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Demographic and Health Survey
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Preliminary Report

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Foreword

The 1995 Egypt Demographic and Health Survey (EDHS) is the third survey in a series of Demographic and Health surveys that have been carried out in Egypt. The EDHS-95 collected information on fertility and child mortality, family planning awareness, approval and use, as well as basic information on maternal and child health. Preparations for the EDHS-95 started early in 1995, and the fieldwork was carried out between November 1995 and January 1996.

This report presents preliminary findings from the EDHS-95. It includes information on fertility levels, reproductive intentions, and contraceptive knowledge and use. The report also provides results for key maternal and health indicators including medical care for mothers during pregnancy and at time of delivery, infant feeding practices, child immunization coverage and the prevalence and treatment of diarrheal disease among children. More detailed results will be presented in the final report which will be published later in 1996.

It is evident that the information collected in the EDHS-95 will be instrumental in identifying new directions for the national family planning and health programs in Egypt. In addition, as one of more than 70 surveys carried out in the international Demographic and Health Surveys program, it will hopefully contribute to an increased global commitment to improve the lives of mothers and children worldwide.

I am deeply indebted and grateful to all of the EDHS-95 staff for their dedicated efforts to make these highly important data available in such a timely fashion.

Prof. Dr. Maher Mahran
Secretary General
National Population Council

Acknowledgments

Sample surveys are one of the basic instruments used to obtain reliable information on a country's population and health situation. The EDHS-95 is the third in a series of Demographic and Health surveys in Egypt. It was conducted to provide the data needed to monitor and evaluate the progress that is being made in the effort to improve the health of mothers and children in Egypt.

The successful implementation of the EDHS-95 would not be possible without the active support and dedicated efforts of a large number of institutions and individuals. The National Population Council under the leadership of Prof. Dr. Maher Mahran has provided logistic support throughout the survey implementation. Technical assistance came from Macro International Inc. through the international Demographic and Health Surveys program. Funding for the survey was provided by USAID/Cairo through the Population and Family Planning III project.

A large number of individuals contributed to the successful implementation of the EDHS. In particular, the contribution of our deceased colleague, Dr. Abdel Hakim Mohamed Abdel Hakim, the Assistant Director for Survey Operations, deserves special acknowledgment. His spirit and devotion were instrumental throughout the survey. We profoundly regret that he is not present with us to see the successful conclusion of the survey on which he worked so diligently.

Other individuals whose efforts were instrumental in completing the survey include Dr. Enas Mansour, Assistant Director for Sampling, and Dr. Gihan Shawky, Assistant Director for Data Processing. Mr. Mounir Ibrahim, the fieldwork coordinator, ably supervised the field teams. Dr. Rashad Hamed, the senior data processing expert, and Mr. El-Daw Abdalla El-Daw and Mr. Hesham Abdel Megid, the data processing coordinators, were responsible for seeing that the data entry and editing proceeded on schedule. Dr. Effat Fakher El-Din and Dr. Abdel Monem Darwesh capably managed the training and supervision of the staff who collected the anthropometric data.

Dr. Ann Way of Macro International deserves my deepest gratitude for her effort and contribution during all the survey activities. My thanks and appreciation also are extended to Dr. Alfredo Aliaga, who served as sampling expert, Dr. Sunita Kishor, who worked on the Woman Status questionnaire, and Mr. Keith Purvis, who assisted with the data processing and tabulations required for this report.

I also gratefully acknowledge Dr. Richard Martin and Ms. Amani Selim in the Office of Population, USAID/Cairo, and Ms. Mary Ellen Tanamly and Dr. Nahid Matta in the Office of Health, USAID/Cairo, for their support and valuable comments throughout the survey activities.

I am deeply grateful to the many individuals at the National Population Council who contributed to the successful completion of this project, in particular Mr. Fawzy Abdel Ghani, the Director of the Institutional Development Project (IDP), and the staff of the central office and financial department at the NPC.

Finally, this survey could not have been conducted in such a timely fashion without the efforts of each member of the EDHS-95 field and office staff. I would like to express my appreciation for the dedication and skill with which they performed their tasks.

Fatma El-Zanaty
Technical Director

I BACKGROUND

A Introduction

The 1995 Egypt Demographic and Health Survey (EDHS-95) is the most recent in a series of national-level population and health surveys in Egypt¹. The EDHS-95 was conducted under the auspices of the National Population Council. Macro International provided technical support for the survey through the Demographic and Health Surveys project, which is sponsored by the U.S. Agency for International Development (USAID) to assist countries worldwide to obtain information on key population and health indicators. USAID/Cairo provided funding for the survey under the Population and Family Planning III project.

This preliminary report presents initial findings relating to the principal topics in the survey. The early publication of these results is intended to facilitate their use in the planning and management of population and health programs in Egypt. A more detailed report will be issued in the latter half of 1996. The figures in this preliminary report are not expected to differ markedly from the findings presented later in the more detailed report, nevertheless, the results presented here should be considered provisional and subject to further modification.

B Survey Objectives

The EDHS-95 was undertaken in order to obtain data on fertility and family planning behavior, child mortality, and the utilization of maternal and child health care services in Egypt. The survey obtained detailed information on these issues from a sample of ever-married women in the reproductive ages. Additional information relating to women's status within the household was obtained from a subsample of the women interviewed in the EDHS-95.

The EDHS-95 results are intended to provide the information needed to monitor the performance of the family planning and maternal and child health programs in Egypt. The survey findings may be used to assess the current health situation of women and their children and to plan further interventions to improve Egypt's reproductive health and child survival programs. Because of the extensive information obtained on various aspects of women's status, the EDHS-95 also provides a unique opportunity to obtain an in-depth portrait of the lives of Egyptian women.

¹ The EDHS-95 is the third Demographic and Health Survey to be implemented in Egypt, the earlier DHS surveys were conducted in 1988 and 1992. Other national-level surveys for which results are shown in this report include the 1980 Egyptian Fertility Survey (EFS-80), the 1984 Egypt Contraceptive Prevalence Survey (ECPS-84) and the 1991 Egypt Maternal and Child Health Survey (EMCHS 91).

II. SURVEY IMPLEMENTATION

A Sample Design

The sample for the EDHS-95 was designed to provide estimates of population and health indicators including fertility and mortality rates for the country as a whole and for six major subdivisions (Urban Governorates, urban Lower Egypt, rural Lower Egypt, urban Upper Egypt, rural Upper Egypt and the Frontier Governorates²). In addition, in the Urban Governorates, Lower Egypt and Upper Egypt the sample allows for governorate-level estimates of most key variables, with the exception of fertility and mortality rates and women's status indicators. In the Frontier Governorates, the sample size for individual governorates is not sufficiently large to allow for separate governorate-level estimates; however, separate estimates are possible for the western Frontier Governorates (Matrouh and New Valley) and the eastern Frontier Governorates (North Sinai, South Sinai and Red Sea). The EDHS-95 sample design also called for two governorates (Assuit and Souhag) to be oversampled in order to provide the basis for a subsequent in-depth study which will investigate the reasons for the high level of unmet need for family planning in Upper Egypt.

In order to allow for the subregional estimates, the number of households selected from each governorate (or subregion in the Frontier Governorates) is disproportionate to the size of the population in the governorate (subregion). Thus, the EDHS sample is not self-weighting at the national level. Consequently, all data in this report have been weighted so as to be representative.

B Sample Selection

The sample for the EDHS-95 was selected at three stages. Within each governorate (or subregion in the case of the Frontier Governorates), a list of shiakhass/towns constituted the primary sampling frame for urban areas, and a list of villages served as the frame for rural areas. The list of the shiakhass/towns and villages was obtained from the Central Agency for Public Mobilization and Statistics and was based on the 1986 census, however, prior to the selection of the sampling units, both the urban and rural frames were updated to take into account changes in the shiakhass/towns and villages since 1986.

In order to provide for implicit geographic stratification, the lists of shiakhass/towns and villages in each governorate were arranged in serpentine order according to their location from north to south within the governorate. During the first stage selection, 467 primary sampling units (204 shiakhass/towns and 263 villages) were chosen for the EDHS-95 sample.

The second stage of selection involved several steps. First, for each of the primary sampling units, maps were obtained and divided into a number of parts of roughly equal size. In large shiakhass/towns or villages (approximately 20,000 population) two parts were then selected from each PSU. In the remaining smaller shiakhass/towns and villages, one part was selected. A quick count was carried out in each selected part in order to provide the information needed to divide the parts into a number of segments of roughly equal size. In large shiakhass/towns and villages, one segment was selected from each part. In small shiakhass/towns and villages, two segments were selected from each part.

² The Frontier Governorates were not included in the two earlier DHS surveys. The inclusion of the Frontier Governorates in the EDHS-95 has little effect on the national figures since only around one percent of the Egyptian population reside in the Frontier Governorates.

A household listing was obtained for each segment. Using the household lists, a systematic random sample of households was chosen for the EDHS-95. A subsample of one-third of all households in every segment was selected for the women's status survey, except in Assuit and Souhag governorates where all households were included in the women's status survey sample. All ever-married women 15-49 who were usual residents or present in the household on the night before the interview were eligible for the survey.

