 1987. FOR EACH MONTH MARRIED OR IN UNION, AND ENTER "O" FOR EAU SINCE JANUARY 1987. FOR WOMEN WHO ARE NOT CURRENTLY MARRIED OR WHO HAVE MARR PROBE FOR DATE COUPLE STOPPED LIVING TOGETHER OR DATE WIN	ENTER "X" IN COLUMN 6 OF CALENDAR CH MONTH NOT MARRIED, IED MORE THAN ONCE: DOWED, AND FOR STARTING DATE OF ANY	2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
809	CHECK COLUMN 6 OF CALENDAR: IN MARITAL UNION AT ANY TIME SINCE JANUARY 1987 UNION AT ANY 1987	л	►814A
810	Since January 1987, did you and your husband ever live apart (without visiting) for more than one month because of work, school or for any other reason? (IF WOMAN HAD MORE THAN ONE HUSBAND DURING THE PERIOD, CIRCLE CODE '1' (YES) IF SHE LIVED APART FROM ANY OF OF HER HUSBANDS FOR MORE THAN ONE MONTH.)	YES1 NO2-	901
811	USE CALENDAR TO PROBE FOR ALL PERIODS THE WOMAN LIVED AP JANUARY 1987. ENTER 'X' (NOT SEPARATED) OR THE CODE FOR IF THE WOMAN MARRIED FOR THE FIRST TIME SINCE JANUARY 199 THE MONTH AND YEAR OF MARRIAGE AND PROBE FOR PERIODS OF FOR WOMEN MARRIED FOR THE FIRST TIME BEFORE JANUARY 1987 COMPLETE THE ENTIRE COLUMN. ILLUSTRATIVE QUESTIONS Did your husband ever leave and stay somewhere else for When did he leave? For how many months was he away without visiting you? Was he staying somewhere else in Egypt or in some other Did you ever leave and stay elsewhere (e.g., because a f more than one month? When did you leave? For how many months were you away without seeing your hu Were you staying somewhere else in Egypt or in some other	ART FROM HER HUSBAND(S) BACK TO THE TYPE OF SEPARATION IN COLUMN 7. 87, RECORD "X" (NOT SEPARATED) IN SEPARATION FOLLOWING THAT DATE. , BEGIN WITH JANUARY 1987 AND more than one month? country? amily member was ill, etc.) for sband? r country?	
812	CHECK 804-806: BEGAN FIRST BEGAN FIRST MARRIAGE MARRIAGE BEFORE AT ANY TIME JANUARY 1987 1987		<b>→</b> 901
813	CHECK COLUMN 7 OF CALENDAR:	OT LIVING PART FROM USBAND IN ANUARY 1987	901
814 814A	I see that you were living apart from your husband in January 1987. When did you begin living apart that time? THIS DATE SHOULD NOT PRECEDE THE <u>DATE OF CONCEPTION</u> OF ANY CHILD BORN BEFORE 1987. In what month and year were you widowed (divorced from) your last husband)?	MONTH	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	Ĺ				
901	CHECK 104: CURRENTLY DIVORCED WIDOW	JED					
	(SKIP TO 903)						
902	RECORD THE LINE NUMBER OF THE WOMAN'S HUSBAND FROM THE HOUSEHOLD QUESTIONNAIRE. IF THE HUSBAND IS NOT PRESENT IN THE HOUSEHOLD, RECORD '00'.	HUSBAND'S LINE NUMBER					
903	How old was your husband on his last birthday?	AGE IN COMPLETED YEARS					
904	In what month and year was your husband born?						
	COMPARE AND CORRECT 903 AND/OR 904 IF INCONSISTENT.	YEAR					
905	Is (was) your (last) husband your first cousin, other blood relative, or no relation at all?	FIRST COUSIN1 OTHER RELATIVE2 NO RELATION AT ALL3					
906	Did your (last) husband ever attend school?	YES1 NO2-					
907	What was the highest level of school he attended?	PRIMARY					
908	What was the highest grade which he completed at that level?	GRADE					
909	What kind of work does (did) your (last) husband mainly do? RECORD ANSWER IN DETAIL.						
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SK1P TO				
-----	--	---	----------------------------	--	--	--	--
910	CHECK 909: WORKS (WORKED) DOES (DID) IN AGRICULTURE IN AGRICULTURE		<b>9</b> 12				
911	(Does/did) your husband mainly work on his own land or family land, or (does/did) he rent land, or (does/did) he work on someone else's land?	HIS/FAMILY LAND	<b> </b> □ ▶914 ▶913				
912	Does (did) your husband work for someone else or for himself?	FOR SOMEONE ELSE1 FOR HIMSELF2-	914				
913	Does (did) he earn a regular wage or salary?	YES1 NO2					
914	Now I would like to ask some questions about places where you have lived. For most of the time until you were 12 years old, did you live in Cairo, Giza, Alexandria, another city or town or in a village?	CAIRO/GIZA1 ALEXANDRIA2 OTHER CITY/TOWN3 VILLAGE4 OUTSIDE EGYPT5 (SPECIFY)					
	(NAME OF LOCALITY AND GOVERNORATE)		<u> </u>				
915	Have you lived in only one or in more than one community since January 1987?	ONE COMMUNITY1 MORE THAN ONE COMMUNITY2-	<b>9</b> 17				
916	CHECK COVER PAGE OR Q116-Q117 (FOR VISITORS) AND ENTER TO RESPONDENT CURRENTLY RESIDES:	HE NAME OF THE PLACE WHERE THE					
	(NAME OF LOCALITY AND GOVERNORATE) ENTER (IN COLUMN 8 OF CALENDAR) THE APPROPRIATE CODE FOR COMMUNITY WHERE RESPONDENT CURRENTLY LIVES ("1" CAIRO/GIZA, "2" ALEXANDRIA, "3" OTHER CITY/TOWN, "4" VILLAGE, "5" OUTSIDE EGYPT) FOR VISITORS, CHECK QUESTION 116 FOR RESIDENCE. BEGIN IN THE MONTH OF INTERVIEW AND CONTINUE WITH ALL PRECEDING MONTHS BACK TO JANUARY 1987						
917	In what month and year did you move to (CURRENT COMMUNIT'	٢)?					
	ENTER (IN COLUMN 8 OF CALENDAR) "X" IN THE MONTH AND YEA MONTHS, ENTER THE APPROPRIATE CODE FOR TYPE OF COMMUNITY "3" OTHER CITY/TOWN, "4" VILLAGE, OR "5" OUTSIDE EGYPT) CONTINUE PROBING FOR PREVIOUS COMMUNITIES AND RECORD MOVI ACCORDINGLY.	R OF THE MOVE, AND IN THE SUBSEQUENT ("1" CAIRO/GIZA, "2" ALEXANDRIA, ES AND TYPES OF COMMUNITIES					
	ILLUSTRATIVE QUESTIONS - Where did you live before? - In what month and year did you arrive there? - Is that place in a city, a town, or in a village?						
	ENTER THE NAME OF THE LACALITY AND THE GOVERNORATE IN WHICH THE RESPONDENT WAS LIVING IN JANUARY 1987:						
	(NAME OF LOCALITY AND GOVERNORATE)						
	۱ <u>ــــــــــــــــــــــــــــــــــــ</u>	9	-2				

