

Health Survey

# Egypt <br> Demographic and Health Survey 2000 

Fatma El-Zanaty

Ann A. Way

January 2001

The 2000 Egypt Demographic and Health Survey ( 2000 EDHS) is part of the worldwide MEASURE DHS+ project that is funded by the United States Agency for International Development (USAID). The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.

Additional information about the 2000 EDHS may be obtained from the National Population Council, P.O. Box 1036, Cairo, Egypt (telephone: 5240425 or 5240505 and fax: 5240219). Additional information about the MEASURE DHS + project may be obtained from Macro International Inc., 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (telephone: 301-572-0200; fax: 301-572-0999).

Suggested citation:
El-Zanaty, Fatma and Ann Way. 2001 Egypt Demographic and Health Survey 2000. Calverton, Maryland [USA]: Ministry of Health and Population [Egypt], National Population Council and ORC Macro.

## CONTENTS

Page
Tables and Figures ..... vii
Preface ..... XV
Preface ..... xvii
Acknowledgments ..... xix
Summary of Findings ..... xxi
Map of Egypt ..... xxviii
CHAPTER 1 INTRODUCTION ..... 1
1.1 Geography ..... 1
1.2 Socioeconomic Indicators ..... 1
1.3 Changing Population Size and Structure ..... 2
1.4 Recent Rate of Natural Increase ..... 3
1.5 Population Policy and Programs ..... 4
1.6 Health Policies and Programs ..... 4
1.7 Organization and Objectives of the 2000 EDHS ..... 5
1.8 Implementation of the 2000 EDHS ..... 5
1.9 Coverage of the Survey ..... 11
CHAPTER 2 CHARACTERISTICS OF HOUSEHOLDS ..... 13
2.1 Characteristics of the Household Population ..... 13
2.2 Education of the Household Population ..... 16
2.3 Household Environment ..... 20
CHAPTER 3 BACKGROUND CHARACTERISTICS OF RESPONDENTS ..... 25
3.1 General Characteristics ..... 25
3.2 Education ..... 26
3.3 Employment ..... 28
3.4 Disposal of Earnings ..... 33
3.5 Household Decision-making ..... 35
3.6 Access to Health Care ..... 37
3.7 Coverage of Mass Media ..... 39
CHAPTER 4 FERTILITY ..... 43
4.1 Current Fertility Levels and Differentials ..... 43
4.2 Comparison of Current and Cumulative Fertility Levels ..... 45
4.3 Fertility Trends ..... 47

## Page

4.4 Children Ever Born and Living ..... 50
4.5 Birth Intervals ..... 51
4.6 Age at First Birth ..... 53
4.7 Teenage Pregnancy and Motherhood ..... 55
CHAPTER 5 KNOWLEDGE, ATTITUDES, AND EVER USE OF FAMILY PLANNING ..... 57
5.1 Knowledge of Family Planning Methods ..... 57
5.2 Knowledge of a Source for Family Planning Methods ..... 60
5.3 Exposure to Family Planning Information ..... 61
5.4 Interpersonal Communication about Family Planning ..... 64
5.5 Approval of Family Planning Use ..... 67
5.6 Attitude about Timing of Adoption of Contraception ..... 68
5.7 Knowledge of Fertile Period ..... 69
5.8 Ever Use of Family Planning ..... 70
5.9 First Use of Family Planning ..... 73
CHAPTER 6 CURRENT USE OF FAMILY PLANNING ..... 75
6.1 Level and Differentials in Current Use of Family Planning ..... 75
6.2 Trends in Current Use of Family Planning ..... 79
6.3 Sources for Modern Family Planning Methods ..... 83
6.4 Pill Use ..... 87
6.5 Cost of the IUD and Willingness to Pay ..... 90
6.6 Cost of Injectables and Willingness to Pay ..... 92
CHAPTER 7 NONUSE OF FAMILY PLANNING AND INTENTION TO USE ..... 95
7.1 Discontinuation Rates ..... 95
7.2 Reasons for Discontinuation of Contraceptive Use ..... 96
7.3 Intention to Use Contraception in the Future ..... 98
7.4 Reasons for Nonuse ..... 99
7.5 Preferred Method ..... 100
7.6 Contact of Nonusers with Outreach Workers or Health Care Providers ..... 100
CHAPTER 8 PROXIMATE DETERMINANTS OF FERTILITY ..... 103
8.1 Marital Status ..... 103
8.2 Consanguinity ..... 103
8.3 Age at First Marriage ..... 105
8.4 Postpartum Amenorrhea, Abstinence and Insusceptibility ..... 107
8. 5 Termination of Exposure to Pregnancy ..... 110
CHAPTER 9 FERTILITY PREFERENCES ..... 111
9.1 Desire for More Children ..... 111
9.2 Need for Family Planning ..... 114
9.3 Women with Unmet Need for Family Planning ..... 116
9.4 Ideal Number of Children ..... 118
9.5 Unplanned and Unwanted Fertility ..... 120
CHAPTER 10 INFANT AND CHILD MORTALITY ..... 123
10.1 Assessment of Data Quality ..... 123
10.2 Levels and Trends in Early Childhood Mortality ..... 124
10.3 Differentials in Mortality ..... 127
10.4 High-risk Fertility Behavior ..... 130
CHAPTER 11 MATERNAL HEALTH CARE ..... 133
11.1 Pregnancy Care ..... 133
11.2 Content of Pregnancy Care ..... 138
11.3 Delivery Care ..... 140
11.4 Delivery Characteristics ..... 143
11.5 Postnatal Care ..... 144
11.6 Trends in Maternal Health Indicators ..... 146
11.7 Use of Smoking Tobacco ..... 148
CHAPTER 12 CHILD HEALTH ..... 151
12.1 Immunization of Children ..... 151
12.2 Diarrhea ..... 156
12.3 Acute Respiratory Infection ..... 160
CHAPTER 13 NUTRITIONAL STATUS, PREVALENCE OF ANEMIA, AND MICRONUTRIENT SUPPLEMENTATION ..... 163
13.1 Breastfeeding and Supplementation ..... 163
13.2 Nutritional Status of Children ..... 171
13.3 Nutritional Status of Women ..... 176
13.4 Anemia ..... 178
13.5 Micronutrient Supplementation ..... 186
Page
CHAPTER 14 FEMALE CIRCUMCISION ..... 191
14.1 Prevalence of Female Circumcision ..... 191
14.2 Circumcision Experience of Daughters ..... 191
14.3 Support for Female Circumcision ..... 194
14.4 Trends in Circumcision Indicators ..... 196
14.5 Reasons for Support of Female Circumcision ..... 197
14.6 Exposure to Discussion/Information about Circumcision ..... 200
CHAPTER 15 CHILDREN'S EDUCATION ..... 203
15.1 Attendance at School ..... 203
15.2 Reasons for Not Attending School ..... 206
15.3 Absence from School ..... 208
15.4 Expenditures on Schooling ..... 209
15.5 Attitude about University Education ..... 211
REFERENCES ..... 213
APPENDIX A SURVEY STAFF ..... 215
APPENDIX B SAMPLE DESIGN ..... 219
APPENDIX C SAMPLING ERRORS ..... 237
APPENDIX D DATA QUALITY TABLES ..... 251
APPENDIX E QUESTIONNAIRES ..... 257
Page
CHAPTER 1 INTRODUCTION
Table 1.1 Population of Egypt, 1882-1996 ..... 2
Table 1.2 Life expectancy, Egypt 1960-2001 ..... 3
Table 1.3 Survey timetable, 2000 Egypt DHS ..... 6
Table 1.4 Results of the household and individual interviews ..... 12
Figure 1.1 Trends in the crude birth rate and the crude death rate, Egypt 1986-1998 ..... 3
CHAPTER 2 CHARACTERISTICS OF HOUSEHOLDS
Table 2.1 Household population by age, residence, and sex ..... 13
Table $2.2 \quad$ Population by age, 1988, 1992, 1995, and 2000 ..... 14
Table 2.3 Household composition ..... 15
Table 2.4.1 Educational level of the male household populatio ..... 16
Table 2.4.2 Educational level of the female household populat ..... 17
Table 2.5 School attendance ..... 19
Table 2.6 Housing characteristics ..... 21
Table 2.7 Household possessions ..... 23
Figure 2.1 Population pyramid, Egypt 2000 ..... 14
Figure 2.2 Current school attendance by age and sex ..... 18
Figure 2.3 Current school attendance among girls age 6-15 by residence ..... 20
CHAPTER 3 BACKGROUND CHARACTERISTICS OF RESPONDENTS
Table 3.1 Background characteristics of respondents ..... 25
Table 3.2 Level of education ..... 26
Table 3.3 Literacy ..... 28
Table 3.4 Employment ..... 29
Table 3.5 Occupation ..... 31
Table 3.6 Employer and form of earnings ..... 32
Table 3.7 Share of household expenditures met by earnings by control over earnings ..... 34
Table 3.8 Share of household expenditures met by earnings and control over earnings by background characteristics ..... 35
Table 3.9 Household decision-making ..... 36
Table 3.10 Final say in household decisions ..... 37
Table 3.11 Problems women face in accessing health care ..... 38
Table 3.12 Exposure to mass media ..... 41
Figure 3.1 Occupation among working women ..... 30

## Page

Figure 3.2 Share of household expenditures met by working women's earnings ..... 33
Figure 3.3 Exposure to mass media weekly ..... 40
CHAPTER 4 FERTILITY
Table 4.1 Current fertility ..... 44
Table $4.2 \quad$ Fertility by background characteristics ..... 46
Table 4.3 Trends in fertility ..... 47
Table 4.4 Trends in fertility by residence ..... 48
Table 4.5 Age-specific fertility rates ..... 49
Table 4.6 Children ever born and living ..... 51
Table $4.7 \quad$ Birth intervals ..... 52
Table 4.8 Age at first birth ..... 53
Table 4.9 Median age at first birth ..... 54
Table 4.10 Teenage pregnancy and motherhood ..... 55
Figure 4.1 Total fertility rates (births per woman 15-49) by place of residence ..... 45
Figure 4.2 Trends in total fertility rates by urban-rural residence, 1988-2000 ..... 49
Figure 4.3 Age-specific fertility rates for five-year periods preceding the survey ..... 50
CHAPTER 5 KNOWLEDGE, ATTITUDES, AND EVER USE OF FAMILY PLANNING
Table 5.1 Knowledge of family planning methods ..... 58
Table 5.2 Knowledge of family planning methods by background characteristics ..... 59
Table 5.3 Knowledge of source for family planning services ..... 60
Table 5.4 Exposure to family planning messages on radio and television ..... 62
Table 5.5 Exposure to family planning messages in print media and at community meetings ..... 64
Table 5.6 Discussion of family planning by couples ..... 66
Table 5.7 Discussion of family planning with persons other than husband ..... 67
Table 5.8 Wives' and husbands' attitudes toward family planning ..... 68
Table $5.9 \quad$ Timing of use of family planning by newly married couples ..... 69
Table 5.10 Knowledge of fertile period ..... 70
Table 5.11 Ever use of family planning ..... 70
Table 5.12 Trends in ever use of family planning ..... 71
Table 5.13 Ever use of family planning by background characteristics ..... 72
Table 5.14 Number of children at first use of family planning ..... 74
Figure 5.1 Trends in knowledge of norplant and injectables among currently married women, Egypt 1992-2000 ..... 58
Figure 5.2 Trends in recent exposure of ever-married women to family planning messages broadcast on radio or television, Egypt 1995 and 2000 ..... 63
Figure 5.3 Recent discussion of family planning with husband ..... 65

CHAPTER 6 CURRENT USE OF FAMILY PLANNING
Table 6.1 Current use of family planning by residence ..... 75
Table 6.2 Current use of family planning by method ..... 77
Table 6.3 Current use of family planning by governorate ..... 78
Table 6.4 Trends in current use of family planning ..... 80
Table 6.5 Trends in the family planning method mix ..... 81
Table 6.6 Trends in current use of family planning by residence ..... 81
Table 6.7 Trends in current use of family planning by governorate ..... 82
Table 6.8 Sources for modern family planning methods ..... 84
Table 6.9 Sources for family planning methods by residence ..... 86
Table 6.10 Trends in reliance on public sector source for contraceptive method ..... 87
Table $6.11 \quad$ Brand of pill used ..... 87
Table 6.12 Cost of method for pill users ..... 88
Table 6.13 Amount users are willing to pay for the pill ..... 88
Table 6.14 Pharmacies as a source for the pill ..... 89
Table 6.15 Information received at pharmacies about the pill ..... 89
Table 6.16 Cost of method for IUD users ..... 90
Table 6.17 Amount users are willing to pay for IUD insertion ..... 91
Table 6.18 Cost of method for injectable users ..... 92
Table 6.19 Amount users are willing to pay for injectables ..... 92
Table 6.20 Service assessment indicators for clinical providers ..... 93
Figure 6.1 Current use of family planning by place of residence ..... 76
Figure 6.2 Trends in current use of family planning, Egypt 1980-2000 ..... 79
Figure 6.3 Source for family planning methods by method ..... 85
Figure 6.4 Trends in median cost of IUD in Egyptian pounds, by type of provider, Egypt 1995-2000 ..... 91
CHAPTER 7 NONUSE OF FAMILY PLANNING AND INTENTION TO USE
Table 7.1 Contraceptive discontinuation rates ..... 96
Table 7.2 Reasons for discontinuing use of family planning ..... 97
Table 7.3 Future use of family planning ..... 98
Table 7.4 Reasons for not using family planning ..... 99
Table 7.5 Preferred method of family planning for future use ..... 100
Table 7.6 Contact of nonusers with family planning providers ..... 101
Figure 7.1 Contraceptive discontinuation rates by method and reason for stopping use ..... 97
Figure 7.2 Trends in contact with outreach workers among nonusers by residence ..... 102
CHAPTER 8 PROXIMATE DETERMINANTS OF FERTILITY
Table 8.1 Current marital status ..... 104
Table 8.2 Consanguinity ..... 104
Table 8.3 Age at first marriage ..... 105

## Page

Table 8.4 Median age at first marriage ..... 106
Table 8.5 Postpartum amenorrhea, abstinence, and insusceptibility ..... 108
Table 8.6 Median duration of postpartum insusceptibility by background characteristics ..... 109
Table 8.7 Termination of exposure to the risk of pregnancy ..... 110
Figure 8.1 Percentage of births for which mothers are still amenorrheic or abstaining ..... 108
CHAPTER 9 FERTILITY PREFERENCES
Table 9.1 Fertility preferences by number of living children ..... 111
Table 9.2 Fertility preferences by age ..... 113
Table 9.3 Desire to limit childbearing ..... 113
Table 9.4 Need for family planning services ..... 115
Table 9.5 Profile of women with unmet need for family planning ..... 116
Table 9.6 Family planning experience and attitudes among women with unmet need for family planning ..... 117
Table 9.7 Exposure to family planning messages or counseling among women with unmet need for family planning ..... 118
Table 9.8 Ideal number of children ..... 119
Table 9.9 Mean ideal number of children by background characteristics ..... 120
Table 9.10 Fertility planning status ..... 121
Table 9.11 Wanted fertility rates ..... 122
Figure 9.1 Desire for more children among currently married women ..... 112
CHAPTER 10 INFANT AND CHILD MORTALITY
Table 10.1 Infant and child mortality ..... 125
Table 10.2 Trends in early childhood mortality in Egypt, 1965-2000 ..... 126
Table 10.3 Infant and child mortality by socioeconomic characteristics ..... 127
Table 10.4 Infant and child mortality by demographic characteristics ..... 129
Table 10.5 High-risk fertility behavior ..... 131
Figure 10.1 Trends in under-five mortality, Egypt 1967-1998 ..... 126
Figure 10.2 Under-five mortality (deaths per 1,000 births) by place of residence ..... 128
CHAPTER 11 MATERNAL HEALTH CARE
Table 11.1 Type of provider for antenatal care, antenatal care source, number of antenatal care visits, and stage of pregnancy ..... 133
Table 11.2 Tetanus toxoid injections ..... 134
Table 11.3 Other medical care during pregnancy ..... 135
Table 11.4 Advice about antenatal care and family planning use ..... 136
Table 11.5 Care during pregnancy ..... 137

## Page

Table 11.6 Pregnancy care indicators ..... 138
Table 11.7 Pregnancy care indicators by background characteristics ..... 139
Table $11.8 \quad$ Place of delivery ..... 141
Table 11.9 Assistance during delivery ..... 142
Table 11.10 Characteristics of delivery ..... 143
Table 11.11 Delivery complications ..... 144
Table 11.12 Postnatal care ..... 145
Table 11.13 Postnatal care by background characteristics ..... 146
Table 11.14 Trends in maternal health indicators ..... 147
Table 11.15 Use of smoking tobacco ..... 149
Figure 11.1 Consultation with health provider during pregnancy ..... 135
Figure 11.2 Trends in medically assisted deliveries, Egypt 1988-2000 ..... 148
CHAPTER 12 CHILD HEALTH
Table 12.1 Vaccinations by source of information ..... 152
Table 12.2 Trends in vaccination coverage ..... 153
Table 12.3 Vaccinations by background characteristics ..... 154
Table 12.4 Vaccinations in the first year of life ..... 155
Table 12.5 Prevalence of diarrhea ..... 156
Table 12.6 Feeding practices during diarrhea ..... 157
Table 12.7 Treatment of diarrhea ..... 158
Table 12.8 Hand-washing facilities in households ..... 160
Table 12.9 Prevalence and treatment of acute respiratory infection (ARI) ..... 161
Figure 12.1 Trends in vaccination coverage, Egypt 1988-2000 ..... 153
CHAPTER 13 NUTRITIONAL STATUS, PREVALENCE OF ANEMIA, AND MICRONUTRIENT SUPPLEMENTATION
Table 13.1 Initial breastfeeding ..... 164
Table 13.2 Breastfeeding status ..... 165
Table 13.3 Types of food received by children in the preceding 24 hours ..... 167
Table 13.4 Median duration of breastfeeding ..... 169
Table 13.5 Frequency of breastfeeding ..... 170
Table 13.6 Nutritional status by demographic characteristics ..... 173
Table 13.7 Nutritional status by socioeconomic characteristics ..... 174
Table 13.8 Trends in nutritional status of children ..... 175
Table 13.9 Anthropometric indicators of maternal nutritional status ..... 176
Table 13.10 Differentials in maternal anthropometric indicators ..... 178
Table 13.11 Prevalence of anemia in women ..... 180
Table 13.12 Prevalence of anemia among children 6-59 months ..... 182
Table 13.13 Prevalence of anemia in children age 11-19 ..... 184
Table 13.14.1 Prevalence of anemia in boys age 11-19 ..... 185
Table 13.14.2 Prevalence of anemia in girls age 11-19 ..... 186

## Page

Table 13.15 Vitamin A supplementation among postpartum mothers ..... 187
Table 13.16 Vitamin A supplementation among children age 12-23 months ..... 188
Table 13.17 Iodized salt ..... 189
Figure 13.1 Distribution of children by breastfeeding status according to age ..... 166
Figure 13.2 Level of anemia among children 6-59 months by place of residence ..... 183
CHAPTER 14 FEMALE CIRCUMCISION
Table 14.1 Prevalence of female circumcision ..... 192
Table 14.2 Aspects of daughter's circumcision ..... 193
Table 14.3 Daughter's age at circumcision and person performing circumcision ..... 194
Table 14.4 Attitudes toward circumcision and perception of men's attitudes ..... 195
Table 14.5 Trends in circumcision indicators, Egypt 1995-2000 ..... 197
Table 14.6 Benefits from undergoing and from not undergoing circumcision ..... 198
Table 14.7 Beliefs about female circumcision ..... 199
Table 14.8 Exposure to discussion or information about female circumcision ..... 201
Figure 14.1 Trend in level of support for female circumcision, Egypt 1995-2000 ..... 196
CHAPTER 15 CHILDREN'S EDUCATION
Table 15.1 School attendance pattern and age started or dropped out ..... 203
Table 15.2 School attendance by background characteristics ..... 204
Table 15.3 Reasons for never having attended school ..... 206
Table 15.4 Reasons for dropping out of school ..... 207
Table 15.5 Absence from school ..... 208
Table 15.6 Main reasons for missing school ..... 208
Table 15.7 Type of school attended ..... 209
Table 15.8 Expenditures on schooling ..... 210
Table 15.9 Median expenditures on schooling ..... 211
Table 15.10 Opinion about university education for sons or daughters ..... 212
Figure 15.1 Percentage of children age 6-15 not currently attending school by gender and residence ..... 205
APPENDIX B SAMPLE DESIGN
Table B. 1 Sample parameters ..... 220
Table B. 2 Primary sampling units by governorate, 2000 Egypt ..... 222
Table B. 3 Sample implementation ..... 235
Figure B.1.1 Distribution of sampling points, Urban Governorates, 2000 EDHS ..... 231
Figure B.1.2 Distribution of sampling points, Lower Egypt, 2000 EDHS ..... 232
Figure B.1.3 Distribution of sampling points, Upper Egypt, 2000 EDHS ..... 233
Figure B.1.4 Distribution of sampling points, Frontier Governorates, 2000 EDHS ..... 234
APPENDIX C SAMPLING ERRORS
Table C. 1 List of selected variables for sampling errors, 2000 Egypt DHS ..... 239
Table C. 2 Sampling Errors - National sample ..... 240
Table C. 3 Sampling Errors - Urban sample ..... 241
Table C. 4 Sampling Errors - Rural sample ..... 242
Table C. 5 Sampling Errors - Urban Governorates sample ..... 243
Table C. 6 Sampling Errors - Lower Egypt sample ..... 244
Table C.7.1 Sampling Errors - Lower Egypt Urban sample ..... 245
Table C.7.2 Sampling Errors - Lower Egypt Rural sample ..... 246
Table C. 8 Sampling Errors - Upper Egypt sample ..... 247
Table C.9.1 Sampling Errors - Upper Egypt Urban sample ..... 248
Table C.9.2 Sampling Errors - Upper Egypt Rural sample ..... 249
Table C. 10 Sampling Errors - Frontier Governorates sample ..... 250
APPENDIX D DATA QUALITY TABLES
Table D. 1 Household age distribution ..... 251
Table D. 2 Age distribution of eligible and interviewed women ..... 252
Table D. 3 Completeness of reporting ..... 252
Table D. 4 Births by calendar years ..... 253
Table D. 5 Reporting of age at death in days ..... 254
Table D. 6 Reporting of age at death in months ..... 255

## PREFACE

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 healthrelated 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<br>Secretary General<br>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.

Funding for the survey was provided by USAID/Cairo through its bilateral health and population projects. Technical assistance came from ORC Macro through the worldwide USAIDsupported MEASURE DHS + project.

I am deeply grateful to the Ministry of Health and Population staff who contributed to the successful completion of this project, especially Dr. Moushera El- Shafei, who was First UnderSecretary of the Ministry of Health and Population at the time that the survey was conducted, for her continuous help and support during the survey. Dr. Essmat Mansour, Under-Secretary for Primary Health Care and Head of the Maternal and Child Health Project, deserves special thanks for her help in facilitating the anemia testing component of the survey. The support of Dr. Yahia ElHadidi, General Director of the Population and Family Planning Sector, was also appreciated especially his effort in providing the information needed for coding the source of family planning methods. Many thanks also are extended to Dr. Khalid Nasr, Deputy Director of the Maternal and Child Health Project, for his role in facilitating the referral of anemic women, children and adolescents to the health units.

I also gratefully acknowledge the staff of USAID, especially Mr. Gary Newton, Mr. Chris McDermott, Dr. Nahed Matta, Ms. Shadia Attia, Mr. Tourhan Nouri, and Ms. Amani Selim for their support and valuable comments throughout the survey activities.

Dr. Ann Way of ORC Macro, who worked closely with us on all phases of the EDHS, deserves special thanks for all her efforts throughout the survey and during the preparation of this report. My thanks also are extended to Dr. Alfredo Aliaga for his advice and guidance in designing the sample. Dr. Almaz Sharman provided invaluable assistance with the organization of the anemiatesting component of the survey. Ms. Jeanne Cushing deserves my deepest thanks for her assistance in data processing and analysis required for this report.

I would like to express my appreciation for all the assistance received from the administrative and financial department of the National Population Council.

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 planing 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 mistimed, 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 fiveyear 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 chil-
dren 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 around 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 twothirds of the children with these symptoms, and mothers reported that antibiotics were given to three-fourths of the children.

## Nutrition Indicators for Children 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
birth. About one-third of children are exclusively breastfed throughout the first 4-6 months of life. Exclusive breastfeeding (i.e., without any food or liquid) is recommended because it provides all the necessary nutrients and avoids exposure to disease agents.

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 nevermarried 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 resi-
dence, 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.

## Egypt



### 1.1 Geography

Egypt, one of the oldest societies in the world, is located on the northeast corner of the African continent, bounded on the north by the Mediterranean Sea, on the south by Sudan, on the east by the Red Sea, and on the west by Libya.

Egypt has the largest, most densely settled population among the Arab countries. The total area of the country covers approximately one million square kilometers. However, much of the land is desert, and only 6 percent of Egypt's area is inhabited (CAPMAS 1999). Recently, the Egyptian government adopted a policy of land reclamation and fostering of new settlements in the desert. Despite these efforts, the majority of Egyptians live either in the Nile Delta located in the north of the country or in the narrow Nile Valley south of Cairo.

Administratively, Egypt is divided into 26 governorates (see map) and Luxor City. The four Urban Governorates (Cairo, Alexandria, Port Said, and Suez) have no rural population. Each of the other 22 governorates is subdivided into urban and rural areas. Nine of these governorates are located in the Nile Delta (Lower Egypt), eight are located in the Nile Valley (Upper Egypt), and the remaining five Frontier Governorates are located on the eastern and western boundaries of Egypt.

### 1.2 Socioeconomic Indicators

The government of Egypt has adopted various strategies for fostering economic development during the latter half of the twentieth century, moving from a closed economy during the 1960s to an open-market approach in the mid-1970s. The economy expanded rapidly during the 1990s, with the gross national product (GNP) almost doubling between 1993 and 1997, from US\$660 to US $\$ 1,200$ per capita, and the inflation rate decreasing to 3.6 percent (UNDP 2000).

The recent economic growth has been accompanied by improvements in a number of human development indicators, including the following:

- The proportion of households with access to piped water increased from 70 percent in 1986 to 83 percent in 1996.
- School enrolment levels have improved over time, and literacy levels have risen. In 1997, for example, the enrolment ratio at the primary level was 95.2, and adult literacy was 53 percent.
- Of particular note are the advances in the education of women. Female enrolment at the primary level rose from 57 percent in 1970 to 91 percent in 1997. At the secondary level, female enrolment also expanded rapidly, from 23 percent in 1970 to 70 percent in 1997 (INP 1998).

Although many indicators have been improved over time, gaps remain evident for a number of subgroups:

- Although women have made gains in education and employment, significant gender gaps still exist. For example, the female literacy rate is only about two-thirds the male rate, and female participation in the labor force is 18 percent of male participation.
- Indicators for the rural population continue to be significantly lower than those for urban households. For example, the proportion of the rural population with piped water is 73 percent of the urban population with piped water. The urban-rural gap in access to sanitation facilities is even greater. The proportion of the rural population with access to sanitation facilities is 23 percent of the urban population with access to sanitation facilities.
- The urban population is considerably better educated than the rural population. Overall, the literate population in rural areas is two-thirds the literate population in urban areas (INP 1998).


### 1.3 Changing Population Size and Structure

The latest population census in Egypt was carried out in November 1996. According to the results, Egypt has a de facto population of 59.3 million. This number excludes the roughly 2.2 million Egyptians who are living abroad. The overall population density was estimated to exceed 1,685 persons per square kilometer of inhabited area (CAPMAS 1999). This figure varied widely by governorate, from a high of 31,750 persons per square kilometer in Cairo to 34 persons per square kilometer in Suez.

Table 1.1 presents the trend over roughly the last century in the size of the Egyptian population and in the distribution of the population by urban-rural residence. The table shows that Egypt's population more than doubled during the 45 -year period between 1882 and 1927. Growth accelerated at that point, with the population more than quadrupling between 1927 and 1996 (from 14 to 59 million). Population projections based on the 1996 census results indicate that Egypt's population will continue to grow rapidly, reaching 77.4 million in the year 2010.

Table 1.1 also shows that the Egyptian population became steadily more urbanized during the past century. The proportion urban rose from 17 percent in 1907 to 40 percent in 1966. At that point, the pace of urbanization slowed. In 1996, the urban population represented 43 percent of the total population.

Table 1.1 Population of Egypt, 1882-1996
Total population in Egypt and percentage living in urban and rural areas, 1882-1996

|  | Total <br> population <br> (millions) |  | Residence |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Urban | Rural |  |  |
| 1882 | 6,712 | u | u |  |
| 1897 | 9,669 | u | u |  |
| 1907 | 11,190 | 17.2 | 82.8 |  |
| 1917 | 12,718 | u | u |  |
| 1927 | 14,178 | 26.8 | 73.1 |  |
| 1937 | 15,921 | 28.2 | 71.8 |  |
| 1947 | 18,967 | 33.5 | 66.5 |  |
| 1960 | 26,085 | 38.2 | 61.8 |  |
| 1966 | 30,076 | 40.0 | 58.8 |  |
| 1976 | 36,626 | 43.8 | 56.2 |  |
| 1986 | 48,254 | 44.0 | 56.0 |  |
| 1996 | 59,313 | 43.0 | 57.0 |  |
|  |  |  |  |  |

Note: Figures exclude Egyptians living abroad.
$\mathrm{u}=$ Unknown (not available)
Source: CAPMAS 2000, Table 1.3

### 1.4 Recent Rate of Natural Increase

The rate of natural increase represents the difference between the level of births and deaths in a population. It indicates how fast a population will grow, taking into account these two natural events. ${ }^{1}$ Figure 1.1 shows that the rate of natural increase has been declining in Egypt since 1986.

## Figure 1.1 Trends in the Crude Birth Rate and the Crude Death Rate, Egypt 1986-1998



Note: Rates are expressed per thousand population
Source: CAPMASS2000

Most of the decline in the rate of natural increase since 1986 is the result of changes in fertility behavior. The crude birth rate (CBR) dropped from a level of 39 per thousand population in 1986 to 28 per thousand by 1994. As Figure 1.1 shows, the decline appears to have leveled off in the mid-1990s, with the CBR fluctuating around a level of 27 births per thousand during the period 1994-1998.

The crude death rate decreased from a level of 9.2 per thousand in 1986 to a level of 6.5 per thousand in 1998. Declining mortality has had a demonstrable effect on increasing the life expectancy of the Egyptian population. The life expectancy at birth represents the average number of years a child born in a specific year may be expected to live during his/her lifetime. Table 1.2 documents gains in life expectancy for both males and females in Egypt during the period 19602001. Life expectancy increased somewhat faster for females than for males during the period.

Table 1.2 Life expectancy, Egypt 1960-2001

Life expectancy at birth by sex, Egypt 1960-2001

| Year | Male | Female |
| :--- | :---: | :---: |
| 1960 | 51.6 | 53.8 |
| 1976 | 52.7 | 57.7 |
| 1986 | 60.5 | 63.5 |
| 1991 | 62.8 | 66.4 |
| 1996 | 65.1 | 69.0 |
| 2001 | 67.1 | 71.5 |

Source: CAPMAS 2000, Table 1.16

[^0]
### 1.5 Population Policy and Programs

Concerns about the population problem were expressed clearly in the National Charter that was issued in the 1960s. In that document, rapid population growth was identified as hindering efforts to raise the living standard of the Egyptian people. An official national family planning program also was established. The program, which was set up within the Ministry of Health, aimed to reduce fertility and thus population growth. The first national population policy statement, initially issued in 1973 and further articulated in 1975, recognized the simultaneous importance of four inter-related dimensions of Egypt's population problem: growth, spatial distribution, characteristics, and structure.

The adoption of the population policy in the 1970s was accompanied by increased governmental activities related to family planning. The Ministry of Health established a department of family planning, and government personnel received training in family planning program management. An information, education, and communication (IEC) project undertaken by a newly established center in the State Information Service was aimed at increasing public awareness about family planning.

A revised population policy was issued in 1980, which placed greater emphasis on face-toface communication and community-based activities to promote family planning. The third (and current) national population policy statement was formulated after the establishment of the National Population Council in the mid-1980s. It again emphasized the seriousness of population problems and recognized the interaction between population and development.

Finally, based on the recommendations of the International Conference on Population and Development (ICPD) held in Cairo in 1994, the strategy for achieving Egypt's population objectives has been broadened to support the expanded availability of reproductive health services and community development efforts of nongovernmental organizations. The new strategy also stresses female education and calls for increased employment opportunities for women to reduce the gender gap.

In January 1996, the Ministry of Health became the Ministry of Health and Population (MOHP), reflecting its increased responsibility for population sector activities. Responding to the concerns of the Cairo conference declaration, the MOHP has merged family planning and maternal and child health services into a broad-based women's health program. It has expanded family planning services, particularly to low-income populations and to rural Upper Egypt. As part of these efforts, the MOHP has renovated most of its clinics and added more than 300 mobile family planning clinics to improve access to services.

In addition, the National Women's Council was established early in the new millennium. The main objective of the council is to increase the role of women in Egyptian society and to decrease the gap between men and women in all areas (education, employment, etc.).

### 1.6 Health Policies and Programs

During the 1990s, the MOHP had the continuing objective "health for all by the year 2000." Within that broad mandate, the Government of Egypt placed priority on meeting children's health needs, with President Mubarak declaring that the 1989-1999 period would be a decade focused on the protection and development of the Egyptian child. A National Council of Childhood and Motherhood, co-chaired by the Prime Minister and the First Lady, was formed at that time to coordinate activities between ministries implementing programs affecting children and mothers.

To improve child health, the MOHP has focused on national programs to control diarrhea and acute respiratory infections and an expanded childhood immunization program. Targets were set to eradicate poliomyelitis and to eliminate neonatal tetanus before the year 2000. The MOHP also directed attention to reducing neonatal mortality by improving the quality of care given to newborns at home and in health facilities through postnatal care.

Following the merger of the health and population services described above, the MOHP also has stressed the importance of integrating family planning and maternal and child health. A policy reform agenda was developed to expand health insurance to more beneficiaries and to introduce changes designed to enhance the quality of health services. Attention has been paid to improving health manpower distribution and the compensation provided to health workers. The importance of strengthening the information system to collect, analyze, and facilitate the use of health information at all levels was recognized, and steps have been taken to address this task. All these health reform plans are expected to have a positive effect on the health of women and children.

### 1.7 Organization and Objectives of the 2000 EDHS

The Egypt Demographic and Health Survey (2000 EDHS) is the latest in a series of a nationally representative population and health surveys conducted in Egypt. ${ }^{2}$ The 2000 EDHS was conducted under the auspices of the Ministry of Health and Population (MOHP) and National Population Council (NPC). Technical support for the 2000 EDHS was provided by ORC Macro through MEASURE DHS + , a project sponsored by the U.S. Agency for International Development (USAID) to assist countries worldwide in conducting surveys to obtain information on key population and health indicators. USAID/Cairo, under the Population/Family Planning IV Project, provided funding for the survey.

The 2000 EDHS was designed to provide estimates for key indicators such as fertility, contraceptive use, infant and child mortality, immunization levels, coverage of antenatal and delivery care, and maternal and child health and nutrition. The survey results are intended to assist policymakers and planners in assessing the current health and population programs and in designing new strategies for improving reproductive health and health services in Egypt.

### 1.8 Implementation of the 2000 EDHS

## Timetable

The 2000 EDHS was executed in four stages. The first stage involved preparatory activities, including designing the sample and updating the frame. At the same time, the survey questionnaires were developed, pretested, and finalized. The preparatory stage was initiated in January 1999, and all of the activities were completed by December 1999. The second stage, which took place from January 2000 through April 2000, involved training field staff and interviewing eligible households and individual respondents. The third stage involved all of the data processing activities necessary to produce a clean data file, including editing, coding, entering and verifying the data as well as checking it for consistency. This stage started soon after the beginning of the fieldwork and lasted

[^1]through late May 2000. The focus of the final stage of the survey was analyzing the data and preparing the report. This phase began in June 2000 with the publication of the preliminary report, which presented the main findings from the survey.

The activities involved in each of the stages are described in more detail below. The survey timetable is presented in Table 1.3.

| Table 1.3 Survey timetable, 2000 Egypt DHS |  |  |
| :--- | ---: | :--- |
| Activity | Starting date | Duration |
| Updating the sample frame | January 1999 | 1 month |
| Mapping | February 1999 | 1 month |
| Quick-count operation | March 1999 | 3 months |
| Pretest I | May 1999 | 2 weeks |
| Recruitment and training of listing staff | September 1999 | 2 weeks |
| Listing and relisting | September 1999 | 2 months |
| Sample selection | November 1999 | 2 months |
| Questionnaire design | March 1999 | 3 months |
| Preparation of training materials | September 1999 | 2 months |
| Pretest II | October 1999 | 2 months |
| Finalization of questionnaires | December 1999 | 1 month |
| Training of data collection staff | January 2000 | 5 weeks |
| Printing survey materials | February 2000 | 1 month |
| Fieldwork | February 2000 | 2 months |
| Reinterviews | April 2000 | 1 month |
| Office editing and coding | March 2000 | 3 months |
| Data entry | March 2000 | 3 months |
| Computer editing | April 2000 | 3 months |
| Preliminary report | June 2000 | 3 weeks |
| Detailed tabulations | June 2000 | 1 month |
| Final report preparation | July 2000 | 7 months |

## Sample Design

The primary objective of the sample design for the 2000 EDHS was to provide estimates of key population and health indicators including fertility and child mortality rates for the country as a whole and for six major administrative regions (the Urban Governorates, urban Lower Egypt, rural Lower Egypt, urban Upper Egypt, rural Upper Egypt, and the Frontier Governorates). In the Urban Governorates, Lower Egypt, and Upper Egypt, the design allowed for governorate-level estimates of most of the key variables, with the exception of the fertility and mortality rates. In the Frontier Governorates, the sample size was not sufficiently large to provide separate estimates for the individual governorates. To meet the survey objectives, the number of households selected in the 2000 EDHS sample from each governorate was not proportional to the size of the population in the governorate. As a result, the 2000 EDHS sample is not self-weighting at the national level, and weights have to be applied to the data to obtain the national-level estimates presented in this report.

A more detailed description of the 2000 EDHS sample design is included in Appendix B. Sampling errors for selected variables are presented in Appendix C.

## Sample Selection

The sample for the 2000 EDHS was selected in three stages. The first stage included selecting the primary sampling units. The units of selection were shiakhas/towns in urban areas and villages in rural areas. Information from the 1996 census was used in constructing the frame from which the primary sampling units (PSUs) were selected. Prior to selecting the PSUs, the frame was updated to take into account administrative changes that had occurred since 1996. The updating process included both office work and field visits during a three-month period. After it was completed, urban and rural units were stratified by geographical location in a serpentine order from the northwest corner to the southeast corner within each governorate. During this process, shiakhas or villages with a population less than 2,500 were grouped with contiguous shiakhas or villages (usually within the same kism or marquez) to form units with a population of at least 5,000. After the frame was ordered, a total of 500 primary sampling units ( 228 shiakhas/towns and 272 villages) were selected.

The second stage of selection involved several steps. First, detailed maps of the PSUs chosen during the first stage were obtained and divided into parts of roughly equal population size (about 5,000 ). In shiakhas/towns or villages with a population of 20,000 or more, two parts were selected. In the remaining smaller shiakhas/towns or villages, only one part was selected. Overall, a total of 735 parts were selected from the shiakhas/towns and villages in the 2000 EDHS sample.

A quick count was then carried out to provide an estimate of the number of households in each part. This information was needed to divide each part into standard segments of about 200 households. A group of 37 experienced field workers participated in the quick count operation. They were organized into 13 teams, each consisting of 1 supervisor, 1 cartographer and 1 or 2 counters. A one-week training course conducted prior to the quick count included both classroom sessions and field practice in a shiakha/town and a village not covered in the survey. The quickcount operation took place between late March and May 1999.

As a quality control measure, the quick count was repeated in 10 percent of the parts. If the difference between the results of the first and second quick count was less than 2 percent, then the first count was accepted. No major discrepancies were found between the two counts in most of the areas for which the count was repeated.

After the quick count, a total of 1,000 segments were chosen from the parts in each shiakha/ town and village in the 2000 EDHS sample (i.e., two segments were selected from each of the 500 PSUs). A household listing operation was then implemented in each of the selected segments. To conduct this operation, 12 supervisors and 24 listers were organized into 12 teams. Generally, each listing team consisted of a supervisor and two listers. A one-week training course for the listing staff was held in mid-September 1999. The training involved classroom lectures and two days of field practice in three urban and rural locations not covered in the survey. The listing operation began at the end of September and continued for about 40 days.

About 10 percent of the segments were relisted. Two criteria were used to select segments for relisting. First, segments were relisted when the number of households in the listing differed markedly from that expected according to the quick count information. Second, a number of segments were randomly selected to be relisted as an additional quality control test. Overall, few major discrepancies were found in comparisons of the listings. However, a third visit to the field was necessary in a few segments in the Cairo and Aswan governorates because of significant discrepancies between the results of the original listing and the relisting operation.

The third stage involved selecting the household sample. Using the household lists for each segment, a systematic random sample of households was selected for the 2000 EDHS sample. All ever-married women 15-49 who were usual residents or who were present in the sampled households on the night before the interview were eligible for the EDHS.

## Questionnaire Development

The 2000 EDHS involved two questionnaires: a household questionnaire and an individual questionnaire. The household and individual questionnaires were based on the model survey instruments developed by MEASURE DHS + for countries with high contraceptive prevalence. Questions on a number of topics not covered in the DHS model questionnaires were also included in the 2000 EDHS questionnaires. In some cases, those items were drawn from the questionnaires used for earlier rounds of the DHS in Egypt. In other cases, the questions were intended to collect information on topics not covered in the earlier surveys (e.g., schooling of children).

The household questionnaire consisted of three parts: a household schedule, a series of questions related to the socioeconomic status of the household, and height and weight measurement and anemia testing. The household schedule was used to list all usual household members and visitors and to identify those present in the household during the night before the interviewer's visit. For each of the individuals included in the schedule, information was collected on the relationship to the household head, age, sex, marital status (for those 15 years and older), educational attainment, repetition and dropout (for those 6-24 years), and work status (for those 6 years and older). The second part of the household questionnaire obtained information on characteristics of the physical and social environment of the household (e.g., type of dwelling, availability of electricity, source of drinking water, household possessions, and the type of salt the household used for cooking). Height and weight measurements were obtained and recorded in the last part of the household questionnaire for all ever-married women age 15-49 years and all children born since January 1995 who were listed in the household schedule. In a subsample of households, all eligible women, all children born since January 1995, and all children age 11-19 years were eligible for anemia testing.

The individual questionnaire was administered to all ever-married women age 15-49 who were usual residents or who were present in the household during the night before the interviewer's visit. It obtained information on the following topics:

- Respondent's background
- Reproduction
- Contraceptive knowledge and use
- Fertility preferences and attitudes about family planning
- Pregnancy and breastfeeding
- Immunization and health
- Schooling of children and child labor
- Female circumcision
- Marriage and husband's background
- Woman's work and residence.

The individual questionnaire included a monthly calendar, which was used to record a history of the respondent's fertility, contraceptive use (including the source where the method was obtained and the reason for discontinuation for each segment of use), and marriage status during each month of around a five-year period beginning in January 1995.

## Pretest

Two pretests were conducted during the preparation for the 2000 EDHS. After a ten-day training course, the household and individual questionnaires were pretested first in May 1999 in a small number of households. Two supervisors, two field editors, and eight interviewers participated in the first pretest. The pretest was conducted in two Upper Egypt governorates (Beni Suef and Fayoum) and two Lower Egypt governorates (Gharbia and Menoufia). A total of 276 household and 273 individual interviews were completed during the pretest.

A larger-scale pretest was conducted in October 1999, including height and weight measurements as well as anemia testing. A three-week training course was conducted prior to the data collection for this pretest. Using six teams, the second pretest was conducted in all the governorates (excluding the Frontier Governorates). A total of 6 supervisors, 6 field editors, and 22 interviewers shared in the data collection with the health technicians who were responsible for the height and weight data collection and anemia testing in a subsample of households. The data collection took about two weeks, and approximately 3,000 households were interviewed.

The questionnaires for the 2000 EDHS were finalized after the second pretest. Both comments from interviewers and tabulations of the pretest results were reviewed during the process of finalizing the questionnaires.

English versions of the final Arabic language questionnaires are included in Appendix E.

## Data Collection Activities

Staff recruitment. To recruit interviewers and field editors, a list was obtained from the Ministry of Social Affairs (MOSA) of female personnel who were working to fulfill the one-year period of governmental public service that is mandatory for university graduates. All candidates nominated by MOSA for the field staff positions were interviewed, and only those who were qualified were accepted into the training program.

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

All of the staff recruited for the anemia testing were required to have a medical background. Some were assigned by the MOHP, and others were recruited from among newly graduated physicians.

Training materials. A variety of materials were developed for use in training personnel involved in the fieldwork. A lengthy interviewer's manual, including general guidelines for conducting an interview as well as specific instructions for asking each of the questions in the EDHS questionnaires, was prepared and given to all field staff. In addition, a chart for converting months from the Islamic calendar to the Gregorian calendar was designed for the 74 months before the 2000 EDHS and distributed to all field staff.

Other training materials, including special manuals describing the duties of the team supervisor and the rules for field editing, were prepared. Instructions for anthropometric data collection were included in a manual for the staff trained to collect height and weight data. A special manual covering the procedures to be followed in the anemia testing was also prepared.

Training for supervisors and interviewers. A special training program for supervisors was conducted during a three-day period prior to the main fieldwork training. This training focused specifically on the supervisor's duties, but it also covered the 2000 EDHS questionnaires in order to give supervisors a basic understanding of the content of the survey prior to the main training program.

Training for interviewers for the 2000 EDHS data collection began in mid-January 2000. Twenty supervisors, 88 interviewers, and 34 anemia-testing and anthropometric-data-collection staff participated in the training program. This five-week training program, which was held in Cairo, included the following:

- Lectures related to basic interview techniques and to specific survey topics (e.g., fertility and family planning, maternal and child health, and female circumcision)
- Sessions on how to fill out the questionnaire, using visual aids
- Role playing and mock interviews
- Four days of field practice in areas not covered in the survey
- Nine quizzes.

Trainees who failed to show interest in the survey, who did not attend the training program on a regular basis, or who failed the first three quizzes were terminated immediately.

At the beginning of the third week of training, a list was prepared of the 17 trainees who had performed best during both the classroom and field practices. These trainees were further examined to select 13 field editors. A special training session was held for the field editors after their selection. By the end of the training course, 63 of the 88 candidates originally recruited for interviewer training had been selected to work as interviewers or field editors in the EDHS fieldwork.

Training for anthropometric-data-collection and anemia-testing staff. Thirty-four personnel were selected for training in anthropometric data collection and anemia testing. The training included both classroom lectures and practice measurement and blood testing in a nursery school, in health facilities, and in households. At the end of the program, the 26 most-qualified trainees were selected for the anthropometric data collection and anemia testing. As discussed earlier, all of the personnel involved in the anemia testing had a medical background. Most were medical school graduates.

Fieldwork. Fieldwork for the 2000 EDHS began on February 23, 2000 and was completed in late April 2000. A total of 105 staff members, including 1 fieldwork coordinator, 2 assistant fieldwork coordinators, 13 supervisors, 13 field editors, and 50 interviewers were responsible for the data collection. In addition, 26 staff members were responsible for the anthropometric measurement and anemia testing. All supervisors were males, while the field editors and interviewers were females. One male and one female staff member were involved in the anthropometric measurement and the anemia testing.

The field staff was divided into 13 teams; each team had 1 supervisor, 1 field editor, 3 to 4 interviewers, and 2 staff members assigned to height and weight measurement and anemia testing. During the fieldwork, the 13 field teams worked in separate governorates; the number of governorates assigned to an individual team varied from one to three, according to the sample size in the governorates.

As soon as the main data collection was completed in the first group of governorates, a random sample of up to 10 percent of the households was selected for reinterview as a quality control measure. Shorter versions of the 2000 EDHS questionnaires were prepared and used for the reinterviews. The visits to PSUs to conduct reinterviews also afforded an opportunity to make callbacks to complete interviews with households or individuals who were not available at the time of the original visit by the 2000 EDHS interviewers. Household or individual questionnaires in which there were significant errors that could not be corrected in the office were also assigned for callbacks. Special teams were organized to handle callbacks and reinterviews. During this phase of the survey, interviewers were not allowed to work in the governorate in which they had worked in the initial fieldwork. Callbacks and reinterviews began on April 15, 2000 and were completed by May 15, 2000.

## Data Processing Activities

Office editing. Staff from the central office were responsible for collecting questionnaires from the teams as soon as a cluster was completed. Office editors reviewed questionnaires for consistency and completeness, and a few questions (e.g., occupation) were coded in the office prior to data entry. To provide feedback for the field teams, the office editors were instructed to report any problems detected while editing the questionnaires, which were reviewed by the senior staff. If serious errors were found in one or more questionnaires from a cluster, the supervisor of the team working in that cluster was notified and advised of the steps to be taken to avoid these problems in the future.

Machine entry and editing. Machine entry and editing began while interviewing teams were still in the field. The data from the questionnaires were entered and edited on microcomputers using the Integrated System for Survey Analysis (ISSA), a software package developed especially for the Demographic and Health Surveys program.

Eleven data entry personnel used ten microcomputers to process the 2000 EDHS survey data. During the machine entry, 100 percent of each segment was reentered for verification. By working one shift six days per week, the data processing staff completed the entry and editing of data by the end of May 2000.

### 1.9 Coverage of the Survey

Table 1.4 summarizes the outcome of the fieldwork for the 2000 EDHS by place of residence. The table shows that, during the main fieldwork and callback phases of the survey, out of 17,521 households selected for the 2000 EDHS, 17,103 households were found, and 16,957 households were successfully interviewed which represents a response rate of 99 percent.

A total of 15,649 women were identified as eligible to be interviewed. Questionnaires were completed for 15,573 of those women, which represents a response rate of 99.5 percent. The household response rate exceeded 98 percent in all residential categories, and the response rate for eligible women exceeded 99 percent in all areas.

| Table 1.4 Results of the household and individual interviews |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of household and eligible women interviewed and response rates by urban-rural residence and place of residence, Egypt DHS 2000 |  |  |  |  |  |  |  |  |  |  |  |
| Interview results | Urban | Rural | Place of residence |  |  |  |  |  |  |  | Total |
|  |  |  | Urban Governorates | Lower Egypt |  |  | Upper Egypt |  |  | Frontier Governorates |  |
|  |  |  |  | Total | Urban | Rural | Total | Urban | Rural |  |  |
| Household interviews |  |  |  |  |  |  |  |  |  |  |  |
| Households sampled | 9,119 | 8,402 | 4,173 | 6,661 | 2,354 | 4,307 | 5,748 | 1,968 | 3,780 | 939 | 17,521 |
| Households found | 8,810 | 8,293 | 4,009 | 6,520 | 2,273 | 4,247 | 5,654 | 1,921 | 3,733 | 920 | 17,103 |
| Households interviewed | 8,692 | 8,265 | 3,939 | 6,478 | 2,242 | 4,236 | 5,621 | 1,905 | 3,716 | 919 | 16,957 |
| Household response rate | 98.7 | 99.7 | 98.3 | 99.4 | 98.6 | 99.7 | 99.4 | 99.2 | 99.5 | 99.9 | 99.1 |
| Individual interviews |  |  |  |  |  |  |  |  |  |  |  |
| Eligible women | 7,211 | 8,438 | 3,122 | 6,135 | 1,837 | 4,298 | 5,441 | 1,677 | 3,764 | 951 | 15,649 |
| Eligible women interviewed | 7,178 | 8,395 | 3,102 | 6,108 | 1,831 | 4,277 | 5,413 | 1,670 | 3,743 | 950 | 15,573 |
| Eligible woman response rate | 99.5 | 99.5 | 99.4 | 99.6 | 99.7 | 99.5 | 99.5 | 99.6 | 99.4 | 99.9 | 99.5 |

## CHARACTERISTICS OF HOUSEHOLDS

The objective of this chapter is to provide a demographic and socioeconomic profile of the 2000 EDHS sample and a descriptive assessment of the environment in which women and children live. This goal is accomplished by examining the general characteristics of the households in the sample. Information is presented on the age, sex, and education of the household population, as well as on housing facilities and household possessions. The profile of the 2000 EDHS households provided in this chapter will help in understanding the results presented in the following chapters. In addition, it may provide useful input for social and economic development planning.

### 2.1 Characteristics of the Household Population

The questionnaire for the 2000 EDHS included two questions distinguishing between the de jure population (persons who usually live in selected household) and the de facto population (persons who spent the night before the interview in the household). The differences between these populations are small, and since past surveys and censuses were based on de facto populations, tabulations for the household data presented in this chapter are based on the de facto definition, unless otherwise stated.

## Age and Sex Composition

Table 2.1 presents the percent distribution of the de facto population by age, according to urban-rural residence and sex. The table shows the effects of past demographic trends on the structure of the Egyptian population and indicates the context in which a variety of demographic processes are operating.

| Table 2.1 Household population by age, residence, and sex |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of the de facto household population by five-year age groups, according to urban-rural residence and sex, Egypt 2000 |  |  |  |  |  |  |  |  |  |
| Age group | Urban |  |  | Rural |  |  | Total |  |  |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 0-4 | 11.3 | 10.9 | 11.1 | 13.8 | 13.0 | 13.4 | 12.7 | 12.1 | 12.4 |
| 5-9 | 10.1 | 10.2 | 10.1 | 13.0 | 12.5 | 12.8 | 11.8 | 11.5 | 11.6 |
| 10-14 | 12.2 | 11.9 | 12.0 | 14.5 | 13.8 | 14.2 | 13.5 | 13.0 | 13.3 |
| 15-19 | 11.6 | 11.4 | 11.5 | 12.5 | 11.8 | 12.2 | 12.1 | 11.6 | 11.9 |
| 20-24 | 9.4 | 9.8 | 9.6 | 8.4 | 9.2 | 8.8 | 8.9 | 9.5 | 9.2 |
| 25-29 | 7.3 | 7.7 | 7.5 | 6.6 | 7.5 | 7.1 | 6.9 | 7.6 | 7.3 |
| 30-34 | 6.4 | 6.9 | 6.6 | 5.7 | 6.1 | 5.9 | 6.0 | 6.5 | 6.2 |
| 35-39 | 6.7 | 6.8 | 6.8 | 5.9 | 5.9 | 5.9 | 6.2 | 6.3 | 6.3 |
| 40-44 | 5.5 | 6.0 | 5.7 | 4.3 | 4.4 | 4.4 | 4.8 | 5.1 | 4.9 |
| 45-49 | 5.4 | 6.1 | 5.7 | 3.9 | 4.6 | 4.2 | 4.5 | 5.3 | 4.9 |
| 50-54 | 4.4 | 3.2 | 3.8 | 3.2 | 2.5 | 2.8 | 3.7 | 2.8 | 3.2 |
| 55-59 | 3.1 | 3.3 | 3.2 | 2.3 | 2.6 | 2.5 | 2.7 | 2.9 | 2.8 |
| 60-64 | 2.8 | 2.6 | 2.7 | 2.2 | 2.3 | 2.2 | 2.4 | 2.4 | 2.4 |
| 65-69 | 1.7 | 1.3 | 1.5 | 1.6 | 1.5 | 1.5 | 1.7 | 1.4 | 1.5 |
| 70-74 | 1.2 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.1 | 1.1 |
| 75-79 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 |
| $80+$ | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 19,135 | 19,169 | 38,305 | 25,169 | 24,893 | 50,062 | 44,304 | 44,061 | 88,367 |

The information on sex and age distribution is used to construct a population pyramid describing the 2000 EDHS household population (Figure 2.1). The pyramid has a wide base, with a large concentration ( 37 percent) of the population under 15 years of age. This pattern is typical of countries that have experienced relatively high fertility in the recent past. The effect of recent fertility declines is evident in the fact that the proportions of children under age 5 and age 5 to 9 are smaller than the proportion age 10 to 14 . The proportion under age 15 is greater in the rural population than in the urban population (Table 2.1). The differences in the urban-rural age distributions reflect the lower recent fertility in urban areas compared with rural areas.

Figure 2.1 Population Pyramid, Egypt 2000


Table 2.2 presents a comparison of the distribution of the household population by broad age groups for the four EDHS surveys carried out between 1988 and 2000. The dependency ratio, defined as the ratio of the nonproductive population (persons under age 15 and age 65 and over) to the population age 15-64, is calculated based on these figures. The dependency ratio, which was above 80 at the time of the 1988 survey, had declined to 69 at the time of the 2000 EDHS. The decline reflects a substantial lessening in the burden placed on persons in the productive ages to support older and younger household members.

Table 2.2 Population by age, 1988, 1992, 1995, and 2000
Percent distribution of the de facto population by broad age groups, 1988 EDHS, 1992 EDHS, 1995 EDHS, and 2000 EDHS

| Age group | $\begin{aligned} & 1988 \\ & \text { EDHS } \end{aligned}$ | $\begin{aligned} & 1992 \\ & \text { EDHS } \end{aligned}$ | $\begin{aligned} & 1995 \\ & \text { EDHS } \end{aligned}$ | $\begin{aligned} & 2000 \\ & \text { EDHS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Less than 15 | 41.2 | 41.7 | 40.0 | 37.3 |
| 15-64 | 55.0 | 54.6 | 56.3 | 59.1 |
| 65+ | 3.8 | 3.7 | 3.7 | 3.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Median age | - | 18.8 | 19.3 | 20.3 |
| Dependency ratio | 81.8 | 83.2 | 77.6 | 69.2 |

Source: El-Zanaty et al., 1996, Table 2.2

## Household Composition

Table 2.3 presents the distribution of households in the 2000 EDHS sample by sex of the head of the household and by the number of household members. These characteristics are important because they are often associated with socioeconomic differences between households. For example, female-headed households frequently are poorer than households headed by males. In addition, the size and composition of the household affects the allocation of financial and other resources among household members, which in turn influences the overall well-being of these individuals. Household size is also associated with crowding in the dwelling, which can lead to unfavorable health conditions. Unlike earlier tables, Table 2.3 is based on de jure members, i.e. usual residents.

The household head is female in 12 percent of households. There is little variation in the proportion of female-headed households by residence, except for the Frontier Governorates, where females head 6 percent of households.

## Table 2.3 Household composition

Percent distribution of households by sex of head of household and household size, according to urban-rural residence and place of residence, Egypt 2000

| Characteristic | Urban | Rural | Place of residence |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Urban Governorates | Lower Egypt |  |  | Upper Egypt |  |  | Frontier Governorates | T Total |
|  |  |  |  | Total | Urban | Rural | Total | Urban | Rural |  |  |
| Household headship |  |  |  |  |  |  |  |  |  |  |  |
| Male | 86.9 | 89.1 | 86.3 | 88.7 | 86.6 | 89.7 | 88.1 | 88.1 | 88.1 | 93.8 | 88.0 |
| Female | 13.1 | 10.9 | 13.7 | 11.3 | 13.4 | 10.3 | 11.9 | 11.9 | 11.9 | 6.2 | 12.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of usual members |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 0.3 | 0.0 | 0.4 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.5 | 0.1 |
| 1 | 6.2 | 3.7 | 6.8 | 4.0 | 6.3 | 2.9 | 4.9 | 5.0 | 4.8 | 6.4 | 5.0 |
| 2 | 10.1 | 7.2 | 10.9 | 8.1 | 9.5 | 7.4 | 7.9 | 9.5 | 7.0 | 9.1 | 8.7 |
| 3 | 14.4 | 8.8 | 15.5 | 11.2 | 14.0 | 9.8 | 9.5 | 13.3 | 7.4 | 8.7 | 11.6 |
| 4 | 21.5 | 13.3 | 23.6 | 16.7 | 21.4 | 14.4 | 14.1 | 17.8 | 12.0 | 14.2 | 17.4 |
| 5 | 20.2 | 15.0 | 20.4 | 18.8 | 21.5 | 17.4 | 14.4 | 18.8 | 12.0 | 15.1 | 17.6 |
| 6 | 13.1 | 15.7 | 11.6 | 15.9 | 14.2 | 16.7 | 14.5 | 14.5 | 14.4 | 12.9 | 14.4 |
| 7 | 6.9 | 11.9 | 5.3 | 10.1 | 7.5 | 11.4 | 11.4 | 9.1 | 12.7 | 9.7 | 9.4 |
| 8 | 3.6 | 8.6 | 2.7 | 5.8 | 2.9 | 7.2 | 8.8 | 5.9 | 10.4 | 7.6 | 6.1 |
| 9+ | 3.7 | 15.6 | 2.9 | 9.4 | 2.7 | 12.8 | 14.4 | 5.9 | 19.1 | 15.8 | 9.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Mean size | 4.5 | 6.0 | 4.3 | 5.3 | 4.5 | 5.7 | 5.7 | 4.9 | 6.2 | 6.0 | 5.2 |
| Number of households | 8,429 | 8,528 | 3,852 | 7,154 | 2,380 | 4,775 | 5,751 | 2,066 | 3,685 | 200 | 16,957 |

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

There are on average 5.2 persons per household. One in four households has fewer than four members, while another quarter of the households has seven or more members. In general, rural households are larger than urban households. For example, fewer than one in ten urban households have eight or more members, compared with nearly one in four rural households. Household size varies from an average of 4.3 persons in the Urban Governorates to 6.2 persons in rural Upper Egypt.

### 2.2 Education of the Household Population

The educational level of household members is among the most important characteristics of the household because it is associated with many phenomena including reproductive behavior, use of contraception, and the health of children. Results from household interviews can be used to look at both educational attainment among household members and school attendance among children and young adults.

## Educational Attainment

Tables 2.4.1 and 2.4.2 present data on the educational level of the household population age 6 and over. Primary education in Egypt starts at age 6 and continues for 5 years. A further three-year period, known as the preparatory stage, is considered basic education and is compulsory. The secondary stage, which includes another three years of schooling, is not compulsory.

| Percent distribution of the de facto male household population age six and over by highest level of education attended, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | No education | Primary incomplete | Primary complete/ some secondary | Secondary complete | Higher | Total | Number of males | Median number of years of schooling |
| Age group |  |  |  |  |  |  |  |  |
| $6-9$ | 13.8 | 86.1 | 0.0 | 0.0 | 0.0 | 100.0 | 4,089 | 0.4 |
| 10-14 | 4.4 | 38.0 | 57.6 | 0.0 | 0.0 | 100.0 | 5,992 | 4.3 |
| 15-19 | 6.2 | 8.3 | 63.5 | 13.8 | 8.1 | 100.0 | 5,381 | 8.2 |
| 20-24 | 7.6 | 6.7 | 22.4 | 38.8 | 24.5 | 100.0 | 3,923 | 10.4 |
| 25-29 | 12.1 | 10.4 | 21.1 | 38.4 | 17.9 | 100.0 | 3,059 | 11.2 |
| 30-34 | 16.6 | 12.7 | 16.9 | 37.1 | 16.7 | 100.0 | 2,649 | 11.1 |
| 35-39 | 21.8 | 16.2 | 15.5 | 29.1 | 17.4 | 100.0 | 2,766 | 8.5 |
| 40-44 | 24.7 | 16.9 | 17.0 | 24.5 | 16.9 | 100.0 | 2,127 | 6.5 |
| 45-49 | 31.4 | 16.1 | 18.1 | 18.8 | 15.6 | 100.0 | 1,996 | 5.3 |
| 50-54 | 38.4 | 13.4 | 18.2 | 15.0 | 14.9 | 100.0 | 1,633 | 4.6 |
| 55-59 | 44.1 | 13.2 | 17.6 | 11.3 | 13.8 | 100.0 | 1,178 | 3.2 |
| 60-64 | 55.1 | 11.6 | 12.1 | 9.6 | 11.7 | 100.0 | 1,084 | 0.0 |
| $65+$ | 66.9 | 12.4 | 10.1 | 4.9 | 5.7 | 100.0 | 1,684 | 0.0 |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 12.4 | 20.5 | 29.3 | 19.9 | 18.1 | 100.0 | 16,573 | 7.1 |
| Rural | 23.1 | 26.7 | 28.5 | 16.2 | 5.6 | 100.0 | 20,994 | 4.4 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 12.0 | 18.2 | 29.3 | 18.8 | 21.7 | 100.0 | 7,346 | 7.8 |
| Lower Egypt | 19.2 | 24.5 | 29.1 | 18.0 | 9.2 | 100.0 | 16,351 | 5.1 |
| Urban | 12.4 | 22.0 | 28.6 | 20.5 | 16.4 | 100.0 | 4,637 | 6.9 |
| Rural | 21.9 | 25.6 | 29.2 | 17.0 | 6.4 | 100.0 | 11,714 | 4.6 |
| Upper Egypt | 20.8 | 26.5 | 28.0 | 17.0 | 7.6 | 100.0 | 13,364 | 4.7 |
| Urban | 13.0 | 22.7 | 29.0 | 20.9 | 14.3 | 100.0 | 4,283 | 6.4 |
| Rural | 24.5 | 28.3 | 27.5 | 15.2 | 4.5 | 100.0 | 9,081 | 4.0 |
| Frontier Governorates | 19.4 | 21.5 | 30.5 | 19.3 | 9.4 | 100.0 | 506 | 5.5 |
| Total | 18.4 | 24.0 | 28.8 | 17.8 | 11.1 | 100.0 | 37,567 | 5.4 |

Table 2.4.2 Educational level of the female household population

Percent distribution of the de facto female household population age six and over by highest level of education attended, according to selected background characteristics, Egypt 2000

| Background characteristic | No education | Primary incomplete | Primary complete/ some secondary | Secondary complete | Higher | Total | Number of females | Median number of years of schooling |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age group |  |  |  |  |  |  |  |  |
| 6-9 | 17.4 | 82.5 | 0.0 | 0.0 | 0.0 | 100.0 | 3,918 | 0.4 |
| 10-14 | 13.3 | 33.2 | 53.5 | 0.0 | 0.0 | 100.0 | 5,717 | 4.2 |
| 15-19 | 18.5 | 7.3 | 49.7 | 15.4 | 9.1 | 100.0 | 5,124 | 8.1 |
| 20-24 | 21.9 | 6.6 | 18.2 | 34.5 | 18.9 | 100.0 | 4,171 | 10.1 |
| 25-29 | 32.9 | 10.1 | 12.8 | 31.2 | 13.0 | 100.0 | 3,353 | 7.9 |
| 30-34 | 38.8 | 12.7 | 9.8 | 28.1 | 10.7 | 100.0 | 2,843 | 4.6 |
| 35-39 | 47.5 | 15.5 | 8.8 | 17.9 | 10.3 | 100.0 | 2,774 | 1.1 |
| 40-44 | 48.2 | 19.8 | 10.4 | 13.5 | 8.1 | 100.0 | 2,245 | 1.0 |
| 45-49 | 55.8 | 16.8 | 12.3 | 8.4 | 6.7 | 100.0 | 2,317 | 0.0 |
| 50-54 | 64.2 | 12.3 | 11.0 | 7.6 | 4.9 | 100.0 | 1,233 | 0.0 |
| 55-59 | 69.5 | 13.0 | 6.8 | 5.2 | 5.5 | 100.0 | 1,274 | 0.0 |
| 60-64 | 73.8 | 12.3 | 5.8 | 5.3 | 2.8 | 100.0 | 1,077 | 0.0 |
| $65+$ | 84.8 | 8.9 | 4.0 | 1.5 | 0.8 | 100.0 | 1,537 | 0.0 |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 21.6 | 20.7 | 25.0 | 19.1 | 13.6 | 100.0 | 16,659 | 5.5 |
| Rural | 44.8 | 23.4 | 19.2 | 10.1 | 2.5 | 100.0 | 20,927 | 0.5 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 20.9 | 19.0 | 25.4 | 18.5 | 16.2 | 100.0 | 7,331 | 5.9 |
| Lower Egypt | 34.5 | 23.3 | 21.3 | 15.2 | 5.7 | 100.0 | 16,131 | 3.0 |
| Urban | 21.5 | 22.1 | 24.0 | 20.6 | 11.7 | 100.0 | 4,642 | 5.4 |
| Rural | 39.7 | 23.8 | 20.2 | 13.1 | 3.3 | 100.0 | 11,489 | 1.8 |
| Upper Egypt | 41.9 | 22.7 | 20.3 | 10.4 | 4.8 | 100.0 | 13,626 | 1.3 |
| Urban | 22.8 | 22.0 | 25.3 | 18.5 | 11.4 | 100.0 | 4,393 | 5.0 |
| Rural | 50.9 | 23.1 | 17.8 | 6.5 | 1.6 | 100.0 | 9,233 | 0.0 |
| Frontier Governorates | S 37.4 | 16.8 | 24.3 | 15.0 | 6.5 | 100.0 | 497 | 3.2 |
| Total | 34.5 | 22.2 | 21.7 | 14.1 | 7.4 | 100.0 | 37,586 | 3.1 |

The results in Tables 2.4.1 and 2.4.2 confirm that there is a gap in educational attainment between males and females. Overall, more than 80 percent of males in the EDHS households have ever attended school, compared with 65 percent of females. The median number of years of schooling for men is 5.4 , which is more than 2 years higher than the median level for women (3.1 years). ${ }^{1}$

[^2]An examination of the changes in educational indicators over successive cohorts indicates that there have been substantial increases over time in the educational attainment of both men and women. For example, the median number of years of schooling is 10.4 for males age 20-24 years, compared with 6.5 years in the $40-44$ age group. Women have experienced substantial improvements in education as well. As a result, the differentials in educational attainment between males and females have narrowed among younger cohorts; for example, the gap in the median number of years of schooling is negligible for those under age 25.

Urban residents are more likely to have attended school and to have remained in school for a longer period than rural residents. Gender differences in educational attainment also are less evident in urban than in rural areas. The median number of years of schooling is 4.4 years among rural men, compared with 0.5 years among rural women. The difference is much smaller in urban areas, where the median years of schooling is 7.1 years for men, compared with 5.5 years for women.

By place of residence, gender differences in the likelihood of attending school are greatest in rural Upper Egypt and least in the Urban Governorates. In rural Upper Egypt, three-quarters of men have ever attended school, compared with about 50 percent of women. In the Urban Governorates, the gap is much smaller, with nearly 80 percent of women having had some education, compared with 88 percent of men.

## Current School Attendance

The 2000 EDHS collected information on current school attendance for the population age $6-24$ years. Figure 2.2 presents the percentage of the population in this age range that was attending school at the time of the survey. The comparatively low age-specific attendance rate for children age 6 reflects that some of these children had not had their sixth birthday at the time the school year started and thus were not eligible to attend school.


Overall, the majority of children of both sexes age 16 and under were attending school. However, Figure 2.2 shows that school attendance rates are generally higher among boys than among girls. The gender gap in school attendance increases somewhat with age, particularly among the post-primary ages (i.e., 11-24 years).