C Questionnaires

Three questionnaires were used in the EDHS-95: the household questionnaire, the individual questionnaire and a special woman's status questionnaire. The household and individual questionnaires were based on the questionnaires which had been used in the EDHS-88 and the EDHS-92 and on model survey instruments developed in the DHS program. The women's status questionnaire was based on a special set of modules developed in the DHS program and modified to obtain data of interest in understanding women's position in Egyptian society. All of the questionnaires were developed in English and translated into Arabic. A pretest of the household and individual questionnaires was conducted in June 1995 and of the women's status questionnaire in July 1995.

The household questionnaire was used to enumerate all usual members of and visitors to the selected households and to collect information on the socioeconomic status of the households. The first part of the household questionnaire collected information on the age, sex, marital status, educational attainment, work status and relationship to the household head of each household member or visitor. This information was used to identify the women who were eligible for the individual interview. It also provides basic demographic data for Egyptian households. In the second part of the household questionnaire, there were questions on housing characteristics (e.g., the number of rooms, the flooring material, the source of water and the type of toilet facilities) and on ownership of a variety of consumer goods.

The individual questionnaire for women obtained information on the following topics: respondent's background characteristics, reproduction, contraceptive knowledge and use, fertility preferences and attitudes about family planning, pregnancy care and infant feeding practices, child immunization and health, schooling of children, female circumcision, marriage and husband's background, women's work and height and weight of children and mothers. The woman's status questionnaire, which was administered to a subsample of EDHS-95 respondents, obtained more detailed information from these women on their marriage and employment patterns, relationships with the husband and other household members, responsibilities in the household, and financial autonomy.

D Data Collection and Processing

The EDHS data were collected by 13 teams, each team consisted of four to five interviewers and a field editor, who were female, and the team supervisor and assistant supervisor, who were male. The field staff was trained during a four-week period in October 1995. The main fieldwork began in November 1995 and was completed in early January 1996. All callbacks and reinterviews were completed by late January 1996.

Questionnaires were returned to the EDHS survey office in Cairo for data processing. The office editing staff first checked that questionnaires for all selected households and eligible respondents had been received from the field staff. In addition, the few questions which had not been precoded (e.g., occupation) were coded at this time. The data were then entered and edited using microcomputers and the ISSA (Integrated System for Survey Analysis) software which was developed

in the DHS program to facilitate processing of survey data. Office editing and data processing activities were initiated almost immediately after the beginning of fieldwork and were completed in early March 1996.

E Coverage of the Sample

Table 1 presents information on the results of the household and individual interviews. A total of 16,046 households were selected for the EDHS-95 sample. Household interviews were completed for 15,567 households, which represents 97 percent of the sample households.

As noted above, an eligible respondent was defined as an ever-married woman age 15-49 who was a usual resident or who was present in the household on the night before the interview. A total of 14,879 eligible women were identified in the households in the EDHS-95 sample. Of these women, 14,779 were successfully interviewed.

The following preliminary tabulations summarize the main findings of the interviews with eligible women.

Percent distribution of households and eligible women by the result of the interview and response rates 1995 Egypt Demographic and Health Survey		
Result of interview and response rate	Number	Percent
Households selected	16,046	100.0
Result of household interview		
Completed	15,567	97.0
No competent respondent at home	96	0.6
Postponed	2	0.0
Refused	22	0.1
Household not found	2	0.0
Household absent	185	1.2
Dwelling vacant/no dwelling	159	1.0
Dwelling destroyed	5	0.0
Other	8	0.0
Occupied households	15,689	100.0
Households interviewed	15,567	99.2
Households not interviewed	122	0.8
Eligible women identified	14,879	100.0
Result of individual interview		
Completed	14,779	99.3
Partly completed	3	0.0
Not at home	81	0.5
Postponed	2	0.0
Refused	6	0.0
Incapacitated	7	0.0
Other	1	0.0
Overall response rate		98.6

III MAIN FINDINGS FROM THE EDHS-95

A Background Characteristics

The distribution of ever-married women 15-49 interviewed in the EDHS-95 by selected background characteristics is presented in Table 2. The relatively low proportion of women under age 25 (19 percent) is due to the increasing age at first marriage in Egypt. Beginning with the 25-29 cohort, the proportion of women gradually declines with age.

Slightly over half of the EDHS-95 respondents live in rural areas, while 46 percent live in urban areas. By place of residence, 22 percent reside in the Urban Governorates, 42 percent in Lower Egypt, 35 percent in Upper Egypt and 1 percent in the Frontier Governorates.

Table 2. Background characteristics of respondents			
Percent distribution of ever married women 15-49 by selected background characteristics, Egypt 1995			
Background characteristic	Weighted percent	Number of women	
		Weighted	Unweighted
Age			
15-19	4.6	673	704
20-24	14.5	2,136	2,167
25-29	18.6	2,749	2,770
30-34	17.6	2,605	2,606
35-39	17.4	2,573	2,554
40-44	13.9	2,059	2,003
45-49	13.4	1,984	1,975
Urban/rural residence			
Urban	46.1	6,809	6,279
Rural	53.9	7,970	8,500
Place of residence			
Urban Governorates	22.4	3,312	2,595
Lower Egypt	42.0	6,207	4,676
Urban	12.4	1,830	1,447
Rural	29.6	4,377	3,229
Upper Egypt	34.7	5,125	6,262
Urban	10.7	1,583	1,510
Rural	24.0	3,543	4,752
Frontier Governorates	0.9	135	1,246
Education			
No education	43.7	6,464	6,793
Some primary	19.7	2,908	2,821
Completed primary through some secondary	13.0	1,923	1,854
Completed secondary/higher	23.6	3,483	3,311
Work status			
Working for cash	16.9	2,503	2,373
Not working for cash	83.1	12,276	12,406
Total	100.0	14,779	14,779

Although the majority of women in the sample had some education, 44 percent of the respondents reported that they had never attended school. An additional 20 percent attended but did not complete primary school, 13 percent completed the primary level or had some secondary education, and 24 percent completed the secondary or higher level.

Few EDHS-95 respondents (17 percent) were working at a job for which they were paid in cash.

B Fertility

In the EDHS-95, retrospective reproductive histories were obtained from all respondents. In collecting these histories, each woman was first asked about 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 in which each child was born, the child's name, sex and if dead, the age at death, and, if alive, the current age and whether the child was living with the mother.

Current and Cumulative Fertility

Table 3 presents several fertility measures including the total and age-specific fertility rates and the mean number of children ever born.³ The total and age-specific fertility rates are for the three-year period before the survey, a period covering principally the calendar years 1993-1995. The total fertility rate measures recent fertility. It represents the number of children the average woman would have by the end of her reproductive years if she were to bear children during the period at the currently observed rates. The total fertility rate in Table 3 indicates that, if fertility were to remain constant at levels prevailing during the period 1993-1995, an Egyptian woman would bear 3.6 children over her lifetime.

Table 3 Current fertility and children ever born

Age specific fertility rates (per 1,000 women) and total fertility rate for the three years preceding the survey and the mean number of children ever born by age of the mother, Egypt 1995

Age	Age specific fertility rates	Mean number of children ever born	Number of women
15-19	61	0.09	4,700
20-24	200	0.88	3,677
25-29	210	2.24	3,174
30-34	140	3.44	2,745
35-39	81	4.45	2,642
40-44	27	5.14	2,099
45-49	7	5.95	2,007
Total 15-44	3.59	2.25	19,037
Total 15-49	3.63	2.60	21,045

Table 3 confirms that Egyptian women have children early in the reproductive period. At the age-specific rates shown in the table, an Egyptian woman would give birth to 1.3 children—around one-third of her lifetime births—by age 25 and to 2.4 births—almost two-thirds of her lifetime births—by age 30.

The effect of past high fertility among Egyptian women is evident in the mean number of children ever born in Table 3. On average, women currently in their late 20s have had two births, women in their late 30s have had more than 4 births, and women nearing the end of the childbearing period have given birth to six children. The difference between the mean number of children ever born

³ Fertility measures for the EDHS 95 are calculated directly from the birth history data. Although information on fertility was obtained only from ever-married women, estimates 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.

to women 45-49 and the total fertility rate is more than two children, indicating the rapid transition to lower fertility which Egypt has experienced in the past several decades

Trend in Fertility

Using data from earlier surveys as well as from the EDHS-95, Table 4 examines the trend in fertility in Egypt since the late 1970s. During the period, fertility levels fell by around 30 percent, from 5.3 births at the time of the Egypt Fertility Survey to 3.6 births at the time of the EDHS-95 (Figure 1). The pace of fertility decline slowed somewhat in the 1990s compared with the experience during the 1980s.

Table 4 Trend in fertility						
Age specific fertility rates (per 1,000 women) and total fertility rate, Egypt 1979-1995						
	EFS 80	ECPS 84	EDHS-88	EMCHS 91	EDHS 92	EDHS 95
Age	1979 1980	1983 1984	1986 1988	1990 1991	1990 1992	1993 1995
15-19	78	73	72	73	63	61
20-24	256	205	220	207	208	200
25-29	280	265	243	235	222	210
30-34	239	223	182	158	155	140
35-39	139	151	118	97	89	81
40-44	53	42	41	41	43	27
45-49	12	13	6	14	6	7
TFR 15-44	5.22	4.79	4.38	4.06	3.90	3.59
TFR 15-49	5.28	4.85	4.41	4.13	3.93	3.63

Source: EFS 80: Hallouada, A. M. et al., 1983, Volume II, Table 4.16
 ECPS 84: Unpublished results
 EDHS 88: Sayed et al., 1989, Table 3.2
 EMCHS 91: Abdel Azeem et al., 1993, Table 7.14
 EDHS 92: El Zanaty et al., 1993, Table 3.1

Fertility by Residence

As Table 5 indicates, rural women are having more children than urban women. At current levels, rural women will have 4.2 births by the end of the childbearing period while urban women will have three births. By region, fertility levels vary from a low of 2.7 births per woman in urban areas in Lower Egypt to 5.2 births in rural areas in Upper Egypt.