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
918	CHECK 916 OR 917 FOR RESIDENCE IN JANUARY 1987: When did you move to (PLACE OF RESIDENCE IN JANUARY 1987)?	LIVED THERE SINCE BIRTH96	<b>9</b> 20
919	Before you moved to (PLACE OF RESIDENCE IN JANUARY 1987), were you living in Cairo/Giza, Alexandria, another city or town or a village? 	CAIRO/GIZA	
920	Now I would like to ask you some questions about working. As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm, or in the family business. Before you married for the first time, did you do any of these things or any work?	YES1 NO2	
921	Are you currently doing any of these things or any other work?	YES1- NO2	 ↓ ↓ ↓
922	Have you ever worked since January 1987?	YES1 NO2	
923	ENTER "O" IN COLUMN 9 OF CALENDAR IN EACH MONTH FROM JAN	UARY 1987 TO CURRENT MONTH-	<b>1</b> →928
924	What is (was) your (most recent) occupation? That is, what kind of work do (did) you do?		
925	USE CALENDAR TO PROBE FOR ALL PERIODS OF WORK, STARTING BACK TO JANUARY 1987. ENTER CODE FOR NO WORK OR FOR TY ILLUSTRATIVE QUESTIONS - When did this job begin (and when did it end)? - What did you do before that? - How long did you work at that time? - Were you self-employed or an employee? - Were you paid for this work? - Did you work at home or away from home?	WITH CURRENT OR MOST RECENT WORK, PE OF WORK IN COLUMN 9.	

926       CHECK COLUMN 9 OF CALENDAR:       DID NOT WORK         WORKED IN JANUARY 1987       IN JANUARY 1987         927       I see that you were working in January 1987.       MONTH	→ 928         → 930         → 930         → 930         → 930         → 930         →         →         →
927       I see that you were working in January 1987.         When did you start that job?       DON'T KNOW MONTH	P30     P30
928     I see that you were not working in January 1987.     YES	 930 
	1
929       When did your last job prior to January 1987 end?       MONTH	
930 CHECK 921: YES NO CURRENTLY WORKING?	 ∍934
931 CHECK 215/216/218: HAS CHILD BORN SINCE YES NO JANUARY 1987 AND LIVING AT HOME?	934
932 While you are working, do you <u>usually</u> have (NAME OF YOUNGEST CHILD AT HOME) with you, <u>sometimes</u> have him/her with you, or <u>never</u> have him/her with you?	<b>Ⅰ</b> 934
933       Who usually takes care of (NAME OF YOUNGEST CHILD AT HOME) while you are working?       01 0LDER CHILD(REN)02 0THER RELATIVES03 NEIGHBORS04 FRIENDS05 SERVANTS06 CHILD IS IN SCHOOL07 CHILD TAKEN TO NURSERY08 0THER09 (SPECIFY)	
934 RECORD THE TIME HOUR	

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SECTION 10. HEIGHT AND WEIGHT