Table 2.5 presents school attendance rates by residence. For boys, under age 15, residential differences in school attendance rates are generally quite small; more than eight in ten boys age 15 and under are in school regardless of the locality in which they reside. At older ages, however, boys living in urban areas, particularly in the Urban Governorates, are more likely to attend school than boys from rural areas. For example, 59 percent of boys age 16-20 are currently attending school in urban areas compared to 46 percent of boys in the same age group in rural areas.

| Table 2.5 School attendance |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of the de facto household population age 6-24 years who are currently attending school, by age group, sex, urban-rural residence, and place of residence, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |
| Age group | Urban | Rural | Place of residence |  |  |  |  |  |  |  |  |
|  |  |  | Urban Governorates | Lower Egypt |  |  | Upper Egypt |  |  | Frontier Governorates | Total |
|  |  |  |  | Total | Urban | Rural | Total | Urban | Rural |  |  |
| MALE |  |  |  |  |  |  |  |  |  |  |  |
| 6-10 | 88.4 | 87.1 | 88.8 | 89.2 | 89.7 | 89.0 | 85.7 | 86.3 | 85.5 | 84.6 | 87.6 |
| 11-15 | 86.7 | 84.3 | 86.5 | 84.8 | 85.2 | 84.6 | 85.2 | 88.0 | 84.0 | 86.7 | 85.3 |
| 6-15 | 87.5 | 85.6 | 87.5 | 86.8 | 87.3 | 86.6 | 85.4 | 87.2 | 84.8 | 85.6 | 86.3 |
| 16-20 | 59.3 | 45.5 | 63.2 | 48.5 | 58.1 | 44.9 | 48.9 | 54.4 | 46.6 | 46.8 | 51.3 |
| 21-24 | 20.4 | 12.6 | 23.0 | 14.0 | 17.8 | 12.4 | 15.1 | 18.9 | 12.9 | 12.8 | 16.3 |
| FEMALE |  |  |  |  |  |  |  |  |  |  |  |
| 6-10 | 89.8 | 79.9 | 89.0 | 87.1 | 90.6 | 85.8 | 78.5 | 90.0 | 74.0 | 79.9 | 83.9 |
| 11-15 | 89.3 | 70.8 | 88.1 | 82.9 | 93.3 | 79.3 | 69.4 | 87.6 | 61.6 | 70.5 | 78.2 |
| 6-15 | 89.6 | 75.2 | 88.5 | 84.9 | 92.0 | 82.4 | 73.8 | 88.7 | 67.6 | 75.0 | 80.9 |
| 16-20 | 54.5 | 28.2 | 57.3 | 38.9 | 55.4 | 32.6 | 31.8 | 49.9 | 22.9 | 35.8 | 39.7 |
| 21-24 | 14.7 | 5.4 | 16.2 | 7.8 | 12.9 | 5.8 | 8.2 | 14.7 | 4.8 | 5.4 | 9.6 |
| TOTAL |  |  |  |  |  |  |  |  |  |  |  |
| 6-10 | 89.1 | 83.7 | 88.9 | 88.1 | 90.2 | 87.4 | 82.3 | 88.1 | 80.1 | 82.5 | 85.8 |
| 11-15 | 88.0 | 77.8 | 87.3 | 83.9 | 89.1 | 82.1 | 77.4 | 87.8 | 73.0 | 78.9 | 81.8 |
| 6-15 | 88.5 | 80.6 | 88.0 | 85.9 | 89.6 | 84.6 | 79.8 | 87.9 | 76.5 | 80.7 | 83.7 |
| 16-20 | 56.9 | 36.9 | 60.2 | 43.7 | 56.8 | 38.8 | 40.3 | 52.0 | 34.9 | 40.6 | 45.5 |
| 21-24 | 17.6 | 8.9 | 19.7 | 10.8 | 15.4 | 9.0 | 11.5 | 16.8 | 8.7 | 8.8 | 12.9 |

Residential differentials in school attendance rates are much more evident for girls than boys at all ages. For example, there is gap of 15 percentage points in the current school attendance rates for girls age $6-15$ between urban and rural areas ( 90 percent and 75 percent, respectively). In general, school attendance rates are lowest for girls living in rural Upper Egypt followed by girls living in the Frontier Governorates. Figure 2.3 shows that the rates of attendance for girls age 6-15 range from 68 percent in rural Upper Egypt to 92 percent in urban Lower Egypt.


### 2.3 Household Environment

## Housing Characteristics

Table 2.6 presents the distribution of households by selected housing characteristics, including the source of drinking water, type of sanitation facilities, type of flooring, and number of rooms in the dwelling. These are important determinants of the health status of household members, particularly children. They can also be used as indicators of the socioeconomic status of households.

| Table 2.6 Housing characteristics |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households by housing characteristics, according to urban-rural residence and place of residence, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |
| Characteristic | Urban | Rural | Place of residence |  |  |  |  |  |  |  | Total |
|  |  |  | Urban Governorates | Lower Egypt |  |  | Upper Egypt |  |  | Frontier Governorates |  |
|  |  |  |  | Total | Urban | Rural | Total | Urban | Rural |  |  |
| Electricity |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 99.5 | 95.9 | 99.7 | 98.7 | 99.6 | 98.3 | 95.3 | 99.0 | 93.3 | 89.7 | 97.7 |
| No | 0.5 | 4.1 | 0.3 | 1.3 | 0.4 | 1.7 | 4.7 | 1.0 | 6.7 | 10.3 | 2.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Source of drinking water |  |  |  |  |  |  |  |  |  |  |  |
| Piped water | 99.0 | 75.9 | 99.7 | 83.8 | 98.4 | 76.5 | 83.9 | 98.6 | 75.6 | 81.6 | 87.4 |
| Piped into residence/plot | 97.0 | 64.9 | 98.3 | 76.1 | 96.1 | 65.8 | 75.2 | 95.3 | 64.0 | 77.5 | 80.8 |
| Public tap | 2.0 | 11.0 | 1.4 | 7.7 | 1.8 | 10.6 | 8.6 | 3.3 | 11.6 | 4.0 | 6.5 |
| Open well water | 0.2 | 2.5 | 0.0 | 1.5 | 0.4 | 2.0 | 1.6 | 0.1 | 2.5 | 13.7 | 1.4 |
| Well in residence/plot | 0.0 | 1.3 | 0.0 | 0.7 | 0.1 | 1.0 | 1.0 | 0.1 | 1.5 | 3.9 | 0.7 |
| Public well | 0.1 | 1.2 | 0.0 | 0.8 | 0.3 | 1.0 | 0.6 | 0.0 | 1.0 | 9.8 | 0.7 |
| Covered well water | 0.3 | 20.0 | 0.1 | 13.0 | 0.5 | 19.2 | 13.9 | 0.6 | 21.3 | 0.8 | 10.2 |
| Well in residence/plot | 0.1 | 13.1 | 0.1 | 7.5 | 0.1 | 11.1 | 10.3 | 0.4 | 16.0 | 0.6 | 6.7 |
| Public well | 0.1 | 6.9 | 0.0 | 5.5 | 0.4 | 8.1 | 3.5 | 0.2 | 5.4 | 0.3 | 3.5 |
| Surface water | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 |
| Nile/canal | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 |
| Purchase water | 0.5 | 1.5 | 0.2 | 1.7 | 0.6 | 2.3 | 0.5 | 0.8 | 0.4 | 3.9 | 1.0 |
| Bottled water | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.8 | 0.0 | 0.0 | 0.1 |
| Buy water from truck | 0.3 | 1.5 | 0.2 | 1.7 | 0.6 | 2.3 | 0.3 | 0.0 | 0.4 | 3.9 | 0.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Time to water source |  |  |  |  |  |  |  |  |  |  |  |
| Water within 15 minutes | 99.0 | 89.8 | 99.4 | 92.7 | 98.7 | 89.8 | 93.2 | 98.7 | 90.1 | 89.6 | 94.4 |
| Sanitation facility |  |  |  |  |  |  |  |  |  |  |  |
| Modern flush toilet | 59.2 | 7.8 | 71.6 | 24.0 | 52.7 | 9.7 | 19.3 | 44.3 | 5.4 | 36.8 | 33.4 |
| Traditional w/tank flush | 3.4 | 3.7 | 2.3 | 5.0 | 4.7 | 5.2 | 2.7 | 4.0 | 1.9 | 0.7 | 3.6 |
| Traditional w/bucket flush | 36.6 | 78.1 | 25.9 | 69.1 | 42.0 | 82.6 | 64.3 | 49.4 | 72.6 | 52.7 | 57.5 |
| Pit toilet/latrine | 0.5 | 5.4 | 0.0 | 1.2 | 0.4 | 1.5 | 7.3 | 1.4 | 10.5 | 1.4 | 3.0 |
| No facility | 0.3 | 4.9 | 0.2 | 0.7 | 0.2 | 1.0 | 6.4 | 0.8 | 9.6 | 8.4 | 2.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Flooring |  |  |  |  |  |  |  |  |  |  |  |
| Ceramic/marble tiles | 6.8 | 0.5 | 9.4 | 1.4 | 2.8 | 0.7 | 2.6 | 6.7 | 0.3 | 3.1 | 3.6 |
| Cement tiles | 70.7 | 30.4 | 72.1 | 46.6 | 69.7 | 35.1 | 40.7 | 70.0 | 24.3 | 48.3 | 50.4 |
| Cement | 8.2 | 31.8 | 5.2 | 32.1 | 12.1 | 42.1 | 15.0 | 8.9 | 18.5 | 19.8 | 20.0 |
| Wall-to-wall carpet | 8.7 | 1.5 | 9.3 | 5.5 | 11.6 | 2.4 | 1.5 | 3.7 | 0.3 | 12.0 | 5.1 |
| Vinyl | 0.9 | 0.0 | 1.7 | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 |
| Parquet/polished wood | 0.6 | 0.0 | 0.8 | 0.2 | 0.5 | 0.0 | 0.2 | 0.4 | 0.0 | 0.1 | 0.3 |
| Wood planks | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Earth/sand | 4.0 | 35.6 | 1.3 | 13.9 | 2.7 | 19.5 | 39.9 | 10.1 | 56.6 | 16.2 | 19.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Persons per sleeping room |  |  |  |  |  |  |  |  |  |  |  |
| 1-2 | 13.1 | 13.6 | 15.7 | 8.8 | 8.9 | 8.7 | 17.8 | 13.7 | 20.0 | 7.0 | 13.4 |
| 3-4 | 74.0 | 60.4 | 73.0 | 68.6 | 76.7 | 64.6 | 61.3 | 72.7 | 55.0 | 68.2 | 67.1 |
| $5+$ | 12.5 | 25.5 | 11.0 | 22.2 | 13.9 | 26.3 | 20.4 | 13.2 | 24.4 | 24.4 | 19.0 |
| Don't know/missing | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.6 | 0.4 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Mean rooms per household | 3.5 | 3.9 | 3.4 | 3.9 | 3.6 | 4.0 | 3.7 | 3.5 | 3.7 | 3.9 | 3.7 |
| Mean persons per room | 1.4 | 1.7 | 1.5 | 1.5 | 1.3 | 1.5 | 1.8 | 1.5 | 1.9 | 1.6 | 1.6 |
| Number of households | 8,429 | 8,528 | 3,852 | 7,154 | 2,380 | 4,775 | 5,751 | 2,066 | 3,685 | 2001 | 16,957 |

Almost all EDHS households live in dwellings with electricity, and nearly nine in ten households have access to piped water, mainly within their dwelling or yard. Urban households are somewhat more likely to have access to piped drinking water than rural households. Among urban households, 97 percent have piped water available in the dwelling or yard, and 2 percent obtain water from a public tap. Among rural households, more than three-quarters have access to piped water, primarily at their residence ( 65 percent). Among the remaining rural households, most use well water. Households in rural Upper Egypt are somewhat more likely to rely on well water than households in rural Lower Egypt (24 percent and 21 percent, respectively).

For most households, the source for their drinking water is within their dwelling or yard. Overall, 94 percent of households obtain drinking water in their dwelling or yard or within 15 minutes of their residence.

About a third of Egyptian households have modern flush toilets, and 61 percent have traditional flush toilets. There are differences in the type of toilet facilities by both urban-rural residence and place of residence. Urban households are somewhat more likely to have a modern flush toilet ( 59 percent) than a traditional flush toilet. In comparison, the majority of rural households ( 78 percent) have traditional toilets with a bucket flush. Only 3 percent have no toilet facilities. Almost all of the households without toilet facilities are found in rural Upper Egypt or the Frontier Governorates.

With regard to flooring, about half of the EDHS households live in dwellings with cement tile floors, and 20 percent in dwellings with a cement floor. About another fifth have a dirt (earth/sand) floor in their dwelling. There are substantial differences in the flooring materials in urban and rural dwellings. Among urban households, nearly 80 percent have a cement tile or cement floor, compared with about 60 percent of rural households. Conversely, more than a third of rural households live in dwellings with a dirt floor, compared with 4 percent of urban households. Dirt floors are more common in rural Upper Egypt than in rural Lower Egypt.

The 2000 EDHS included a question about the number of rooms that a household had (excluding the bathrooms, kitchen, and hallways). Taken together with the information on the number of persons in the household, the results provide a measure of crowding. Table 2.6 shows that 13 percent of the households have one or two rooms in the dwelling, 67 percent have three or four rooms, and 19 percent have five rooms or more. The mean number of rooms per household is 3.7 , and there is an average of 1.6 persons per room. Rural households are more crowded than urban households. The mean number of persons per room is 1.4 in urban areas, compared with 1.7 persons in rural areas.

## Household Possessions

Table 2.7 provides information on household ownership of durable goods and other possessions. With regard to durable goods, about nine in ten EDHS households own a television (color or black and white), more than eight in ten households own a washing machine or a radio with a cassette recorder, and about two-thirds own a refrigerator or electric fan. More than a quarter of the households have a telephone.

Urban households are more likely to have these items than rural households. For example, 93 percent of households in urban areas own a washing machine, compared with about 74 percent of households in rural areas. Rates of ownership of various household possessions also differ by place of residence, with higher rates of ownership for most items reported among households in the Urban Governorates, Lower Egypt, and the Frontier Governorates than in Upper Egypt. Households in rural Upper Egypt have the lowest rates of ownership for all durable goods.

| Table 2.7 Household possessions |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of households possessing various household effects, means of transportation, property, and farm animals, by urban-rural residence and place of residence, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |
| Possession | Urban | Rural | Place of residence |  |  |  |  |  |  |  |  |
|  |  |  | Urban <br> Gover- <br> norates | Lower Egypt |  |  | Upper Egypt |  |  | Frontier Governorates | Total |
|  |  |  |  | Total | Urban | Rural | Total | Urban | Rural |  |  |
| Household effects |  |  |  |  |  |  |  |  |  |  |  |
| Radio | 89.3 | 74.6 | 90.3 | 84.2 | 90.6 | 81.1 | 73.3 | 85.8 | 66.3 | 81.8 | 81.9 |
| Television | 94.5 | 84.3 | 95.3 | 90.6 | 94.5 | 88.6 | 84.2 | 93.2 | 79.1 | 81.2 | 89.4 |
| Video | 22.0 | 2.3 | 28.4 | 6.6 | 15.1 | 2.4 | 8.2 | 18.8 | 2.2 | 9.9 | 12.1 |
| Telephone | 44.7 | 11.0 | 51.0 | 21.4 | 39.0 | 12.6 | 19.6 | 39.2 | 8.7 | 43.6 | 27.8 |
| Electric fan | 82.4 | 56.9 | 82.9 | 61.9 | 77.1 | 54.4 | 69.9 | 87.1 | 60.3 | 74.5 | 69.5 |
| Water heater | 56.4 | 11.6 | 63.3 | 26.8 | 51.9 | 14.3 | 23.0 | 49.2 | 8.3 | 33.9 | 33.9 |
| Refrigerator | 85.0 | 44.4 | 88.4 | 61.4 | 83.5 | 50.4 | 52.1 | 80.0 | 36.5 | 75.7 | 64.6 |
| Sewing machine | 11.0 | 4.8 | 10.7 | 6.6 | 9.7 | 5.1 | 7.5 | 12.9 | 4.5 | 11.4 | 7.9 |
| Washing machine | 92.8 | 73.5 | 94.4 | 86.4 | 92.5 | 83.3 | 71.6 | 90.3 | 61.1 | 77.7 | 83.1 |
| Means of transportation |  |  |  |  |  |  |  |  |  |  |  |
| Bicycle | 11.5 | 16.5 | 4.0 | 15.5 | 14.6 | 16.0 | 18.2 | 20.3 | 17.0 | 32.0 | 14.0 |
| Private car | 13.1 | 3.4 | 17.3 | 5.1 | 8.1 | 3.7 | 5.7 | 11.0 | 2.7 | 14.6 | 8.2 |
| Motorcycle | 1.7 | 1.9 | 1.0 | 2.3 | 2.3 | 2.4 | 1.6 | 2.2 | 1.2 | 2.5 | 1.8 |
| Property |  |  |  |  |  |  |  |  |  |  |  |
| Farm/other land | 6.5 | 35.1 | 5.2 | 27.5 | 7.9 | 37.2 | 23.0 | 7.0 | 32.0 | 27.2 | 20.9 |
| Farm animals |  |  |  |  |  |  |  |  |  |  |  |
| Livestock/poultry | 11.4 | 65.1 | 4.0 | 48.8 | 18.2 | 64.1 | 48.3 | 16.2 | 66.3 | 41.7 | 38.4 |
| None of the above | 1.5 | 3.6 | 1.5 | 1.9 | 1.4 | 2.1 | 4.2 | 1.6 | 5.6 | 3.0 | 2.6 |
| Number of households | 8,429 | 8,528 | 3,852 | 7,154 | 2,380 | 4,775 | 5,751 | 2,066 | 3,685 | 2001 | 16,957 |

Table 2.7 also includes information on household ownership of a means of transportation. Overall, 8 percent of households own a car, with the highest rate of ownership in the Urban Governorates (17 percent) and the lowest rate in rural Upper Egypt (3 percent). Relatively few households have a motorcycle, and rates of ownership of bicycles vary from 4 percent in the Urban Governorates to 32 percent in the Frontier Governorates.

As expected, households in rural areas are significantly more likely than urban households to own a farm or other land. More than one-third of rural households own a farm or other land, compared with only 7 percent of urban households. There is also considerable variation in the proportion reporting that they own livestock or poultry, from 66 percent of households in rural Upper Egypt to only 4 percent of households in the Urban Governorates.

## BACKGROUND CHARACTERISTICS OF RESPONDENTS

This chapter provides a profile of the ever-married women who were interviewed in the 2000 Egypt DHS. First, information is presented on a number of basic characteristics of the EDHS respondents including age, residence, education, and work status. Then the chapter explores in more depth the women's educational and employment status, their participation in household decision-making, and the problems that they perceive they have in accessing health care for themselves. Finally, the chapter looks at the extent to which women have access to mass media, which is used extensively in Egypt for public education efforts in the areas of reproductive and child health.

### 3.1 General Characteristics

Table 3.1 presents the distribution of eligible women by various background characteristics including age, marital status, urban-rural residence, place of residence, and educational level. As noted in Chapter 1, ever-married women age 15-49 who were usual residents or present in the household on the night before the interviewer's visit were eligible to be interviewed in the 2000 EDHS.

Among the ever-married women in the sample, 92 percent are currently married, 5 percent widowed, and 3 percent divorced or separated. Looking at the age distribution in Table 3.1, slightly more than one-third of the 2000 EDHS respondents are under age 30 and more than one-quarter are age 40 and over. There are fewer women in the 15-19 and 20-24 age groups than in the 25-29 cohort. This is because only ever-married women were interviewed and because there has been an increasing tendency to delay marriage until older ages in Egypt. These changes in marriage patterns are described in more detail in Chapter 8.

| Table 3.1 Background characteristics of respondents |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women by selected background characteristics, Egypt 2000 |  |  |  |
|  |  | Number of women |  |
| Background characteristic | Weighted percent | Weighted | Unweighted |
| Marital status |  |  |  |
| Married | 92.4 | 14,382 | 14,393 |
| Widowed | 5.0 | , 775 | 748 |
| Divorced | 2.0 | 309 | 317 |
| Not living together | 0.7 | 107 | 115 |
| Age |  |  |  |
| 15-19 | 4.0 | 615 | 595 |
| 20-24 | 14.4 | 2,244 | 2,246 |
| 25-29 | 18.3 | 2,850 | 2,844 |
| 30-34 | 17.3 | 2,701 | 2,701 |
| 35-39 | 17.2 | 2,674 | 2,688 |
| 40-44 | 14.0 | 2,182 | 2,223 |
| 45-49 | 14.8 | 2,307 | 2,276 |
| Urban-rural residence |  |  |  |
| Urban | 44.1 | 6,871 | 7,178 |
| Rural | 55.9 | 8,702 | 8,395 |
| Place of residence |  |  |  |
| Urban Governorates | 19.2 | 2,992 | 3,102 |
| Lower Egypt | 43.8 | 6,826 | 6,108 |
| Urban | 12.5 | 1,946 | 1,831 |
| Rural | 31.3 | 4,880 | 4,277 |
| Upper Egypt | 35.6 | 5,546 | 5,413 |
| Urban | 11.6 | 1,808 | 1,670 |
| Rural | 24.0 | 3,738 | 3,743 |
| Frontier Governorates | 1.3 | 209 | 950 |
| Education |  |  |  |
| No education | 43.2 | 6,734 | 6,613 |
| Primary incomplete | 13.2 | 2,060 | 2,043 |
| Primary complete/ some secondary | 13.0 | 2,026 | 2,083 |
| Secondary complete/higher | 30.5 | 4,753 | 4,834 |
| Work status |  |  |  |
| Working for cash | 14.6 | 2,266 | 2,332 |
| Not working for cash | 85.4 | 13,307 | 13,241 |
| All women | 100.0 | 15,573 | 15,573 |

More than half of the women (56 percent) are living in rural areas. Considering place of residence, about one-fifth of the women are from the Urban Governorates, 44 percent live in Lower Egypt, and 36 percent live in Upper Egypt. Only 1 percent was from the Frontier Governorates.

The educational level of the 2000 EDHS respondents varies considerably. Slightly more than 40 percent of the women never attended school, while 31 percent had completed the secondary level. Only 15 percent of respondents were working at a job for which they are paid in cash.

### 3.2 Education

## Differentials in Educational Attainment

An overview of the relationship between women's level of education and other background characteristics is provided in Table 3.2. As expected, the level of education decreases with increasing age among respondents age 25 and over. That women age 25-29 have a higher level of education than women in the 15-19 and 20-24 age groups should not be interpreted as evidence of a recent decline in educational attainment among young women. Instead the explanation lies in the fact that the EDHS sample included only ever-married women. Women who married in their teens are more likely to have left school early than women who married later, and thus women in the 15-19 and 20-24 age groups include a disproportionate number of less-educated women in comparison with older cohorts.

| Table 3.2 Level of education |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women by highest level of education attended, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |
|  | Level of education |  |  |  | Total | Number of women | Median number of years |
| Background characteristic | No education | Primary incomplete | Primary complete/ some secondary | Secondary complete/ higher |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 37.5 | 13.1 | 28.4 | 21.0 | 100.0 | 615 | 3.9 |
| 20-24 | 31.2 | 8.6 | 21.2 | 39.1 | 100.0 | 2,244 | 5.8 |
| 25-29 | 35.3 | 10.3 | 13.3 | 41.1 | 100.0 | 2,850 | 7.0 |
| 30-34 | 39.7 | 12.4 | 9.3 | 38.7 | 100.0 | 2,701 | 4.5 |
| 35-39 | 49.4 | 14.4 | 8.6 | 27.6 | 100.0 | 2,674 | 0.0 |
| 40-44 | 49.8 | 19.2 | 10.4 | 20.7 | 100.0 | 2,182 | 0.0 |
| 45-49 | 57.2 | 15.4 | 12.6 | 14.8 | 100.0 | 2,307 | 0.0 |
| Urban-rural residence |  |  |  |  |  |  |  |
| Urban | 25.9 | 12.0 | 16.3 | 45.8 | 100.0 | 6,871 | 8.2 |
| Rural | 57.0 | 14.2 | 10.4 | 18.4 | 100.0 | 8,702 | 0.0 |
| Place of residence |  |  |  |  |  |  |  |
| Urban Governorates | 23.9 | 10.0 | 19.0 | 47.1 | 100.0 | 2,992 | 8.6 |
| Lower Egypt | 44.9 | 13.6 | 11.3 | 30.1 | 100.0 | 6,826 | 2.4 |
| Urban | 26.2 | 13.0 | 13.9 | 46.8 | 100.0 | 1,946 | 8.4 |
| Rural | 52.4 | 13.9 | 10.3 | 23.4 | 100.0 | 4,880 | 0.0 |
| Upper Egypt | 51.6 | 14.7 | 11.7 | 22.1 | 100.0 | 5,546 | 0.0 |
| Urban | 28.6 | 14.5 | 14.0 | 42.8 | 100.0 | 1,808 | 5.9 |
| Rural | 62.7 | 14.8 | 10.5 | 12.0 | 100.0 | 3,738 | 0.0 |
| Frontier Governorates | 43.8 | 7.0 | 17.7 | 31.6 | 100.0 | 209 | 4.6 |
| Work status |  |  |  |  |  |  |  |
| Working for cash | 16.9 | 4.0 | 4.9 | 74.2 | 100.0 | 2,266 | 11.7 |
| Not working for cash | 47.7 | 14.8 | 14.4 | 23.1 | 100.0 | 13,307 | 1.2 |
| Total | 43.2 | 13.2 | 13.0 | 30.5 | 100.0 | 15,573 | 3.1 |

Women in urban areas are more educated than those from rural areas. Among urban women, 46 percent have completed at least secondary school, compared with 18 percent of rural women. Educational levels are lowest in rural Upper Egypt, where 63 percent of the women have never gone to school. The highest levels are found in the Urban Governorates, where only about one-quarter of women have never attended school. Not surprisingly, the majority of women working for cash have completed secondary school or higher.

## Literacy Assessment

The 2000 EDHS assessed literacy levels among women who had never been to school or who had attended only the primary level by asking them to read several simple sentences from a card. To avoid possible bias in households where more than one eligible woman was interviewed, the EDHS teams used two cards, each with a different set of sentences. The sentences on the cards were selected from primary school Arabic textbooks. In addition to assessing literacy, information was collected from women with a primary education or less on whether they had ever attended any literacy program, i.e., any program (outside of primary school) that involved learning to read or write.

Table 3.3 shows that the majority of respondents asked to read simple sentences during the EDHS interview either were unable to read at all or were able to read only part of the sentences. This is not surprising in view of the relatively large proportion of EDHS respondents who never attended school (43 percent) or have less than a primary education (13 percent). However, even among respondents who completed the primary level, about a quarter were unable to read any of the simple sentences, and 44 percent could read only parts of a sentence.

The proportion that is illiterate is somewhat higher among respondents age 15-19 than among those in the 20-24 and 25-29 age groups. This pattern is somewhat unexpected because participation in schooling has been steadily rising among Egyptian women. The explanation lies in the fact that the EDHS sample included only ever-married women. Women in their teens who are married are more likely to have left school early than other women.

The strong association between residence and literacy observed in Table 3.3 is clearly a reflection of residential differences in educational levels. Rural women are more than twice as likely as urban women to be unable to read at all. As expected, women working for cash are much more likely to be literate than other women.

Literacy programs are one means of increasing the proportion of women who are able to read or write. Table 3.3 shows that 9 percent of women with a primary education or less have ever attended a literacy program. Younger women and women living in urban areas are somewhat more likely than other women to have taken part in a literacy program. Even among these groups, however, only a relatively small proportion participated in a literacy program.

| Table 3.3 Literacy |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women by level of literacy, and percentage of women with primary education or less who attended a literacy program, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |
| Background characteristic | Literacy |  |  |  | Total | Number of women | Percentage who attended literacy program | Number of women with primary education or less |
|  | Cannot read at all | Able to read only parts of sentence | Able to read whole sentence | Preparatory/ higher education |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 45.1 | 8.5 | 3.3 | 43.1 | 100.0 | 615 | 13.0 | 350 |
| 20-24 | 36.7 | 7.0 | 2.8 | 53.5 | 100.0 | 2,244 | 10.6 | 1,042 |
| 25-29 | 39.9 | 5.7 | 2.4 | 52.0 | 100.0 | 2,850 | 9.3 | 1,367 |
| 30-34 | 44.8 | 7.0 | 3.5 | 44.7 | 100.0 | 2,701 | 9.9 | 1,493 |
| 35-39 | 56.3 | 7.6 | 3.6 | 32.4 | 100.0 | 2,674 | 8.0 | 1,806 |
| 40-44 | 58.8 | 10.6 | 6.2 | 24.3 | 100.0 | 2,182 | 8.0 | 1,651 |
| 45-49 | 65.9 | 11.0 | 4.2 | 18.9 | 100.0 | 2,307 | 5.9 | 1,872 |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 30.3 | 10.0 | 4.5 | 55.2 | 100.0 | 6,871 | 11.9 | 3,079 |
| Rural | 65.2 | 6.5 | 3.0 | 25.3 | 100.0 | 8,702 | 6.9 | 6,504 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 26.6 | 11.1 | 4.5 | 57.8 | 100.0 | 2,992 | 12.8 | 1,261 |
| Lower Egypt | 52.8 | 6.6 | 3.3 | 37.3 | 100.0 | 6,826 | 7.4 | 4,281 |
| Urban | 32.3 | 7.2 | 5.0 | 55.5 | 100.0 | 1,946 | 8.8 | 866 |
| Rural | 61.0 | 6.3 | 2.7 | 30.0 | 100.0 | 4,880 | 7.0 | 3,415 |
| Upper Egypt | 58.8 | 8.2 | 3.7 | 29.3 | 100.0 | 5,546 | 8.2 | 3,920 |
| Urban | 34.3 | 11.2 | 4.1 | 50.3 | 100.0 | 1,808 | 13.2 | 898 |
| Rural | 70.6 | 6.7 | 3.5 | 19.2 | 100.0 | 3,738 | 6.7 | 3,022 |
| Frontier Governorates | 44.2 | 8.3 | 4.7 | 42.8 | 100.0 | 209 | 16.6 | 120 |
| Education |  |  |  |  |  |  |  |  |
| No education | 94.7 | 4.3 | 1.0 | NA | 100.0 | 6,734 | 7.1 | 6,734 |
| Primary incomplete | 57.9 | 29.7 | 12.3 | NA | 100.0 | 2,060 | 11.5 | 2,060 |
| Primary complete | 23.6 | 44.3 | 32.1 | NA | 100.0 | 788 | 13.1 | 788 |
| Work status |  |  |  |  |  |  |  |  |
| Working for cash | 18.8 | 2.8 | 1.9 | 76.6 | 100.0 | 2,266 | 9.8 | 531 |
| Not working for cash | 55.1 | 8.9 | 4.0 | 32.0 | 100.0 | 13,307 | 8.4 | 9,051 |
| Total | 49.8 | 8.0 | 3.7 | 38.5 | 100.0 | 15,573 | 8.5 | 9,582 |
| NA = Not applicable |  |  |  |  |  |  |  |  |

### 3.3 Employment

In the 2000 EDHS, respondents were asked a number of questions about their employment, including whether they were currently working and, if not, whether they had worked during the year before the survey. Women who were currently working were then asked questions about the kind of work they were doing and whether they were paid in cash or not.

## Current Employment

Table 3.4 shows the percent distribution of 2000 EDHS respondents according to current and past employment. For those women who are working, the table provides information on whether the woman is employed full-time or not. Overall, 17 percent of women are currently engaged in some economic activity. Most of the women who are not working do not report recent work experience; only 1 percent of the respondents not working at the time of EDHS interview had had a job for which they were paid in cash during the 12 -month period before the survey.

## Table 3.4 Employment

Percent distribution of ever-married women by employment status and continuity of employment, according to background characteristics, Egypt 2000

| Background characteristic | Not currently employed |  | Currently employed |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Did not work in last 12 months | Worked in last 12 months |  |  |  |  |  |
|  |  |  | All year | Seasonally | Occasionally |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 96.9 | 0.4 | 1.5 | 0.5 | 0.6 | 100.0 | 615 |
| 20-24 | 93.4 | 0.9 | 4.2 | 1.2 | 0.3 | 100.0 | 2,244 |
| 25-29 | 84.2 | 0.7 | 12.8 | 1.8 | 0.3 | 100.0 | 2,850 |
| 30-34 | 79.2 | 1.2 | 16.9 | 2.1 | 0.6 | 100.0 | 2,701 |
| 35-39 | 74.0 | 1.1 | 21.9 | 2.2 | 0.8 | 100.0 | 2,674 |
| 40-44 | 77.8 | 0.7 | 18.5 | 2.1 | 0.8 | 100.0 | 2,182 |
| 45-49 | 83.0 | 0.7 | 14.6 | 1.4 | 0.3 | 100.0 | 2,307 |
| Marital status |  |  |  |  |  |  |  |
| Currently married | 83.0 | 0.9 | 14.0 | 1.7 | 0.4 | 100.0 | 14,382 |
| Widowed/divorced/separated | 74.3 | 1.1 | 19.6 | 3.1 | 2.0 | 100.0 | 1,191 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 85.6 | 1.4 | 11.5 | 1.3 | 0.2 | 100.0 | 1,428 |
| 1-2 | 80.4 | 0.9 | 16.8 | 1.4 | 0.4 | 100.0 | 5,218 |
| 3-4 | 78.4 | 1.0 | 17.9 | 2.0 | 0.7 | 100.0 | 5,321 |
| 5+ | 89.7 | 0.4 | 7.1 | 2.2 | 0.6 | 100.0 | 3,606 |
| Urban-rural residence |  |  |  |  |  |  |  |
| Urban | 77.0 | 1.3 | 20.5 | 0.9 | 0.4 | 100.0 | 6,871 |
| Rural | 86.6 | 0.6 | 9.7 | 2.5 | 0.6 | 100.0 | 8,702 |
| Place of residence |  |  |  |  |  |  |  |
| Urban Governorates | 77.2 | 1.2 | 20.5 | 0.6 | 0.5 | 100.0 | 2,992 |
| Lower Egypt | 79.9 | 0.8 | 15.8 | 2.8 | 0.7 | 100.0 | 6,826 |
| Urban | 75.1 | 1.3 | 22.2 | 1.0 | 0.4 | 100.0 | 1,946 |
| Rural | 81.8 | 0.5 | 13.3 | 3.5 | 0.8 | 100.0 | 4,880 |
| Upper Egypt | 88.2 | 0.9 | 9.4 | 1.1 | 0.3 | 100.0 | 5,546 |
| Urban | 79.0 | 1.4 | 18.5 | 1.0 | 0.2 | 100.0 | 1,808 |
| Rural | 92.7 | 0.7 | 5.1 | 1.1 | 0.4 | 100.0 | 3,738 |
| Frontier Governorates | 79.8 | 0.8 | 18.5 | 0.7 | 0.1 | 100.0 | 209 |
| Education |  |  |  |  |  |  |  |
| No education | 89.7 | 0.6 | 5.9 | 2.9 | 0.9 | 100.0 | 6,734 |
| Primary incomplete | 92.6 | 0.6 | 5.2 | 1.2 | 0.4 | 100.0 | 2,060 |
| Primary complete/ some secondary | 93.5 | 0.4 | 5.1 | 0.6 | 0.4 | 100.0 | 2,026 |
| Secondary complete/higher | 62.7 | 1.7 | 34.6 | 0.8 | 0.1 | 100.0 | 4,753 |
| Total | 82.3 | 0.9 | 14.5 | 1.8 | 0.5 | 100.0 | 15,573 |

Most of the women who work are employed on a full-time basis; only a minority work only seasonally or occasionally.

The employment differentials presented in Table 3.4 indicate that women in the $30-44$ age group are more likely to be currently employed than older or younger women. The comparatively small proportion of women under age 30 who work may be related to the greater childcare responsibilities. Urban women and highly educated women are much more likely to be involved in work than other women. Overall, 23 percent of urban women are engaged in some economic activity, compared with 13 percent in rural areas. Highly educated women are most likely to report current employment; more than a third of women who completed secondary or higher education are working.

## Occupation

In the EDHS 2000, women who indicated that were working or had worked within the year before the survey were asked about the kind of work that they did. Their response was recorded exactly as they gave it and was the basis for the coding of occupation that occurred after the survey in the central office.

As Figure 3.1 shows, the majority of women who are currently working are employed in nonagricultural occupations. About two-thirds of working women are in professional, technical, and managerial positions or in clerical occupations. An additional 12 percent are in sales and services, and 6 percent work in jobs categorized as skilled manual labor.

Less than one in five working women is involved in some type of agricultural activity. Women who work in agricultural occupations typically work on land that they or their family own or on rented land, with a relatively small proportion working on someone else's land.


Table 3.5 looks at the differences in the occupational profile of working women according to selected background characteristics. As expected, the proportion involved in professional, technical and managerial occupations and the proportion working in clerical positions are much greater among urban women than rural women. These proportions also rise rapidly with the women's educational level.

| Table 3.5 Occupation |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently employed women by occupation and type of agricultural land worked ortype of non-agricultural employment, according to background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |
|  | Agricultural |  |  |  | Non-agricultural |  |  |  |  | Total | Number of women |
| Background characteristic | Own <br> land | Family land | Rented land | Other's land | Prof./ tech./ manag. ${ }^{1}$ | Clerical | Sales/ services | Skilled manual | Missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| $15-19$ | * | * | * | * | * | * | * | * | * | * | 16 |
| 20-24 | 2.3 | 21.6 | 5.1 | 4.0 | 40.1 | 11.0 | 7.5 | 5.9 | 2.5 | 100.0 | 129 |
| 25-29 | 1.4 | 9.3 | 3.8 | 4.3 | 53.8 | 12.9 | 8.9 | 4.8 | 0.7 | 100.0 | 429 |
| 30-34 | 0.9 | 6.7 | 2.7 | 3.9 | 45.4 | 22.2 | 10.9 | 5.9 | 1.4 | 100.0 | 529 |
| 35-39 | 1.6 | 6.4 | 2.5 | 4.3 | 35.4 | 32.8 | 10.0 | 5.5 | 1.5 | 100.0 | 665 |
| 40-44 | 3.1 | 6.8 | 3.1 | 3.1 | 33.7 | 29.1 | 14.3 | 5.2 | 1.7 | 100.0 | 468 |
| 45-49 | 4.2 | 9.1 | 3.4 | 2.3 | 39.7 | 20.0 | 15.6 | 5.3 | 0.3 | 100.0 | 376 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |
| Currently married | 1.6 | 9.2 | 3.2 | 3.0 | 42.6 | 24.8 | 9.3 | 5.2 | 1.1 | 100.0 | 2,318 |
| Widowed/divorced/ separated | 6.3 | 1.6 | 2.8 | 9.0 | 27.4 | 13.8 | 28.5 | 8.4 | 2.1 | 100.0 | 294 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 1.4 | 5.9 | 2.5 | 1.4 | 42.7 | 24.9 | 8.3 | 11.3 | 1.5 | 100.0 | 187 |
| 1-2 | 1.2 | 4.9 | 2.1 | 1.9 | 52.3 | 23.5 | 8.0 | 4.8 | 1.3 | 100.0 | 973 |
| 3-4 | 1.3 | 7.8 | 2.8 | 4.7 | 38.5 | 28.0 | 10.9 | 5.0 | 1.1 | 100.0 | 1,095 |
| $5+$ | 7.7 | 20.6 | 7.4 | 6.5 | 16.5 | 9.5 | 24.2 | 6.0 | 1.7 | 100.0 | 357 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 0.3 | 0.6 | 0.2 | 0.5 | 50.7 | 29.8 | 10.2 | 6.4 | 1.2 | 100.0 | 1,496 |
| Rural | 4.6 | 18.6 | 7.2 | 7.9 | 27.8 | 15.2 | 13.1 | 4.3 | 1.3 | 100.0 | 1,115 |
| Place of residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 0.3 | 0.3 | 0.2 | 0.2 | 47.7 | 31.6 | 11.1 | 8.4 | 0.2 | 100.0 | 648 |
| Lower Egypt | 3.6 | 14.0 | 4.4 | 6.0 | 36.5 | 18.6 | 11.0 | 5.1 | 0.7 | 100.0 | 1,321 |
| Urban | 0.4 | 1.4 | 0.0 | 0.9 | 54.7 | 25.9 | 10.2 | 6.5 | 0.0 | 100.0 | 460 |
| Rural | 5.4 | 20.8 | 6.7 | 8.7 | 26.8 | 14.7 | 11.4 | 4.4 | 1.1 | 100.0 | 861 |
| Upper Egypt | 0.8 | 4.9 | 3.9 | 2.5 | 42.4 | 25.2 | 13.0 | 3.6 | 3.7 | 100.0 | 602 |
| Urban | 0.0 | 0.3 | 0.4 | 0.5 | 50.4 | 31.2 | 9.1 | 3.2 | 4.9 | 100.0 | 355 |
| Rural | 1.9 | 11.4 | 9.0 | 5.4 | 31.0 | 16.5 | 18.6 | 4.1 | 2.0 | 100.0 | 248 |
| Frontier Governorates | 1.2 | 0.0 | 0.6 | 0.0 | 53.7 | 33.4 | 8.8 | 1.7 | 0.5 | 100.0 | 40 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 7.1 | 27.5 | 10.0 | 13.7 | 6.8 | 0.0 | 26.5 | 7.0 | 1.3 | 100.0 | 656 |
| Primary incomplete | 3.6 | 19.1 | 10.2 | 3.3 | 9.3 | 1.7 | 26.4 | 25.2 | 1.3 | 100.0 | 140 |
| Primary complete/ some secondary | 0.0 | 5.8 | 1.1 | 0.0 | 11.8 | 5.4 | 43.5 | 32.5 | 0.0 | 100.0 | 124 |
| Secondary complete/higher | 0.2 | 0.2 | 0.1 | 0.1 | 58.8 | 35.9 | 2.1 | 1.4 | 1.3 | 100.0 | 1,692 |
| Total | 2.1 | 8.3 | 3.2 | 3.7 | 40.9 | 23.6 | 11.5 | 5.5 | 1.3 | 100.0 | 2,611 |
| Note: An asterisk indicates that a figure is based on fewer than 25 cases and has been suppressed. ${ }^{1}$ Professional, technical, and managerial, occupations |  |  |  |  |  |  |  |  |  |  |  |

## Employer and Form of Earnings

Table 3.6 shows that, among working women, 12 percent are self-employed, a roughly similar percentage work for relatives, while the majority ( 76 percent) work for someone other than a relative. Rural women, particularly from Upper Egypt, are more likely to be self-employed or to work for a relative than urban women. Similarly, women with less than a secondary education are more likely to be self-employed or to work for a relative than highly educated women. For example, among employed women who never attended school, about two-thirds are either self-employed ( 32 percent) or work for a relative ( 36 percent). In contrast, only 4 percent of working women with at least a secondary education are self-employed or work for a relative.

| Table 3.6 Employer and form of earnings |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently employed women by employer and form of earnings, according to background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |  |
|  | Self-employed |  | Employed by a non-relative |  | Employed by a relative |  | Missing | Total | Number of women |
| Background characteristic | Earns cash | Does not earn cash | Earns cash | Does not earn cash | Earns cash | Does not earn cash |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | * | 100.0 | 16 |
| 20-24 | 8.4 | 2.0 | 65.7 | 1.9 | 0.8 | 21.1 | 0.0 | 100.0 | 129 |
| 25-29 | 6.2 | 1.7 | 76.6 | 1.3 | 3.2 | 10.9 | 0.1 | 100.0 | 429 |
| 30-34 | 7.7 | 1.0 | 76.4 | 2.3 | 2.6 | 9.5 | 0.5 | 100.0 | 529 |
| 35-39 | 11.6 | 2.1 | 75.7 | 1.7 | 1.2 | 7.3 | 0.3 | 100.0 | 665 |
| 40-44 | 10.9 | 3.8 | 73.5 | 0.9 | 3.0 | 7.3 | 0.5 | 100.0 | 468 |
| 45-49 | 14.5 | 1.7 | 70.7 | 0.3 | 2.9 | 9.9 | 0.0 | 100.0 | 376 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |
| Urban | 5.9 | 0.4 | 89.9 | 0.2 | 1.5 | 1.8 | 0.4 | 100.0 | 1,496 |
| Rural | 15.7 | 4.5 | 52.9 | 3.1 | 3.5 | 20.2 | 0.1 | 100.0 | 1,115 |
| Place of residence |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 5.9 | 0.6 | 89.4 | 0.0 | 1.7 | 2.0 | 0.5 | 100.0 | 648 |
| Lower Egypt | 11.9 | 3.1 | 64.1 | 2.5 | 3.1 | 15.1 | 0.2 | 100.0 | 1,321 |
| Urban | 7.2 | 0.3 | 88.1 | 0.3 | 1.4 | 2.5 | 0.3 | 100.0 | 460 |
| Rural | 14.4 | 4.7 | 51.2 | 3.7 | 4.0 | 21.8 | 0.1 | 100.0 | 861 |
| Upper Egypt | 10.9 | 1.6 | 78.5 | 0.6 | 1.3 | 6.7 | 0.3 | 100.0 | 602 |
| Urban | 4.3 | 0.0 | 92.9 | 0.3 | 1.3 | 0.7 | 0.5 | 100.0 | 355 |
| Rural | 20.4 | 3.9 | 57.8 | 1.0 | 1.4 | 15.4 | 0.0 | 100.0 | 248 |
| Frontier Governorates | 5.1 | 1.5 | 89.7 | 0.0 | 2.4 | 1.3 | 0.0 | 100.0 | 40 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 25.3 | 6.2 | 28.2 | 4.6 | 5.0 | 30.7 | 0.0 | 100.0 | 656 |
| Primary incomplete | 28.5 | 7.7 | 35.3 | 3.1 | 1.5 | 23.9 | 0.0 | 100.0 | 140 |
| Primary complete/ some secondary | 22.2 | 1.7 | 63.8 | 0.0 | 3.5 | 8.9 | 0.0 | 100.0 | 124 |
| Secondary complete/higher | 1.8 | 0.1 | 95.8 | 0.2 | 1.3 | 0.4 | 0.4 | 100.0 | 1,692 |
| Works in agriculture |  |  |  |  |  |  |  |  |  |
| Agricultural | 7.4 | 8.9 | 21.8 | 7.1 | 5.8 | 49.0 | 0.0 | 100.0 | 451 |
| Non-agricultural | 10.6 | 0.7 | 85.0 | 0.2 | 1.6 | 1.5 | 0.3 | 100.0 | 2,161 |
| Total | 10.1 | 2.1 | 74.1 | 1.4 | 2.3 | 9.7 | 0.3 | 100.0 | 2,611 |

Table 3.6 also shows that, among women who work, 87 percent earn cash for the work they do. As discussed earlier, women who are working and earning cash represent 15 percent of all evermarried women interviewed in the survey.

Finally, the results in Table 3.6 confirm that as expected, the proportion earning cash varies markedly according to the type of employer. Women employed by a non-relative almost always earn cash, and the majority of self-employed women receive cash for the work they do. However, the majority of women working for relatives are not paid in cash. Thus, women who receive cash for the work they do are disproportionately found in groups where the proportion of women working for an employer other than a relative is highest, i.e., among urban women, well-educated women, and women working in non-agricultural occupations.

### 3.4 Disposal of Earnings

EDHS respondents who earned cash were asked about the share of household expenditures that were paid with their earnings and about the person(s) who mainly made the decisions about how their earnings would be spent. Figure 3.2 shows that women's earnings are used to meet household expenses in most cases. Only 13 percent of the women with cash earnings contribute nothing or almost nothing to meeting household expenses.


Table 3.7 shows that almost all of the women who work for cash are involved in deciding how their earnings would be spent. Two in five women say they alone are mainly responsible for making decisions on how their earnings are spent. Among the remaining women, the majority make these decisions jointly (primarily with the husband); only 4 percent say that the husband or someone else alone is mainly responsible for decisions about how the respondent's earnings are to be spent. The extent to which women report that they mainly are responsible for deciding how to spend their earnings is related to the degree to which the household is dependent on the women's earnings to meet expenses. Women at the two extremes-those whose earnings are not used to

| Table 3.7 hare of household expenditures met by earnings by control over earnings |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women receiving cash earnings by the person(s) deciding about how earnings will be used, according to the share of household expenditures met by earnings, Egypt 2000 |  |  |  |  |  |  |  |
|  | Person | s) deciding | bout how e | rnings will b | be spent |  |  |
| Share of household expenditures met by earnings | Respondent | Jointly with husband | ```Jointly with someone else``` | Husband | Someone else | Total | Number of women |
| None/almost none | 56.9 | 35.4 | 2.1 | 4.0 | 1.6 | 100.0 | 299 |
| Less than half | 35.1 | 60.7 | 0.7 | 3.3 | 0.2 | 100.0 | 861 |
| Half or more | 31.3 | 63.4 | 1.6 | 3.5 | 0.1 | 100.0 | 734 |
| All | 65.8 | 28.9 | 1.6 | 3.1 | 0.6 | 100.0 | 369 |
| Total | 41.7 | 53.0 | 1.3 | 3.4 | 0.5 | 100.0 | 2,266 |
| Note: Total includes three women for whom information on the contribution to household expenditures was missing. |  |  |  |  |  |  |  |

meet expenses at all and those whose earnings cover all household expenses-are more likely than other women to report that they alone are responsible for making decisions about how their earnings will be spent.

Table 3.8 presents differentials in the two measures related to the disposal of women's earnings. With regard to the extent to which their earnings contribute to meeting household expenses, women under age 30 and those with no living children generally report paying a smaller proportion of household expenses than older and higher parity women. There are several possible reasons for this pattern. Women may have less need to contribute to meeting household expenses before the family has children. Younger women may also have lower earnings relative to the earnings of their husband. In the case of older women, the husband is more likely to have retired (or died) so that the woman's earnings may represent a more significant proportion of the household budget.

Table 3.8 shows that almost all women who are widowed, divorced, or separated say they alone are responsible for deciding how to use their earnings. Among currently married women, only one-third report that they make the decisions about how their earnings are used themselves, while 60 percent say that the decisions are made jointly with their husband.

In general, the residential differentials in the share of household expenses paid for by women's earnings are not large, nor is there great variation by educational level. With respect to control over how their earnings are spent, urban women are somewhat more likely than rural women to report that they themselves mainly make decisions about how the money they earn will be spent. By place of residence, the proportion reporting that they themselves make spending decisions varies from a high of 56 percent among women in urban Upper Egypt to 28 percent in the Frontier Governorates. With respect to educational differentials, women with less than a secondary education are more likely than those who have completed secondary school or higher to report that they decide for themselves how to spend the money they earn.

In all subgroups, the majority of the women who do not make decisions about how to spend earnings themselves report that they make these decisions jointly with their husband.

Table 3.8 Share of household expenditures met by earnings and control over earnings by background characteristics
Percent distribution of women receiving cash earnings by share of household expenditures met by earnings and the person deciding about how earnings will be spent, according to selected background characteristics, Egypt 2000

| Background characteristic | Share of household expenditures by respondent's earnings |  |  |  |  | Number of women | Person(s) deciding about how earnings will be spent |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None/ almost none | Less than half | Half or more | All | Total |  | Respondent | Jointly with husband | Jointly with someone else | Husband | Someone else |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | 100.0 | 6 | * | * | * | * | * | 100.0 | 6 |
| 20-24 | 24.7 | 44.4 | 22.2 | 7.7 | 100.0 | 96 | 26.8 | 59.5 | 0.9 | 9.7 | 3.1 | 100.0 | 96 |
| 25-29 | 19.7 | 43.1 | 30.6 | 6.6 | 100.0 | 369 | 36.1 | 55.5 | 1.1 | 6.3 | 1.0 | 100.0 | 369 |
| 30-34 | 16.2 | 39.9 | 34.3 | 9.4 | 100.0 | 461 | 34.5 | 60.9 | 1.7 | 2.5 | 0.3 | 100.0 | 461 |
| 35-39 | 8.3 | 36.8 | 33.8 | 20.8 | 100.0 | 591 | 43.8 | 53.0 | 0.2 | 2.5 | 0.2 | 100.0 | 591 |
| 40-44 | 10.7 | 36.0 | 33.2 | 20.1 | 100.0 | 411 | 46.4 | 49.7 | 1.8 | 1.9 | 0.2 | 100.0 | 411 |
| 45-49 | 8.9 | 32.8 | 31.9 | 26.4 | 100.0 | 331 | 53.0 | 41.6 | 2.4 | 2.9 | 0.1 | 100.0 | 331 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Currently married | 14.0 | 41.5 | 34.7 | 9.6 | 100.0 | 1,990 | 35.0 | 60.4 | 0.3 | 3.9 | 0.5 | 100.0 | 1,990 |
| Widowed/divorced/ separated | 7.6 | 12.2 | 15.7 | 64.0 | 100.0 | 276 | 90.3 | 0.0 | 8.7 | 0.0 | 0.5 | 100.0 | 276 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 25.7 | 31.6 | 32.7 | 10.0 | 100.0 | 168 | 46.4 | 47.1 | 2.2 | 3.7 | 0.6 | 100.0 | 168 |
| 1-2 | 14.6 | 40.0 | 31.7 | 13.5 | 100.0 | 900 | 42.9 | 52.5 | 1.2 | 2.6 | 0.7 | 100.0 | 900 |
| 3-4 | 10.8 | 38.5 | 33.3 | 17.1 | 100.0 | 960 | 40.3 | 55.0 | 0.9 | 3.3 | 0.3 | 100.0 | 960 |
| 5+ | 8.6 | 32.6 | 31.2 | 27.7 | 100.0 | 238 | 39.3 | 51.0 | 2.5 | 7.1 | 0.0 | 100.0 | 238 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 13.1 | 37.7 | 35.2 | 13.9 | 100.0 | 1,462 | 45.7 | 50.3 | 1.3 | 2.5 | 0.2 | 100.0 | 1,462 |
| Rural | 13.4 | 38.4 | 27.3 | 20.5 | 100.0 | 805 | 34.4 | 58.0 | 1.4 | 5.1 | 1.0 | 100.0 | 805 |
| Place of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 12.7 | 38.2 | 32.9 | 16.3 | 100.0 | 631 | 49.5 | 44.8 | 2.3 | 3.3 | 0.0 | 100.0 | 631 |
| Lower Egypt | 12.1 | 35.7 | 32.2 | 19.7 | 100.0 | 1,047 | 33.4 | 61.5 | 1.1 | 3.3 | 0.5 | 100.0 | 1,047 |
| Urban | 11.8 | 35.0 | 38.2 | 14.8 | 100.0 | 446 | 33.7 | 63.3 | 0.6 | 2.1 | 0.0 | 100.0 | 446 |
| Rural | 12.4 | 36.1 | 27.8 | 23.3 | 100.0 | 601 | 33.2 | 60.2 | 1.4 | 4.2 | 0.8 | 100.0 | 601 |
| Upper Egypt | 16.1 | 42.8 | 30.4 | 10.7 | 100.0 | 549 | 49.5 | 45.0 | 0.7 | 3.9 | 0.9 | 100.0 | 549 |
| Urban | 15.7 | 41.2 | 33.5 | 9.6 | 100.0 | 351 | 55.7 | 41.5 | 0.3 | 1.8 | 0.6 | 100.0 | 351 |
| Rural | 16.9 | 45.5 | 24.9 | 12.7 | 100.0 | 197 | 38.4 | 51.1 | 1.3 | 7.7 | 1.5 | 100.0 | 197 |
| Frontier Governorates | 9.8 | 29.6 | 57.1 | 3.5 | 100.0 | 39 | 28.3 | 69.2 | 0.7 | 1.8 | 0.0 | 100.0 | 39 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 13.4 | 29.9 | 20.8 | 35.3 | 100.0 | 384 | 46.8 | 41.7 | 3.1 | 6.9 | 1.2 | 100.0 | 384 |
| Primary incomplete | 13.8 | 33.1 | 21.5 | 31.6 | 100.0 | 91 | 52.2 | 43.3 | 0.0 | 4.5 | 0.0 | 100.0 | 91 |
| Primary compl./ some secondary | 4.4 | 37.5 | 28.0 | 29.7 | 100.0 | 111 | 55.8 | 35.3 | 0.9 | 6.8 | 0.7 | 100.0 | 111 |
| Secondary complete/higher | 13.7 | 40.1 | 36.0 | 10.2 | 100.0 | 1,681 | 39.1 | 57.3 | 1.0 | 2.4 | 0.3 | 100.0 | 1,681 |
| Total | 13.2 | 38.0 | 32.4 | 16.3 | 100.0 | 2,266 | 41.7 | 53.0 | 1.3 | 3.4 | 0.5 | 100.0 | 2,266 |

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

### 3.5 Household Decision-making

To assess women's role in household decision-making, 2000 EDHS respondents were asked questions about who in the household (respondent, husband, both, other) has the final say in decisions related to the following five specific areas: the woman's own health care, large household purchases, everyday household purchases, visits to friends or relatives, and what food to cook each day. Table 3.9 shows that women are more likely to make the final decision in the case of recurring household decisions (i.e., what to cook or everyday purchases). Joint decision-making is most common in the case of visits to family or relatives, while women most often say that the husband

## Table 3.9 Household decision-making

Percent distribution of ever-married women 15-49 by person who makes specific household decisions, according to type of decision, Egypt 2000

| Household decision | Person(s) who make(s) household decision |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Self only | Jointly with husband | Jointly with someone else | Husband only | Someone else only |  |  |
| Own health care | 36.4 | 22.9 | 1.0 | 38.0 | 1.8 | 100.0 | 15,573 |
| Large household purchases | 10.0 | 31.0 | 1.3 | 53.5 | 4.2 | 100.0 | 15,573 |
| Everyday household purchases | 47.6 | 18.4 | 4.2 | 22.4 | 7.3 | 100.0 | 15,573 |
| Visits to family or relatives | 16.8 | 53.6 | 3.5 | 23.8 | 2.3 | 100.0 | 15,573 |
| What food to cook each day | 66.3 | 13.7 | 9.8 | 4.3 | 5.9 | 100.0 | 15,573 |

makes final decisions about large household purchases. With regard to decisions about the woman's own health care, about a third of the women say that final decisions in this area are their own. The remaining women are more likely to report that their husband makes the final decisions about the woman's own health care than to say that the decisions are made jointly.

Table 3.10 presents differentials in the proportions of women who report that they alone or jointly have the final say with respect to various decisions. The table shows that 31 percent of the respondents are involved either alone or jointly in all five decision areas. Only 4 percent have no involvement in making any of the decisions.

The results in Table 3.10 indicate that widowed, divorced, and separated women have greater involvement in various decisions than currently married women. Women's involvement in household decision-making increases with the age of the woman and with parity up to four children. Rural women, and women from the Frontier Governorates are generally less likely than women to report that they make decisions alone or jointly. Participation in household decisionmaking appears to be more limited for women living in rural Upper Egypt and the Frontier Governorates than for women from other areas. For example, slightly less than half of women from rural Upper Egypt and the Frontier Governorates say they alone or jointly have the final say in decisions relating to their own health care compared with 75 percent of women in the Urban Governorates. There are also relatively large differentials in the proportions having a final say in decisions about major and daily household purchases between women from rural Upper Egypt and the Frontier Governorates and other women.

A woman's education level is directly related to her degree of involvement in making the various household decisions, with 40 percent of women who completed at least the secondary level of education saying that they have the final say either alone or jointly in all of the decisions, compared with slightly more than a quarter of the women with no education. Women working for cash are also much more likely than other women to report having a say in the various decisions.

| Table 3.10 Final say in household decisions |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women who say that they alone or jointly have the final say in specific household decisions, according to background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |
|  | Alone or jointly has final say in: |  |  |  |  |  |  | Number of women |
| Background characteristic | Own health care | Making large purchases | Making daily purchases | Visits to family, relatives, friends | What food to cook daily | All specified decisions | None of specified decisions |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 48.1 | 33.2 | 52.7 | 63.4 | 74.1 | 19.6 | 11.3 | 615 |
| 20-24 | 53.8 | 36.7 | 61.5 | 69.1 | 83.7 | 24.8 | 7.1 | 2,244 |
| 25-29 | 59.2 | 39.7 | 68.8 | 72.2 | 88.2 | 28.1 | 5.0 | 2,850 |
| 30-34 | 62.0 | 42.1 | 72.7 | 75.4 | 90.9 | 31.4 | 3.8 | 2,701 |
| 35-39 | 60.5 | 43.0 | 73.3 | 74.5 | 92.9 | 32.0 | 3.1 | 2,674 |
| 40-44 | 64.4 | 48.0 | 74.3 | 75.8 | 93.9 | 36.3 | 2.7 | 2,182 |
| 45-49 | 64.8 | 47.7 | 75.0 | 78.6 | 93.2 | 38.3 | 2.2 | 2,307 |
| Marital status |  |  |  |  |  |  |  |  |
| Currently married | 57.8 | 39.1 | 69.0 | 72.5 | 89.8 | 27.5 | 4.3 | 14,382 |
| Widowed/divorced/ separated | 89.3 | 81.8 | 84.9 | 89.5 | 90.4 | 75.6 | 4.4 | 1,191 |
| Number of living children |  |  |  |  |  |  |  |  |
| 0 0 | 57.2 | 41.4 | 61.8 | 72.3 | 82.6 | 28.9 | 8.0 | 1,428 |
| 1-2 | 62.8 | 43.9 | 69.8 | 75.0 | 88.0 | 33.0 | 4.8 | 5,218 |
| 3-4 | 62.9 | 45.0 | 74.7 | 75.8 | 92.6 | 33.3 | 2.8 | 5,321 |
| 5+ | 53.8 | 36.5 | 67.7 | 69.7 | 91.0 | 26.4 | 4.3 | 3,606 |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 68.0 | 47.6 | 76.2 | 78.8 | 93.2 | 36.2 | 2.3 | 6,871 |
| Rural | 54.2 | 38.2 | 65.6 | 69.9 | 87.1 | 27.2 | 5.8 | 8,702 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 74.5 | 50.2 | 79.3 | 77.0 | 91.9 | 40.6 | 2.4 | 2,992 |
| Lower Egypt | 63.3 | 47.2 | 75.5 | 76.6 | 89.8 | 35.6 | 3.6 | 6,826 |
| Urban | 70.8 | 51.8 | 79.9 | 82.5 | 94.3 | 40.6 | 1.8 | 1,946 |
| Rural | 60.3 | 45.3 | 73.7 | 74.3 | 88.0 | 33.5 | 4.4 | 4,880 |
| Upper Egypt | 49.3 | 32.6 | 59.9 | 68.7 | 88.8 | 21.2 | 5.8 | 5,546 |
| Urban | 54.8 | 39.3 | 68.4 | 77.3 | 94.2 | 25.0 | 2.5 | 1,808 |
| Rural | 46.7 | 29.4 | 55.8 | 64.6 | 86.2 | 19.3 | 7.4 | 3,738 |
| Frontier Governorates | 46.3 | 29.9 | 44.7 | 72.2 | 88.9 | 19.9 | 10.4 | 209 |
| Education |  |  |  |  |  |  |  |  |
| No education | 52.5 | 35.5 | 66.0 | 68.0 | 87.7 | 25.8 | 6.0 | 6,734 |
| Primary incomplete | 58.3 | 40.6 | 72.0 | 70.5 | 90.5 | 28.5 | 3.6 | 2,060 |
| Primary complete/ some secondary | 60.5 | 43.0 | 67.5 | 73.3 | 88.4 | 30.4 | 4.4 | 2,026 |
| Secondary complete/higher | 72.0 | 52.5 | 76.7 | 83.7 | 93.1 | 40.3 | 2.0 | 4,753 |
| Work status |  |  |  |  |  |  |  |  |
| Working for cash | 80.2 | 63.5 | 82.6 | 88.1 | 95.5 | 52.0 | 1.1 | 2,266 |
| Not working for cash | 56.9 | 38.7 | 68.2 | 71.4 | 88.8 | 27.7 | 4.8 | 13,307 |
| Total | 60.3 | 42.3 | 70.3 | 73.8 | 89.8 | 31.2 | 4.3 | 15,573 |

### 3.6 Access to Health Care

As part of the effort to explore women's ability to obtain health services, the 2000 EDHS looked at the extent to which women perceive that they face significant problems in accessing health care for themselves. To obtain this information, EDHS respondents were asked whether each of the following factors would be a big problem for them in obtaining health services: knowing where to go, getting permission to go, getting money for treatment, the distance to the health facility, concern about going alone to the facility, and lack of a female health care provider. Table 3.11 shows that in general, a minority of women think each of the specific potential barriers to accessing care is actually a big problem for them. However, slightly more than half of the women identify at least one obstacle to getting health care that they consider to be a major problem.

| Table 3.11 Problems women face in accessing health care |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women 15-49 who reported that various factors pose a big problem in accessing health care for themselves by selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |  |
| Background characteristic | Knowing where to go | Getting permission to go | Getting money for treatment | Distance to health facility | Have to take transport | Not wanting to go alone | Lack of female health provider | At least one specified factor is a big problem | Number of women |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 15.8 | 39.0 | 32.4 | 15.2 | 16.7 | 32.9 | 28.2 | 61.6 | 615 |
| 20-24 | 10.4 | 32.8 | 26.2 | 12.8 | 14.2 | 25.5 | 23.8 | 56.0 | 2,244 |
| 25-29 | 8.7 | 29.1 | 25.2 | 13.1 | 14.2 | 21.4 | 20.3 | 51.7 | 2,850 |
| 30-34 | 8.6 | 27.4 | 27.1 | 14.1 | 14.7 | 20.1 | 20.3 | 52.3 | 2,701 |
| 35-39 | 9.8 | 28.3 | 28.9 | 13.5 | 14.6 | 21.2 | 20.5 | 51.4 | 2,674 |
| 40-44 | 9.3 | 22.6 | 25.7 | 12.5 | 14.0 | 18.0 | 17.5 | 48.3 | 2,182 |
| 45-49 | 9.1 | 23.3 | 25.9 | 14.2 | 15.6 | 20.5 | 19.0 | 49.5 | 2,307 |
| Marital status |  |  |  |  |  |  |  |  |  |
| Currently married | 9.6 | 29.2 | 26.6 | 13.2 | 14.4 | 21.5 | 20.6 | 52.5 | 14,382 |
| Widowed/divorced/ separated | 9.3 | 11.0 | 28.8 | 16.1 | 17.4 | 22.3 | 19.5 | 45.5 | 1,191 |
| Number of living children |  |  |  |  |  |  |  |  |  |
| 0 | 12.5 | 29.4 | 22.0 | 12.6 | 13.8 | 28.0 | 23.2 | 53.0 | 1,428 |
| 1-2 | 8.0 | 25.3 | 22.0 | 11.3 | 12.7 | 20.1 | 18.8 | 47.1 | 5,218 |
| 3-4 | 8.2 | 26.2 | 25.7 | 13.5 | 14.5 | 19.7 | 20.2 | 50.5 | 5,321 |
| $5+$ | 12.6 | 33.1 | 37.2 | 16.8 | 18.0 | 24.1 | 22.6 | 60.7 | 3,606 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |
| Urban | 5.4 | 19.7 | 18.0 | 8.5 | 9.6 | 16.2 | 16.7 | 41.3 | 6,871 |
| Rural | 12.8 | 34.2 | 33.7 | 17.4 | 18.6 | 25.9 | 23.6 | 60.4 | 8,702 |
| Place of residence |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 3.6 | 16.5 | 14.0 | 6.3 | 8.1 | 15.5 | 16.0 | 36.3 | 2,992 |
| Lower Egypt | 9.8 | 29.4 | 24.6 | 15.4 | 16.4 | 20.1 | 20.8 | 53.4 | 6,826 |
| Urban | 6.4 | 23.8 | 18.6 | 11.6 | 11.6 | 16.2 | 16.7 | 45.2 | 1,946 |
| Rural | 11.2 | 31.6 | 27.0 | 16.9 | 18.3 | 21.7 | 22.4 | 56.7 | 4,880 |
| Upper Egypt | 11.9 | 31.0 | 36.1 | 14.6 | 15.8 | 26.1 | 22.6 | 58.0 | 5,546 |
| Urban | 6.9 | 19.4 | 23.6 | 8.8 | 10.1 | 16.3 | 18.2 | 44.2 | 1,808 |
| Rural | 14.3 | 36.6 | 42.2 | 17.5 | 18.5 | 30.8 | 24.7 | 64.7 | 3,738 |
| Frontier Governorates | 23.9 | 52.3 | 33.1 | 20.7 | 22.0 | 40.0 | 25.1 | 65.4 | 209 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 13.6 | 36.0 | 38.6 | 18.4 | 19.7 | 26.8 | 25.3 | 63.6 | 6,734 |
| Primary incomplete | 10.3 | 29.5 | 31.0 | 14.6 | 15.4 | 22.7 | 20.4 | 57.2 | 2,060 |
| Primary complete/ some secondary | 7.5 | 25.1 | 22.1 | 10.9 | 11.6 | 21.3 | 20.7 | 49.0 | 2,026 |
| Secondary complete/higher | r 4.4 | 16.6 | 10.2 | 7.1 | 8.4 | 13.9 | 13.9 | 34.4 | 4,753 |
| Works status |  |  |  |  |  |  |  |  |  |
| Working for cash | 4.9 | 15.6 | 13.4 | 9.2 | 11.0 | 12.0 | 11.5 | 34.3 | 2,266 |
| Not-working for cash | 10.3 | 29.9 | 29.1 | 14.2 | 15.3 | 23.2 | 22.1 | 55.0 | 13,307 |
| Total | 9.6 | 27.8 | 26.8 | 13.5 | 14.6 | 21.6 | 20.6 | 51.9 | 15,573 |

Table 3.11 also provides some insights into the specific problems women perceive as major obstacles in getting health care. Getting permission to go and getting the money to pay are most frequently cited as posing big problems ( 28 percent and 27 percent, respectively), followed by desire to have someone accompany them to the provider, and the lack of female providers ( 22 percent and 21 percent, respectively). Fifteen percent or less of women mention the need to arrange for transport, the distance to the provider, or their lack of knowledge of where to go as big problems in obtaining health care for themselves.

There are marked differences by urban-rural residence and place of residence in the extent to which women perceive that they face major obstacle(s) to getting health care (Table 3.11). Sixty percent of rural women report at least one potential obstacle, compared with a little more than 40 percent of urban women. Women from Upper Egypt and the Frontier Governorates are more likely than those from Lower Egypt and the Urban Governorates to mention at least one potential obstacle. As expected, highly educated women and women who work for cash are less likely than other women to report that anything is a big problem for them in accessing health care.

There also are differences by background characteristics, particularly residence and education, in the types of specific obstacles that women regard as big problems in accessing health care. For example, women in rural Upper Egypt and especially in the Frontier Governorates were more likely than other women to say that lack of knowledge of where to go to obtain health care services posed a big problem for them. Getting permission to go and not wanting to go alone were acknowledged much more often as potential obstacles by women from the Frontier Governorates than by women in other residential categories. Concerns about obtaining the money to pay for care and finding transport are more common among rural women and women from the Frontier Governorates than other women.

Looking at women's education, the largest differential was found with respect to the proportion of women indicating that money was a problem in accessing health care. Women with no education were nearly four times as likely to say that getting money for treatment was potentially an issue for them compared to women with a secondary or higher education. Educational differentials were smallest in the case of knowing where to go.

### 3.7 Coverage of Mass Media

The 2000 EDHS collected information on the exposure of women to both broadcast and print media. These data are important because they provide some indication of the extent to which Egyptian women are regularly exposed to the mass media, which are extensively used in Egypt to convey family planning and health messages to the population.

The level of exposure of EDHS respondents to television, radio, and newspapers or magazines is shown in Figure 3.3. More than 90 percent usually watch television weekly, about threequarters listen to radio, and one-quarter read a newspaper or magazine. Slightly more than one in five women report exposure to all three media, and only 5 percent have no exposure to print or broadcast media.

# Figure 3.3 Exposure to Mass Media Weekly 



According to the results presented in Table 3.12, women living in urban areas are somewhat more likely to be exposed to the mass media channels, particularly newspapers or magazines and the radio, than rural women. Overall, a third of urban women are exposed to all three media weekly, compared with 11 percent of rural women.

Considering place of residence, a majority of women in every residential category watches television or listens to the radio weekly. The percentage that reads a newspaper or magazine weekly varies considerably, from 11 percent in rural Upper Egypt to 45 percent in the Urban Governorates. Lack of exposure to any of the three media varies from 2 percent of women in the Urban Governorates and urban Lower Egypt to 13 percent of women in the Frontier Governorates.

There is a strong association between the level of education and exposure to mass media; as the education level of respondents increases, the percentages that report exposure to each of the three mass media increase.