Figure 1
Trend in Fertility
Egypt 1979-1995

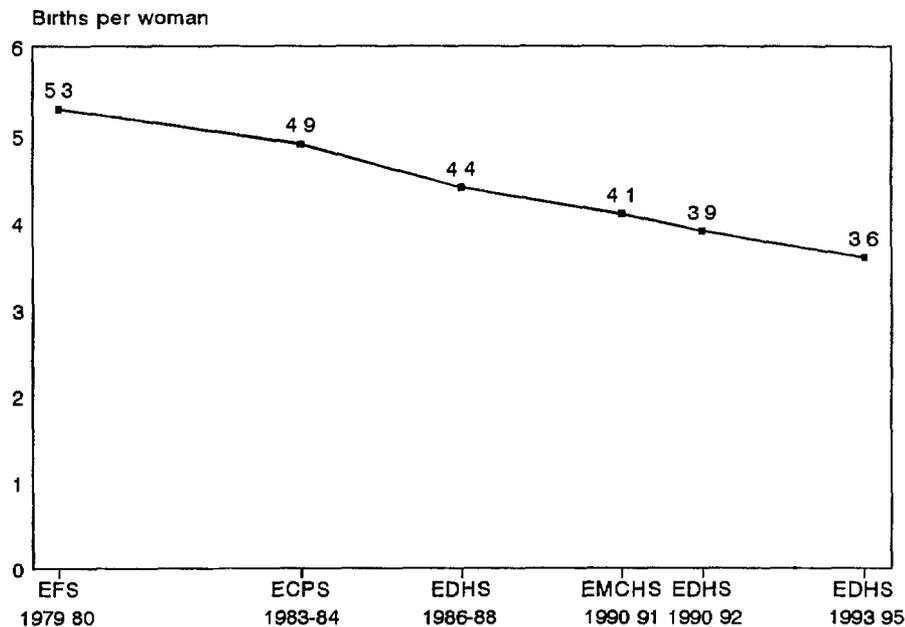


Table 5 Current fertility by residence

Age specific fertility rates (per 1,000 women) and total fertility rate for the three years preceding the survey by urban rural residence and place of residence, Egypt 1995

Age	Urban		Urban Governorates	Lower Egypt			Upper Egypt			Frontier Governorates
	Urban	Rural		Total	Urban	Rural	Total	Urban	Rural	
15-19	37	80	32	49	21	59	97	65	112	56
20-24	154	238	134	198	157	214	244	192	268	209
25-29	191	228	182	192	174	199	252	227	264	222
30-34	129	150	132	111	106	114	183	149	200	187
35-39	66	97	65	64	51	70	118	88	135	93
40-44	21	33	19	26	19	31	34	30	37	25
45-49	3	11		3	3	4	18	10	22	7
TFR 15-44	2.99	4.13	2.82	3.20	2.64	3.43	4.64	3.75	5.08	3.96
TFR 15-49	3.01	4.19	2.82	3.22	2.66	3.45	4.73	3.80	5.19	4.00

Using information from the two earlier DHS surveys, the EMCHS-91, and the EDHS-95 Table 6 examines recent trends in fertility by region. In urban areas, fertility fell fairly rapidly in the late 1980s and early 1990s. However, by the mid-1990s, urban fertility appears to have virtually plateaued⁴. In contrast, rural fertility declined throughout the period between the EDHS-88 and the EDHS-95 in both Lower Egypt and Upper Egypt. Overall, the size of the decline in fertility rates was somewhat larger in rural Lower Egypt (1.3 births) than in rural Upper Egypt (1 birth).

⁴ An initial analysis of the small rise in fertility levels in the Urban Governorates and urban Upper Egypt between 1992 and 1995 suggests that the increases in both areas may be due to sampling variability and are not significant.

Table 6 Trends in current fertility by residence				
Trends in total fertility rates by urban rural residence and place of residence, Egypt 1988 1995				
	EDHS-88	EMCHS 91	EDHS 92	EDHS 95
	1986	1987	1990	1993
Residence	1988	1991	1992	1995
Urban rural residence				
Urban	3 48	3 31	2 91	3 01
Rural	5 35	5 63	4 91	4 19
Place of residence				
Urban Governorates	3 01	2 93	2 69	2 82
Lower Egypt	4 45	U	3 70	3 22
Urban	3 81	3 46	2 80	2 66
Rural	4 73	4 89	4 10	3 45
Upper Egypt	5 39	U	5 17	4 73
Urban	4 17	3 86	3 58	3 80
Rural	6 15	6 71	5 97	5 19
Frontier Governorates	U	U	U	4 00

U = Unknown (not available)
Source EDHS 88 Sayed et al , 1989, Table 3 1
EMCHS 91 Abdel Azeem et al , 1993, Table 7 11
EDHS 92 El-Zanaty et al , 1993, Table 3 1

C Family Planning

The EDHS-95 collected information on the knowledge and use of family planning. To obtain these data, respondents were first asked to name all of the methods that they had heard about. For methods not mentioned spontaneously, a description of the method was read, and the respondents were asked if they had heard of the method. For each method recognized, respondents were asked if they had ever used the method and if they knew of a place where they could obtain the method. Finally, women were asked if they were currently using a method, and, if so, where they had obtained the method that they were using.

Knowledge of Methods and Sources

Knowledge of family planning methods is almost universal among Egyptian women (Table 7) and over 90 percent know about at least one place where they can obtain a method. With regard to knowledge of specific methods, virtually all currently married women have heard about the pill and IUD and most know about injectables. Other methods recognized by at least half of all currently married women are female sterilization (72 percent) and the condom (52 percent). Prolonged breastfeeding is the most widely known traditional method.

Injectables were introduced as a program method during the period between the EDHS-92 and the EDHS-95. The EDHS-95 results indicate that there were substantial increases both in the proportion of married women knowing about injectables and in the proportion who were able to name a source for this method (Figure 2).

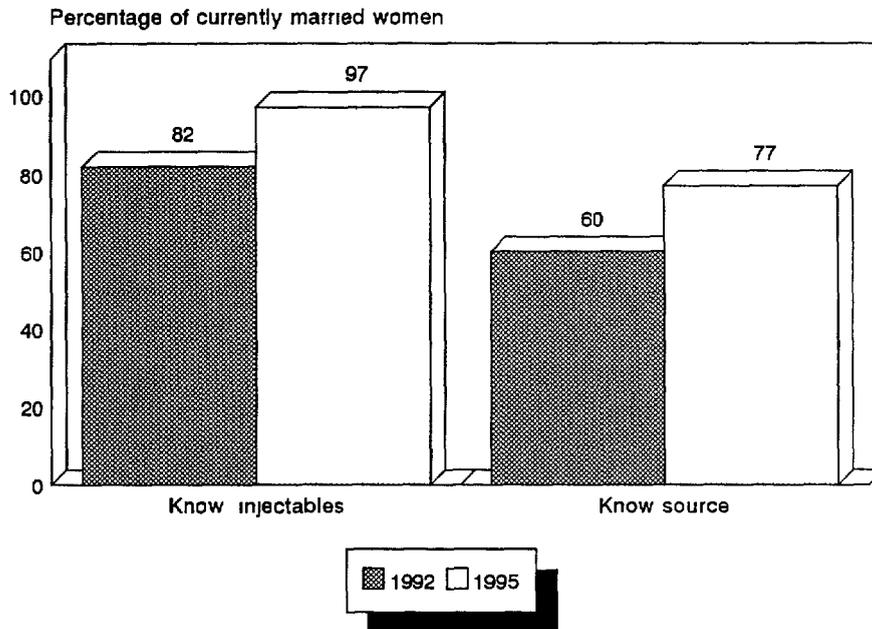
Table 7 Knowledge of family planning methods and sources and ever use of family planning

Percentage of ever married women and currently married women who know a family planning method, who know a source for family planning information or services, and who have ever used a family planning method, by method, Egypt 1995

Family planning method	Percent who know method		Percent who know source		Percent who ever used a method	
	EM	CM	EM	CM	EM	CM
Any method	99.8	99.8	91.5	92.5	68.4	70.4
Any modern method	99.8	99.8	91.3	92.3	66.7	68.7
Pill	99.6	99.6	88.3	89.3	44.2	45.2
IUD	99.4	99.5	86.2	87.5	46.1	48.1
Injectables	96.2	96.7	75.7	77.1	6.2	6.5
Norplant	44.0	44.9	32.1	32.9	0.2	0.2
Diaphragm/foam/jelly	30.4	31.0	25.1	25.7	2.2	2.2
Condom	51.0	52.4	42.4	43.9	7.7	8.0
Female sterilization	71.0	71.8	59.2	60.2	1.1	1.1
Male sterilization	12.8	13.2	8.9	9.3	0.0	0.0
Any traditional method	85.4	86.0	26.8	27.6	11.2	11.6
Periodic abstinence	41.7	42.7	26.8	27.6	3.3	3.4
Withdrawal	25.6	26.4			2.5	2.7
Prolonged breastfeeding	78.9	79.4			6.6	6.8
Other methods	2.5	2.5			0.4	0.4
Number of women	14,779	13,710	14,779	13,710	14,779	13,710

EM = Ever married women CM = Currently married women

**Figure 2
Trend in Knowledge of Injectables
Egypt 1992-1995**



Ever Use

The EDHS-95 found that 70 percent of currently married women in Egypt have had some experience in using family planning methods (Table 7). Almost all of the women who have ever used a method have used a modern contraceptive, 69 percent of currently married women have used a modern method at some time, while only 12 percent have used a traditional method. Looking at ever use of specific methods, the IUD and the pill are the most widely adopted methods, 48 percent of married women have used the IUD, while 45 percent have used the pill. Fewer than one in ten women had ever used any of the other family planning methods.