ONE OR MORE BIRTHS		NO BIRTHS SI		1101
NTERVIEWER: IN 1002 (COLUMNS 2-4) RE IN 1003 AND 1004 RECORD SINCE JANUARY 1987. IN (NOTE: ALL RESPONDENTS N IF ALL OF THE CHILDREN H USE ADDITIONAL FORMS).	CORD THE LINE NUMBER THE NAME AND BIRTH D 1006 AND 1008 RECORD JITH ONE OR MORE BIRT IAVE DIED. IF THERE	FOR EACH CHILD BORI ATE FOR THE RESPOND HEIGHT AND WEIGHT ( HS SINCE JANUARY 194 ARE MORE THAN 3 LIV	N SINCE JANUARY 198 ENT AND FOR ALL LIV OF THE RESPONDENT A B7 SHOULD BE WEIGHEI ING CHILDREN BORN S	7 AND STILL ALIVE. ING CHILDREN BORN ND THE LIVING CHILT D AND MEASURED EVEN INCE JANUARY 1987,
		2 YOUNGEST LIVING CHILD	3 NEXT-TO- YOUNGEST LIVING CHILD	4 SECOND-TO- YOUNGEST LIVING CHILD
02 INE NO. FROM Q.212				
DO3 IAME FROM Q.212 FOR CHILDREN	(NAME)	(NAME)	(NAME)	(NAME)
DO4 DATE OF BIRTH FROM Q.103 FOR RESPONDENT FROM Q.215 FOR CHILDREN, AND ASK FOR DAY OF BIRTH	MONTH	DAY	DAY	DAY
105 ICG SCAR ON TOP IF LEFT SHOULDER		SCAR SEEN1 NO SCAR2	SCAR SEEN1 NO SCAR2	SCAR SEEN1 NO SCAR2
006 IEIGHT in centimeters)				
07 AS HEIGHT/LENGTH OF CHILD EASURED LYING DOWN OR TANDING UP?		LYING1 STANDING2	LYING1 STANDING2	LYING1 STANDING2
108 /EIGHT in kilograms)		0	0	0
109 ATE EIGHED ND EASURED	DAY	DAY	DAY	DAY
10 ESULT	MEASURED1 NOT PRESENT3 REFUSED4 OTHER6 (SPECIFY)	CHILD MEASURED.1 CHILD SICK2 CHILD NOT PRESENT3 CHILD REFUSED.4 MOTHER REFUSED.5 OTHER6 (SPECIFY)	CHILD MEASURED.1 CHILD SICK2 CHILD NOT PRESENT3 CHILD REFUSED.4 MOTHER REFUSED.5 OTHER6 (SPECIFY)	CHILD MEASURED.1 CHILD SICK2 CHILD NOT PRESENT3 CHILD REFUSED.4 MOTHER REFUSED.5 OTHER6 (SPECIFY)
NAME OF		NAME OF		

THANK THE RESPONDENT FOR PARTICIPATING IN THE SURVEY. COMPLETE QUESTIONS 1101-1102 AS APPROPRIATE. BE SURE TO REVIEW THE QUESTIONNAIRE FOR COMPLETENESS BEFORE LEAVING THE HOUSEHOLD.

1101	DEGREE OF COOPERATION.	POOR
1102	INTERVIEWER'S COMMENTS:	
1103	FIELD EDITOR'S COMMENTS:	
1104	SUPERVISOR'S COMMENTS:	
1105	OFFICE EDITOR'S COMMENTS:	

