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The 2000 Egypt Demographic and Health Survey is the latest round of a series of surveys carried out in Egypt that have provided information on fertility behavior and its determinants, particularly contraceptive use. The EDHS findings are important in monitoring trends for key variables and in understanding the factors that contribute to differentials in fertility and contraceptive use among various population subgroups. The EDHS also provides a wealth of health-related information about mothers and their children. These data are of special importance for understanding the factors that influence the health and survival of infants and young children.

This report summarizes the results of more than 18 months of continuous work in preparing and carrying out various activities of the 2000 EDHS, including fieldwork, data processing, and analysis of the findings presented in this report.

It includes findings relating to fertility levels, childbearing intentions, and contraceptive use. It also looks at key maternal and health indicators including the extent to which mothers receive medical care during pregnancy and at delivery, immunization coverage, and the prevalence and treatment of diarrheal disease.

The challenge that remains is to use the information in this report to improve the efficiency of population and health program in Egypt.

Finally, I would like to express my appreciation to all parties who assisted in the implementation of 2000 EDHS. Their dedication and sincere efforts resulted in the successful completion of the field activities and the rapid issuance of this preliminary analysis of the survey results.

Prof. Dr. Maher Mahran
Secretary General
National Population Council
ACKNOWLEDGMENTS

The Egypt Demographic and Health Survey 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 charting future directions for the population and health programs.

This important survey could not have been implemented without the active support and dedicated efforts of a large number of institutions and individuals. The support and approval of H.E. Prof. Dr. Ismail Salam, the Minister of Health and Population, was instrumental in securing the implementation of the survey. Prof. Dr. Maher Mahan, Secretary General of the National Population Council, provided strong continuing support to the project and has shown great interest in the survey results.

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This survey could not have been conducted in such a timely fashion without the combined efforts of the senior, office and field staff in the EDHS team. I would like to express my appreciation for the dedication and skill with which they performed their tasks.

Finally, I would like to express my appreciation to all households and women who responded in the survey; without their participation this project would have been impossible.

Fatma El- Zanaty
Technical Director
The 2000 Egypt Demographic and Health Survey (2000 EDHS) interviewed a nationally representative sample of 15,573 ever-married women aged 15-49. The survey is the sixth in a series of Demographic and Health Surveys conducted in Egypt. As in previous surveys, the main purpose of the 2000 EDHS is to provide detailed information on fertility, family planning, infant and child mortality, and maternal and child health and nutrition. In addition, the 2000 EDHS included two special modules, one including questions on female circumcision and the other collecting data on children's education.

**Fertility Behavior**

**Levels and Trends.** During the past 20 years, fertility in Egypt has decreased by almost two births, from 5.3 births at the time of the 1980 Egypt Fertility Survey to 3.5 births at the time of the 2000 EDHS. The decline in fertility was not uniform throughout this period, however; the pace of change was very rapid during the 1980s, slowed in the early 1990s, and showed little change during the period between the 1995 and 2000 EDHS surveys.

Looking more closely at the period between the 1995 and 2000 surveys, Upper Egypt experienced the largest decrease in fertility, from 4.7 births per woman at the time of the 1995 EDHS to 4.2 births at the time of the 2000 survey. The Frontier Governorates had a more modest decline (from 4.0 to 3.8 births per woman), while, in the Urban Governorates and Lower Egypt, fertility levels remained essentially unchanged during the period at a level of around three births per woman.

**Age at Marriage.** One of the factors influencing the on-going fertility decline in Egypt has been the steady increase in the age at which women marry. Currently, the median age at first marriage among women age 25-29 is 20.8 years, around three years greater than the median age at first marriage prevailing among women age 45-49.

One of the more important effects of the increase in the age at first marriage has been a reduction in adolescent fertility. Adolescent childbearing carries higher risks of morbidity and mortality for the mother and child, particularly when the mother is under age 18. At the time of the 2000 EDHS, 6 percent of women 15-19 had given birth and 3 percent were pregnant with their first child.

**Family Planning Use**

**Levels and Trends.** The Egyptian government’s commitment to providing widely accessible family planning services has been a very important factor in the on-going fertility decline. Contraceptive use levels have more than doubled in Egypt between 1980 and 2000, from 24 percent to 56 percent. The IUD continues to be by far the most widely used method; 36 percent of married women were relying on the IUD, 10 percent the pill, and 6 percent injectables.

**Family Planning Knowledge and Approval.** Widespread awareness of family methods as well as nearly universal approval of family planning use have been crucial elements in the expansion of family planning use. At the time of the 2000 EDHS, the average currently married woman knew about seven methods. More than eight in ten women were able to name a source for family planning methods. Exposure to broadcast messages about family planning had increased since 1995, particularly in rural Upper Egypt, where nine in ten 2000 EDHS respondents had heard a broadcast compared to seven in ten at the time of the 1995 survey.