Current Use

Overall, 48 percent of currently married women in Egypt are currently using a contraceptive method. The most widely used method is the IUD (30 percent) followed by the pill (10 percent) and injectables (2 percent).

There are marked differences in the level of current use of family planning methods by residence (Table 8). Urban women are more likely to be using than rural women. By region, use rates are considerably higher in the Urban Governorates (58 percent) and Lower Egypt (55 percent) than in Upper Egypt (32 percent). In Upper Egypt, the use rate among urban women (50 percent) is more than twice the rate among rural women (24 percent). In Lower Egypt, the urban-rural differential is much less marked, 59 percent of married women living in urban areas in Lower Egypt are using a family planning method compared with 54 percent of rural women.

Table 8 Current use of family planning by residence

Percent distribution of currently married women by the family planning method currently used, according to residence, Egypt 1995

Family planning method	Urban		Urban Governorates	Lower Egypt			Upper Egypt			Frontier Governorates	Total
	Urban	Rural		Total	Urban	Rural	Total	Urban	Rural		
Any method	56.4	40.5	58.1	55.4	59.1	53.8	32.1	49.9	24.0	44.0	47.9
Any modern method	53.6	38.5	55.2	52.9	56.2	51.5	30.3	47.6	22.3	41.4	45.5
Pill	11.0	9.9	8.4	12.6	14.3	11.9	9.1	12.6	7.5	12.5	10.4
IUD	36.2	24.6	40.2	34.7	34.4	34.8	17.7	30.3	11.9	21.9	30.0
Injectables	2.4	2.5	2.2	2.8	3.0	2.7	2.0	1.8	2.1	3.5	2.4
Norplant	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diaphragm/foam/jelly	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.3	0.0	0.0	0.1
Condom	2.3	0.7	2.7	1.2	2.1	0.9	0.8	1.6	0.4	3.2	1.4
Female sterilization	1.6	0.7	1.6	1.4	2.2	1.1	0.5	1.0	0.3	0.3	1.1
Male sterilization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Any traditional method	2.7	2.0	2.8	2.5	2.9	2.3	1.9	2.3	1.7	2.6	2.4
Periodic abstinence	1.4	0.3	1.4	0.7	1.6	0.4	0.4	1.1	0.1	1.2	0.8
Withdrawal	0.8	0.3	1.0	0.6	0.7	0.6	0.2	0.5	0.0	0.4	0.5
Prolonged breastfeeding	0.5	1.3	0.5	1.1	0.6	1.2	1.2	0.6	1.5	0.7	1.0
Other methods	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.1
Not using	43.6	59.5	41.9	44.6	40.9	46.2	67.9	50.1	76.1	56.0	52.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	6,372	7,339	3,122	5,736	1,686	4,050	4,725	1,483	3,241	128	13,710

Other differentials in current use are presented in Table 9. Current use rises rapidly with age, reaching a peak (61 percent) in the 35-39 age group. Use rates also are related to family size. Few women use before having the first birth. After the first child, contraceptive use increases sharply with the number of living children, peaking at 65 percent among women with 3 children, after which it declines slightly.

Table 9 Current use of family planning by background characteristics

Percent distribution of currently married women by the family planning method currently used, according to selected background characteristics, Egypt 1995

Background characteristic	Any method	Any modern method	Pill	IUD	Injectables	Vaginals	Condom	Female sterilization	Any traditional method	Periodic abstinence	Withdrawal	Pro longed breast feeding	Not using	Total	Number of women
Age															
15 19	16 1	15 8	3 2	11 3	1 1	0 2	0 1	0 0	0 3	0 0	0 0	0 2	83 9	100 0	663
20 24	33 2	30 9	6 6	21 7	2 1	0 0	0 4	0 0	2 3	0 4	0 3	1 7	66 8	100 0	2,083
25 29	47 6	45 7	9 8	33 1	2 2	0 0	0 7	0 1	1 9	0 2	0 4	1 4	52 4	100 0	2,677
30 34	58 1	56 2	13 3	37 3	3 2	0 1	1 4	0 9	1 9	0 4	0 4	1 1	41 9	100 0	2,466
35 39	60 7	58 3	13 8	37 2	3 2	0 3	1 8	1 9	2 4	0 7	0 5	1 1	39 3	100 0	2,392
40 44	58 8	54 8	12 5	34 4	2 5	0 4	2 8	2 1	4 0	2 2	1 1	0 4	41 2	100 0	1,816
45 49	33 3	30 5	7 6	16 2	1 2	0 0	2 4	3 1	2 9	1 7	0 9	0 0	66 7	100 0	1,614
No of living children															
0	1 2	1 0	0 5	0 5	0 0	0 0	0 0	0 0	0 2	0 2	0 0	0 0	98 8	100 0	1,367
1	31 6	29 6	4 7	23 3	0 9	0 2	0 4	0 1	2 0	0 6	0 3	1 0	68 4	100 0	1,798
2	53 9	51 6	8 9	38 9	1 6	0 1	1 8	0 2	2 3	0 9	0 6	0 9	46 1	100 0	2,500
3	65 4	61 9	13 7	40 3	3 8	0 2	2 6	1 3	3 5	1 4	0 9	1 3	34 6	100 0	2,550
4 or more	53 9	51 5	13 9	30 6	3 2	0 2	1 4	2 1	2 4	0 6	0 6	1 1	46 1	100 0	5,495
Education															
No education	40 6	39 1	11 0	23 8	2 3	0 1	0 6	1 3	1 5	0 1	0 2	1 2	59 4	100 0	5,839
Some primary	50 5	48 2	12 2	30 2	3 1	0 3	1 2	1 2	2 3	0 5	0 5	1 2	49 5	100 0	2,683
Completed primary thru secondary	51 2	48 5	10 1	32 8	2 3	0 1	1 8	1 3	2 8	0 9	1 0	0 8	48 8	100 0	1,806
Completed secondary/higher	56 5	52 9	8 3	39 0	2 0	0 1	2 7	0 8	3 6	2 1	0 9	0 6	43 5	100 0	3,383
Work status															
Working for cash	58 6	54 0	10 0	37 7	2 0	0 2	3 0	1 1	4 6	2 6	1 3	0 8	41 4	100 0	2,229
Not working for cash	45 8	43 9	10 5	28 5	2 5	0 1	1 1	1 1	1 9	0 4	0 4	1 0	54 2	100 0	11,482
Total	47 9	45 5	10 4	30 0	2 4	0 1	1 4	1 1	2 4	0 8	0 5	1 0	52 1	100 0	13,710

Note Three Norplant users and 13 users of other (folk) methods are included as appropriate in the total percentages using any method any modern method and any traditional method but are not shown separately in the table Vaginal methods include the diaphragm, foam and jelly

By educational level, the most marked differences are between women with no education and those who have attended school, even if they did not complete the primary level. Among women who have attended school, there are only minor differences across educational levels in the level of current use. Finally, women employed in a job for which they are paid in cash are more likely to use than other women (59 percent and 46 percent, respectively).

Trends in Contraceptive Use

Table 10 uses data from the 1980 Egypt Fertility Survey, the 1984 Egypt Contraceptive Prevalence Survey, the three rounds of DHS surveys and the 1991 EMCHS to examine trends in contraceptive use in Egypt during the past 15 years. Contraceptive use levels clearly rose rapidly in the 1980s, and, by 1992, the overall use rate (47 percent) was almost twice the rate reported in the 1980 Egypt Fertility Survey (24 percent). However, the pace of change slowed in the 1990s, and there was no significant change in the use rate between the EDHS-92 and the EDHS-95 (Figure 3).

With regard to the method mix, the shift to more effective methods, which was very evident in the 1980s, is continuing in the 1990s but at a much slower pace. IUD use rose from 28 percent of married women in 1992 to 30 percent in 1995. There also was a small increase in prevalence of use of injectables, from less than 1 percent in 1992 to 2 percent in 1995. Use of the pill continues to decline, dropping from 13 percent in 1992 to 10 percent in 1995.