11-1

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					1	2	3	- 4	5	6	7	8	9		
	1														<u> </u>
INSTRUCTIONS: ONLY ONE CODE SHOULD	9	~~		~		r	- <b>T</b>						<del></del>		ee. 9
APPEAR IN ANT BOX. FOR CULURNS	9	02	rta	01				<u> </u>				ļ	$\downarrow$		FEB 9
1, 6, 8, AND 9 ALL MONTHS SHOULD	3	01	JAN	02			L	1					<u> </u>	02	JAN 3
BE FILLED IN.		12	DEC	03			<b>—</b>	T			TT	- <u>r</u>	T	<b>Ó</b> 3	DEC
INFORMATION TO BE CODED FOR EACH COLUMN:		11	NOV	04				1.				<b></b>	11	04	NOV
COL.1: Births, Pregnancies, Contraceptive Use		10	TJO	05				1						05	OCT
B BIRTHS		09	SEP	06				1						06	SEP
P PREGNANCIES	1	08	AUG	07			-	1			h		+	07	AUG 1
T TERMINATIONS	ò	07		08				+			1			na l	
G NO METHOD METHOD	ó	06	ILIN	00							<b>├</b> ──-1		+	00	
	5	05	MAY	10				╁╼┉				$\rightarrow$	<b>}</b> /	10	MAT 2
1 FILL 2 THD	-	<u>0</u> /	ADB	11				<del> </del>			·		+	11	ADD
2 100 3 1N ECTIONS		07	MAD	42				+					<b>{</b> ∤	12	MAD
J INJECTIONS ( NORDIANT		02		12										12	CCO
		01	TED	12				-					<b>∲-</b> ──┥	1/	141
J DIAPHRAUH/FUAH/JELLI		01	JAN	14					L	L	1	<b></b>	<b></b>	14	374
		12	DEC	- 15			- <u> </u>	T	Ι		T	T		15	DEC
/ FEMALE SICKILIZATION		11	NOV	16				1						16	NOV
O MALE SIERILIZATION		10	100	17				1					1	17	OCT
Y PERIODIC ABSTINENCE		09	SEP	18				1						18	SEP
L WIINDKAWAL	1	80	AUG	19				1						19	AUG 1
G PROLONGED BREASTFEEDING	9	07	JUL	20									1	20	JUL 9
W UINER (SPECIFT)	9	06	JUN	21				1			[]		E	21	JUN 9
COL.2: Discontinuation of Contraceptive Use	1	05	MAY	22										22	MAY 1
1 BECAME PREGNANT WHILE USING		04	APR	23				1					T	23	APR
2 WANTED TO BECOME PREGNANT		03	MAR	24				+	ti				1	24	MAR
3 HUSBAND DISAPPROVED		02	FEB	25				<u> </u>	t				1	25	FEB
4 SIDE EFFECTS		01	JAN	26				1					1	26	JAN
5 HEALTH CONCERNS		45	DET					<u>,                                     </u>					<u></u>	155	DEC
6 ACCESS/AVAILABILITY		12	NFC	21				┥	<b> </b>			<b> </b>	–	21	DEC
7 WANTED MORE EFFECTIVE METHOD		11	NUV	20					ł		<b>  </b>		∔	20	VUN TOO
8 INCONVENTENT TO USE		10	OCT	29		$\square$	-	-	<u> </u>	⊢	$\vdash$		<b>_</b>	127	CED
9 INFREQUENT SEX/HUSBAND AWAY		UY	SEP.	30				<b> </b>					<b>┟</b> ┅──	30	SEP 1
C COST		00	AUG	21				÷			·		+	131	
F FATALISTIC		04	JUL	32			<u> </u>	╂──			<b>}</b>		┥──	122	
A DIFFICULT TO GET PREGNANT/MENOPAUSE	~	00	JUN	22				-	<b> </b>				+	122	MAY O
D MARITAL DISSOLUTION/SEPARATION		0/	400	34				+					+	126	ADD
W OTHER (SPECIFY)		04	MAD	33									—	134	MAD
K DON'T KNOW		03	CEO	- 20				+	·		<u></u>			37	FER
COL T. Destantin Americanhan		02	14.0	31				+				-	+	120	
		01	JAN	50								L	<u> </u>	100	
A LESS THAN ONE MONTH		12	DEC	- 39										39	DEC
O LESS THAN ONE HOWTH		11	NOV	40										40	NOV
COL.4: Postpartum Abstinence		10	100	41										41	OCT
X NO SEXUAL RELATIONS		09	SEP	42							_			42	SEP
O LESS THAN ONE MONTH	1	80	AUG	-43									1	]43	AUG 1
COL 5: Breastfeeding	9	07	JUL	44										44	JUL 9
Y REFASTEEDING	8	06	JUN	45					ļ					45	JUN 8
O LESS THAN ONE MONTH	9	05	MÁY	46					ļ					46	MAY 9
N NEVER REFASTEED		04	APR	47										47	APR
		03	MAR	48										48	MAR
COL.6: Marriage/Union		OZ	FEB	49					Į			<u> </u>	$\vdash$	149	FEB
X MARRIED		01	JAN	50	L		L	1	I	i	L	1	1	٥٩	JAN
U NUI IN UNION		12	DEC	51		T							1	51	DEC
COL.7: Periods of Separation		11	NOV	52				+	<u>† · · · ·</u>				1	52	NOV
X NOT SEPARATED		10	OCT .	53	<u> </u>			1	1				1	53	OCT
1 HUSBAND ABROAD		09	SEP	- 54				1	<u> </u>				1	154	SEP
2 HUSBAND ELSEWHERE IN EGYPT	1	08	AUG	55	<u> </u>			1	1				1	155	AUG 1
3 WIFE ABROAD	9	07	JUL	56	h	·····			<u> </u>				1	56	JUL 9
4 WIFE ELSEWHERE IN EGYPT	8	06	JUN	57				1	1				1	57	JUN 8
COL B. Hover and Yuman of Party Street	8	05	MAY	58			<b></b>	1	1	[			1	58	MAY 8
CULID: Moves and Types of Communities		04	APR	-59				1	1				-	59	APR
A CHARGE OF LUMMUNIET		03	MAR	60										60	MAR
		02	FEB	61					1				1	61	FEB
		01	JAN	62	· · · · ·			1	1					62	JAN
S UINER CLIT/IUWN 4 VILLACE		15	DEA	-27				1	1				<del>-</del>	-	<u> </u>
4 VILLAGE 5 auteire Eavat		11	UCU NOV	ده بړ	├──	$ \rightarrow$		+	+			<u> </u>	+	4	NCL
J OUTSIDE EUTPI		10	NUV OCT	04 7 E				+	+		}		+	1	NON DCT
COL. 9: Type of Employment		10	001 620	02 44	<u> </u>	$\vdash$		+					+	44	SED.
O DID NOT WORK	4	07	ALIC	- 20		┝		+					+	147	
1 PAID EMPLOYEE, AWAY FROM HOME	0	00	700	- 20	<u> </u>	$\vdash$			+				+	144	100
2 PAID EMPLOYEE, AT HOME	7	04	JUL	00	<b> </b>			+	+				+	100	
3 SELF-ENPLOYED, AWAY FROM HOME	2	00		70	<b> </b>	┝	┣—	+	<u> </u>			<u>}</u>	┥—	70	
4 SELF-EMPLOYED, AT HOME	'	02	Abn	70	<b> </b>	{			<del> </del>			h	+	121	
5 UNPAID WORKER, AWAY FROM HOME		04	MAD	70	<b> </b>		- H-	+	+					175	MAD
6 UNPAID WORKER, AT HOME		03	FED	77	┝	⊢−∣		+	+			-	+	5	FER
		01	181	- 1-3 - 7/	<u> </u>	$\vdash$	-		+			-	+	174	164
			~~	74		<b>د</b> ا	L	1	1		L	L	<b>_</b>	J ' •	944
BIRTH DATE: LAST CHILD BORN						u ("		I							
PRIOR TO JANUARY 1987					YEA	≓ ⊢									1
								)							•