## Table 3.12 Exposure to mass media

Percentage of ever-married women who usually watch television weekly, listen to the radio weekly, or read a newspaper or magazine weekly, by selected background characteristics, Egypt 2000

| Background characteristic | Watch television weekly | Listen to radio weekly | Read newspaper or magazine weekly | All three media | No media exposure | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| 15-19 | 93.3 | 67.1 | 18.9 | 15.8 | 3.7 | 615 |
| 20-24 | 93.8 | 72.6 | 25.8 | 20.7 | 3.3 | 2,244 |
| 25-29 | 94.3 | 73.2 | 29.2 | 25.1 | 3.6 | 2,850 |
| 30-34 | 93.0 | 73.4 | 29.8 | 25.4 | 4.3 | 2,701 |
| 35-39 | 91.9 | 70.1 | 24.7 | 20.6 | 5.2 | 2,674 |
| 40-44 | 91.1 | 71.6 | 22.8 | 19.0 | 5.7 | 2,182 |
| 45-49 | 91.0 | 70.1 | 19.7 | 16.6 | 6.3 | 2,307 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 95.9 | 78.5 | 41.3 | 34.9 | 1.9 | 6,871 |
| Rural | 90.0 | 66.3 | 12.7 | 10.5 | 6.8 | 8,702 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 96.2 | 81.1 | 45.4 | 39.1 | 1.7 | 2,992 |
| Lower Egypt | 93.9 | 76.8 | 21.2 | 17.9 | 3.2 | 6,826 |
| Urban | 95.9 | 81.2 | 39.3 | 33.6 | 1.7 | 1,946 |
| Rural | 93.1 | 75.1 | 14.0 | 11.7 | 3.8 | 4,880 |
| Upper Egypt | 89.6 | 60.8 | 19.7 | 16.0 | 7.7 | 5,546 |
| Urban | 95.3 | 72.4 | 37.3 | 30.1 | 2.6 | 1,808 |
| Rural | 86.8 | 55.2 | 11.2 | 9.1 | 10.2 | 3,738 |
| Frontier Governorates | 77.7 | 58.2 | 22.6 | 16.7 | 13.3 | 209 |
| Education |  |  |  |  |  |  |
| No education | 87.8 | 62.8 | 1.1 | 0.8 | 8.7 | 6,734 |
| Primary incomplete | 93.9 | 69.1 | 7.6 | 6.7 | 4.0 | 2,060 |
| Primary complete/ some secondary | 96.0 | 78.4 | 28.8 | 23.9 | 1.7 | 2,026 |
| Secondary complete/higher | 97.4 | 82.6 | 65.8 | 55.5 | 0.5 | 4,753 |
| Work status |  |  |  |  |  |  |
| Working for cash | 94.6 | 77.8 | 61.3 | 51.3 | 3.0 | 2,266 |
| Not working for cash | 92.2 | 70.6 | 19.2 | 16.2 | 4.9 | 13,307 |
| Total | 92.6 | 71.7 | 25.3 | 21.3 | 4.7 | 15,573 |

## FERTILITY

This chapter looks at a number of fertility indicators including levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women initiate childbearing. Information on current and cumulative fertility is essential in monitoring the progress and evaluating the impact of the population program in Egypt. The data on birth intervals are important since short intervals are strongly associated with childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the child and the mother.

Data on childbearing patterns were collected in the 2000 EDHS in several ways. First, each woman was asked a series of questions on the number of her sons and daughters living with her, the number living elsewhere, and the number who may have died. Next, a complete history of all of the woman's births was obtained, including the name, sex, month and year of birth, age, and survival status for each of the births. For living children, a question was asked about whether the child was living in the household or away. For dead children, the age at death was recorded. Finally, information was collected on whether currently married women were pregnant at the time of the survey.

### 4.1 Current Fertility Levels and Differentials

The level of current fertility is one of the most important topics in this report because of its direct relevance to population policies and programs. Measures of current fertility presented in this chapter include age-specific fertility rates, the total fertility rate, the general fertility rate, and the crude birth rate. These rates are generally presented for the three-year period preceding the survey, a period covering portions of the calendar years 1997 through 2000. The three-year period was chosen for calculating these rates (rather than a longer or a shorter period) to provide the most current information, to reduce sampling error, and to avoid problems of the displacement of births.

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

The total fertility rate (TFR) is a useful measure for examining the overall level of fertility. It can be interpreted as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the currently observed rates. The TFR is calculated by summing the age-specific fertility rates. It is presented for women age 15-44 and women 15-49 to facilitate comparisons with other surveys in which the age range of interviewed women may differ from that in the 2000 EDHS.

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

Current estimates of fertility levels are presented in Table 4.1 by residence. The total fertility rate indicates that if fertility rates were to remain constant at the level prevailing during the threeyear period before the 2000 EDHS (approximately March 1997 to February 2000), an Egyptian woman would bear 3.5 children during her lifetime. In rural areas, the TFR is 3.9 births per woman, a little less than one birth higher than the rate in urban areas.

| Table 4.1 Current fertility |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age-specific and total fertility rates and the crude birth rate and general fertility rate for the three years preceding the survey, by urban-rural residence and place of residence, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Place of residence |  |  |  |  |  |  |  |  |
|  |  |  | Urban |  | wer Egy |  |  | per Egy |  | Frontier |  |
| Age group | Urban | Rural | norates | Total | Urban | Rural | Total | Urban | Rural | norates | Total |
| 15-19 | 34 | 65 | 31 | 50 | 29 | 57 | 64 | 35 | 77 | 38 | 51 |
| 20-24 | 152 | 231 | 136 | 208 | 175 | 220 | 217 | 152 | 250 | 172 | 196 |
| 25-29 | 194 | 218 | 187 | 197 | 194 | 199 | 232 | 205 | 246 | 216 | 208 |
| 30-34 | 148 | 146 | 141 | 125 | 144 | 117 | 177 | 161 | 185 | 191 | 147 |
| 35-39 | 66 | 83 | 60 | 50 | 53 | 49 | 113 | 90 | 125 | 95 | 75 |
| 40-44 | 20 | 28 | 19 | 15 | 12 | 17 | 39 | 31 | 44 | 30 | 24 |
| 45-49 | 4 | 4 | 5 | 3 | 3 | 3 | 5 | 3 | 6 | 18 | 4 |
| TFR 15-49 | 3.09 | 3.88 | 2.89 | 3.24 | 3.05 | 3.31 | 4.24 | 3.39 | 4.66 | 3.80 | 3.53 |
| TFR 15-44 | 3.07 | 3.86 | 2.87 | 3.23 | 3.03 | 3.29 | 4.21 | 3.37 | 4.63 | 3.71 | 3.51 |
| GFR | 102 | 135 | 95 | 114 | 100 | 119 | 142 | 110 | 157 | 125 | 120 |
| CBR | 24.8 | 30.1 | 23.2 | 26.9 | 25.1 | 27.5 | 31.3 | 26.3 | 33.4 | 29.9 | 27.8 |
| Note: Rates are for the period 1-36 months preceding the survey (approximately March 1997-February 2000). Rates for age group 45-49 may be slightly biased due to truncation. <br> TFR: Total fertility rate expressed per woman <br> GFR: General fertility rate (births divided by number of women 15-44), expressed per 1,000 women <br> CBR: Crude birth rate, expressed per 1,000 population |  |  |  |  |  |  |  |  |  |  |  |

Considering the variation by place of residence, the TFR for rural Lower Egypt (3.3 births per woman) is similar to the rate for urban Upper Egypt ( 3.4 births per woman) and 1.4 births lower than the TFR for rural Upper Egypt. The TFR for the Frontier Governorates is 3.8 births, a rate that is higher than any other area except rural Upper Egypt (Figure 4.1). The lowest TFR is 2.9 births per woman in the Urban Governorates, almost two children lower than the rate in rural Upper Egypt.

Egyptian women are having children early in the childbearing period. According to the agespecific fertility rates shown in Table 4.1, the average Egyptian woman will give birth to 1.2 children by age 25 and 2.3 children by age 30 . The age pattern of fertility shows little variation by urban-rural residence, except that urban fertility peaks in the age group 25-29 (194 births per thousand women), while rural fertility is highest in age group 20-24 (231 births per thousand women). Looking at place of residence, the age-specific rates are much higher in rural Upper Egypt than in the other areas in every age group except the 45-49 age group.


Estimates of the crude birth rate and the general fertility rate are also presented in Table 4.1. For the period 1997-2000, the crude birth rate was 27.8 births per thousand population, and the general fertility rate was 120 births per thousand women. There are substantial differences by residence in both the CBR and the GFR. The lowest rates are found in the Urban Governorates, where the CBR was 23 births per thousand population and the GFR was 95 births per thousand women. In contrast, in rural Upper Egypt where the rates are highest, the CBR was estimated to be 33 births per thousand population, and the GFR was 157 births per thousand women.

### 4.2 Comparison of Current and Cumulative Fertility Levels

Using the 2000 EDHS data, the trend in fertility in Egypt can be assessed in several ways. One approach is to compare the total fertility rate at the time of the survey with the mean number of children ever born (CEB) among women 40-49. The latter indicator takes into account the fertility behavior of older women who are nearing the end of their reproductive period and thus serves as a measure of cumulative fertility. If fertility is stable over time in a population, the TFR and the mean CEB for women 40-49 will be similar. If fertility levels have been falling, the TFR will be substantially lower than the mean CEB among women age 40-49.

The comparison of the TFR with the mean CEB among women 40-49 in Table 4.2 suggests that fertility has fallen sharply in Egypt over the past several decades. Women age 40-49 had an average of 5.2 births during their lifetime, about one and a half births more than women bearing children at the current rates will have. The decline in fertility implied by a comparison of the TFR with completed fertility has been greater in rural than in urban areas. The largest implied decline in fertility by place of residence is observed in rural Lower Egypt, where the TFR was 2.2 births lower than the mean number of children ever born to women 40-49.

Table 4.2 also highlights marked differences in fertility levels and trends by education. The TFR decreases rapidly with increasing educational level, from 4.1 births among women with no education to 3.2 births among women who had completed secondary or higher. The differentials in completed fertility across educational groups are even more striking. The mean number of children ever born is 6.0 among women age 40-49 with no education, compared with 3.0 among women who have completed secondary school or higher. With regard to the trend in fertility, the decline in fertility implied by a comparison of the TFR with the mean CEB is substantial for women with less than a secondary education. However, the TFR for women with a secondary or higher education is slightly higher than the mean number of children ever born among women age 40-49 with at least a secondary education. This pattern suggests that fertility levels among highly educated women may be increasing slightly after remaining relatively stable for several decades.

The TFR is about one birth lower among women who are working for cash than among other women. Cumulative fertility is also lower among women who work in the cash economy than among other women. The decline in fertility implied by a comparison of the TFR with the mean CEB is greater among women who are not working or who do not receive cash for their work than among women who are employed in jobs for which they are paid in cash.

Another indicator of current fertility, the percentage of women who are currently pregnant, is included in Table 4.2. Overall, 6 percent of the 2000 EDHS respondents were pregnant at the time of the survey. Women in rural Upper Egypt have the highest percentage currently pregnant ( 8 percent), while the percentage is lowest in the Urban Governorates (4 percent).

Surprisingly, the percentage of women who were pregnant is higher for women with a secondary or higher education than for other women. This may be due at least in part to the fact that, on average, highly-educated women are younger than women in the other education categories and thus more likely to be in the family-building stage than other women.

### 4.3 Fertility Trends

Trends in fertility can be assessed in several other ways. TFR estimates from the 2000 EDHS can be compared with estimates obtained in earlier surveys. Fertility changes can also be examined by using data from the birth histories obtained from the 2000 EDHS respondents to look at the trend in age-specific fertility rates for successive five-year periods before the survey.

## Comparison with Previous Surveys

Table 4.3 shows the TFR estimates from a series of surveys conducted in Egypt during the period 1979 through 2000. The surveys vary in the timeframes for which the TFR estimates are available. For example, the rates from the EFS, ECPS and the EMCHS are based on births in a oneyear period before the survey, while the rates for the DHS surveys are based on a three-year period before the interview date. In general, three-year rates are subject to less sampling variability than one-year rates. The size of the sample covered in a specific survey is another factor related to sampling variability. In general, rates from surveys with comparatively large samples are subject to less sampling variability than rates from surveys with smaller samples. Thus, the rates for the 1997 and 1998 Interim DHS surveys have somewhat greater margins of error than the standard DHS surveys (i.e., the surveys conducted in 1988, 1992, 1995, and 2000). Sampling errors for the TFRs derived from the 2000 EDHS are presented in Appendix C.

As Table 4.3 shows, fertility levels have declined almost continuously in Egypt over the past two decades, from a level of 5.3 births per woman at the time of the 1980 EFS to 3.5 births per woman at the time of the 2000 EDHS. The decline in fertility was especially rapid during the period between the mid-1980s and the mid-1990s. The TFR reached a level of 3.3 births per woman at the time of the 1997 Interim DHS before rising to the level of 3.5 births per woman recorded in the 2000 EDHS. The sampling errors associated with the TFR estimates for the Interim DHS surveys are sufficiently large that the trend in the TFR estimates between the 1997 EDHS and 2000 EDHS

| Table 4.3 | fert |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age-specific | rat | 1,000 | en) an | l fertil | es, E | 979- |  |  |  |
|  | $\begin{gathered} 1980 \\ \text { EFS } \end{gathered}$ | $\begin{aligned} & 1984 \\ & \text { ECPS } \end{aligned}$ | $\begin{aligned} & 1988 \\ & \text { EDHS } \end{aligned}$ | $\begin{gathered} 1991 \\ \text { EMCHS } \end{gathered}$ | $\begin{aligned} & 1992 \\ & \text { EDHS } \end{aligned}$ | $\begin{aligned} & 1995 \\ & \text { EDHS } \end{aligned}$ | $1997$ <br> Interim EDHS | 1998 Interim EDHS | $\begin{aligned} & 2000 \\ & \text { EDHS } \end{aligned}$ |
| Age group | $\begin{aligned} & 1979- \\ & 1980^{1} \end{aligned}$ | $\begin{aligned} & 1983- \\ & 1984^{1} \end{aligned}$ | $\begin{aligned} & 1986- \\ & 1988^{2} \end{aligned}$ | $\begin{aligned} & 1990- \\ & 1991^{1} \end{aligned}$ | $\begin{aligned} & 1990- \\ & 1992^{2} \end{aligned}$ | $\begin{aligned} & 1993- \\ & 1995^{2} \end{aligned}$ | $\begin{aligned} & 1995- \\ & 1997 \end{aligned}$ | $\begin{aligned} & 1996- \\ & 1998^{2} \end{aligned}$ | $\begin{aligned} & 1997- \\ & 2000^{2} \end{aligned}$ |
| 15-19 | 78 | 73 | 72 | 73 | 63 | 61 | 52 | 64 | 51 |
| 20-24 | 256 | 205 | 220 | 207 | 208 | 200 | 186 | 192 | 196 |
| 25-29 | 280 | 265 | 243 | 235 | 222 | 210 | 189 | 194 | 208 |
| 30-34 | 239 | 223 | 182 | 158 | 155 | 140 | 135 | 135 | 147 |
| 35-39 | 139 | 151 | 118 | 97 | 89 | 81 | 65 | 73 | 75 |
| 40-44 | 53 | 42 | 41 | 41 | 43 | 27 | 18 | 22 | 24 |
| 45-49 | 12 | 13 | 6 | 14 | 6 | 7 | 5 | 1 | 4 |
| TFR 15-49 | 5.3 | 4.9 | 4.4 | 4.1 | 3.9 | 3.6 | 3.3 | 3.4 | 3.5 |
| ${ }^{1}$ Rates are for the 12-month period preceding the survey |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Rates are for the 36-month period preceding the survey |  |  |  |  |  |  |  |  |  |
| Source: El-Zanaty et al., 1996, Table 3.2 |  |  |  |  |  |  |  |  |  |
| El-Zanaty and Associates and Macro International Inc., 1998, Table 2.1 |  |  |  |  |  |  |  |  |  |
| El-Zanaty and Associates and Macro International Inc., 1999, Table 2.1 |  |  |  |  |  |  |  |  |  |

surveys cannot be considered significant. However, the rise in the TFR observed in the DHS results is similar to the trend observed in crude birth rate estimates derived from the vital registration system (see Figure 1.1) during the period, suggesting that fertility levels in Egypt may in fact have risen slightly in the latter half of the 1990s before falling back to the level observed in the middle of the decade.

The results in Table 4.3 indicate that all age groups have shared in the decline in fertility rates. However, the decline has been more rapid among older women than among younger women. Age-specific fertility rates among women age 30 and over fell by more than 40 percent between the 1980 EFS and the 2000 EDHS. In contrast, fertility rates among women under age 30 declined by only about 25 percent during this period. As a result of the differences in the pace of fertility change across various age groups, childbearing has become somewhat more concentrated among women under age 30. Currently, a woman will have an average of 2.3 births by her $30^{\text {th }}$ birthday, roughly two-thirds of her lifetime births. This pattern is typical of countries like Egypt in which fertility levels are declining.

The trend in fertility by residence is presented in Table 4.4 for the period between the 1988 EDHS and the 2000 EDHS. ${ }^{1}$ Urban fertility declined between the 1988 and 1992 surveys, from 3.5 to 2.9 births (Figure 4.2). The decline leveled off early in the 1990s, with the urban TFR fluctuating around three births throughout the rest of the 1990s. In rural areas, however, fertility levels declined continuously, from 5.4 births per woman at the time of the 1988 EDHS to 3.9 births per woman at the time of the 2000 EDHS.

| Table 4.4 Trends in fertility by residence |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total fertility rates for the three years preceding the survey, by residence, Egypt 1986-2000 |  |  |  |  |  |
|  | $\begin{gathered} 1988 \\ \text { EDHS } \end{gathered}$ | $\begin{aligned} & 1991 \\ & \text { EMCHS } \end{aligned}$ | $\begin{gathered} 1992 \\ \text { EDHS } \end{gathered}$ | $\begin{aligned} & 1995 \\ & \text { EDHS } \end{aligned}$ | $\begin{aligned} & 2000 \\ & \text { EDHS } \end{aligned}$ |
| Residence | 1986 1988 | $\begin{aligned} & 1990- \\ & 1991^{2} \end{aligned}$ | $\begin{aligned} & 1990- \\ & 1992^{1} \end{aligned}$ | $\begin{aligned} & 1993-1 \\ & 1995^{1} \end{aligned}$ | $\begin{aligned} & 1997-1 \\ & 2000^{1} \end{aligned}$ |
| Urban-rural residence |  |  |  |  |  |
| Urban | 3.5 | 3.3 | 2.9 | 3.0 | 3.1 |
| Rural | 5.4 | 5.6 | 4.9 | 4.2 | 3.9 |
| Place of residence |  |  |  |  |  |
| Urban Governorates | 3.0 | 2.9 | 2.7 | 2.8 | 2.9 |
| Lower Egypt | 4.5 | u | 3.7 | 3.2 | 3.2 |
| Urban | 3.8 | 3.5 | 2.8 | 2.7 | 3.1 |
| Rural | 4.7 | 4.9 | 4.1 | 3.5 | 3.3 |
| Upper Egypt | 5.4 | u | 5.2 | 4.7 | 4.2 |
| Urban | 4.2 | 3.9 | 3.6 | 3.8 | 3.4 |
| Rural | 6.2 | 6.7 | 6.0 | 5.2 | 4.7 |
| Frontier Governorates | u | u | u | 4.0 | 3.8 |
| TFR 15-49 | 4.4 | 4.1 | 3.9 | 3.6 | 3.5 |
| $\mathrm{u}=$ Unknown (not available) <br> ${ }^{1}$ Rates are for the 36 -month period preceding the survey. <br> ${ }^{2}$ Rates are for the 12 -month period preceding the survey <br> Source: El-Zanaty et al., 1996, Table 3.4 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

[^3]

Place of residence was related to the pattern of fertility decline. Women in rural Upper Egypt experienced the greatest absolute change in fertility levels during the period, with the TFR dropping from 6.2 to 4.7 births per woman. The TFR in rural Lower Egypt was 4.7 births at the time of the 1988 survey (the level reached in 2000 in rural Upper Egypt) and dropped to 3.3 births at the time of the 2000 EDHS.

## Retrospective Data

Fertility trends can also be investigated using retrospective data from the birth histories collected from respondents in a single survey. The age-specific fertility rates shown in Table 4.5 and in Figure 4.3 were generated from the birth history data collected in the 2000 EDHS. The numerators of the rates are classified by five-year segments of time preceding the survey and the mother's age at the time of birth. Because women 50 years and over were not interviewed in the 2000 EDHS, the rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age $45-49$ for the period $5-9$ years and more prior to the survey, because women in that age group would have been 50 years or older at the

Table 4.5 Age-specific fertility rates
Age-specific fertility rates for five-year periods preceding the survey, by mother's age, Egypt 2000

|  | Number of years preceding the survey |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Mother's <br> age | $0-4$ | $5-9$ | $10-14$ | $15-19$ |
| $15-19$ | 53 | 72 | 106 | 123 |
| $20-24$ | 195 | 220 | 267 | 280 |
| $25-29$ | 208 | 223 | 270 | 294 |
| $30-34$ | 145 | 157 | 203 | 237 |
| $35-39$ | 72 | 91 | $[133]$ | - |
| $40-44$ | 25 | $[44]$ | - | - |
| $45-49$ | $[4]$ | - | - | - |

Note: Age-specific fertility rates are per 1,000 women. Estimates enclosed in brackets are truncated. time of the survey.

The results in Table 4.5 and Figure 4.3 confirm that fertility has fallen substantially among all age groups, with the most rapid relative decline occurring in the 15-19 age group. Overall, the cumulative fertility rate for women age 15-29 decreased by more than one birth, from 3.5 births per woman during the period 15-19 years before the survey to 2.3 births per woman in the five-year period preceding the survey.


### 4.4 Children Ever Born and Living

Table 4.6 presents the distribution of all women and of currently married women by the total number of children ever born. The distribution is the outcome of each woman's lifetime fertility. It reflects the accumulation of births over the past 30 years and therefore its relevance to the current situation is limited. However, the information is useful in looking at how average family size varies across age groups and for looking at the level of primary infertility.

Since only ever-married women were interviewed in the 2000 EDHS, information on the reproductive histories of never-married women is not available. However, virtually all births in Egypt occur within marriage; thus, in calculating these fertility measures for all women, nevermarried women were assumed to have had no births. The marked differences between the results for currently married women and for all women at the younger ages are due to the comparatively large numbers of never-married women in those age groups who, as noted, are assumed to have had no births.


#### Abstract

Table 4.6 Children ever born and living Percent distribution of all women and of currently married women by number of children ever born (CEB) and mean number ever born and living, according to five-year age groups, Egypt 2000


| Age group | Number of children ever born (CEB) |  |  |  |  |  |  |  |  |  |  | Total | Number <br> of women | Mean number of CEB | Mean number of living children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ |  |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 94.2 | 4.7 | 0.9 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 5,161 | 0.07 | 0.07 |
| 20-24 | 56.7 | 20.6 | 15.3 | 5.2 | 1.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 4,126 | 0.76 | 0.72 |
| 25-29 | 22.8 | 15.4 | 27.0 | 18.5 | 9.8 | 4.4 | 1.4 | 0.5 | 0.1 | 0.1 | 0.0 | 100.0 | 3,399 | 1.99 | 1.88 |
| 30-34 | 9.8 | 6.1 | 19.0 | 25.0 | 17.6 | 11.5 | 5.9 | 3.3 | 1.1 | 0.6 | 0.1 | 100.0 | 2,878 | 3.21 | 2.95 |
| 35-39 | 6.3 | 3.6 | 11.4 | 18.6 | 19.7 | 14.2 | 10.3 | 7.2 | 4.3 | 2.5 | 1.9 | 100.0 | 2,756 | 4.21 | 3.75 |
| 40-44 | 5.3 | 2.8 | 8.9 | 16.4 | 14.8 | 14.0 | 11.4 | 10.0 | 7.0 | 4.1 | 5.2 | 100.0 | 2,222 | 4.87 | 4.19 |
| 45-49 | 4.8 | 3.7 | 7.1 | 11.9 | 12.4 | 13.0 | 12.6 | 10.3 | 8.9 | 6.6 | 8.8 | 100.0 | 2,343 | 5.42 | 4.50 |
| Total | 37.9 | 8.9 | 12.3 | 11.9 | 9.1 | 6.6 | 4.6 | 3.4 | 2.3 | 1.5 | 1.7 | 100.0 | 22,884 | 2.39 | 2.11 |


| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $15-19$ | 50.2 | 40.4 | 7.9 | 1.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 599 | 0.61 | 0.57 |
| $20-24$ | 20.4 | 37.6 | 28.5 | 9.7 | 3.0 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2,187 | 1.40 | 1.32 |
| $25-29$ | 7.6 | 17.9 | 32.5 | 22.3 | 11.9 | 5.3 | 1.6 | 0.6 | 0.1 | 0.1 | 0.0 | 100.0 | 2,776 | 2.39 | 2.26 |
| $30-34$ | 3.5 | 5.7 | 20.0 | 26.9 | 19.1 | 12.6 | 6.5 | 3.7 | 1.2 | 0.6 | 0.1 | 100.0 | 2,568 | 3.47 | 3.20 |
| $35-39$ | 3.3 | 2.9 | 11.0 | 19.4 | 20.3 | 15.1 | 10.9 | 7.7 | 4.7 | 2.7 | 2.1 | 100.0 | 2,472 | 4.43 | 3.95 |
| $40-44$ | 3.1 | 2.0 | 8.6 | 16.8 | 15.2 | 14.3 | 11.7 | 10.7 | 7.5 | 4.3 | 5.9 | 100.0 | 1,921 | 5.08 | 4.99 |
| $45-49$ | 2.9 | 2.4 | 6.7 | 11.6 | 12.7 | 13.7 | 12.8 | 11.1 | 9.2 | 7.3 | 9.6 | 100.0 | 1,860 | 5.70 | 4.74 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 8.6 | 13.0 | 18.4 | 17.7 | 13.4 | 9.7 | 6.6 | 4.9 | 3.2 | 2.1 | 2.4 | 100.0 | 14,382 | 3.50 | 3.11 |

Table 4.6 shows that the average Egyptian woman has given birth to 2.4 children. Out of that number, 2.1 children are still alive, indicating that 12 percent of the children ever born to EDHS respondents have died. The number of children that women have borne increases directly with age, reflecting the natural family-building process. Women age 45-49, who are approaching the end of their childbearing period, have had an average of 5.7 births. Reflecting the high levels of fertility prevailing during the 30 -year period when those women were bearing children, one in ten women in the cohort has had 10 or more births. As expected, the likelihood that at least one of a woman's children will have died also increases with the woman's age. Among women age 4549 , the mean number of children ever born (5.7) is almost one child greater than the mean number of surviving children.

### 4.5 Birth Intervals

A birth interval is the period between two successive live births. Research has shown that children born soon after a previous birth (i.e., within 24 months) are at greater risk of illness and death than those born after a longer interval. In addition, short birth intervals may have consequences for other children in the family. The occurrence of closely spaced births gives the mother insufficient time to restore her health, which may limit her ability to take care of her children. The duration of breastfeeding for the older child may also be shortened if the mother becomes pregnant.

Table 4.7 shows the percent distribution of second order and higher (non-first) births in the five years preceding the survey by length of the previous birth interval. Birth intervals are relatively long, with about three-quarters of all non-first births occurring at least two years after the previous birth. Forty-six percent of births took place at least three years after a prior birth. The median interval is 34 months, which is slightly longer than the median interval at the 1995 EDHS (32 months). Although the majority of non-first births are appropriately spaced, 24 percent were born too soon after a prior birth, i.e., within 24 months of a previous birth.

| Table 4.7 Birth intervals |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of births in the five years preceding the survey by number of months since previous birth, according to selected demographic and socioeconomic characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |
| Characteristic | Number of months since previous birth |  |  |  |  | Total | Number of births | Median number of months since previous birth |
|  | 7-17 | 18-23 | 24-35 | 36-47 | 48+ |  |  |  |
| Age of mother |  |  |  |  |  |  |  |  |
| 15-19 | 39.8 | 22.7 | 28.2 | 6.3 | 3.0 | 100.0 | 65 | 20.6 |
| 20-29 | 14.2 | 17.3 | 36.9 | 18.3 | 13.2 | 100.0 | 3,779 | 29.1 |
| 30-39 | 8.9 | 9.1 | 23.9 | 19.1 | 39.0 | 100.0 | 3,742 | 40.1 |
| 40-49 | 5.3 | 7.1 | 18.5 | 12.4 | 56.7 | 100.0 | 654 | 54.3 |
| Birth order |  |  |  |  |  |  |  |  |
| 2-3 | 13.3 | 14.0 | 31.2 | 18.2 | 23.3 | 100.0 | 4,545 | 32.3 |
| 4-6 | 8.3 | 11.4 | 26.8 | 18.3 | 35.4 | 100.0 | 2,682 | 37.8 |
| $7+$ | 10.5 | 11.2 | 29.1 | 17.1 | 32.1 | 100.0 | 1,013 | 35.3 |
| Sex of prior birth |  |  |  |  |  |  |  |  |
| Male | 10.3 | 11.4 | 28.4 | 18.7 | 31.2 | 100.0 | 4,155 | 35.9 |
| Female | 12.3 | 14.3 | 30.6 | 17.5 | 25.4 | 100.0 | 4,085 | 32.8 |
| Survival of prior birth |  |  |  |  |  |  |  |  |
| Living | 10.0 | 12.5 | 30.0 | 18.5 | 29.0 | 100.0 | 7,690 | 34.8 |
| Dead | 29.4 | 16.9 | 23.0 | 11.9 | 18.7 | 100.0 | 550 | 25.1 |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 10.7 | 10.7 | 24.9 | 19.3 | 34.3 | 100.0 | 3,008 | 37.5 |
| Rural | 11.6 | 14.0 | 32.1 | 17.4 | 24.8 | 100.0 | 5,232 | 32.5 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 11.5 | 10.6 | 23.2 | 19.1 | 35.6 | 100.0 | 1,222 | 38.2 |
| Lower Egypt | 10.4 | 11.7 | 29.5 | 18.6 | 29.8 | 100.0 | 3,233 | 35.4 |
| Urban | 9.2 | 9.2 | 24.4 | 21.9 | 35.4 | 100.0 | 809 | 39.3 |
| Rural | 10.7 | 12.5 | 31.2 | 17.5 | 28.0 | 100.0 | 2,423 | 33.9 |
| Upper Egypt | 11.9 | 14.6 | 31.5 | 17.3 | 24.6 | 100.0 | 3,642 | 32.4 |
| Urban | 10.7 | 12.4 | 27.3 | 17.5 | 32.1 | 100.0 | 898 | 35.7 |
| Rural | 12.3 | 15.3 | 32.9 | 17.3 | 22.2 | 100.0 | 2,744 | 31.5 |
| Frontier Governorates | 13.5 | 13.3 | 31.6 | 17.4 | 24.2 | 100.0 | 143 | 32.6 |
| Education |  |  |  |  |  |  |  |  |
| No education | 11.6 | 13.8 | 31.1 | 17.2 | 26.2 | 100.0 | 3,741 | 33.1 |
| Primary incomplete | 10.0 | 10.4 | 28.4 | 17.2 | 33.9 | 100.0 | 1,065 | 36.6 |
| Primary complete/ some secondary | 11.0 | 12.6 | 31.2 | 17.8 | 27.5 | 100.0 | 1,018 | 33.7 |
| Secondary complete/higher | 11.5 | 12.4 | 26.8 | 19.9 | 29.4 | 100.0 | 2,416 | 35.7 |
| Work status |  |  |  |  |  |  |  |  |
| Working for cash | 9.4 | 9.8 | 22.8 | 17.3 | 40.7 | 100.0 | 949 | 40.2 |
| Not working for cash | 11.5 | 13.2 | 30.4 | 18.2 | 26.7 | 100.0 | 7,291 | 33.6 |
| Total | 11.3 | 12.8 | 29.5 | 18.1 | 28.3 | 100.0 | 8,240 | 34.3 |

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

Younger women have shorter birth intervals than older women. The median interval varies from 21 months among the small number of births to women age 15-19 to 40 months among births to women age 30-39. Birth intervals do not vary as much with the child's birth order or the sex of the prior birth. However, birth intervals are markedly different depending on the survival status of the prior birth; the average interval is 10 months longer in cases where the prior birth is alive than when that child has died ( 35 months and 25 months, respectively).

As Table 4.7 shows, the median birth interval in urban areas is 38 months, compared with 33 months in rural areas. Birth intervals are longer in urban Lower Egypt and the Urban Governorates ( 39 months and 38 months, respectively) than in urban upper Egypt ( 36 months). In rural areas, the median birth interval is slightly longer in Lower Egypt (34 months) than in Upper Egypt (32 months).

No clear association is observed between the woman's educational level and the average birth interval. However, intervals are longer for births to women who are working for cash than for births to other women ( 40 months and 34 months, respectively).

### 4.6 Age at First Birth

The age at which childbearing begins has important demographic consequences for society as a whole as well as for the health and welfare of mother and child. In many countries, postponement of first births has contributed greatly to overall fertility decline.

Table 4.8 presents the distribution of women by age at first birth, according to their current age. For women under age 25 the median age at first birth is not shown because less than 50 percent of women in those ages had given birth at the time of the survey.

The results in Table 4.8 suggest that there has been a steady rise in the age at first birth among Egyptian women. Women in younger cohorts are much less likely than older women to have given birth to their first child while they were in their teens. For example, among women age 45-49, 41 percent had become a mother before age 20, while only 28 percent of women age $25-29$ had given birth to their first child before age 20. Overall, Table 4.8 shows that the median age at first birth ranges from a low of 21 years among women age 45-49 to 22.6 years among women age 2529. These cohort changes parallel increases in the median age at first marriage that took place during the same period (see Chapter 8).

Table 4.8 Age at first birth
Percent distribution of women 15-49 by age at first birth, according to current age, Egypt 2000

| Current age | Women with no births | Age at first birth |  |  |  |  |  | Total | Number of women | Median age at first birth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $<15$ | 15-17 | 18-19 | 20-21 | 22-24 | $25+$ |  |  |  |
| 15-19 | 94.2 | 0.2 | 3.1 | 2.4 | - | - | - | 100.0 | 5,161 | a |
| 20-24 | 56.7 | 1.0 | 8.5 | 14.5 | 12.6 | 6.6 | - | 100.0 | 4,126 | a |
| 25-29 | 22.8 | 2.3 | 11.6 | 13.9 | 17.7 | 21.7 | 9.8 | 100.0 | 3,399 | 22.6 |
| 30-34 | 9.8 | 2.7 | 16.6 | 16.1 | 17.6 | 19.4 | 17.8 | 100.0 | 2,878 | 21.7 |
| 35-39 | 6.3 | 3.0 | 17.1 | 18.6 | 17.1 | 19.2 | 18.8 | 100.0 | 2,756 | 21.3 |
| 40-44 | 5.3 | 3.0 | 18.4 | 17.2 | 17.9 | 18.1 | 20.2 | 100.0 | 2,222 | 21.3 |
| 45-49 | 4.8 | 4.8 | 19.0 | 17.1 | 16.8 | 18.4 | 19.2 | 100.0 | 2,343 | 21.0 |

[^4]Table 4.9 presents trends in the median age at first birth across age cohorts for key subgroups. The measures are presented for women age 25-49 years to ensure that half of the women have already had a birth. Overall, the median age at first birth is 21.6 years for women $25-$ 49. However, there are wide differences in the age at which women first gave birth among the various subgroups. Urban women started childbearing nearly three years later than their rural counterparts. On average, women in rural Upper Egypt had their first birth one year earlier than women in rural Lower Egypt and about four years earlier than women in the Urban Governorates. Looking at the patterns by education within age groups, highly educated women had their first birth about five years later than women with less than a primary education. There is a difference of about four years in the median age at first birth between women who work for cash and other women.

## Table 4.9 Median age at first birth

Median age at first birth among women age 25-49 years, by current age and selected background characteristics, Egypt 2000

| Background characteristic | Current age |  |  |  |  | Ages$25-49$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 23.9 | 23.3 | 23.2 | 22.5 | 22.2 | 23.1 |
| Rural | 21.4 | 20.3 | 20.1 | 20.2 | 20.0 | 20.4 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 24.6 | 23.9 | 23.5 | 23.3 | 22.6 | 23.6 |
| Lower Egypt | 22.4 | 21.5 | 21.1 | 20.9 | 20.6 | 21.4 |
| Urban | 23.2 | 23.2 | 23.2 | 21.5 | 22.1 | 22.8 |
| Rural | 22.0 | 20.9 | 20.4 | 20.5 | 20.2 | 20.9 |
| Upper Egypt | 21.6 | 20.5 | 20.3 | 20.6 | 20.4 | 20.7 |
| Urban | 23.8 | 22.6 | 22.8 | 22.2 | 21.7 | 22.7 |
| Rural | 20.5 | 19.3 | 19.5 | 19.8 | 19.7 | 19.8 |
| Frontier Governorates | 22.5 | 22.8 | 21.6 | 21.8 | 19.9 | 21.9 |
| Education |  |  |  |  |  |  |
| No education | 20.3 | 19.3 | 19.6 | 19.8 | 20.0 | 19.8 |
| Primary incomplete | 20.6 | 20.4 | 19.9 | 20.9 | 20.4 | 20.4 |
| Primary complete/ some secondary | 21.5 | 20.7 | 21.3 | 21.2 | 21.3 | 21.3 |
| Secondary complete /higher | 24.5 | 24.4 | 24.9 | 26.0 | 25.9 | 24.8 |
| Work status |  |  |  |  |  |  |
| Working for cash | a | 24.7 | 24.1 | 24.8 | 25.2 | 24.9 |
| Not working for cash | 21.9 | 21.1 | 20.4 | 20.6 | 20.5 | 21.0 |
| Total | 22.6 | 21.7 | 21.3 | 21.3 | 21.0 | 21.6 |

Note: Medians for the 15-19 cohort and the 20-24 cohort could not be determined because half of the women have not yet had a birth.
${ }^{\text {a }}$ Medians were not calculated for this cohort because less than 50 percent of women in the age group $x$ to $x+4$ have had a birth by age $x$.

### 4.7 Teenage Pregnancy and Motherhood

Teenage fertility is a major health concern because teenage mothers and their children are at high risk of illness and death. Childbearing during the teenage years also frequently has adverse social consequences, particularly on female educational attainment since women who become mothers in their teens are more likely to curtail education.

Using information from the 2000 EDHS, Table 4.10 shows the percentage of women age 1519 who are mothers or who are pregnant with their first child. The overall level of teenage childbearing is 9 percent, of which 6 percent already have given birth and 3 percent are pregnant with their first child. This percentage is slightly lower than that recorded in the 1995 EDHS when the proportion of teenagers who had begun childbearing was 10 percent.

| Table 4.10 Teenage pregnancy and motherhood |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of women 15-19 who are mothers or pregnant with their first child, by selected background characteristics, Egypt 2000 |  |  |  |  |
|  | Percentage who are: |  | Percentage who have begun childbearing | Number of women |
| Background characteristic | Mothers | Pregnant with first child |  |  |
| Age |  |  |  |  |
| 15 | 0.3 | 0.3 | 0.6 | 1,058 |
| 16 | 1.5 | 1.2 | 2.7 | 1,045 |
| 17 | 3.4 | 3.9 | 7.3 | 970 |
| 18 | 8.4 | 3.9 | 12.3 | 1,135 |
| 19 | 16.1 | 4.3 | 20.4 | 953 |
| Urban-rural residence |  |  |  |  |
| Urban | 3.9 | 1.5 | 5.3 | 2,198 |
| Rural | 7.3 | 3.6 | 10.9 | 2,962 |
| Place of residence |  |  |  |  |
| Urban Governorates | 3.5 | 1.1 | 4.6 | 928 |
| Lower Egypt | 5.2 | 3.0 | 8.3 | 2,270 |
| Urban | 3.8 | 1.8 | 5.5 | 632 |
| Rural | 5.8 | 3.5 | 9.3 | 1,637 |
| Upper Egypt | 7.8 | 3.1 | 10.8 | 1,897 |
| Urban | 4.6 | 1.6 | 6.2 | 596 |
| Rural | 9.2 | 3.8 | 13.0 | 1,295 |
| Frontier Governorates | 2.6 | 2.3 | 4.9 | 75 |
| Education |  |  |  |  |
| No education | 11.7 | 5.3 | 16.9 | 1,018 |
| Primary incomplete | 8.8 | 7.5 | 16.3 | 379 |
| Primary complete/ some secondary | 4.1 | 0.8 | 4.9 | 2,508 |
| Secondary complete/higher | 3.6 | 2.9 | 6.5 | 1,271 |
| Work status |  |  |  |  |
| Working for cash | 4.9 | 0.4 | 5.3 | 76 |
| Not working for cash | 5.8 | 2.7 | 8.6 | 5,083 |
| Total | 5.8 | 2.7 | 8.5 | 5,161 |

Table 4.10 shows that the proportion of women who have begun childbearing rises rapidly throughout the teenage years, from 1 percent among 15 -year-olds to 7 percent among 17-year-olds, 12 percent among 18 -year-olds, and 20 percent among 19 -year-olds. There are significant residential differences in the level of teenage childbearing. In rural areas, the level of teenage fertility ( 11 percent) is almost twice the level in urban areas ( 5 percent). Upper Egypt has the highest level of teenage childbearing, especially in the rural areas (13 percent), while the Urban Governorates have the lowest (5 percent).

The level of teenage fertility is also strongly associated with a woman's educational level and work status. The proportion of women age 15-19 who are pregnant or who have already given birth decreases from about 17 percent among women with less than a primary education to 7 percent among women with at least a secondary education. The small group of teenagers who are working for cash are less likely to have begun childbearing than other teenagers.

The Egyptian family planning program has a strong education and communication program spearheaded by the State Information Service. Education and communication efforts are aimed at improving family planning awareness nationwide. The program employs a variety of channels to promote family planning, including extensive use of mass media channels especially television.

This chapter presents results from the 2000 EDHS that can be used in assessing the coverage of current education and communication campaigns and planning for future interventions. Data from the 2000 EDHS on knowledge of methods and on the channels through which Egyptian women receive information about family planning methods are presented first in the chapter. Then the chapter looks at the information obtained in the survey on attitudes toward family planning use, the level of ever use of family planning, and the circumstances surrounding the first use of family planning.

### 5.1 Knowledge of Family Planning Methods

Awareness of family planning methods is crucial in decisions on whether to use a contraceptive method and which method to use. One of the main objectives of the 2000 EDHS was to determine the level of knowledge of contraceptive methods. Contraception knowledge was assessed as follows:

- Respondents were first asked an open-ended question about the contraceptive methods about which they had heard. All methods named in response to this question were recorded as recognized.
- When a respondent failed to mention any of the methods listed in the questionnaire, the interviewer would describe the method and ask whether the respondent had heard about it. Methods recognized by the respondent after the description was read were also recorded as known.

Information on knowledge of specific methods was collected in the 2000 EDHS for eight modern methods (the pill, IUD, injectables, Norplant, vaginal methods i.e., foam, jelly, or diaphragm, condoms, female sterilization, and male sterilization) and three traditional methods (periodic abstinence, withdrawal, and prolonged breastfeeding). In addition, provision was made in the questionnaire to record other methods that respondents mentioned spontaneously.

No questions were asked to elicit information on depth of knowledge of these methods (e.g., on the respondent's understanding of how to use a specific method). Therefore, in the analysis that follows, knowledge of a family planning method is defined simply as having heard of a method.

## Level of Knowledge

The results in Table 5.1 show that knowledge of family planning methods is universal among Egyptian women. Almost all currently married women know about the pill, IUD, and injectables. More than 80 percent of women know about Norplant and 75 percent about female sterilization. Two in three women know about the condom. Other male methods are less widely recognized; only three in ten women know about withdrawal and 16 percent about male sterilization. Prolonged breastfeeding is the most commonly recognized traditional method (68 percent).

A comparison of the levels of knowledge of specific methods in the 2000 EDHS with levels observed in earlier EDHS surveys indicates that there has been a substantial increase in the recognition of injectables and Norplant (Figure 5.1). The proportion of currently married women who knew about injectables rose from 82 percent in 1992 to 99 percent in 2000. The increase in the level of knowledge of Norplant was even more striking, from less than half of the women in the 1992 and 1995 surveys to more than 80 percent in the 2000 EDHS.

Table 5.1 Knowledge of family planning methods

Percentage of currently married women 15-49 who know about specific family planning methods, Egypt 2000

| Method | Knows <br> method |
| :--- | :---: |
| Any method | 100.0 |
| Any modern method | 100.0 |
| Pill | 99.9 |
| IUD | 99.9 |
| Injectables | 99.4 |
| Diaphragm/foam/jelly | 58.0 |
| Condom | 68.1 |
| Female sterilization | 74.9 |
| Male sterilization | 15.7 |
| Norplant | 83.1 |
| Any traditional method | 77.8 |
| Periodic abstinence | 38.0 |
| Withdrawal | 31.3 |
| Prolonged breastfeeding | 68.2 |
| Other | 1.5 |
| Number of women | 14,382 |



## Differentials in Knowledge

Table 5.2 shows the percentages of currently married women who know any method of contraception and any modern method. The table also presents the mean number of methods known for all methods and for modern methods. Knowledge of any method and of any modern method is almost universal (i.e., almost 100 percent) in all subgroups.

The mean number of methods known is also high in most subgroups, with currently married women knowing about an average of 7.4 methods. The greatest variation in the number of methods known is observed across educational groups, with the mean number of methods known ranging from 6.5 methods among women with no education to 8.7 methods among women with secondary or higher education. Looking at the variation by urban-rural residence, urban women know about an average of 8.1 methods, while the average for rural women is 6.8 methods. By place of residence, the mean number of methods known varies from 6.4 methods in rural Upper Egypt to 8.2 methods in urban Lower Egypt.

| Percentage of currently married women who know any family planning method and any modern method and the mean number of methods known, by selected background characteristics, Egypt 2000 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Know any method | Mean number of methods known | Know any modern method | Mean number of modern methods known | Number of women |
| Age |  |  |  |  |  |
| 15-19 | 99.6 | 6.3 | 99.6 | 5.3 | 599 |
| 20-24 | 100.0 | 7.1 | 100.0 | 5.8 | 2,187 |
| 25-29 | 100.0 | 7.5 | 100.0 | 6.1 | 2,776 |
| 30-34 | 100.0 | 7.6 | 100.0 | 6.2 | 2,568 |
| 35-39 | 100.0 | 7.5 | 100.0 | 6.0 | 2,472 |
| 40-44 | 100.0 | 7.6 | 100.0 | 6.1 | 1,921 |
| 45-49 | 99.9 | 7.2 | 99.9 | 5.9 | 1,860 |
| Urban-rural residence |  |  |  |  |  |
| Urban | 100.0 | 8.1 | 100.0 | 6.4 | 6,328 |
| Rural | 100.0 | 6.8 | 100.0 | 5.7 | 8,054 |
| Place of residence |  |  |  |  |  |
| Urban Governorates | 100.0 | 8.1 | 100.0 | 6.4 | 2,749 |
| Lower Egypt | 100.0 | 7.4 | 100.0 | 6.1 | 6,324 |
| Urban | 100.0 | 8.2 | 100.0 | 6.6 | 1,799 |
| Rural | 100.0 | 7.1 | 100.0 | 6.0 | 4,524 |
| Upper Egypt | 99.9 | 6.9 | 99.9 | 5.6 | 5,113 |
| Urban | 99.9 | 7.9 | 99.9 | 6.3 | 1,662 |
| Rural | 99.9 | 6.4 | 99.9 | 5.3 | 3,451 |
| Frontier Governorates | 99.5 | 6.8 | 99.4 | 5.6 | 196 |
| Education |  |  |  |  |  |
| No education | 99.9 | 6.5 | 99.9 | 5.5 | 6,074 |
| Primary incomplete | 100.0 | 7.0 | 100.0 | 5.8 | 1,867 |
| Primary complete/ some secondary | 99.9 | 7.5 | 99.9 | 6.1 | 1,867 |
| Secondary complete/higher | 100.0 | 8.7 | 100.0 | 6.7 | 4,573 |
| Work status |  |  |  |  |  |
| Working for cash | 100.0 | 8.8 | 100.0 | 6.8 | 1,990 |
| Not working for cash | 100.0 | 7.2 | 100.0 | 5.9 | 12,392 |
| Total | 100.0 | 7.4 | 100.0 | 6.0 | 14,382 |

### 5.2 Knowledge of a Source for Family Planning Methods

Table 5.3 presents information from the 2000 EDHS on whether women knew a source where they could get a family planning method. To assess this knowledge, women using a method at the time of the survey were asked where they had obtained the method (or been given information on the method for those relying on traditional methods) and nonusers were asked about where to go to obtain a method. Table 5.3 shows that more than eight in ten Egyptian women are able to name specific a place where they can obtain a family planning method. Regarding differentials in source knowledge, the level is lowest among women 45-49 (72 percent) and highest among women living in urban Lower Egypt (90 percent).

| Table 5.3 Knowledge of source for family planning services |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of currently married women who know a source for family planning (FP) services, by selected background characteristics, 2000 EDHS and 1995 EDHS |  |  |  |  |
|  | 2000 EDHS |  | 1995 EDHS |  |
| Background characteristic | Knows source | $\underset{\text { of }}{\text { Number }}$ women | Knows source | Number of women |
| Age |  |  |  |  |
| 15-19 | 73.6 | 599 | 61.6 | 663 |
| 20-24 | 84.7 | 2,187 | 76.7 | 2,083 |
| 25-29 | 89.9 | 2,776 | 82.0 | 2,677 |
| 30-34 | 89.8 | 2,568 | 83.5 | 2,466 |
| 35-39 | 89.8 | 2,472 | 81.8 | 2,392 |
| 40-44 | 86.0 | 1,921 | 78.4 | 1,816 |
| 45-49 | 71.7 | 1,860 | 67.3 | 1,614 |
| Urban-rural residence |  |  |  |  |
| Urban | 86.0 | 6,328 | 82.6 | 6,372 |
| Rural | 85.2 | 8,054 | 74.5 | 7,339 |
| Place of residence |  |  |  |  |
| Urban Governorates | 82.5 | 2,749 | 81.3 | 3,122 |
| Lower Egypt | 89.8 | 6,324 | 84.1 | 5,736 |
| Urban | 90.2 | 1,799 | 86.4 | 1,686 |
| Rural | 89.7 | 4,524 | 83.1 | 4,050 |
| Upper Egypt | 82.1 | 5,113 | 69.1 | 4,725 |
| Urban | 87.4 | 1,662 | 80.7 | 1,483 |
| Rural | 79.6 | 3,451 | 63.8 | 3,241 |
| Frontier Governorates | 77.8 | 196 | 81.5 | 128 |
| Education |  |  |  |  |
| No education | 81.9 | 6,074 | 70.2 | 5,839 |
| Primary incomplete | 87.3 | 1,867 | 81.3 | 2,683 |
| Primary complete/ some secondary | 86.3 | 1,867 | 83.0 | 1,806 |
| Secondary complete/higher | 89.3 | 4,573 | 87.2 | 3,383 |
| Work status |  |  |  |  |
| Working for cash | 89.0 | 1,990 | u | u |
| Not working for cash | 85.0 | 12,392 | u | u |
| Total | 85.5 | 14,382 | 78.2 | 13,710 |
| $\mathrm{u}=$ Unknown (not available) |  |  |  |  |

Table 5.3 also looks at trends in source knowledge between the 1995 and 2000 EDHS surveys. ${ }^{1}$ An Egyptian woman's ability to identify a place where family planning methods were available increased from 78 percent at the time of the 1995 EDHS to 86 percent in 2000. Increases in the level of source knowledge between the two rounds of the DHS were greatest among married women age $15-19$, women with no education, and women living in rural areas, especially rural Upper Egypt.

Among women living in rural Upper Egypt, there was 16 percentage point increase in the proportions of women able to identify a place where they could obtain a family planning method while the increases in the other groups were somewhat smaller.

### 5.3 Exposure to Family Planning Information

By the mid-1980s, a strong mass media public information and education program conducted by the State Information Service was one of the main components of the Egyptian family planning program. After focusing initially on general "population awareness" messages, the education and communication effort has increasingly moved to providing more specific advice and information on family planning. The 2000 EDHS obtained information on the types of media through which women receive family planning information. This information may be useful in guiding future information and education efforts in Egypt's family planning program.

## Exposure through Radio and Television

Table 5.4 presents the percentage of ever-married women who heard messages about family planning on broadcast media (television or radio). The 2000 EDHS collected these data by asking respondents whether they had heard family planning messages on radio or television during the few months prior to the interview. The results suggest that more than nine in ten women have recently heard a message on either the radio or television.

Television is the principal source of family planning information. Ninety-six percent of women have seen a recent family planning message on television, compared with 65 percent who have listened to a message on the radio. About two-thirds of women heard a message on both television and radio in the few months prior to the EDHS interview.

[^5]| Table 5.4 Exposure to family planning messages on radio and television |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women by whether they have heard a family planning message on radio or on television in the last few months, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |
| Heard family planning message on radio or television |  |  |  |  |  |  |
| Background characteristic | Neither | Radio only | Television only | Both | Total | of women |
| Age |  |  |  |  |  |  |
| 15-19 | 2.7 | 0.4 | 36.0 | 60.9 | 100.0 | 615 |
| 20-24 | 3.3 | 0.3 | 29.3 | 67.0 | 100.0 | 2,244 |
| 25-29 | 3.0 | 0.5 | 29.3 | 67.1 | 100.0 | 2,850 |
| 30-34 | 3.6 | 0.6 | 30.7 | 65.1 | 100.0 | 2,701 |
| 35-39 | 4.7 | 0.5 | 29.6 | 65.3 | 100.0 | 2,674 |
| 40-44 | 4.5 | 0.5 | 33.2 | 61.9 | 100.0 | 2,182 |
| 45-49 | 4.9 | 0.4 | 35.8 | 58.9 | 100.0 | 2,307 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 1.6 | 0.3 | 28.8 | 69.2 | 100.0 | 6,871 |
| Rural | 5.7 | 0.6 | 33.4 | 60.3 | 100.0 | 8,702 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 1.9 | 0.3 | 36.4 | 61.5 | 100.0 | 2,992 |
| Lower Egypt | 2.3 | 0.4 | 27.1 | 70.3 | 100.0 | 6,826 |
| Urban | 0.8 | 0.4 | 20.8 | 78.0 | 100.0 | 1,946 |
| Rural | 2.9 | 0.4 | 29.6 | 67.2 | 100.0 | 4,880 |
| Upper Egypt | 6.8 | 0.4 | 33.8 | 59.1 | 100.0 | 5,546 |
| Urban | 2.2 | 0.2 | 23.9 | 73.7 | 100.0 | 1,808 |
| Rural | 9.0 | 0.5 | 38.6 | 52.0 | 100.0 | 3,738 |
| Frontier Governorates | 12.1 | 7.1 | 36.6 | 44.2 | 100.0 | 209 |
| Education |  |  |  |  |  |  |
| No education | 6.9 | 0.8 | 39.5 | 52.8 | 100.0 | 6,734 |
| Primary incomplete | 3.4 | 0.4 | 33.8 | 62.5 | 100.0 | 2,060 |
| Primary complete/ some secondary | 1.7 | 0.1 | 28.5 | 69.7 | 100.0 |  |
| Secondary complete/higher | 0.9 | 0.2 | 20.0 | 78.8 | 100.0 | 4,753 |
| Work status |  |  |  |  |  |  |
| Working for cash | 1.8 | 0.2 | 23.0 | 75.0 | 100.0 | 2,266 |
| Not working for cash | 4.3 | 0.5 | 32.8 | 62.4 | 100.0 | 13,307 |
| Total | 3.9 | 0.5 | 31.4 | 64.2 | 100.0 | 15,573 |

Figure 5.2 looks at the trend in the proportion of ever-married women exposed to broadcast messages about family planning for Egypt as a whole and for rural Upper Egypt. Overall, the proportion of ever-married women who had heard a family planning message on either television or radio increased from 83 percent in the 1995 EDHS to 96 percent at the time of the 2000 survey. The increased exposure to broadcast messages has been especially evident among women living in rural Upper Egypt. According to the 2000 EDHS, 90 percent of women in rural Upper Egypt had heard or seen a recent message about family planning, compared with 70 percent who reported seeing or listening to a broadcast message in the 1995 EDHS.


## Exposure through Print Media and Community Meetings

The 2000 EDHS also obtained information on recent exposure to messages about family planning disseminated through various print media (newspapers, posters, and leaflets/brochures) or at community meetings. The results in Table 5.5 indicate that print media and community meetings reach far fewer women than messages broadcast on television or the radio. Overall, about a third of Egyptian women receive information about family planning through any single print media source. Thirty-two percent of EDHS respondents had seen a family planning billboard or signboard, 30 percent had read about family planning in a newspaper or magazine, 30 percent had seen a family planning poster, and 27 percent had read a leaflet or brochure about family planning.

As expected, print media coverage is lowest among groups where literacy levels are lowest. For example, only 16 percent of women in rural Upper Egypt, where educational levels are low, had read an article on family planning in a newspaper or magazine in the few months before the EDHS survey, compared with 48 percent of women in urban Lower Egypt. Print media messages reach a majority of women only in the case of women with a secondary or higher education or women working for cash.

Table 5.5 also shows that a very small proportion of women (4 percent) obtain information on family planning at community meetings. Differences in the proportions who had heard about family planning at a community meeting are minor. For example, the percentage of respondents who had received family planning information at a community meeting in the few months prior to the EDHS ranged from 2 percent in rural Lower Egypt to 7 percent in urban Upper Egypt.

| Percentage of ever-married women who received a message about family planning through various print media sources or at a community meeting in the last few months, by selected background characteristics, Egypt 2000 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Newspaper/ magazine | Poster | Leaflet/ brochure | Billboards/ signboards | Community meeting | Number of women |
| Age |  |  |  |  |  |  |
| 15-19 | 26.7 | 29.9 | 23.3 | 28.1 | 1.6 | 615 |
| 20-24 | 34.4 | 35.9 | 32.8 | 38.2 | 3.6 | 2,244 |
| 25-29 | 36.0 | 35.7 | 32.6 | 38.8 | 3.7 | 2,850 |
| 30-34 | 34.6 | 33.6 | 30.0 | 35.9 | 3.8 | 2,701 |
| 35-39 | 28.8 | 28.8 | 26.4 | 31.4 | 4.0 | 2,674 |
| 40-44 | 25.4 | 26.2 | 22.4 | 26.9 | 3.7 | 2,182 |
| 45-49 | 19.9 | 20.9 | 17.8 | 21.5 | 2.4 | 2,307 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 41.9 | 36.7 | 32.5 | 38.0 | 4.6 | 6,871 |
| Rural | 20.7 | 25.5 | 22.9 | 27.8 | 2.6 | 8,702 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 39.5 | 27.3 | 24.0 | 33.1 | 3.5 | 2,992 |
| Lower Egypt | 31.5 | 33.7 | 33.1 | 37.1 | 2.6 | 6,826 |
| Urban | 48.1 | 43.7 | 43.4 | 44.5 | 3.7 | 1,946 |
| Rural | 24.8 | 29.8 | 29.1 | 34.2 | 2.2 | 4,880 |
| Upper Egypt | 23.4 | 28.0 | 21.8 | 26.0 | 4.4 | 5,546 |
| Urban | 39.7 | 44.4 | 35.6 | 39.1 | 7.3 | 1,808 |
| Rural | 15.5 | 20.1 | 15.1 | 19.6 | 3.0 | 3,738 |
| Frontier Governorates | 25.7 | 31.0 | 16.1 | 29.4 | 5.9 | 209 |
| Education |  |  |  |  |  |  |
| No education | 7.2 | 13.9 | 12.5 | 17.7 | 1.2 | 6,734 |
| Primary incomplete | 13.4 | 19.5 | 17.6 | 22.3 | 1.7 | 2,060 |
| Primary complete/ some secondary | 32.4 | 32.1 | 27.6 | 34.5 | 2.6 | 2,026 |
| Secondary complete/higher | r 68.7 | 57.9 | 51.8 | 56.4 | 7.8 | 4,753 |
| Work status |  |  |  |  |  |  |
| Working for cash | 61.0 | 51.9 | 47.3 | 52.1 | 10.1 | 2,266 |
| Not working for cash | 24.8 | 26.8 | 23.7 | 28.9 | 2.3 | 13,307 |
| Total | 30.1 | 30.4 | 27.1 | 32.3 | 3.5 | 15,573 |

### 5.4 Interpersonal Communication about Family Planning

Talking about family planning, particularly with a spouse, is not a necessary precondition for adoption of family planning. However, for many women, such communication is an important intermediate step. For users, interpersonal communication may also affect sustained use of contraception, particularly for users who experience problems with their method. To obtain a basic understanding of the extent of interpersonal communication about family planning, currently married respondents were asked whether they had discussed family planning with their husband or with other individuals during the year before the EDHS interview.

## Discussion of Family Planning with the Husband

Figure 5.3 presents the distribution of currently married, non-sterilized women by the number of times they discussed family planning with their husband during the six months before the survey. Overall, the majority ( 62 percent) of women had not discussed family planning with their husband during this period. A little more than a quarter of the women had discussed family planning once or twice with their husband, and around one in ten had talked with their husband about family planning more often.

## Figure 5.3 Recent Discussion of Family Planning with Husband



2000 EDHS

Table 5.6 looks at differentials in the likelihood that couples have discussed family planning. Women age 20-34 are more likely than women in other age groups to discuss family planning with their husband. Looking at the residential differentials, there is almost no difference between urban and rural women in the percentages who discuss family planning with their husband during the year before the survey. Women from urban and rural Upper Egypt are much more likely than those from other areas to have discussed family planning with their husband. This may in part reflect the recent increased use among couples in the region (see Chapter 6). The proportion of couples who had discussed family planning increases directly with the woman's educational level to a high of 45 percent among women who have completed secondary school or higher.

| Table 5.6 Discussion of family planning by couples |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married non-sterilized women by the number of times family planning was discussed with husband in the six months preceding the survey, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |
| Number of times family planning discussed with husband |  |  |  |  |  |
| Background characteristic | Never | Once or twice | More often | Total | of women |
| Age |  |  |  |  |  |
| 15-19 | 62.4 | 30.3 | 7.3 | 100.0 | 597 |
| 20-24 | 51.5 | 36.3 | 12.1 | 100.0 | 2,186 |
| 25-29 | 49.7 | 36.1 | 14.2 | 100.0 | 2,770 |
| 30-34 | 53.1 | 33.6 | 13.3 | 100.0 | 2,539 |
| 35-39 | 65.0 | 24.8 | 10.1 | 100.0 | 2,429 |
| 40-44 | 76.7 | 16.5 | 6.8 | 100.0 | 1,856 |
| 45-49 | 85.0 | 11.0 | 4.0 | 100.0 | 1,795 |
| Urban-rural residence |  |  |  |  |  |
| Urban | 62.8 | 27.1 | 10.1 | 100.0 | 6,232 |
| Rural | 60.9 | 28.3 | 10.8 | 100.0 | 7,939 |
| Place of residence |  |  |  |  |  |
| Urban Governorates | 67.8 | 22.6 | 9.6 | 100.0 | 2,714 |
| Lower Egypt | 61.6 | 29.0 | 9.4 | 100.0 | 6,206 |
| Urban | 59.0 | 31.3 | 9.7 | 100.0 | 1,759 |
| Rural | 62.7 | 28.1 | 9.2 | 100.0 | 4,447 |
| Upper Egypt | 58.7 | 29.2 | 12.1 | 100.0 | 5,058 |
| Urban | 58.9 | 30.3 | 10.8 | 100.0 | 1,643 |
| Rural | 58.6 | 28.7 | 12.7 | 100.0 | 3,415 |
| Frontier Governorates | 60.9 | 22.0 | 17.1 | 100.0 | 192 |
| Education |  |  |  |  |  |
| No education | 66.8 | 23.8 | 9.4 | 100.0 | 5,952 |
| Primary incomplete | 65.2 | 26.5 | 8.3 | 100.0 | 1,830 |
| Primary complete/ some secondary | 59.3 | 28.4 | 12.3 | 100.0 | 1,848 |
| Secondary complete/higher | 54.7 | 33.2 | 12.1 | 100.0 | 4,540 |
| Work status |  |  |  |  |  |
| Working for cash | 61.4 | 27.6 | 11.0 | 100.0 | 1,961 |
| Not working for cash | 61.8 | 27.8 | 10.4 | 100.0 | 12,210 |
| Total | 61.7 | 27.8 | 10.5 | 100.0 | 14,171 |

## Discussion of Family Planning with Persons Other than the Husband

Women were also asked in the 2000 EDHS whether they have discussed family planning with relatives (other than the husband) or friends or neighbors. The results in Table 5.7 suggest that Egyptian women rarely discuss family planning with relatives or friends. Overall, 85 percent of currently married non-sterilized women had not discussed family planning with a relative other than the husband or a friend or neighbor during the six-month period before the survey. The women who reported discussing family planning were slightly more likely to have talked about the subject with friends and neighbors than with relatives other than the husband.

| Table 5.7 Discussion of family planning with persons other than husband |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of currently married non-sterilized women who discussed family planning with persons other than the husband during the six months preceding the survey, by selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |  |
| Background characteristic | No one | Relative |  |  |  |  |  | Friends/ neighbors | Number of women |
|  |  | Any relative | Mother | Mother in-law | Sister | Daughter | Father/ brother |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 85.3 | 9.4 | 2.1 | 6.9 | 0.7 | 0.2 | 0.2 | 7.3 | 597 |
| 20-24 | 81.9 | 10.4 | 2.7 | 5.4 | 3.2 | 0.3 | 0.4 | 10.1 | 2,186 |
| 25-29 | 82.3 | 7.8 | 1.9 | 3.1 | 3.3 | 0.3 | 0.3 | 12.6 | 2,770 |
| 30-34 | 83.9 | 6.3 | 1.3 | 1.8 | 3.1 | 0.5 | 0.3 | 11.9 | 2,539 |
| 35-39 | 86.9 | 4.4 | 0.6 | 0.7 | 2.5 | 0.6 | 0.5 | 9.8 | 2,429 |
| 40-44 | 88.3 | 4.1 | 0.2 | 0.5 | 1.4 | 2.0 | 0.5 | 8.6 | 1,856 |
| 45-49 | 89.1 | 5.0 | 0.1 | 0.1 | 0.7 | 4.2 | 0.2 | 6.9 | 1,795 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |
| Urban | 86.2 | 6.0 | 1.6 | 1.3 | 2.8 | 0.8 | 0.4 | 9.6 | 6,232 |
| Rural | 84.2 | 7.0 | 1.0 | 2.9 | 2.1 | 1.3 | 0.3 | 10.6 | 7,939 |
| Place of residence |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 87.6 | 5.0 | 1.5 | 1.2 | 2.9 | 0.3 | 0.1 | 8.7 | 2,714 |
| Lower Egypt | 87.1 | 5.8 | 1.0 | 2.3 | 1.7 | 1.0 | 0.6 | 8.5 | 6,206 |
| Urban | 86.6 | 6.6 | 1.9 | 1.5 | 2.2 | 1.0 | 1.0 | 8.5 | 1,759 |
| Rural | 87.4 | 5.5 | 0.6 | 2.6 | 1.5 | 1.0 | 0.4 | 8.5 | 4,447 |
| Upper Egypt | 81.6 | 8.2 | 1.4 | 2.8 | 3.0 | 1.5 | 0.1 | 12.7 | 5,058 |
| Urban | 84.3 | 6.5 | 1.3 | 1.4 | 2.9 | 1.1 | 0.2 | 11.7 | 1,643 |
| Rural | 80.3 | 9.0 | 1.5 | 3.4 | 3.0 | 1.7 | 0.1 | 13.1 | 3,415 |
| Frontier Governorates | 75.9 | 12.5 | 1.8 | 2.9 | 4.8 | 3.6 | 0.4 | 14.0 | 192 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 86.1 | 5.5 | 0.6 | 2.0 | 1.6 | 1.6 | 0.3 | 9.7 | 5,952 |
| Primary incomplete | 86.1 | 6.1 | 1.0 | 1.8 | 2.0 | 1.2 | 0.3 | 9.7 | 1,830 |
| Primary complete/ some secondary | 83.5 | 8.0 | 1.6 | 2.9 | 3.1 | 1.0 | 0.4 | 10.6 | 1,848 |
| Comp. second./higher | 84.0 | 7.6 | 2.1 | 2.4 | 3.4 | 0.4 | 0.4 | 10.6 | 4,540 |
| Work status |  |  |  |  |  |  |  |  |  |
| Working for cash | 83.0 | 6.1 | 1.3 | 1.5 | 3.1 | 0.8 | 0.6 | 13.2 | 1,961 |
| Not working for cash | 85.4 | 6.7 | 1.2 | 2.4 | 2.3 | 1.1 | 0.3 | 9.6 | 12,210 |
| Total | 85.1 | 6.6 | 1.2 | 2.2 | 2.4 | 1.1 | 0.4 | 10.1 | 14,171 |

### 5.5 Approval of Family Planning Use

Besides knowledge of methods, a positive attitude toward family planning is a prerequisite to adoption of family planning. Attitudinal data were collected by asking EDHS respondents whether they themselves approved of a couple using family planning and, if they were currently married, what they thought their husband's opinion was on the subject.

Table 5.8 shows the level of approval of the use of family planning among currently married, non-sterilized women by selected background characteristics. The results suggest that almost all Egyptian women approve of a couple using family planning, with only 3 percent expressing disapproval. Regarding couple agreement, most women believe that their husbands share their positive attitude toward family planning use. Overall, 85 percent of the women approve of family planning and believe their husbands also approve. The remaining women are largely divided between those who are uncertain about their husband's attitude ( 7 percent) and those who believe that their husband's attitude is different from their own ( 6 percent). In most of the latter cases, the woman says she approves of family planning but the husband does not.

| Table 5.8 Wives' and husbands' attitudes toward family planning |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married non-sterilized women by wife's attitude toward family planning and wife's perception of her husband's attitude toward family planning, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Woman approves |  | Woman disapproves |  | Both disapprove | Other | Total | Wife approves | Husband Number ap- of proves ${ }^{1}$ women |  |
| Background characteristic | Both approve | Husband disapproves | Husband's attitude unknown | Husband approves | Husband's attitude unknown |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 80.7 | 5.1 | 9.9 | 0.6 | 1.1 | 0.9 | 1.7 | 100.0 | 95.7 | 81.3 | 597 |
| 20-24 | 83.4 | 6.0 | 6.9 | 1.0 | 0.2 | 1.5 | 0.9 | 100.0 | 96.3 | 84.4 | 2,186 |
| 25-29 | 86.7 | 5.2 | 4.1 | 1.6 | 0.3 | 1.1 | 1.1 | 100.0 | 96.0 | 88.3 | 2,770 |
| 30-34 | 87.9 | 4.3 | 4.2 | 1.2 | 0.3 | 1.1 | 0.9 | 100.0 | 96.4 | 89.1 | 2,539 |
| 35-39 | 85.3 | 4.7 | 5.5 | 1.2 | 0.5 | 1.8 | 0.9 | 100.0 | 95.5 | 86.5 | 2,429 |
| 40-44 | 84.4 | 4.6 | 6.9 | 1.1 | 0.6 | 1.6 | 0.8 | 100.0 | 95.9 | 85.5 | 1,856 |
| 45-49 | 80.2 | 3.7 | 8.4 | 1.8 | 1.3 | 2.4 | 2.2 | 100.0 | 92.3 | 82.0 | 1,795 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 89.8 | 3.3 | 4.8 | 0.7 | 0.2 | 0.7 | 0.6 | 100.0 | 97.9 | 90.5 | 6,232 |
| Rural | 80.9 | 6.0 | 6.9 | 1.8 | 0.7 | 2.2 | 1.6 | 100.0 | 93.8 | 82.6 | 7,939 |
| Place of residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 89.0 | 2.9 | 6.6 | 0.4 | 0.2 | 0.5 | 0.5 | 100.0 | 98.4 | 89.3 | 2,714 |
| Lower Egypt | 89.1 | 2.7 | 4.5 | 2.0 | 0.4 | 0.7 | 0.7 | 100.0 | 96.3 | 91.0 | 6,206 |
| Urban | 93.6 | 2.0 | 2.7 | 1.0 | 0.1 | 0.4 | 0.2 | 100.0 | 98.3 | 94.7 | 1,759 |
| Rural | 87.2 | 3.1 | 5.2 | 2.3 | 0.5 | 0.8 | 0.9 | 100.0 | 95.5 | 89.6 | 4,447 |
| Upper Egypt | 77.5 | 8.3 | 7.6 | 0.9 | 0.7 | 3.0 | 1.9 | 100.0 | 93.4 | 78.4 | 5,058 |
| Urban | 87.1 | 5.3 | 4.4 | 0.7 | 0.3 | 1.1 | 1.0 | 100.0 | 96.8 | 87.8 | 1,643 |
| Rural | 72.9 | 9.8 | 9.2 | 1.0 | 0.9 | 3.9 | 2.4 | 100.0 | 91.8 | 73.9 | 3,415 |
| Frontier Governorates | 79.8 | 5.3 | 3.4 | 1.9 | 3.3 | 4.0 | 2.3 | 100.0 | 88.5 | 81.7 | 192 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 78.2 | 6.4 | 8.4 | 1.5 | 1.1 | 2.4 | 1.9 | 100.0 | 93.0 | 79.7 | 5,952 |
| Primary incomplete | 84.7 | 4.8 | 6.3 | 1.4 | 0.3 | 1.4 | 1.0 | 100.0 | 95.9 | 86.1 | 1,830 |
| Primary complete/ some secondary | 87.6 | 4.4 | 5.4 | 1.0 | 0.1 | 1.1 | 0.4 | 100.0 | 97.5 | 88.6 | 1,848 |
| Secondary complete/higher | 92.2 | 2.8 | 2.9 | 1.1 | 0.1 | 0.5 | 0.4 | 100.0 | 98.0 | 93.3 | 4,540 |
| Work status |  |  |  |  |  |  |  |  |  |  |  |
| Working for cash | 91.6 | 2.8 | 3.4 | 1.1 | 0.0 | 0.4 | 0.7 | 100.0 | 97.8 | 92.7 | 1,961 |
| Not working for cash | 83.7 | 5.1 | 6.4 | 1.3 | 0.6 | 1.7 | 1.2 | 100.0 | 95.2 | 85.0 | 12,210 |
| Total | 84.8 | 4.8 | 6.0 | 1.3 | 0.5 | 1.5 | 1.1 | 100.0 | 95.6 | 86.1 | 14,171 |
| ${ }^{1}$ Includes cases in which the wife is unsure about her own attitude, but knows her husband's |  |  |  |  |  |  |  |  |  |  |  |

The likelihood that a woman will report that both she and her husband approve of family planning use is lowest among women living in rural Upper Egypt and among women who never attended school and highest among women with a secondary education and those who work for cash.