Table 10 Trends in current use of family planning						
Percent distribution of currently married women by the family planning method currently used Egypt 1980-1995						
Family planning method	EFS 80	ECPS 84	EDHS 88	EMCHS 91	EDHS 92	EDHS 95
Any method	24.2	30.3	37.8	47.6	47.1	47.9
Any modern method	22.8	28.7	35.4	44.3	44.8	45.5
Pill	16.6	16.5	15.3	15.9	12.9	10.4
IUD	4.1	8.4	15.7	24.1	27.9	30.0
Injectables		0.3	0.1		0.5	2.4
Norplant					0.0	0.0
Vaginal methods	0.3	0.7	0.4		0.4	0.1
Condom	1.1	1.3	2.4		2.0	1.4
Female sterilization	0.7	1.5	1.5		1.1	1.1
Male sterilization	0.1	0.0	0.0		0.0	0.0
Any traditional method	1.4	1.6	2.4	3.3	2.3	2.4
Periodic abstinence	0.5	0.6	0.6		0.7	0.8
Withdrawal	0.4	0.3	0.5		0.7	0.5
Prolonged breastfeeding		0.6	1.1		0.9	1.0
Other methods	0.3	0.1	0.2		0.1	0.1
Not using	75.8	69.7	62.2	52.4	52.9	52.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8,012	9,158	8,221	8,406	9,153	13,710

Note: A dash (-) indicates that separate results were not reported for the method.

Source: EFS 80: Unpublished results
 ECPS 84: Sayed et al., 1985, Table 9.4
 EDHS 88: Sayed et al., 1989, Table 6.1
 EMCHS 91: Abdel Azeem et al., 1993, Table 8.7
 EDHS 92: El Zanaty et al., 1993, Table 5.1

Figure 3
Trend in Contraceptive Use by Method
Egypt 1980-1995

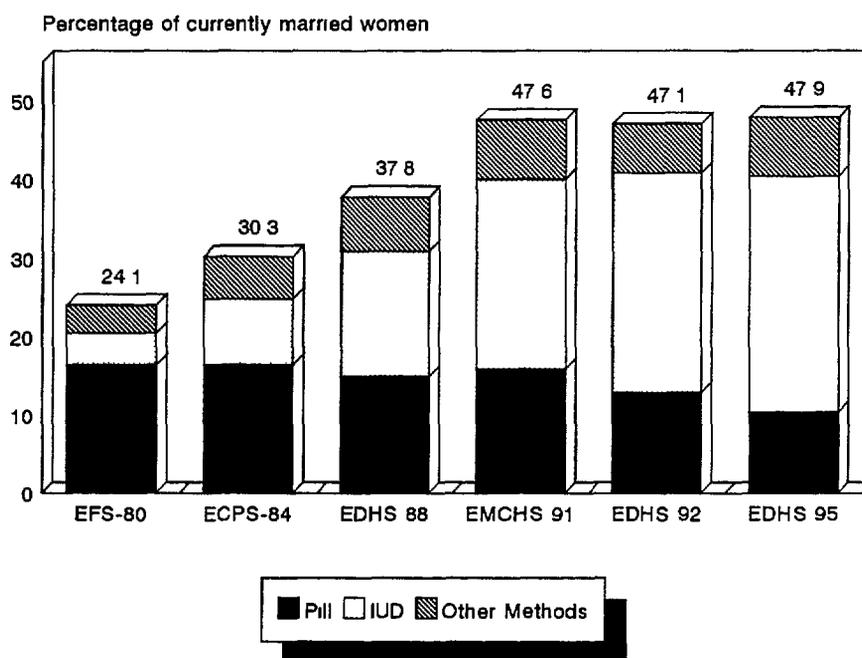


Table 11 summarizes the trend in contraceptive use in the major regions since 1980. The plateauing of use rates that was observed for the country as a whole is evident in all of the main regions. Between 1992 and 1995 there was no significant change in the overall prevalence rate in any of the regions. The largest change was in rural Lower Egypt, where contraceptive use rose from 51 percent in 1992 to 54 percent in 1995. All regions except urban Lower Egypt experienced small increases in use of the IUD, while use of the pill declined in all areas.

Table 12 shows use rates by governorate. Use rates exceed 50 percent in all of the Urban Governorates and in the nine governorates in Lower Egypt. In Upper Egypt, only Giza governorate, a large part of which is included in the Cairo Metropolitan area, has a contraceptive prevalence rate over 50 percent. Among the other governorates in Upper Egypt, use rates range from only 22 percent in Assuit and Souhag to 36 percent in Aswan.

As in the country as a whole, use rates increased fairly rapidly between 1988 and 1992 in most governorates, with the exception of Cairo and Damietta, where there was virtually no change in use rates during the period. During the period 1992-1995, use rates remained level or declined slightly in 7 governorates.⁵ The largest increases in use between 1992 and 1995 were observed in Kafr El-Sheikh and Ismailia.

⁵ With the exception of Assuit, the changes in most governorates experiencing declines are small and may not be statistically significant.

Table 11 Trends in current use of family planning by residence

Percentage of currently married women 15-49 who are currently using any family planning method, currently using the pill and currently using the IUD by urban rural residence and place of residence, Egypt 1980 1995

Method and residence	EFS-80	ECPS 84	EDHS 88	EMCHS 91	EDHS 92	EDHS 95
Any method						
Total	24.1	30.3	37.8	47.6	47.1	47.9
Urban	39.8	45.1	51.8	61.4	57.0	56.4
Rural	11.7	19.2	24.5	38.4	38.4	40.5
Urban Governorates						
Lower Egypt	43.6	49.6	56.0	64.0	59.1	58.1
Urban	23.8	34.1	41.2	U	53.5	55.4
Rural	42.6	47.7	54.5	61.5	60.3	59.1
Upper Egypt	18.0	28.5	35.6	50.1	50.5	53.8
Urban	8.9	17.3	22.1	U	31.4	32.1
Rural	24.9	36.8	41.5	56.3	48.1	49.9
Frontier Governorates	4.4	7.9	11.5	22.6	24.3	24.0
Frontier Governorates	U	30.4	U	U	U	44.0
Pill						
Total	16.5	16.5	15.3	15.9	12.9	10.4
Urban	26.7	23.3	18.4	17.6	14.0	11.0
Rural	8.8	11.4	12.4	14.8	11.9	9.9
Urban Governorates						
Lower Egypt	25.9	20.8	16.9	13.7	12.5	8.4
Urban	18.2	19.8	19.2	U	15.1	12.6
Rural	33.9	29.1	24.2	22.9	17.3	14.3
Upper Egypt	13.2	15.9	17.2	17.9	14.1	11.9
Urban	6.7	10.8	10.0	U	10.7	9.1
Rural	19.2	21.3	16.0	18.8	13.8	12.6
Frontier Governorates	3.0	5.7	6.7	10.5	9.3	7.5
Frontier Governorates	U	20.0	U	U	U	12.5
IUD						
Total	4.0	8.4	15.8	24.1	27.9	30.0
Urban	6.6	12.9	23.0	32.5	34.6	36.2
Rural	2.1	5.0	8.8	18.5	22.0	24.6
Urban Governorates						
Lower Egypt	9.0	17.4	26.8	36.0	36.8	40.2
Urban	3.2	9.0	16.2	U	32.6	34.7
Rural	3.9	10.5	21.2	31.4	36.3	34.4
Upper Egypt	3.0	8.3	14.1	26.4	31.0	34.8
Urban	1.1	3.7	7.9	U	16.4	17.7
Rural	2.4	9.5	17.6	27.1	27.6	30.3
Frontier Governorates	0.8	0.9	2.7	7.9	11.6	11.9
Frontier Governorates	U	6.7	U	U	U	21.9

U = Unknown (not available)

Source EFS 80 El Zanaty 1995 Table 1 and unpublished tabulations
 ECPS-84 Sayed et al 1985 Table 9.4 and El-Zanaty 1995 Table 1
 EDHS 88 Sayed et al 1989 Table 6.3
 EMCHS 91 Abdel-Azeem et al 1993 Table 8.10
 EDHS 92 El Zanaty et al 1993 Table 5.1

Table 12 Trends in current use of family planning by governorate

Percentage of currently married women 15-49 who are currently using family planning by governorate, Egypt 1995

Governorate	EDHS 88	EDHS 92	EDHS 95
Urban Governorates	56.0	59.1	58.1
Cairo	58.9	58.1	56.9
Alexandria	51.6	62.1	59.8
Port Said	48.2	60.5	59.7
Suez	50.3	57.3	62.4
Lower Egypt	41.2	53.5	55.4
Damietta	54.1	53.4	57.4
Dakhalia	41.3	52.8	54.9
Sharkia	35.2	49.2	53.1
Kalyubia	42.3	57.9	55.6
Kafr El-Sheikh	41.7	47.2	54.4
Gharbia	50.1	55.9	55.9
Menoufia	43.9	55.7	54.3
Behera	32.5	54.7	58.7
Ismailia	41.0	50.2	58.5
Upper Egypt	22.1	31.4	32.1
Giza	45.7	49.9	50.9
Beni Suef	15.3	29.2	30.4
Fayoum	20.2	33.3	34.0
Menya	16.6	21.9	24.3
Assuit	12.7	28.2	22.1
Souhag	16.2	19.8	21.7
Qena	12.2	24.7	26.3
Aswan	18.6	31.9	36.0
Total	37.8	47.1	47.9

Source: EDHS 88 and EDHS-92. El Zanaty et al., 1993, Table 5.6

Sources of Family Planning Methods

The EDHS-95 included a question for current users of modern methods about the source from which they had gotten their method. In the case of the IUD, users also were asked if they had bought the method from a place other than the source to which they went to have the IUD inserted. Table 13 presents the results of these questions.