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## EGYPT DEMOGRAPHIC AND HEALTH SURVEY HUSBAND QUESTIONNAIRE

IDE	NTIFICATION		
GOVERNORATE	PSU/SEGMENT NO.	GOVERNO	RATE
KISH/HARQAZ	BUILDING NO		7
SHIAKHA/VILLAGE	HOUSE NO	PSU/SEGM	LI ENT NO.
HOUSEHOLD NO.			
URBAN1 RURAL2		HOUSEHOLD NO.	URBAN/RURAL
LARGE CITY1 SMALL CITY	2 TOWN3 VILLAGE4		
NAME OF HOUSEHOLD HEAD			
ADDRESS IN DETAIL		LOCALITY	KUSBAND
NAME OF HUSBAND			
LINE NUMBER OF HUSBAND			
		<u> </u>	

	INTERV				
	1	2	3	FINA	LVISIT
DATE					
TEAM				TEAM	
INTERVIEWER'S NAME					2
SUPERVISOR'S NAME				SUPERVISOR	
RESULT				RESULT	
NEXT VISIT: DATI	E			TOTAL VISITS	s []
RESULT CODES: 1 COMPLETED 2 NOT AT HOME 3 POSTPONED 4 REFUSED 5 PARTLY COMPLETED 6 INCAPACITATED 7 OTHER	(SPECIFY)				
	FIELD EDITOR	OFFICE	EDITOR	CODER	KEYER

	FIELD EDITOR	OFFICE EDITOR	CODER	KEYER
NAME		·····		
DATE				
SIGNATURE				

SECTION	1.	RESPONDENT'S	BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
101	RECORD THE TIME.	HOUR	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in Cairo, Giza, Alexandria, another city or town or in a village?	CAIRO/GIZA	
103	How long have you been living continuously in (NAME OF VILLAGE OR CITY IN WHICH INTERVIEW OCCURS)? IF LESS THAN ONE YEAR, ENTER '00'.	NUMBER OF YEARS	<u>→105</u>
104	Just before you moved here, did you live in a Cairo, Giza, Alexandria, another city or town or in a village? 	CAIRO/GIZA	
105	In what month and year were you born?	MONTH	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCOMSISTENT.	AGE IN COMPLETED YEARS	İ
107	How many times have you been married?	NUMBER	
108	In what month and year did you first enter into a marriage contract?	MONTH	
109	How old were you when you first entered into a marriage contract?	AGE	
110	In what month and year did you first begin to live together (consummate your marriage)?	MONTH	
111	How old were you when you first began to live together (consummate your marriage)?	AGE	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	KIP TO
112	How many wives do you have now?	NUMBER OF WIVES	
113	Have you ever attended school?	YES1 NO2	+118
114	What is the highest level of school you attended?	PRIMARY	
115	What is the highest grade which you successfully completed at that level?	GRADE	
116	Are you currently attending school?	YES1	
117	CHECK 114: PREPARATORY PRIMARY OR HIGHER		+119
118	Can you read and understand a letter or newspaper easily, with difficulty, or not at all?	EASILY	►120
119	Do you usually read a newspaper or magazine at least once a week?	YES1 NO2	
120	How many hours on average do you listen to the radio each day? IF LISTENS LESS THAN 1 HOUR, WRITE "OO".	NUMBER OF HOURS PER DAY ALL OF THE TIME	
121	How many hours on average do you watch television each day?	NUMBER OF HOURS PER DAY	
	IF WATCHES LESS THAN 1 HOUR, WRITE "00".	NEVER	
122	What is your religion?	MOSLEM	
123	What kind of work do you mainly do? WRITE THE ANSWER EXACTLY AS GIVEN.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
124	CHECK 123: WORKS (WORKED) DOES (DID) IN AGRICULTURE IN AGRICULTURE		 →126
125	v Do you work mainly on your own land or family land, or do you rent land or do you work on someone else's land?	HIS/FAMILY LAND	<b> </b> ]+201
126	Do you work for someone else or for yourself?	FOR SOMEONE ELSE1 FOR HIMSELF2-	<b> </b> →201
127	Do you earn a regular wage or salary?	YES1 NO2	
		1	- 3