Family planning has broad support among Egyptian couples. Nine in ten non-sterilized currently married women approve of a couple using family planning, and 85 percent believe their husbands also approve. Very few women
who approve of family planning use (5 percent) think that a newly married couple should use contraception to delay the first birth. However, most women (85 percent) consider it appropriate for a couple to begin family planning use after they have their first child.

Differentials in Use. Despite nearly universal family planning knowledge and approval, the 2000 EDHS found significant differentials in use. Use rates exceeded 60 percent in the Urban Governorates and in both urban and rural areas in Lower Egypt. In contrast, only around 40 percent of currently married women were using in rural Upper Egypt and the Frontier Governorates. Use rates were directly associated with a woman’s educational level, ranging from 52 percent among women with no education to 61 percent among women who completed secondary school or higher.

Discontinuation of Use. A key concern for the family planning program is the rate at which users discontinue use of contraception and their reasons for stopping. Overall, 30 percent of users in Egypt discontinue using a method within 12 months of starting use. The rate of discontinuation during the first year of use is much higher among pill users (48 percent) and injectable users (48 percent) than among IUD users (14 percent). With regard to the reasons for stopping use, users are more likely to discontinue during the first year of use because they experienced side effects or had health concerns than for other reasons.

Provision of Services. Both government health facilities and private sector providers play an important role in the delivery of family planning services. More than half of all IUD users (54 percent) go to Ministry of Health or other governmental providers for their method. This represents an increase from the situation in 1995, when 45 percent of users relied on public sector facilities for their methods. Public sector providers are also the principal source for injectables while eight in ten pill users obtain their method from a pharmacy.

The DHS results suggest that family planning providers are not offering women adequate information to enable them to make an informed choice about the method best suited to their contraceptive needs. In particular, many users are not offered a choice of methods. Although side effects cause many users to discontinue, many providers also are not counselling women about the side effects.

For example, only two in five users who obtained their method from a clinical provider reported that they had been told about methods other than the one that they adopted or about the side effects that they might experience. There is even less information exchange between pill users and the pharmacists from which they obtain their methods. Fewer than one in seven users who obtained the pill from a pharmacy received information about other methods or about the side effects they might have in using the pill.

Need for Family Planning

Fertility Preferences. Many Egyptian women are having more births than they consider ideal. Overall, 5 percent of births in the five years prior to the survey were reported to be mis-timed, that is, wanted later and 13 percent were unwanted. If Egyptian women were to have the number of children they consider ideal, the total fertility rate would fall from 3.5 births to 2.9 births per woman.

Unmet Need for Family Planning. Taking into account both their fertility desire at the time of the survey and their exposure to the risk of pregnancy, more than one in ten currently married women were considered to have an immediate need for family planning. This group includes women who were not using family planning but wanted either to wait two or more years for the next birth (4 percent) or wanted no more children (8 percent). Two-thirds of women defined as having an unmet need for family planning lived in rural areas and a similar proportion had less than a primary education.
Opportunities to provide advice to these women about family planning are being missed in many cases. Almost half of the women in need of family planning had some contact with a family planning worker or health facility in the year before the survey. In the majority of these encounters, however, family planning was not discussed. Overall, less than one in ten women with an unmet need for family planning received information or advice about family planning during the year before the survey.

**Child Mortality**

**Levels and Trends.** At the mortality level prevailing in the five-year period before the EDHS, one in twenty Egyptian children will die before their fifth birthday. The level of early childhood mortality has fallen substantially since the 1960s, when around one in four children died before reaching age five.

**Socioeconomic Differentials.** Mortality rates are higher in rural than urban areas. The highest levels are found in rural Upper Egypt, where rates are roughly double those in the Urban Governorates, which has the lowest mortality. Differentials by the mother’s education are also large, with children born to women who never attended school having mortality rates that are more than twice as high as those among children born to mothers who have at least a secondary education.

**Demographic Differentials.** Mortality risks are especially high for births that occur within too short a period after a prior birth. The risk of dying before the fifth birthday more than triples if births are closely spaced, i.e., if a child is born less than two years after an elder sibling compared with children born four or more years after a prior birth.

During the five years prior to the EDHS, more than one-quarter of non-first births occurred within 24 months of a previous birth. Breastfeeding practices, especially the early introduction of supplemental foods, reduce the time a woman is amenorrheic following a birth and, thus contribute to short birth intervals. Half of Egyptian mothers become exposed to the risk of another pregnancy within four months of giving birth.

**Maternal Health**

**Care During Pregnancy.** The care that a woman receives during pregnancy and at childbirth reduces the risks of illness and death for both the mother and the child. Overall, women saw a medical provider for at least some type of care during the pregnancy prior to 85 percent of all births that occurred during the five-year period prior to the 2000 EDHS. Women reported that they had antenatal care, i.e., care sought specifically to monitor the pregnancy, in the case of 52 percent of births. They saw a provider for the recommended minimum number of antenatal care visits (four) in the case of 37 percent of births.