Overall, family planning users in Egypt continue to be more likely to obtain their method from a private provider than from a public sector source. In the case of the pill, more than 8 in 10 users get their method at a pharmacy. In the case of the IUD, more than half of all users have the method inserted by a private provider. The majority of IUD users relying on private providers to insert the IUD went to a private doctor or hospital/clinic; however, 13 percent of IUD users went to a facility operated by a private voluntary organization. Most users obtained the IUD from the provider who inserted the method, however, 6 percent purchased the IUD from a pharmacy. Most IUD users who purchased the method at a pharmacy went to a private doctor or hospital/clinic for the insertion.

Table 13 Sources for modern family planning methods

Percent distribution of current users of modern family planning methods by source Egypt 1995

Service provider	Pill	IUD			Condom	Female sterilization	All modern methods
		Obtained	Inserted	Injectables			
Public sector	8.1	43.5	44.5	55.3	4.5	51.8	38.7
Urban hospital	1.4	12.6	13.1	15.0	1.3	30.4	11.4
Urban health unit	1.0	18.4	18.4	17.5	2.2	2.5	15.8
Rural hospital	0.5	1.0	1.0	2.1	0.0	0.0	0.9
Rural health unit	3.8	7.2	7.1	14.7	0.8	2.5	6.8
Other MOH	0.5	0.5	0.6	0.4	0.3	0.0	0.2
Teaching hospital	0.1	1.8	2.0	4.0	0.0	13.7	1.9
HIO	0.0	0.8	0.9	0.6	0.0	1.3	0.7
CCO	0.0	0.3	0.4	0.0	0.0	1.2	0.3
Other government	0.8	0.9	1.0	1.0	0.0	0.2	0.6
Private sector	89.1	55.9	55.2	42.2	81.3	48.2	60.0
Medical private	88.5	55.6	55.1	41.6	81.2	48.2	59.9
EFPA	0.2	8.3	8.4	4.5	0.1	1.1	6.9
CSI	0.2	3.7	3.8	2.7	0.2	0.0	3.1
Other PVO	0.0	0.9	1.0	0.1	0.0	0.0	0.8
Mosque health unit	0.0	3.2	3.9	0.1	0.0	0.1	2.8
Church health unit	0.0	0.3	0.3	0.4	0.2	0.0	0.3
Private hospital/Clinic	0.2	3.1	3.3	1.6	0.0	15.3	2.9
Private doctor	2.1	30.6	34.4	19.0	0.0	31.7	27.2
Pharmacy	85.7	5.5	0.0	13.1	80.6	0.0	16.0
Other private vendor	0.6	0.3	0.1	0.6	0.1	0.0	0.1
Other vendor	0.2	0.0	0.0	0.6	0.0	0.0	0.0
Husband/other relatives/friends	0.2	0.1	0.0	0.0	0.1	0.0	0.0
Other	0.2	0.2	0.1	0.0	0.0	0.0	0.1
Don't know	2.8	0.7	0.3	2.6	14.2	0.0	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	1,430	4,108	4,108	331	194	155	6,219
MOH - Ministry of Health		EFPA - Egypt Family Planning Association					
HIO - Health Insurance Organization		CSI - Clinical Services Improvement project					
CCO - Curative Care Organization		PVO - Private Voluntary Organization					

Users of injectables are somewhat more likely than IUD users to report that they obtained the method at a public sector facility. Overall, the major providers of injectables are government health facilities (55 percent), private doctors or hospital/clinics (21 percent), pharmacies (13 percent) and PVO facilities (7 percent).

D Fertility Preferences

Respondents in the EDHS-95 were asked whether they wanted to have another child and, if so how soon. Table 14 summarizes the information on women's reproductive preferences. The majority of all married women express a desire to control future childbearing. Sixty-five percent either report that they do not want another child or are using female sterilization. Moreover, 15 percent who say that they want another child indicate that they want to wait at least two years before the birth of their next child.

Table 14 Reproductive preferences by age
Percent distribution of currently married women by desire for more children, according to age, Egypt 1995

Desire for more children	Age						Total	
	15 19	20 24	25 29	30 34	35 39	40 44		45 49
Want within two years	35 5	22 5	15 5	11 1	10 3	6 1	2 8	13 1
Want after two years	53 5	40 2	21 8	7 6	2 0	0 6	0 0	14 8
Want, unsure timing	2 3	2 3	1 9	0 6	0 9	0 4	0 1	1 2
Undecided	2 5	3 8	4 3	2 8	1 9	1 3	0 7	2 6
Want no more	6 1	31 0	56 0	76 1	81 2	84 7	77 7	64 1
Sterilized	0 0	0 0	0 1	0 9	1 9	2 1	3 1	1 1
Declared infecund	0 1	0 1	0 4	0 8	1 8	4 8	15 7	3 1
Total	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0
Number of women	663	2,083	2,677	2,466	2,392	1,816	1,614	13,710

The desire to delay childbearing is largely concentrated among women under age 30. As expected, the proportion wanting no more children increases rapidly with age, with more than half of married women age 25-29 saying that they do not want another birth.

E Maternal Health

Proper care during pregnancy and childbirth are important to the health of both a mother and her baby. To obtain data on these issues, the EDHS-95 included questions on tetanus toxoid vaccinations, antenatal care, and assistance received at delivery for each birth that a woman reported during the five-year period before the survey.

Tetanus Toxoid Coverage

Tetanus toxoid injections are given during pregnancy in order to prevent neonatal tetanus, a frequent cause of infant deaths when sterile procedures are not observed in cutting the umbilical cord following delivery. Table 15 shows that, in the case of 7 in 10 births in the five-year period before the survey, the mother had received at least one tetanus toxoid injection. Births to older mothers (age 35 and over), higher order births (birth order 6 and over) and births in the Frontier Governorates had the lowest levels of tetanus toxoid injections (56 percent, 57 percent, and 60 percent respectively) while the levels were highest for first births (77 percent) and births in rural Lower Egypt (78 percent).

Antenatal Care

Antenatal care from a trained provider is important in order to monitor the pregnancy and reduce the risks for the mother and child during pregnancy and at delivery. To be most effective, there should be regular antenatal care throughout a pregnancy, it is recommended that all mothers see a trained provider at least four times during pregnancy.

Overall, the EDHS-95 found that antenatal care was received from a trained provider (doctor or nurse/midwife) for 39 percent of the births during the five-year period before the survey (Table 15). Not all of these births received regular antenatal care; the mother reported that she had four or more antenatal care visits in only 28 percent of births. The urban-rural differential in the percentage of births for which the mother had four or more visits is quite large. Forty-nine percent of urban births had regular antenatal care compared with only 15 percent of rural births. Mothers in rural Upper

Table 15 Tetanus toxoid injections, antenatal care, and assistance at delivery by background characteristics

For all births in the five years preceding the survey, the percentage whose mothers had at least one tetanus toxoid injection, antenatal care from a doctor or trained nurse/midwife, four or more antenatal care visits and assistance at delivery from a doctor or trained nurse/midwife, according to selected background characteristics, Egypt 1995

Background characteristic	Tetanus toxoid	Antenatal care			Assistance at delivery		Number of births
		From doctor	From Nurse/midwife	Had 4 or more visits	Doctor	Nurse/midwife	
Mother's age at birth							
15-19	75.3	32.8	0.1	19.3	33.9	6.6	1,422
20-34	70.9	40.6	0.0	29.3	39.2	7.7	8,736
35-49	56.4	36.1	0.0	25.3	41.9	6.4	1,296
Birth order							
1	77.3	53.5	0.0	40.5	57.5	6.6	2,729
2-3	73.1	42.7	0.0	31.1	39.7	8.6	4,386
4-5	65.5	30.2	0.0	18.9	29.0	8.1	2,278
6 or more	57.3	22.4	0.0	12.6	23.5	5.1	2,061
Urban/rural residence							
Urban	67.1	58.3	0.0	48.6	60.2	7.7	4,381
Rural	71.4	27.2	0.0	14.6	25.7	7.1	7,073
Place of residence							
Urban Governorates	64.4	59.2	0.0	53.7	63.1	6.1	1,990
Lower Egypt	76.2	41.9	0.0	27.4	42.3	9.1	4,377
Urban	70.6	65.2	0.0	51.1	68.4	6.7	1,057
Rural	77.9	34.5	0.0	19.9	34.0	9.9	3,321
Upper Egypt	66.5	28.6	0.0	17.2	26.0	6.2	4,973
Urban	67.9	51.2	0.0	38.6	48.8	10.8	1,269
Rural	66.0	20.8	0.0	9.8	18.2	4.7	3,705
Frontier Governorates	60.1	41.4	0.2	30.2	46.3	13.0	113
Education							
No education	66.0	22.0	0.0	11.7	22.5	5.4	5,266
Some primary	71.2	33.9	0.0	21.1	34.1	8.7	2,063
Completed primary through some secondary	74.6	49.3	0.0	38.8	48.0	9.0	1,320
Completed secondary/higher	73.6	70.2	0.1	56.9	68.9	9.3	2,805
Work status							
Working for cash	69.8	59.8	0.0	47.4	60.9	8.6	1,609
Not working for cash	69.8	35.7	0.0	24.3	35.3	7.2	9,845
Total	69.8	39.1	0.0	27.6	38.9	7.4	11,454