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
201	Now I would like to ask you about all your children. Do you have any children?	YES1 NO2—	 203 
202	How many sons do you have? And how many daughters do you have? 1F NONE ENTER '00'.	SONS	
203	Did you ever have a child who died, even if it was a only a small baby?	YES1 NO2—	 → 205
204	How many of your sons have you lost? And how many of your daughters have you lost? IF NONE ENTER '00'.	SONS DIED	
205	Would you like to have a (another) child or would you prefer not to have any more children?	HAVE A (ANOTHER) CHILD1 NO MORE/NONE2- UNDECIDED/DOES NOT KNOW8	 □-207 
206	Does your wife want to have a (another) child or would she prefer not to have any (more) children?	HAVE A (ANOTHER) CHILD1 NO MORE/NONE2 WIFE IS UNDECIDED3 DOESN'T KNOW WIFE'S DESIRES8	
207	Have you and your wife ever discussed the number of children you would like to have?	YES1 NO2	
208	Do you think your wife wants the <u>same</u> number of children that you want, or does she want <u>more</u> or <u>fewer</u> children than you want?	SAME NUMBER	
209	CHECK 201: YES, HAS CHILDREN NO, HAS NO LIVING CH		 →211 
210	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 you choose?	NUMBER	 → 212   → 213 
211	If you could choose exactly the number of children to have in your whole life, how many would that be?	NUMBER	213
		2	-1

## SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
212	How many boys and how many girls? IF NONE ENTER '00'.	BOYS GIRLS OTHER ANSWER96 (SPECIFY)
213	What do you think is the best number of months or years between the birth of one child and the birth of the next child? IF LESS THAN 2 YEARS, RECORD IN MONTHS. OTHERWISE RECORD IN YEARS.	MONTHS1 YEARS2 OTHER996 (SPECIFY)
214	When a couple is making a decision, sometimes the husband has more influence, in some cases, the wife has more influence, while other decisions are made jointly. In your family, who has the most influence in deciding whether or not to have another childyou, or your wife or do you have equal say?	RESPONDENT HAS MORE INFLUENCE1 BOTH RESPONDANT AND WIFE EQUAL2 WIFE HAS MORE INFLUENCE3 OTHER4 (SPECIFY)
215	Do you expect your children to help you financially when you get old?	YES1 NO2 NOT SURE/DOESN'T KNOW8
216	What is the highest level of school you would like for your daughter(s) to attain?	PRIMARY01PREPARATORY02SECONDARY03UPPER INTERMEDIATE04UNIVERSITY05MORE THAN UNIVERSITY06DEPENDS ON CHILD
217	What is the highest level of school you would like for your son(s) to attain?	PRIMARY01PREPARATORY02SECONDARY03UPPER INTERMEDIATE04UNIVERSITY05NORE THAN UNIVERSITY06DEPENDS ON CHILD95NO ASPIRATIONS FOR EDUCATION96DON'T KNOW98

301 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. Which ways or methods have you heard about?

CIRCLE CODE 1 IN 302 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN THE COLUMN, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 302, ASK 303-304 BEFORE PROCEEDING TO THE NEXT METHOD.

SECTION 3. CONTRACEPTION

		302 Have you ever heard of (METHOD)? READ DESCRIPTION OF	303 Kave you ever used (METHOD)?	304 Do you know where a person could go to get (METHOD)?
		EACH METHOD.		
01	PILL Women can take a pill every day.	YES/SPONT1 YES/PROBED2 NO3	YES1 NO2	YES1 NO2
02 	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES/SPONT	YES1 NO2	YES1 NO2
03	INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	YES/SPONT	YES1 NO2	YES1 NO2
04	NORPLANT Women can have small rods placed in their arm by a doctor which stops them from becoming pregnant for several years.	YES/SPONT1 YES/PROBED2 NO3	YES1 NO2	YES1 NO2
05	DIAPHRAGH,FOAH,JELLY Women can place a sponge, suppository, diaphragm, jelly or cream in- side them before intercourse.	YES/SPONT	YES1 NO2	YES1 NO2
<u>06</u>	CONDOM Men can use a rubber covering during sexual intercourse.	YES/SPONT1 YES/PROBED2 NO	YES1	YES1 NO2
07	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES/SPONT	Has your wife ever had an operation to avoid having any more children?	Do you know a place where a person can get such an operation?
		V	YES1 NO2	YES1 NO2
08	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES/SPONT1 YES/PROBED2 NO3	Have you ever had an operation to avoid having any more children?	YES1 NO2
			YES1	