### 5.6 Attitude about Timing of Adoption of Contraception

The EDHS included questions about the appropriateness of a couple's use of family planning before the first pregnancy and after the first birth. The results presented in Table 5.9 indicate that most married women ( 85 percent) in Egypt consider it appropriate for a couple to begin using family planning after the first birth. In sharp contrast, only 5 percent regard use before the first pregnancy as appropriate.

Few women in any of the subgroups shown in Table 5.9 consider it appropriate to adopt family planning before the first birth. However, there is some variability across subgroups in the attitude toward family planning use after the first birth. The groups with the highest proportions considering use after the first birth as appropriate include women from the Urban Governorates, women from urban Lower Egypt and women with a secondary or higher education (93 percent in all three groups). The groups with the lowest proportions considering use after the first birth as appropriate are women from rural Upper Egypt, women from the Frontier Governorates and women with no education (69 percent, 79 percent, and 78 percent respectively).

### 5.7 Knowledge of Fertile Period

An elementary understanding of reproductive physiology, particularly knowledge of when in the ovulatory cycle a woman is most likely to become pregnant, may be useful in ensuring success in the use of coitus-related methods such as the condom, vaginal methods and withdrawal. Such knowledge is especially critical for the practice of periodic abstinence.

To investigate women's knowledge about their fertile period, 2000 EDHS respondents were asked whether there are certain days a woman is more likely to become pregnant if she has sexual intercourse. Those who responded affirmatively to that question were asked whether this time is just before the period begins, during the period, right after the period ends, or halfway between two periods.

Table 5.9 Timing of use of family planning by newly married couples

Percentage of ever-married women approving of family planning use who think it is appropriate for a couple to use family planning before the first pregnancy and after the first birth, by selected background characteristics, Egypt 2000

|  | Family planning <br> use appropriate |  |  |
| :--- | :---: | :---: | :---: |
| Background <br> characteristic | Before <br> first <br> pregnancy | After <br> first <br> birth | Number <br> of <br> women |
| Age | 4.1 | 88.8 | 598 |
| $15-19$ | 4.4 | 87.7 | 2,182 |
| $20-24$ | 5.3 | 86.3 | 2,763 |
| $25-29$ | 4.7 | 86.9 | 2,625 |
| $30-34$ | 5.6 | 84.4 | 2,575 |
| $35-39$ | 4.2 | 80.2 | 2,108 |
| $40-44$ | 4.0 | 80.4 | 2,174 |
| $45-49$ |  |  |  |

Urban-rural residence

| Urban | 4.9 | 90.1 | 6,749 |
| :--- | :--- | :--- | :--- |
| Rural | 4.5 | 80.3 | 8,275 |

Place of residence

| Urban Governorates | 3.5 | 92.9 | 2,956 |
| :--- | :--- | :--- | ---: |
| Lower Egypt | 5.9 | 90.0 | 6,619 |
| Urban | 7.0 | 93.3 | 1,915 |
| Rural | 5.5 | 88.6 | 4,703 |
| Upper Egypt | 3.9 | 73.6 | 5,261 |
| Urban | 5.1 | 82.0 | 1,759 |
| Rural | 3.3 | 69.3 | 3,501 |
| Frontier Governorates | 4.3 | 79.2 | 189 |

Education

| No education |  |  |  |
| :---: | :---: | :---: | :---: |
| Primary incomplete | 3.7 | 77.6 | 6,373 |
| Primary complete/ some secondary | 4.0 | 84.6 | 1,994 |
| Secondary complete/higher | 4.8 | 88.0 | 1,980 |
|  | 6.4 | 93.0 | 4,677 |
| Work status |  |  |  |
| Working for cash | 6.4 | 90.4 | 2,225 |
| Not working for cash | 4.4 | 83.7 | 12,799 |


| Respondent approval of <br> family planning | 4.8 | 85.5 | 14,818 |
| :--- | :--- | ---: | ---: |
| Approves |  |  |  |
| Doesn't know if approves | 1.3 | 24.5 | 206 |
| Total | 4.7 | 84.7 | 15,024 |

Table 5.10 shows that understanding of the ovulatory cycle is limited among Egyptian women. Only 16 percent of EDHS respondents knew that a woman has a greater probability of becoming pregnant if she has sexual intercourse halfway between two periods. Sixty percent of respondents either were unable to say when a woman is most at risk of pregnancy or believed that a woman's risk does not vary.

### 5.8 Ever Use of Family Planning

The 2000 EDHS collected data on the level of ever use of family planning methods. These data were obtained by asking respondents separately about whether they had ever used each of the family planning methods that they knew. The following sections explore the level of ever use

| Table 5.10 Knowledge of fertile period |  |
| :--- | ---: |
| Percent distribution of ever-married |  |
| women 15-49 by knowledge of the fertile |  |
| period during the ovulatory cycle, Egypt |  |
| 2000 |  |
|  |  |
|  | Ever- |
| Perceived | married |
| fertile period | women |
| Before period begins | 21.7 |
| During period | 1.4 |
| After period ends | 0.3 |
| Middle of the cycle | 16.4 |
| At any time/don't know | 60.2 |
| Missing | 0.0 |
| Total | 100.0 |
| Number of women | 15,573 | of family planning methods among Egyptian women.

## Levels of Ever Use

Table 5.11 shows the percentages of ever-married women and of currently married women who have ever used a family planning method according to the woman's current age. Overall, the results indicate that 75 percent of ever-married women and 77 percent of currently married women have used a family planning method at some time. Across age groups, the highest level of ever use of any family planning method is observed among ever-married women age 35-39, while the lowest level is found among women age 15-19.

| Table 5.11 Ever use of family planning |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women and of currently married women who have ever used a family planning method, by specific method and age, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age | Any method | Any modern method | Pill | IUD |  | Diaphragm/ foam/ jelly | Condom | Female steri-lization | Norplant | Any trad. method | Periodic abstinence | Pr <br> Withdrawal | rolonged breast-feeding | d <br> Other | Number of r women |
| EVER-MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 29.1 | 27.8 | 8.7 | 20.7 | 3.1 | 0.0 | 0.1 | 0.0 | 0.2 | 2.1 | 0.0 | 0.2 | 1.9 | 0.0 | 615 |
| 20-24 | 57.7 | 55.6 | 18.7 | 43.8 | 8.4 | 0.2 | 0.8 | 0.0 | 0.2 | 5.6 | 0.3 | 0.3 | 5.1 | 0.0 | 2,244 |
| 25-29 | 78.1 | 76.2 | 30.7 | 61.7 | 13.3 | 0.9 | 2.8 | 0.2 | 0.3 | 8.5 | 0.6 | 0.8 | 7.3 | 0.2 | 2,850 |
| 30-34 | 83.7 | 81.9 | 43.5 | 65.1 | 18.6 | 1.2 | 4.9 | 1.1 | 0.5 | 9.2 | 2.1 | 0.9 | 6.9 | 0.2 | 2,701 |
| 35-39 | 84.6 | 83.2 | 50.3 | 63.9 | 17.8 | 1.8 | 4.2 | 1.6 | 0.5 | 8.9 | 1.5 | 0.8 | 6.4 | 0.8 | 2,674 |
| 40-44 | 81.2 | 79.9 | 52.7 | 57.4 | 16.0 | 2.6 | 5.3 | 3.1 | 0.3 | 9.7 | 2.1 | 1.3 | 6.6 | 0.6 | 2,182 |
| 45-49 | 74.0 | 72.2 | 51.1 | 48.5 | 12.5 | 3.0 | 5.4 | 3.1 | 0.2 | 9.4 | 2.6 | 1.0 | 6.1 | 0.5 | 2,307 |
| Total | 75.1 | 73.4 | 39.8 | 55.9 | 14.1 | 1.5 | 3.7 | 1.4 | 0.3 | 8.3 | 1.5 | 0.8 | 6.3 | 0.3 | 15,573 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 29.8 | 28.4 | 8.9 | 21.2 | 3.2 | 0.0 | 0.1 | 0.0 | 0.2 | 2.2 | 0.0 | 0.2 | 2.0 | 0.0 | 599 |
| 20-24 | 58.4 | 56.2 | 18.8 | 44.4 | 8.5 | 0.2 | 0.9 | 0.0 | 0.2 | 5.7 | 0.3 | 0.3 | 5.2 | 0.0 | 2,187 |
| 25-29 | 79.2 | 77.4 | 31.2 | 62.7 | 13.5 | 0.9 | 2.7 | 0.2 | 0.3 | 8.7 | 0.6 | 0.8 | 7.4 | 0.2 | 2,776 |
| 30-34 | 85.7 | 83.9 | 44.7 | 67.0 | 19.4 | 1.2 | 5.1 | 1.1 | 0.6 | 9.3 | 2.2 | 0.9 | 6.9 | 0.2 | 2,568 |
| 35-39 | 86.9 | 85.7 | 52.0 | 66.3 | 18.8 | 1.9 | 4.5 | 1.7 | 0.5 | 8.9 | 1.6 | 0.9 | 6.3 | 0.8 | 2,472 |
| 40-44 | 85.4 | 84.2 | 55.4 | 61.5 | 17.3 | 2.9 | 5.7 | 3.3 | 0.4 | 10.1 | 2.3 | 1.4 | 6.8 | 0.6 | 1,921 |
| 45-49 | 79.4 | 77.4 | 54.1 | 52.9 | 14.4 | 3.2 | 5.8 | 3.5 | 0.3 | 9.9 | 2.9 | 1.2 | 6.3 | 0.5 | 1,860 |
| Total | 77.3 | 75.6 | 40.6 | 58.2 | 14.9 | 1.6 | 3.8 | 1.4 | 0.4 | 8.5 | 1.5 | 0.9 | 6.3 | 0.4 | 14,382 |

Almost all women who have ever used a method have experience with modern methods. The most commonly used modern method is the IUD, followed by the pill. Much smaller proportions of women report that they have used injectables or condoms. Fewer than one in ten women have had experience using any traditional method. The most widely used traditional method is prolonged breastfeeding, followed by periodic abstinence.

## Trends in Ever Use

Table 5.12 presents trends in the level of ever use of family planning among ever-married women during the period 1980-2000. The ever-use level increased from 40 percent in 1980 to 75 percent in 2000, an average of 1.7 percentage points per year.

With regard to the trends in use of specific methods, the most significant change has been the rapid rise in IUD use. The level of ever use of the IUD was 56 percent at the time of the 2000 EDHS, more than six times the level reported in 1980 ( 9 percent). In the case of the pill, the level of ever use peaked at 46 percent in 1988, before dropping to 40 percent in 2000. In general, there were only minor fluctuations in the level of ever use for other modern methods between 1980 and 2000, except for injectables. The latter method was introduced into the family planning program in the 1990s and ever use of injectables expanded rapidly over the decade, from a level of 3 percent in 1992 to 14 percent in 2000.

Table 5.12 Trends in ever use of family planning
Percentage of ever-married women 15-49 who have ever used a family planning method, by specific method, Egypt, 1980-2000

| Family planning <br> method | 1980 <br> EFS | 1984 <br> ECPS | 1988 <br> EDHS | 1991 <br> EMCHS | 1992 <br> EDHS | 1995 <br> EDHS | 2000 <br> EDHS |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Any method | 39.8 | 48.2 | 57.4 | 63.2 | 64.6 | 68.4 | 75.1 |
| Any modern method | 38.9 | 46.7 | 55.9 | 59.8 | 62.9 | 66.7 | 73.4 |
| Pill | 35.8 | 41.0 | 46.0 | 44.7 | 44.0 | 44.2 | 39.8 |
| IUD | 8.7 | 14.8 | 25.6 | 32.3 | 39.7 | 46.1 | 55.9 |
| Injectables | 0.5 | 1.1 | 2.3 | - | 2.9 | 6.2 | 14.1 |
| Vaginal methods | 1.2 | 3.9 | 5.3 | - | 3.6 | 2.2 | 1.5 |
| Condom | 5.0 | 3.4 | 8.6 | - | 7.5 | 7.7 | 3.7 |
| Female sterilization | 0.7 | 1.4 | 1.5 | - | 1.1 | 1.1 | 1.4 |
| Norplant | - | - | - | - | - | - | 0.4 |
| Any traditional method | - | 5.3 | 11.4 | - | 9.5 | 10.8 | 8.3 |
| Periodic abstinence | 2.7 | 1.4 | 3.7 | - | 3.4 | 3.3 | 1.5 |
| Withdrawal | 2.3 | 1.0 | 2.4 | - | 2.6 | 2.5 | 0.8 |
| Prolonged breastfeeding | - | 3.1 | 6.5 | - | 4.9 | 6.6 | 6.3 |
| Other traditional methods | - | 0.5 | 0.8 | - | 0.4 | 0.4 | 0.3 |
| Number of women | 8,788 | 10,013 | 8,911 | 9,073 | 9,864 | 14,779 | 15,573 |

Source: El-Zanaty et al., 1996, Table 4.14

## Differentials in Ever Use

Table 5.13 presents differences in the overall proportions of ever-married women who have ever used family planning and in the number of methods with which ever users have had experience. About half ( 52 percent) of the ever users have had experience with only one method, while 33 percent have used two methods, and 15 percent have tried three or more methods.

Clearly, older women are not only more likely to have ever used family planning but also, if they have used, to have experience with a greater number of methods than younger women. For example, 10 percent or less of women age 15-29 have used three or more methods, compared with 19 percent of women age 40-49.

Table 5.13 Ever use of family planning by background characteristics
Percentage of ever-married women who have ever used a family planning method and, among ever-users, percent distribution by number of methods ever used, and mean number of methods ever used, according to selected background characteristics, Egypt 2000

| Background characteristic | Percentage of women who ever used any method | Among ever-users |  |  |  |  | Number of evermarried women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of methods ever used |  |  | Total | Mean number of methods ever used |  |
|  |  | 1 | 2 | $3+$ |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 29.1 | 84.8 | 10.3 | 4.9 | 100.0 | 1.2 | 615 |
| 20-24 | 57.7 | 71.6 | 22.5 | 5.9 | 100.0 | 1.3 | 2,244 |
| 25-29 | 78.1 | 60.8 | 29.0 | 10.2 | 100.0 | 1.5 | 2,850 |
| 30-34 | 83.7 | 48.3 | 35.0 | 16.6 | 100.0 | 1.7 | 2,701 |
| 35-39 | 84.6 | 44.5 | 38.2 | 17.3 | 100.0 | 1.8 | 2,674 |
| 40-44 | 81.2 | 42.8 | 38.0 | 19.2 | 100.0 | 1.8 | 2,182 |
| 45-49 | 74.0 | 44.5 | 36.7 | 18.8 | 100.0 | 1.8 | 2,307 |
| Urban-rural residence |  |  |  |  |  |  |  |
| Urban | 80.8 | 51.1 | 33.1 | 15.9 | 100.0 | 1.7 | 6,871 |
| Rural | 70.7 | 52.3 | 33.7 | 14.0 | 100.0 | 1.6 | 8,702 |
| Place of residence |  |  |  |  |  |  |  |
| Urban Governorates | 81.7 | 51.8 | 31.5 | 16.7 | 100.0 | 1.7 | 2,992 |
| Lower Egypt | 80.6 | 51.3 | 34.6 | 14.1 | 100.0 | 1.7 | 6,826 |
| Urban | 84.1 | 50.5 | 34.8 | 14.7 | 100.0 | 1.7 | 1,946 |
| Rural | 79.2 | 51.7 | 34.5 | 13.8 | 100.0 | 1.6 | 4,880 |
| Upper Egypt | 65.4 | 52.5 | 32.8 | 14.7 | 100.0 | 1.7 | 5,546 |
| Urban | 76.6 | 51.1 | 33.5 | 15.3 | 100.0 | 1.7 | 1,808 |
| Rural | 60.0 | 53.4 | 32.3 | 14.3 | 100.0 | 1.6 | 3,738 |
| Frontier Governorates | 63.3 | 41.4 | 38.5 | 20.2 | 100.0 | 1.9 | 209 |
| Education |  |  |  |  |  |  |  |
| No education | 71.1 | 49.4 | 36.0 | 14.7 | 100.0 | 1.7 | 6,734 |
| Primary incomplete | 79.1 | 44.8 | 36.8 | 18.4 | 100.0 | 1.8 | 2,060 |
| Primary complete/ some secondary | 76.8 | 50.4 | 33.3 | 16.3 | 100.0 | 1.7 | 2,026 |
| Secondary complete/higher | r 78.5 | 58.2 | 28.8 | 13.0 | 100.0 | 1.6 | 4,753 |
| Work status |  |  |  |  |  |  |  |
| Working for cash | 81.5 | 53.1 | 33.2 | 13.7 | 100.0 | 1.7 | 2,266 |
| Not working for cash | 74.1 | 51.4 | 33.5 | 15.1 | 100.0 | 1.7 | 13,307 |
| Total | 75.1 | 51.7 | 33.4 | 14.9 | 100.0 | 1.7 | 15,573 |

Looking at the other subgroups for which information is presented in Table 5.13, women from urban areas, women with at least some primary education, and women who are working for cash are more likely than other women to have used a family planning method. Women from rural Upper Egypt have the least experience with family planning ( 60 percent), followed by women from the Frontier Governorates. There is relatively little variation among ever users in the number of methods that ever users have tried.

### 5.9 First Use of Family Planning

Women who reported that they had used family planning methods at some time were asked about the number of children they had when they first used family planning. These data are useful in identifying the stage in the family-building process when women begin using family planning as well as their motivation for adopting family planning.

Table 5.14 presents the percent distribution of ever-married women by the number of living children at the time of the first use of family planning. Almost none of the women started using family planning immediately after marriage while still childless. Overall, 35 percent of women began use of family planning after they had had their first child, 16 percent started after they had had two children, and 24 percent had three or more children before using.

Looking at the age patterns, there appears to have been a shift in the timing of the adoption of the first contraceptive method, with younger women initiating use of family planning methods at lower parities than older women. For example, although only 20 percent of women age 45-49 used contraception after their first child, 49 percent of women age 25-29 started family planning use after their first child. The median parity at which women begin using contraception is inversely associated with age, ranging from 3.3 children among the women 45-49 to less than two children among women under age 30 . The earlier initiation of use among younger women suggests that women are increasingly adopting family planning to space births.

Differentials by urban-rural residence indicate that urban women are likely to start family planning at a lower parity than rural women. Forty-six percent of urban women began use after the first child, compared with only 26 percent of rural women. These findings suggests that urban women are much more likely to begin using family planning to space a wanted birth, while rural women are principally concerned with avoiding an unwanted birth at the time they adopt family planning.

There are also differentials in the number of living children at the time of the first use of contraception by place of residence, educational level, and work status. On average, ever-users in rural Upper Egypt began using at a much higher parity (3 children), while women from the Urban Governorates and urban Lower Egypt started at a lower parity (1.8 children and 1.9 children, respectively) than women in other residential categories. Education clearly influences the timing of initiation of contraception. More than half of ever-users (54 percent) who have completed secondary or higher education initiated family planning use after the first child, compared with 20 percent of ever-users with no education. Women working for cash were more likely to initiate contraceptive use after the birth of their first child than other women were ( 47 percent and 33 percent, respectively).

## Table 5.14 Number of children at first use of family planning

Percent distribution of ever-married women by number of living children at the time of first use of family planning, according to background characteristics, Egypt 2000

| Background characteristic | Never used contraception | Number of living children at time of first use of contraception |  |  |  |  | Total | Number of women | Median number of children ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0 | 1 | 2 | 3 | 4+ |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 70.9 | 0.8 | 25.2 | 3.1 | 0.0 | 0.0 | 100.0 | 615 | 1.5 |
| 20-24 | 42.3 | 0.1 | 43.5 | 11.3 | 2.1 | 0.6 | 100.0 | 2,244 | 1.7 |
| 25-29 | 21.9 | 0.5 | 48.6 | 17.4 | 7.3 | 4.3 | 100.0 | 2,850 | 1.8 |
| 30-34 | 16.3 | 0.2 | 40.0 | 21.4 | 11.9 | 10.2 | 100.0 | 2,701 | 2.1 |
| 35-39 | 15.4 | 0.3 | 31.4 | 19.1 | 12.5 | 21.4 | 100.0 | 2,674 | 2.6 |
| 40-44 | 18.8 | 0.4 | 23.3 | 17.1 | 12.7 | 27.8 | 100.0 | 2,182 | 3.0 |
| 45-49 | 26.0 | 0.2 | 20.0 | 13.8 | 11.2 | 28.8 | 100.0 | 2,307 | 3.3 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |
| Urban | 19.2 | 0.3 | 46.1 | 17.5 | 7.9 | 9.0 | 100.0 | 6,871 | 1.9 |
| Rural | 29.3 | 0.3 | 25.7 | 15.5 | 10.4 | 18.8 | 100.0 | 8,702 | 2.6 |
| Place of residence |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 18.3 | 0.4 | 49.7 | 17.3 | 7.1 | 7.2 | 100.0 | 2,992 | 1.8 |
| Lower Egypt | 19.4 | 0.2 | 36.6 | 18.0 | 11.3 | 14.4 | 100.0 | 6,826 | 2.2 |
| Urban | 15.9 | 0.2 | 47.5 | 18.1 | 10.0 | 8.3 | 100.0 | 1,946 | 1.9 |
| Rural | 20.8 | 0.2 | 32.3 | 18.0 | 11.8 | 16.9 | 100.0 | 4,880 | 2.4 |
| Upper Egypt | 34.6 | 0.3 | 24.6 | 14.0 | 8.0 | 18.5 | 100.0 | 5,546 | 2.6 |
| Urban | 23.4 | 0.4 | 39.5 | 17.3 | 7.1 | 12.3 | 100.0 | 1,808 | 2.0 |
| Rural | 40.0 | 0.3 | 17.3 | 12.4 | 8.5 | 21.4 | 100.0 | 3,738 | 3.0 |
| Frontier Governorates | 36.7 | 0.2 | 27.0 | 14.2 | 8.2 | 13.6 | 100.0 | 209 | 2.3 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 28.9 | 0.2 | 20.2 | 14.8 | 12.0 | 23.8 | 100.0 | 6,734 | 3.0 |
| Primary incomplete | 20.9 | 0.1 | 28.8 | 18.8 | 12.8 | 18.5 | 100.0 | 2,060 | 2.6 |
| Primary complete/ some secondary | 23.2 | 0.4 | 42.8 | 17.5 | 7.3 | 8.7 | 100.0 | 2,026 | 1.9 |
| Secondary complete/higher | - 21.5 | 0.4 | 54.4 | 17.0 | 4.8 | 1.9 | 100.0 | 4,753 | 1.7 |
| Work status |  |  |  |  |  |  |  |  |  |
| Working for cash | 18.5 | 0.5 | 47.3 | 18.8 | 8.0 | 6.8 | 100.0 | 2,266 | 1.9 |
| Not working for cash | 25.9 | 0.3 | 32.6 | 15.9 | 9.5 | 15.8 | 100.0 | 13,307 | 2.3 |
| Total | 24.9 | 0.3 | 34.7 | 16.4 | 9.3 | 14.5 | 100.0 | 15,573 | 2.2 |

[^6]
## CURRENT USE OF FAMILY PLANNING

The data on the current use of family planning is among the most important information collected in the 2000 EDHS since it provides insight into one of the principal determinants of fertility and serves as a key measure for assessing the success of the national family planning program. This chapter focuses on data from the 2000 EDHS on levels, differentials, and trends in current use. Information on the service providers from which users obtain their methods and on the willingness to pay for the widely used methods are also presented.

### 6.1 Level and Differentials in Current Use of Family Planning

The level of current use of contraception by methods and region is presented in Table 6.1. The table shows that 56 percent of currently married women in Egypt are using contraception, with 54 percent depending on modern methods and 2 percent using traditional methods. The IUD, pill, and injectables are the most widely used methods: 36 percent of currently married women are using the IUD, 10 percent currently rely on the pill, and 6 percent are currently using injectables. Relatively small proportions of women are using other modern methods; e.g., 1 percent report currently using the condom.

Table 6.1 Current use of family planning by residence
Percent distribution of currently married women 15-49 by family planning method currently used, accordingto urban-rural residence and place of residence, Egypt 2000

| Method | Urban | Rural | Place of residence |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Urban Governorates | Lower Egypt |  |  | Upper Egypt |  |  | Frontier Governorates |  |
|  |  |  |  | Total | Urban | Rural | Total | Urban | Rural |  |  |
| Any method | 61.2 | 52.0 | 62.7 | 62.4 | 64.9 | 61.4 | 45.1 | 55.4 | 40.2 | 43.0 | 56.1 |
| Any modern method | 58.9 | 49.9 | 59.9 | 60.9 | 63.2 | 60.0 | 42.4 | 53.3 | 37.1 | 41.4 | 53.9 |
| Pill | 10.3 | 8.8 | 8.1 | 10.2 | 12.6 | 9.3 | 9.2 | 11.3 | 8.1 | 12.6 | 9.5 |
| IUD | 41.0 | 31.3 | 44.3 | 40.9 | 42.0 | 40.4 | 24.9 | 35.7 | 19.7 | 19.6 | 35.5 |
| Injectables | 4.0 | 7.7 | 3.9 | 6.9 | 4.6 | 7.8 | 6.3 | 3.4 | 7.6 | 5.8 | 6.1 |
| Diaphragm/foam/jelly | 0.2 | 0.1 | 0.2 | 0.2 | 0.4 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.2 |
| Condom | 1.7 | 0.4 | 1.9 | 0.7 | 1.4 | 0.4 | 0.7 | 1.4 | 0.4 | 1.7 | 1.0 |
| Female sterilization | 1.5 | 1.4 | 1.3 | 1.9 | 2.2 | 1.7 | 1.0 | 1.0 | 1.0 | 1.5 | 1.4 |
| Norplant | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 |
| Any traditional method | 2.3 | 2.1 | 2.8 | 1.5 | 1.8 | 1.4 | 2.7 | 2.0 | 3.1 | 1.6 | 2.2 |
| Periodic abstinence | 1.2 | 0.2 | 1.5 | 0.4 | 1.0 | 0.2 | 0.4 | 0.8 | 0.2 | 0.4 | 0.6 |
| Withdrawal | 0.4 | 0.1 | 0.6 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.0 | 0.4 | 0.2 |
| Prolonged breastfeeding | 0.6 | 1.7 | 0.7 | 0.8 | 0.4 | 1.0 | 2.0 | 0.9 | 2.6 | 0.5 | 1.2 |
| Other methods | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.3 | 0.3 | 0.1 |
| Not currently using | 38.8 | 48.0 | 37.3 | 37.6 | 35.1 | 38.6 | 54.9 | 44.6 | 59.8 | 57.0 | 43.9 |
| Total | 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 | 6,328 | 8,054 | 2,749 | 6,324 | 1,799 | 4,524 | 5,113 | 1,662 | 3,451 | 196 | 14,382 |

## Differentials by Residence

The level of contraceptive use differs significantly across residential categories (Table 6.1 and Figure 6.1). Currently married women are more likely to be using a method in urban than in rural areas ( 61 percent and 52 percent, respectively). By place of residence, current use is highest in urban Lower Egypt and the Urban Governorates ( 65 percent and 63 percent, respectively) and lowest in rural Upper Egypt ( 40 percent). Of note is the fact that use in rural Lower Egypt (61 percent) is higher than in urban areas in Upper Egypt (55 percent). Striking differences in current use levels are also observed between rural areas in Lower Egypt and Upper Egypt. Whereas 61 percent of married women are currently using in rural Lower Egypt, the level is 40 percent in rural Upper Egypt. The level of current use in the Frontier Governorates is 43 percent, lower than in all areas except rural Upper Egypt.


The IUD is the most frequently used method in every residential category, followed by the pill and injectables. The extent to which the IUD dominates the method mix, however, varies across residential subgroups. Women in the Urban Governorates rely on the IUD more often than women from other areas. For example, women from this region are more than five times as likely to be using the IUD as the pill. In other residential areas except for the Frontier Governorates, there are two to four times as many IUD users as pill users. The pill is the second most widely used method in all areas except rural Upper Egypt, where the proportion of women using injectables is virtually identical to that relying on the pill.

## Differentials by Selected Background Characteristics

Differentials in the levels of current use by background characteristics other than residence are presented in Table 6.2. Current use is clearly associated with a woman's age; younger and older women are less likely to be using contraception than women age 25-44. The lowest level of use is found among women age 15-19 (23 percent). The IUD is the most popular method among women in all age groups, with the highest levels of IUD use found among women age 30-39 (43 percent).


Contraceptive use is also associated with the number of living children a woman has. Use levels increase from 42 percent of women with one child to 69 percent of women with three children and then drop off to 62 percent of women with four or more children. Few women use family planning before having the first child; less than 1 percent of childless women are currently using a method.

As for education, the proportion currently using a method varies from 52 percent among women with no education to 61 percent of those with a secondary or higher education. The IUD is the most commonly used method among women at every level of education, followed by the pill.

However, the dominance of the IUD in the method mix clearly increases with a woman's education. Users with a secondary or higher education are about five times as likely to be using the IUD as the pill, whereas women with no education are about three times as likely to be using the IUD as the pill.

Finally, the level of current use among women who are working for cash is substantially higher than the level among other women ( 67 percent and 54 percent, respectively). Women working for cash are also more likely to be using an IUD than other women.

## Differentials by Governorate

Current use rates are presented in Table 6.3 for the Urban Governorates and the governorates in Lower Egypt and Upper Egypt. They are not shown separately for the Frontier Governorates because the samples from the individual governorates in this region were not sufficiently large to allow separate estimation of the use rates.

| Table 6.3 Current use of family planning by governorate |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of currently married women 15-49 who are currently using any method, any modern method, the pill, the IUD, or injectables, by governorate, Egypt 2000 |  |  |  |  |  |  |
| Governorate | Any method | Any modern method | Pill | IUD | Injectables | Number of women |
| Urban Governorates |  |  |  |  |  |  |
| Cairo | 62.3 | 59.7 | 9.0 | 43.7 | 3.7 | 1,560 |
| Alexandria | 64.7 | 61.6 | 6.1 | 47.6 | 4.0 | 939 |
| Port Said | 57.7 | 54.8 | 9.4 | 34.0 | 5.6 | 134 |
| Suez | 58.0 | 55.6 | 10.8 | 37.5 | 3.2 | 116 |
| Lower Egypt |  |  |  |  |  |  |
| Damietta | 58.8 | 57.4 | 10.2 | 36.6 | 4.2 | 222 |
| Dakahlia | 62.8 | 62.0 | 9.4 | 42.1 | 7.1 | 1,169 |
| Sharkia | 61.4 | 58.3 | 14.8 | 33.3 | 8.4 | 1,000 |
| Kalyubia | 64.0 | 62.7 | 10.6 | 41.9 | 8.2 | 744 |
| Kafr El-Sheikh | 64.2 | 64.0 | 5.7 | 49.1 | 6.1 | 511 |
| Gharbia | 65.7 | 64.5 | 11.9 | 44.4 | 4.2 | 913 |
| Menoufia | 61.3 | 59.2 | 9.8 | 41.8 | 4.8 | 677 |
| Behera | 59.8 | 58.7 | 7.0 | 39.9 | 9.2 | 963 |
| Ismailia | 58.9 | 55.1 | 11.3 | 33.1 | 7.3 | 125 |
| Upper Egypt |  |  |  |  |  |  |
| Giza | 60.5 | 56.8 | 8.4 | 42.0 | 4.5 | 1,383 |
| Beni Suef | 53.0 | 48.1 | 9.3 | 25.6 | 10.4 | 368 |
| Fayoum | 50.4 | 48.2 | 7.3 | 27.4 | 12.1 | 431 |
| Menya | 46.7 | 44.0 | 10.3 | 19.8 | 11.4 | 691 |
| Assuit | 32.9 | 30.5 | 5.7 | 16.6 | 5.3 | 786 |
| Souhag | 27.5 | 26.2 | 7.2 | 14.0 | 3.2 | 664 |
| Qena | 34.6 | 32.9 | 15.3 | 12.7 | 2.9 | 588 |
| Aswan | 44.8 | 42.8 | 16.6 | 20.9 | 4.4 | 203 |

There is considerable variability in the level of current use across the governorates for which results are presented in Table 6.3. The current use rate exceeds 60 percent in two of the four Urban Governorates (Cairo and Alexandria) and in six of the governorates in Lower Egypt. In Upper Egypt, only Giza governorate, which is a part of Greater Cairo, has a level of use of more than 60 percent. Current use levels in the other governorates in Upper Egypt lag behind the level in Giza, with only Beni Suef and Fayoum having levels greater than 50 percent.

Table 6.3 also shows the rates of current use of the pill, the IUD, and injectables for each governorate. The IUD is the most popular method among users in all governorates, except Qena, where more women rely on the pill than on the IUD. The highest level of IUD use is observed in Kafr El-Sheikh (49 percent), followed by Alexandria (48 percent), and the lowest level is in Qena (13 percent). Aswan has the highest level of pill use (17 percent), while the lowest levels are found in Assuit and Kafr El-Sheikh ( 6 percent each). Use of injectables varies from 3 percent in Qena, Souhag, and Suez to 12 percent in Fayoum.

### 6.2 Trends in Current Use of Family Planning

## Trend by Method

The results from the 2000 EDHS, as well as those from earlier fertility surveys, can be used to examine the changes that have taken place in the level and pattern of contraceptive use in Egypt over the past 20 years. Figure 6.2 and Table 6.4 highlight the trend in family planning use at the national level between 1980 and 2000. The data show that contraceptive use in Egypt more than doubled during the period, rising from 24 percent in 1980 to 56 percent by 2000. The pace of change was rapid in the 1980s (nearly 3 percentage points annually during the eight-year period between 1980 and 1988), but slowed significantly in the 1990s (about 1 percentage point annually during the eight-year period between 1992 and 2000).


The shift toward more effective methods, which was evident in the 1980s, continued during the 1990s although at a slower pace. As Table 6.4 shows, IUD use rose continuously, from 4 percent in 1980 to 36 percent in 2000. In contrast, the rate of use of the pill declined from 17 percent in 1980 to 10 percent in 1995, a level around which it fluctuated during the remainder of the decade. Use of injectables showed a small but steady rise after its introduction into the family planning program in the 1990s, increasing from less than 1 percent in 1992 to 6 percent in 2000.

Trends over time in the method mix among users, that is, the distribution of users according to the method used are presented in Table 6.5. The dramatic shift from pill to IUD use that occurred during the past two decades is clear in the table. In 1980, almost 70 percent of current users relied on the pill, more than four times the percentage of users who relied on the IUD. By 2000, nearly two-thirds of current users relied on the IUD, about four times the percentage that were using the pill. The relatively rapid expansion of the use of injectables is also evident. Eleven percent of current users rely on injectables, compared with 5 percent in 1995 and only 1 percent in 1992.

| Table 6.4 Trends in current use of family planning |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married women 15-49 by the family planning method currently used, Egypt 1980-2000 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 1997 | 1998 |  |
|  | 1980 | 1984 | 1988 | 1991 | 1992 | 1995 | Interim | Interim | 2000 |
| Method | EFS | ECPS | EDHS | EMCHS | EDHS | EDHS | EDHS | EDHS | EDHS |
| Any method | 24.2 | 30.3 | 37.8 | 47.6 | 47.1 | 47.9 | 54.5 | 51.7 | 56.1 |
| Any modern method | 22.8 | 28.7 | 35.4 | 44.3 | 44.8 | 45.5 | 51.8 | 49.5 | 53.9 |
| Modern method |  |  |  |  |  |  |  |  |  |
| Pill | 16.6 | 15.5 | 15.3 | 15.9 | 12.9 | 10.4 | 10.2 | 8.7 | 9.5 |
| IUD | 4.1 | 8.4 | 15.7 | 24.1 | 27.9 | 30.0 | 34.6 | 34.3 | 35.5 |
| Injectables | u | 0.3 | 0.1 | u | 0.5 | 2.4 | 3.9 | 3.9 | 6.1 |
| Vaginal methods | 0.3 | 0.7 | 0.4 | u | 0.4 | 0.1 | 0.1 | 0.0 | 0.2 |
| Condom | 1.1 | 1.3 | 2.4 | u | 2.0 | 1.4 | 0.2 | 0.1 | 1.0 |
| Female sterilization | 0.7 | 1.5 | 1.5 | $u$ | 1.1 | 1.1 | 1.5 | 1.1 | 1.4 |
| Norplant | u | u | u | u | 0.0 | 0.0 | 1.4 | 1.3 | 0.2 |
| Any traditional method | 1.4 | 1.6 | 2.4 | 3.3 | 2.3 | 2.4 | 2.7 | 2.3 | 2.2 |
| Periodic abstinence | 0.5 | 0.6 | 0.6 | u | 0.7 | 0.8 | 0.6 | 0.8 | 0.6 |
| Withdrawal | 0.4 | 0.3 | 0.5 | u | 0.7 | 0.5 | 0.4 | 0.3 | 0.2 |
| Prolonged breastfeeding | u | 0.6 | 1.1 | u | 0.9 | 1.0 | 1.5 | 1.1 | 1.2 |
| Other traditional methods | 0.3 | 0.1 | 0.2 | u | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Not using | 75.8 | 69.7 | 62.2 | 52.4 | 52.9 | 52.1 | 45.5 | 48.2 | 43.9 |
| Total | 100.0 | 100.0 | 100.0 | 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 | 5,157 | 5,971 | 14,382 |
| $\mathrm{u}=$ Unknown (not available) |  |  |  |  |  |  |  |  |  |
| Source: El-Zanaty et al., 1996, Table 5.4 |  |  |  |  |  |  |  |  |  |
| El-Zanaty and Associates and Macro International Inc., 1998, Table 3.3 |  |  |  |  |  |  |  |  |  |
| El-Zanaty and Associates and Macro International Inc., 1999, Table 3.2 |  |  |  |  |  |  |  |  |  |

## Table 6.5 Trends in the family planning method mix

Percent distribution of currently married women 15-49 who are using a family planning method by the method used, Egypt 1980-2000

| Method | 1980 <br> EFS | 1984 <br> ECPS | 1988 <br> EDHS | 1992 <br> EDHS | 1995 <br> EDHS | 2000 <br> EDHS |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Pill | 68.6 | 54.4 | 40.5 | 27.4 | 21.7 | 16.9 |
| IUD | 15.9 | 27.7 | 41.6 | 59.2 | 62.6 | 63.4 |
| Injectables | 0.0 | 1.0 | 0.3 | 1.1 | 5.0 | 10.9 |
| Condom | 4.5 | 4.3 | 6.3 | 4.2 | 2.9 | 1.7 |
| Female sterilization | 2.9 | 5.0 | 4.0 | 2.3 | 2.3 | 2.5 |
| Other modern methods | 1.3 | 2.3 | 1.0 | 0.9 | 0.5 | 0.7 |
| Traditional methods | 5.8 | 5.3 | 6.3 | 4.9 | 5.0 | 3.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 1,939 | 2,775 | 3,108 | 4,311 | 6,567 | 8,063 |

Source: El-Zanaty et al., 1996, Table 5.5

## Trend by Urban-Rural Residence and Place of Residence

Table 6.6 presents trends in the rate of current use of family planning methods between 1984 and 2000 by residence. Overall, contraceptive use increased steadily through the early 1990s in both urban and rural areas. In urban areas, the current use rate rose more rapidly in the first half of the period than later, increasing by 12 percentage points between 1984 and 1992 (from 45 percent to 57 percent). At that point, the rise in the use level slowed significantly, with the urban use rate rising by only 4 percentage points between 1992 and 2000. In rural areas, the decade of the eighties was also a period of substantial growth in contraceptive use. The rural use rate recorded

| Table 6.6 Trends in current use of family planning by residence |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of currently married women 15-49 who are currently using a family planning method by urban-rural residence and place of residence, Egypt 1984-2000 |  |  |  |  |  |
| Residence | $\begin{aligned} & 1984 \\ & \text { ECPS } \end{aligned}$ | $\begin{gathered} 1988 \\ \text { EDHS } \end{gathered}$ | $\begin{gathered} 1992 \\ \text { EDHS } \end{gathered}$ | $\begin{aligned} & 1995 \\ & \text { EDHS } \end{aligned}$ | $\begin{gathered} 2000 \\ \text { EDHS } \end{gathered}$ |
| Urban-rural residence |  |  |  |  |  |
| Urban | 45.1 | 51.8 | 57.0 | 56.4 | 61.2 |
| Rural | 19.2 | 24.5 | 38.4 | 40.5 | 52.0 |
| Place of residence |  |  |  |  |  |
| Urban Governorates | 49.6 | 56.0 | 59.1 | 58.1 | 62.7 |
| Lower Egypt | 34.1 | 41.2 | 53.5 | 55.4 | 62.4 |
| Urban | 47.6 | 54.5 | 60.5 | 59.1 | 64.9 |
| Rural | 28.5 | 35.6 | 50.5 | 53.8 | 61.4 |
| Upper Egypt | 17.3 | 22.1 | 31.4 | 32.1 | 45.1 |
| Urban | 36.8 | 41.5 | 48.1 | 49.9 | 55.4 |
| Rural | 7.9 | 11.5 | 24.3 | 24.0 | 40.2 |
| Frontier Governorates | u | u | u | 44.0 | 43.0 |
| Total | 30.3 | 37.8 | 47.1 | 47.9 | 56.1 |
| $\mathrm{U}=$ Unknown (Not available) <br> Source: El-Zanaty et al., 1996, Table 5.3 and 5.6 |  |  |  |  |  |

a moderate increase during the period from 1984 to 1988 (from 19 percent to 25 percent), followed by a period of very rapid growth between 1988 and 1992 when the use rate increased to 38 percent. At that point, the pace of change in rural areas slowed. During the period between 1992 and 2000, the increase in the rural use level averaged about 1.5 percentage points per year, about half the annual increase observed between 1988 and 1992.

Table 6.6 also shows that place of residence was strongly associated with the changes in use levels observed in Egypt between 1984 and 2000. The greatest absolute increase in use during the period occurred in rural Lower Egypt, where the use rate rose from 29 percent in 1984 to 61 percent in 2000. Rural Upper Egypt had the greatest relative increase in use. The increase in use in rural Upper Egypt was especially rapid between 1995 and 2000, when the rate rose from 24 percent to 40 percent.

The Urban Governorates and urban areas in both Lower Egypt and Upper Egypt experienced moderate increases in contraceptive use rates during the period 1984-88. Between 1988 and 1992, use rates continued to rise at a moderate pace in both urban Lower Egypt and urban Upper Egypt; however, the rise in the use rate slowed noticeably in the Urban Governorates during that period. Between 1992 and 1995, contraceptive use levels in the Urban Governorates, urban Lower Egypt, and urban Upper Egypt remained virtually stationary. After 1995, there were small increases in use levels in all of the urban areas, with the magnitude of the increase being slightly greater in urban Upper Egypt than in the Urban Governorates or in urban Lower Egypt.

## Trend by Governorate

Table 6.7 presents the trend in current use rates at the governorate level between 1988 and 2000. Some caution must be used in interpreting the changes in use levels for individual governorates since the comparatively small sample sizes on which the estimates are based increases the sampling variability, reducing the likelihood that small changes are significant. However, the results clearly show that most governorates experienced significant increases in use levels over the roughly 12 -year period. The pattern of change observed for Egypt as a whole is also evident in most of the governorates, with a slowing or plateauing of the growth between 1992 and 1995 and more rapid change in the late 1980s and the latter half of the 1990s.

In absolute terms, the governorates in Upper Egypt, where use levels were lowest in 1988 (i.e., rates of

| Table 6.7 Trends in current use of family planning by governorate |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of currently married women 15-49 who are currently using a family planning method by governorate, Egypt 2000 |  |  |  |  |
|  | 1988 | 1992 | 1995 | 2000 |
| Governorate | EDHS | EDHS | EDHS | EDHS |
| Urban Governo |  |  |  |  |
| Cairo | 58.9 | 58.1 | 56.9 | 62.3 |
| Alexandria | 51.6 | 62.1 | 59.8 | 64.7 |
| Port Said | 48.2 | 60.5 | 59.7 | 57.7 |
| Suez | 50.3 | 57.3 | 62.4 | 58.0 |
| Lower Egypt |  |  |  |  |
| Damietta | 54.1 | 53.4 | 57.4 | 58.8 |
| Dakahlia | 41.3 | 52.8 | 54.9 | 62.8 |
| Sharkia | 35.2 | 49.2 | 53.1 | 61.4 |
| Kalyubia | 42.3 | 57.9 | 55.6 | 64.0 |
| Kafr El-Sheikh | 41.7 | 47.2 | 54.4 | 64.2 |
| Gharbia | 50.1 | 55.9 | 55.9 | 65.7 |
| Menoufia | 43.9 | 55.7 | 54.3 | 61.3 |
| Behera | 32.5 | 54.7 | 58.7 | 59.8 |
| Ismailia | 41.0 | 50.2 | 58.5 | 58.9 |
| Upper Egypt |  |  |  |  |
| Giza | 45.7 | 49.9 | 50.9 | 60.5 |
| Beni Suef | 15.3 | 29.2 | 30.4 | 53.0 |
| Fayoum | 20.2 | 33.3 | 34.0 | 50.4 |
| Menya | 16.6 | 21.9 | 24.3 | 46.7 |
| Assuit | 12.7 | 28.2 | 22.1 | 32.9 |
| Souhag | 16.2 | 19.8 | 21.7 | 27.5 |
| Qena | 12.2 | 24.7 | 26.3 | 34.6 |
| Aswan | 18.6 | 31.9 | 36.0 | 44.8 |
| Total | 37.8 | 47.1 | 47.9 | 56.1 |
| Source: El-Zanaty et al., 1996, Table 5.7 |  |  |  |  |

20 percent or less), had the largest increases during the period. In Beni Suef, the use rate more than tripled, from 15 percent in 1988 to 53 percent in 2000. More than half of the increase in use in Beni Suef was recent (i.e., between the 1995 and 2000 surveys). In Fayoum and Menya, use rates increased by 30 percentage points over the period, with the largest increases again occurring between 1995 and 2000. Aswan, Qena, and Assuit also had substantial overall increases in use, between 20 and 26 percentage points over the 12 -year period. In contrast to Beni Suef, Fayoum, and Menya, the gains in Aswan, Qena, and Assuit were more rapid early in the period than between the 1995 and 2000 surveys. The overall increase was more moderate in Giza, where the use rate exceeded 40 percent in 1988. Regarding the timing of the increases, much of the growth in use rates in Giza occurred in the latter half of the 1990s. In Souhag, there was a relatively steady increase in use levels through the period. Overall, however, Souhag experienced the least growth in use (11 percentage points) among the Upper Egypt governorates.

Except for Behera and Sharkia, governorates in Lower Egypt started the period with use levels greater than 40 percent. Increases in use levels during the period were greatest overall (20 percentage points or more) in Behera, Sharkia, Kafr El-Sheikh, Kalyubia, and Dakhalia. Damietta, where the use rate was 54 percent in 1988, experienced the least growth in use levels over the entire 12 -year period, with the use rate increasing by only about 1 percentage point during the period between the 1995 and 2000 surveys. The absolute change in use levels was greatest during the latter half of the 1990s in Gharbia and Menoufia, while Ismailia and Behera were like Damietta in registering only a modest change in use levels between 1995 and 2000.

Considering the Urban Governorates, Alexandria had a somewhat larger overall increase in its use rate (13 percentage points) between 1988 and 2000 than was observed in either Port Said (10 percentage points) or Suez ( 8 percentage points). In all three governorates, the increases in use were much greater between 1988 and 1995 than in the latter half of the 1990s. Suez and Port Said in fact experienced small declines in their use rates between 1995 and 2000. The overall increase in use levels in these governorates was, however, much greater than that experienced in Cairo, where the use rate grew by only three percentage points over the 12 -year period. Because of the slow growth, particularly during the period between 1988 and 1995, Cairo, which in 1988 had had the highest use rates among all of the governorates, ended the period ranking sixth behind Gharbia, Alexandria, Kafr El-Sheikh, Kalyubia, and Dakahlia.

### 6.3 Sources for Modern Family Planning Methods

## Sources by Method

In the 2000 EDHS detailed information was collected on sources from which family planning methods were obtained. To obtain these data, current users of modern methods were asked for the name and location of the source where they had gotten their method at the beginning of the current segment of use. A code identifying the type of source was then recorded in the questionnaire and in the calendar in the month at the beginning of the period of use. Users relying on supply methods like the pill and the injectable were also asked about the source where they had most recently obtained the method.

Table 6.8 shows the distribution of current users by source. For supply methods, the source refers to the place where the method was obtained most recently. Overall, current family planning users are almost as likely to obtain their method from a governmental source as from a private sector source ( 49 percent and 51 percent, respectively). The source for family planning method, however, varies markedly by method (Figure 6.3). The majority of current users of the IUD
(54 percent) have the method inserted at a public sector source, mainly at Ministry of Health and Population (MOHP) facilities. In general, those users relying on a government source for the IUD get the device inserted at a static facility; however, 2 percent obtain the method from MOHP mobile clinics. One-third of IUD users go to private physicians, hospitals, or clinics for the method, while 10 percent obtain the method at clinics operated by private voluntary organizations, including those of the Egyptian Family Planning Association and the Clinical Services Improvement Project, or at a facility operated by a mosque or a church.

## Table 6.8 Sources for modern family planning methods

Percent distribution of current users of modern family planning methods by most recent source, according to specific methods, Egypt 2000

| Source of method | Modern family planning method |  |  |  |  | All modern methods ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pill | IUD | Injectables | Condom | Female sterilization |  |
| Public sector | 10.8 | 54.0 | 81.4 | 14.2 | 46.5 | 48.6 |
| Urban hospital | 1.3 | 9.1 | 8.2 | 2.6 | 32.8 | 8.3 |
| Urban health unit | 2.6 | 17.7 | 13.8 | 4.2 | 1.8 | 13.9 |
| Rural hospital | 0.2 | 1.0 | 1.4 | 0.0 | 0.0 | 0.9 |
| Rural health unit | 5.1 | 12.1 | 43.1 | 2.4 | 0.5 | 13.9 |
| MCH centre | 0.5 | 9.0 | 7.4 | 4.8 | 0.0 | 7.0 |
| Mobile unit | 0.7 | 2.4 | 6.5 | 0.2 | 0.0 | 2.5 |
| Teaching hospital | 0.0 | 0.8 | 0.8 | 0.0 | 1.3 | 0.7 |
| HIO | 0.2 | 1.0 | 0.1 | 0.0 | 1.3 | 0.7 |
| Other government | 0.0 | 0.7 | 0.2 | 0.0 | 8.7 | 0.8 |
| Private sector | 88.9 | 46.0 | 17.6 | 82.2 | 53.5 | 51.2 |
| EFPA | 0.2 | 2.6 | 1.8 | 1.0 | 0.0 | 2.0 |
| CSI | 0.0 | 4.0 | 0.9 | 0.7 | 0.0 | 2.8 |
| Other NGO/PVO | 0.2 | 0.3 | 0.3 | 0.0 | 1.5 | 0.3 |
| Mosque health unit | 0.6 | 2.4 | 1.0 | 0.0 | 1.3 | 1.8 |
| Church health unit | 0.2 | 0.6 | 0.0 | 0.0 | 0.7 | 0.4 |
| Private hospital/Clinic | 0.7 | 3.2 | 0.8 | 0.0 | 18.9 | 2.8 |
| Private doctor | 5.3 | 32.9 | 9.5 | 1.8 | 31.0 | 24.6 |
| Pharmacy | 81.7 | 0.0 | 3.4 | 78.7 | 0.0 | 16.3 |
| Other | 0.3 | 0.0 | 1.0 | 3.6 | 0.0 | 0.2 |
| Friends/Relatives | 0.3 | 0.0 | 0.4 | 3.6 | 0.0 | 0.2 |
| Other | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of users | 1,362 | 5,112 | 876 | 140 | 217 | 7,760 |
| ```CSI = Clinical Services Improvement Project EFPA = Egyptian Family Planning Association \(\mathrm{HIO}=\) Health Insurance Organization MCH \(=\) Maternal and Child Health NGO \(=\) Nongovernmental organization PVO = Private voluntary organization \({ }^{1}\) Includes users of Norplant and vaginal methods for whom the source distribution is not shown separately.``` |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |



Table 6.8 shows that the public sector is the main source for injectables, with eight in ten users obtaining the method from a governmental source. As was the case with the IUD, most injectable users obtain their method at a static facility, especially rural health units (43 percent). About 7 percent get injectables from a mobile clinic.

Regarding the sources for other methods, pill users mainly get their method from a pharmacy ( 82 percent), as do couples using the condom ( 79 percent). The small number of sterilization users is about equally likely to have had the operation performed at a public or private health facility.

## Sources by Method and Residence

The variation in the type of source by method, urban-rural residence, and place of residence is presented in Table 6.9 for all modern methods and for the pill and the IUD. There are significant differences in the source from which users obtain their method across residential categories for both the pill and the IUD. In general, rural women are more likely to go to a public sector source to obtain their method than urban women. Users from rural Upper Egypt are somewhat more likely than users from any other area to have the IUD inserted at a public health facility. Overall, twothirds of IUD users in rural Upper Egypt get the method at a public sector facility, while the proportion of IUD users relying on a public sector source varies in the other areas from 45 percent in the Frontier Governorates to 58 percent in rural areas in Lower Egypt.

In all areas, the pharmacy is the principal source for pill users, with only a minority getting their method from public sector facilities. However, the proportion of pill users relying on the public sector varies by residence; only 6 percent of pill users in the Urban Governorates and urban Upper Egypt get their method from a public sector facility, compared with 17 percent in the Frontier Governorates.

| Table 6.9 Sources for family planning methods by residence |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of current users of modern family planning methods by method and most recent source, according to urban-rural residence and place of residence, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |
| Method/ source | Urban | Rural | Place of residence |  |  |  |  |  |  |  | Total |
|  |  |  | Urban <br> Governorates | Lower Egypt |  |  | Upper Egypt |  |  | Frontier Governorates |  |
|  |  |  |  | Total | Urban | Rural | Total | Urban | Rural |  |  |
| Pill |  |  |  |  |  |  |  |  |  |  |  |
| Public sector | 7.0 | 14.3 | 6.3 | 13.1 | 8.5 | 15.5 | 9.5 | 5.9 | 11.9 | 16.8 | 10.8 |
| Private sector | 92.6 | 85.4 | 92.6 | 86.9 | 91.5 | 84.5 | 90.0 | 94.1 | 87.3 | 83.2 | 88.9 |
| NGO/PVO | 0.8 | 0.0 | 1.5 | 0.2 | 0.5 | 0.1 | 0.2 | 0.6 | 0.0 | 0.0 | 0.4 |
| Private hospital/clinic or doctor | 7.8 | 4.3 | 11.8 | 4.7 | 6.8 | 3.6 | 5.2 | 4.7 | 5.6 | 1.8 | 6.0 |
| Mosque/church clinic | 1.3 | 0.3 | 2.3 | 0.5 | 1.4 | 0.0 | 0.5 | 0.0 | 0.8 | 0.0 | 0.8 |
| Pharmacy | 82.7 | 80.7 | 77.0 | 81.5 | 82.8 | 80.8 | 84.1 | 88.8 | 80.9 | 81.4 | 81.7 |
| Other ${ }^{1} /$ Not sure | 0.4 | 0.3 | 1.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.8 | 0.0 | 0.3 |
| 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 users | 654 | 707 | 223 | 645 | 227 | 419 | 469 | 188 | 281 | 25 | 1,362 |
| IUD |  |  |  |  |  |  |  |  |  |  |  |
| Public sector | 48.7 | 59.4 | 48.8 | 54.9 | 47.5 | 58.0 | 57.3 | 50.1 | 63.5 | 44.9 | 54.0 |
| Private sector | 51.3 | 40.6 | 51.2 | 45.1 | 52.4 | 42.0 | 42.7 | 49.9 | 36.5 | 55.1 | 46.0 |
| NGO/PVO | 6.6 | 7.2 | 4.3 | 8.0 | 10.4 | 7.0 | 7.2 | 6.4 | 7.8 | 12.1 | 6.9 |
| Private hospital/clinic or doctor | 39.6 | 32.6 | 40.5 | 35.8 | 38.7 | 34.6 | 32.4 | 38.6 | 27.1 | 42.5 | 36.1 |
| Mosque/church clinic | 5.1 | 0.7 | 6.5 | 1.3 | 3.3 | 0.4 | 3.2 | 4.9 | 1.7 | 0.6 | 3.0 |
| 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 users | 2,593 | 2,518 | 1,218 | 2,584 | 755 | 1,829 | 1,271 | 593 | 678 | 38 | 5,112 |
| All modern methods |  |  |  |  |  |  |  |  |  |  |  |
| Public sector | 42.0 | 54.8 | 43.5 | 50.2 | 40.9 | 54.1 | 50.0 | 40.8 | 56.3 | 41.0 | 48.6 |
| Private sector | 57.8 | 45.0 | 56.1 | 49.7 | 59.0 | 45.8 | 49.7 | 59.0 | 43.3 | 58.7 | 51.1 |
| NGO/PVO | 5.1 | 5.0 | 3.6 | 5.8 | 7.5 | 5.1 | 4.7 | 4.8 | 4.7 | 6.0 | 5.1 |
| Private hospital/clinic or doctor | 31.2 | 24.1 | 33.7 | 27.7 | 29.7 | 26.8 | 22.6 | 28.6 | 18.5 | 22.7 | 27.5 |
| Mosque/church clinic | 4.0 | 0.6 | 5.3 | 1.1 | 2.7 | 0.4 | 2.2 | 3.6 | 1.2 | 0.6 | 2.3 |
| Pharmacy | 17.5 | 15.3 | 13.5 | 15.1 | 19.1 | 13.5 | 20.1 | 22.0 | 18.9 | 29.4 | 16.3 |
| Other ${ }^{1} /$ Not sure | 0.2 | 0.3 | 0.4 | 0.1 | 0.0 | 0.2 | 0.3 | 0.2 | 0.5 | 0.3 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of users | 3,735 | 4,025 | 1,655 | 3,856 | 1,138 | 2,718 | 2,168 | 886 | 1,282 | 81 | 7,760 |
| $\mathrm{NGO} / \mathrm{PVO}=$ Nongovernmental organization/private voluntary organization ${ }^{1}$ Includes husband, friends and relatives, etc. |  |  |  |  |  |  |  |  |  |  |  |

## Trend in Sources of Modern Methods

Trends in the source of family planning methods during the period between the 1995 EDHS and the 2000 EDHS are presented by residence in Table 6.10 for IUD users and for users of all modern methods. Overall, the table indicates that there has been an increase in the percentage of current users who rely on the public sector for family planning methods since 1995. The percentage of users of modern methods who obtained their method from a governmental provider increased from 36 percent in 1995 to 49 percent at the time of the 2000 EDHS. Much of that change is due

| Table 6.10 Trends in reliance on public sector source for contraceptive method |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of current users of the IUD and of all modern methods who obtained their method from a public sector source, by residence, Egypt 1995-2000 |  |  |  |  |
|  | IUD |  | All modern methods |  |
| Residence | $\begin{gathered} 1995 \\ \text { EDHS } \end{gathered}$ | $\begin{gathered} 2000 \\ \text { EDHS } \end{gathered}$ | $\begin{gathered} 1995 \\ \text { EDHS } \end{gathered}$ | $\begin{gathered} 2000 \\ \text { EDHS } \end{gathered}$ |
| Urban-rural residence |  |  |  |  |
| Urban | 42.8 | 48.7 | 34.0 | 42.0 |
| Rural | 46.7 | 59.4 | 37.7 | 54.8 |
| Place of residence |  |  |  |  |
| Urban Governorates | 46.5 | 48.8 | 39.7 | 43.5 |
| Lower Egypt | 44.4 | 54.9 | 35.2 | 50.2 |
| Urban | 37.4 | 47.5 | 27.5 | 40.9 |
| Rural | 47.3 | 58.0 | 38.6 | 54.1 |
| Upper Egypt | 42.1 | 57.3 | 32.3 | 50.0 |
| Urban | 39.9 | 50.1 | 29.6 | 40.8 |
| Rural | 44.5 | 63.5 | 34.8 | 56.3 |
| Frontier Governorates | 31.3 | 44.9 | 25.2 | 41.0 |
| Total | 44.5 | 54.0 | 35.7 | 48.6 |
| Source: El-Zanaty et al., 1996, Table 5.9 |  |  |  |  |

to increased reliance on the public sector for the IUD. Table 6.10 shows that the percentage of users who obtained the IUD at a public sector provider increased from 45 percent in 1995 to 54 percent in 2000.

Considering the variation by residence, the trend toward an increased reliance on public sector providers was observed among users in all areas. However, the magnitude of the increase was somewhat greater for rural users than for urban users. Within urban areas, the trend was considerably less evident among users in the Urban Governorates than among users from urban Lower Egypt and urban Upper Egypt.

### 6.4 Pill Use

Overall, 10 percent of currently married women-a little more than one in six of all current users in Egypt-are pill users. In the 2000 EDHS, current users of the pill were asked a number of questions about the method, including questions on the brand of pills they used, the cost of a pill cycle, the amount that they would be willing to pay for a cycle, and, if they had obtained the pill from a pharmacy themselves, the interaction they had had with the pharmacy staff.

## Brand

Information about the brands used by women was collected by asking pill users to show the packet of pills. If the packet was available, the interviewers recorded the name of the brand. If a user was unable to show the EDHS interviewer the packet, she was asked to name the brand she was using. About a quarter of all users of the pill were not able to show a packet or identify the brand they were using.

Table 6.11 shows that Microvlar and Nordette are the most commonly used brands ( 27 percent each), followed by Triovlar and Primovlar ( 6 percent each). Norminest is used by 2 percent of users.

| Table 6.11 Brand of pill used |  |
| :--- | ---: |
| Percent distribution of pill users |  |
| by the brand of pill currently |  |
| used, Egypt 2000 |  |
| Pill brand used | Total |
| Microvlar | 27.4 |
| Nordette | 27.4 |
| Triovlar | 5.5 |
| Norminest | 1.8 |
| Primovlar | 5.7 |
| Other | 7.7 |
| Don't know/missing | 24.4 |
| Total | 100.0 |
| Number of women | 1,362 |

## Cost and Willingness to Pay

To obtain information on cost, current users were asked about the amount that they paid for the most recent packet of pills. According to the results in Table 6.12, virtually all pill users are paying more than 50 piastres for a cycle of pills, and 22 percent pay more than one pound (100 piastres) (Table 6.12). The median cost of a cycle is 95 piastres, which is substantially higher than in 1995 when the median price for a pill cycle was 66 piastres.

Pill users were asked about their willingness to pay specific amounts for the pill in order to ascertain whether they would be likely to pay a higher price for the method. The amount asked ranged from 50 piastres to more than 5 pounds. Table 6.13 indicates that many pill users would be willing to pay more than they do.

As expected, the proportion expressing a willingness to pay is directly associated with the amount mentioned. Almost all pill users would be willing to pay 50 or 75 piastres, and 93 percent would be willing to pay one pound. The majority ( 69 percent) would also be willing to pay two pounds. There is greater reluctance to pay higher amounts, with only about a quarter being willing to pay more than five pounds for a cycle of pills.

| Table 6.12 Cost of method for pill |  |
| :--- | ---: |
| users |  |
| Percent distribution of current users of |  |
| the pill by cost of a cycle of pills (in |  |
| piastres), Egypt 2000 |  |
| Cost of |  |
| one cycle |  |
| Free |  |
| 1-50 piastres | 1.2 |
| $51-75$ piastres |  |
| $76-100$ piastres | 1.7 |
| More than 100 piastres | 38.6 |
| Don't know/missing | 21.9 |
|  | 2.9 |
| Total | 100.0 |
| Number of women | 1,362 |
| Median | 95.2 |
| Mean | 204.8 |

Table 6.13 Amount users are willing to pay for the pill

Percentage of current users of the pill willing to pay various amounts to obtain the method, Egypt 2000

| Amount willing <br> to pay for one <br> cycle of pills | Total |
| :--- | ---: |
| 50 piasters | 99.8 |
| 75 piasters | 98.7 |
| 1 pound | 92.7 |
| 2 pounds | 69.4 |
| 5 pounds |  |
| More than 5 pounds | 35.8 |
| Number of women | 24.5 |


| Table 6.14 Pharmacies as a source for the pill |  |
| :--- | :---: |
| Percent distribution of pill users reporting the |  |
| pharmacy as the recent source by whether |  |
| the woman ever obtained the pill herself and |  |
| the person who obtained the pills if the |  |
| woman did not usually go herself, Egypt 2000 |  |
| Obtaining pills |  |
| from pharmacy |  |
| Woman obtained pills |  |
| Usually obtained herself |  |
| Obtained herself but not usually | 34.6 |
| Never obtained at pharmacy | 56.5 |
| Total | 100.0 |
| Number of women | 1,112 |
| Person usually obtaining pills |  |
| Husband | 42.8 |
| Children | 16.3 |
| Other relatives/friends | 40.9 |
| Total | 100.0 |
| Number of women | 727 |

## Table 6.15 Information received at pharmacies about the pill

Percent distribution of pill users who reported obtaining the pill themselves from a pharmacy by type of information received at the pharmacy, Egypt 2000

| Information <br> received | Total |
| :--- | ---: |
| Shown how to use pill |  |
| Yes | 28.2 |
| No | 71.8 |
| Side effects described |  |
| Yes | 13.0 |
| No | 87.0 |
| Told what to do for side effects |  |
| $\quad$ Yes | 7.6 |
| No | 92.4 |
| Told about other methods |  |
| Yes | 12.1 |
| No | 87.9 |
| Total | 100.0 |
| Number of women | 480 |

## Pharmacies as a Source for the Pill

The majority of pill users named the pharmacy as the source for their method. Prior DHS surveys documented that many pill users never actually went to the pharmacy themselves to get the pill. The results from the 2000 EDHS presented in Table 6.14 confirm this pattern; more than half of the pill users who cite the pharmacy as the source for their method have never gone to the pharmacy themselves to obtain the method. Users who rely on someone else to get the pills are fairly evenly divided between those who depend on the husband to get the method and those who rely on other relatives or friends ( 43 percent and 41 percent, respectively), with 16 percent saying that their children get the method for them.

Women who had gone to the pharmacy themselves to obtain the method were asked a number of questions about the information they received at the pharmacy, including questions about whether anyone at the pharmacy had told them how to use the pill, had described the side effects they might have, had advised them about what to do if they experience any of the side effects, or had mentioned any other family planning methods they might use.

The results in Table 6.15 indicate that there is little interaction between pill users and the staff at the pharmacy from which they obtain their supplies. A little more than one-quarter of pill users were told how to use the pill by pharmacy staff. Even smaller proportions of pill users say that pharmacy staff described the side effects they might have (13 percent) or told them what to do about the side effects (8 percent). Pharmacy staff also rarely talked with pill users about other methods (12 percent). The comparison of these results with similar figures from the 1995 Egypt DHS suggests that, although the information exchange between pharmacy staff and pill users remains limited, it has improved since 1995.

### 6.5 Cost of the IUD and Willingness to Pay

IUD users represent two-thirds of all current users. Like pill users, IUD users were asked in the 2000 EDHS for information on the actual cost they paid when obtaining the method as well as their willingness to pay specific amounts to get an IUD.

## Actual Cost

Table 6.16 presents the actual amount that IUD users paid for services. The table shows that, while relatively few IUD users ( 5 percent) get the method for free, more than 4 in 10 users pay less than 5 pounds for the method. At the other extreme, more than one-fifth of users pay more than 20 pounds to obtain the IUD.

The amount that a user pays to obtain an IUD varies with the type of provider. The lowest median cost is observed among those users who obtained the method from a public sector source (3.1 pounds). The median cost at a PVO clinic is 11.8 pounds, almost four times the cost the average user pays at a public sector facility, but less than half the amount users who have the IUD inserted by a private doctor or at a private hospital or clinic pay.

Figure 6.4 compares the median costs for an IUD at the time of the 1995 DHS with the cost reported by IUD users in the 2000 survey. The comparison indicates that the median cost of having an IUD inserted at a governmental facility declined slightly between the 1995 and 2000 DHS surveys. At all other types of sources, however, the median amount a user paid for the IUD rose between the two surveys. For example, in 2000, the median cost of an IUD inserted at a private clinic or hospital or by a private doctor was 25.7 pounds, more than 4 pounds higher than the median cost in 1995. The increasing gap between the costs of the IUD in public and private sector facilities may be one factor explaining the rise between the 1995 and 2000 surveys in the proportion of users obtaining the IUD at governmental facilities.

| Table 6.16 Cost of method for IUD users |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of current users of the IUD by cost of the method (in pounds), according to the type of provider, Egypt 2000 |  |  |  |  |  |
| Cost of IUD | Public health facility | Private doctor/ clinic | NGO/PVO clinic | Mosque or church clinic | Total |
| Free | 7.2 | 3.1 | 1.4 | 4.8 | 5.3 |
| $<3$ pounds | 40.0 | 0.5 | 11.7 | 5.1 | 22.7 |
| 3-5 pounds | 35.0 | 1.7 | 19.8 | 11.4 | 21.2 |
| 6-10 pounds | 8.2 | 5.2 | 15.8 | 13.4 | 7.8 |
| 11-15 pounds | 3.3 | 9.7 | 33.0 | 17.2 | 8.1 |
| 16-20 pounds | 1.6 | 16.0 | 10.1 | 21.2 | 7.9 |
| 21-30 pounds | 1.4 | 22.8 | 3.5 | 12.0 | 9.6 |
| 31-50 pounds | 0.3 | 23.3 | 2.8 | 6.4 | 8.9 |
| More than 50 pounds | 0.2 | 11.1 | 1.0 | 4.0 | 4.3 |
| Don't know/Missing | 2.7 | 6.7 | 1.0 | 4.6 | 4.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 2,758 | 1,846 | 355 | 153 | 5,112 |
| Median | 3.1 | 25.7 | 11.8 | 15.6 | 5.8 |
| Mean | 4.4 | 34.1 | 11.5 | 18.2 | 15.7 |
| NGO/PVO = Nongovernmental organization/private voluntary organization |  |  |  |  |  |



## Willingness to Pay

To investigate whether higher prices might be charged for the IUD, all current IUD users were asked about their willingness to pay various amounts for the method. The amounts asked about ranged from 5 to more than 200 pounds. The results in Table 6.17 indicate that many IUD users would be willing to pay considerably more for the method than they currently pay. As expected, the proportion willing to pay a specific amount decreases as the suggested amount increases. Virtually all IUD users (98 percent) would be willing to pay 5 pounds, and 89 percent say they are willing to pay 10 pounds. Two-thirds of women would be willing to pay 25 pounds, and 33 percent express a willingness to pay at least 50 pounds. Relatively few women would be willing to pay more than 100 pounds, with only 4 percent of IUD users saying they would pay more than 200 pounds for an IUD.