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus, an important cause of death among newborns. Women had one or more tetanus toxoid injections for 73 percent of births in the five-year period before the survey.

**Content of Pregnancy Care.** The pregnancy care that Egyptian mothers receive often does not include routine screening or advice that is important in detecting and preventing complications. For example, women reported that they had been weighed and their blood pressure monitored in the case of only about 60 percent of the births in which a medical provider was seen for pregnancy care. Urine and blood samples were taken in two in five births, the mother’s height was measured in about a third of the births, and iron tablets/syrup were received or bought in around a quarter of the births. Mothers were given advice about potential pregnancy complications in 18 percent of the births and told by the provider where to seek assistance if they experienced problems in the case of 14 percent of the births.

**Delivery Care and Postnatal Care.** Trained medical personnel assisted at six in ten births during the five-year period prior to the 2000
EDHS. Dayas (traditional birth attendants) assisted with most of the remaining deliveries. Slightly less than half of all deliveries took place in a health facility, with delivery care provided somewhat more often at private than governmental facilities. Around one in ten deliveries were by Caesarean section.

Care following delivery is very important for both the mother and her child, especially if the birth occurs in the home without medical assistance. In Egypt, postnatal care was reported in the case of less than 1 in 10 deliveries that took place outside of a health facility.

**Differentials in Coverage.** A woman’s residence and education status are strongly associated with the receipt of maternity care. For example, the percentage of urban births in which the mother received regular antenatal care is more than twice the proportion of rural births (54 percent and 26 percent, respectively). Coverage of maternity care services is especially low in rural Upper Egypt, where regular antenatal care is received for slightly less than a fifth of births and slightly less than two-fifths of deliveries are medically assisted. Mothers with a secondary or higher education are more than three times as likely to have regular antenatal care and more than twice as likely to have been assisted at delivery by trained medical personnel as mothers who never attended school.

**Trends in Coverage.** Coverage of maternity care services has improved since the late 1980s. The six-fold increase in tetanus toxoid coverage during the period—from 11 percent at the time of the 1988 EDHS to 72 percent at the time of the 2000 survey—is particularly notable. Medically assisted deliveries also have risen considerably, from a level of 35 percent in 1988 to 61 percent in 2000.

**Child Health**

**Childhood Vaccination Coverage.** One of the primary means for improving survival during childhood is increasing the proportion of children vaccinated against the major preventable diseases. The 2000 EDHS results show that 92 percent of children 12-23 months are fully immunized against the six major preventable childhood illnesses (tuberculosis, diphtheria, whooping cough, tetanus, polio and measles). This represents a substantial improvement over the level at the 1995 EDHS, where 79 percent of children were fully immunized. In addition, more than 90 percent of young children also have the recommended three doses of the hepatitis vaccine.

**Prevalence and Treatment of Childhood Illnesses.** The 2000 EDHS provided data on the prevalence and treatment of two common childhood illnesses, diarrhea and acute respiratory illness. Seven percent of children under five were reported to have had diarrhea in the two weeks preceding the survey. Medical advice was sought in treating about half of these cases. Use of ORS packets (34 percent) or a homemade solution of sugar, salt and water (5 percent) to combat the dehydration was common. Altogether some form of ORT or increased fluids was used in treating around one in two of the children suffering from diarrhea.

During the two weeks preceding the survey, 10 percent of children had a cough accompanied by short, rapid breathing, which are symptoms of acute respiratory illness. A provider was consulted about the illness in the case of two-thirds of the children with these symptoms, and mothers reported that antibiotics were given to three-fourths of the children.

**Nutrition Indicators for Childern and Women**

**Infant Feeding Practices.** Breastfeeding is nearly universal in Egypt, and the average length of time that a child is breastfed is relatively long (18.4 months). Breastfeeding practices for very young children are not however optimal. More than half of all infants receive prelacteal feeds (i.e., they are given some type of liquid until the mother’s breast milk flows freely) during the first three days following...
Nutritional Status of Children. Anthropometric data collected for children in the 2000 EDHS indicate that 19 percent of Egyptian children show evidence of chronic malnutrition or stunting, and 3 percent are acutely malnourished. The trend in anthropometric indicators from EDHS surveys between 1992 and 2000 shows that the nutritional status of children under age five has improved from the situation prevailing during the first half of the 1990s, when 25-30 percent of children were found to be stunted. Large differentials in children’s nutritional status continue to be observed, however, particularly by residence. For example, the percentage stunted among children in rural Upper Egypt is 27 percent, three times the level found in the Urban Governorates.