## CONTRACEPTIVE METHOD TABLE CONTINUED

	302 Have you ever heard of (METHOD)? READ DESCRIPTION OF EACH METHOD.	303 Have you ever used (METHOD)?	304 Do you know where a person could go to get (METHOD)?
OP RHYTHM, PERIODIC ABSTINENCE Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to become pregnant.	YES/SPONT1 YES/PROBED2 NO3	YES1 NO2	Do you know where a person can obtain advice on how to use periodic abstinence? YES
10 WITHDRAWAL Men can be careful and pull out before ejaculation.	YES/SPONT1 YES/PROBED2 NO3	YES1 NO2	
11 PROLONGED BREASTFEEDING Women can prolong the time that they breastfeed their babies to delay the next pregnancy.	YES/SPONT1 YES/PROBED2 NO3	YES1 NO2	
12       Have you heard of any other ways or methods that women or men can use to evoid pregnancy?         1	YES/SPONT1 NO3	YES	
305 CHECK 302: AT LEAST ONE "YE (HEARD OF A MET	NOT A SINGLE "YE	S"→ SK1P TO 40	01

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SK IP
306	Have you ever discussed family planning with your wife?	YÉS1 NO2—	>309
307	Who first started to discuss family planning, you or your wife?	RESPONDENT1 HIS WIFE2	
308	How often have you talked to your wife about family planning in the past year?	ONCE	
309	When a couple is making a decision, sometimes the husband has more influence, in some cases, the wife has more influence, while other decisions are made jointly. In your family, who has the most influence in deciding whether or not to use family planning-you, or your wife or do you have equal say?	RESPONDENT HAS MORE INFLUENCE1 BOTH RESPONDENT AND WIFE EQUAL2 WIFE HAS MORE INFLUENCE3 OTHER4 (SPECIFY)	
310	CHECK 303: NOT A SINGLE "YES" AT LEAST ONE ' (NEVER USED) (EVER USED)	YES"	
311	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES1 NO2—	 →322 
312	What have you or your wife used or done? CORRECT 303-305 (AND 302 IF NECESSARY).		
313	Kave you ever gone to get family planning supplies?	YES1 NO2 NEVER USED SUPPLY METHODS3	
314	Have you ever accompanied your wife when she went for family planning?	YES1 NO2 SHE NEVER WENT3	
315	CHECK 303: EVER USED NEVER USED CONDOM CONDOM	SKIP TO 320	
			3-3

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SK1P TO
316	Do you and your wife usually use the condom in conjunction with some other method? IF YES: Which method?	PILL       01         1UD       02         INJECTIONS       03         NORPLANT       04         DIAPHRAGM/FOAM/JELLY       05         FEMALE STERILIZATION       07         MALE STERILIZATION       07         MALE STERILIZATION       08         PERIODIC ABSTINENCE       09         WITHDRAWAL       10         PROLONGED BREASTFEEDING       11         OTHER       12         (SPECIFY)         USE CONDOM ONLY       13	
317	Did you buy any condoms in the <u>past year</u> ?	YES1 NO2	->319
318	How many packets of condoms have you bought?	NUMBER	
319	What brand of condoms do you usually obtain? Brand	BRAND	
320	Are you and your wife currently doing anything or using anything to avoid or delay getting pregnant?	YES1 NO2	<b>→ 3</b> 22
321	Which method are you or your wife using?	PILL       .01	<b>→</b> 326
355	Do you intend to use a method to delay or avoid pregnancy at any time in the future?	YES	-+324 -+326
		3-4	4

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
323	What is the main reason you do not intend to use a method?	WANTS CHILDREN.       01         LACK OF KNOWLEDGE.       02         PARTNER OPPOSED.       03         COST TOO MUCH.       04         SIDE EFFECTS.       05         HEALTH CONCERNS.       06         HARD TO GET METHODS.       07         RELIGION.       08         OPPOSED TO FAMILY PLANNING.       09         FATALISTIC.       10         OTHER PEOPLE OPPOSED.       11         INFREQUENT SEX.       12         WIFE CANNOT GET PREGNANT.       13         WIFE MENOPAUSAL/HYSTERECTOMY.       14         INCONVENIENT.       15         OTHER16       (SPECIFY)         DON'T KNOW.       .98-	<b>Ⅰ</b> → 326
324	Do you intend to use a method within the next 12 months?	YES	
325	When you use a method, which method would you prefer to use?	PILL	
326	Ноw did you first hear about family planning?	TELEVISION.       .01         RADIO.       .02         PRINT MEDIA.       .03         WIFE.       .04         OTHER RELATIVES/FRIENDS.       .05         GOVERNMENT DOCTOR/       .06         CLINIC STAFF.       .06         PRIVATE DOCTOR/       .07         RAIYDA/OTHER FP WORKER.       .08         COMMUNITY MEETING.       .09         OTHER10       .09         (SPECIFY)       .01	
327	In the last month, have you heard a message about family planning on: the radio?	YES NO RADIO1 2	
328	Is it acceptable or not acceptable to you for family planning information to be provided on the radio or television?	ACCEPTABLE	