The large degree of variance between what users currently pay for the IUD and the amounts that they say they would be willing to pay suggests that the method may be considerably underpriced in both the public and private sector. However, some caution must be exercised in interpreting the results in this manner. The question on willingness to pay is hypothetical and women may have been embarrassed to tell an interviewer that they were unwilling

| Table 6.17 Amount users are willing  <br> to pay for IUD insertion  <br> Percentage of current users of the  <br> IUD willing to pay various amounts  <br> for the method, Egypt 2000  |  |
| :--- | ---: |
| Amount | Total |
| 5 pounds | 97.8 |
| 10 pounds | 88.5 |
| 25 pounds | 64.8 |
| 50 pounds | 33.1 |
| 100 pounds | 12.8 |
| 150 pounds | 7.2 |
| 200 pounds | 4.8 |
| More than 200 pounds | 4.1 |
| Number of women | 5,112 | to pay more for the method.

### 6.6 Cost of Injectables and Willingness to Pay

Injectables were introduced as a program method about five years before the 2000 EDHS. Reflecting the fact that the method has only been promoted for a short time, only 11 percent of all current users are using injectables. As with the pill and the IUD, the 2000 EDHS obtained information on both the actual cost of the method and on the amounts that injectable users would be willing to pay for the method.

## Actual Cost

Table 6.18 shows that more than eight in ten injectable users paid at least something for the method, with the majority paying less than 5 pounds. The median cost was 2.3 pounds, which is substantially lower than the average cost for injectables at the time of 1995 EDHS ( 5.1 pounds). The MOHP reduced the cost of injectables to one pound during the six-month period prior to the 2000 EDHS survey. In addition, the method has been provided for free at mobile clinics since 1997. This in part explains the decline in the average cost of injectables since MOHP facilities provide the method to the majority of injectable users.

## Willingness to Pay

Injectable users were asked about their willingness to pay specific amounts for the method in order to ascertain whether they would be likely to pay a higher price for the method. The amounts asked about ranged from 2 to more than 20 pounds. Table 6.19 , which shows the proportions of injectable users who are willing to pay various amounts,

| Table 6.18 Cost of method for <br> injectable users <br> Percent distribution of current users of <br> injectables by the cost of the method <br> (in pounds), Egypt 2000 |  |
| :--- | ---: |
| Cost of |  |
| injectables |  |
| Free | Total |
| <3 pounds | 11.9 |
| 3-4 pounds | 46.5 |
| 5-6 pounds | 19.5 |
| $7-8$ pounds | 7.6 |
| 9-10 pounds | 3.1 |
| 11-14 pounds | 3.5 |
| 15-19 pounds | 1.5 |
| 20 pounds or more | 3.3 |
| Total | 3.1 |
| Number of women | 100.0 |
| Median | 876 |
| Mean | 2.3 | indicates that many injectable users would be willing to pay more for the method. As expected, the willingness to pay is directly associated with the amount mentioned. Almost all injectable users ( 98 percent) would be willing to pay 2 pounds for the method, about 80 percent would pay 5 pounds, and almost 47 percent would be willing to pay 10 pounds. Considerably fewer users expressed a willingness to pay larger amounts for injectables, although 10 percent reported they

Table 6.19 Amount users are willing to pay for injectables

Percentage of current users of injectables willing to pay various amounts to obtain the method, Egypt 2000

| Amount willing <br> to pay for <br> injectables | Total |
| :--- | :---: |
| 2 pounds | 97.5 |
| 5 pounds | 79.8 |
| 10 pounds | 46.6 |
| 15 pounds | 22.9 |
| 20 pounds 20 pounds | 14.2 |
| More than 20.1 |  |
| Number of users | 876 |

Caution must be exercised in interpreting the responses to these questions since they are subjective. In addition, they also suffer from an unknown degree of recall error, i.e., many users had gone to the provider months or even years before the EDHS interview and may not have remembered accurately everything that took place during the encounter. Nevertheless, the results of these questions provide at least some insight into the nature of the counseling that family planning users are receiving from their providers.

In general, the results of these questions presented in Table 6.20 indicate that the information exchange between many current users and their provider is fairly limited. Overall, about four in ten users report that the provider discussed methods other than the one the user received. Providers described possible side effects with 34 percent of users and told 30 percent about what to do if they had any problems or side effects in using their method. In general, clinics operated by private voluntary agencies appear to be somewhat better at counseling users than other private sector providers or governmental sources.

| Table 6.20 Service assessment indicators for clinical providers |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Percentage of current users who consulted a clinical provider at the beginning of the current |  |  |  |

Improvement in the quality of contraceptive use is an important goal of Egypt's family planning program. The rate at which users discontinue using a method of contraception is one of the major indicators of the quality of use. Accordingly, one of the primary objectives of the 2000 EDHS is to provide information on reasons for nonuse and on the intention to use family planning in the future. Such information is considered to be of particular interest to policymakers and program mangers as they seek to address the contraceptive needs of nonusers who are concerned about spacing or limiting their fertility.

This chapter focuses on women who are not using family planning. It presents information on the following topics: levels of family planning discontinuation, reasons for discontinuation, reasons for nonuse, intention to use in the future, timing of future use, and the methods preferred among women who are not currently using a family planning method.

### 7.1 Discontinuation Rates

A key concern for family planning programs is the rate at which users discontinue use of contraception and the reasons for such discontinuation. Reasons for discontinuation may vary among couples but usually include factors such as contraceptive failure, dissatisfaction with the method, and health concerns as well as the lack of availability or the cost of contraceptive methods. High rates of discontinuation indicate that a family planning program should focus greater attention on counseling and follow-up, which can reduce the discontinuation rates by helping women to deal with the various obstacles to continued use.

The data used to analyze discontinuation were collected in the 2000 EDHS by asking respondents for information on all episodes of contraceptive use between January 1995 and the date of the interview. For each interval of use, the woman was asked the contraceptive method used and the date of use (year and month) and, if applicable, the date they stopped using and the reason for discontinuation. If a woman reported that she was using a method in January 1995, she was also asked for the date when that segment of use began.

Life-table techniques are used to calculate discontinuation rates from the 2000 EDHS calendar data. Specifically, the rates are based on episodes of use that began during the period 3 to 63 months prior to the 2000 EDHS. The rates are one-year discontinuation rates; i.e., they represent the proportion of users discontinuing within the first 12 months after beginning to use the method. The rates are calculated separately for the following five methods: pills, injectables, IUDs, condoms, and prolonged breastfeeding. To ensure a sufficient number of segments of use to allow calculation of the rates, the reasons for discontinuation were grouped into four specific categories: method failure, desire for pregnancy, side effects/health concerns, and other reasons including husband's disapproval, need for a more effective method, marital dissolution, etc.

In calculating the rates, the month of interview and the two preceding months were dropped to avoid any bias that might be introduced by unrecognized pregnancy. The rates are cumulative, i.e., they are obtained by dividing the number of discontinuations at each duration of use (in single months) by the number of months of exposure at that duration. The single-month rates were then cumulated to produce a one-year rate. In deriving these rates, the reasons for discontinuation are treated as competing risks; thus, the rates are additive across the reasons for discontinuation.

Overall, Table 7.1 shows that 3 in 10 users in Egypt stop using a method within 12 months of starting use. Three percent of users stop using due to method failure (i.e., they became pregnant while using the method), 4 percent stop using because they want to become pregnant, 14 percent stop using as a result of side effects or health concerns, and 8 percent stop using for other reasons. Regarding individual methods, the highest rate is observed for condoms ( 53 percent), followed by injectables and pills ( 48 percent each) and prolonged breastfeeding ( 41 percent). The IUD has the lowest discontinuation rate, with only 14 percent of IUD users stopping use during the first 12 months of use.

| Table 7.1 Contraceptive discontinuation rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| One-year contraceptive discontinuation rates due to method failure, desire for pregnancy, health reasons, or other reasons, according to specific methods, Egypt 2000 |  |  |  |  |  |
|  | Reason for discontinuation |  |  |  |  |
| Method | Method failure | To become pregnant | Side effects/ health concerns | All other reasons | $\begin{aligned} & \text { All } \\ & \text { reasons } \end{aligned}$ |
| Pill | 6.1 | 7.5 | 21.1 | 13.8 | 48.4 |
| IUD | 1.0 | 3.1 | 8.6 | 1.5 | 14.2 |
| Injectables | 0.8 | 3.6 | 33.8 | 10.2 | 48.4 |
| Condom | 13.0 | 5.0 | 4.1 | 30.4 | 52.5 |
| Prolonged breastfeeding | 6.2 | 1.0 | 0.3 | 33.3 | 40.7 |
| Total | 3.0 | 4.2 | 14.1 | 8.2 | 29.5 |
| Note: Figures are based | fe-table ca | culations. |  |  |  |

The reasons for discontinuation vary by method (Figure 7.1). More than one-fifth of pill users cite side effects or health concerns as the main reason for discontinuation. The rate of discontinuation due to side effects or health concerns is even higher among injectable users (34 percent). The proportion of users who stop use because of method failure is very low for the IUD and injectables (about 1 percent), moderate for the pill and prolonged breastfeeding (6 percent), and highest among users who rely on the condom (13 percent).

### 7.2 Reasons for Discontinuation of Contraceptive Use

Table 7.2 looks in greater detail at the reasons the 2000 EDHS respondents gave for discontinuing use. The table shows the percent distribution of all discontinuations in the five-year period prior to the survey by the main reason for discontinuing according to the specific method. Side effects ( 36 percent) were the most common reason for discontinuation of all modern methods except the condom, for which the main reason given for discontinuing use was the desire for a more effective method. Health concerns were cited as the reason for another 5 percent of discontinuations. The desire to become pregnant was also a frequently mentioned reason for discontinuing use.

Figure 7.1 Contraceptive Discontinuation Rates
by Method and Reason for Stopping Use


2000 EDHS

Overall, more than a quarter of all discontinuations during the five-year period before the 2000 EDHS occurred because the user wanted to have a child. For other women, an unintended pregnancy was the reason for discontinuation; 9 percent of discontinuations were the result of method failure; i.e., the woman became pregnant while using a method.

Table 7.2 Reasons for discontinuing use of family planning
Percent distribution of discontinuations of family planning methods in the last five years by main reason for discontinuation, according to specific method, Egypt 2000

|  |  |  |  |  | Periodic <br> absti- <br> nence | Prolonged <br> breast- <br> feeding | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Main reason for <br> discontinuation | Pill | IUD | Injectables | Condom |  |  |  |
| Became pregnant | 14.3 | 4.5 | 1.8 | 20.0 | 35.9 | 16.4 | 8.8 |
| Wanted to become pregnant | 22.9 | 38.1 | 10.4 | 15.6 | 32.4 | 7.8 | 27.9 |
| Husband disapproved | 1.0 | 0.4 | 0.6 | 5.6 | 0.0 | 0.0 | 0.7 |
| Side effects | 33.4 | 38.8 | 58.5 | 7.5 | 0.0 | 0.8 | 35.8 |
| Health concerns | 6.0 | 5.1 | 7.9 | 3.4 | 2.3 | 0.5 | 5.3 |
| Access/availability | 0.5 | 0.1 | 1.0 | 0.5 | 0.0 | 0.0 | 0.3 |
| Wanted more effective method | 4.2 | 0.8 | 3.0 | 26.2 | 21.5 | 20.7 | 4.2 |
| Inconvenient to use | 0.7 | 0.7 | 0.5 | 3.4 | 0.4 | 24.0 | 2.2 |
| Cost | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| Fatalistic | 0.1 | 0.1 | 0.0 | 0.2 | 0.4 | 0.2 | 0.1 |
| Difficulty in getting pregnant/ |  |  |  |  |  |  |  |
| menopausal | 2.3 | 1.5 | 1.4 | 4.4 | 2.1 | 0.0 | 1.7 |
| Infrequent sex/husband away | 10.6 | 2.0 | 6.8 | 9.4 | 0.5 | 0.1 | 5.1 |
| Marital dissolution | 0.5 | 1.0 | 1.0 | 0.8 | 2.3 | 0.0 | 0.8 |
| Other | 3.5 | 6.8 | 6.9 | 3.0 | 2.3 | 29.6 | 7.1 |
| Total |  |  |  |  |  |  |  |
| Number of discontinuations | 2,706 | 4,334 | 984 | 173 | 67 | 552 | 8,910 |

By method, side effects were the most common reason for discontinuations of the pill, IUD, and injectables. Method failure was among the major reasons for discontinuations of the condom, pill, periodic abstinence, and prolonged breastfeeding. On the other hand, method failure accounted for relatively few discontinuations of the IUD and injectables (5 percent and 2 percent, respectively).

Dissatisfaction with the method was a major factor in discontinuations for some methods. In the case of prolonged breastfeeding, for example, 24 percent of discontinuations were because the woman found the method inconvenient to use. Concern about method effectiveness was a factor in more than a fifth of the discontinuations of periodic abstinence and prolonged breastfeeding and more than a quarter of the discontinuations of the condom.

Table 7.2 also shows that program-related factors such as cost or access were almost never cited as reasons for discontinuation. Except for the condom, the husband's disapproval was also rarely cited as a main factor affecting the decision to discontinue use. Six percent of discontinuations of the condom were due to the husband's unwillingness to use the method. Factors that reduced or eliminated the risk of pregnancy (e.g., infrequent sex/husband away, difficulty in getting pregnant/menopause, and marital dissolution) accounted for 8 percent of discontinuations.

### 7.3 Intention to Use Contraception in the Future

To obtain information about potential demand for family planning services, all currently married women who were not using contraception at the time of the survey were asked about their intention to adopt family planning methods in the future. Table 7.3 shows the percent distribution of nonusers by their intention to use in the future, according to number of living children.

Among all currently married nonusers, about 60 percent intend to use family planning some time in the future, while about one-third do not plan to use in the future, and the rest are unsure about their intentions.

| Table 7.3 Future use of family planning |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married nonusers by intention to use in the future, according to number of living children, Egypt 2000 |  |  |  |  |  |  |
| Intention to use family planning in the future | Number of living children ${ }^{1}$ |  |  |  |  | Total |
|  | 0 | 1 | 2 | 3 | 4+ |  |
| Intends to use | 56.9 | 76.7 | 70.4 | 61.0 | 42.9 | 58.8 |
| Unsure about use | 15.6 | 7.6 | 6.1 | 5.4 | 6.8 | 7.8 |
| Does not intend to use | 27.1 | 15.5 | 23.4 | 33.6 | 50.4 | 33.2 |
| Missing | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 856 | 1,234 | 1,091 | 943 | 2,195 | 6,319 |
| ${ }^{1}$ Includes current pregnancy |  |  |  |  |  |  |

A nonuser's intention to use varies with the number of living children she has. Overall, the proportion saying they plan to use in the future decreases from a high of 77 percent among women with one child to 43 percent of women with four or more children. Among childless women, more than half ( 57 percent) say they intend to use in the future.

### 7.4 Reasons for Nonuse

The reasons for nonuse given by women who do not intend to use family planning are of interest to the family planning program since they help to identify areas for potential interventions. Table 7.4 presents the distribution of currently married non-users who do not intend to use in the future by the main reason for not using. Two-thirds of the nonusers have various fertility-related reasons for not planning to adopt contraception. These reasons include a perceived lack of need for contraception because the woman is subfecund or infecund ( 28 percent), is menopausal or has had a hysterectomy (19 percent), or has sex infrequently (4 percent). In addition, 11 percent of the nonusers want more children.

Method-related reasons are cited by 14 percent of nonusers; 8 percent mention health concerns and 6 percent mention fear of side effects. Opposition to use-either the woman's own attitude or that of her husband-is a factor for 8 percent of the nonusers.

Table 7.4 classifies women into two age groups (under age 30 and age 30 and over) in order to consider how the reasons for nonuse are related to a woman's age. There are significant differences in the reasons given by women under age 30 and those of age 30 and over. Nonusers under age 30 are more likely to mention the desire to have more children than those age 30 or over ( 38 percent and 7 percent, respectively), while, as might be expected, lack of need for contraception because of menopause or hysterectomy is a reason given almost exclusively by older nonusers. Opposition to use, especially on the part of the husband, is cited more often by younger than older nonusers ( 24 percent and 6 percent, respectively). Fear of side effects is reported twice as often among younger women as among older women (10 percent and 5 percent, respectively), while older women are twice as likely as younger women to mention health concerns ( 8 percent and 4 percent, respectively).

Table 7.4 Reasons for not using family planning
Percent distribution of currently married nonusers who do not intend to use in the future by main reason for not using, according to age, Egypt 2000

|  | Age |  |  |
| :--- | ---: | ---: | ---: |
| Main reason for not <br> using family planning | $15-29$ | $30-49$ | Total |
| Fertility related | 53.2 | 64.2 | 63.0 |
| Not having sex | 1.2 | 1.7 | 1.6 |
| Infrequent sex | 2.0 | 4.3 | 4.0 |
| Menopausal/had hysterectomy | 0.0 | 21.5 | 19.2 |
| Subfecund/infecund | 11.6 | 29.5 | 27.6 |
| Wants more children | 38.4 | 7.2 | 10.5 |
|  |  |  |  |
| Opposition to use | 24.4 | 5.6 | 7.6 |
| Respondent opposed | 6.0 | 2.7 | 3.0 |
| Husband opposed | 16.4 | 2.3 | 3.8 |
| Others opposed | 0.5 | 0.1 | 0.1 |
| Religious prohibit | 1.5 | 0.5 | 0.6 |
|  |  |  |  |
| Lack of knowledge | 0.0 | 0.1 | 0.1 |
| $\quad$ Knows no method | 0.0 | 0.0 | 0.0 |
| Knows no source | 0.0 | 0.0 | 0.0 |
|  |  |  |  |
| Method-related | 14.0 | 13.8 | 13.9 |
| Health concerns | 3.5 | 8.1 | 7.6 |
| Side effects | 10.0 | 5.2 | 5.7 |
| Costs too much | 0.0 | 0.2 | 0.2 |
| Inconvenient | 0.0 | 0.2 | 0.1 |
| Interferes with body | 0.5 | 0.2 | 0.2 |
| Other |  |  |  |
| Don't know | 6.6 | 15.6 | 14.7 |
| Total | 1.7 | 0.8 | 0.9 |
| Number of women | 100.0 | 100.0 | 100.0 |
|  | 223 | 1,877 | 2,101 |

### 7.5 Preferred Method

Nonusers who planned to use family planning in the future were asked about the method they would prefer to use. Table 7.5 shows that the majority of women (61 percent) prefer modern contraceptive methods. Regarding specific methods, almost 40 percent of all nonusers who plan to use prefer the IUD. The remaining nonusers are divided between those who prefer the pill (14 percent) and those who prefer injectables ( 7 percent), with less than 1 percent expressing a preference for the other modern or traditional methods shown in the table.

### 7.6 Contact of Nonusers with Outreach Workers/Health Care Providers

The 2000 EDHS collected information on whether nonusers had any recent contact with commu-

Table 7.5 Preferred method of family planning for future use

Percent distribution of currently married women who are not using a family planning method but who intend to use in the future by preferred method, Egypt 2000

| Method | Intend to use |
| :--- | ---: |
| Pill | 13.5 |
| IUD | 39.3 |
| Injectables | 7.0 |
| Condom | 0.2 |
| Female Sterilization | 0.4 |
| Norplant | 0.9 |
| Periodic Abstinence | 0.1 |
| Withdrawal | 0.0 |
| Other | 23.0 |
| As doctor recommends | 2.3 |
| Don't know | 13.3 |
|  |  |
| Total | 100.0 |
| Number of women | 3,717 | nity workers or health care providers. Such contacts provide an opportunity to counsel the nonuser about the need for family planning. To obtain this information, nonusers were asked whether they had been visited at home at anytime during the 6 months preceding the survey by an outreach worker (e.g., a raiyda refia) or anyone else who had talked with them about family planning. They were also asked about any visits they had made to governmental health facilities or private doctors or clinics during the six months preceding the survey and, if they had visited any of these providers, whether anyone had spoken to them about family planning during their visit(s).

Table 7.6 presents the data on both the proportion of currently married nonusers who had any contact with an outreach workers or health facilities and the proportion who discussed family planning with an outreach worker or other health care provider during the 6 months prior to the EDHS interview by background characteristics. Table 7.6 shows that relatively few women had been reached through community outreach efforts, with only 4 percent of nonusers reporting that they had been visited at home by a fieldworker. Figure 7.2 shows that outreach visits were considerably less common in 2000 than at the time of the 1995 EDHS when 11 percent of nonusers had reported a home visit during the six-month period before the survey. The decrease in outreach contacts was particularly striking in rural Upper Egypt: in 1995, 17 percent of nonusers in rural Upper Egypt reported being visited at home by a fieldworker; however, in 2000, the figure was 5 percent.

Table 7.6 also looks at the proportion of nonusers reporting that they had visited a health facility during the six-month period before the survey. A little more than a quarter of nonusers had made at least one visit to a government health facility during the period, and 30 percent had gone to a private doctor or private health facility at least once.

Taking into account both contacts with fieldworkers and contacts with health facilities, Table 7.6 shows that 45 percent of all nonusers had some type of contact during the six months before the survey. In general, as the results in Table 7.6 show, there were not large differentials in the proportions of nonusers who had contact with a fieldworker or a provider. Younger women were somewhat more likely than older women to report having had some contact with a family planning worker or health provider. By residence, differentials were greatest between women living in Lower Egypt and those from other areas. The proportion who had some contact with a family planning worker or provider is also generally positively related to a woman's educational level.

| Table 7.6 Contact of nonusers with family planning providers |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of nonusers of family planning (FP) who were visited at home by an outreach worker and the percentage who discussed family planning at a health facility during the six months preceding the survey, by selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |
| Background characteristic | Visited <br> by FP <br> worker at home | Visited public health facility (PHF) | Visited PHF, discussed FP with staff | Visited private health facility (PrHF) | Visited PrHF, discussed FP with staff | Had some contact with FP worker or health facility | Discussed <br> FP with FP worker or staff at health facility | Number of women |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 3.4 | 29.3 | 4.4 | 37.4 | 4.1 | 52.7 | 7.6 | 475 |
| 20-24 | 3.6 | 34.5 | 5.3 | 38.7 | 3.6 | 55.5 | 7.9 | 1,311 |
| 25-29 | 5.4 | 34.2 | 6.9 | 35.8 | 4.9 | 53.7 | 10.6 | 1,267 |
| 30-34 | 5.8 | 28.9 | 5.6 | 33.7 | 4.8 | 50.3 | 9.6 | 975 |
| 35-39 | 3.7 | 23.8 | 4.1 | 28.1 | 3.5 | 40.6 | 6.6 | 991 |
| 40-44 | 2.6 | 20.8 | 2.5 | 23.3 | 1.2 | 35.9 | 3.4 | 961 |
| 45-49 | 2.6 | 17.9 | 1.2 | 19.9 | 1.1 | 31.7 | 2.1 | 1,518 |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 1.8 | 26.5 | 4.5 | 36.0 | 3.8 | 47.6 | 7.4 | 2,991 |
| Rural | 5.2 | $27.1$ | $4.0$ | $26.5$ | $2.8$ | $43.4$ | $6.2$ | $4,507$ |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 0.7 | 26.6 | 4.2 | 34.4 | 3.5 | 45.9 | 6.7 | 1,260 |
| Lower Egypt | 4.7 | 34.0 | 4.6 | 34.5 | 3.8 | 51.6 | 7.4 | 2,875 |
| Urban | 3.1 | 34.2 | 5.6 | 42.5 | 4.0 | 57.4 | 8.5 | 776 |
| Rural | 5.3 | 34.0 | 4.2 | 31.5 | 3.7 | 49.4 | 7.0 | 2,099 |
| Upper Egypt | 4.4 | 20.8 | 3.8 | 25.3 | 2.6 | 39.1 | 6.0 | 3,238 |
| Urban | 2.2 | 19.8 | 4.0 | 33.1 | 4.3 | 41.6 | 7.5 | 888 |
| Rural | 5.2 | 21.1 | 3.8 | 22.3 | 2.0 | 38.2 | 5.4 | 2,350 |
| Frontier Governorates | 2.7 | 22.9 | 4.3 | 21.7 | 2.5 | 39.6 | 6.4 | 125 |
| Education |  |  |  |  |  |  |  |  |
| No education | 4.2 | 23.0 | 3.4 | 19.9 | 1.9 | 35.3 | 4.9 | 3,604 |
| Primary incomplete | 4.2 | 29.1 | 3.4 | 34.0 | 3.2 | 50.1 | 5.9 | 987 |
| Primary complete/ some secondary | 3.6 | 28.7 | 6.1 | 33.1 | 4.2 | 47.7 | 9.2 | 955 |
| Secondary complete/higher | 3.1 | 31.9 | 5.1 | 46.1 | 5.1 | 59.2 | 9.1 | 1,952 |
| Work status |  |  |  |  |  |  |  |  |
| Working for cash | 2.2 | 26.5 | 4.2 | 34.2 | 3.8 | 46.0 | 7.3 | 934 |
| Not working for cash | 4.1 | 26.9 | 4.2 | 29.7 | 3.1 | 44.9 | 6.6 | 6,563 |
| Total | 3.9 | 26.9 | 4.2 | 30.3 | 3.2 | 45.1 | 6.7 | 7,498 |



Table 7.6 also shows that although a substantial proportion of nonusers had at least some contact with a health facility in the six months before the survey, relatively few nonusers had actually discussed family planning with a provider at a facility. Overall, one in seven nonusers who reported at least one visit to public health facility (4 percent of all nonusers) had talked about family planning with the facility staff. The likelihood that family planning was discussed was even lower at private sector health facilities; only about one in ten nonusers who had visited a private health facility (3 percent of all nonusers) reported any discussion of family planning with the facility staff. Overall, taking into account both the nonusers who had had any discussion of family planning at a facility and those who had been visited by a health worker, 7 percent of all nonusers had had some discussion of family planning during the six months prior to the EDHS interview.

Although the results in Table 7.6 suggest that there are many "missed" opportunities for informing and motivating nonusers about family planning, some caution must be exercised in drawing such conclusions. Not all visits to health providers present appropriate opportunities for offering family planning information or services, and not all nonusers are interested in/or in need of family planning when they visit an outreach facility. Nevertheless, the results in Table 7.6 suggest that there is potential for taking more advantage of visits to facilities to offer family planning information and counseling to nonusers.

## PROXIMATE DETERMINANTS OF FERTILITY

This chapter considers a number of factors other than contraception that influence fertility. Marriage is among the most important of these proximate determinants since it is a primary indicator of women's exposure to the risk of pregnancy. Early age at first marriage in a population is usually associated with a longer period of exposure to the risk of pregnancy and thus higher fertility levels. The early initiation of childbearing associated with early marriage may also adversely affect women's and children's health.

Besides marriage, this chapter explores several other factors that influence fertility, including postpartum amenorrhea, postpartum abstinence, and menopause. Postpartum amenorrhea and postpartum abstinence determine the length of time a woman is insusceptible to pregnancy after childbirth, affecting birth intervals and thus fertility levels. Menopause is important since it marks the end of a woman's period of exposure to the risk of pregnancy.

In the 2000 EDHS, questions about the proximate determinants of fertility were included in the individual questionnaire, which was administered only to ever-married women. However, a number of the tables, which examine the proximate determinants in this chapter, are based on all women, i.e., on ever-married women and never-married women. In constructing these tables, the denominators have been expanded to represent all women by multiplying the number of evermarried women by an inflation factor equal to the ratio of all women to ever-married women reported in the household questionnaire. The inflation factors are calculated by single years of age, either for the population as a whole or, in cases where the results are presented by background characteristics, separately for each category of the characteristic in question.

### 8.1 Marital Status

Table 8.1 shows the distribution of all women age 15-49 by current marital status. Overall, 63 percent of women are currently married, 3 percent are widowed, 2 percent are divorced or separated (not living together), and 32 percent have never married. The proportion never married decreases rapidly with age, from 88 percent among women age 15-19 to 46 percent among women age 20-24. The virtual universality of marriage among women is further evidenced from the fact that among women age 30 and over, 94 percent or more are or have been married. Most disruption of marital unions appears to be due to the death of the husband. As expected, the proportion widowed increases steadily with age, from less than 1 percent among women under age 30 to 16 percent among women age 45-49. The proportion divorced and separated does not exceed 5 percent of women in any age groups.

### 8.2 Consanguinity

Marriages between relatives (consanguineous marriages) are common in Egypt. According to the 2000 EDHS data presented in Table 8.2, more than one-third of ever-married women report that their current or, in the case of widowed or divorced women, their most recent husband was a relative. Nearly six in ten consanguineous marriages involve first cousins. In such marriages, the husband is somewhat more likely to be a relative from the father's side than the mother's side.

| Table 8.1 Current marital status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women by current marital status, according to age, Egypt 2000 |  |  |  |  |  |  |  |
|  |  |  | Marital statu |  |  |  |  |
| Age | Never married | Married | Widowed | Divorced | Not living together | Total | Number of women |
| 15-19 | 88.1 | 11.6 | 0.0 | 0.3 | 0.1 | 100.0 | 5,161 |
| 20-24 | 45.6 | 53.0 | 0.2 | 0.9 | 0.3 | 100.0 | 4,126 |
| 25-29 | 16.2 | 81.7 | 0.5 | 1.3 | 0.4 | 100.0 | 3,399 |
| 30-34 | 6.1 | 89.2 | 2.1 | 1.9 | 0.5 | 100.0 | 2,878 |
| 35-39 | 3.0 | 89.7 | 4.5 | 2.1 | 0.7 | 100.0 | 2,756 |
| 40-44 | 1.8 | 86.5 | 8.9 | 1.8 | 1.1 | 100.0 | 2,222 |
| 45-49 | 1.5 | 79.4 | 15.6 | 2.6 | 0.9 | 100.0 | 2,343 |
| Total | 31.9 | 62.8 | 3.4 | 1.3 | 0.5 | 100.0 | 22,884 |

## Table 8.2 Consanguinity

Percent distribution of ever-married women by relationship to their (last) husband, according to selected background characteristics, Egypt 2000

| Background characteristic | First cousin |  | Second cousin |  | Other blood relative | Relative by marriage/ not related | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Father's side | Mother's side | Father's side | Mother's side |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 15.5 | 8.9 | 8.6 | 5.0 | 8.8 | 53.2 | 100.0 | 615 |
| 20-24 | 13.5 | 9.3 | 6.3 | 4.1 | 5.8 | 61.0 | 100.0 | 2,244 |
| 25-29 | 12.4 | 8.5 | 5.1 | 4.3 | 5.7 | 63.9 | 100.0 | 2,850 |
| 30-34 | 12.9 | 9.2 | 5.5 | 3.2 | 5.9 | 63.2 | 100.0 | 2,701 |
| 35-39 | 13.6 | 8.7 | 5.5 | 3.5 | 5.8 | 62.9 | 100.0 | 2,674 |
| 40-44 | 13.0 | 7.9 | 5.9 | 4.7 | 6.0 | 62.6 | 100.0 | 2,182 |
| 45-49 | 13.3 | 8.0 | 5.4 | 5.1 | 6.4 | 61.7 | 100.0 | 2,307 |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 8.8 | 7.6 | 4.3 | 3.6 | 5.4 | 70.3 | 100.0 | 6,871 |
| Rural | 16.6 | 9.4 | 6.8 | 4.6 | 6.5 | 56.0 | 100.0 | 8,702 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 8.6 | 7.9 | 3.5 | 2.8 | 6.3 | 71.0 | 100.0 | 2,992 |
| Lower Egypt | 12.0 | 8.7 | 4.1 | 3.7 | 4.8 | 66.7 | 100.0 | 6,826 |
| Urban | 7.2 | 7.4 | 2.9 | 3.7 | 4.0 | 74.9 | 100.0 | 1,946 |
| Rural | 13.9 | 9.2 | 4.6 | 3.8 | 5.1 | 63.4 | 100.0 | 4,880 |
| Upper Egypt | 17.0 | 9.1 | 8.7 | 5.4 | 7.5 | 52.4 | 100.0 | 5,546 |
| Urban | 10.6 | 7.4 | 6.7 | 4.8 | 5.8 | 64.7 | 100.0 | 1,808 |
| Rural | 20.1 | 9.9 | 9.6 | 5.6 | 8.3 | 46.5 | 100.0 | 3,738 |
| Frontier Governorates | 15.9 | 6.8 | 10.2 | 5.4 | 7.9 | 53.7 | 100.0 | 209 |
| Education |  |  |  |  |  |  |  |  |
| No education | 16.3 | 9.9 | 6.8 | 4.4 | 6.4 | 56.3 | 100.0 | 6,734 |
| Primary incomplete | 14.8 | 9.5 | 7.0 | 5.2 | 6.0 | 57.3 | 100.0 | 2,060 |
| Primary complete/ some secondary | 13.0 | 7.8 | 5.6 | 4.4 | 6.2 | 62.9 | 100.0 | 2,026 |
| Secondary complete/higher | r 8.1 | 6.8 | 3.6 | 3.3 | 5.6 | 72.6 | 100.0 | 4,753 |
| Work status |  |  |  |  |  |  |  |  |
| Working for cash | 7.9 | 5.7 | 3.3 | 2.9 | 5.0 | 75.3 | 100.0 | 2,266 |
| Not working for cash | 14.1 | 9.1 | 6.1 | 4.4 | 6.2 | 60.1 | 100.0 | 13,307 |
| Total | 13.2 | 8.6 | 5.7 | 4.2 | 6.1 | 62.3 | 100.0 | 15,573 |

As expected, consanguineous marriages are more common in rural than in urban areas, with close to half of the marriages in rural areas involving relatives. Even in urban areas, however, 30 percent of women are married to a blood relative. The likelihood of consanguineous marriage also varies by place of residence. Women in Upper Egypt ( 48 percent) contract such unions more frequently than women in other areas. The highest rate of consanguineous marriages is found in rural Upper Egypt, where more than five in ten marriages are between relatives. The rate of consanguineous marriage is lowest in the Urban Governorates (29 percent).

A woman's chance of marrying a relative is also associated with the level of education. The percentage of marriages involving relatives decreases from 44 percent among women with no education to 27 percent among women with a secondary education or higher. The likelihood of consanguineous marriage is higher among women who are not working for cash than among women who are working for cash.

### 8.3 Age at First Marriage

The duration of exposure to the risk of pregnancy in a society such as Egypt is closely associated with the age at which women first marry. Thus, trends in age at first marriage can help explain changes in fertility levels.

Table 8.3 shows both the percentage of women who have ever married by selected exact ages and the median age at first marriage, according to current age. The results document a substantial increase in age at marriage among younger cohorts. Overall, the median age at first marriage among women 25-29 is 20.8 years, around three years greater than the median age at first marriage among women age 45-49 (18.1 years). Accompanying the overall trend to later marriage is an especially marked decline in the proportion of women marrying at very young ages. The percentage of women married by exact age 15 has dropped from 17 percent among women age $45-49$ to 4 percent among women age 20-24. The percentage of women married by exact age 18 has fallen from 49 percent among women 45-49 to 20 percent among women 20-24.

## Table 8.3 Age at first marriage

Percentage of women who were first married by exact age $15,18,20,22$, and 25 , and median age at first marriage, according to current age, Egypt 2000

| Current age | Percentage of women who were first married by exact age: |  |  |  |  | Percentage never married | Number of women | Median age at first marriage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 18 | 20 | 22 | 25 |  |  |  |
| 15-19 | 1.3 | NA | NA | NA | NA | 88.1 | 5,161 | a |
| 20-24 | 3.9 | 19.5 | 35.9 | NA | NA | 45.6 | 4,126 | a |
| 25-29 | 8.2 | 25.0 | 42.5 | 58.4 | 77.0 | 16.2 | 3,399 | 20.8 |
| 30-34 | 10.1 | 34.6 | 50.8 | 66.8 | 81.7 | 6.1 | 2,878 | 19.9 |
| 35-39 | 12.2 | 41.4 | 57.2 | 71.2 | 85.2 | 3.0 | 2,756 | 19.0 |
| 40-44 | 12.2 | 43.0 | 59.5 | 73.0 | 83.8 | 1.8 | 2,222 | 18.7 |
| 45-49 | 16.7 | 48.7 | 64.5 | 77.6 | 87.9 | 1.5 | 2,343 | 18.1 |
| 25-49 | 11.5 | 37.4 | 53.8 | 68.5 | 82.7 | 6.5 | 13,597 | 19.5 |

[^7]${ }^{\text {a }}$ Omitted because less than 50 percent of the women in the age group $x$ to $x+4$ were first married by age $x$

Differentials in the median age at first marriage by selected background characteristics are presented in Table 8.4. The table shows early marriage is much more common in rural than in urban areas. The median age at first marriage among urban women age $25-49$ is 21 years, more than three years higher than the median age at first marriage among rural women. Considering the trend across age cohorts, the results document a generally similar increase in the age at first marriage for both urban and rural women ( 2.6 years and 2.8 years, respectively).

| Table 8.4 Median age at first marriage |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median age at first marriage among women age 20-49 years, by current age and selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |
| Background characteristic | Current age |  |  |  |  |  | Women age 20-49 | Women age 25-49 |
|  | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |  |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | a | 22.4 | 21.7 | 21.3 | 20.5 | 19.8 | a | 21.2 |
| Rural | a | 19.7 | 18.3 | 17.5 | 17.4 | 16.9 | 18.6 | 18.1 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | a | 23.0 | 22.1 | 21.5 | 21.4 | 20.4 | a | 21.7 |
| Lower Egypt | a | 20.8 | 19.7 | 18.7 | 18.3 | 17.7 | 19.8 | 19.2 |
| Urban | a | 21.9 | 21.7 | 21.1 | 19.7 | 19.7 | a | 20.9 |
| Rural | a | 20.4 | 18.9 | 17.8 | 17.7 | 17.1 | 19.1 | 18.5 |
| Upper Egypt | a | 19.8 | 18.5 | 18.1 | 18.1 | 17.3 | 19.0 | 18.4 |
| Urban | a | 22.2 | 20.9 | 21.0 | 20.2 | 18.7 | a | 20.7 |
| Rural | 19.8 | 18.6 | 17.3 | 17.0 | 17.1 | 16.6 | 17.9 | 17.4 |
| Frontier Governorates | a | 20.5 | 20.9 | 18.6 | 18.3 | 16.5 | 20.0 | 19.4 |
| Education |  |  |  |  |  |  |  |  |
| No education | 18.8 | 18.3 | 17.3 | 17.0 | 17.2 | 17.0 | 17.5 | 17.3 |
| Primary incomplete | 19.5 | 18.7 | 18.0 | 17.9 | 18.4 | 17.6 | 18.3 | 18.1 |
| Primary complete/ some secondary | a | 19.8 | 18.7 | 19.4 | 19.2 | 18.9 | 19.5 | 19.3 |
| Secondary complete/higher | a | 23.1 | 22.8 | 23.2 | 24.3 | 24.0 | a | 23.2 |
| Work status |  |  |  |  |  |  |  |  |
| Working for cash | a | 24.4 | 23.1 | 22.5 | 22.8 | 22.3 | a | 23.1 |
| Not working for cash | a | 20.2 | 19.2 | 18.1 | 18.1 | 17.7 | 19.4 | 18.8 |
| Total | a | 20.8 | 19.9 | 19.0 | 18.7 | 18.1 | a | 19.5 |
| Note: Medians are not shown for women 15-19 because less than 50 percent have married by age 15 in all subgroups shown in the table. <br> ${ }^{\text {a }}$ Omitted because less than 50 percent of the women in the age group were first married by age 20. |  |  |  |  |  |  |  |  |

There are marked differentials in the age of first marriage among women $25-49$ by place of residence. On average, Table 8.4 shows that women marry at a much younger age in rural Upper Egypt ( 17.4 years) than in rural Lower Egypt ( 18.5 years), while there is almost no difference in the median age at first marriage between urban Upper Egypt ( 20.7 years) and urban Lower Egypt (20.9 years). The median age at first marriage in the Urban Governorates (21.7 years) is slightly higher than in either urban Lower Egypt or urban Upper Egypt. An examination of the trend across age cohorts suggests that there have been substantial increases over time in the median age at marriage within each area.

Large differences in age at first marriage by educational level also are evident in Table 8.4. The differential is especially pronounced between women who have completed at least secondary school and other women. The median age at first marriage among women with a secondary education is 23.2 years, about four years higher than the median age among women who have completed the primary but not the secondary level (19.3 years) and about six years higher than among women who never attended school (17.3 years). The magnitude of the differential in the age at marriage does not vary greatly across age cohorts, which suggests that much of the upward trend in the age at marriage over the past several decades in Egypt has been due to increases in educational attainment among women.

Finally, the median age at first marriage is much higher among women who are working for cash ( 23 years) than among other women.

### 8.4 Postpartum Amenorrhea, Abstinence and Insusceptibility

Among women who are not using contraception, exposure to the risk of pregnancy in the period after a birth is influenced primarily by two factors: breastfeeding and sexual abstinence. Breastfeeding prolongs postpartum protection from conception through its effect on the length of the period of amenorrhea (the period prior to the return of menses) after a birth. More frequent breastfeeding for longer durations as well as delays in the age at which supplementary foods are introduced are associated with longer periods of postpartum amenorrhea. Delaying the resumption of sexual relations after a birth also prolongs the period of postpartum protection. For the purposes of the following discussion, women are considered insusceptible to pregnancy if they are not at risk of conception, either because they are amenorrheic or abstaining after a birth.

The percentage of births occurring during the three years preceding the survey for which mothers are postpartum amenorrheic, postpartum abstaining, and postpartum insusceptible is shown in Table 8.5, according to the number of months since the birth. These distributions are based on current status information, i.e., on the proportion of births occurring $x$ months before the survey for which mothers were still amenorrheic, abstaining, or insusceptible at the time of the survey. Thus, the results presented in the table are based on cross-sectional data, representing the experience of mothers of all births at a single point in time rather than showing the experience of a cohort of mothers over time. The data are grouped in two-month intervals to minimize the fluctuations in the estimates. The median- and mean-duration estimates shown at the bottom of Table 8.5 are calculated from the current status distributions presented in the table. The prevalence/incidence mean also is shown in Table 8.5. The prevalence/incidence mean is obtained by dividing the number of mothers who are amenorrheic, abstaining, or insusceptible by the average number of births per month over the 36 -month period.

Overall, the period of amenorrhea after birth is not long for the average Egyptian woman. As Figure 8.1 shows, the percentage of babies whose mothers are amenorrheic declines from 94 percent in the two months immediately after a birth to 52 percent during the period two to three months after birth. By the period 4 to 5 months after a birth, mothers of 44 percent of births are still amenorrheic, and by 12 to 13 months after a birth, mothers have not resumed menstruation in the case of only 18 percent of births. The median duration of postpartum amenorrhea is 3.8 months, and the mean duration is 7 months. The relatively short average duration of postpartum amenorrhea is related to breastfeeding patterns, especially the early introduction of supplemental foods (see Chapter 13).

| Table 8.5 Postpartum amenorrhea, abstinence, and insusceptibility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of births for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Egypt 2000 |  |  |  |  |
| Months since birth | Amenorrheic | Abstaining | Insusceptible | Number of births |
| $<2$ | 93.6 | 74.7 | 95.6 | 362 |
| 2-3 | 52.3 | 11.2 | 54.3 | 477 |
| 4-5 | 43.8 | 4.5 | 45.4 | 397 |
| 6-7 | 33.4 | 5.1 | 35.7 | 422 |
| 8-9 | 30.0 | 3.7 | 32.2 | 399 |
| 10-11 | 24.7 | 1.6 | 25.8 | 347 |
| 12-13 | 18.0 | 3.6 | 19.9 | 384 |
| 14-15 | 13.1 | 4.2 | 15.9 | 404 |
| 16-17 | 14.6 | 2.4 | 16.0 | 341 |
| 18-19 | 6.5 | 1.7 | 8.2 | 415 |
| 20-21 | 3.6 | 2.2 | 5.8 | 361 |
| 22-23 | 0.8 | 1.1 | 1.9 | 330 |
| 24-25 | 1.1 | 1.3 | 2.1 | 415 |
| 26-27 | 0.3 | 0.8 | 1.1 | 399 |
| 28-29 | 1.2 | 1.7 | 2.7 | 366 |
| 30-31 | 0.0 | 1.0 | 1.0 | 390 |
| 32-33 | 0.8 | 0.9 | 1.6 | 353 |
| 34-35 | 0.1 | 1.2 | 1.3 | 335 |
| Total | 19.4 | 6.8 | 21.0 | 6,896 |
| Median | 3.8 | 1.7 | 4.0 |  |
| Mean | 7.0 | 2.8 | 7.6 | - |
| Prevalence/Incidence mean | 6.9 | 2.4 | 7.4 | - |

## Figure 8.1 Percentage of Births for which Mothers are Still Amenorrheic or Abstaining



As in other Islamic countries, many couples in Egypt observe the traditional practice of abstaining from sexual relations for a period of 40 days after a birth. Reflecting this tradition, the percentage of births for which the mother is still abstaining decreases rapidly, from 75 percent in the 2 -month period immediately after a birth to 11 percent at 2 to 3 months after a birth.

The combined effects of postpartum amenorrhea and postpartum abstinence are reflected in the period of postpartum insusceptibility after a birth. Overall, about half of all Egyptian women are at risk of pregnancy by 4 months after a birth unless they have begun to use contraception. The mean duration of the period of postpartum insusceptibility is almost 8 months.

The median duration of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility is presented in Table 8.6, according to selected background characteristics. In general, the periods of insusceptibility to the risk of conception are longer for older women, rural women, women in Upper Egypt, and women with no education than for women in other groups. The median duration of postpartum insusceptibility is longest for women from rural Upper Egypt ( 6.1 months). Most of the differences in the durations of insusceptibility are owed to marked differences in the durations of postpartum amenorrhea, since the average duration of postpartum abstinence does not vary greatly among the population subgroups.

| Table 8.6 Median duration of postpartum insusceptibility by background characteristics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility, by selected background characteristics, Egypt 2000 |  |  |  |  |
| Background characteristic | Postpartum amenorrhea | Postpartum abstinence | Postpartum insusceptibility | Number of births |
| Age |  |  |  |  |
| <30 | 3.5 | 1.6 | 3.7 | 4,393 |
| 30+ | 4.8 | 1.8 | 5.2 | 2,502 |
| Urban-rural residence |  |  |  |  |
| Urban | 3.2 | 1.7 | 3.3 | 2,676 |
| Rural | 4.2 | 1.6 | 4.5 | 4,220 |
| Place of residence |  |  |  |  |
| Urban Governorates | 3.5 | 1.9 | 3.8 | 1,114 |
| Lower Egypt | 3.1 | 1.6 | 3.3 | 2,836 |
| Urban | 2.5 | 1.5 | 2.5 | 756 |
| Rural | 3.5 | 1.7 | 3.7 | 2,079 |
| Upper Egypt | 4.4 | 1.6 | 4.8 | 2,842 |
| Urban | 3.4 | 1.8 | 3.4 | 745 |
| Rural | 5.3 | 1.6 | 6.1 | 2,097 |
| Frontier Governorates | 4.3 | 1.8 | 4.4 | 104 |
| Education |  |  |  |  |
| No education | 4.3 | 1.6 | 4.7 | 2,639 |
| Primary incomplete | 4.4 | 1.8 | 4.6 | 751 |
| Primary complete/ some secondary | 3.8 | 1.7 | 4.0 | 976 |
| Secondary complete/higher | 3.4 | 1.7 | 3.6 | 2,529 |
| Work status |  |  |  |  |
| Working for cash | 4.9 | 1.5 | 5.1 | 755 |
| Not working for cash | 2.8 | 1.4 | 3.2 | 6,140 |
| Total | 3.8 | 1.7 | 4.0 | 6,896 |
| Note: Medians are based on current status. |  |  |  |  |

## 8. 5 Termination of Exposure to Pregnancy

Another factor influencing the risk of pregnancy among women is menopause among older women. Table 8.7 presents data on the proportion of women who are menopausal among nonpregnant, non-amenorrheic, currently married women age 35 and over. For the purposes of the table, an EDHS respondent is considered menopausal if she met one of the two following conditions: (1) she declared herself menopausal at the time of the interview, or (2) she had not had a period for six months or more before the survey and was neither pregnant nor amenorrheic.

Based on this definition, Table 8.7 shows that few respondents under age 40 are considered menopausal. However, the proportion menopausal rises rapidly with age, from 6 percent of women age 40-41 to slightly less than half of the women in the oldest age group (48-49 years).

| Table 8.7 Termination of exposure to the risk of pregnancy |  |  |
| :---: | :---: | :---: |
|  |  |  |
| Percentage of currently married women age 30-49 who are menopausal, ${ }^{1}$ by age, Egypt 2000 |  |  |
| Age | Percent | Number of women |
| 30-34 | 2.7 | 2,701 |
| 35-39 | 3.1 | 2,674 |
| 40-41 | 6.4 | 1,024 |
| 42-43 | 8.5 | 835 |
| 44-45 | 22.2 | 1,016 |
| 46-47 | 33.2 | 773 |
| 48-49 | 49.4 | 841 |
| Total | 12.1 | 9,864 |
| ${ }^{1}$ Includes non-pregnant, non-amenorrheic currently married women whose last menstrual period occurred six or more months preceding the survey or who report that they are menopausal. |  |  |

## FERTILITY PREFERENCES

Insight into the fertility desires in a population is important, both for estimating the potential unmet need for family planning and for predicting future fertility. This chapter presents data from the 2000 EDHS on the fertility intentions of Egyptian women, the need for family planning services, and desired family size. It also considers the potential effect on fertility if unwanted pregnancies were prevented.

### 9.1 Desire for More Children

To obtain information on fertility preferences, non-sterilized currently married women were asked the question: "Would you like to have (another) child or would you prefer not to have any (more) children?" For pregnant women, the question was prefaced by the wording, "After the child you are expecting. . . ." Women who wanted more children were then asked how long they would like to wait before the birth of their next child. The small number of sterilized women who were not asked about their childbearing preferences was considered to want no more children for the purposes of the fertility preference tabulations presented in this chapter.

Table 9.1 and Figure 9.1 show the future reproductive intentions of currently married women by the number of living children (including any current pregnancy). The majority of currently married women do not want any more children ( 64 percent) or are sterilized ( 1 percent). Almost all of the remaining women ( 28 percent) want another child. Among those wanting another child, the majority- 15 percent of all currently married women - either want to wait two years or more to have the next birth or are unsure of when they want another child. Slightly less than half of the women who want another child-13 percent of all currently married women-want a child soon (within two years).

Table 9.1 Fertility preferences by number of living children
Percent distribution of currently married women by desire for more children, according to number of living children, Egypt 2000

| Desire for more children | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6+ |  |
| Want another soon ${ }^{2}$ | 89.9 | 26.2 | 9.8 | 3.9 | 2.4 | 0.8 | 0.8 | 12.5 |
| Want another later ${ }^{3}$ | 0.4 | 58.1 | 18.9 | 5.2 | 1.9 | 1.6 | 0.5 | 13.8 |
| Want another, undecided when | 1.5 | 3.3 | 1.5 | 0.7 | 0.5 | 0.2 | 0.3 | 1.2 |
| Undecided | 0.6 | 3.1 | 8.6 | 5.6 | 2.8 | 2.4 | 1.6 | 4.3 |
| Want no more | 1.1 | 7.5 | 58.9 | 81.4 | 87.3 | 88.7 | 88.8 | 64.0 |
| Sterilized | 0.0 | 0.1 | 0.4 | 1.1 | 2.4 | 2.5 | 3.7 | 1.4 |
| Declared infecund | 6.7 | 1.7 | 1.9 | 2.1 | 2.7 | 3.7 | 4.2 | 2.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 861 | 2,062 | 2,977 | 2,914 | 2,166 | 1,481 | 1,923 | 14,382 |

[^8]
# Figure 9.1 Desire for More Children among Currently Married Women 



2000 EDHS

The desire for a child is strongly related to the number of living children the woman has. There is very little interest in spacing the first birth. Nine in ten women who had not yet begun childbearing at the time of the survey want a birth soon. More than eight in ten women who have one child also express a desire to have another; however, the majority ( 58 percent) of women with one child want to wait two years or more to have the next birth. Among women with more than one child, the desire to cease childbearing rises rapidly with the number of children, from 59 percent among women with two children to 89 percent among women with six or more children.

Table 9.2 shows the distribution of currently married women by the desire for children, according to age. As expected, older women are much more likely to want no more children than younger women. The proportion of women who want no more children or who are sterilized is only 7 percent in the youngest age group, increases to 26 percent among those in age group 20-24, and reaches 85 percent among women in age group 40-44.

The desire to space children is concentrated among younger women. Half of the women age 15-19 and 41 percent of the women age 20-24 want to delay having their next child for at least two years, compared with 6 percent of those age 30-34.

Table 9.3 shows the variation in the percentage of currently married women who wanted no more children or who are sterilized with the number of living children (including any current pregnancy) for various subgroups. The results indicate that urban women express a desire to limit family size at lower parities than rural women. For example, 69 percent of urban women with two children want to stop childbearing, compared with 48 percent of rural women with two children. The urban-rural differential in the desire for children narrows among women with four or more children.

## Table 9.2 Fertility preferences by age

Percent distribution of currently married women by desire for more children, according to age, Egypt 2000

|  | Age of woman |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Desire for <br> more children | $15-19$ | $20-24$ | $25-29$ | $30-34$ | $35-39$ | $40-44$ | $45-49$ | Total |
| Want another soon ${ }^{1}$ | 36.2 | 24.2 | 16.4 | 10.4 | 7.5 | 5.4 | 2.3 | 12.5 |
| Want another later ${ }^{2}$ | 50.4 | 40.9 | 21.1 | 6.4 | 1.3 | 0.4 | 0.1 | 13.8 |
| Want another, undecided when | 4.4 | 2.4 | 1.8 | 0.7 | 0.4 | 0.3 | 0.1 | 1.2 |
| Undecided | 2.2 | 6.2 | 7.4 | 5.0 | 3.7 | 1.7 | 0.6 | 4.3 |
| Want no more | 6.6 | 26.0 | 52.9 | 75.5 | 83.8 | 84.9 | 79.6 | 64.0 |
| Sterilized | 0.0 | 0.0 | 0.2 | 1.1 | 1.7 | 3.3 | 3.5 | 1.4 |
| Declared infecund | 0.2 | 0.2 | 0.1 | 0.8 | 1.6 | 4.1 | 13.9 | 2.8 |
|  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 599 | 2,187 | 2,776 | 2,568 | 2,472 | 1,921 | 1,860 | 14,382 |

Want next birth within 2 years
${ }^{2}$ Want to delay next birth for 2 or more years

## Table 9.3 Desire to limit childbearing

Percentage of currently married women who want no more children, by number of living children and selected background characteristics, Egypt 2000

| Background characteristic | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6+ |  |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 0.9 | 8.2 | 68.8 | 87.9 | 91.6 | 91.0 | 93.1 | 66.9 |
| Rural | 1.2 | 7.0 | 48.3 | 76.8 | 88.3 | 91.3 | 92.4 | 64.2 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 1.5 | 10.0 | 76.6 | 91.6 | 90.1 | 94.8 | 93.9 | 69.2 |
| Lower Egypt | 1.5 | 8.3 | 61.7 | 88.1 | 95.6 | 94.8 | 96.5 | 69.4 |
| Urban | 0.0 | 7.6 | 70.6 | 90.0 | 95.4 | 96.8 | 97.7 | 69.9 |
| Rural | 2.0 | 8.6 | 57.4 | 87.2 | 95.6 | 94.3 | 96.3 | 69.2 |
| Upper Egypt | 0.4 | 5.1 | 40.5 | 67.1 | 80.9 | 86.9 | 90.2 | 58.8 |
| Urban | 0.4 | 5.6 | 51.9 | 79.1 | 89.4 | 82.7 | 90.6 | 60.6 |
| Rural | 0.4 | 4.8 | 31.9 | 59.1 | 77.2 | 88.6 | 90.1 | 58.0 |
| Frontier Governorates | 1.4 | 5.5 | 32.0 | 57.7 | 78.8 | 77.5 | 83.1 | 52.3 |
| Education |  |  |  |  |  |  |  |  |
| No education | 1.3 | 10.2 | 52.9 | 78.3 | 87.7 | 90.4 | 91.6 | 72.0 |
| Primary incomplete | 2.3 | 9.3 | 55.4 | 81.0 | 91.2 | 95.0 | 95.2 | 73.1 |
| Primary complete/ some secondary | 0.0 | 8.7 | 53.5 | 82.1 | 90.4 | 87.8 | 94.1 | 58.3 |
| Secondary complete/higher | 1.0 | 5.5 | 64.9 | 87.1 | 92.4 | 93.3 | 100.0 | 56.4 |
| Work status |  |  |  |  |  |  |  |  |
| Working for cash | 1.5 | 9.3 | 70.3 | 88.9 | 94.4 | 95.4 | 91.9 | 70.8 |
| Not working for cash | 1.0 | 7.3 | 56.7 | 80.9 | 88.8 | 90.9 | 92.6 | 64.5 |
| Total | 1.1 | 7.6 | 59.3 | 82.4 | 89.6 | 91.2 | 92.6 | 65.4 |

[^9]Regarding the differentials by place of residence, married women living in the Frontier Governorates and rural Upper Egypt are generally the least likely to want to limit childbearing. For example, half or more of the married women with two children in the Urban Governorates, in urban areas in Upper and Lower Egypt, and in rural Lower Egypt want no more children (or are sterilized). In contrast, only about one in three married women with two children in rural Upper Egypt and the Frontier Governorates want to limit childbearing. Interestingly, women with five or more children in rural Upper Egypt are somewhat more likely to express a desire to limit childbearing than are women in the Frontier Governorates with the same number of children.

Somewhat unexpectedly, there is an inverse relationship between education status and the desire to limit childbearing among women with one child. Among women with two and three children, however, the expected direct relationship is generally evident. As also expected, women who are working for cash are generally more likely to want to limit childbearing than other women.

### 9.2 Need for Family Planning

One of the major concerns of family planning programs is to define the size of the potential demand for contraception and to identify women who are the most in need of contraceptive services. Table 9.4 presents estimates of unmet need and of met need for family planning services, and of the total demand for family planning in Egypt as a whole and for various subgroups.

Women with an unmet need for family planning (shown in columns 1-3 of Table 9.4) include the following:
(1) Currently married women who are in need of family planning for spacing purposes. This group includes (a) pregnant women whose pregnancy is mistimed (i.e., wanted later); (b) amenorrheic women whose last birth was mistimed; and (c) nonusers who are neither pregnant nor amenorrheic and who either want to delay the next birth at least two or more years, are unsure whether they want another child, or want another child but are unsure when to have the birth.
(2) Currently married women who are in need of family planning for limiting purposes. This group includes: (a) pregnant women whose pregnancy is unwanted; (b) amenorrheic women whose last child was unwanted; and (c) nonusers who are neither pregnant nor amenorrheic and who want no more children.

Menopausal and infecund women are excluded from the unmet need category as are pregnant or amenorrheic women who became pregnant while using a contraceptive method. These women are considered to be in need of better contraception.

Women with a met need for family planning (shown in columns 4-6 of Table 9.4) include women who are currently using contraception. The total demand for family planning (shown in columns 7-9 of Table 9.4) represents the sum of unmet need and met need. The total demand also includes pregnant and amenorrheic women who became pregnant while using a family planning method. The percentage of the total demand that is satisfied is shown in the last column of Table 9.4.

According to Table 9.4, the total unmet need in Egypt is 11 percent; about a third of this need represents a desire to space the next birth, and the remainder represents an interest in limiting births. The total met need for family planning (i.e., the proportion of women currently using contraception) is 56 percent. Most users are limiters, with only about one in five users reporting a desire to delay the next birth for two or more years.

Table 9.4 Need for family planning services
Percentage of currently married women with unmet need for family planning, met need for family planning, contraceptive failure, and the total demand for family planning services, by selected background characteristics, Egypt 2000

| Background characteristic | Unmet need for family planning ${ }^{1}$ |  |  | Met need for family planning (currently using) ${ }^{2}$ |  |  | Contraceptive failure ${ }^{3}$ |  |  | Total demand for family planning ${ }^{4}$ |  |  | Percentage of demand Number satis- of fied women |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 9.5 | 0.6 | 10.1 | 20.1 | 3.3 | 23.4 | 0.2 | 0.2 | 0.4 | 29.8 | 4.0 | 33.8 | 70.2 | 599 |
| 20-24 | 8.1 | 2.4 | 10.5 | 27.7 | 15.0 | 42.7 | 0.7 | 0.1 | 0.8 | 36.5 | 17.5 | 54.0 | 80.5 | 2,187 |
| 25-29 | 5.0 | 5.7 | 10.7 | 21.3 | 35.7 | 57.0 | 0.9 | 0.6 | 1.5 | 27.2 | 41.9 | 69.2 | 84.5 | 2,776 |
| 30-34 | 2.8 | 8.6 | 11.4 | 8.9 | 58.3 | 67.2 | 0.5 | 1.2 | 1.7 | 12.2 | 68.1 | 80.3 | 85.8 | 2,568 |
| 35-39 | 1.9 | 11.6 | 13.6 | 2.8 | 65.3 | 68.0 | 0.2 | 0.8 | 1.0 | 4.9 | 77.7 | 82.6 | 83.6 | 2,472 |
| 40-44 | 0.8 | 11.5 | 12.3 | 0.6 | 62.8 | 63.4 | 0.1 | 0.5 | 0.7 | 1.6 | 74.8 | 76.4 | 83.8 | 1,921 |
| 45-49 | 0.2 | 7.9 | 8.2 | 0.3 | 41.7 | 42.0 | 0.0 | 0.1 | 0.1 | 0.5 | 49.7 | 50.3 | 83.8 | 1,860 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 2.6 | 6.1 | 8.7 | 12.2 | 49.0 | 61.2 | 0.4 | 0.5 | 0.9 | 15.2 | 55.6 | 70.8 | 87.7 | 6,328 |
| Rural | 4.3 | 8.8 | 13.1 | 10.7 | 41.3 | 52.0 | 0.5 | 0.6 | 1.1 | 15.5 | 50.7 | 66.2 | 80.2 | 8,054 |
| Place of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 2.0 | 5.1 | 7.2 | 10.6 | 52.1 | 62.7 | 0.3 | 0.5 | 0.8 | 13.0 | 57.7 | 70.7 | 89.9 | 2,749 |
| Lower Egypt | 2.6 | 6.2 | 8.8 | 12.0 | 50.5 | 62.4 | 0.3 | 0.5 | 0.9 | 14.9 | 57.2 | 72.1 | 87.8 | 6,324 |
| Urban | 2.3 | 6.5 | 8.8 | 12.5 | 52.4 | 64.9 | 0.4 | 0.5 | 0.9 | 15.2 | 59.4 | 74.6 | 88.2 | 1,799 |
| Rural | 2.7 | 6.0 | 8.8 | 11.7 | 49.7 | 61.4 | 0.3 | 0.6 | 0.9 | 14.8 | 56.3 | 71.1 | 87.7 | 4,524 |
| Upper Egypt | 5.4 | 10.7 | 16.1 | 11.0 | 34.1 | 45.1 | 0.6 | 0.6 | 1.2 | 17.0 | 45.4 | 62.4 | 74.2 | 5,113 |
| Urban | 3.6 | 7.1 | 10.7 | 14.4 | 41.0 | 55.4 | 0.4 | 0.6 | 1.1 | 18.5 | 48.7 | 67.2 | 84.0 | 1,662 |
| Rural | 6.2 | 12.5 | 18.7 | 9.4 | 30.8 | 40.2 | 0.7 | 0.6 | 1.3 | 16.3 | 43.9 | 60.2 | 68.9 | 3,451 |
| Frontier |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Governorates | 7.6 | 6.9 | 14.5 | 10.8 | 32.2 | 43.0 | 0.8 | 0.2 | 1.0 | 19.3 | 39.3 | 58.5 | 75.2 | 196 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 3.6 | 10.4 | 14.0 | 6.1 | 45.3 | 51.5 | 0.4 | 0.7 | 1.2 | 10.2 | 56.5 | 66.6 | 79.0 | 6,074 |
| Primary incomplete | 2.4 | 10.7 | 13.0 | 8.7 | 48.8 | 57.5 | 0.6 | 0.3 | 0.9 | 11.6 | 59.8 | 71.4 | 81.7 | 1,867 |
| Primary complete/ some secondary | 3.9 | 5.2 | 9.1 | 15.2 | 42.0 | 57.2 | 0.3 | 0.5 | 0.8 | 19.3 | 47.7 | 67.0 | 86.4 | 1,867 |
| Secondary complete/higher | 3.9 | 3.6 | 7.4 | 17.8 | 43.4 | 61.2 | 0.5 | 0.4 | 0.9 | 22.1 | 47.3 | 69.5 | 89.3 | 4,573 |
| Work status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Working for cash | 2.4 | 5.0 | 7.4 | 11.2 | 55.5 | 66.7 | 0.6 | 0.4 | 1.0 | 14.2 | 61.0 | 75.1 | 90.1 | 1,990 |
| Not working for cash | 3.7 | 8.0 | 11.8 | 11.4 | 43.0 | 54.4 | 0.4 | 0.6 | 1.0 | 15.5 | 51.6 | 67.1 | 82.5 | 12,392 |
| Total | 3.6 | 7.6 | 11.2 | 11.4 | 44.7 | 56.1 | 0.4 | 0.5 | 1.0 | 15.4 | 52.9 | 68.2 | 83.6 | 14,382 |

[^10]Overall, the total demand for family planning comprises 68 percent of married women in Egypt. Currently, 84 percent of the total demand for family planning in Egypt is satisfied. Comparison of the 1995 and 2000 EDHS survey findings indicates that the percentage of the demand for family planning services that is satisfied increased by 7 percentage points between the two surveys (not shown in table).

Looking at variations in the percentage of the total demand for family planning that is satisfied, the most striking finding in Table 9.4 is the fact that two-thirds or more of the demand for services is satisfied in all subgroups. Overall, the level of satisfied demand is lowest among women in rural Upper Egypt and in the Frontier Governorates and highest among those living in the Urban Governorates and those working for cash.

### 9.3 Women with Unmet Need for Family Planning

## Demographic and Socioeconomic Profile

Table 9.5 shows the percent distribution of currently married women in need of family planning according to the nature of the need (for spacing or limiting) and selected background characteristics. This profile of women in need of family planning takes into account not only the prevalence of unmet need in a population subgroup (shown in Table 9.4) but also the size of the group relative to the total population of married women.

A little less than a fifth of the women in need of family planning are under age 25 , a third are between the ages of 25 and 34 , and 45 percent are age 35 or older. Half of the women in need of family planning have had at least 4 children, and 45 percent have had a recent birth (within 24 months of the survey). As expected, the need for spacing and for limiting varies markedly with woman's age and childbearing experience. Women in need for spacing purposes are mainly younger (under age 30) and have smaller families (three or fewer children), and two-thirds had had a

| Table 9.5 Profile of women with unmet need for family planning |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of currently married women who are in need of family planning by selected background characteristics, according to type of need, Egypt 2000 |  |  |  |
|  | Need for family planning |  |  |
| Background characteristic | Need for spacing | Need for limiting | Total |
| Age |  |  |  |
| 15-19 | 11.1 | 0.3 | 3.8 |
| 20-24 | 34.5 | 4.8 | 14.3 |
| 25-29 | 27.2 | 14.5 | 18.5 |
| 30-34 | 14.0 | 20.3 | 18.3 |
| 35-39 | 9.2 | 26.3 | 20.9 |
| 40-44 | 3.0 | 20.3 | 14.8 |
| 45-49 | 0.9 | 13.5 | 9.5 |
| Number of living children |  |  |  |
| 0 | 5.5 | 0.5 | 2.1 |
|  | 37.1 | 1.6 | 12.9 |
| 2 | 27.9 | 11.4 | 16.7 |
| 3 | 13.0 | 20.5 | 18.1 |
| 4 | 7.7 | 18.8 | 15.2 |
| 5 | 4.5 | 17.6 | 13.5 |
| $6+$ | 4.4 | 29.6 | 21.6 |
| Had birth in last 24 months |  |  |  |
| Yes | 67.0 | 34.0 | 44.6 |
| No | 33.0 | 66.0 | 55.4 |
| Urban-rural residence |  |  |  |
| Urban | 32.3 | 35.2 | 34.3 |
| Rural | 67.7 | 64.8 | 65.7 |
| Place of residence |  |  |  |
| Urban Governorates | 10.9 | 12.9 | 12.3 |
| Lower Egypt | 32.2 | 35.7 | 34.6 |
| Urban | 8.0 | 10.7 | 9.8 |
| Rural | 24.3 | 25.0 | 24.7 |
| Upper Egypt | 54.0 | 50.1 | 51.4 |
| Urban | 11.8 | 10.8 | 11.1 |
| Rural | 42.1 | 39.4 | 40.2 |
| Frontier Governorates | 2.9 | 1.2 | 1.8 |
| Education |  |  |  |
| No education | 42.8 | 57.9 | 53.1 |
| Primary incomplete | 8.6 | 18.3 | 15.2 |
| Primary complete/ some secondary | 14.1 | 9.0 | 10.6 |
| Secondary complete/higher | 34.5 | 14.9 | 21.1 |
| Work status |  |  |  |
| Working for cash | 9.5 | 9.1 | 9.2 |
| Not working for cash | 90.5 | 90.9 | 90.8 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 512 | 1,093 | 1,605 |

recent birth. On the other hand, nearly half of the women in need for limiting purposes are in the 30-39 age group, and more than one-quarter have six or more children.

Women in need of family planning are heavily concentrated in the rural areas. Overall, nearly two-thirds of the women in need are rural residents. Forty percent live in rural Upper Egypt, and one-quarter live in rural Lower Egypt. Urban women in need of family planning are most likely to be found in the Urban Governorates, followed closely by urban Lower Egypt.

More than half of the women in need of family planning have never attended school, and 15 percent have attended but not completed primary school. Women in need for spacing purposes are somewhat more likely to have attended school and to have a secondary education than women in need for limiting purposes; however, even among the group in need for spacing purposes, about half have less than a primary education.

## Family Planning Experience and Attitudes

Table 9.6 presents the distribution of currently married women in need of family planning, according to their prior experience with using family planning, their attitude toward family planning use, and their intention to use of contraception. The majority of women in need of family planning have experience in using some contraceptive method; 62 percent have ever used an IUD and 58 percent have ever used the pill. Women in need for limiting purposes are more likely to have had past experience with some family planning method than women in need for spacing purposes (77 percent and 41 percent, respectively).