Egypt are the least likely to receive regular antenatal care, mothers had four or more antenatal care visits for only ten percent of the births in rural Upper Egypt during the five-year period before the survey

With regard to other background characteristics, regular antenatal care was received most often for first births, births to mothers who had completed secondary education and births to mothers with a job for which they are paid in cash

Assistance at Delivery

A doctor or trained nurse/midwife assisted at the delivery of 46 percent of all births in the five-year period before the EDHS-95. Most of the remaining births were assisted by *dayas* (traditional

birth attendants) Medically assisted deliveries are more common for urban births and births to highly educated mothers Births in rural Upper Egypt are least likely to be assisted by a trained health professional, doctors or trained nurse/midwives assisted in the delivery of only 23 percent of births in rural Upper Egypt

Trends in Maternal Health Indicators

Table 16 presents trends in key maternal health indicators during the period 1988-1995 The table suggests that there has been a very sharp increase in the proportions of women who receive tetanus toxoid injections during pregnancy

<u>Table 16 Trends in maternal health indicators</u>				
For all births in the five years preceding the survey the percentage whose mothers had at least one tetanus toxoid injection, antenatal care from a doctor or trained nurse midwife, four or more antenatal care visits and assistance at delivery from a doctor or trained nurse/midwife Egypt 1988 1995				
Maternal health indicator	EDHS 88	EMCHS 91	EDHS 92	EDHS 95
Tetanus toxoid	11 4	42 5	57 3	69 8
Antenatal care				
Antenatal care	52 8	52 1	52 9	39 1
4 or more visits	U	U	22 5	27 6
Medical assistance at delivery	34 6	36 5	40 7	46 3
U = Unknown (not available)				
Source	EDHS 88	Sayed et al , 1989, Tables 9 1 and 9 2		
	EMCHS 91	Abdel Azeem et al , 1993, Tables 5 8 5 15, and 5 25		
	EDHS 92	El Zanaty et al , 1992, Tables 11 1 11 3, 11 5		

Improvements in other maternal health indicators have been more gradual but steady during the period The proportion of births for which the mother had regular antenatal care increased from 23 to 28 percent between 1992 and 1995 The decline in the total proportion of births for which the mother received any antenatal care is not a genuine trend but the result of changes in field procedures⁶ The proportion of births attended by a doctor or trained nurse/midwife increased from 35 percent in 1988 to 46 percent in 1995

⁶ Many women in Egypt distinguish between antenatal care and the receipt of tetanus toxoid injections This was evidenced in the EDHS-92 survey results in which mothers of nearly one-quarter of the births in the five year period before the survey said that they had not had antenatal care but they had received one or more tetanus toxoid injections This percentage would have been even higher except for the fact that in an indeterminate number of cases in the 1992 EDHS interviewers and field editors changed the response to the question on antenatal care from no to 'yes' in cases when the woman had received a tetanus toxoid injection In the training for the EDHS-95 interviewers were told not to correct inconsistencies in the responses to the antenatal care and tetanus toxoid injection questions DHS is currently conducting a further study to investigate the issue but it is believed that the 39 percent figure may more closely approximate the proportion of women who go for routine checkups or for assistance with problems that they experienced during the pregnancy The proportion of births for which the mother reported that she had neither antenatal care nor a tetanus toxoid injection was 20 percent in 1995 compared with 24 percent in 1992

F Child Health

The EDHS-95 obtained information on a number of key child health indicators, including infant feeding practices, immunization of young children and treatment practices when a child has diarrhea

Breastfeeding and Supplementation

Breast milk is the optimal source of nutrients for infants. Children who are *exclusively* breastfed receive only breast milk. Exclusive breastfeeding is recommended during the first 4-6 months of a child's life because it limits exposure to disease agents while providing all of the nutrients a baby requires.

Table 17 describes infant feeding practices of Egyptian mothers. Most babies are breastfed during the first three months of life, only 2 percent of babies age 0-3 months at the time of the survey were not receiving breast milk. The proportion breastfed remains high during the first year of life, with more than 85 percent of children age 10-12 months being breastfed.

Age in months	Not currently breast feeding	Breast milk and				Total	Bottle fed	Number of children
		Breast milk only	Plain water	Other liquids	Solid/mushy foods			
0-3 months	1.8	67.7	1.9	23.3	5.3	100.0	18.6	762
4-6 months	4.7	24.1	6.0	19.9	45.3	100.0	19.1	532
7-9 months	8.2	5.7	6.5	9.0	70.6	100.0	12.7	522
10-12 months	13.9	2.4	3.8	4.0	75.9	100.0	11.8	538
Total	6.6	29.2	4.3	15.0	45.0	100.0	15.8	2,353

Exclusive breastfeeding is common but not universal among children under four months of age, more than two-thirds of children in this age group receive breast milk only. Supplements are introduced rapidly after early infancy, among children age 4-6 months, only 24 percent are exclusively breastfed.

Bottle feeding is not common in Egypt. Nevertheless, around one in five children 0-6 months of age received water or another type of liquid supplement (infant formula, milk or juice) in a bottle with a nipple during the 24 hours preceding the survey.

Vaccination of Children

In the EDHS-95, information on childhood immunizations was collected for all children born during the five-year period before the survey. In Egypt, immunizations are recorded on a child's birth record (certificate). For each child, mothers were asked whether they had the birth record for the child and, if so, to show the record to the interviewer. When the mother was able to show the birth record, the dates of vaccinations were copied from the record to the questionnaire. If the birth record was not available (or a vaccination was not recorded), mothers were asked questions to determine whether the child had received each vaccine.

The estimates of immunization coverage among children 12-23 months in Table 18 are based on the information taken from the birth record and for those for whom a record was not seen (or a vaccination not recorded), from the information provided by the mother. Mothers were able to provide birth records for half of the children.

The World Health Organization guidelines for childhood immunizations call for all children to receive a BCG vaccination against tuberculosis, three doses of the DPT vaccine to prevent diphtheria, pertussis and tetanus, three doses of polio vaccine, and a measles vaccination. Egypt has recently added the hepatitis vaccine to its child immunization program. Because the hepatitis vaccination program was in place for only a short period before the EDHS-95, hepatitis immunizations are not taken into account in calculating the proportion of children considered to be fully immunized in Table 18. Thus children are considered to have had the full schedule of immunizations if they have received a BCG and a measles vaccination and three doses of the DPT and polio vaccines.

Table 18 shows that, among Egyptian children 12-23 months, 79 percent can be considered to be fully immunized. Only 3 percent had received no vaccinations. The level of coverage for BCG and the first two doses of DPT and polio exceeds 90 percent. Almost 90 percent had also received the measles vaccine. The third doses of DPT and polio were received by more than 80 percent of children (Figure 4).

Not unexpectedly in view of its recent introduction in the child immunization program, coverage levels for the hepatitis vaccine are lower than for other vaccines. Only 75 percent of children had received the first dose of the hepatitis vaccine, and only 57 were fully immunized against hepatitis.

Looking at differentials in immunization coverage, there is no difference in the levels of immunization between boys and girls. By residence, however, there are clear differences. Urban children are more likely to be immunized than rural children. By place of residence, the percentage who can be considered to be fully immunized varies from 70 percent in rural areas in Upper Egypt to over 90 percent in urban Lower Egypt.

There is a direct relationship between the proportion fully immunized among young children and the educational level of the mother. Children born to mothers who are working for cash also are more likely to have been fully immunized than children born to mothers who are not working for cash.

Childhood Diarrhea

Dehydration as a result of diarrhea is a frequent cause of death in young children. The administration of oral rehydration therapy (ORT) is a simple means of countering the effects of dehydration. ORT consists of giving a child either a solution prepared by mixing water with a commercially prepared packet of oral rehydration salts (ORS) or a homemade sugar-salt-water solution.

In the EDHS-95, mothers of children under age five were asked if their children had had diarrhea in the two-week period before the survey. If the child had had diarrhea, the mother was asked what she had done to treat the diarrhea. Since the prevalence of diarrhea varies seasonally, the results pertain only to the pattern during the period November-December when the majority of the EDHS interviewing took place.