ю.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
329	There are many spots or messages regarding family planning on television. Can you tell me about the spots or messages which you have found most informative or helpful to you?	1 2	
	RECORD THE RESPONSE IN DETAIL. IF THE ANSWER IS A TO SERIES (E.G., KAREEMA MUHKTAR OR THE DOCTOR), PROBE TO FIND OUT WHICH SPECIFIC SPOTS IN THE SERIES WERE MOST HELPFUL OR INFORMATIVE. RECORD UP TO THREE SPOTS.	3	
330	CHECK 113, 114 AND 118:		
	ATTENDED PREPARATORY OR HIGHER LEVEL ABLE TO READ	NOT ABLE TO READ	332
		•	<u>.</u>
331	In the last month have you read an article about family planning in a newspaper or magazine?	YES1 No2	
332	In the past year, have you ever attended a community meeting or talk in which there was discussion about family planning or Egypt's population problem?	YES1 NO2	
333	In general, do you approve or disapprove of couples using a method to avoid pregnancy?	APPROVES	
334	In general, do you think that your religion allows couples to use family planning or it forbids it?	ALLOWS FP	
335	Do you think that your wife approves or disapproves of couples using a method to avoid pregnancy?	APPROVES	
336	If couples wish to avoid pregnancy, do you approve or disapprove of their using:	APPR DISAPPR DK	
:	the condom?	CONDOM 2 8	1
	the IUD?	IUD1 2 8	
	female sterilization?	FEMALE STER1 2 8	
	withdrawal?	WITHDRAWAL1 2 8	
	male sterilization?	MALE STER 1 2 8	
	the pill?	PILL 1 2 8	

\_\_\_\_\_

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
337	In your opinion, what is the main problem, if any, with using:	CONDOM	
	<pre>the condom? the IUD? female sterilization? withdrawal? male sterilization? the pill? ENTER CODE FOR EACH METHOD FROM LIST BELOW. 01 NONE 02 NOT EFFECTIVE 03 WIFE/PARTNER DISAPPROVES 04 COMMUNITY DISAPPROVES 05 RELIGION DISAPPROVES 06 SIDE EFFECTS/HEALTH CONCERN 07 ACCESS/AVAILABILITY 08 COSTS TOO MUCH 09 INCONVENIENT TO USE 10 OTHER (SPECIFY) 98 DON'T KNOW</pre>	(SPECIFY) IUD	
338	Would you object if your wife went to a male doctor for family planning?	YES1 NO2 DOESN'T KNOW	
339	Between the first day of a woman's period (i.e., menstrual cycle) and the first day of her <u>next</u> period, are there certain times when she has a greater chance of becoming pregnant than other times?	YES1 NO2 DON'T KNOW8	 ⊒⊷401 
340	During which times of a woman's menstrual cycle does she have the greatest chance of becoming pregnant?	DURING HER PERIOD1 RIGHT AFTER HER PERIOD HAS ENDED2 IN THE MIDDLE OF THE CYCLE3 JUST BEFORE HER PERIOD BEGINS4 OTHER5 (SPECIFY) DON'T KNOW8	
340	nenstruat cycle, and the first day of her <u>next</u> period, are there certain times when she has a greater chance of becoming pregnant than other times? During which times of a woman's menstrual cycle does she have the greatest chance of becoming pregnant?	DURING HER PERIOD RIGHT AFTER HER PERIOD HAS ENDED IN THE MIDDLE OF THE CYCLE JUST BEFORE HER PERIOD BEGINS OTHER	8 1 2 3 4 5 8

## SECTION 4. WIFE'S CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
401	Does your wife go out alone or with your children to buy household items or visit relatives?	YES, ALONE
402	In general, if a wife disagrees with her husband, do you think she should express her opinion or keep quiet?	EXPRESS OPINION
403	Some say that a woman's place is not only at home but she should be able to work. Do you agree?	AGREE
404	Who should have the last word on the followingthe husband, the wife, both, or someone else? Visits to friends or relatives? Household budget? Having another child? Children's education? Children's education? Use of family planning methods? Your wife's employment?	HUSB WIFE BOTH OTHER VISITS TO FRD/RL.1 2 3 4 HOUSEHOLD BUDGET.1 2 3 4 HAVING CHILD1 2 3 4 CHILD'S EDUC1 2 3 4 CHILD'S MARR1 2 3 4 CHILD'S MARR1 2 3 4 FAMILY PLANNING.1 2 3 4 WIFE'S EMPLOYM'T.1 2 3 4
405	What do you think is the total spent each month by a family in your situation?	AMOUNT
406	Does your wife make any contribution to the household budget?	YES1 NO2
407	RECORD THE TIME.	HOUR

THANK THE RESPONDENT FOR PARTICIPATING IN THE SURVEY. COMPLETE QUESTIONS 501-502 AS APPROPRIATE. BE SURE TO REVIEW THE QUESTIONNAIRE FOR COMPLETENESS BEFORE LEAVING THE HOUSEHOLD.

501	DEGREE OF COOPERATION.	POOR
502	INTERVIEWER'S COMMENTS:	
503	FIELD EDITOR'S COMMENTS:	
5D4	SUPERVISOR'S COMMENTS:	
505	OFFICE EDITOR'S COMMENTS:	