More than nine in ten women in need of family planning approve of a couple using contraception; however, slightly less than eight in ten of the women believe their husband approves of family planning use. Women in need for spacing purposes are somewhat more likely than women in need for limiting purposes to report that their husband disapproves of family planning. Twothirds of women in need of family planning intend to use in the future. Women in need for limiting purposes are somewhat less likely than those in need for spacing purposes to express an intention to use contraception in the future.

| Table 9.6 Family planning experience and attitudes among |  |  |  |
| :---: | :---: | :---: | :---: |
| women with unmet need for family planning |  |  |  |
| Percent distribution of currently married women who are in need of family planning (FP) by selected indicators of family planning experience, attitudes, and intentions, according to type of need, Egypt 2000 |  |  |  |
| Need for family planning |  |  |  |
| use and attitudes and intentions | Need for spacing | Need for limiting | Total |
| Ever use of any method |  |  |  |
| Yes | 40.8 | 76.6 | 65.2 |
| No | 59.2 | 23.4 | 34.8 |
| Ever used IUD |  |  |  |
| Yes | 77.2 | 55.1 | 62.1 |
| No | 22.8 | 44.9 | 37.9 |
| Ever used pill |  |  |  |
| Yes | 79.7 | 48.2 | 58.3 |
| No | 20.3 | 51.8 | 41.7 |
| Respondent approves of FP |  |  |  |
| Approves | 92.2 | 93.4 | 93.0 |
| Disapproves | 5.9 | 4.6 | 5.0 |
| Don't know/missing | 1.9 | 2.0 | 2.0 |
| Husband approves of FP |  |  |  |
| Approves | 73.5 | 80.1 | 78.0 |
| Disapproves | 17.0 | 11.9 | 13.5 |
| Don't know/missing | 9.5 | 8.0 | 8.5 |
| Intention to use FP |  |  |  |
| Yes, intends to use | 79.3 | 62.6 | 67.9 |
| Unsure about timing | 8.7 | 9.3 | 9.1 |
| Does not intend | 12.1 | 28.1 | 23.0 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 512 | 1,093 | 1,605 |

## Exposure to Family Planning Messages and Counseling

Table 9.7 presents the distribution of currently married women in need of family planning according to recent exposure to family planning messages in the broadcast or print media and to the recent contacts with family planning fieldworkers and health care providers. More than nine in ten women in need of family planning have heard a family planning message on television or radio recently, and a little more than a third have read about family planning in a newspaper, magazine, or brochure. During the six months preceding the survey, only 10 percent of the women in need received any information or advice about family planning during contacts with health care providers or fieldworkers. There appear to be missed opportunities for counseling since nearly half of the women in need had some contact with a family planning worker or a health care facility during that period.

### 9.4 Ideal Number of Children

The discussion of fertility preferences earlier in this chapter focused on the respondent's wishes for the future. A woman's preferences obviously are influenced by the number of children she already has. The 2000 EDHS attempted to obtain a measure of fertility preferences that is less dependent on the woman's current family size by asking about the ideal number of children. The question about ideal family size required a woman to perform the difficult task of considering the number of children she would choose to have in her whole life regardless of the number (if any) that she had already borne. More than a fifth of the women gave a nonnumeric response to the question about ideal family size, reflecting the difficulty that respondents had with the abstract nature of the question.

Table 9.8 shows the distribution of ever-married women by their ideal number of children, according to number of living children. In considering the results in Table 9.8, it is important to remember that for several reasons, the ideal number of children tends to be fairly closely associated with the actual number of children a woman has. First, women who want a large family tend to have more children than other women. Second, women may rationalize their ideal family size so that as the actual number of children increases, their preferred family size also increases. Furthermore, women with a larger family-being on average older than women with small families-may prefer a larger ideal family size because of attitudes that they acquired 20 to 30 years ago.

| Table 9.8 Ideal number of children |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women by ideal number of children and mean ideal number of children for ever married women and for currently married women, according to number of living children, Egypt 2000 |  |  |  |  |  |  |  |  |
|  |  |  | Num | of living | Idren ${ }^{1}$ |  |  |  |
| of children | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ | Total |
| 0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 9.8 | 4.5 | 1.3 | 1.2 | 0.4 | 0.7 | 0.5 | 2.0 |
| 2 | 43.5 | 52.0 | 56.3 | 22.8 | 21.3 | 15.9 | 12.1 | 32.8 |
| 3 | 14.4 | 21.9 | 21.3 | 45.2 | 15.1 | 17.3 | 12.9 | 23.2 |
| 4 | 7.4 | 6.8 | 7.2 | 10.0 | 31.5 | 17.7 | 17.8 | 13.9 |
| 5 | 1.4 | 0.6 | 1.1 | 2.0 | 3.1 | 10.5 | 5.8 | 3.1 |
| 6+ | 0.7 | 0.9 | 0.6 | 1.6 | 1.6 | 3.7 | 10.9 | 2.7 |
| Non-numeric response | 22.7 | 13.2 | 12.1 | 17.2 | 27.1 | 34.2 | 40.1 | 22.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 985 | 2,261 | 3,183 | 3,102 | 2,350 | 1,608 | 2,084 | 15,573 |
| Mean ideal number | 2.4 | 2.4 | 2.5 | 3.0 | 3.3 | 3.6 | 4.1 | 2.9 |
| Ever-married women | 761 | 1,962 | 2,798 | 2,568 | 1,714 | 1,057 | 1,249 | 12,109 |
| Currently married women | 2.4 | 2.4 | 2.5 | 3.0 | 3.3 | 3.6 | 4.0 | 2.9 |
| Number of women | 672 | 1,820 | 2,631 | 2,429 | 1,574 | 985 | 1,158 | 11,268 |
| Note: The mean excludes women who gave non-numeric responses. ${ }^{1}$ Includes current pregnancy |  |  |  |  |  |  |  |  |

Table 9.8 shows that most Egyptian women want small families. Overall, ever-married women who expressed a numeric preference wanted an average of 2.9 children. About 40 percent of ever-married women who expressed a numeric preference want a two-child family, while more than a quarter consider a three-child family ideal. Relatively few want five or more children. As expected, higher parity women show a preference for more children; the mean ideal number of children ranges from 2.4 children among women with one child to 4.1 children among women with six or more children.

The results in Table 9.8 also clearly show that many women in Egypt have had more children than they would now prefer. For example, more than a third of the women with four children say that they would prefer to have three or fewer children. About half of the women with five children consider a smaller family ideal.

Table 9.9 presents the mean ideal number of children for ever-married women among various subgroups. There is a direct relationship between age and the ideal number of children. On average, women who live in the Urban Governorates, in Lower Egypt (either in urban or rural areas), and in urban Upper Egypt, women with a primary education or higher, and women working for cash want fewer than three children. The mean ideal family size is highest ( 3.5 children) in the Frontier Governorates and in rural Upper Egypt.

| Table 9.9 Mean ideal number of children by background characteristics |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mean ideal number of children for ever-married women, by age and selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |
| Background characteristic | Age of woman |  |  |  |  |  |  | Total |
|  | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 2.4 | 2.4 | 2.5 | 2.6 | 2.8 | 2.9 | 3.1 | 2.7 |
| Rural | 2.6 | 2.7 | 2.9 | 3.1 | 3.4 | 3.6 | 3.8 | 3.1 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 2.2 | 2.4 | 2.5 | 2.4 | 2.7 | 2.7 | 2.9 | 2.6 |
| Lower Egypt | 2.3 | 2.5 | 2.6 | 2.8 | 3.0 | 3.2 | 3.4 | 2.8 |
| Urban | 2.4 | 2.4 | 2.5 | 2.7 | 2.8 | 2.9 | 3.2 | 2.7 |
| Rural | 2.3 | 2.5 | 2.7 | 2.8 | 3.1 | 3.3 | 3.5 | 2.9 |
| Upper Egypt | 2.7 | 2.9 | 3.1 | 3.3 | 3.5 | 3.6 | 3.8 | 3.3 |
| Urban | 2.5 | 2.6 | 2.7 | 2.9 | 2.9 | 3.0 | 3.3 | 2.9 |
| Rural | 2.8 | 3.0 | 3.3 | 3.6 | 3.8 | 4.1 | 4.3 | 3.5 |
| Frontier Governorates | 3.3 | 3.2 | 3.4 | 3.3 | 3.8 | 4.0 | 4.2 | 3.5 |
| Education |  |  |  |  |  |  |  |  |
| No education | 2.7 | 2.9 | 3.0 | 3.2 | 3.3 | 3.5 | 3.8 | 3.3 |
| Primary incomplete | 2.5 | 2.7 | 2.8 | 3.0 | 3.2 | 3.2 | 3.5 | 3.1 |
| Primary complete/ some secondary | 2.4 | 2.6 | 2.8 | 2.8 | 2.8 | 3.0 | 3.0 | 2.7 |
| Secondary complete/higher | 2.4 | 2.5 | 2.5 | 2.6 | 2.7 | 2.8 | 2.8 | 2.6 |
| Work status |  |  |  |  |  |  |  |  |
| Working for cash | 2.2 | 2.5 | 2.5 | 2.7 | 2.8 | 2.9 | 2.9 | 2.7 |
| Not working for cash | 2.5 | 2.6 | 2.8 | 2.9 | 3.2 | 3.3 | 3.5 | 3.0 |
| Total | 2.5 | 2.6 | 2.7 | 2.9 | 3.1 | 3.2 | 3.4 | 2.9 |

### 9.5 Unplanned and Unwanted Fertility

Several indicators of the level of unwanted fertility can be derived from the 2000 EDHS data. First, responses to a question about the planning status of prior births, i.e., whether a birth was planned (wanted then), unplanned (wanted later), or not wanted at all, provide some indication of the extent of unwanted childbearing. In interpreting these data, however, it is important to remember that women may rationalize mistimed or unwanted pregnancies, declaring them as wanted after the children are born.

Table 9.10 shows the percent distribution of births in the five years preceding the 2000 EDHS by planning status of the birth. Overall, 18 percent of births in the five-year period were not wanted at the time of conception, with 5 percent wanted but at a later time and 13 percent not wanted at all. Birth order strongly affects the planning status of births. The proportion of births that were not wanted at the time of conception increases directly with birth order. About two-fifths of all fourth and higher order births were unplanned, compared with only about one in ten second order births. The planning status of births is also affected by the age of the mother. In general, the older the mother, the larger the percentage of children that are unwanted at conception; for example, nearly 60 percent of the births to women age 40-44 are unwanted.

| Table 9.10 Fertility planning status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of births in the five years preceding the survey by fertility planning status, according to birth order and mother's age, Egypt 2000 |  |  |  |  |  |  |
| Birth order and mother's age | Planning status of birth |  |  |  |  | Number <br> of births |
|  | Wanted then | Wanted later | Not wanted | Missing | Total |  |
| Birth order |  |  |  |  |  |  |
| 1 | 98.5 | 1.3 | 0.2 | 0.1 | 100.0 | 3,496 |
| 2 | 89.4 | 9.1 | 1.5 | 0.0 | 100.0 | 2,978 |
| 3 | 84.5 | 6.4 | 9.0 | 0.1 | 100.0 | 2,160 |
| 4+ | 59.5 | 4.5 | 35.9 | 0.2 | 100.0 | 4,057 |
| Age at birth |  |  |  |  |  |  |
| <20 | 94.8 | 4.4 | 0.7 | 0.1 | 100.0 | 1,405 |
| 20-24 | 91.6 | 5.8 | 2.5 | 0.1 | 100.0 | 4,092 |
| 25-29 | 83.1 | 5.6 | 11.2 | 0.1 | 100.0 | 3,588 |
| 30-34 | 70.2 | 4.7 | 24.9 | 0.1 | 100.0 | 2,287 |
| 35-39 | 55.3 | 2.0 | 42.5 | 0.2 | 100.0 | 990 |
| 40-44 | 40.8 | 2.0 | 57.2 | 0.0 | 100.0 | 301 |
| 45-49 | 13.5 | 10.3 | 76.2 | 0.0 | 100.0 | 29 |
| Total | 81.5 | 5.0 | 13.4 | 0.1 | 100.0 | 12,691 |
| Note: Birth order includes current pregnancy. |  |  |  |  |  |  |

A second approach to measuring unwanted fertility is to calculate what the fertility rate would be if all unwanted births were avoided. This wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. For this purpose, unwanted births are defined as those that exceed the number considered ideal by the respondent. Women who did not report a numeric ideal family size are assumed to have wanted all their births. To the extent that women are unwilling to report an ideal family size that is lower than their actual family size, the wanted fertility rate may be overestimated.

Table 9.11 presents total wanted fertility rates and total fertility rates for the three-year period before the survey for various subgroups. Overall, the wanted fertility rate is 2.9 births per women, slightly more than a half birth less than the actual fertility rate. Thus, if unwanted births could be eliminated, the total fertility rate in Egypt would be 17 percent less than it is now. The gap between the wanted and actual fertility rates is greatest among rural women, (especially those living in Upper Egypt), women in the Frontier Governorates, women who never attended school or have less than a primary education, and women who are not working for cash.

| Table 9.11 Wanted fertility rates |  |  |
| :---: | :---: | :---: |
| Total wanted fertility rates and total fertility rates for the three years preceding the survey, by selected background characteristics, Egypt 2000 |  |  |
| Background characteristic | Total wanted fertility rate | Total fertility rate |
| Urban-rural residence |  |  |
| Urban | 2.6 | 3.1 |
| Rural | 3.1 | 3.9 |
| Place of residence |  |  |
| Urban Governorates | 2.5 | 2.9 |
| Lower Egypt | 2.6 | 3.2 |
| Urban | 2.5 | 3.0 |
| Rural | 2.6 | 3.3 |
| Upper Egypt | 3.4 | 4.2 |
| Urban ${ }^{\text {a }}$ | 2.7 | 3.4 |
| Rural | 3.7 | 4.7 |
| Frontier Governorates | 3.0 | 3.8 |
| Education |  |  |
| No education | 3.3 | 4.1 |
| Primary incomplete | 2.9 | 3.8 |
| Primary complete/ some secondary | 2.6 | 3.4 |
| Secondary complete/higher | 2.8 | 3.2 |
| Work status |  |  |
| Working for cash | 2.2 | 2.6 |
| Not working for cash | 2.9 | 3.7 |
| Total | 2.9 | 3.5 |
| Note: Rates are based on births to women 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 3.2. |  |  |

## INFANT AND CHILD MORTALITY

This chapter deals with information on the levels and trends, and differentials in neonatal, postneonatal, infant and child mortality among children under five years of age in Egypt. The chapter also looks at the variation in mortality levels according to demographic and socioeconomic characteristics that have been shown to influence infant and childhood mortality (e.g., residence, young maternal age at birth, and short birth intervals). The mortality levels from the 2000 EDHS are central to the assessment of the current demographic situation in Egypt. Mortality levels are also one of the main indicators of the standard of living or development of a population. Thus, identifying segments of the child population that are at greater risk of dying contributes to efforts to improve child survival and lower the exposure of young children to risk.

### 10.1 Assessment of Data Quality

The 2000 EDHS mortality estimates are calculated from information that was collected in the birth history section of the individual questionnaire. The birth history section began with questions about respondent experience with childbearing (i.e., the number of sons and daughters living with the mother, the number who live elsewhere, and the number who have died). These questions were followed by a retrospective birth history in which the respondent was asked to list each of her births, starting with the first birth. Data were obtained in the birth history on the sex, month and year of birth, survivorship status, and current age, or age at death, of each of the respondent's live births. This information is used to directly estimate the mortality rates.

In this chapter, the following rates are used to assess and measure infant and child mortality:

Neonatal mortality: the probability of dying within the first month of life;
Postneonatal mortality: the difference between infant and neonatal mortality;
Infant mortality: the probability of dying during the first year of life;
Child mortality: the probability of dying between the first and fifth birthday;
Under-five mortality: the probability of dying before the fifth birthday.
The reliability of mortality estimates from surveys such the 2000 EDHS that derive the estimates from retrospective birth history is affected by a number of factors. These factors include the completeness with which deaths of children are reported, and the extent to which birth dates and ages at death are accurately reported. Omissions of either births or deaths is the more serious problem since it affects the level of the mortality estimates. Errors in reporting of birth dates may cause a distortion of trends over time, while errors in reporting of age at death can distort the age pattern of mortality.

Omissions can be detected by examining the proportion of neonatal deaths that occur during the first week of life and the proportion of infant deaths that take place during the first month of life. Thus, if there is substantial underreporting of deaths, the results would be an abnormally low ratio of deaths under seven days to all neonatal deaths. Since underreporting of deaths is likely to be more common for births that occurred long time before the survey, it is important to explore whether these ratios change markedly over time.

Inspection of the ratio of deaths in the first six days of life to all neonatal deaths (shown in Appendix Table D.5) shows that the proportion of neonatal deaths that took place in the first week of life ranges from 67 percent for deaths during the period $0-4$ years before the survey to 53 percent for deaths during the period 10-14 years before the survey. There is less variation over time in the proportion of neonatal to all infant deaths (shown in Appendix Table D.6), which ranges from 60 percent in the period $0-4$ years before the survey to 47 percent during the period 15-19 years before the survey. These ratios are within acceptable limits for the level of mortality.

Errors in the reporting of birth dates also affect the accuracy of period mortality estimates. An examination of the distribution of dead children according to their birth date indicates that there is an excess of deaths in calendar year 1994 (shown in Appendix Table D.4). The transference occurred in the case of both living and dead children. A similar pattern is evident in the data from Demographic and Health Surveys in other countries as well as Egypt; it is thought to result, at least partially, from interviewer transference of births out of the period for which health data were collected (January 1995 through the date of the survey) in order to reduce the workload. The effect of the transference is a slight underestimate of mortality in the period 0-4 years prior to the survey and an overestimate of mortality in the period 5-9 years prior to the survey. Results from a simulation study conducted with a number of DHS countries suggests the error introduced in the mortality estimates is typically less than 5 percent (Macro International Inc., 1993).

Another problem common to the collection of birth history data is heaping of age at death, especially at age 12 months. Errors in the reporting of the age at death will bias estimates of the age pattern of mortality if the net result of the errors is transference of deaths between the age segments for which the rates are calculated. For example, an overestimate of child mortality relative to infant mortality may result if children who died during the first year of life are reported to have died at age one year ( 12 months) or older. In an effort to avoid this problem, EDHS interviewers were instructed to record the age at death in months for deaths under age two years. In addition, they were asked to probe whenever the mother reported an age at death of " 1 year" or " 12 months." Despite these procedures, the data on age at death from the 2000 EDHS exhibits considerable heaping at age 12 months (shown in Appendix Table D.6). However, the heaping is much less evident for deaths occurring in the period 0-4 years before the survey than for deaths taking place further in the past, and less than what was observed in earlier EDHS surveys. As a result, the effect of heaping on the 2000 EDHS mortality estimates is not large.

### 10.2 Levels and Trends in Early Childhood Mortality

## Levels

Neonatal, postneonatal, infant, child, and under-five mortality rates are shown in Table 10.1 for the 25 years preceding the 2000 EDHS. Under-five mortality for the period 0-4 years before the survey (circa 1998) is 54 deaths per 1,000 births. At this level, about one in twenty Egyptian children will die before the fifth birthday. The infant mortality rate is 44 deaths per 1,000 births, and the neonatal mortality rate is 24 deaths per 1,000 births. This indicates that 80 percent of early childhood deaths in Egypt take place before a child's first birthday, with more than 40 percent occurring during the first month of life.

## Trends Based on Retrospective Data

The estimates in Table 10.1 can be used to explore the trend in early childhood mortality in Egypt. It should be noted however that the rates in Table 10.1 are derived from retrospective data
from the 2000 EDHS. Thus, they are subject to errors of omission and misreporting of date of birth and age at death, which are usually more common for events further back in time.

The results of the 2000 EDHS shown in Table 10.1 indicate that early childhood mortality levels have declined rapidly in Egypt over the twenty-year period before the survey. Table 10.1 indicates a drop of 54 deaths per 1,000 in infant mortality, from 98 deaths per 1,000 births in the period 15-19 years before the survey, to the current level of 44 deaths per 1,000. The rate of decline in under-five mortality was even faster over the twenty-year period, from 140 deaths per 1,000 births in the period 15-19 years before the survey (circa 1983) to 54 deaths in the five-year period immediately before the survey (circa 1998).


## Trends Based on Data from Multiple Surveys

Another approach to looking at trends in mortality levels involves the comparison of estimates from surveys conducted at different points in time. Table 10.2 amd Figure 10.1 present the trend in early childhood mortality rates for successive five-year periods before the four rounds of the Egypt DHS surveys and the 1980 Egypt Fertility Survey. Together the estimates span a thirtyfive year period between 1965 and 2000.

In examining the estimates, it is important to remember that the reporting of mortality events is generally better for the period immediately before a survey since mothers are more likely to forget or fail to mention deaths further back in time. Thus, the estimate for the five-year period immediately prior to each of the surveys shown in Table 10.2 is likely to be the most accurate. Sampling error also must be taken into account in interpreting the trends in the table. Sampling errors are typically fairly large for mortality rates. For these reasons, the differences or fluctuations between mortality estimates for roughly the same time periods from different surveys in Table 10.2 must be interpreted with caution, particularly where they are small.

The estimates presented in Table 10.2 confirm that early childhood mortality has fallen significantly in Egypt during the past three decades. An Egyptian child was almost five times as likely to die before the fifth birthday in the mid-1960s as in the late 1990s (Figure 10.1). The trends in Table 10.2 also document the changing age pattern of deaths among young children. As the overall rates decreased, mortality is increasingly concentrated in the earliest months of life. In the mid-1960s, 40 percent of deaths occurred after the child's first birthday; by the 1990s only 20 percent of all deaths under age five took place after the first 12 months of life.

Table 10.2 Trends in early childhood mortality in Egypt, 1965-2000
Trends in neonatal, infant, and under-five mortality from selected surveys, Egypt 19652000

| Approximate <br> reference <br> period | Approxi- <br> mate <br> midpoint | Survey | Neonatal <br> mortality | Infant <br> mortality | Under- <br> five <br> mortality |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $1995-2000$ | 1998 | 2000 EDHS | 24 | 44 | 54 |
| $1990-1995$ | 1993 | 2000 EDHS | 34 | 66 | 84 |
| $1990-1995$ | 1993 | 1995 EDHS | 30 | 63 | 81 |
| $1987-1992$ | 1990 | 1992 EDHS | 33 | 62 | 85 |
| $1985-1990$ | 1988 | 2000 EDHS | 37 | 74 | 103 |
| $1985-1990$ | 1988 | 1995 EDHS | 44 | 82 | 110 |
| $1983-1988$ | 1986 | 1988 EDHS | 39 | 73 | 102 |
| $1982-1987$ | 1985 | 1992 EDHS | 51 | 97 | 130 |
| $1980-1985$ | 1983 | 2000 EDHS | 44 | 98 | 140 |
| $1980-1985$ | 1983 | 1995 EDHS | 45 | 97 | 139 |
| $1978-1983$ | 1981 | 1988 EDHS | 58 | 120 | 167 |
| $1977-1982$ | 1980 | 1992 EDHS | 48 | 108 | 157 |
| $1974-1979$ | 1977 | 1980 EFS | 59 | 132 | 191 |
| $1973-1978$ | 1976 | 1988 EDHS | 53 | 124 | 203 |
| $1969-1974$ | 1972 | 1980 EFS | 67 | 146 | 238 |
| $1964-1969$ | 1967 | 1980 EFS | 63 | 141 | 243 |

Note: For the 2000 EDHS and the 1980 EFS, the fieldwork for the survey took place principally during February and March of the survey years. Thus, the five-year reference periods for the morality rates from these surveys can be considered to approximately represent periods starting in March of the year in which the period begins and ending in February of the year in which the period terminates (e.g., March 1995-February 2000 for the five-year period immediately prior to the 2000 DHS ). For all other DHS surveys, fieldwork took place principally during October to December of the survey years. Thus, the five-year reference periods used in calculating the mortality rates for the 1988, 1992 and 1995 DHS surveys can be considered to approximately represent periods starting in November of the year in which the period begins and ending in October of the year in which the period terminates (e.g, November 1990-October 1995).

Source: El-Zanaty et al., 1996, Table 9.2

Figure 10.1 Trends in Under-five Mortality, Egypt 1967-1998


### 10.3 Differentials in Mortality

Differentials in early childhood mortality classified according to various socioeconomic or demographic variables are presented in Tables 10.3 and 10.4. For most variables, the mortality estimates are calculated for a ten-year period before the survey so that the rates are based on a sufficient number of cases in each category to ensure statistical significance. However, five-year rates are presented for the medical maternity care and size at birth variables because information was collected for these indicators only for births during the period since January 1995.

## Socioeconomic Differentials

Table 10.3 examines the differentials in childhood mortality according to selected socioeconomic characteristics including residence, mother's education, and the medical care received during pregnancy and childbirth. Urban-rural differences favor urban children-i.e., urban children have a lower probability of dying at any stage of early childhood than rural children. For example, under-five mortality in urban areas is 53 per 1,000 births, 26 percent lower than underfive motrality in rural areas ( 79 per 1,000 ). There is also variation by place of residence, where the

| Table 10.3 Infant and child mortality by socioeconomic characteristics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Infant and child mortality rates for the ten-year period preceding the survey, by selected socioeconomic characteristics, Egypt 2000 |  |  |  |  |  |
| Socioeconomic characteristic | Neonatal mortality ( NN ) | Postneonatal mortality (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left(4 q_{1}\right)$ | Under-five mortality $\left({ }_{5} q_{0}\right)$ |
| Urban-rural residence |  |  |  |  |  |
| Urban | 26.5 | 16.6 | 43.1 | 10.1 | 52.8 |
| Rural | 30.5 | 31.4 | 61.8 | 18.5 | 79.2 |
| Place of residence |  |  |  |  |  |
| Urban Governorates | 23.6 | 13.9 | 37.4 | 7.7 | 44.9 |
| Lower Egypt | 26.5 | 18.8 | 45.3 | 13.9 | 58.6 |
| Urban | 28.9 | 11.4 | 40.3 | 12.1 | 51.9 |
| Rural | 25.7 | 21.3 | 47.0 | 14.5 | 60.8 |
| Upper Egypt | 33.7 | 37.5 | 71.2 | 19.8 | 89.6 |
| Urban | 28.8 | 25.5 | 54.3 | 11.6 | 65.2 |
| Rural | 35.4 | 41.9 | 77.3 | 23.0 | 98.5 |
| Frontier Governorates | 21.5 | 15.8 | 37.3 | 9.3 | 46.2 |
| Education |  |  |  |  |  |
| No education | 33.4 | 34.9 | 68.3 | 22.3 | 89.1 |
| Primary incomplete | 33.9 | 27.0 | 60.9 | 16.9 | 76.8 |
| Primary complete/ some secondary | 22.6 | 24.8 | 47.5 | 7.1 | 54.2 |
| Secondary complete/higher | 22.5 | 10.7 | 33.2 | 4.6 | 37.6 |
| Medical maternity care ${ }^{1}$ |  |  |  |  |  |
| No antenatal/delivery care | 26.3 | 28.6 | 54.9 | - | - |
| Either antenatal or delivery | 25.4 | 19.7 | 45.0 | - | - |
| Both antenatal and delivery | 21.7 | 10.5 | 32.2 | - | - |
| Total | 29.0 | 25.8 | 54.7 | 15.3 | 69.2 |
| ${ }^{1}$ Rates for the five-year period before the survey |  |  |  |  |  |

lowest mortality rates are found in the Urban and Frontier Governorates, while the highest rates are found in rural Upper Egypt (see Figure 10.2). For example, under-five mortality in rural Upper Egypt is 99 deaths per 1,000 births, almost 38 percent higher than under-five mortality in rural Lower Egypt (61 deaths per 1,000 births). Although mortality in rural Upper Egypt is higher at all ages than mortality in rural Lower Egypt, the large differential in postneonatal mortality is particularly noteworthy. The postneonatal mortality rate in rural Upper Egypt is 42 deaths per 1,000 births, almost twice the rate in rural Lower Egypt ( 21 deaths per 1,000 births). Also, the infant mortality rate in rural Upper Egypt (77 per 1,000) is 64 percent higher than the rate in rural Lower Egypt (47 per 1,000).

Looking at urban areas, mortality levels are also higher in urban Upper Egypt than in either urban Lower Egypt or the Urban Governorates, primarily because of higher infant mortality. The infant mortality rate in urban Upper Egypt is 54 deaths per 1,000 births compared with 40 deaths per 1,000 in urban Lower Egypt and 37 deaths per 1,000 in the Urban Governorates. The gap in child mortality between the three urban areas is much smaller.

As shown in previous surveys, mortality levels at all ages are inversely related to mother's education. The infant mortality rate among children born to women with no education is 68 deaths per 1,000 births compared with 33 deaths per 1,000 births among children born to women who have completed secondary school or higher.

As Table 10.3 shows maternity care during pregnancy and delivery has a significant bearing on the risk of early childhood mortality. Mortality levels during infancy are lower for births whose mothers had both antenatal care and assistance at delivery from a trained medical provider than for births whose mothers received only antenatal care or delivery, or received no care.

Figure 10.2 Under-Five Mortality (Deaths per 1,000 Births) by Place of Residence


## Demographic Differentials

Table 10.4 shows the relationship between early childhood mortality and selected demographic variables. These demographic characteristics include the sex of child, mother's age at birth, birth order, length of the previous birth intervals, and mother's perception concerning the size of the child at birth. As expected, neonatal mortality is higher among boys than girls by 8 percentage points ( 33 percent and 25 percent; respectively). Postneonatal mortality rates are somewhat higher for girls than for boys; however, there is little difference in the child mortality rates between boys and girls.

| Table 10.4 Infant and child mortality by demographic characteristics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Infant and child mortality rates for the ten-year period preceding the survey, by selected demographic characteristics, Egypt 2000 |  |  |  |  |  |
| Demographic characteristic | Neonatal mortality ( NN ) | Postneonatal mortality (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Under-five mortality $\left({ }_{5} q_{0}\right)$ |
| Sex of child |  |  |  |  |  |
| Male | 32.6 | 22.4 | 55.0 | 14.6 | 68.8 |
| Female | 25.2 | 29.3 | 54.5 | 16.1 | 69.7 |
| Age of mother at birth |  |  |  |  |  |
| < 20 | 36.6 | 37.9 | 74.4 | 15.1 | 88.4 |
| 20-29 | 24.2 | 21.6 | 45.8 | 12.9 | 58.1 |
| 30-39 | 36.4 | 28.9 | 65.3 | 21.2 | 85.1 |
| 40-49 | 29.5 | 36.0 | 65.5 | 14.0 | 78.6 |
| Birth order |  |  |  |  |  |
| 1 | 26.4 | 19.5 | 45.8 | 8.3 | 53.7 |
| 2-3 | 23.8 | 20.9 | 44.7 | 11.0 | 55.2 |
| 4-6 | 31.9 | 29.7 | 61.7 | 21.6 | 81.9 |
| 7+ | 47.2 | 48.6 | 95.8 | 30.2 | 123.1 |
| Previous birth interval |  |  |  |  |  |
| < 2 yrs | 52.3 | 47.8 | 100.1 | 33.7 | 130.4 |
| 2-3 yrs | 20.9 | 21.7 | 42.6 | 11.6 | 53.8 |
| $4 \mathrm{yrs}+$ | 18.3 | 15.6 | 33.9 | 8.2 | 41.8 |
| Size at birth ${ }^{1}$ |  |  |  |  |  |
| Very small or small | 61.9 | 32.4 | 94.4 | - | - |
| Average or larger | 15.6 | 16.1 | 31.8 | - | - |
| ${ }^{1}$ Rates for the five-year period preceding the survey |  |  |  |  |  |

The effect of young maternal age at birth on mortality is also seen in Table 10.4. Children born to mothers who were under age 20 at the time of the birth are significantly more likely to die at all ages than children born to older mothers. Mortality levels are lowest for births to mothers age 20-29. Considering birth order, seventh order and higher births have the highest mortality. For example, infant mortality for seventh births or higher is 96 deaths per 1,000 compared with 62 deaths per 1000 or lower among other births.

The length of the previous birth interval is strongly associated with mortality levels. Mortality levels are consistently higher at all ages among children born less than two years after a previous birth. Overall, the under-five mortality rate among children born less than two years after a previous birth is 130 deaths per 1,000 births, almost three times the level among children born four or more years after a previous birth. Coupled with the finding in Chapter 4 that about onequarter of non-first births occur within 24 months of the previous birth, these results indicate the importance of continuing efforts to promote the use of family planning for birth spacing.

Research has shown that a child's size at birth is an important predictor of the risk of dying during early infancy. For all births in the five-year period before the 2000 EDHS, mothers were asked if the child was small or very small, average or large. Table 10.4 shows that the children who were considered by their mothers to be small or very small at birth were at greater risk of dying than children who were described as average, or larger. For example, infant mortality for children who were considered by their mothers to be small or very small is 94 deaths per 1,000 compared with 32 deaths per 1,000 for children regarded as average or large.

### 10.4 High-risk Fertility Behavior

Research has indicated there is a strong relationship between maternal fertility patterns and children's survival risks. Typically, the risk of early childhood death increases among children born to mothers who are too young or too old, children born after too short a birth interval, and children that are high birth order. For the purpose of this analysis, a mother is classified as "too young" if she is less than 18 years of age, and "too old" if she is over 34 years at the time of the birth. A "short birth interval" is defined by the birth occurring less than 24 months after a previous birth; and a child is of "high birth order," if the mother had previously given birth to three or more children (i.e., the child is of birth order four or higher).

Table 10.5 shows that percent distribution of births in the five-year period before the survey and the percent distribution of currently married women according to these elevated risk factors. The table also examines the relative risk of dying for children by comparing the proportion dead in each specified high-risk category with the proportion dead among children not in any high-risk category. First births, although often at increased risk, are included in the not in any high-risk category in this analysis because they are not considered an avoidable risk.

Forty-eight percent of births in the five-year period before the survey were in at least one of the specified high-risk categories, and 15 percent were associated with two or more high-risk factors. A short birth interval and high birth order were the most common high-risk factors.

The second column of Table 10.5 shows the risk ratios for children. The risk of dying for a child in any high-risk category is 1.9 times the risk for a child not in any high-risk category. Among the single high-risk categories, short birth intervals placed children at the highest risk; children born less than 24 months after a previous birth were 1.7 times as likely to die as children without any high-risk factor. Both high birth order and young maternal age at birth were associated with anelevated risk of dying, while older maternal age was not. The risk ratios were higher for children in multiple high-risk categories than for children in any single high-risk category. With regard to the specific combination of risk factors, the highest risks were found for higher order births to older mothers after a short interval, births to young mothers after a short interval, and higher order births after a short interval.

Column 3 examines the potential for high-risk births among currently married women. A woman's current age, time elapsed since the last birth, and parity were used to determine the risk categories in which any birth she conceived at the time of the survey would fall. For example, if a respondent age 40 who has had four births with the last birth 18 months before the survey were to become pregnant, she would fall in the multiple high-risk category of being too old, too high parity (four or more births), and giving birth too soon (less than 24 months) after a previous birth.

## Table 10.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey who are at elevated risk of dying, and the percent distribution of currently married women at risk of conceiving a child with an elevated risk of dying, by category of increased risk, Egypt 2000

| Risk category | Births in the 5 years preceding the survey |  | Percentage of currently married women ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: |
|  | Percentage of births | Risk ratio |  |
| Not in any high-risk category | 28.0 | 1.0 | $16.9{ }^{\text {b }}$ |
| Single high-risk category |  |  |  |
| First birth | 24.1 | 1.1 | 6.8 |
| Mother's age < 18 | 2.8 | 2.7 | 0.4 |
| Mother's age > 34 | 1.6 | 0.6 | 6.7 |
| Birth interval $<24$ | 10.4 | 1.7 | 10.2 |
| Birth order > 3 | 18.4 | 1.5 | 13.8 |
| Subtotal | 33.2 | 1.6 | 31.1 |
| Multiple high-risk category |  |  |  |
| Age <18 and birth interval <24 | 0.3 | 3.3 | 0.2 |
| Age $>34$ and birth interval<24 | 0.2 | 2.8 | 0.2 |
| Age > $>34$ and birth order>3 | 7.6 | 1.8 | 34.9 |
| Age $>34$ and birth interval $<24$ and birth order >3 | 1.0 | 3.4 | 2.8 |
| Birth interval $<24$ and birth order $>$ | 3 5.5 | 2.9 | 7.1 |
| Subtotal | 14.7 | 2.4 | 45.2 |
| In any high-risk category | 47.9 | 1.9 | 76.3 |
| Total | 100.0 | - | 100.0 |
| Number | 11,361 | - | 14,382 |

Note: Risk ratio is the ratio of the proportion dead of births in a specific highrisk category to the proportion dead of births not in any high-risk category.
Women were assigned to risk categories according to the status they would have at the birth of a child, if the child were conceived at the time of the survey: age less than 17 years and 3 months, age older than 34 years and 2 months, latest birth less than 15 months ago, and latest birth of order 3 or higher.
${ }^{\text {b }}$ Includes sterilized women
${ }^{\mathrm{c}}$ Includes the combined categories age $<18$ and birth order $>3$.

Overall, the majority of currently married women (76 percent) have the potential of giving birth to a child at elevated risk of mortality. About one in three women has the potential for having a birth in a single high-risk category (mainly high birth order), while about one in two have the potential for having a birth in a multiple high-risk category (mainly older maternal age and high birth order).

During the past decade, maternal health has been one of the major focuses of the health program in Egypt. Using data from the 2000 EDHS, this chapter looks at the extent to which women are obtaining medical care during pregnancy, at the time of delivery, and in the postpartum period. The chapter also employs results from the 2000 EDHS and earlier surveys to look at trends across time in key maternal care indicators.

### 11.1 Pregnancy Care

The 2000 EDHS collected a range of information on the type of care that Egyptian women received during pregnancy, including information on antenatal care and tetanus toxoid vaccinations. The survey also obtained information on whether women had sought medical care during pregnancy for reasons not directly related to the pregnancy. Finally, women were also asked a number of questions about the nature of the care they received.

## Antenatal care coverage

Early and regular checkups by trained medical providers are very important in assessing the physical status of women during pregnancy. Table 11.1 presents data from the 2000 EDHS on the coverage of antenatal care services for births taking place during the five-year period before the survey. A birth is considered to have received regular care if the mother said that she had made at least four antenatal care visits, i.e., a visit to a trained medical provider for care for the pregnancy.

The results in Table 11.1 indicate that Egyptian women received antenatal care from a medical provider for more than half of the births that occurred during the fiveyear period before the survey. Most women saw a doctor for care, with less than 1 percent reporting that they had received care only from a trained nurse or midwife. Antenatal care was obtained three times as often from a private sector provider as from a public sector provider (39 percent and 13 percent, respectively).

At least four antenatal visits are recommended during pregnancy to ensure proper care. Overall, because

| Table 11.1 Type of provider for antenatal |  |
| :---: | :---: |
| care, antenatal care source, number of antenatal care visits, and stage of pregnancy |  |
| Percent distribution of births in years preceding the survey by provider for antenatal care, (ANC) for antenatal care, number of ante visits, and by the stage of pregna time of the first and last visit, Egy | n the five y type of C), source enatal care ancy at the ypt 2000 |
| Type of provider and source for ANC/ Number and timing of visits | All births |
| ANC medical provider |  |
| Doctor | 52.7 |
| Trained nurse/midwife | 0.2 |
| No one/missing | 47.1 |
| Total | 100.0 |
| ANC source |  |
| Public sector | 12.7 |
| Private sector | 39.3 |
| Both public and private sectors | 0.8 |
| Non-medical provider/no care | 47.2 |
| Total | 100.0 |
| Number of ANC visits |  |
| 0 | 47.1 |
| 1 | 3.2 |
| 2-3 visits | 9.1 |
| $4+$ visits | 36.7 |
| Don't know/missing | 3.9 |
| Total | 100.0 |
| Median | 6.1 |
| Number of months pregnant at first ANC visit |  |
| No antenatal care | 47.1 |
| Less than 6 months | 48.6 |
| 6-7 months | 3.0 |
| $8+$ months | 0.9 |
| Don't know/missing | 0.4 |
| Total | 100.0 |
| Median | 2.8 |
| Number of months pregnant at last ANC visit |  |
| No antenatal care | 47.1 |
| $<6$ months | 3.7 |
| 6-7 months | 4.8 |
| $8+$ months | 43.0 |
| Don't know/missing | 1.5 |
| Total | 100.0 |
| Number of live births | 11,361 |
| Note: Figures are for births in the period $0-59$ months preceding the survey. |  |

of the large proportion of women who received no care, women received regular antenatal care (i.e., they made four or more visits to a provider) for only about two in five of the births in the five years before the survey. Considering only those births for which care was received, the median number of antenatal visits was 6.1.

Table 11.1 shows that most Egyptian mothers who received antenatal care began seeing a provider within the first six months of pregnancy. Mothers saw a provider for care for the first time before the sixth month of pregnancy for nine in ten births for which antenatal care was reported (i.e., in 49 percent of all births). The median length of time the mother was pregnant at the time of the first visit was 2.8 months.

To detect problems that might affect the delivery, women should also see a provider late in the pregnancy. Table 11.1 shows that if a woman received antenatal care, she generally saw a provider within the last two months of pregnancy; in more than eight in ten births in which the mother had any antenatal care (i.e., in 43 percent of all births), the mother saw the provider in the eight month of pregnancy or later.

## Coverage of Tetanus Toxoid Vaccinations

Tetanus toxoid injections are given to women during pregnancy to prevent deaths from neonatal tetanus. Neonatal tetanus can result when sterile procedures are not followed in cutting the umbilical cord after delivery.

In the 2000 EDHS, information was collected on the number of doses of tetanus toxoid vaccine the mother received and on the source from which the tetanus toxoid vaccination was received. These results are presented in Table 11.2. Women received one dose of tetanus toxoid vaccine in the case of 36 percent of the births during the five-year period before the 2000 EDHS, and two or more doses in the case of an identical percentage of births. Mothers reported obtaining the injection from a public sector provider for nine in ten births in which a tetanus toxoid vaccination was received.

## Any Medical Care During Pregnancy

The 2000 EDHS included a number of questions designed to determine whether women saw a doctor, nurse, or other health during pregnancy for care other

| Table 11.2 Tetanus toxoid injections |  |
| :--- | ---: |
| Percent distribution of births in the five years |  |
| preceding the survey by number of tetanus |  |
| toxoid (TO) injections received and the source |  |
| for injections, Egypt 2000 |  |
| TT indicator |  |
| Number of TT injections |  |
| None | 26.6 |
| One dose | 36.4 |
| Two doses or more | 0.1 |
| Don't know/missing | 100.0 |
| Total |  |
|  | 67.4 |
| Source for TT injections | 4.6 |
| Public sector | 0.1 |
| Private sector | 27.9 |
| Both public and private sectors |  |
| Nonmedical provider/no care | 100.0 |
| Total | 11,361 |
| Number of births |  | than an antenatal visit or a tetanus toxoid injection. Figure 11.1 combines these responses as well as the information on antenatal care and tetanus toxoid coverage to assess the proportion of women who have at least some contact with a medical provider during pregnancy. Overall, women saw a medical provider for some type of care, i.e., they had had antenatal care, a tetanus toxoid injection, and/or they had seen a medical provider for care for an illness or problem unrelated to the pregnancy for 85 percent of all births that occurred during the five-year period before the survey.



Table 11.3 looks in more detail at the types of care women received during pregnancy. Women visited a provider at least once for antenatal care and received at least one tetanus toxoid injection prior to 41 percent of births. For an additional 31 percent of births, women received a tetanus toxoid injection but did not see a provider for antenatal care. In a much smaller proportion of births, women had antenatal care but no tetanus toxoid injection (12 percent). Table 11.3 also shows that most of the medical care that pregnant women received was related to the pregnancy. Women reported consulting a medical provider for care unrelated to the pregnancy in the case of only one in nine births.

In summary, the results in Table 11.3 indicate that, while the majority of women see a medical provider at some point during pregnancy, many are not receiving comprehensive care, i.e., both antenatal checkups and tetanus toxoid immunizations. In particular, there are a substantial number of women who have tetanus toxoid injections without receiving other antenatal care as well as a few women who only see a provider for care unrelated to the pregnancy. These women represent potential opportunities for improving the coverage of antenatal care services.

| Table 11.3 Other medical care during pregnancy |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of births in the five years preceding the survey by mother's report that she had seen a doctor or health worker at any time during the pregnancy for care other than an antenatal care (ANC) checkup or TT injection, according to mother's ANC and TT status, Egypt 2000 |  |  |  |  |  |
| Received other medical care | $\begin{aligned} & \text { ANC } \\ & \text { only } \end{aligned}$ | ANC and TT injection | $\begin{gathered} \text { TTly } \\ \text { only } \end{gathered}$ | $\begin{aligned} & \hline \text { No } \\ & \text { ANC } \\ & \text { or TT } \end{aligned}$ | Tota |
| Had other care | 1.4 | 5.1 | 3.8 | 1.2 | 11.4 |
| No other care | 10.3 | 36.1 | 27.5 | 14.7 | 88.6 |
| Total | 11.7 | 41.2 | 31.2 | 15.9 | 100.0 |

The MOHP has recently undertaken a campaign to take advantage of the contacts that providers have with women during the provision of tetanus toxoid vaccinations to promote antenatal care and family planning use. To assess the impact of these efforts, the 2000 EDHS collected information from women who received a tetanus toxoid vaccination before the last birth on whether anyone had encouraged them to seek antental care or talked to them about family planning at the time that they received the injection(s). Table 11.4 shows that about one-fifth of the women receiving a tetanus toxoid injection before the last birth said that they were advised to obtain antenatal care, and 12 percent said that someone had talked to them about family planning.

## Differentials in Pregnancy Care Indicators

Table 11.4 Advice about antenatal care and family planning use

Percent distribution of last live birth in the five years preceding the survey whose mothers received a tetanus toxoid (TT) injection by advice given about antenatal care (ANC) or family planning (FP) use at the time the TT was received, Egypt 2000

| Advice about ANC/FP |  |
| :--- | ---: |
| Advised to seek ANC | 10.7 |
| Told about FP | 3.5 |
| Both ANC and FP discussed | 8.1 |
| Neither ANC nor FP discussed | 77.7 |
| Total <br> Number of births whose mothers <br> received a TT injection | 100.0 |
|  | 5,809 |

Table 11.5 presents differences across subgroups for five pregnancy care indicators: the percentages of births in which the mother received any antenatal care during pregnancy, regular antenatal care, at least one tetanus toxoid injection, medical care unrelated to the pregnancy, and any type of medical care during pregnancy.

Regarding age, the differentials are mixed. In general, however, mothers age 35 and over are less likely to report receiving care than younger mothers. There is a negative association between the child's birth order and all of the pregnancy care indicators except care unrelated to the pregnancy. Birth order differentials are especially large in the case of regular antenatal care, with mothers of first-order births more than three times as likely to have regular care as mothers of sixthorder or higher births.

The various care indicators typically are higher for urban than for rural births. 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). In the case of tetanus toxoid coverage, however, the level is slightly higher for rural than for urban births ( 74 percent and 70 percent, respectively).

Births in rural Upper Egypt and the Frontier Governorates rank lowest on all of the pregnancy care indicators. Coverage of antenatal care services is especially low in rural Upper Egypt; for example, regular antenatal care is received for a little less than a fifth of births in rural Upper Egypt, compared with more than half the births in the Urban Governorates and urban Lower Egypt.

| Table 11.5 Care during pregnancy |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of births in the five years preceding the survey for which the mother received any antenatal care (ANC), regular antenatal care, one or more tetanus toxoid injections, other medical care unrelated to the pregnancy, and any medical care during the pregnancy, by selected background characteristics, Egypt 2000 |  |  |  |  |  |  |
|  | ANC |  | One or more TT injection(s) | Other medical care | Any medical care | Number of births |
| Background characteristic | Any | Regular ANC |  |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |
| <20 | 50.1 | 33.0 | 81.9 | 10.5 | 88.4 | 1,259 |
| 20-34 | 54.4 | 38.2 | 73.0 | 11.3 | 86.0 | 8,923 |
| 35+ | 44.1 | 29.2 | 57.8 | 13.6 | 76.6 | 1,178 |
| Birth order |  |  |  |  |  |  |
| 1 | 68.6 | 50.6 | 83.2 | 11.2 | 94.2 | 3,069 |
| 2-3 | 54.7 | 38.9 | 73.4 | 11.2 | 88.0 | 4,596 |
| 4-5 | 42.9 | 27.3 | 67.4 | 12.3 | 80.6 | 2,134 |
| 6+ | 30.0 | 15.4 | 55.3 | 11.3 | 66.0 | 1,561 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 70.4 | 53.9 | 70.1 | 12.0 | 90.6 | 4,374 |
| Rural | 41.9 | 25.9 | 73.9 | 11.1 | 81.9 | 6,987 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 74.1 | 56.0 | 62.4 | 8.7 | 88.8 | 1,813 |
| Lower Egypt | 53.5 | 38.9 | 79.1 | 10.9 | 88.9 | 4,679 |
| Urban | 71.2 | 56.2 | 75.3 | 13.6 | 92.5 | 1,230 |
| Rural | 47.2 | 32.8 | 80.4 | 9.9 | 87.6 | 3,448 |
| Upper Egypt | 44.3 | 27.2 | 70.0 | 13.2 | 80.7 | 4,690 |
| Urban | 65.1 | 49.8 | 75.4 | 15.7 | 91.6 | 1,227 |
| Rural | 36.9 | 19.2 | 68.1 | 12.4 | 76.8 | 3,463 |
| Frontier Governorates | 44.6 | 28.5 | 64.2 | 5.9 | 74.7 | 179 |
| Mother's education |  |  |  |  |  |  |
| No education | 33.9 | 17.2 | 67.0 | 10.6 | 75.3 | 4,559 |
| Primary incomplete | 45.2 | 27.7 | 73.4 | 11.1 | 83.1 | 1,309 |
| Primary complete/ some secondary | 58.8 | 41.6 | 78.5 | 13.1 | 90.3 | 1,572 |
| Secondary complete/higher | 75.0 | 60.3 | 76.0 | 11.8 | 95.6 | 3,921 |
| Work status |  |  |  |  |  |  |
| Working for cash | 70.8 | 55.9 | 69.5 | 14.4 | 91.7 | 1,333 |
| Not working for cash | 50.5 | 34.1 | 72.8 | 11.0 | 84.4 | 10,027 |
| Total | 52.9 | 36.7 | 72.5 | 11.4 | 85.3 | 11,361 |
| Note: Figures are for births in the period 0-59 months preceding the survey. A birth is considered to have received antenatal care if there was at least one antenatal care consultation during the pregnancy. Regular antenatal care refers to four or more ANC visits. A birth is considred to have received any medical care if the mother reported at least one antenatal care visit, at least one tetanus toxoid injection, and/or at least one visit to a provider for care unrelated to the pregnancy. |  |  |  |  |  |  |

There generally is a positive association between the women's education status and the various pregnancy care indicators. The relationship is particularly marked in the case of regular antenatal care, with such care being more than three times as common among births to women who have a secondary or higher education than among births to women who have never attended school. Except for tetanus toxoid, the levels of the pregnancy care indicators in Table 11.5 are higher for births to women who work for cash than for births to other women.

### 11.2 Content of Pregnancy Care

In the 2000 EDHS, women who reported that they received antenatal care, tetanus toxoid injections, or other medical care unrelated to the pregnancy were asked questions about the types of routine screening they may have received during the visit to their provider for the care. These women were also asked whether they had been told about the signs of pregnancy complications, and, if they were told, whether they received any information about where to go if they experienced any complications. Finally, women were also asked whether they were given or had bought iron tablets or syrup. Iron supplementation during pregnancy is recommended to prevent iron deficiency anemia, which is a common problem among pregnant women.

Some caution must be exercised in considering the information in Table 11.6 since it depends on the mother's understanding of the questions, e.g., her understanding of what blood pressure measurement involves. It also depends on the mother's recall of events during visits to the provider that may have taken place a number of years before the 2000 EDHS interview. Nonetheless, the results are useful in providing insight into the content of the care Egyptian women receive during pregnancy.

Table 11.6 shows that, for about six in ten births for which mothers saw a medical provider during pregnancy, the women reported that they had been weighed or their blood pressure had been monitored during the visit to the provider. Mothers reported that urine and blood samples were taken in more than two in five births, while the mother's height was measured for about a third of the births. Iron tablets or syrup were received or bought in a little more than a quarter of the births. Mothers were advised about the complications that they might experience in 18 percent of the births and were told to seek assistance if they actually had problems in 14 percent of the births.

| Table 11.6 Pregnancy care indicators |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of births in the five years preceding the survey for which mothers received any care during pregnancy, by content of care and type of care received, Egypt 2000 |  |  |  |  |  |  |  |  |  |
|  | Content of care during pregnancy |  |  |  |  |  |  |  | Number of births |
| Type of care received | Weighed | Height measured | Blood pressure measured | Urine sample | Blood sample | Received/ bought iron tablets/ syrup | Told about complications | Told where to go for complications |  |
| Antenatal care (ANC) |  |  |  |  |  |  |  |  |  |
| Any ANC | 75.3 | 42.3 | 76.7 | 62.9 | 63.2 | 39.4 | 24.8 | 19.9 | 6,003 |
| Regular ANC (4+ visits) | 80.3 | 45.9 | 82.7 | 69.0 | 69.2 | 45.5 | 28.6 | 22.9 | 4,166 |
| Less than four ANC visits | 64.0 | 34.1 | 63.0 | 48.9 | 49.7 | 25.4 | 16.2 | 13.1 | 1,837 |
| Tetanus toxoid (TT) |  |  |  |  |  |  |  |  |  |
| Any TT injection | 58.8 | 32.2 | 55.9 | 43.9 | 44.5 | 26.1 | 16.7 | 13.0 | 8,229 |
| TT and ANC | 77.1 | 43.9 | 76.8 | 63.4 | 63.5 | 38.3 | 24.6 | 19.7 | 4,679 |
| TT only | 34.6 | 16.7 | 28.5 | 18.1 | 19.5 | 10.1 | 6.4 | 4.3 | 3,550 |
| Other medical care |  |  |  |  |  |  |  |  |  |
| Any other medical care | 57.6 | 37.2 | 65.5 | 47.9 | 48.3 | 39.9 | 27.0 | 20.5 | 1,299 |
| Other care and ANC | 72.4 | 48.6 | 77.1 | 64.9 | 63.9 | 52.4 | 37.3 | 29.1 | 736 |
| Other medical care only | 38.3 | 22.2 | 50.2 | 25.8 | 27.9 | 23.4 | 13.6 | 9.3 | 562 |
| Total | 59.6 | 32.4 | 58.4 | 45.7 | 46.5 | 28.3 | 17.9 | 14.0 | 9,688 |

The quality of the medical care that a woman received was better for mothers who saw a medical provider for antenatal care than for mothers who had seen a provider only for care unrelated to the pregnancy or who only had received a tetanus toxoid injection. Mothers who saw a provider for regular antenatal were the most likely to report that routine screening procedures were preformed; for example, eight in ten mothers who had regular antenatal care were weighed and had their blood pressure monitored and around seven in ten had urine or blood samples taken. The proportions who were advised about pregnancy complications and who reported receiving or being given iron supplement was also higher for mother who saw a provider for regular antenatal care.

Very large differentials in the content of care are evident by the demographic and socioeconomic characteristics shown in Table 11.7. For example, there is a very strong negative association between the child's birth order and the routine antenatal care procedures. In general, the procedures were more likely to have been performed for urban than for rural births, with

| Table 11.7 Pregnancy care indicators by background characteristics |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

particularly low levels found for births in rural Upper Egypt. A positive association is observed between the woman's educational status and the indicators of the quality of pregnancy care presented in Table 11.7. The indicators were also more common among births to women who worked for cash than for births to other women.

### 11.3 Delivery Care

Hygienic conditions and proper medical assistance at the time of delivery can reduce the risk of complications and infection for both the mother and the child. For all births in the five-year period before the survey, the 2000 EDHS collected information on where the delivery occurred and on whether the mother was assisted by trained medical personnel.

## Place of Delivery

Table 11.8 indicates that slightly more than 50 percent of the births during the five-year period preceding the survey occurred outside of a health facility (either in the woman's own home or in another home). The likelihood of the delivery occurring at home is greatest for births of order six or higher, births in rural Upper Egypt, and births to women with no education. More than seven in ten births in those subgroups took place at home. In contrast, about a quarter of births in the Urban Governorates and in urban Lower Egypt took place at home.

The kind of care received during pregnancy is also related to the likelihood that the delivery occurred at home. Home deliveries were more than twice as common for births to women who had no antenatal care (whether or not they had other care) as for births to women who received antenatal care. Home deliveries were also more common for births to women who had few or no antenatal care visits than for births to women who had regular care (i.e., four or more antenatal visits).

Regarding the type of health facility, overall, the majority of facility deliveries ( 26 percent of all births) occurred in private health facilities. However, deliveries in public health facilities were more prevalent than deliveries in private health facilities among births of order six and higher, births in Upper Egypt and the Frontier Governorates, and births to women with less than a primary education. Antenatal care, especially regular antenatal care, was positively associated with the likelihood that the delivery occurred in a private health facility.

| Percent distribution of births in the five years preceding the survey by place of delivery, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Public health facility | Private health facility | At home | Other | Total | Number of births |
| Mother's age at birth |  |  |  |  |  |  |
| < 20 | 23.2 | 21.1 | 55.6 | 0.0 | 100.0 | 1,259 |
| 20-34 | 22.0 | 26.8 | 51.0 | 0.0 | 100.0 | 8,923 |
| 35+ | 22.4 | 24.5 | 52.9 | 0.0 | 100.0 | 1,178 |
| Birth order |  |  |  |  |  |  |
| 1 | 29.7 | 33.8 | 36.4 | 0.0 | 100.0 | 3,069 |
| 2-3 | 22.0 | 28.4 | 49.4 | 0.1 | 100.0 | 4,596 |
| 4-5 | 16.9 | 19.6 | 63.4 | 0.0 | 100.0 | 2,134 |
| $6+$ | 15.2 | 11.9 | 72.6 | 0.0 | 100.0 | 1,561 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 33.4 | 36.4 | 30.0 | 0.1 | 100.0 | 4,374 |
| Rural | 15.2 | 19.4 | 65.3 | 0.0 | 100.0 | 6,987 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 40.1 | 36.2 | 23.4 | 0.2 | 100.0 | 1,813 |
| Lower Egypt | 18.3 | 33.3 | 48.4 | 0.0 | 100.0 | 4,679 |
| Urban | 25.1 | 47.4 | 27.3 | 0.0 | 100.0 | 1,230 |
| Rural | 15.8 | 28.2 | 55.9 | 0.0 | 100.0 | 3,448 |
| Upper Egypt | 19.1 | 15.1 | 65.7 | 0.0 | 100.0 | 4,690 |
| Urban | 31.9 | 27.1 | 41.0 | 0.0 | 100.0 | 1,227 |
| Rural | 14.5 | 10.9 | 74.4 | 0.0 | 100.0 | 3,463 |
| Frontier Governorates | 25.3 | 15.1 | 59.7 | 0.0 | 100.0 | 179 |
| Mother's education |  |  |  |  |  |  |
| No education | 16.7 | 12.6 | 70.6 | 0.0 | 100.0 | 4,559 |
| Primary incomplete | 21.3 | 17.4 | 61.1 | 0.0 | 100.0 | 1,309 |
| Primary complete/ some secondary | 30.8 | 25.1 | 44.1 | 0.0 | 100.0 | 1,572 |
| Secondary complete/higher | 25.5 | 44.7 | 29.6 | 0.1 | 100.0 | 3,921 |
| Work status |  |  |  |  |  |  |
| Working for cash | 28.8 | 42.2 | 28.7 | 0.2 | 100.0 | 1,333 |
| Not working for cash | 21.3 | 23.8 | 54.8 | 0.0 | 100.0 | 10,027 |
| Care during pregnancy from trained provider |  |  |  |  |  |  |
| ANC only | 27.2 | 39.3 | 33.4 | 0.1 | 100.0 | 5,268 |
| ANC and other care | 29.1 | 36.8 | 34.1 | 0.0 | 100.0 | 736 |
| Other care only | 16.6 | 16.3 | 67.1 | 0.0 | 100.0 | 562 |
| No care | 16.3 | 10.8 | 72.7 | 0.0 | 100.0 | 4,794 |
| Antenatal care visits |  |  |  |  |  |  |
| None | 16.3 | 11.4 | 72.3 | 0.0 | 100.0 | 5,345 |
| 1-3 | 22.6 | 18.6 | 58.7 | 0.0 | 100.0 | 1,402 |
| 4 or more | 28.5 | 45.7 | 25.8 | 0.0 | 100.0 | 4,166 |
| Don't know/Missing | 31.7 | 39.9 | 25.2 | 0.7 | 100.0 | 447 |
| Total | 22.2 | 26.0 | 51.7 | 0.0 | 100.0 | 11,361 |

Note: Figures are for births in the period 0-59 months preceding the survey.

## Assistance at Delivery

Table 11.9 presents information on the person assisting with the delivery for all births during the five years before the survey. If the mother was assisted at delivery by more than one individual, only the most qualified is shown in the table.

| Percent distribution of live births in the five years preceding the survey by type of assistance during delivery, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Attendant assisting during delivery ${ }^{1}$ |  |  |  |  |  | Number of births |
|  | Doctor | Trained nurse/ midwife | Daya ${ }^{2}$ | Relative/ Other | No one | Total |  |
| Mother's age at birth |  |  |  |  |  |  |  |
|  | 51.2 | 6.6 | 38.8 | 2.8 | 0.6 | 100.0 | 1,259 |
| 20-34 | 54.2 | 7.7 | 34.7 | 2.4 | 0.9 | 100.0 | 8,923 |
| 35+ | 50.5 | 5.8 | 37.9 | 2.5 | 3.1 | 100.0 | 1,178 |
| Birth order |  |  |  |  |  |  |  |
|  | 69.3 | 6.6 | 22.7 | 1.1 | 0.2 | 100.0 | 3,069 |
| 2-3 | 55.8 | 8.2 | 33.3 | 2.1 | 0.5 | 100.0 | 4,596 |
| 4-5 | 41.8 | 7.9 | 44.7 | 3.9 | 1.6 | 100.0 | 2,134 |
| 6+ | 31.5 | 5.8 | 54.4 | 4.2 | 3.7 | 100.0 | 1,561 |
| Urban-rural residence |  |  |  |  |  |  |  |
| Urban | 73.3 | 8.1 | 17.0 | 1.1 | 0.4 | 100.0 | 4,374 |
| Rural | 41.0 | 7.0 | 47.1 | 3.3 | 1.5 | 100.0 | 6,987 |
| Place of residence |  |  |  |  |  |  |  |
| Urban Governorates | 79.5 | 4.2 | 14.4 | 1.1 | 0.6 | 100.0 | 1,813 |
| Lower Egypt | 57.8 | 7.3 | 33.1 | 1.3 | 0.4 | 100.0 | 4,679 |
| Urban | 76.6 | 8.1 | 14.4 | 0.3 | 0.3 | 100.0 | 1,230 |
| Rural | 51.1 | 7.0 | 39.7 | 1.7 | 0.4 | 100.0 | 3,448 |
| Upper Egypt | 39.2 | 8.6 | 46.6 | 3.7 | 1.8 | 100.0 | 4,690 |
| Urban | 61.8 | 12.9 | 23.4 | 1.8 | 0.2 | 100.0 | 1,227 |
| Rural | 31.2 | 7.0 | 54.8 | 4.3 | 2.4 | 100.0 | 3,463 |
| Frontier Governorates | 48.7 | 11.7 | 20.4 | 15.4 | 3.8 | 100.0 | -179 |
| Mother's education |  |  |  |  |  |  |  |
| No education | 33.9 | 6.1 | 53.8 | 4.0 | 2.1 | 100.0 | 4,559 |
| Primary incomplete | 45.2 | 7.1 | 43.5 | 3.4 | 0.6 | 100.0 | 1,309 |
| Primary complete/ some secondary | 62.3 | 8.3 | 27.6 | 1.3 | 0.3 | 100.0 | 1,572 |
| Secondary complete/higher | 75.4 | 8.7 | 14.7 | 0.9 | 0.3 | 100.0 | 3,921 |
| Work status |  |  |  |  |  |  |  |
| Working for cash | 76.2 | 8.3 | 14.1 | 0.5 | 0.8 | 100.0 | 1,333 |
| Not working for cash | 50.4 | 7.3 | 38.3 | 2.7 | 1.1 | 100.0 | 10,027 |
| Care from trained provider |  |  |  |  |  |  |  |
| ANC only | 71.7 | 6.6 | 20.2 | 1.2 | 0.3 | 100.0 | 5,268 |
| ANC and other care | 71.5 | 5.8 | 21.1 | 0.9 | 0.7 | 100.0 | 736 |
| Other care only | 41.3 | 11.8 | 43.1 | 3.4 | 0.4 | 100.0 | 562 |
| No care | 32.1 | 8.0 | 53.6 | 4.0 | 2.0 | 100.0 | 4,794 |
| Antenatal care visits 33.1 - 10.4 - 100.0 |  |  |  |  |  |  |  |
| None | 33.1 | 8.4 | 52.6 | 4.0 | 1.9 | 100.0 | 5,345 |
| 1-3 | 47.2 | 9.0 | 40.3 | 2.8 | 0.7 | 100.0 | 1,402 |
| 4 or more | 79.1 | 5.9 | 14.1 | 0.7 | 0.3 | 100.0 | 4,166 |
| Don't know/missing | 77.5 | 4.5 | 14.8 | 0.6 | 0.0 | 100.0 | 447 |
|  |  |  |  |  |  |  |  |
| Health facility At home | 99.5 10.6 | 0.4 13.9 | 0.1 68.6 | 0.0 4.8 | 0.0 2.1 | 100.0 100.0 | 5,471 5,874 |
| Total | 53.5 | 7.4 | 35.5 | 2.5 | 1.1 | 100.0 | 11,361 |

[^11]Doctors ( 54 percent) or trained nurses or midwives ( 7 percent) assisted at delivery for more than six in ten births in the five-year period before the survey. Most of the remaining births were assisted by dayas (traditional birth attendants). A comparison of the results in Table 11.9 with the information on place of delivery in Table 11.8 indicates that about one in five births assisted by trained medical personnel took place outside of medical facilities.

Medically assisted deliveries were most common for urban births, particularly those in the Urban Governorates and in urban Lower Egypt; births to highly educated mothers; and births to mothers who reported that they were working for cash. Births in rural Upper Egypt are least likely to be assisted by a trained health professional, with rural Upper Egypt being the only area where more than half of the deliveries were assisted by dayas.

Finally, Table 11.9 shows that antenatal care, particularly regular antenatal care, is strongly associated with the likelihood that births will be medically assisted.

### 11.4 Delivery Characteristics

The 2000 EDHS obtained information on a number of other key aspects of deliveries, including the frequency of caesarean sections and of low birth weight babies. In addition, the survey collected information on the complications women experienced during and after delivery.

## Caesarean Deliveries and Birth Weight

Caesarean sections are generally performed because the mother has medical problems or experiences complications at the time of delivery. Table 11.10 shows that one in ten deliveries in the five-year period before the survey was by caesarean section. This proportion is somewhat higher than that in the 1995 EDHS when 7 percent of deliveries were by caesarean section.

Birth weight is a major determinant of infant and child health and mortality. In the 2000 EDHS, for all births during the five-year period preceding the survey, mothers were first asked to subjectively assess the size of their baby and then were asked to report the actual weight in kilograms if the baby had been weighed after delivery.

Table 11.10 shows that the majority of babies were not weighed at birth ( 64 percent) or the mother was unable to report a birth weight ( 15 percent). Among those births for which the mother was able to report the baby's weight, about 10 percent ( 2 percent of all births) were classified as low birth weight; i.e., they weighed less than 2.5 kilograms at birth.

Table 11.10 also includes information on the mother's assessment of the baby's size at birth. It is important to remember that this assessment may vary among respondents since it is based on the mother's own perception of what is a small, average, or large baby and

Table 11.10 Characteristics of delivery
Percent distribution of births in the five years preceding the survey by whether the delivery was by caesarean section, the birth weight and the mother's estimate of baby's size at birth, Egypt 2000

| Delivery <br> characteristic | Percentage <br> of births |
| :--- | ---: |
| Delivery by caesarean <br> section | 10.3 |
| Birth weight |  |
| Less than 2.5 kg | 2.1 |
| 2.5 kg or more | 19.2 |
| Not weighed at birth | 63.8 |
| Don't know/missing | 14.9 |
|  |  |
| Size at birth |  |
| Very small | 3.4 |
| Smaller than average | 11.1 |
| Average or larger | 85.0 |
| Don't know/missing | 0.5 |
|  | 100.0 |
| Total |  |
| Number of births | 11,361 |

Note: Figures are for births in the period $0-59$ months preceding the survey.
not on a uniform definition. Eighty-five percent of the births were considered average or larger than average. Three percent were considered very small.

## Delivery Complications

The 2000 EDHS questionnaire included questions designed to obtain information on whether the mother had experienced signs or symptoms of delivery complications. The signs or symptoms about which they were asked included prolonged labor, excessive bleeding, and vaginal infection or convulsions. Prolonged labor was reported in the case of 11 percent of births. Excessive bleeding occurred in 3 percent of births, and vaginal infections and convulsions occurred in 1 percent of births during the five-year period preceding the survey (Table 11.11).

There was comparatively little variation in the prevalence of reporting of complications by the type of pregnancy and delivery care the mother received. However, mothers were more likely to report that they experienced complications during pregnancy for children who died early in the neonatal period.

| Table 11.11 Delivery complications |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of births in the five years preceding the survey for which women reported specific signs and symptoms of delivery complications, by selected antenatal and delivery care characteristics, Egypt 2000 |  |  |  |  |  |  |
| Antenatal/ delivery care characteristic | Prolonged labor | Excessive bleeding | Vaginal infection | Convulsions | No complications | Number of births |
| Care received |  |  |  |  |  |  |
| Antenatal and delivery care | 12.5 | 3.1 | 1.2 | 0.4 | 85.2 | 4,694 |
| Antenatal care only | 10.3 | 2.3 | 1.0 | 0.3 | 87.3 | 1,310 |
| Delivery care only | 11.2 | 3.0 | 1.5 | 0.2 | 86.6 | 2,223 |
| None | 9.6 | 1.3 | 0.9 | 0.3 | 89.1 | 3,133 |
| Neonatal death | 17.0 | 5.7 | 3.6 | 1.6 | 78.8 | 182 |
| Delivery by caesarean section | 11.8 | 3.1 | 3.0 | 0.3 | 85.4 | 1,168 |
| Total | 11.2 | 2.5 | 1.1 | 0.3 | 86.8 | 11,361 |

### 11.5 Postnatal Care

Care after delivery is very important for both the mother and her child. Proper care after delivery is especially important for births occurring in the home. The Ministry of Health and Population recommends several visits for postnatal care. The first visit should occur within two day of delivery, and the last at 40 days. In addition there should be at least two other visits, one at seven days after delivery and another at 15 days.

## Postnatal Checkups

Table 11.12 presents the percent distribution of births during the five-year period before the survey by the timing of the first postnatal checkup, type of provider, and source of postnatal care. It is assumed that mothers who deliver in a health facility will have the first postnatal checkup before leaving the facility.

The results in Table 11.12 suggest that postpartum care is largely confined to births that take place within a health facility. Mothers rarely report receiving postnatal care when the birth occurred in a noninstitutional setting. Postnatal care was reported for less than one in ten deliveries that took place outside of a health facility (i.e., 4 percent of all births).

Table 11.12 also shows the timing of the first postnatal checkup for births that took place at home rather than in a health facility. The mother saw a provider for the checkup within two days of the delivery in only about a quarter of the births for which postnatal care was reported after a home delivery (i.e., 1 percent of all births). About a quarter of the mothers did not have a checkup until a month or more after delivery.

| Table 11.12 Postnatal care |  |
| :--- | ---: |
| Percent distribution of births in the five years preceding |  |
| the survey, by timing of postnatal checkup, Egypt 2000 |  |
| Timing of first |  |
| postnatal checkup |  |
| Delivered outside of health facility | 51.8 |
| Had any postnatal checkup | 4.3 |
| Within 2 days of birth | 1.1 |
| 3-7 days of birth | 1.6 |
| 8-27 days of birth | 0.6 |
| 4+ weeks after birth | 1.0 |
| Had no postnatal checkup | 47.2 |
| Don't know/missing | 0.3 |
| Delivered in health facility | 48.2 |
| Total | 100.0 |
| Number of births | 11,361 |

Generally, if a postnatal checkup occurred for a birth delivered outside a facility, the mother was somewhat more likely to visit a health facility for the care ( 56 percent) than to be seen by a provider at home (not shown in table).