Table 18 Vaccinations by background characteristics

Among children aged 12-23 months, the percentage with vaccination records seen by the interviewer and the percentage who have received each vaccine (according to the vaccination record or mother's report), by selected background characteristics Egypt 1995

Background characteristic	Percent age with vaccination record	Percentage of children who received													Number of children	
		BCG	DPT			Polio			Hepatitis			Measles	All except hepatitis	None		
			1	2	3	1	2	3	1	2	3					
Sex																
Male	49.5	94.4	96.7	93.1	83.4	97.9	94.8	84.3	76.8	68.5	57.9	89.7	78.7	2.1	1,082	
Female	50.8	94.9	95.6	92.5	82.7	96.0	93.0	84.1	74.0	66.9	55.8	88.7	79.5	3.0	1,002	
Urban rural residence																
Urban	48.9	97.3	98.0	95.4	89.5	98.4	96.2	90.2	80.0	71.9	63.4	93.5	86.5	1.3	852	
Rural	50.9	92.8	95.0	91.0	78.6	96.0	92.3	80.0	72.2	64.9	52.3	86.2	73.9	3.4	1,232	
Place of residence																
Urban Gov	42.8	98.1	97.5	95.7	88.9	98.0	96.1	88.9	79.8	71.9	64.2	93.7	87.4	1.4	408	
Lower Egypt	59.0	96.1	98.1	94.5	84.8	98.6	95.5	85.8	80.8	72.5	60.1	92.8	81.9	1.4	813	
Urban	59.1	99.0	99.8	96.9	93.1	99.8	98.0	93.9	81.0	72.7	65.4	96.3	91.7	0.2	209	
Rural	59.0	95.1	97.5	93.7	81.9	98.2	94.7	83.1	80.7	72.5	58.3	91.6	78.5	1.8	604	
Upper Egypt	44.9	91.8	93.8	89.8	78.5	95.0	91.4	80.4	68.3	61.3	50.3	83.7	72.4	4.0	842	
Urban	49.8	94.5	97.1	93.1	86.8	97.8	94.6	88.8	79.4	70.6	59.8	90.3	79.9	2.0	222	
Rural	43.2	90.8	92.6	88.6	75.6	94.0	90.2	77.4	64.3	57.9	46.9	81.3	69.7	4.7	620	
Frontier Gov	53.0	89.0	92.9	88.1	78.8	92.9	88.1	78.9	68.5	62.1	53.4	84.1	74.1	6.7	22	
Education																
No education	48.7	90.8	93.0	87.9	74.4	94.3	89.6	75.6	67.8	59.9	47.6	82.1	69.0	4.8	854	
Some primary	51.7	97.1	97.5	94.9	84.0	98.3	96.2	85.5	71.6	63.7	53.1	88.5	78.9	1.0	395	
Comp primary thru some sec	54.4	94.8	97.3	94.7	89.2	97.9	95.3	89.6	77.7	70.8	60.9	93.4	86.7	2.1	284	
Comp sec /higher	49.0	98.9	99.7	97.8	92.6	99.8	98.2	93.6	88.7	81.1	71.8	98.5	90.7	0.2	553	
Work status																
Working for cash	39.4	95.2	96.0	93.0	88.5	98.1	94.1	90.0	84.4	78.4	70.0	92.9	85.4	1.6	292	
Not working for cash	51.9	94.6	96.2	92.7	82.1	96.8	93.9	83.2	73.9	66.0	54.7	88.6	78.0	2.6	1,793	
All children	50.1	94.7	96.2	92.8	83.0	97.0	93.9	84.2	75.4	67.8	56.9	89.2	79.1	2.5	2,085	

Figure 4
Vaccination Coverage
Egypt 1995

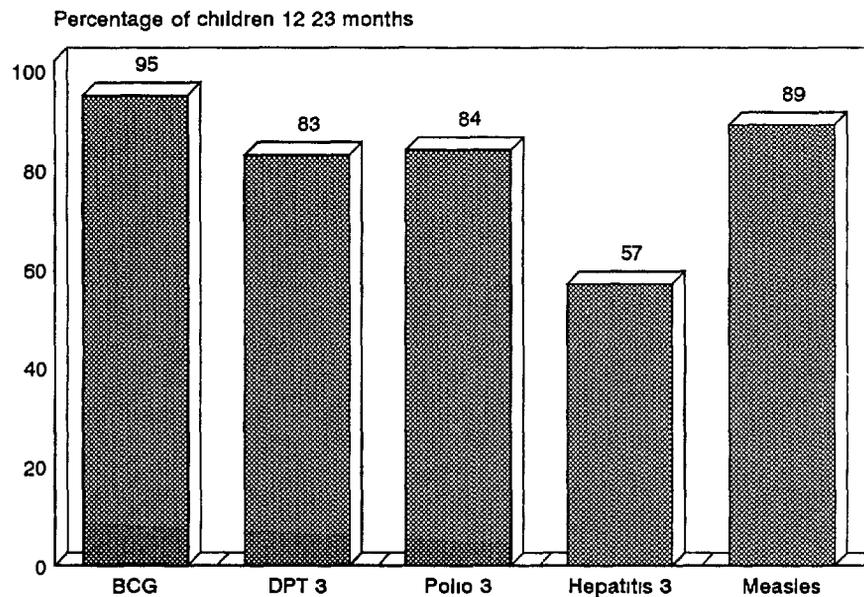


Table 19 presents information on recent episodes of diarrhea among young children and the actions that were taken to treat the illness. Overall, 16 percent of children under age five were reported to have had diarrhea in the two-week period before the survey. As expected, diarrhea is more prevalent among children age 6-23 months. This pattern is believed to be associated with increased exposure to the illness (as a result of both weaning and the greater mobility of the child), as well as the immature immune system of children in this age group.

With regard to treatment, advice was sought from a medical provider in 48 percent of the cases. Among mothers reporting that medical advice was sought, the majority said that a private doctor was consulted. There was some evidence of gender preference, mothers reported that advice was sought in 51 percent of the cases in which the child was a boy compared with 43 percent of the cases in which the child was a girl. Urban mothers were more likely to say that a provider was consulted than rural mothers. By place of residence, the proportion seeking provider advice ranges from 44 percent in rural Upper Egypt to 65 percent in the Urban Governorates.

Slightly more than 40 percent of the children who had diarrhea were treated with oral rehydration therapy (either ORS packets or a homemade sugar-salt-water solution). ORS packets were used more often than homemade solution. Children in the age group 6-23 months, where the prevalence of diarrhea was the highest, were also the most likely to have been treated with oral rehydration therapy. Rural children were somewhat more likely than urban children to have been treated with oral rehydration therapy. By place of residence, the proportion treated with oral rehydration therapy ranges from 32 percent in the urban Lower Egypt to 49 percent in rural Lower Egypt.

Table 19 Prevalence and treatment of diarrhea by background characteristics

Among children under five years of age, the percentage who were ill with diarrhea during the two weeks preceding the survey, and the percentages of ill children for whom mothers report advice was sought from a health provider and who received oral rehydration therapy (ORT), by selected background characteristics, Egypt 1995

Background characteristic	Percentage of children with diarrhea	Percentage of ill children receiving advice from health provider				Percentage of ill children receiving ORT			Number of children under age 5
		Public	Private	Public and private	Any provider	ORS	RHF	Either ORS or RHF	
Child's age									
< 6 months	19.0	17.2	36.5	1.1	52.6	23.3	4.7	25.7	1,106
6-11 months	32.0	16.7	45.3	1.3	60.7	50.0	3.2	51.9	1,100
12-23 months	24.0	13.8	37.1	0.8	50.2	49.3	5.3	52.3	2,084
24-35 months	15.0	14.2	26.6	0.0	40.8	40.3	5.3	43.0	2,061
36-47 months	9.0	11.8	24.5	0.2	36.1	27.6	3.0	28.8	2,142
48-59 months	7.0	9.9	18.9	0.0	28.8	26.3	8.1	30.3	2,194
Sex									
Male	17.0	12.6	39.2	0.7	51.1	41.2	5.0	43.5	5,544
Female	15.0	16.4	27.3	0.6	43.1	38.9	4.5	41.8	5,144
Urban rural residence									
Urban	16.0	17.7	35.6	1.0	52.4	35.5	5.0	37.9	4,168
Rural	16.0	12.2	32.7	0.5	44.4	43.1	4.6	45.7	6,521
Place of residence									
Urban Gov	13.0	24.5	40.8	0.0	65.3	39.4	4.4	41.6	1,930
Lower Egypt	16.0	8.6	34.6	0.6	42.6	40.8	6.3	44.3	4,155
Urban	18.0	4.7	31.3	1.0	35.0	29.3	6.1	32.0	1,014
Rural	16.0	10.1	35.8	0.5	45.4	44.9	6.3	48.8	3,141
Upper Egypt	17.0	15.8	30.7	0.9	45.6	39.9	3.6	41.6	4,496
Urban	18.0	20.6	32.4	2.2	50.8	35.6	4.9	37.8	1,161
Rural	16.0	14.0	30.1	0.4	43.6	41.5	3.1	43.1	3,334
Frontier Gov	15.0	21.3	32.4	0.0	53.7	41.0	3.3	44.2	107
Education									
No education	15.0	17.3	27.6	0.1	44.8	41.2	3.0	42.1	4,799
Some primary	16.0	16.4	31.8	1.1	47.1	45.1	9.5	51.7	1,924
Comp primary thru some sec	20.0	14.0	39.5	1.3	52.1	41.4	3.3	43.3	1,253
Comp sec /higher	15.0	7.3	43.4	0.8	49.9	33.6	5.3	36.3	2,711
Work status									
Working for cash	14.0	11.7	35.2	0.7	46.2	41.2	9.9	45.9	1,534
Not working for cash	16.0	14.7	33.6	0.6	47.7	40.0	4.0	42.3	9,154
All children	16.0	14.3	33.8	0.7	47.5	40.2	4.8	42.7	10,689

ORS = Oral rehydration salts

RHF = Recommended home fluids (homemade sugar salt water solution)

Note: Figures are for children born in the period 1-59 months preceding the survey

Public facilities include government hospitals and health units

Private facilities include private hospitals/clinics and private doctors

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