Anemia Levels. Anemia, a condition characterized by a decrease in the concentration of hemoglobin in the blood, is associated with increased morbidity and mortality risks. The 2000 EDHS included hemoglobin testing (the primary method of anemia diagnosis) in a subsample of one-half of all EDHS households for three groups: ever-married women 15-49, children under age five and never-married boys and girls 11-19 years old.

The results of the hemoglobin testing for women indicated that around three in ten EDHS respondents have some degree of anemia. Most of these women were found to be mildly anemic, 5 percent moderately anemic and only a few women (less than one percent) were found to be severely anemic. Anemia during pregnancy increases the risks of maternal and infant death, premature delivery, and low birth weight. The 2000 EDHS survey found proportion anemic to be considerably higher for pregnant women (45 percent) and breastfeeding women (32 percent) than for women who were neither pregnant or breastfeeding (26 percent).

Looking at the situation among young children, the proportion considered to be at least mildly anemic was similar to that observed among ever-married women (30 percent). However, young children were classified as moderately anemic more often than women. Overall, one in nine children under age five was at least moderately anemic.

The overall levels of anemia among never-married boys and girls age 11-19 years (30 percent and 29 percent, respectively) were similar to that found for women and young children. Virtually all of these boys and girls were only mildly anemic; less than two percent were classified as moderately or severely anemic.

Vitamin A Supplementation. Vitamin A is a micronutrient found in very small quantities in some foods. It is considered essential for normal sight, growth, and development. Egypt has recently introduced a program of vitamin A supplementation for new mothers and for children beginning at age nine months. The 2000 EDHS results suggest that the coverage of that program is still limited. Mothers reported receiving a vitamin A capsule in the case of 1 in 9 births. Around a fifth of Egyptian children 12-23 months had received a Vitamin A capsule.

Iodization of Salt. Iodine is another important micronutrient. Egypt has adopted a program of fortifying salt with iodine to prevent iodine deficiency. Overall, 56 percent of households were found to be using salt containing some iodine.

Female Circumcision

Level and Trends. Results from the 2000 EDHS confirm the 1995 EDHS finding that the practice of female circumcision is virtually universal among women of reproductive age in Egypt; 97 percent of EDHS respondents had been circumcised.

Attitudes about circumcision appear to be changing. There is some evidence that support
for the practice is gradually changing. Just over eight in ten women with daughters (81 percent) reported in 2000 that they had a daughter who was already circumcised or that they intended to have a daughter circumcised in the future. This represented a decrease over the proportion of women with daughters who said in 1995 that they had or planned to have a daughter circumcised (87 percent). A somewhat smaller proportion of women also supported continuation of the practice at the time of the 2000 EDHS (75 percent) than in 1995 (82 percent).

Beliefs about Circumcision. The majority of ever-married women 15-49 (73 percent) believe that circumcision is an important part of religious tradition. Two-thirds of the women feel that the husband prefers the wife to be circumcised, and half of women think that circumcision prevents adultery. Fewer women believe that the practice has any adverse consequences, with the most widely recognized problem being the lessening of sexual satisfaction (37 percent).

Children’s Education

School Attendance. Information from a children’s education module is useful in looking at several important aspects of school attendance among Egyptian children. While most children 6-15 years of age were currently going to school, 16 percent had either never attended school or had attended but dropped out of school at some point prior to the survey. Among those ever attending school, 14 percent had repeated at least one grade.

Gender Differences. The proportions never having attended school are nearly identical for boys and girls living in urban areas while there are marked differences between the level among boys (9 percent) and that among girls (19 percent) in rural areas. By place of residence, the proportions never having attended school are highest for both boys and girls in rural Upper Egypt and in the Frontier Governorates.

The reasons that mothers give for children never having attended school also vary by the child’s gender. Mothers are much more likely to say that a girl did not attend school because it was too costly or because of custom or tradition than they are to offer those reasons when a boy has never have attended school.

Expenditures on Schooling. The average Egyptian household spends around 25 pounds per child during the school year on registration and tuition fees, 70 pounds per child on clothing and bags, 33 pounds per child on textbooks and supplies, and 10 pounds per child for tutoring or special classes. Expenditures per child are higher in urban areas than in rural areas for all items. The urban-rural differences in expenditures may in part be due to the fact that more urban than rural children attend private secular schools, where costs are substantially higher than in public or religious schools.

Attitude about University Education. The children’s education module looked for evidence of son bias in educational expectations by asking all EDHS respondents about who should be sent to the university—the son or the daughter—if parents could afford the costs for only one child. Slightly more than half of the women felt that the decision should be made based on the child’s capabilities. Among the remaining women, however, most believed parents should send the son rather than the daughter. Altogether almost 2 in 5 women felt the parents should send the son to the university if they could afford to send only one child compared to 7 percent who felt that the daughter should be sent.