## Differentials of Postnatal Care Indicators

Table 11.13 presents differentials in key postnatal care indicators for births occurring during the five-year period before the survey. Regarding postnatal checkups, the table shows the percentage of births that occurred in a health facility and thus are assumed to have had a postnatal checkup, the percentage of births that occurred outside a health facility in which the mother had any postnatal care, and the percentage of births that occurred outside a health facility in which the mother had a postnatal checkup within two days of the delivery.

As noted above, the level of postnatal checkups after births that take place outside a health facility is low overall. Somewhat surprisingly, births to women in categories that tended to be the least likely to have other types of pregnancy care, including rural women, especially those from Upper Egypt, and women with less than a primary education, were somewhat more likely to have postnatal checkups in the case of noninstitutional deliveries.

| Table 11.13 Postnatal care by background characteristics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of births in the five years preceding the survey in which mothers delivered outside a facility, percentage in which mothers delivered at home and had any postnatal checkup, and percentage on which mothers delivered at home and had a post-natal checkup within two days of delivery, by selected background characteristics, Egypt 2000 |  |  |  |  |
|  | $\begin{gathered} \text { Delivered } \\ \text { in } \\ \text { facility } \end{gathered}$ | Delivered at home |  | Number <br> of births |
| Background characteristic |  | Had any postnatal checkup | Had checkup within 2 days of birth |  |
| Mother's age at birth |  |  |  |  |
| < 20 | 44.3 | 4.6 | 1.1 | 1,259 |
| 20-34 | 48.9 | 4.3 | 1.2 | 8,923 |
| 35+ | 46.9 | 4.1 | 1.0 | 1,178 |
| Birth order |  |  |  |  |
| 1 | 63.6 | 3.8 | 1.0 | 3,069 |
| 2-3 | 50.4 | 4.2 | 1.1 | 4,596 |
| 4-5 | 36.6 | 5.0 | 1.2 | 2,134 |
| $6+$ | 27.1 | 4.7 | 1.3 | 1,561 |
| Urban-rural residence |  |  |  |  |
| Urban | 69.8 | 2.5 | 0.6 | 4,374 |
| Rural | 34.6 | 5.4 | 1.5 | 6,987 |
| Place of residence |  |  |  |  |
| Urban Governorates | 76.3 | 1.1 | 0.4 | 1,813 |
| Lower Egypt | 51.5 | 3.8 | 1.2 | 4,679 |
| Urban | 72.5 | 1.9 | 0.6 | 1,230 |
| Rural | 44.1 | 4.5 | 1.3 | 3,448 |
| Upper Egypt | 34.2 | 6.1 | 1.4 | 4,690 |
| Urban | 59.0 | 5.0 | 0.9 | 1,227 |
| Rural | 25.4 | 6.4 | 1.6 | 3,463 |
| Frontier Governorates | 40.3 | 3.9 | 1.1 | 179 |
| Mother's education |  |  |  |  |
| No education | 29.3 | 4.7 | 1.1 | 4,559 |
| Primary incomplete | 38.7 | 5.2 | 1.4 | 1,309 |
| Primary complete/ some secondary | 55.8 | 3.5 | 1.3 | 1,572 |
| Secondary complete/higher | 70.2 | 3.9 | 1.1 | 3,921 |
| Work status |  |  |  |  |
| Working for cash | 71.0 | 3.9 | 0.9 | 1,333 |
| Not working for cash | 45.1 | 4.3 | 1.2 | 10,027 |
| Total | 48.2 | 4.3 | 1.1 | 11,361 |

### 11.6 Trends in Maternal Health Indicators

Table 11.14 presents the trend in key maternal health indicators by residence for the period between the 1988 and 2000 EDHS surveys. The table documents upward trends in all of the indicators, with the trend in tetanus toxoid coverage being particularly notable. Overall, there was a more than sixfold increase in the percentage of births for which the mother received at least one tetanus toxoid injection, from 11 percent at the time of the 1988 EDHS to the current level of 72 percent.

| Table 11.14 Trends in maternal health indicators |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| For 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, and four or more antenatal care visits, and the percentage whose mothers were assisted at delivery by a trained medical provider, by urban-rural residence and place of residence, Egypt, 1988-2000 |  |  |  |  |  |  |  |  |  |  |  |
| Maternal health indicator | Residence |  | Place of residence |  |  |  |  |  |  | Frontier Governorates | Total |
|  |  |  | Urban Governorates | Lower Egypt |  |  | Upper Egypt |  |  |  |  |
|  | Urban | Rural |  | Total | Urban | Rural | Total | Urban | Rural |  |  |
| Antenatal care |  |  |  |  |  |  |  |  |  |  |  |
| Any |  |  |  |  |  |  |  |  |  |  |  |
| 1988 | u | u | u | u | u | u | u | u | u | u | u |
| 1992 | u | u | u | u | u | u | u | u | u | u | u |
| 1995 | 58.3 | 27.2 | 59.2 | 41.9 | 65.2 | 34.5 | 28.6 | 51.2 | 20.8 | 41.4 | 39.1 |
| 2000 | 70.4 | 41.9 | 74.1 | 53.5 | 71.2 | 47.2 | 44.3 | 65.1 | 36.9 | 44.6 | 52.9 |
| Regular |  |  |  |  |  |  |  |  |  |  |  |
| 1988 | u | u | u | u | u | u | u | u | u | u | u |
| 1992 | u | u | u | u | u | u | u | u | u | u | u |
| 1995 | 50.0 | 14.9 | 55.1 | 27.9 | 52.0 | 20.2 | 17.9 | 40.6 | 10.1 | 30.6 | 28.3 |
| 2000 | 53.9 | 25.9 | 56.0 | 38.9 | 56.2 | 32.8 | 27.2 | 49.8 | 19.2 | 28.5 | 36.7 |
| Tetanus toxoid vaccinations |  |  |  |  |  |  |  |  |  |  |  |
| 1988 | 12.6 | 10.6 | 8.8 | 13.1 | 14.8 | 12.5 | 11.1 | 17.3 | 8.6 | u | 11.4 |
| 1992 | 56.9 | 57.5 | 52.0 | 64.0 | 67.8 | 62.7 | 53.3 | 55.3 | 52.8 | u | 57.8 |
| 1995 | 66.7 | 71.2 | 64.2 | 75.6 | 70.2 | 77.4 | 66.3 | 67.6 | 65.9 | 59.8 | 69.5 |
| 2000 | 70.1 | 73.9 | 62.4 | 79.1 | 75.3 | 80.4 | 70.0 | 75.4 | 68.1 | 64.2 | 72.4 |
| Medically-assisted deliveries |  |  |  |  |  |  |  |  |  |  |  |
| 1988 | 57.0 | 19.1 | 64.9 | 31.1 | 54.4 | 23.3 | 23.9 | 46.9 | 14.4 | u | 34.6 |
| 1992 | 62.5 | 27.5 | 68.3 | 39.7 | 62.9 | 32.5 | 29.7 | 51.8 | 23.0 | u | 40.7 |
| 1995 | 67.9 | 32.8 | 69.2 | 51.4 | 75.1 | 43.9 | 32.2 | 59.6 | 22.9 | 59.3 | 46.3 |
| 2000 | 81.4 | 48.0 | 83.7 | 65.1 | 84.7 | 58.1 | 47.8 | 74.7 | 38.2 | 60.4 | 60.9 |
| $\mathrm{u}=$ Unknown (not available) |  |  |  |  |  |  |  |  |  |  |  |
| Source: Sayed et al., 1989 <br> El-Zanaty et al., 1993 <br> El-Zanaty et al., 1996 |  |  |  |  |  |  |  |  |  |  |  |

During the period between the 1988 and 2000 surveys, there were also substantial gains in antenatal care coverage and in the proportion of medically assisted deliveries. Regarding the latter indicator, Figure 11.2 shows that only about a third of births were medically assisted at the time of the 1988 survey. By the time of the 2000 survey, this proportion had climbed to slightly more than 60 percent.

All residential categories shared in the improvements in maternal health indicators. Rural areas, however, continued to lag behind urban areas in both antenatal care coverage and in medically assisted deliveries. Within rural Egypt, the gains in both antenatal care coverage and the proportion of medically assisted deliveries have been somewhat greater in Lower Egypt than in Upper Egypt. As a result, the gap in both antenatal care and medically assisted deliveries between rural Lower Egypt and rural Upper Egypt increased during the time between the 1988 and 2000 surveys.


### 11.7 Use of Smoking Tobacco

Smoking during pregnancy increases the risk of having a low birth weight baby. Even if the woman herself does not smoke, the presence of second-had smoke in the household presents health risks for children as well as for adult members of the household. To obtain information on smoking patterns among family members, the 2000 EDHS obtained information from currently married women on whether they smoked. The women were also asked whether their husband smoked. This data does not provide a comprehensive picture of smoking patterns among household members since there may be other individuals besides the respondent and the husband smoking in the household. However, it does indicate the extent to which women and children may be exposed to the effects of smoking within the nuclear family unit.

Table 11.15 shows that relatively few currently married women smoke. However, more than half of the women reported that their husbands smoke. Rural husbands are slightly more likely to smoke than urban husbands. Smoking is most prevalent among husbands living in rural Upper Egypt and among husbands whose wives have had less than a primary education.

| Percentage of currently married women who smoke tobacco and who report that their husband smokes, by selected background characteristics, Egypt 2000 |  |  |  |
| :---: | :---: | :---: | :---: |
| Background characteristic | Percentage of currently married women who smoke tobacco | Percentage of husbands who smoke tobacco (according) to wife) | Number of women |
| Age |  |  |  |
| 15-19 | 0.0 | 56.6 | 599 |
| 20-24 | 0.1 | 53.2 | 2,187 |
| 25-29 | 0.2 | 56.0 | 2,776 |
| 30-34 | 0.4 | 57.5 | 2,568 |
| 35-39 | 0.2 | 55.7 | 2,472 |
| 40-44 | 0.4 | 59.7 | 1,921 |
| 45-49 | 0.7 | 53.2 | 1,860 |
| Urban-rural residence |  |  |  |
| Urban | 0.5 | 53.9 | 6,328 |
| Rural | 0.2 | 57.5 | 8,054 |
| Place of residence |  |  |  |
| Urban Governorates | 0.4 | 54.8 | 2,749 |
| Lower Egypt | 0.2 | 52.8 | 6,324 |
| Urban | 0.4 | 50.9 | 1,799 |
| Rural | 0.1 | 53.6 | 4,524 |
| Upper Egypt | 0.4 | 60.8 | 5,113 |
| Urban | 0.8 | 55.7 | 1,662 |
| Rural | 0.3 | 63.2 | 3,451 |
| Frontier Governorates | 0.2 | 48.3 | 196 |
| Woman's education |  |  |  |
| No education | 0.3 | 61.0 | 6,074 |
| Primary incomplete | 0.2 | 61.7 | 1,867 |
| Primary complete/ some secondary | 0.3 | 58.7 | 1,867 |
| Secondary complete/higher | r 0.4 | 45.9 | 4,573 |
| Husband's education |  |  |  |
| No education | 0.4 | 61.4 | 4,038 |
| Primary incomplete | 0.3 | 63.6 | 2,109 |
| Primary complete/ some secondary | 0.2 | 61.3 | 2,616 |
| Secondary complete/higher | r 0.3 | 46.7 | 5,614 |
| Work status |  |  |  |
| Working for cash | 0.5 | 48.9 | 1,990 |
| Not working for cash | 0.3 | 57.1 | 12,392 |
| Total | 0.3 | 56.0 | 14,382 |

## CHILD HEALTH

Increasing the proportion of children who are vaccinated against the major preventable diseases of childhood is a cornerstone of Egypt's child survival programs. This chapter presents information from the 2000 EDHS on the level of immunization among young children. The chapter also considers information from the EDHS on the prevalence and treatment of diarrhea and acute respiratory infections, illnesses that are among the most common causes of childhood deaths in Egypt.

### 12.1 Immunization of Children

Egypt's Ministry of Health and Population has adopted World Health Organization guidelines for childhood immunizations that 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 during the first year of life. In addition to these standard immunizations, Egypt's childhood immunization program recommends that children receive three doses of the hepatitis vaccine.

## Collection of Data

In Egypt, immunizations may be recorded on a child's birth record (certificate) or on a special health card. In collecting data on immunization coverage in the 2000 EDHS, mothers were asked to show the interviewer the birth record and/or health card for each child born since January 1995. When the mother was able to show the birth record and/or health card, the dates of vaccinations were copied from the document(s) to the questionnaire. If neither a birth record nor a health card was available (or a vaccination was not recorded), mothers were asked a series of questions to determine whether the child had ever received specific vaccines and, if so, the number of doses.

## Immunization against Common Childhood Illnesses

Table 12.1 shows information on vaccination coverage according to the source of the information, i.e., the child's birth record and/or health card or the mother's report. The table is restricted to children 12-23 months of age in order to focus on recent coverage levels.

The first three rows of the table provide information on the proportions of children who were immunized at any age up to the time of the survey. The last row looks at the proportion of children who were vaccinated by age 12 months, the age at which children should have received all of the recommended vaccinations. For children with vaccination records, the percentage of children immunized by age 12 months was calculated based on the child's birth date and the dates on which specific vaccines were given as reported on the vaccination record. For children whose information was based on mother's recall, the proportion of vaccinations given during the first year of life was assumed to be the same as that for children with a written vaccination record.

Table 12.1 shows that birth records and/or health cards were available in the case of 70 percent of the children 12-23 months. For the rest of the children, the information on vaccinations was based on the mother's report.

The results in Table 12.1 indicate that the childhood immunization program in Egypt has wide coverage. Among children 12-23 months, less than 1 percent have not been immunized against any of the preventable childhood diseases. Coverage levels for BCG are virtually universal, and 97 percent of children 12-23 months have received a measles vaccination. The proportions receiving three doses of the DPT and polio vaccines are 94 percent and 95 percent, respectively. Overall, 92 percent of children are considered immunized against all of these preventable diseases, i.e., they have received a BCG and measles vaccination and three doses of the DPT and polio vaccines.


Hepatitis vaccinations were introduced into Egypt's childhood immunization program in the mid-1990s. Table 12.1 shows that coverage levels are high for the hepatitis vaccine, with 93 percent of children reported as having received the third dose of this vaccine. Overall, 91 percent of children 12-23 months are fully immunized against hepatitis as well as the other seven preventable illnesses.

Finally, the percentages in the third row of Table 12.1 can be compared with those in the fourth row to assess the proportion of vaccinated children who, as recommended, had received the vaccinations before the child's first birthday. Overall, 88 percent of the children 12-23 months had received all of the required vaccinations (excluding hepatitis) by their first birthday. This proportion represents 95 percent of all children who were fully immunized against the seven primary preventable childhood illnesses at the time of the survey.

## Trends in Vaccination Coverage

As Figure 12.1 and Table 12.2 show, the levels of vaccination coverage steadily increased during the period between the 1988 and 2000 EDHS surveys. Overall, the proportion fully immunized, i.e., the proportion receiving BCG and measles vaccinations and three doses of DPT and polio, rose from 54 percent of children age 12-23 months in 1988 to 92 percent in 2000.

## Figure 12.1 Trends in Vaccination Coverage, Egypt 1988-2000



Table 12.2 Trends in vaccination coverage
Percentage of children 12-23 months with a vaccination record available, the percentage who had received specific vaccinations, and the percentage fully immunized, Egypt 1988-2000

| Specific <br> vaccinations | 1988 <br> EDHS | 1992 <br> EDHS | 1995 <br> EDHS | 1997 <br> EDHS | 1998 <br> EDHS | 2000 <br> EDHS |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Vaccination record <br> seen by interviewer | 53 | 55 | 50 | 73 | 65 | 73 |
| Vaccination |  |  |  |  |  |  |
| BCG | 70 | 90 | 95 | 96 | 98 | 99 |
| DPT 3 3 | 66 | 76 | 83 | 90 | 88 | 94 |
| Polio 3 | 66 | 79 | 84 | 91 | 90 | 95 |
| Measles |  |  |  |  |  |  |
| Hepatitis 3 | 76 | 82 | 89 | 89 | 93 | 97 |
| Children fully immunized | 54 | 67 | 79 | 83 | 84 | 92 |

Note: Children are fully immunized if they have received BCG, measles, and three doses of DPT and polio vaccines.
$\mathrm{u}=$ Unknown (not available)
Source: Sommerfelt and Piani, 1997, Table 7.1
El-Zanaty et al., 1996, Table 11.2
El-Zanaty and associates and Macro International Inc., 1998, Table 8.2
El-Zanaty and Associates and Macro International, Inc., 1999, Table 8.2.

## Vaccination Coverage by Background Characteristics

Table 12.3 presents differentials in vaccination coverage among children 12-23 months according to selected background characteristics. There is little variation in coverage levels, with 90 percent or more of the children in all subgroups fully vaccinated.

## Table 12.3 Vaccinations by background characteristics

Percentage of children 12-23 months who had received specific vaccines by the time of the survey (according to the vaccination record or the mother's report) and the percentage with a vaccination record, by selected background characteristics, Egypt 2000

| Background characteristic | Percentage of children who received: |  |  |  |  |  |  |  |  |  |  |  |  |  | Percentage with a vaccination record | Num- <br> ber of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | DPT |  |  | Polio |  |  | Hepatitis |  |  | Measles | $A I^{1}$ | All plus hepatitis | None |  |  |
|  | BCG | 1 | 2 | $3+$ | 1 | 2 | $3+$ | 1 | 2 | 3 |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 99.3 | 99.0 | 96.9 | 93.9 | 99.6 | 97.5 | 94.5 | 98.3 | 95.8 | 92.6 | 96.6 | 92.1 | 90.7 | 0.3 | 72.5 | 1,134 |
| Female | 99.3 | 99.4 | 97.4 | 94.1 | 99.5 | 97.8 | 95.4 | 99.0 | 96.8 | 93.4 | 97.2 | 92.3 | 91.5 | 0.2 | 72.5 | 1,036 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 99.6 | 99.4 | 97.0 | 94.8 | 99.6 | 97.2 | 94.9 | 98.7 | 95.9 | 93.4 | 97.7 | 92.9 | 91.8 | 0.0 | 70.4 | 598 |
| 2-3 | 99.3 | 99.0 | 96.9 | 93.3 | 99.4 | 97.6 | 94.2 | 98.7 | 96.6 | 92.9 | 96.9 | 91.6 | 90.9 | 0.4 | 72.4 | 905 |
| 4-5 | 99.0 | 99.1 | 97.4 | 94.1 | 99.8 | 98.1 | 95.7 | 98.6 | 96.0 | 92.8 | 95.8 | 91.9 | 90.3 | 0.1 | 75.7 | 387 |
| $6+$ | 99.2 | 99.4 | 97.8 | 94.4 | 99.7 | 98.5 | 96.2 | 98.6 | 96.8 | 92.6 | 96.3 | 93.1 | 91.3 | 0.3 | 72.8 | 280 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 99.7 | 99.6 | 96.5 | 93.5 | 99.8 | 97.0 | 94.3 | 98.9 | 96.0 | 92.7 | 97.8 | 92.8 | 91.8 | 0.2 | 68.9 | 843 |
| Rural | 99.1 | 98.9 | 97.5 | 94.3 | 99.4 | 98.2 | 95.3 | 98.5 | 96.5 | 93.1 | 96.2 | 91.8 | 90.7 | 0.3 | 74.7 | 1,327 |
| Place of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 99.4 | 99.3 | 95.9 | 92.7 | 99.4 | 96.5 | 93.7 | 99.0 | 95.8 | 92.4 | 96.9 | 91.9 | 91.3 | 0.5 | 64.1 | 360 |
| Lower Egypt | 99.6 | 99.4 | 97.0 | 94.6 | 99.5 | 97.1 | 95.4 | 98.5 | 95.7 | 93.4 | 97.3 | 92.5 | 91.4 | 0.0 | 75.0 | 904 |
| Urban | 100.0 | 99.6 | 95.1 | 93.8 | 100.0 | 95.6 | 94.4 | 97.8 | 93.6 | 92.0 | 97.5 | 92.6 | 90.8 | 0.0 | 74.6 | 238 |
| Rural | 99.4 | 99.4 | 97.7 | 94.9 | 99.4 | 97.6 | 95.8 | 98.7 | 96.5 | 93.9 | 97.2 | 92.5 | 91.6 | 0.0 | 75.2 | 666 |
| Upper Egypt | 99.1 | 98.9 | 97.9 | 94.2 | 99.7 | 99.0 | 95.1 | 98.7 | 97.2 | 93.1 | 96.4 | 92.3 | 91.1 | 0.3 | 73.0 | 871 |
| Urban | 100.0 | 100.0 | 99.2 | 95.0 | 100.0 | 99.2 | 95.4 | 100.0 | 99.2 | 94.8 | 99.6 | 95.0 | 94.4 | 0.0 | 69.7 | 225 |
| Rural | 98.8 | 98.5 | 97.4 | 93.9 | 99.5 | 98.9 | 95.0 | 98.3 | 96.5 | 92.6 | 95.3 | 91.3 | 90.0 | 0.5 | 74.1 | 645 |
| Frontier Governorates | 97.5 | 98.0 | 92.9 | 87.4 | 98.7 | 94.2 | 88.6 | 97.5 | 92.4 | 83.9 | 95.6 | 85.6 | 82.6 | 1.3 | 80.2 | 36 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 98.9 | 98.8 | 97.3 | 93.6 | 99.5 | 98.3 | 95.6 | 98.3 | 95.9 | 91.9 | 95.4 | 91.4 | 89.9 | 0.3 | 74.6 | 849 |
| Primary incomplete | 100.0 | 100.0 | 97.5 | 93.8 | 100.0 | 97.5 | 94.5 | 100.0 | 97.1 | 93.5 | 96.7 | 92.6 | 92.2 | 0.0 | 77.4 | 230 |
| Primary complete/ some secondary | 98.7 | 98.3 | 96.6 | 93.3 | 98.7 | 97.2 | 94.1 | 97.1 | 95.4 | 93.3 | 97.4 | 92.2 | 91.3 | 0.9 | 80.4 | 311 |
| Secondary complete/ higher | 99.8 | 99.7 | 97.0 | 94.7 | 99.8 | 97.2 | 94.6 | 99.3 | 96.8 | 93.8 | 98.3 | 92.9 | 92.0 | 0.0 | 65.5 | 780 |
| Work status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Working for cash | 99.4 | 99.4 | 98.3 | 95.2 | 99.4 | 98.8 | 95.9 | 99.4 | 98.2 | 93.8 | 97.7 | 92.6 | 91.6 | 0.0 | 65.6 | 241 |
| Not working for cash | 99.3 | 99.1 | 97.0 | 93.9 | 99.6 | 97.5 | 94.8 | 98.6 | 96.1 | 92.9 | 96.8 | 92.1 | 91.1 | 0.3 | 73.3 | 1,930 |
| All children | 99.3 | 99.2 | 97.1 | 94.0 | 99.6 | 97.7 | 94.9 | 98.7 | 96.3 | 93.0 | 96.9 | 92.2 | 91.1 | 0.2 | 72.5 | 2,170 |

[^12]
## Vaccinations in the First Year

As mentioned earlier, it is recommended that children receive all required vaccinations by their first birthday. Table 12.4 shows the percentage of children receiving vaccinations during the first year of life according to the child's current age. These results are useful for assessing trends in coverage during the first year of life for a four-year period prior to the survey. Each age group in the table represents the experience of children during a specific calendar period before the survey. For example, the data for children 12-23 months refer to the performance of the immunization program during the year before the survey (i.e., roughly March 1999 to February 2000), data for children 24-35 months refer to the period between March 1998 and February 1999, and so forth.

It is important to remember that the procedure used in deriving the estimates in Table 12.4 assumed that the proportion of vaccinations given during the first year of life was the same for children for whom information was based on the mother's recall as for children who had a written record showing the dates for the various immunizations. Obviously, this assumption is more robust if the proportion of children for which the information is based on mothers recall is small. The first row of Table 12.4 indicates that the percentage of children for whom vaccination records were seen decreases directly with increasing age, from 73 percent among children 12-23 months to 52 percent among those 48-59 months. Thus, the estimates of the percentage of children vaccinated during the first year of life may be less accurate as the age of the child increases.
Table 12.4 Vaccinations in the first year of life
Percentage of children 12-59 months for whom a vaccination record was seen by the
(interviewer and the percentage vaccinated with BCG, DPT, polio, measles, and hepatitus
vaccines during the first year of life, by current age of the child, Egypt 2000
${ }^{\text {a }}$ Information was obtained either from a vaccination card or from the mother if there was no written record. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as that for children with a written vaccination record.
${ }^{\mathrm{b}}$ Children who have received BCG, measles, and three doses of DPT and polio vaccines.

Overall, the results suggest that immunization coverage levels during the first year of life increased fairly rapidly during the four-year period before the 2000 EDHS. The proportion of children 12-23 months fully immunized (excluding hepatitis) by their first birthday increased from 74 percent among children 48-59 years to 88 percent among children 12-23 months.

### 12.2 Diarrhea

Dehydration caused by severe diarrhea is a major cause of death among young children. A simple and effective response to dehydration is a prompt increase in the child's fluid intake through some form of oral rehydration therapy (ORT). ORT may include the use of a solution prepared from commercially produced packets of oral rehydration salts (ORS) or a homemade mixture usually prepared from sugar, salt, and water. Increasing the amount of any other liquids given a child during a diarrheal episode is another means of preventing dehydration.

In the 2000 EDHS, mothers were asked whether any of their children under five years of age had had diarrhea during the two-week period preceding the survey. If the child had had diarrhea, the mother was asked about feeding practices during the diarrheal episode and about what actions were taken to treat the diarrhea.

## Prevalence of Diarrhea

Table 12.5 shows the percentages of children under five years of age who had had diarrhea at some time during the two-week period before the survey. Since there are seasonal variations in the pattern of diarrheal illnesses, it should be remembered that the percentages in Table 12.5 represent the prevalence of diarrhea at the time of the 2000 EDHS (circa February to March 2000) and not the situation at other times of the year in Egypt.

Considering the variation in diarrheal prevalence by age, Table 12.5 shows that children 6-23 months are more likely to have had diarrhea than older or younger children. Regarding the other back-

## Table 12.5 Prevalence of diarrhea

Percentage of children under five years who had diarrhea in the two weeks preceding the survey, by selected background characteristics, Egypt 2000

| Background characteristic | Diarrhea in the preceding two weeks | Number <br> of children |
| :---: | :---: | :---: |
| Child's age |  |  |
| < 6 months | 8.6 | 1,211 |
| 6-11 months | 14.5 | 1,150 |
| 12-23 months | 10.1 | 2,170 |
| 24-35 months | 6.3 | 2,209 |
| 36-47 months | 4.3 | 2,126 |
| 48-59 months | 2.6 | 1,988 |
| Sex |  |  |
| Male | 7.4 | 5,566 |
| Female | 6.8 | 5,289 |
| Birth order |  |  |
| 1 | 7.1 | 2,949 |
| 2-3 | 6.5 | 4,425 |
| 4-5 | 8.2 | 2,042 |
| 6+ | 7.6 | 1,438 |
| Urban-rural residence |  |  |
| Urban | 6.1 | 4,209 |
| Rural | 7.8 | 6,646 |
| Place of residence |  |  |
| Urban Governorates | 4.9 | 1,754 |
| Lower Egypt | 6.1 | 4,504 |
| Urban | 6.0 | 1,186 |
| Rural | 6.1 | 3,317 |
| Upper Egypt | 9.0 | 4,423 |
| Urban | 7.6 | 1,169 |
| Rural | 9.5 | 3,254 |
| Frontier Governorates | 6.9 | 174 |
| Mother's education |  |  |
| No education | 7.7 | 4,308 |
| Primary incomplete | 7.3 | 1,229 |
| Primary complete/ some secondary | 8.0 | 1,516 |
| Secondary complete/higher | 6.1 | 3,802 |
| Work status |  |  |
| Working for cash | 5.4 | 1,279 |
| Not working for cash | 7.3 | 9,576 |
| All children | 7.1 | 10,855 |

ground characteristics in Table 12.5, the largest differences are observed across residential categories. The proportion of children suffering from diarrhea in the two-week period before the survey ranged from 5 percent of children in the Urban Governorates to 10 percent of children in rural Upper Egypt.

## Feeding Practices during Diarrheal Episodes

It is important that children who have diarrhea receive adequate nutrients, and thus it is recommended that the solids given to a child be increased or at least remain the same during diarrheal episodes. To prevent dehydration, the amount of liquids given to the child should be increased.

Table 12.6 shows that mothers of children who had had diarrhea during the two-week period before the survey reported that in the majority of cases, the child had been given less than the normal amount of food during the most recent diarrheal episode. In about quarter of the cases, the mother either stopped feeding the child at all (10 percent) or gave the child much less than normal to eat (13 percent). The child was given more than normal to eat in only 4 percent of the cases.

Mothers also reported that, for slightly more than half of the children with diarrhea, fluid intake was less than normal during the diarrheal episode. In about a fifth of the cases, the mother said that the child was either given nothing to drink (11 percent) or much less fluid than normal (10 percent), while about a third of the children received somewhat less

| Table 12.6 Feeding practices during diarrhea |  |
| :--- | :---: |
| Percent distribution of children under five years |  |
| who had diarrhea in the two weeks preceding the |  |
| survey, by amount of food given and amount of |  |
| liquid given compared with normal practice, |  |
| Egypt 2000 |  |
| Feeding practice |  |
| Increase or decrease in food |  |
| Stopped food |  |
| Never gave food | 10.1 |
| Much less | 12.7 |
| Somewhat less | 13.4 |
| About the same | 35.6 |
| More | 23.5 |
| Missing | 3.9 |
| Increase or decrease in fluids | 0.6 |
| Nothing to drink | 11.4 |
| Much less | 9.6 |
| Somewhat less | 32.5 |
| About the same | 28.7 |
| More | 17.0 |
| Missing | 0.8 |
| Total | 100.0 |
| Number of children | 771 | than the normal amount of liquids. Fluids were increased in 17 percent of the cases.

## Diarrhea Treatment

Table 12.7 provides information from mothers on the treatments used during recent diarrheal episodes among children under five years of age. The majority of mothers took some action to treat their child's diarrhea. Mothers reported that nothing was done in only a fifth of the cases in which a child had diarrhea.

Regarding specific actions taken when a child was ill with diarrhea, the results in Table 12.7 indicate that mothers sought advice or treatment at a health facility in almost half of all recent diarrheal episodes. Among those receiving medical advice, private health care providers were consulted nearly twice as often as providers at public sector facilities.

Increasing a child's fluid intake during a diarrheal episode is important to prevent or treat dehydration. Virtually all mothers ( 98 percent) are aware of the availability of packets of oral rehydration salts that can be used to prevent dehydration (not shown in table). However, only a

## Table 12.7 Treatment of diarrhea

Percentage of children under five years ill with diarrhea in the two weeks preceding the survey receiving medical care, oral rehdyration therapy (ORT), increased fluids, either ORT or increased fluids, other treatments, or no treatment, according to selected background characteristics, Egypt 2000

| Background characteristic | Percentage of children ill with diarrhea receiving: |  |  |  |  |  |  |  |  |  |  |  |  | Number of children with diarrhea |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Medical care from: |  |  | Oral rehydration therapy (ORT) |  |  | ORT/In-in- <br> creased creased <br> fluids fluids |  | Other treatments |  |  |  | No treatment |  |
|  | Any provider | Public sector provider ${ }^{1}$ | Private sector provider ${ }^{2}$ | ORS packet | $\begin{gathered} \text { RHF } \\ \text { at } \\ \text { home } \end{gathered}$ | Either ORS or RHF |  |  | Antibiotics | Other pill | IV | Home remedy/ Other |  |  |
| Child's age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $<6$ months | 50.9 | 16.9 | 36.2 | 29.1 | 4.0 | 31.9 | 12.5 | 37.7 | 25.1 | 28.4 | 8.0 | 5.0 | 30.2 | 105 |
| 6-11 months | 63.1 | 18.5 | 45.2 | 39.7 | 4.1 | 41.5 | 11.4 | 46.6 | 24.9 | 30.2 | 13.0 | 4.4 | 20.2 | 167 |
| 12-23 months | 46.8 | 18.9 | 28.8 | 35.8 | 5.4 | 39.5 | 19.5 | 50.8 | 25.1 | 31.5 | 8.6 | 7.5 | 14.5 | 219 |
| 24-35 months | 36.8 | 12.2 | 24.6 | 30.2 | 6.0 | 34.2 | 20.6 | 47.0 | 20.7 | 31.5 | 3.2 | 9.0 | 19.3 | 139 |
| 36-47 months | 31.4 | 13.9 | 17.5 | 30.7 | 7.3 | 36.6 | 18.4 | 49.8 | 19.3 | 34.0 | 2.2 | 9.9 | 21.1 | 91 |
| 48-59 months | 33.0 | 12.4 | 20.6 | 29.5 | 2.1 | 31.6 | 21.9 | 50.7 | 26.4 | 22.3 | 7.5 | 5.7 | 24.2 | 51 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 47.0 | 15.8 | 31.6 | 34.7 | 5.5 | 38.5 | 17.0 | 47.3 | 22.2 | 31.2 | 7.6 | 7.1 | 21.3 | 413 |
| Female | 45.6 | 16.9 | 29.7 | 32.6 | 4.5 | 35.5 | 16.9 | 47.3 | 25.4 | 29.6 | 7.8 | 6.7 | 18.7 | 358 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 51.4 | 15.8 | 35.6 | 30.2 | 4.9 | 33.9 | 16.6 | 43.1 | 28.7 | 30.1 | 5.1 | 6.3 | 20.8 | 209 |
| 2-3 | 46.0 | 14.6 | 33.0 | 36.7 | 5.7 | 40.2 | 18.5 | 51.3 | 18.8 | 31.1 | 8.4 | 7.7 | 19.4 | 286 |
| 4-5 | 41.6 | 16.1 | 25.5 | 35.8 | 4.3 | 38.3 | 16.5 | 48.7 | 27.9 | 29.3 | 9.0 | 6.8 | 19.7 | 167 |
| 6+ | 44.5 | 22.2 | 23.3 | 29.5 | 4.8 | 33.3 | 14.5 | 42.8 | 20.3 | 31.4 | 8.6 | 6.2 | 21.3 | 109 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 52.2 | 15.8 | 38.3 | 24.2 | 4.8 | 27.1 | 16.7 | 38.3 | 27.5 | 34.0 | 2.4 | 8.5 | 18.7 | 255 |
| Rural | 43.4 | 16.6 | 27.0 | 38.4 | 5.2 | 42.1 | 17.2 | 51.8 | 21.8 | 28.8 | 10.3 | 6.2 | 20.8 | 516 |
| Place of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 54.0 | 15.8 | 41.2 | 7.8 | 9.1 | 15.1 | 21.3 | 29.9 | 20.5 | 39.9 | 0.0 | 8.3 | 18.9 | 87 |
| Lower Egypt | 53.9 | 17.0 | 37.7 | 40.9 | 3.3 | 42.2 | 18.7 | 52.2 | 23.6 | 33.7 | 8.4 | 9.0 | 17.4 | 275 |
| Urban | 59.4 | 15.2 | 47.1 | 30.6 | 1.7 | 30.6 | 12.7 | 37.5 | 37.9 | 30.1 | 3.6 | 9.9 | 20.2 | 71 |
| Rural | 52.0 | 17.6 | 34.4 | 44.6 | 3.9 | 46.3 | 20.8 | 57.3 | 18.5 | 34.9 | 10.1 | 8.7 | 16.4 | 204 |
| Upper Egypt | 39.5 | 15.8 | 23.9 | 34.6 | 5.5 | 38.7 | 14.9 | 48.2 | 24.2 | 26.6 | 8.9 | 5.1 | 22.2 | 398 |
| Urban | 45.4 | 15.3 | 30.1 | 34.8 | 3.3 | 36.0 | 16.0 | 47.7 | 25.0 | 32.8 | 3.1 | 7.5 | 17.1 | 89 |
| Rural | 37.8 | 15.9 | 22.2 | 34.6 | 6.1 | 39.5 | 14.7 | 48.4 | 24.0 | 24.8 | 10.6 | 4.4 | 23.6 | 309 |
| Frontier Governorates | 4.2 | 24.4 | 19.8 | 25.6 | 0.0 | 25.6 | 14.1 | 31.2 | 32.2 | 19.0 | 6.1 | 9.8 | 24.2 | 12 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 40.3 | 19.4 | 21.4 | 38.1 | 3.9 | 40.4 | 14.6 | 49.1 | 22.1 | 27.2 | 10.1 | 5.4 | 22.4 | 330 |
| Primary incomplete | 56.9 | 24.6 | 33.4 | 36.9 | 2.1 | 36.9 | 20.7 | 46.3 | 24.6 | 26.1 | 12.5 | 10.6 | 20.6 | 90 |
| Primary complete/ some secondary Secondary complete/ higher | 48.3 49.8 | 16.4 8.6 | 31.9 42.3 | 26.4 30.0 | 10.9 4.7 | 35.9 33.1 | 13.8 20.7 | 45.4 46.1 | 25.0 25.0 | 32.4 35.9 | 0.6 6.0 | 2.9 9.7 | 16.8 18.5 | 121 230 |
| Work status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Working for cash | 55.1 | 12.2 | 42.9 | 35.1 | 8.6 | 39.9 | 21.5 | 52.2 | 30.6 | 33.4 | 7.1 | 9.4 | 8.6 | 69 |
| Not working for cash | 45.5 | 16.7 | 29.5 | 33.6 | 4.7 | 36.8 | 16.6 | 46.8 | 23.0 | 30.2 | 7.7 | 6.7 | 21.3 | 703 |
| All children | 46.3 | 16.3 | 30.7 | 33.7 | 5.0 | 37.1 | 17.0 | 47.3 | 23.7 | 30.5 | 7.7 | 6.9 | 20.1 | 771 |

Note: Oral rehydration therapy (ORT) includes solution prepared from ORS packets and recommended home fluids (RHF), e.g., sugar-salt-water solution. Increased fluids includes increased frequency of breastfeeding. The percentages consulting a public sector provider or a private sector provider do not sum to the total percentage consulting any health provider because, in a small proportion of cases, more than one type of provider was consulted. IV refers to intravenous fluids.
${ }^{1}$ Includes government hospitals and health units
${ }^{2}$ Includes private hospitals/clinics and private doctors
third of the mothers report that the child was given a solution prepared using a packet of oral rehydration salts. In 5 percent of the cases, the child was given a solution of sugar and salt (i.e., a recommended home fluid (RHF)). As shown in Table 12.7, mothers reported that the child was given more fluids in an additional 17 percent of the cases. Altogether, some form of ORT or increased fluids was used to treat a little less than half of the diarrheal episodes.

Antibiotics and other antidiarrheal medications are generally not recommended to treat diarrhea in young children. However, Table 12.7 shows that antibiotics were given to 24 percent of the children with diarrhea, while 31 percent received some other medication.

Considering the differentials in Table 12.7, the majority of children in all of the subgroups received some care or treatment for the diarrhea. Children of mothers who worked for cash (91 percent) were most likely to have received some type of care or treatment during their illness while children living in rural Upper Egypt (70 percent) were least likely to have received some care of treatment. Medical care was sought most often for children under one year of age and children living in urban areas. Rural children were somewhat more likely than urban children to received ORT or increased fluids. Fluid intake is least likely to be increased in diarrheal episodes when the child is under six months of age or lives in an urban area, especially the Urban Governorates. Reliance on antibiotics or other medications to treat diarrhea is somewhat more common in urban than in rural areas.

## Hand Washing Facilities in Households

Hand washing is an important means of preventing the spread of diarrheal disease. Table 12.8 considers the extent to which Egyptian households have available the materials needed for hand washing (water, soap, and a basin). In obtaining this information, the EDHS interviewer first asked about the place most often used for hand washing and then observed whether there was water; soap, ash, or another cleansing agent; and a basin available in that place.

Table 12.8 shows that more than 80 percent of the households had water available and nearly three-quarters had soap or another cleansing agent available at the location where they indicated hands were washed. Overall, two-thirds of the households had all three of the items available.

There is considerable variability by residence in the percentage of households that had all of the hand-washing materials. Among urban households, 89 percent had all of the items available, compared with 47 percent of the rural households. By place of residence, the proportion of households with all of the hand-washing items available ranged from 38 percent in rural Upper Egypt to 92 percent in the Urban Governorates.

The source from which the household obtained water was related to the availability of water in the hand-washing location. Households that obtained water from wells or other non-piped sources were much less likely than households with piped water to have water available, and they were also less likely to have soap and a basin. Finally, Table 12.8 shows that there is an association between the presence of a child who had had diarrhea and the lack of hand-washing materials.

| Table 12.8 Hand-washing facilities in households |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of households with hand-washing materials and facilities, by selected background characteristics, Egypt 2000 |  |  |  |  |  |
| Background characteristic | Water | Soap or ash | Basin | All three requirements | Number of households |
| Urban-rural residence |  |  |  |  |  |
| Urban | 95.7 | 90.1 | 93.0 | 88.7 | 8,429 |
| Rural | 66.8 | 57.6 | 53.4 | 46.7 | 8,528 |
| Place of residence |  |  |  |  |  |
| Urban Governorates | 98.0 | 92.5 | 96.4 | 91.9 | 3,852 |
| Lower Egypt | 79.8 | 72.4 | 70.8 | 65.2 | 7,154 |
| Urban | 95.1 | 89.7 | 92.8 | 88.5 | 2,380 |
| Rural | 72.2 | 63.9 | 59.8 | 53.6 | 4,775 |
| Upper Egypt | 71.6 | 62.7 | 60.1 | 54.0 | 5,751 |
| Urban | 92.2 | 86.2 | 86.8 | 83.0 | 2,066 |
| Rural | 60.0 | 49.6 | 45.2 | 37.7 | 3,685 |
| Frontier Governorates | 79.8 | 78.0 | 75.2 | 72.9 | 200 |
| Source of drinking water |  |  |  |  |  |
| Piped | 87.2 | 79.3 | 79.9 | 74.3 | 14,818 |
| Protected well | 37.9 | 33.9 | 24.4 | 19.3 | 1,730 |
| Open well | 35.5 | 29.3 | 23.2 | 17.5 | 229 |
| Surface/other | 60.2 | 61.4 | 41.4 | 37.7 | 178 |
| Child with diarrhea in household |  |  |  |  |  |
| Yes | 72.0 | 63.0 | 62.9 | 56.2 | 712 |
| No | 81.6 | 74.3 | 73.5 | 68.1 | 16,245 |
| All children | 81.2 | 73.8 | 73.0 | 67.6 | 16,957 |

### 12.3 Acute Respiratory Infection

Along with diarrhea, acute respiratory infection (ARI), particularly pneumonia, is a common cause of death among infants and young children. Early diagnosis and treatment with antibiotics can prevent a large proportion of the deaths due to pneumonia. The 2000 EDHS collected information on the prevalence of ARI and on the treatment children with ARI symptoms received.

In the 2000 EDHS, the prevalence of ARI was estimated by asking mothers whether their children under five years of age had been ill with coughing accompanied by short rapid breathing in the two weeks before the survey. Cough and short, rapid breathing are signs and symptoms of pneumonia, and thus the EDHS results are less appropriate for assessing the presence of other ARIrelated conditions (coughs and colds, wheezing, ear infection, and streptococcal sore throat). The mother's report is also subjective, reflecting her perception of the symptoms the child had.

Table 12.9 indicates that the prevalence of cough with short, rapid breathing during the twoweek period before the 2000 EDHS was 10 percent among children under five years of age. Again, as was the case with diarrhea, the prevalence of respiratory illnesses varies seasonally and thus the prevalence figures in Table 12.9 represent the situation at the time of the EDHS interview and not at other times of the year.

## Table 12.9 Prevalence and treatment of acute respiratory infection (ARI)

Percentage of children under five who were ill with cough accompanied by short, rapid breathing during the two weeks before the survey, the percentage of children ill with ARI symptoms receiving medical care, and the percentage given antibiotics, by background characteristics, Egypt 2000

| Background characteristic | Percentage of children ill with  <br> Percentage ARI symptoms receiving |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | with | Medical care from: |  |  | Antibiotics | Number <br> of children |
|  | short, rapid breathing | Any health provider | Public sector provider | Private sector provider |  |  |
| Child's age |  |  |  |  |  |  |
| < 6 months | 8.3 | 74.8 | 18.9 | 55.9 | 73.0 | 1,211 |
| 6-11 months | 12.5 | 78.8 | 28.3 | 53.6 | 83.7 | 1,150 |
| 12-23 months | 10.9 | 62.5 | 28.6 | 35.0 | 72.3 | 2,170 |
| 24-35 months | 9.2 | 62.6 | 22.0 | 40.8 | 74.7 | 2,209 |
| 36-47 months | 9.5 | 65.8 | 27.2 | 40.7 | 73.8 | 2,126 |
| 48-59 months | 7.3 | 58.0 | 17.7 | 42.1 | 77.2 | 1,988 |
| Sex |  |  |  |  |  |  |
| Male | 10.2 | 67.7 | 21.4 | 47.5 | 75.9 | 5,566 |
| Female | 8.8 | 63.9 | 28.2 | 37.3 | 74.9 | 5,289 |
| Birth order |  |  |  |  |  |  |
| 1 | 9.3 | 71.4 | 23.5 | 48.7 | 76.3 | 2,949 |
| 2-3 | 9.2 | 67.7 | 23.5 | 45.1 | 76.3 | 4,425 |
| 4-5 | 9.8 | 62.7 | 25.2 | 39.4 | 80.1 | 2,042 |
| 6+ | 10.4 | 55.9 | 28.1 | 30.9 | 65.2 | 1,438 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 7.8 | 77.4 | 23.3 | 56.1 | 81.6 | 4,209 |
| Rural | 10.6 | 60.6 | 25.1 | 36.7 | 72.5 | 6,646 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 6.1 | 79.8 | 28.7 | 55.8 | 74.1 | 1,754 |
| Lower Egypt | 7.2 | 68.6 | 21.4 | 47.8 | 82.5 | 4,504 |
| Urban | 7.0 | 81.2 | 17.9 | 63.3 | 84.9 | 1,186 |
| Rural | 7.3 | 64.3 | 22.7 | 42.5 | 81.7 | 3,317 |
| Upper Egypt | 13.4 | 62.1 | 25.3 | 38.0 | 71.9 | 4,423 |
| Urban | 11.5 | 73.1 | 21.5 | 52.6 | 85.7 | 1,169 |
| Rural | 14.1 | 58.9 | 26.4 | 33.8 | 67.8 | 3,254 |
| Frontier Governorates | 5.0 | 62.2 | 33.2 | 29.0 | 68.5 | 174 |
| Mother's education |  |  |  |  |  |  |
| No education | 10.9 | 59.9 | 29.6 | 31.4 | 70.0 | 4,308 |
| Primary incomplete | 10.0 | 62.6 | 23.7 | 40.9 | 70.2 | 1,229 |
| Primary complete/ some secondary | 10.2 | 69.8 | 23.4 | 46.3 | 76.7 | 1,516 |
| Secondary complete/higher | 7.5 | 75.4 | 17.0 | 60.7 | 85.9 | 3,802 |
| Work status |  |  |  |  |  |  |
| Working for cash | 84.7 | 76.9 | 17.0 | 61.9 | 74.7 | 1,279 |
| Not working for cash | 10.0 | 65.1 | 25.1 | 41.3 | 75.4 | 9,576 |
| All children | 9.5 | 66.0 | 24.5 | 42.9 | 75.4 | 10,855 |

Note: The percentages consulting a public sector provider or a private sector provider do not sum to the total percentage consulting any health provider because, in a small proportion of cases, more than one type of provider was consulted.

Differentials in the proportions of children with ARI symptoms are small. The largest differences are by the child's age, with children 6-23 months having the highest levels of cough with short, rapid breathing.

Women whose children had had ARI symptoms were asked whether they had sought advice or treatment for the illness. The mothers reported that advice or treatment was sought from a health provider for 66 percent of the children who were ill. Private providers were consulted more often than government health facilities (43 percent and 25 percent, respectively).

Differences in the likelihood of seeking medical advice are evident in Table 12.9. Medical advice was sought more often when the child was less than one-year-old, male, or the first-born. Medical advice was less likely to be sought for rural children than for urban children ( 61 percent and 77 percent, respectively). By place of residence, the proportion of children ill with ARI for whom medical advice was sought ranged from less than 60 percent in rural Upper Egypt to more than 80 percent in urban Lower Egypt. Highly educated mothers were much more likely to seek medical advice than less-educated mothers. A mother's work status is also related to the likelihood that a provider was consulted, with children of mothers who work for cash being more likely to have received care from a health provider than other children.

Finally, Table 12.9 shows that antibiotics were given to treat respiratory illness for 75 percent of the children who had a cough and short, rapid breathing. Those who were most likely to receive antibiotics included children 6-11 months; urban children, especially those from urban Lower Egypt; and children whose mothers had a secondary or higher education.

This chapter looks at several important aspects of the nutritional status of Egyptian children and their mothers. Infant feeding practices, including breastfeeding and complementary feeding patterns and the prevalence of bottle-feeding, are presented first. Anthropometric data (height and weight) collected in the survey are then used to assess the current nutritional status of children under age five as well as that of their mothers. The chapter considers information collected on the prevalence of anemia in several groups including children under five, ever-married women 15-49, and adolescents 11-19. Finally, the chapter addresses other important nutritional issues, including the level of vitamin A supplementation and the iodization of salt used in the household.

### 13.1 Breastfeeding and Supplementation

The pattern of infant feeding has an important influence on the health of children. Feeding practices are the principal determinant of a young child's nutritional status, and poor nutritional status has been shown to increase the risk of illness and death among children. Breastfeeding practices also have an effect on the mother's fertility. Frequent breastfeeding for long durations is associated with longer periods of postpartum amenorrhea and thus longer birth intervals and lower fertility.

## Initiation of Breastfeeding

Early initiation of breastfeeding is beneficial for a number of reasons. For the mother, early suckling promotes the release of a hormone that helps the uterus achieve a contracted state and reduces the risk of postpartum hemorrhage. For the child, it is important to receive the colostrum, which is contained in the first breast milk after delivery. Colostrum is rich in antibodies that are needed since the child's own immune system is immature.

According to the results in Table 13.1, almost all Egyptian children are breastfed for some period of time. Differentials in the proportion of children ever breastfed are small, with 93 percent or more of children in every subgroup reported as ever breastfed.

Among Egyptian children who were ever breastfed, Table 13.1 shows that the majority began breastfeeding soon after birth; 57 percent of the children were put to the breast within an hour after delivery, and 88 percent were breastfed within the first day. Both medical assistance at delivery and delivery at a health facility are associated with lower proportions of children for whom breastfeeding was initiated within an hour of birth. Even among these groups, however, breastfeeding was initiated for more than eight in ten children within 24 hours of birth. In general, mother's characteristics associated with facility deliveries or medical assistance at delivery (e.g., urban residence and higher educational levels) are also associated with somewhat later initiation of breastfeeding.

Prelacteal feeding is the practice of giving other liquids to a child during the period after birth before the mother's milk is flowing freely. Overall, according to Table 13.1, slightly more than half of all children born in the five years prior to the survey received prelacteal feeds during the first three days after birth. Place of residence is strongly associated with the practice, with infants in Upper Egypt and the Frontier Governorates being much more likely to have received prelacteal feeds than children in Lower Egypt and the Urban Governorates.

## Table 13.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, the percentage who started breastfeeding within one hour of birth and within one day of birth and the percentage who received prelacteal feeding, by selected background characteristics, Egypt 2000

| Background characteristic | Percentage ever breastfed | Percentage who started breastfeeding: |  | Percentage who received prelacteal feeding ${ }^{1}$ | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Within 1 hour of birth | Within 1 day of birth |  |  |
| Sex |  |  |  |  |  |
| Male | 95.1 | 56.6 | 88.4 | 52.9 | 5,837 |
| Female | 95.9 | 57.3 | 87.9 | 54.3 | 5,523 |
| Urban-rural residence |  |  |  |  |  |
| Urban | 94.8 | 53.5 | 87.6 | 52.2 | 4,374 |
| Rural | 95.9 | 59.1 | 88.5 | 54.4 | 6,987 |
| Place of residence |  |  |  |  |  |
| Urban Governorates | 95.6 | 50.8 | 86.5 | 48.3 | 1,813 |
| Lower Egypt | 95.0 | 52.7 | 86.5 | 44.8 | 4,679 |
| Urban | 93.4 | 51.4 | 85.6 | 46.0 | 1,230 |
| Rural | 95.6 | 53.1 | 86.8 | 44.4 | 3,448 |
| Upper Egypt | 95.9 | 63.1 | 90.4 | 63.8 | 4,690 |
| Urban | 95.1 | 58.4 | 91.3 | 63.0 | 1,227 |
| Rural | 96.2 | 64.8 | 90.1 | 64.1 | 3,463 |
| Frontier Governorates | 95.5 | 68.0 | 89.4 | 67.0 | 179 |
| Mother's education |  |  |  |  |  |
| No education | 95.5 | 62.0 | 89.5 | 54.1 | 4,559 |
| Primary incomplete | 95.3 | 56.1 | 89.0 | 57.6 | 1,309 |
| Primary complete/ some secondary | 95.4 | 55.0 | 86.5 | 53.2 | 1,572 |
| Secondary complete/higher | - 95.5 | 52.1 | 87.0 | 51.7 | 3,921 |
| Mother's work status |  |  |  |  |  |
| Working for cash | 94.9 | 51.5 | 86.5 | 52.4 | 1,333 |
| Not working for cash | 95.5 | 57.7 | 88.4 | 53.7 | 10,027 |
| Assistance at delivery |  |  |  |  |  |
| Medically trained person | 94.9 | 50.8 | 86.2 | 53.0 | 6,914 |
| Daya | 96.5 | 66.5 | 91.3 | 55.3 | 4,032 |
| Other or none | 95.4 | 64.5 | 89.3 | 46.7 | 414 |
| Place of delivery |  |  |  |  |  |
| Public health facility | 93.4 | 52.2 | 85.7 | 50.9 | 2,522 |
| Private health facility | 95.3 | 46.4 | 83.8 | 55.7 | 2,949 |
| At home/other | 96.5 | 64.2 | 91.3 | 53.6 | 5,889 |
| All children | 95.5 | 57.0 | 88.1 | 53.6 | 11,361 |

Note: Figures are based on all children born in the five years preceding the survey, whether living or dead at the time of the interview.
${ }^{1}$ Excludes children given plain water.

## Introduction of Complementary Feeding

The Ministry of Health and Population has adopted the UNICEF recommendation that during the first six months of life, children should be exclusively breastfed; that is, they should be given only breast milk and not receive other complementary liquids (including plain water) or solids. Early complementary feeding is discouraged for a number of reasons. The early introduction of other liquids or foods increases the exposure of an infant to pathogens that may cause diarrheal disease. Malnutrition is another risk. The complementary foods given to a child may not provide all of the calories that the infant needs, particularly if they are watered down. Since the production of breast milk is influenced by the intensity and frequency of suckling, early complementary feeding may reduce breast milk output, again increasing the risk of malnutrition.

To obtain information on feeding patterns, mothers were asked about the breastfeeding status of all children under the age of five in the 24 -hour period before the survey and about what other (if any) liquids or solids had been given to the child during the period. These data were used to derive the information on the age patterns of breastfeeding and supplementation presented in Table 13.2 and Figure 13.1. The data shown in Table 13.2 and Figure 13.1 indicate that breastfeeding continues for the majority of Egyptian children beyond the first year of life. At age 12-13 months, more than 80 percent of children are still being breastfed, and about half of the children 18-19 months continue to be breastfed. Weaning takes place rapidly after this age, and fewer than one in six children age 24-25 months are still breastfed.

| Table 13.2 Breastfeeding status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of living children by breastfeeding status, according to child's age in months, Egypt 2000 |  |  |  |  |  |  |  |
|  |  |  |  | eastfed and giv | given: |  |  |
| Age in months | Not breastfed | Exclusively breastfed | Plain water only | Waterbased liquids and juices | Complementary foods/ milk | Total | Number of living children |
| $<2$ | 1.0 | 78.6 | 1.5 | 13.1 | 5.9 | 100.0 | 360 |
| 2-3 | 3.4 | 59.6 | 8.1 | 10.3 | 18.6 | 100.0 | 467 |
| 4-5 | 6.3 | 33.5 | 11.5 | 6.0 | 42.7 | 100.0 | 384 |
| 6-7 | 9.8 | 13.7 | 6.5 | 2.4 | 67.5 | 100.0 | 416 |
| 8-9 | 11.0 | 7.2 | 5.3 | 1.4 | 75.2 | 100.0 | 396 |
| 10-11 | 12.2 | 3.3 | 4.8 | 0.5 | 79.3 | 100.0 | 338 |
| 12-13 | 18.0 | 2.5 | 2.2 | 0.7 | 76.7 | 100.0 | 377 |
| 14-15 | 22.1 | 0.8 | 1.0 | 1.6 | 74.5 | 100.0 | 393 |
| 16-17 | 33.2 | 0.6 | 0.3 | 0.4 | 65.5 | 100.0 | 333 |
| 18-19 | 48.2 | 0.2 | 1.0 | 0.0 | 50.5 | 100.0 | 408 |
| 20-21 | 62.9 | 0.5 | 0.9 | 0.0 | 35.7 | 100.0 | 354 |
| 22-23 | 78.0 | 0.0 | 0.0 | 0.0 | 22.0 | 100.0 | 306 |
| 24-25 | 86.0 | 0.0 | 0.0 | 0.0 | 14.0 | 100.0 | 405 |
| 26-27 | 94.1 | 0.0 | 0.0 | 0.0 | 5.9 | 100.0 | 394 |
| 28-29 | 97.3 | 0.3 | 0.0 | 0.0 | 2.5 | 100.0 | 355 |
| 30-31 | 99.0 | 0.0 | 0.0 | 0.0 | 1.0 | 100.0 | 386 |
| 32-33 | 99.2 | 0.0 | 0.0 | 0.0 | 0.8 | 100.0 | 341 |
| 34-35 | 98.6 | 0.0 | 0.0 | 0.0 | 1.4 | 100.0 | 329 |
| 0-3 months | 2.3 | 67.8 | 5.2 | 11.5 | 13.1 | 100.0 | 828 |
| 4-6 months | 7.7 | 27.5 | 9.7 | 4.5 | 50.7 | 100.0 | 619 |
| 7-9 months | 10.6 | 7.7 | 5.5 | 1.9 | 74.3 | 100.0 | 577 |
| Note:Breastfeeding status refers to preceding 24 hours. |  |  |  |  |  |  |  |



Exclusive breastfeeding is common but not universal in very early infancy in Egypt. However, only a minority of children are exclusively breastfed throughout the first six months of life. Table 13.2 shows that among infants under two months of age, 79 percent received only breast milk. The proportion exclusively breastfed then dropped off to 60 percent among children 2-3 months of age, and 34 percent among children 4-5 months of age.

It is important to introduce complementary foods by age six months since, at that stage, the mother's breast milk no longer provides adequate nutrition for the child. The results in Table 13.2 indicate that the majority of older children were receiving other foods or milk in addition to breast milk. At 8-9 months, however, about one in six children was not being given solid or mushy food or other milk in addition to breast milk. At age 10-11 months, one in ten children was not receiving other food or milk.

## Complementary Foods and Bottle-feeding

More-detailed information on the types of foods given to children during the 24-hour period before the survey is shown in Tables 13.3 for children under age three, according to the breastfeeding status of the child. Overall, the results suggest that Egyptian mothers are much less likely to give a child infant formula than other types of milk (e.g., fresh milk or powdered milk) or other liquids. As expected, milk supplements are introduced at an earlier age among nonbreastfeeding children than among breastfeeding children.

Looking at semisolid or solid foods, grain-based foods (e.g., porridge) are the most common weaning foods, followed by sweet potatoes and other tubers, fruit, and fish, eggs or poultry. In general, all of these foods are introduced earlier into the diets of nonbreastfeeding children than
breastfeeding children and, especially during the first year of life, nonbreastfeeding children are much more likely than breastfeeding children to be given these types of foods. After age 12 months, breastfeeding children continue to be less likely than nonbreastfeeding children to receive most foods in the 24 -hour period before the survey.

The extent to which Egyptian children are bottle-fed is also examined in Table 13.3. Bottlefeeding is discouraged for the potential negative effects that it may have on the child's health. Feeding with a bottle with a nipple increases the risk of illness, especially diarrheal disease among young children, because it is difficult to properly sterilize the nipple. The use of a bottle with a nipple can also reduce the period when the mother is not at risk of conception since bottle-feeding is associated with a lessening of the intensity of breastfeeding and a consequent shortening of the period of postpartum amenorrhea.

| Percentage of children under 36 months of age who received specific types of food in the 24 hours before the interview, and the percentage using a bottle with a nipple, by breastfeeding status and child's age in months, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age (in months) | Breast <br> milk <br> only | Infant formula | Other milk | Other liquid | Meat | Fish/ eggs/ poultry | Porridge/ bread/ rice/ macaroni | Sweet potatoes/ other tubers | Fruit | Other | Any solid/ semisolid | Using bottle with a nipple | Number of children |
| BREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | 79.3 | 0.9 | 5.2 | 17.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 | 15.2 | 357 |
| 2-3 | 61.7 | 3.2 | 9.8 | 22.2 | 0.0 | 0.8 | 2.1 | 2.0 | 1.1 | 7.7 | 9.7 | 20.2 | 451 |
| 4-5 | 35.8 | 11.5 | 16.1 | 31.9 | 0.7 | 5.8 | 11.0 | 9.5 | 8.1 | 25.1 | 35.0 | 17.2 | 359 |
| 6-7 | 15.2 | 15.9 | 33.6 | 43.4 | 5.5 | 21.2 | 34.3 | 26.5 | 19.0 | 40.6 | 63.4 | 16.9 | 375 |
| 8-9 | 8.1 | 15.0 | 35.9 | 51.7 | 9.4 | 30.7 | 54.7 | 45.1 | 33.2 | 54.5 | 79.9 | 15.4 | 353 |
| 10-11 | 3.7 | 20.3 | 38.2 | 58.7 | 14.5 | 42.3 | 66.1 | 48.5 | 48.2 | 57.6 | 87.4 | 10.9 | 297 |
| 12-13 | 3.0 | 10.7 | 46.5 | 60.6 | 19.1 | 46.8 | 76.6 | 56.8 | 54.0 | 65.3 | 90.1 | 7.5 | 309 |
| 14-15 | 1.1 | 7.8 | 46.0 | 65.4 | 24.4 | 43.6 | 82.1 | 60.9 | 55.5 | 72.2 | 95.0 | 8.7 | 306 |
| 16-17 | 0.9 | 8.5 | 53.0 | 67.2 | 29.0 | 48.3 | 82.3 | 71.0 | 57.1 | 74.6 | 98.1 | 10.1 | 223 |
| 18-23 | 0.7 | 7.7 | 47.3 | 65.2 | 25.1 | 49.4 | 84.9 | 63.4 | 58.6 | 76.6 | 97.1 | 3.9 | 410 |
| 24-35 | 0.9 | 7.2 | 53.1 | 67.6 | 30.9 | 49.0 | 88.1 | 62.1 | 47.8 | 72.2 | 99.1 | 5.9 | 101 |
| 0-3 months | 69.5 | 2.2 | 7.7 | 19.9 | 0.0 | 0.4 | 1.2 | 1.1 | 0.6 | 4.5 | 5.6 | 18.0 | 808 |
| 4-6 months | 29.8 | 12.0 | 22.7 | 35.2 | 2.4 | 11.4 | 18.9 | 15.3 | 11.1 | 29.5 | 43.5 | 16.1 | 572 |
| 7-9 months | 8.6 | 16.5 | 35.1 | 50.2 | 8.3 | 27.8 | 49.1 | 39.7 | 29.9 | 51.7 | 77.0 | 17.0 | 516 |
| Total | 22.7 | 9.8 | 32.1 | 47.1 | 12.2 | 27.5 | 47.3 | 36.4 | 31.6 | 45.7 | 63.1 | 12.8 | 3,541 |
| NONBREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-6 months | NA | 36.6 | 85.9 | 52.7 | 1.9 | 8.0 | 14.0 | 16.3 | 10.6 | 21.4 | 33.0 | 83.5 | 66 |
| 7-9 months | NA | 40.2 | 71.2 | 75.3 | 14.7 | 32.3 | 56.4 | 49.9 | 39.8 | 60.2 | 85.9 | 68.9 | 61 |
| 10-11 | NA | 26.9 | 91.1 | 80.6 | 10.5 | 26.5 | 71.8 | 57.9 | 44.3 | 67.6 | 90.1 | 72.3 | 41 |
| 12-13 | NA | 25.2 | 81.1 | 67.6 | 24.1 | 41.1 | 74.4 | 74.5 | 52.7 | 80.2 | 98.7 | 60.7 | 68 |
| 14-15 | NA | 23.6 | 80.9 | 75.6 | 41.4 | 61.2 | 83.1 | 66.2 | 68.8 | 84.3 | 99.1 | 33.9 | 87 |
| 16-17 | NA | 8.8 | 65.7 | 74.3 | 27.0 | 56.3 | 88.7 | 70.6 | 63.0 | 75.8 | 95.7 | 18.7 | 110 |
| 18-23 | NA | 10.3 | 69.5 | 75.8 | 41.1 | 60.5 | 89.1 | 68.1 | 69.2 | 82.4 | 98.7 | 8.0 | 657 |
| 24-29 | NA | 5.4 | 66.6 | 74.0 | 40.1 | 60.9 | 91.0 | 70.6 | 70.3 | 80.5 | 99.6 | 2.0 | 1,063 |
| 30-35 | NA | 5.8 | 64.8 | 74.5 | 41.3 | 61.7 | 90.4 | 72.5 | 70.5 | 84.8 | 99.8 | 1.3 | 1,045 |
| Total | NA | 9.1 | 68.1 | 74.1 | 38.3 | 58.4 | 87.3 | 69.0 | 67.3 | 80.5 | 97.5 | 9.6 | 3,200 |
| NA = Not applicable |  |  |  |  |  |  |  |  |  |  |  |  |  |

Overall, only a minority of Egyptian children are fed with a bottle. At younger ages, as might be expected, nonbreastfeeding children are substantially more likely than breastfeeding children to be bottle-fed. Among the small number of nonbreastfeeding children age six months and under, for example, more than eight in ten were fed with a bottle with a nipple, compared with less than one in five breastfeeding children.

## Differentials in the Duration and Frequency of Breastfeeding and Bottle-feeding

Differentials in the median duration of breastfeeding and in the prevalence of bottle-feeding are presented in Table 13.4. The table also includes two estimates of the mean duration of breastfeeding for all children under age three years, the first based on current status information and the second calculated according to the prevalence-incidence technique. ${ }^{1}$ The latter estimates are presented to allow comparison with other breastfeeding studies reporting mean durations.

The median duration of breastfeeding is 18.4 months. Children are exclusively breastfed or predominantly breastfed for less than the recommended six months ( 3.0 months and 3.8 months, respectively).

Considering differentials in the median breastfeeding durations, males tend to be breastfed on average for a somewhat longer period than females. The average breastfeeding duration is somewhat longer for rural children than for urban children. By place of residence, the median duration ranges from a low of 16.2 months in the Urban Governorates to 19.7 months in rural Upper Egypt. Children born to mothers with less than a primary education are breastfed two to three months longer on average than children born to more-educated mothers. The median duration of breastfeeding is also slightly longer for children born to women who were not working for cash than for other children.

Table 13.4 also provides information on the differentials in the percentage of children under age two who are being bottle-fed. Overall, a bottle with a nipple was used in feeding only 16 percent of the children less than two years of age during the 24 hours before the survey. Bottlefeeding is somewhat more common among children whose mothers received assistance at delivery from a doctor or trained nurse. The mother's characteristics related to the likelihood of receiving medical assistance at delivery are also associated with bottle-feeding. For example, bottle-feeding is somewhat more common in urban than in rural areas. By place of residence, the percentage of children who are bottle-fed ranges from less than 14 percent in rural Lower Egypt to 22 percent among mothers in urban Upper Egypt. Bottle-feeding is somewhat more common among children whose mother completed at least the primary level of school than among children whose mother had no education or only some primary education. Mothers who work for cash are more likely to report that their child is bottle-fed than other mothers.

[^13]
## Table 13.4 Median duration of breastfeeding

Median duration of any, exclusive, and full breastfeeding among children under age three and the percentage of children under age two who were bottlefed, according to background characteristics, Egypt 2000

| Background characteristic | Among children under age three, median duration in months: |  |  | Number of children under age three | Percentage of children under age two bottlefed | Number of children under age two |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Any breastfeeding | Exclusive breastfeeding | Full breastfeeding ${ }^{1}$ |  |  |  |
| Sex |  |  |  |  |  |  |
| Male | 19.0 | 3.1 | 3.8 | 3,602 | 15.6 | 2,333 |
| Female | 17.7 | 2.9 | 3.7 | 3,424 | 16.1 | 2,199 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 17.2 | 2.2 | 2.8 | 2,715 | 18.8 | 1,778 |
| Rural | 19.0 | 3.6 | 4.4 | 4,311 | 13.9 | 2,755 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 16.2 | 2.1 | 3.1 | 1,130 | 16.8 | 750 |
| Lower Egypt | 18.3 | 3.4 | 4.0 | 2,907 | 15.0 | 1,861 |
| Urban | 17.2 | 2.3 | 2.5 | 769 | 18.7 | 507 |
| Rural | 18.6 | 3.8 | 4.5 | 2,138 | 13.6 | 1,354 |
| Upper Egypt | 19.4 | 3.0 | 3.8 | 2,884 | 16.1 | 1,852 |
| Urban | 18.7 | 2.3 | 2.7 | 754 | 22.1 | 482 |
| Rural | 19.7 | 3.4 | 4.3 | 2,130 | 14.0 | 1,370 |
| Frontier Governorates | 18.2 | 3.1 | 3.6 | 105 | 20.2 | 70 |
| Mother's education |  |  |  |  |  |  |
| No education | 19.3 | 3.7 | 4.8 | 2,691 | 12.8 | 1,696 |
| Primary incomplete | 20.0 | 2.7 | 3.7 | 762 | 15.2 | 468 |
| Primary complete/ some secondary | 17.8 | 3.2 | 3.8 | 993 | 17.6 | 648 |
| Secondary complete/higher | r 17.2 | 2.5 | 3.1 | 2,580 | 18.3 | 1,720 |
| Mother's work status |  |  |  |  |  |  |
| Working for cash | 17.1 | 1.9 | 2.2 | 778 | 23.1 | 505 |
| Not working for cash | 18.6 | 3.2 | 4.0 | 6,248 | 14.9 | 4,027 |
| Assistance at delivery |  |  |  |  |  |  |
| Medically trained person | 17.9 | 2.6 | 3.3 | 4,466 | 18.6 | 2,984 |
| Daya | 19.3 | 3.8 | 4.9 | 2,327 | 10.6 | 1,390 |
| Other or none | 19.8 | 4.0 | 4.7 | 233 | 10.0 | 159 |
| All children | 18.4 | 3.0 | 3.8 | 7,026 | 15.8 | 4,532 |
| Mean | 18.0 | 4.4 | 5.1 | NA | NA | NA |
| Prevalence/Incidence mean | 17.9 | 4.1 | 4.9 | NA | NA | NA |

Note: Medians and means are based on current status.
NA = Not applicable
Either exclusively breastfed or received plain water only in addition to breastfeeding.

## Frequency of Breastfeeding

The frequency of breastfeeding during a 24 -hour period before the survey is examined in Table 13.5. As discussed earlier, the duration of postpartum amenorrhea for a mother is related not only to the duration of breastfeeding but also to the frequency of breastfeeding.

Among children under age six months, 92 percent were breastfed at least six times during the 24 -hour period before the survey. Mothers reported a mean number of 5.9 daytime feeds and 4.8 nighttime feeds. The largest differentials in the measures of breastfeeding frequency are by place of residence, with lower mean feeding frequencies, particularly at night, observed in the Urban Governorates than in other areas.

| Table 13.5 Frequency of breastfeeding |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of children under age six months who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by selected background characteristics, Egypt 2000 |  |  |  |  |
| Background characteristic | Percentage breastfed $6+$ times | Mean number of feeds |  | Number of children |
|  | 24 hours | Daytime | Nighttime | of age |
| Sex |  |  |  |  |
| Male | 91.6 | 5.9 | 4.8 | 1,927 |
| Female | 92.8 | 6.0 | 4.8 | 1,706 |
| Urban-rural residence |  |  |  |  |
| Urban | 89.4 | 5.7 | 4.5 | 1,324 |
| Rural | 93.8 | 6.1 | 5.0 | 2,310 |
| Place of residence |  |  |  |  |
| Urban Governorates | 84.7 | 5.2 | 3.7 | 551 |
| Lower Egypt | 92.7 | 5.5 | 4.6 | 1,469 |
| Urban | 90.9 | 5.5 | 4.7 | 370 |
| Rural | 93.3 | 5.6 | 4.6 | 1,099 |
| Upper Egypt | 94.3 | 6.6 | 5.3 | 1,562 |
| Urban | 94.3 | 6.6 | 5.3 | 374 |
| Rural | 94.2 | 6.6 | 5.3 | 1,187 |
| Frontier Governorates | 93.7 | 6.4 | 5.5 | 52 |
| Mother's education |  |  |  |  |
| No education | 92.9 | 6.2 | 5.0 | 1,438 |
| Primary incomplete | 92.3 | 6.1 | 4.9 | 411 |
| Primary complete/ some secondary | 93.9 | 5.8 | 4.8 | 482 |
| Secondary complete/higher | 90.7 | 5.6 | 4.6 | 1,303 |
| Mother's work status 89.9 |  |  |  |  |
| Working for cash | 89.9 92.4 | 5.5 6.0 | 4.5 4.8 | 385 3,248 |
| Not working for cash | 92.4 | 6.0 | 4.8 | 3,248 |
| Assistance at delivery |  |  |  |  |
| Medically trained person | 90.8 | 5.7 | 4.6 | 2,317 |
| Daya | 94.7 | 6.3 | 5.1 | 1,180 |
| Other or none | 94.7 | 6.8 | 5.3 | 137 |
| All children | 92.2 | 5.9 | 4.8 | 3,633 |

### 13.2 Nutritional Status of Children

Nutritional status is a primary determinant of a child's health and well-being. Both inadequate or unbalanced diets and chronic illness are associated with poor nutritional status among children. The 2000 EDHS included the collection of anthropometric data that permit an assessment of the nutritional status of young children in Egypt.

## Measurement of Nutritional Status

To assess nutritional status, measurements of height ${ }^{2}$ and weight were obtained for all children living in the household who were under age 6. Using these anthropometric measurements as well as information on the ages of the children, three standard indices of physical growth describing the nutritional status of children were constructed:

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

As recommended by the World Health Organization (WHO), evaluation of nutritional status in this report is based on the comparison of the three indices for the population of children in the survey with those reported for a reference population of well-nourished children. The use of a reference population to identity malnourished children is based on the finding that well-nourished children in all population groups follow similar growth patterns and thus exhibit similar distributions of height and weight at given ages (Martorell and Habicht, 1986). One of the most commonly used reference populations, and the one used for this study, is the international reference population defined by the U.S. National Center for Health Statistics (NCHS) and accepted by WHO and the U.S. Centers for Disease Control.

Each of the indices measures somewhat different aspects of nutritional status. The height-for-age index provides an indicator of linear growth retardation. Children whose height-for-age is below minus two standard deviations ( -2 SD ) from the median of the reference population are considered short for their age, or stunted. Children who are below minus three standard deviations (-3 SD) from the reference population are considered severely stunted. Stunting of a child's growth may be the result of a failure to receive adequate nutrition over a long period of time or of the effects of recurrent or chronic illness. Height-for-age therefore represents a measure of the outcome of malnutrition in a population over a long period and does not vary appreciably with the season of data collection.

The weight-for-height index measures body mass in relation to body length. Children whose weight-for-height measures are below minus two standard deviations (-2 SD) from the median of the reference population are too thin for their height, or wasted, while those whose measures are below minus three standard deviations ( -3 SD ) from the reference population median are severely wasted. Wasting represents the failure to receive adequate nutrition during the period immediately before the survey. It may be the result of recent episodes of illness or acute food shortages.

[^14]Weight-for-age is a composite index of height-for-age and weight-for-height. Children whose weight-for-age measures are below minus two standard deviations ( -2 SD ) from the median of the reference population are underweight for their age, while those whose measures are below minus three standard deviations ( -3 SD ) from the reference population median are severely underweight. A child can be underweight for his age, because he is stunted, because he is wasted, or because he is both stunted and wasted.

## Anthropometric Data Collection

Anthropometric data collection was conducted in all households in the 2000 EDHS sample. The procedure for collecting the 2000 EDHS measurements for children differed from that used in prior EDHS surveys. In the earlier surveys, anthropometric data were reported only for children of mothers interviewed in the survey under age five. In the 2000 EDHS, anthropometric data was obtained for all children under age six in the interviewed households, regardless of whether the mother was interviewed. Although data was collected for all children under age six, for purposes of comparability with prior EDHS surveys, the analysis is limited to children under age five. Only a small proportion of the children under age five in the households interviewed for the 2000 EDHS were not biological offspring of the women interviewed in the survey.

Height and weight measurements were obtained for 97 percent of the 10,855 children born to EDHS respondents and under age five at the time of the survey. Of these children, 4 percent were considered to have implausibly high or low values for the height or weight measures (not shown in table). The following analysis focuses on the 10,193 children for whom complete and plausible anthropometric data were collected.

## Levels of Child Malnutrition

Table 13.6 shows the proportions of children been to EDHS respondents and under age five who are classified as malnourished according to three measures of nutritional status, i.e., height-forage, weight-for-height, and weight-for-age, by selected demographic characteristics of the child. Table 13.7 shows the same measures according to socioeconomic characteristics of the child's mother.

An examination of the data on height-for-age in Table 13.6 suggests that there is considerable chronic malnutrition among Egyptian children. Overall, 19 percent of children under age five are stunted, and 6 percent are severely stunted. A child's age is associated with the likelihood of stunting. Stunting increases rapidly with age, from only 11 percent among children under six months of age to 24 percent among children 12-23 months, before falling to 18 percent among children age four and older. Levels of stunting are slightly higher for male children than for female children. Stunting is higher among children of birth order four or higher compared with other children. It varies inversely with the length of the birth interval. A child born less than 24 months after an elder sibling is around 50 percent more likely to be stunted than a child born 48 months or longer after an elder sibling.

## Table 13.6 Nutritional status by demographic characteristics

Percentage of children under age five who are classified as undernourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by selected demographic characteristics, Egypt 2000

| Demographic characteristic | Height-for-age |  | Weight-for-height |  | Weight-for-age |  | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below -3 SD | $\begin{aligned} & \text { Percentage } \\ & \text { below } \\ & -2 \mathrm{SD}^{1} \end{aligned}$ | Percentage below -3 SD | Percentage below -2 SD $^{1}$ | Percentage below -3 SD | Percentage below - 2 SD $^{1}$ |  |
| Age |  |  |  |  |  |  |  |
| <6 months | 1.9 | 10.7 | 1.2 | 5.3 | 0.0 | 1.4 | 1,007 |
| 6-11 months | 7.0 | 19.4 | 0.6 | 4.0 | 0.9 | 6.8 | 1,061 |
| 12-23 months | 9.0 | 23.5 | 0.6 | 3.1 | 1.2 | 5.7 | 2,052 |
| 24-35 months | 7.2 | 19.2 | 0.3 | 1.7 | 0.6 | 3.7 | 2,115 |
| 36-47 months | 4.9 | 16.9 | 0.1 | 1.1 | 0.1 | 2.9 | 2,048 |
| 48-59 months | 5.3 | 18.4 | 0.1 | 1.9 | 0.3 | 3.8 | 1,910 |
| Sex |  |  |  |  |  |  |  |
| Male | 6.6 | 19.8 | 0.5 | 2.9 | 0.6 | 4.4 | 5,250 |
| Female | 5.8 | 17.4 | 0.3 | 2.2 | 0.4 | 3.6 | 4,943 |
| Birth order |  |  |  |  |  |  |  |
| 1 | 4.8 | 17.4 | 0.5 | 2.9 | 0.3 | 3.7 | 2,757 |
| 2-3 | 5.6 | 16.9 | 0.4 | 2.3 | 0.3 | 3.1 | 4,181 |
| 4-5 | 7.4 | 19.9 | 0.5 | 2.8 | 0.8 | 5.0 | 1,917 |
| 6+ | 9.3 | 24.8 | 0.3 | 2.1 | 1.2 | 6.5 | 1,339 |
| Birth interval |  |  |  |  |  |  |  |
| First birth | 4.8 | 17.5 | 0.5 | 2.9 | 0.3 | 3.7 | 2,794 |
| < 24 months | 9.4 | 23.2 | 0.6 | 2.9 | 1.0 | 6.0 | 1,747 |
| 24-47 months | 6.6 | 18.6 | 0.3 | 2.5 | 0.5 | 3.9 | 3,531 |
| $48+$ months | 4.9 | 16.6 | 0.3 | 1.7 | 0.5 | 3.2 | 2,121 |
| All children | 6.2 | 18.7 | 0.4 | 2.5 | 0.5 | 4.0 | 10,194 |
| Note: Figures are for children of EDHS respondents under age five. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population. Children are classified as undernourished if their $z$-scores are below minus two or minus three standard deviations (-2 SD or -3 SD) from the median of the reference population. <br> ${ }^{1}$ Includes children who are below -3 SD |  |  |  |  |  |  |  |

Table 13.7 shows that there are marked socioeconomic differentials in stunting. Children in rural areas are much more likely to be stunted than urban children ( 22 percent and 14 percent, respectively). The percentage stunted varies greatly by place of residence, ranging from only 9 percent in the Urban Governorates to 27 percent in rural Upper Egypt.

| Table 13.7 Nutritional status by socioeconomic characteristics |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children of EDHS respondents under age five who are classified as undernourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by selected socioeconomic characteristics, Egypt 2000 |  |  |  |  |  |  |  |
|  | Height-for-age |  | Weight-for-height |  | Weight-for-age |  | Number of children |
| Demographic characteristic | Percentage below -3 SD | Percentage below $-2 S D^{1}$ | Percentage below -3 SD | Percentage below $-2 S^{1}$ | Percentage below -3 SD | Percentage below -2 SD $^{1}$ |  |
| Urban-rural residence |  |  |  |  |  |  |  |
| Urban | 4.0 | 13.8 | 0.4 | 2.3 | 0.4 | 3.0 | 3,972 |
| Rural | 7.7 | 21.8 | 0.4 | 2.6 | 0.6 | 4.7 | 6,222 |
| Place of residence |  |  |  |  |  |  |  |
| Urban Governorates | - 2.1 | 8.5 | 0.3 | 1.8 | 0.1 | 2.5 | 1,663 |
| Lower Egypt | 4.2 | 16.0 | 0.6 | 3.1 | 0.3 | 2.6 | 4,304 |
| Urban | 3.3 | 13.7 | 0.5 | 3.3 | 0.3 | 1.9 | 1,128 |
| Rural | 4.5 | 16.8 | 0.6 | 3.1 | 0.3 | 2.8 | 3,176 |
| Upper Egypt | 10.2 | 25.8 | 0.3 | 2.2 | 0.9 | 6.3 | 4,061 |
| Urban | 7.6 | 21.9 | 0.2 | 2.3 | 0.7 | 5.0 | 1,084 |
| Rural | 11.1 | 27.2 | 0.3 | 2.2 | 1.0 | 6.8 | 2,977 |
| Frontier Governorates | S 4.3 | 16.7 | 0.0 | 0.8 | 0.3 | 2.3 | 166 |
| Mother's education |  |  |  |  |  |  |  |
| No education | 8.1 | 22.5 | 0.3 | 2.5 | 0.8 | 5.3 | 4,045 |
| Primary incomplete | 6.1 | 19.1 | 0.3 | 2.7 | 0.6 | 3.3 | 1,153 |
| Primary complete/ some secondary | 5.3 | 17.6 | 0.4 | 2.3 | 0.5 | 3.8 | 1,423 |
| Secondary complete/ higher | / 4.5 | 14.7 | 0.6 | 2.6 | 0.3 | 2.9 | 3,573 |
| Mother's work status |  |  |  |  |  |  |  |
| Working for cash | 5.6 | 16.7 | 0.2 | 2.5 | 0.4 | 3.6 | 1,207 |
| Not working for cash | - 6.3 | 18.9 | 0.4 | 2.5 | 0.6 | 4.1 | 8,987 |
| All children | 6.2 | 18.7 | 0.4 | 2.5 | 0.5 | 4.0 | 10,194 |
| Note: Figures are for children of EDHS respondents under age five. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population. Children are classified as undernourished if their $z$-scores are below minus two or minus three standard deviations (-2 SD or -3 SD) from the median of the reference population. <br> ${ }^{1}$ Includes children who are below -3 SD |  |  |  |  |  |  |  |

The educational level of the mother is inversely related to the level of stunting. Among children whose mothers never attended school, 23 percent are stunted compared with 15 percent of mothers who completed the secondary level or higher. Children of mothers who work for cash are somewhat less likely to be stunted than other children.

The weight-for-height index provides a measure of wasting, or acute malnutrition. As described above, the weight-for-height index reflects the effects on a child's nutritional status of recent food shortages or recent episodes of diarrheal or other illness that contribute to malnutrition. Overall, nearly 3 percent of Egyptian children are wasted. Wasting is more common among children under age two than among older children. Regarding the other characteristics presented in Tables 13.6 and 13.7, there are generally only minor variations in the level of wasting.

Reflecting the effects of both chronic and short-term malnutrition, 4 percent of children under age five are underweight for their age. Low weight-for-age is more common among children 6-23 months than among older or younger children. It generally increases with birth order and is higher among children born less than 24 months after a prior birth. Considering socioeconomic characteristics, low weight-for-age is slightly more common among rural children, children in Upper Egypt, and children of mothers who never attended school than among other children.

## Trends in Child Nutrition

Table 13.8 looks at recent trends in the nutritional status of children in Egypt using anthropometric data from EDHS surveys undertaken between 1992 and 2000. There are a number of factors that should be kept in mind in looking at the trends in the indicators. First, the trends may be influenced by differences in the quality of the anthropometric data collected in the surveys or in the reporting of children's ages. The 2000 EDHS was also fielded between February and March 2000, a period of time that is somewhat colder in Egypt than the period between October and December when the other EDHS surveys were conducted. This may have some effect on the weight information because removing clothing from children during the weighing process may have been more difficult in the 2000 EDHS due to the cold weather than in the earlier surveys. Any clothing that children wore during the weighing in the 2000 survey may have been heavier than the clothing worn at the time of the earlier surveys. Finally, particularly where they are small, the differences in the indicators may be simply a result of sampling variability rather than of a genuine change in children's nutritional status.

| Percentage of children under five classified as malnourished according to selected indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, Egypt 1992-2000 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1997 | 1998 |  |
| Index of nutritional status | $\begin{aligned} & 1992 \\ & \text { EDHS } \end{aligned}$ | $\begin{gathered} 1995 \\ \text { EDHS } \end{gathered}$ | Interim EDHS | Interim EDHS | $\begin{aligned} & 2000 \\ & \text { EDHS } \end{aligned}$ |
| Height-for-age | 26.0 | 29.8 | 24.9 | 20.6 | 18.7 |
| Weight-for-height | 3.4 | 4.6 | 6.1 | 5.1 | 2.5 |
| Weight-for-age | 9.9 | 12.5 | 11.7 | 10.7 | 4.0 |

Note: Figures are based on children of EDHS respondents under age five. Source: El-Zanaty and Associates and Macro International Inc, 1999, Table 9.7

Although the changes are not uniform, the overall trend in the nutritional status indicators suggests that the nutritional status of young children in Egypt improved during the period between 1992 and 2000. Looking at the height-for-age measures, for example, there was a decrease in the percentage of children who were considered stunted, from 26 percent at the time of the 1992 EDHS to 19 percent in the 2000 EDHS (Table 13.8). The weight-for-height and weight-for-age measures also show declines, with the levels observed for the 2000 EDHS being considerably lower than the levels in the earlier surveys. As discussed above, it is possible that this pattern may at least in part reflect an upward shift in the 2000 EDHS weight data because of the cold weather.

### 13.3 Nutritional Status of Women

Besides measures for children under age five, the 2000 EDHS obtained information on the height and weight of evermarried women 15-49. These data can be used to assess the nutritional status of Egyptian women. The measures used to assess maternal nutritional status in this report are height and weight of women and the body mass index (BMI), an indicator combining height and weight data. Table 13.9 shows the distribution of women who had a birth during the five-year period before the survey, according to height, weight, and BMI, along with the means for these indicators.

In looking at the results in Table 13.9, it is important to recognize that the anthropometric data are not representative of all women age 15-49 in Egypt. In particular, height and weight measures were not obtained for women who were not married. Women who were pregnant or less than two months postpartum were also excluded from the analysis of women's weight and body mass. Finally, maternal anthropometric measures are not available for 219 women (1.4 percent of the sample) who were not home when the EDHS staff visited the household to collect the anthropometric measures. As was the case with children, the weight data for women also may have been affected by the timing of the survey. Because the 2000 Egypt survey took place principally in February and March when the weather is relatively cold, women may have been wearing more clothing and the clothing may have been heavier than what would be worn at other times of the year in Egypt. Thus, the weight data as well as the BMI for women may have been biased upward to some degree by the clothing that women wore.

Maternal height is an outcome of nutrition during childhood and adolescence. It is useful in predicting the risk of difficult delivery, since small stature is frequently associated with small pelvis size. The risk of low birth weight babies is also higher for short women. The cutoff point, i.e., the height below which a woman is considered to be at nutritional risk, is in the range of 140-150 centimeters. The mean height of mothers measured in the 2000 EDHS was 158 centimeters. About one in ten fell below the cutoff point; 1 percent were shorter than 145 centimeters and 8 percent were in the 145-149 centimeter range.

| Table 13.9 Anthropometric indicators |  |
| :---: | :---: |
| of women's nutritional status |  |
| Percent distribution of ever-married |  |
| women 15-49 interv | in the 2000 |
| EDHS by selected an | metric indi- |
| cators (height, weigh | d body mass |
| index (BMI)), acco | to whether |
| missing cases were luded Egypt 2000 | ded or inc- |
|  |  |
| Indicator | Total |
| Women's height ( |  |
| $130.0-134.9^{\circ}$ | 0.0 |
| 135.0-139.9 | 0.1 |
| 140.0-144.9 | 1.2 |
| 145.0-149.9 | 7.9 |
| 150.0-154.9 | 23.4 |
| 155.0-159.9 | 35.5 |
| 160.0-164.9 | 24.0 |
| 165.0-169.9 | 6.6 |
| 170.0-174.9 | 1.2 |
| 175.0-179.9 | 0.1 |
| $>=180.0$ | 0.0 |
| Missing | - |
| Total | 100.0 |
| Mean height | 157.5 |
| Number of women | 15,354 |
| Women's weight (k |  |
| 35.0-39.9 | 0.1 |
| 40.0-49.9 | 3.6 |
| 50.0-59.9 | 15.9 |
| 60.0-69.9 | 26.1 |
| $>=70.0$ | 54.3 |
| Missing | - |
| Total | 100.0 |
| Mean weight | 72.9 |
| Number of women | 13,676 |
| Women's BMI (kg/m |  |
| 12.0-15.9 | 0.0 |
| 16.0-16.9 | 0.0 |
| 17.0-18.4 | 0.5 |
| 18.5-20.4 | 2.5 |
| 20.5-22.9 | 8.5 |
| 23.0-24.9 | 11.3 |
| 25.0-26.9 | 14.4 |
| 27.0-28.9 | 14.7 |
| 29.0-29.9 | 7.3 |
| $>=30.0$ | 40.8 |
| Missing | - |
| Total | 100.0 |
| Mean BMI | 29.3 |
| Number of women | 13,624 |
| ${ }^{1}$ Excludes women who are pregnant or less than two months postpartum. |  |

Low pre-pregnancy weight is associated with unfavorable pregnancy outcomes, although maternal height must also be taken into account. Excluding women who were pregnant or had a birth within two months of the interview, the mean weight of ever-married women 15-49 is 72.9 kilograms.

Body mass indices, which take into account both height and weight, provide a better measure of a woman's nutritional status than height and weight alone. The most commonly used body mass index is the BMI, which is defined as weight in kilograms divided by squared height in meters ( $\mathrm{kg} / \mathrm{m}^{2}$ ). For the BMI, a cutoff of 18.5 has been recommended for assessing chronic energy deficiency among nonpregnant women. At the other end of the BMI scale, women are considered overweight if their BMI ranges between 25.0 and 29.9 and obese if their BMI exceeds 30.0.

As Table 13.9 shows, excluding those who are pregnant or less than two months postpartum, the mean BMI of Egyptian women is 29.3. Less than 1 percent have a BMI below 18.5, the level indicating chronic energy deficiency. However, a substantial proportion of ever-married women ( 77 percent) had a BMI of 25.0 or higher. The latter result must be interpreted with some caution because of the positive bias that the timing of the survey in the colder months may have had on the weight data and, thus, the BMI measures. However, they support the conclusions reached in earlier surveys that the primary nutritional problem for many Egyptian women is the tendency toward obesity.

Differentials in maternal height and body mass measures for ever-married women in Egypt are shown in Table 13.10. There is little variation in the women's mean height. The mean body mass index varies directly with the woman's age and is somewhat higher among urban women than among rural women. By place of residence, the mean body mass index ranges from a low of 26.4 among ever-married women in rural Upper Egypt to a high of 31.5 in urban Lower Egypt.

| Table 13.10 Differentials in maternal anthropometric indicators |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mean height and percentage shorter than 145 centimeters among ever-married women 1549 interviewed in the 2000 EDHS and mean body mass index (BMI) and the percentage whose BMI is less than 18.5 among women (excluding pregnant women and women less than three months postpartum), according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |
|  | Height |  | Number of women | BMI |  | Number of women |
| Background characteristic | Mean | $\begin{aligned} & \text { Percent } \\ & <145 \mathrm{~cm} \end{aligned}$ |  | Mean | $\begin{aligned} & \text { Percent } \\ & <18.5 \end{aligned}$ |  |
| Age |  |  |  |  |  |  |
| 15-19 | 157.0 | 1.4 | 606 | 25.3 | 0.9 | 411 |
| 20-24 | 157.1 | 1.1 | 2,216 | 26.6 | 1.0 | 1,664 |
| 25-29 | 157.3 | 1.0 | 2,806 | 27.9 | 0.5 | 2,320 |
| 30-34 | 157.7 | 1.3 | 2,676 | 29.1 | 0.6 | 2,395 |
| 35-39 | 157.7 | 1.1 | 2,637 | 29.9 | 0.4 | 2,504 |
| 40-44 | 157.7 | 1.3 | 2,153 | 31.2 | 0.4 | 2,121 |
| 45-49 | 157.6 | 1.6 | 2,260 | 31.5 | 0.7 | 2,249 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 158.1 | 1.4 | 6,738 | 30.5 | 0.3 | 6,107 |
| Rural | 157.0 | 1.1 | 8,617 | 28.4 | 0.7 | 7,557 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 15.9.1 | 1.4 | 2,930 | 30.6 | 0.3 | 2,679 |
| Lower Egypt | 15.7.5 | 0.8 | 6,751 | 30.3 | 0.1 | 6,054 |
| Urban | 157.5 | 1.2 | 1,915 | 31.5 | 0.1 | 1,740 |
| Rural | 157.5 | 0.7 | 4,836 | 29.9 | 0.1 | 4,314 |
| Upper Egypt | 156.6 | 1.7 | 5,467 | 27.4 | 1.3 | 4,753 |
| Urban | 157.2 | 1.6 | 1,768 | 29.3 | 0.7 | 1,580 |
| Rural | 156.3 | 1.7 | 3,699 | 26.4 | 1.6 | 3,173 |
| Frontier Governorates | 157.8 | 1.1 | 206 | 28.2 | 0.6 | 179 |
| Education |  |  |  |  |  |  |
| No education | 157.0 | 1.6 | 6,664 | 28.8 | 0.8 | 6,059 |
| Primary incomplete | 157.1 | 1.6 | 2,036 | 30.1 | 0.5 | 1,856 |
| Primary complete/ some secondary | 157.5 | 1.3 | 1,998 | 29.9 | 0.4 | 1,757 |
| Secondary complete/higher | 158.4 | 0.6 | 4,657 | 29.5 | 0.2 | 3,992 |
| Work status |  |  |  |  |  |  |
| Working for cash | 158.3 | 0.8 | 2,218 | 30.2 | 0.2 | 2,064 |
| Not working for cash | 15.7.4 | 1.3 | 13,136 | 29.2 | 0.6 | 11,600 |
| Total | 157.5 | 1.2 | 15,354 | 29.3 | 0.6 | 13,664 |
| ${ }^{1}$ Excludes women who are pregnant or less than two months postpartum |  |  |  |  |  |  |

### 13.4 Anemia

Anemia is a condition characterized by a decrease in the concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. The reduction in oxygen available to organs and tissues when hemoglobin levels are low is responsible for many of the symptoms experienced by anemic persons. The consequences of anemia include general body weakness, frequent tiredness, and lowered resistance to disease. Anemia can be a particularly serious problem for pregnant women, leading to premature delivery and low birth weight. It is of concern in children since anemia is associated with impaired mental and physical development. Overall, morbidity and mortality risks increase for individuals suffering from anemia.

Hemoglobin testing is the primary method of anemia diagnosis. The 2000 EDHS included direct measurement of hemoglobin levels in a subsample of one-half of all EDHS households for three groups: ever-married women 15-49, children under six years of age, and boys and girls age 11-19 years. The HemoCue system was used in the 2000 EDHS for hemoglobin testing. This system consists of a battery-operated photometer and a disposable microcuvette, ${ }^{3}$ coated with a dried reagent that serves as the blood-collection device. After obtaining consent from each respondent or, in the case of young children or adolescents, the consent of the child's parent or other adult caretaker, a drop of capillary blood taken from a person's fingertip or heel was drawn into a microcuvette. The blood in the microcuvette was analyzed using the photometer, which displayed the hemoglobin concentration.

As described in Chapter 1, medically trained personnel, primarily doctors, assigned to each of the EDHS teams conducted the testing. The personnel responsible for the testing received extensive classroom training and field practice prior to the survey.

During the fieldwork, each respondent or parent/caretaker was given the results of the test immediately. In cases in which the hemoglobin reading was below $9.0 \mathrm{~g} / \mathrm{dl}$ (grams per deciliter), the respondent or parent/caretaker was referred to Ministry of Health and Population facilities for follow-up. With the permission of the respondent or parent/caretaker, the Ministry of Health and Population was also advised of the names of the individuals with reading below $9.0 \mathrm{~g} / \mathrm{dl}$ to help ensure that they would receive follow-up.

Anemia is classified as mild, moderate, or severe based on the concentrations of hemoglobin in the blood. Mild anemia corresponds to a level of hemoglobin concentration of 10-10.9 g/dl for pregnant women and young children, $10.0-11.9 \mathrm{~g} / \mathrm{dl}$ for nonpregnant women, girls age 11-19, and boys age $11-13$, and $10-0-12-9 \mathrm{~g} / \mathrm{dl}$ for boys age $14-19$. For all of the tested groups, moderate anemia corresponds to a level of $7.0-9.9 \mathrm{~g} / \mathrm{dl}$, while severe anemia corresponds to a level less than $7.0 \mathrm{~g} / \mathrm{dl}$.

## Prevalence of Anemia among Ever-Married Women Age 15-49

Table 13.11 shows anemia levels among the ever-married women 15-49 interviewed in the 2000 EDHS. Around three in ten women had some degree of anemia. The level of anemia was severe in less than 1 percent of the women, while 5 percent had a moderate level.

Age was associated with anemia levels, with women age 40-49 being somewhat less likely to be at least mildly anemic than younger women. Pregnant women who provide the developing fetus with iron are at greater risk of anemia than nonpregnant women. Anemia during pregnancy increases the risks of maternal and infant death, premature delivery, and low birth weight. Table 13.11 shows that pregnancy was associated with an elevated level of anemia among EDHS respondents. More than a third of pregnant women were classified as mildly anemic, and 10 percent had a moderate or severe level of anemia. Breastfeeding women were also somewhat more likely than nonpregnant and nonbreastfeeding women to be at least mildly anemic.

Studies also suggest that IUD use can lead to iron depletion and iron deficiency anemia. There is only a very small association between IUD use and anemia among Egyptian women; 30 percent of IUD users were at least mildly anemic compared with 28 percent of other women.

[^15]| Table 13.11 Prevalence of anemia in women |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women age 15-49 interviewed in the 2000 EDHS by anemia status, according to selected demographic and socioeconomic characteristics, Egypt 2000 |  |  |  |  |  |  |  |
| Characteristic | Severe ${ }_{1}$ anemia | Moderaťe anemia | $\begin{gathered} \text { Mild } \\ \text { anemia }^{3} \end{gathered}$ | Not anemic | Missing | Total | Number of women |
| Age |  |  |  |  |  |  |  |
| 15-19 | 0.0 | 5.2 | 31.1 | 63.1 | 0.7 | 100.0 | 305 |
| 20-24 | 0.1 | 5.2 | 29.4 | 64.1 | 1.2 | 100.0 | 1,049 |
| 25-29 | 0.2 | 5.1 | 26.4 | 67.9 | 0.5 | 100.0 | 1,404 |
| 30-34 | 0.4 | 4.3 | 25.7 | 69.1 | 0.5 | 100.0 | 1,394 |
| 35-39 | 0.6 | 4.6 | 24.0 | 69.5 | 1.3 | 100.0 | 1,360 |
| 40-44 | 0.3 | 4.4 | 17.8 | 76.7 | 0.7 | 100.0 | 1,060 |
| 45-49 | 0.2 | 3.6 | 19.8 | 74.5 | 1.8 | 100.0 | 1,112 |
| Number of live births |  |  |  |  |  |  |  |
| No live births | 0.2 | 4.7 | 25.8 | 68.1 | 1.2 | 100.0 | 662 |
| 1 birth | 0.3 | 4.6 | 27.9 | 66.1 | 1.1 | 100.0 | 987 |
| 2-3 birth | 0.3 | 4.8 | 23.3 | 70.6 719 | 1.0 | 100.0 | 2,739 |
| 4-5 births | 0.4 | 4.5 | 22.4 | 71.9 | 0.9 | 100.0 | 1,751 |
| 6+ births | 0.4 | 4.2 | 25.3 | 69.3 | 0.8 | 100.0 | 1,545 |
| Pregnaņcy/breastfeeding status |  |  |  |  |  |  |  |
| Pregnant | 0.6 | 9.7 | 35.1 | 53.4 | 1.2 | 100.0 | 602 |
| Breastfeeding | 0.2 | 4.3 | 27.4 | 67.5 | 0.6 | 100.0 | 1,690 |
| Neither | 0.3 | 4.0 | 22.0 | 72.6 | 1.1 | 100.0 | 5,359 |
| Currently using IUD |  |  |  |  |  |  |  |
| Yes | 0.1 | 4.4 | 25.7 | 68.8 | 1.0 | 100.0 | 2,540 |
| No | 0.4 | 4.6 | 23.6 | 70.4 | 1.0 | 100.0 | 5,144 |
| Urban-rural residence |  |  |  |  |  |  |  |
| Urban | 0.2 | 3.4 | 23.7 | 71.5 | 1.1 | 100.0 | 3,392 |
| Rural | 0.4 | 5.5 | 24.8 | 68.5 | 0.8 | 100.0 | 4,292 |
| Place of residence |  |  |  |  |  |  |  |
| Urban Governorates | 0.2 | 2.9 | 26.5 | 69.2 | 1.2 | 100.0 | 1,491 |
| Lower Egypt | 0.0 | 5.1 | 22.5 | 71.5 | 0.8 | 100.0 | 3,348 |
| Urban | 0.0 | 4.3 | 20.9 | 73.9 | 0.9 | 100.0 | 940 |
| Rural | 0.1 | 5.4 | 23.1 | 70.6 | 0.8 | 100.0 | 2,408 |
| Upper Egypt | 0.7 0.3 | 4.9 3.3 | 25.0 21.3 | 68.4 73.6 | 1.1 | 100.0 100.0 | 2,742 |
| Rural | 0.8 | 5.6 | 26.8 | 65.9 | 0.9 | 100.0 | 1,843 |
| Frontier Governorates | 0.8 | 3.1 | 32.6 | 63.0 | 0.6 | 100.0 | 102 |
| Education |  |  |  |  |  |  |  |
| No education | 0.5 | 5.0 | 24.0 | 69.6 | 0.9 | 100.0 | 3,330 |
| Primary incomplete | 0.2 | 4.4 | 25.7 | 69.2 | 0.6 | 100.0 | 1,044 |
| Primary complete/ some secondary | 0.2 | 5.8 | 26.5 | 66.7 | 0.8 | 100.0 | 953 |
| Secondary complete/ higher | 0.2 | 3.5 | 23.2 | 71.8 | 1.3 | 100.0 | 2,357 |
| Work status |  |  |  |  |  |  |  |
| Working for cash | 0.2 | 3.8 | 19.7 | 74.7 69.0 | 1.6 0.9 | 100.0 100.0 | 1,121 |
| Not working for cash | 0.3 | 4.7 | 25.1 | 69.0 | 0.9 | 100.0 | 6,563 |
| Total | 0.3 | 4.6 | 24.3 | 69.9 | 1.0 | 100.0 | 7,684 |
| ${ }_{2}^{1}$ Hemoglobin level less <br> ${ }_{3}^{2}$ Hemoglobin level 7-9. <br> ${ }_{4}^{3}$ Hemoglobin level 10- <br> ${ }^{4}$ Excludes a small numb | $\text { han } 7 \mathrm{~g} / \mathrm{dl}$ $\mathrm{g} / \mathrm{dl}$ <br> . $9 \mathrm{~g} / \mathrm{dl}$ for of wome | regnant wom reported as | n and 10.0 egnant and | $11.9 \mathrm{~g} / \mathrm{dl}$ breastfeedi | nonpregn | nt wom |  |

Looking at the socioeconomic characteristics, most of the differentials are small. For example, rural women are only slightly more likely than urban women to be at least mildly anemic (31 percent and 27 percent, respectively). By place of residence, the highest levels were observed in rural Upper Egypt (33 percent) and the Frontier Governorates (37 percent). Women with less than a secondary education were slightly more likely to be at least mildly anemic than more highly educated women.

## Prevalence of Anemia among Young Children

Table 13.12 shows anemia levels for children 6-59 months. Overall, about three in ten children suffer from some degree of anemia. This is similar to the level that was found among women. As was the situation among women, the anemia is mild in many cases. However, 11 percent of young children had a moderate level of anemia, and a small proportion (less than 1 percent) were classified as having severe anemia.

Children under age two were more likely to be anemic than older children. Rural children were more likely to be anemic than urban children ( 33 percent and 24 percent, respectively). Considering the variation by socioeconomic characteristics, the greatest variation in overall level of anemia (including mild as well as moderate and severe anemia) is observed by place of residence. Figure 13.2 shows that children 6-59 months in rural Upper Egypt and the Frontier Governorates have the highest anemia levels ( 38 percent), and children in urban Lower Egypt have the lowest levels ( 23 percent). Looking at the mother's education level, children whose mothers never attended school have the highest anemia level and children whose mothers completed at least secondary school have the lowest level ( 25 and 33 percent, respectively).

Table 13.12 Prevalence of anemia among children 6-59 months
Percent distribution of children 6-59 months by anemia status, according to selected demographic and socioeconomic characteristics, Egypt 2000

| Characteristic | Severe ${ }_{1}$ anemia | Moderațe anemia | $\begin{gathered} \text { Mild } \\ \text { anemia }^{3} \end{gathered}$ | Not anemic | Missing | Total | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |
| 6-9 months | 0.2 | 17.1 | 22.3 | 58.1 | 2.2 | 100.0 | 379 |
| 10-11 months | 0.7 | 19.3 | 17.2 | 60.8 | 2.0 | 100.0 | 172 |
| 12-15 months | 0.5 | 19.2 | 26.7 | 52.7 | 0.8 | 100.0 | 377 |
| 16-23 months | 0.3 | 17.3 | 21.6 | 59.0 | 1.7 | 100.0 | 680 |
| 24-35 months | 0.1 | 10.1 | 18.8 | 69.7 | 1.3 | 100.0 | 1,080 |
| 36-47 months | 0.0 | 8.1 | 15.8 | 74.6 | 1.5 | 100.0 | 1,047 |
| 48-59 months | 0.1 | 4.7 | 14.6 | 78.4 | 2.2 | 100.0 | 972 |
| Sex |  |  |  |  |  |  |  |
| Male | 0.2 | 12.1 | 17.5 | 69.0 | 1.3 | 100.0 | 2,409 |
| Female | 0.2 | 10.3 | 19.6 | 67.8 | 2.1 | 100.0 | 2,299 |
| Birth order |  |  |  |  |  |  |  |
| 1 | 0.1 | 8.5 | 17.7 | 71.6 | 2.0 | 100.0 | 1,259 |
| 2-3 | 0.0 | 11.4 | 18.5 | 68.6 | 1.5 | 100.0 | 1,873 |
| 4-5 | 0.3 | 11.3 | 17.2 | 69.7 | 1.5 | 100.0 | 876 |
| 6+ | 0.5 | 15.5 | 21.7 | 60.5 | 1.8 | 100.0 | 700 |
| Birth Interval |  |  |  |  |  |  |  |
| First birth | 0.1 | 8.4 | 17.9 | 71.5 | 2.0 | 100.0 | 1,275 |
| Under 24 months | 0.0 | 10.3 | 20.1 | 68.1 | 1.5 | 100.0 | 801 |
| 24-47 months | 0.2 | 13.6 | 19.1 | 66.1 | 1.0 | 100.0 | 1,614 |
| $48+$ months | 0.4 | 11.6 | 17.1 | 68.4 | 2.5 | 100.0 | 1,019 |
| Urban-rural residence |  |  |  |  |  |  |  |
| Urban | 0.1 | 8.7 | 14.8 | 74.6 | 1.8 | 100.0 | 1,840 |
| Rural | 0.3 | 12.8 | 20.9 | 64.5 | 1.6 | 100.0 | 2,868 |
| Place of residence |  |  |  |  |  |  |  |
| Urban Governorates | 0.0 | 5.6 | 11.1 | 81.4 | 1.9 | 100.0 | 773 |
| Lower Egypt | 0.0 | 9.8 | 19.1 | 69.7 | 1.4 | 100.0 | 1,963 |
| Urban | 0.1 | 8.6 | 15.9 | 73.8 | 1.7 | 100.0 | 494 |
| Rural | 0.0 | 10.2 | 20.2 | 68.3 | 1.3 | 100.0 | 1,469 |
| Upper Egypt | 0.4 | 14.7 | 20.9 | 62.1 | 1.9 | 100.0 | 1,895 |
| Urban | 0.2 | 12.7 | 19.0 | 66.2 | 1.9 | 100.0 | 528 |
| Rural | 0.5 | 15.4 | 21.6 | 60.6 | 1.9 | 100.0 | 1,366 |
| Frontier Governorates | 0.0 | 16.6 | 21.3 | 60.4 | 1.7 | 100.0 | 77 |
| Mother's education |  |  |  |  |  |  |  |
| No education | 0.3 | 12.2 | 20.5 | 65.3 | 1.7 | 100.0 | 1,871 |
| Primary incomplete | 0.1 | 13.2 | 18.2 | 66.6 | 1.8 | 100.0 | 590 |
| Primary complete/ some secondary | 0.3 | 13.6 | 17.7 | 67.2 | 1.3 | 100.0 | 617 |
| Secondary complete/ higher | 0.0 | 8.4 | 16.7 | 73.1 | 1.7 | 100.0 | 1,631 |
| Mother's work status |  |  |  |  |  |  |  |
| Working for cash | 0.2 | 9.7 | 15.3 | 71.9 | 2.9 | 100.0 | 547 |
| Not working for cash | 0.2 | 11.4 | 19.0 | 68.0 | 1.5 | 100.0 | 4,161 |
| Total | 0.2 | 11.2 | 18.5 | 68.4 | 1.7 | 100.0 | 4,708 |

Note: Figures are based on children of EDHS respondents.
${ }_{2}$ Hemoglobin level less than $7 \mathrm{~g} / \mathrm{dl}$
${ }_{3}^{2}$ Hemoglobin level 7-9.9 g/dl
${ }^{3}$ Hemoglobin level $10-10.9 \mathrm{~g} / \mathrm{dl}$


## Prevalence of Anemia in Children Age 11-19

Table 13.13 shows the level of anemia among children age 11-19. ${ }^{4}$ Overall, around three in ten children age 11-19 are anemic. Most were considered to be mildly anemic, two percent were classified as having moderate anemia, and a negligible proportion were severely anemic.

Anemia levels among children age 11-19 increase with age. In part, this reflects the onset of menarche among girls and subsequent regular blood loss. The level for boys and girls is generally similar.

[^16]| Table 13.13 Prevalence of anemia in children age 11-19 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of children age 11-19 years by anemia status, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |
| Characteristic | Severe ${ }_{1}$ anemia | Moderațe anemia | Mild anemia ${ }^{3}$ | Not anemic | Total | Number of children |
| Age |  |  |  |  |  |  |
|  | 0.0 | 1.1 | 23.3 | 75.6 | 100.0 | 1,086 |
| 12 | 0.1 | 2.1 | 24.6 | 73.2 | 100.0 | 1,226 |
| 13 | 0.0 | 2.5 | 24.1 | 73.3 | 100.0 | 1,143 |
| 14 | 0.4 | 2.3 | 34.0 | 63.3 | 100.0 | 1,085 |
| 15 | 0.0 | 1.9 | 33.0 | 65.0 | 100.0 | 1,089 |
| 16 | 0.1 | 1.7 | 29.3 | 68.9 | 100.0 | 1,115 |
| 17 | 0.1 | 0.8 | 29.0 | 70.0 | 100.0 | 838 |
| 18 | 0.0 | 1.2 | 27.9 | 70.9 | 100.0 | 907 |
| 19 | 0.0 | 1.2 | 25.9 | 72.9 | 100.0 | 747 |
| Sex |  |  |  |  |  |  |
| Males | 0.1 | 0.7 | 29.5 | 69.6 | 100.0 | 4,835 |
| Females | 0.1 | 2.8 | 26.1 | 71.1 | 100.0 | 4,402 |
| Child attends school |  |  |  |  |  |  |
| Attended during current |  |  |  |  |  |  |
| Ster | 0.1 | 1.7 | 29.3 | 68.9 | 100.0 | 6,706 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 0.1 | 1.4 | 27.3 | 71.1 | 100.0 | 3,795 |
| Rural | 0.1 | 1.9 | 28.3 | 69.7 | 100.0 | 5,443 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 0.1 | 1.2 | 27.1 | 71.6 | 100.0 | 1,584 |
| Lower Egypt | 0.1 | 1.9 | 27.0 | 71.0 | 100.0 | 3,995 |
| Urban | 0.1 | 1.3 | 25.8 | 72.8 | 100.0 | 1,067 |
| Rural | 0.1 | 2.1 | 27.5 | 70.3 | 100.0 | 2,928 |
| Upper Egypt | 0.1 | 1.6 | 29.1 | 69.3 | 100.0 | 3,544 |
| Urban | 0.0 | 1.6 | 28.9 | 69.5 | 100.0 | 1,072 |
| Rural | 0.1 | 1.5 | 29.2 | 69.2 | 100.0 | 2,472 |
| Frontier Governorates | 0.0 | 6.4 | 31.6 | 62.0 | 100.0 | 114 |
| Total | 0.1 | 1.7 | 27.9 | 70.3 | 100.0 | 9,237 |
| Note: Figures are based on all never-married children 11-19 present in the household on the night before the interview, regardless of whether the mother was present or interviewed. <br> Hemoglobin level less than $7 \mathrm{~g} / \mathrm{dl}$ <br> ${ }_{3}^{2}$ Hemoglobin level 7-9.9 g/dl <br> ${ }^{3}$ For girls age 11-19, hemoglobin level 10.0-11.9 g/dl; for boys age 11-13, hemoglobin level $10.0-11.9 \mathrm{~g} / \mathrm{dl}$; for boys age 14-19, hemoglobin levels 10.0-12.9 g/dl. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Tables 13.14.1 and 13.14.2 look in more detail at the variation in anemia levels for girls and boys. Anemia levels do not vary greatly according to whether the boys or girls are attending school. There is also relatively little variation in anemia levels by residence for either sex, with the exception of the Frontier Governorates, where the level of moderate anemia was much higher for both groups than in other areas.

## Table 13.14.1 Prevalence of anemia in boys age 11-19

Percent distribution of boys age 11-19 years by anemia status, according to selected background characteristics, Egypt 2000

| Characteristic | Severe ${ }_{1}$ anemia | Moderate anemia | $\begin{gathered} \text { Mild } \\ \text { anemia }^{3} \end{gathered}$ | Not anemic | Total | Number of boys |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| 11 | 0.0 | 0.3 | 18.3 | 81.3 | 100.0 | 569 |
| 12 | 0.1 | 0.5 | 22.0 | 77.3 | 100.0 | 635 |
| 13 | 0.0 | 1.6 | 20.8 | 77.6 | 100.0 | 566 |
| 14 | 0.4 | 1.6 | 43.4 | 54.6 | 100.0 | 530 |
| 15 | 0.0 | 0.9 | 38.0 | 61.1 | 100.0 | 581 |
| 16 | 0.3 | 0.3 | 34.6 | 64.9 | 100.0 | 602 |
| 17 | 0.0 | 0.2 | 30.3 | 69.5 | 100.0 | 444 |
| 18 | 0.0 | 0.8 | 32.4 | 66.8 | 100.0 | 497 |
| 19 | 0.0 | 0.4 | 27.2 | 72.4 | 100.0 | 411 |
| Child attends school |  |  |  |  |  |  |
| Attended during current school year | 0.1 | 0.8 | 28.6 | 70.5 | 100.0 | 3,580 |
| Did not attend | 0.0 | 0.5 | 32.2 | 67.3 | 100.0 | 1,255 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 0.1 | 0.6 | 28.8 | 70.5 | 100.0 | 1,950 |
| Rural | 0.1 | 0.9 | 30.0 | 69.0 | 100.0 | 2,885 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 0.2 | 0.4 | 30.3 | 69.1 | 100.0 | 804 |
| Lower Egypt | 0.1 | 0.7 | 27.4 | 71.9 | 100.0 | 2,125 |
| Urban | 0.0 | 0.1 | 25.7 | 74.2 | 100.0 | 570 |
| Rural | 0.1 | 0.9 | 28.0 | 71.1 | 100.0 | 1,555 |
| Upper Egypt | 0.1 | 0.8 | 31.7 | 67.4 | 100.0 | 1,850 |
| Urban | 0.0 | 1.0 | 29.7 | 69.3 | 100.0 | 539 |
| Rural | 0.1 | 0.7 | 32.5 | 66.7 | 100.0 | 1,311 |
| Frontier Governorates | 0.0 | 6.6 | 31.7 | 61.8 | 100.0 | 56 |
| Total | 0.1 | 0.7 | 29.5 | 69.6 | 100.0 | 4,835 |

Note: Figures are based on all never-married boys 11-19 present in the household on the night before the interview, regardless of whether the mother was present or interviewed.
${ }^{1}$ Hemoglobin level less than $7 \mathrm{~g} / \mathrm{dl}$
${ }_{3}^{2}$ Hemoglobin level 7-9.9 g/dl
${ }^{3}$ Hemoglobin level 10-11.9 g/dl for boys age 11-13 and 10.0-12.9 g/dl for boys age 14-19

| Table 13.14.2 Prevalence of anemia in girls age 11-19 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of girls age 11-19 years by anemia status, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |  |
| Characteristic | Severe ${ }_{1}$ anemia | Moderațe anemia | $\begin{gathered} \text { Mild } \\ \text { anemia }^{3} \end{gathered}$ | Not anemic | Total | Number of girls |
| Age |  |  |  |  |  |  |
| 11 | 0.0 | 1.9 | 28.7 | 69.4 | 100.0 | 516 |
| 12 | 0.0 | 3.7 | 27.5 | 68.8 | 100.0 | 592 |
| 13 | 0.0 | 3.5 | 27.3 | 69.2 | 100.0 | 577 |
| 14 | 0.4 | 2.8 | 25.1 | 71.6 | 100.0 | 555 |
| 15 | 0.0 | 3.2 | 27.3 | 69.5 | 100.0 | 508 |
| 16 | 0.0 | 3.5 | 23.0 | 73.5 | 100.0 | 513 |
| 17 | 0.3 | 1.5 | 27.6 | 70.6 | 100.0 | 394 |
| 18 | 0.0 | 1.7 | 22.5 | 75.8 | 100.0 | 410 |
| 19 | 0.0 | 2.2 | 24.3 | 73.5 | 100.0 | 336 |
| Child attends school |  |  |  |  |  |  |
| Attended during current |  |  |  |  |  |  |
| school year | 0.0 | 2.8 | 25.7 | 71.4 | 100.0 | 2,951 |
| Did not attend | 0.2 | 2.6 | 26.8 | 70.4 | 100.0 | 1,451 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 0.1 | 2.4 | 25.8 | 71.8 | 100.0 | 1,844 |
| Rural | 0.1 | 3.1 | 26.3 | 70.6 | 100.0 | 2,558 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 0.0 | 2.1 | 23.8 | 74.1 | 100.0 | 780 |
| Lower Egypt | 0.1 | 3.3 | 26.6 | 69.9 | 100.0 | 1,870 |
| Urban | 0.2 | 2.6 | 25.9 | 71.2 | 100.0 | 497 |
| Rural | 0.1 | 3.6 | 26.9 | 69.5 | 100.0 | 1,373 |
| Upper Egypt | 0.1 | 2.4 | 26.3 | 71.3 | 100.0 | 1,693 |
| Urban | 0.0 | 2.2 | 28.1 | 69.7 | 100.0 | 532 |
| Rural | 0.1 | 2.4 | 25.4 | 72.1 | 100.0 | 1,161 |
| Frontier Governorates | 0.0 | 6.2 | 31.5 | 62.2 | 100.0 | 59 |
| Total | 0.1 | 2.8 | 26.1 | 71.1 | 100.0 | 4,402 |
| Note: Figures are based on all never-married girls 11-19 present in the household on the night before the interview, regardless of whether the mother was present or interviewed. <br> ${ }_{2}^{1}$ Hemoglobin level less than $7 \mathrm{~g} / \mathrm{dl}$ <br> ${ }_{3}^{2}$ Hemoglobin level 7-9.9 g/dl <br> ${ }^{3}$ Hemoglobin level 10-11.9 g/dl |  |  |  |  |  |  |

### 13.5 Micronutrient Supplementation

## 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. Vitamin A is important in protecting the body against some infectious illnesses such as measles and diarrheal disease. Severe vitamin A deficiency is associated with total loss of vision or with other vision impairments including night blindness.

Egypt has a program of vitamin A supplementation for new mothers and for children beginning at age nine months. The program includes two elements. First, a vitamin A capsule is given to new mothers within the first two months after delivery, with the goal that the infant will receive an adequate quantity of the micronutrient to ensure healthy development through the mother's breast milk. Second, beginning at age nine months (typically at the time the child receives the measles vaccination) young children are given one vitamin A capsule (100,000 international
units). Two additional capsules (200,000 units) are given to children at age 18 months with the activated polio dose.

Table 13.15 presents information on the proportion of women with a recent birth who reported that they had received a vitamin A capsule in the first two months after delivery. For each birth during the five-year period prior to the DHS, the mother was shown the vitamin A capsule and asked whether she had been given the capsule during the two-month period after the child's birth. Mothers reported receiving a vitamin A capsule for one in nine births. New mothers were most likely to report having received the vitamin A supplement if they had completed secondary school or higher or lived in an urban area, especially urban Lower Egypt and the Urban Governorates.

Table 13.16 shows the extent of the coverage of vitamin A supplementation among children 12-23 months. The information is based on information from the child's vaccination record that the child had received a capsule during the six-month period before the survey or on the mother's recall that the child received a capsule when a vaccination record was not available (see Chapter 12 for a discussion of vaccination record coverage).

About a fifth of Egyptian children have received a vitamin A capsule, either according to the child's vaccination record or the mother's report. There are no differences by sex in the proportion who had received at least one capsule. The likelihood of having received a vitamin A capsule generally decreases with the child's birth order.

| Table 13.15 Vitamin A supplementation among postpartum mothers |  |  |
| :---: | :---: | :---: |
| Percentage of births in five years preceding the survey for which mothers received a vitamin A capsule during the two-month period immediately following delivery, by selected background characteristics, Egypt 2000 |  |  |
| Background characteristic | Mother received vitamin A | Number of births |
| Mother's age at birth |  |  |
| < 20 | 8.6 | 1,259 |
| 20-34 | 11.2 | 8,923 |
| $35+$ | 10.9 | 1,178 |
| Birth order |  |  |
| 1 | 12.4 | 3,069 |
| 2-3 | 11.9 | 4,596 |
| 4-5 | 9.3 | 2,134 |
| 6+ | 7.0 | 1,561 |
| Urban-rural residence |  |  |
| Urban | 14.5 | 4,374 |
| Rural | 8.6 | 6,987 |
| Place of residence |  |  |
| Urban Governorates | 13.4 | 1,813 |
| Lower Egypt | 11.6 | 4,679 |
| Urban | 16.1 | 1,230 |
| Rural | 10.0 | 3,448 |
| Upper Egypt | 9.3 | 4,690 |
| Urban | 14.8 | 1,227 |
| Rural | 7.4 | 3,463 |
| Frontier Governorates | 6.8 | 179 |
| Education |  |  |
| No education | 6.4 | 4,559 |
| Primary incomplete | 9.7 | 1,309 |
| Primary complete/ some secondary | 12.9 | 1,572 |
| Secondary complete/ higher | 15.6 | 3,921 |
| Work status |  |  |
| Working for cash | 14.7 | 1,333 |
| Not working for cash | 10.4 | 10,027 |
| Total | 10.9 | 11,361 |

postpartum mothers
Percentage of births in five years preceding the survey ceived a vitamin A capsul delivery, by selected background Egypt 2000

## age at birth

Education

Work status

Vitamin A supplementation is more common for children living in urban areas, particularly in the Urban Governorates and in Lower Egypt, than for rural children. The likelihood of supplementation increases with the mother's education level from 18 percent among children whose mother never attended school to 28 percent among children whose mothers had a secondary or higher education. The child's gender and the mother's work status are not strongly related to the likelihood of vitamin A supplementation.

Finally, the comparatively low proportion of postpartum women and of children who had received a vitamin A capsule is not surprising because the vitamin A supplementation program was introduced during the year before the 2000 EDHS survey.

| Table 13.16 Vitamin A supplementation among children age 12-23 months |  |  |
| :---: | :---: | :---: |
| Percentage of children 12-23 months who had received a vitamin A capsule during the six-month period before the 2000 EDHS, by selected background characteristics, Egypt 2000 |  |  |
| Background characteristic | Child received vitamin A | Number <br> of <br> children |
| Child's sex |  |  |
| Male | 22.0 | 1,134 |
| Female | 23.5 | 1,036 |
| Birth order |  |  |
| 1 | 25.2 | 598 |
| 2-3 | 24.9 | 905 |
| 4-5 | 16.7 | 387 |
| 6+ | 18.5 | 280 |
| Urban-rural residence |  |  |
| Urban | 27.2 | 843 |
| Rural | 19.8 | 1,327 |
| Place of residence |  |  |
| Urban Governorates | 27.9 | 360 |
| Lower Egypt | 23.2 | 904 |
| Urban | 30.2 | 238 |
| Rural | 20.7 | 666 |
| Upper Egypt | 20.2 | 871 |
| Urban | 23.9 | 225 |
| Rural | 18.9 | 645 |
| Frontier Governorates | 18.7 | 36 |
| Mother's education |  |  |
| No education | 17.8 | 849 |
| Primary incomplete | 23.2 | 230 |
| Primary complete/ some secondary | 22.0 | 311 |
| Secondary complete/ higher | 28.2 | 780 |
| Mother's work status |  |  |
| Working for cash | 24.0 | 241 |
| Not working for cash | 22.5 | 1,930 |
| Total | 22.7 | 2,170 |

## Use of Iodized Salt

Iodine is another important micronutrient. Low levels of iodine in the diet are associated with a number of problems including miscarriages and, among children, retarded mental development. Egypt has adopted a program of fortifying salt with iodine to prevent iodine deficiency.

In the 2000 EDHS, the iodine content of the salt used in the household was measured using a rapid-test kit provided by UNICEF. The test kit consisted of ampoules of a stabilized starch solution and a weak acid-based solution. A drop of the starch solution was squeezed onto a salt sample obtained in the household, causing the salt to change color. The EDHS interviewer conducting the test matched the color of the salt to a color chart included with the test kit to determine the level of iodization.

Table 13.17 shows the percentage of households using iodized salt. Overall, the iodine content of the salt exceeded 25 ppm (parts per million) in 28 percent of households. In another 28 percent of the households, the iodine content of the salt fell below 26 ppm , while the salt used by 44 percent of the households was not found to contain iodine. Urban households were much more likely than rural households to be using salt considered to be adequately iodized; the salt was not iodized at all in slightly more than half of rural households and a third of urban households. By place of residence, the proportion of households using noniodized salt ranged from 22 percent in the Frontier Governorates to 57 percent in rural Lower Egypt.

Table 13.17 lodized salt
Percent of households in which salt was tested for iodine and, among those tested, percent distribution by iodine content, according to selected background characteristics, Egypt 2000

| Residence | Percentage of households in which salt was tested | Among households with testing, percent distribution by iodine level: |  |  | Total | Number of households |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 0 \text { ppm } \\ \text { (no iodine) } \end{gathered}$ | $\leqq 25$ ppm | 26 ppm or more |  |  |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 99.9 | 34.6 | 26.6 | 38.7 | 100.0 | 8,429 |
| Rural | 99.9 | 53.4 | 30.2 | 16.3 | 100.0 | 8,528 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 99.9 | 35.0 | 20.8 | 44.2 | 100.0 | 3,852 |
| Lower Egypt | 99.9 | 50.7 | 29.3 | 20.1 | 100.0 | 7,154 |
| Urban | 99.9 | 38.9 | 30.0 | 31.1 | 100.0 | 2,380 |
| Rural | 99.9 | 56.6 | 28.9 | 14.6 | 100.0 | 4,775 |
| Upper Egypt | 99.9 | 42.7 | 32.3 | 25.0 | 100.0 | 5,751 |
| Urban | 99.8 | 30.1 | 32.8 | 37.1 | 100.0 | 2,066 |
| Rural | 99.9 | 49.8 | 32.0 | 18.2 | 100.0 | 3,685 |
| Frontier Governorates | 100.0 | 22.0 | 36.0 | 42.0 | 100.0 | 200 |
| Total | 99.9 | 44.1 | 28.4 | 27.5 | 100.0 | 16,957 |

ppm = parts per million

The 1995 EDHS was the first national-level survey to include questions on the practice of female circumcision. The survey found the practice to be widespread in Egypt. Information was collected in the 2000 EDHS to further investigate attitudes toward female circumcision among Egyptian women and to assess whether there was evidence of changes in attitudes or behavior during the period between the 1995 and 2000 surveys.

### 14.1 Prevalence of Female Circumcision

## Circumcision of EDHS Respondents

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. Table 14.1 shows that 97 percent of the ever-married women interviewed in the 2000 EDHS reported that they had been circumcised. Only in the Frontier Governorates does the prevalence of circumcision fall below 90 percent.

## Circumcision Status of Daughters

Ever-married women who had living daughters were asked questions about the circumcision experience of their daughters. Overall, 11,540 EDHS respondents had at least one living daughter. Table 14.1 shows that about eight in ten of these women reported that at least one of their daughters had already been circumcised ( 50 percent) or that they intended to have a daughter circumcised in the future (31 percent).

Younger women are somewhat less likely to have a daughter already circumcised or to intend to circumcise a daughter than older women. Place of residence is even more strongly associated with the likelihood a daughter will be circumcised. The percentage of women who have at least one daughter who had been circumcised or who intended to have their daughter circumcised in the future varies from a low of 63 percent among women in the Urban Governorates and the Frontier Governorates to a high of 91 percent among women in rural Upper Egypt.

Women with no education are the most likely to have at least one circumcised daughter or to plan to have their daughter(s) circumcised while women with a secondary or higher education are the least likely to have or to consider having their daughter(s) circumcised. Even among highly educated women, however, more than half report that they have at least one daughter who has been circumcised (18 percent) or that they plan for their daughter(s) to be circumcised in the future (35 percent). Women who work for cash were less likely than other women to have a circumcised or to be considering having a daughter circumcised.

### 14.2 Circumcision Experience of Daughters

EDHS respondents who reported that they had at least one circumcised daughter were asked about the age at which the daughter had been circumcised, the person who performed the circumcision, and the place where the procedure took place. For women with more than one circumcised daughter, these questions were asked for the daughter who had been circumcised most recently.

| Table 14.1 Prevalence of female circumcision |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women who have been circumcised and, among ever-married women with daughters, percentage who report that they have at least one daughter circumcised or who say that they intend to have their daughters circumcised, by selected background characteristics, Egypt 2000 |  |  |  |  |  |
|  | Ever-married women |  | Ever-married women with daughters |  |  |
|  |  |  |  | Percentage |  |
| Background characteristic | Percentage circumcised | Number of women | with at least one daughter circumcised | to have daughters circumcised | Number of women |
| Women's age |  |  |  |  |  |
| 15-19 | 99.1 | 615 | 0.0 | 80.5 | 150 |
| 20-24 | 97.4 | 2,244 | 1.5 | 73.3 | 1,117 |
| 25-29 | 97.2 | 2,850 | 11.1 | 64.9 | 1,929 |
| 30-34 | 96.7 | 2,701 | 33.8 | 40.6 | 2,173 |
| 35-39 | 97.4 | 2,674 | 64.2 | 18.2 | 2,273 |
| 40-44 | 96.9 | 2,182 | 79.9 | 5.5 | 1,899 |
| 45-49 | 97.9 | 2,307 | 88.4 | 1.6 | 1,999 |
| Urban-rural residence |  |  |  |  |  |
| Urban | 95.3 | 6,871 | 44.4 | 24.5 | 4,999 |
| Rural | 98.9 | 8,702 | 53.4 | 36.6 | 6,542 |
| Place of residence |  |  |  |  |  |
| Urban Governorates | 93.1 | 2,992 | 40.5 | 22.1 | 2,149 |
| Lower Egypt | 98.9 | 6,826 | 49.0 | 35.8 | 5,090 |
| Urban | 98.0 | 1,946 | 43.9 | 28.7 | 1,424 |
| Rural | 99.2 | 4,880 | 51.0 | 38.6 | 3,665 |
| Upper Egypt | 98.4 | 5,546 | 55.0 | 31.1 | 4,152 |
| Urban | 96.9 | 1,808 | 51.2 | 24.0 | 1,333 |
| Rural | 99.2 | 3,738 | 56.8 | 34.4 | 2,819 |
| Frontier Governorates | 76.3 | 209 | 39.6 | 23.5 | 149 |
| Women's education |  |  |  |  |  |
| No education | 98.8 | 6,734 | 64.7 | 29.1 | 5,393 |
| Primary incomplete | 99.0 | 2,060 | 63.0 | 26.8 | 1,627 |
| Primary complete/ some secondary | 98.4 | 2,026 | 44.7 | 37.6 | 1,400 |
| Secondary complete/higher | r 94.0 | 4,753 | 18.3 | 35.0 | 3,120 |
| Work status |  |  |  |  |  |
| Working for cash | 94.0 | 2,266 | 38.6 | 23.4 | 1,688 |
| Not working for cash | 97.9 | 13,307 | 51.3 | 32.8 | 9,852 |
| Total | 97.3 | 15,573 | 49.5 | 31.4 | 11,540 |

Table 14.2 presents the distribution of the most recently circumcised daughter according to the daughter's age at circumcision. Two-thirds of daughters were reported by their mothers to have been between seven and ten years of age at the time of circumcision, and virtually all daughters were circumcised before age 13. The median age at the time of the circumcision for daughters is 10 years.

| Table 14.2 Aspects of daughter's circumcision |  |
| :--- | ---: |
| Percent distribution of most recently circumcised |  |
| daughters by the age of the daughter at the time she |  |
| was circumcised, the person performing the |  |
| circumcision, and the site where the procedure was |  |
| performed, Egypt 2000 |  |
| Aspects |  |
| Age of daughter when she | Percent |
| was circumcised |  |
| < |  |
| 5-6 |  |
| 7-8 |  |
| 9-10 | 6.2 |
| 11-12 | 9.3 |
| 13+ | 15.2 |
| Don't know/missing | 44.9 |
| Median age | 19.8 |
| Mean age | 3.3 |
| Person who performed | 1.3 |
| the circumcision | 10.0 |
| Male doctor | 9.0 |
| Female doctor |  |
| Trained nurse/midwife |  |
| Daya |  |
| Barber | 41.9 |
| Ghagaria | 10.3 |
| Don't know/missing | 9.2 |
| Place circumcision performed | 32.1 |
| At home | 3.5 |
| Private hospital/clinic | 2.7 |
| Government hospital/clinic | 0.3 |
| Relative/neighbor's house |  |
| Barber's kiosk | 64.8 |
| Don't know/missing | 27.6 |
| Total | 4.8 |
| Number | 1.9 |
|  | 0.2 |

Regarding the person performing the circumcision, Table 14.2 shows that trained medical personnel performed slightly more than 60 percent of the circumcisions. Dayas (traditional birth attendants) performed the majority of the remaining circumcisions.

Regarding the site of the circumcision, 65 percent took place in the home. Among those taking place at a health facility, most were performed in private facilities. Overall, only 5 percent of circumcisions were reported to have been performed in governmental facilities.

Table 14.3 presents differentials in two key aspects of the circumcision experience of daughters: the median age at circumcision and the proportion for which the circumcision was conducted by trained medical personnel. Little variation is observed in the age at circumcision among the various population subgroups. However, subgroups differ considerably in the type of person who performed the circumcision. Medical personnel are much more likely to have performed the circumcision in urban than in rural areas. By place of residence, the proportion of circumcisions performed by trained medical personnel varied from 49 percent in rural Upper Egypt to 76 percent in urban Upper Egypt.

The likelihood that the daughter was circumcised by trained medical personnel increases directly with the mother's educational status, from slightly more than half the circumcisions among daughters of women with no education to nearly 90 percent of the circumcisions among daughters of women with at least a secondary education. Trained medical personnel were also more likely to have been involved in the circumcisions of daughters of women who work for cash than in the circumcisions of daughters of other women.

| Table 14.3 Daughter's age at circumcision and person performing circumcision |  |  |  |
| :---: | :---: | :---: | :---: |
| Among most recently circumcised daughters, the median age at circumcision and the percentage whose circumcision was performed by trained medical personnel, by selected background characteristics, Egypt 2000 |  |  |  |
| Background characteristic | Median age at circumcision | Circumcision performed by trained medical personnel | Number <br> of daughters |
| Mother's age |  |  |  |
| 15-19 | - | - |  |
| 20-24 | * | * | 17 |
| 25-29 | 7.9 | 68.0 | 214 |
| 30-34 | 9.6 | 66.5 | 734 |
| 35-39 | 10.0 | 62.7 | 1,460 |
| 40-44 | 10.2 | 62.6 | 1,517 |
| 45-49 | 10.1 | 56.5 | 1,767 |
| Urban-rural residence |  |  |  |
| Urban | 10.1 | 72.1 | 2,217 |
| Rural | 9.9 | 54.6 | 3,492 |
| Place of residence |  |  |  |
| Urban Governorates | 10.2 | 69.9 | 871 |
| Lower Egypt | 10.2 | 62.8 | 2,496 |
| Urban | 10.4 | 71.0 | 625 |
| Rural | 10.2 | 60.0 | 1,871 |
| Upper Egypt | 9.5 | 56.7 | 2,282 |
| Urban | 9.7 | 75.7 | , 682 |
| Rural | 9.4 | 48.7 | 1,600 |
| Frontier Governorates | 9.1 | 57.9 | 59 |
| Mother's education |  |  |  |
| No education | 9.9 | 52.0 | 3,487 |
| Primary incomplete | 10.2 | 67.8 | 1,025 |
| Primary complete/ some secondary | 10.1 | 78.1 | 626 |
| Secondary complete/higher | 10.0 | 89.4 | 571 |
| Work status |  |  |  |
| Working for cash | 10.2 | 72.4 | 652 |
| Not working for cash | 10.0 | 60.0 | 5,056 |
| Total | 10.0 | 61.4 | 5,709 |
| Note: An asterisk indicates that figures are based on fewer than 25 cases and have been suppressed. |  |  |  |

### 14.3 Support for Female Circumcision

The 2000 EDHS obtained information about women's attitudes about whether the practice of circumcision should be continued and about their perception of men's attitude toward the practice. Women were also asked about whether their attitude about circumcision had changed in the year before the survey.

Table 14.4 shows continuing widespread support for the practice of circumcision among women in Egypt. Overall, three-quarters of ever-married women 15-49 feel that the practice of circumcision should continue. Slightly more than 60 percent of women believe that men support continuation of the practice of circumcision.

Marked differences in attitudes toward the continuation of the practice are evident according to the woman's background characteristics. Urban residents are less likely than rural residents to believe circumcision should be continued or to feel men support continuation of the practice. There is also a marked negative relationship between a woman's educational level and the likelihood that she supports the continuation of the practice of circumcision or believes that men want the practice to be continued.

Table 14.4 also shows that attitudes toward the practice of circumcision have been changing. About one in nine women indicate that their attitude toward the practice had changed during the past year. Urban women, highly educated women and women working for cash are most likely to report a change in attitude.

| Table 14.4 Attitudes toward circumcision and perception of men's attitudes |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women who think the practice of female circumcision should continue and percentage who believe that men want the practice to continue, by selected background characteristics, Egypt 2000 |  |  |  |  |
| Background characteristic | Believe practice should continue | Believe men want the practice to continue | Opinion changed during past year | Number of women |
| Age |  |  |  |  |
| 15-19 | 80.5 | 62.0 | 7.4 | 615 |
| 20-24 | 75.4 | 62.5 | 9.7 | 2,244 |
| 25-29 | 75.7 | 59.9 | 10.7 | 2,847 |
| 30-34 | 72.8 | 59.4 | 12.0 | 2,695 |
| 35-39 | 74.8 | 61.7 | 11.9 | 2,673 |
| 40-44 | 75.5 | 59.4 | 10.9 | 2,180 |
| 45-49 | 76.8 | 61.0 | 10.8 | 2,304 |
| Urban-rural residence |  |  |  |  |
| Urban | 62.6 | 47.4 | 16.4 | 6,860 |
| Rural | 85.3 | 71.1 | 6.6 | 8,699 |
| Place of residence |  |  |  |  |
| Urban Governorates | 56.2 | 34.5 | 17.6 | 2,983 |
| Lower Egypt | 80.7 | 68.5 | 9.9 | 6,825 |
| Urban | 68.3 | 58.2 | 16.5 | 1,945 |
| Rural | 85.6 | 72.7 | 7.2 | 4,880 |
| Upper Egypt | 79.6 | 65.4 | 8.7 | 5,544 |
| Urban | 67.1 | 56.7 | 14.5 | 1,807 |
| Rural | 85.7 | 69.6 | 5.9 | 3,737 |
| Frontier Governorates | 59.9 | 50.3 | 10.1 | 207 |
| Mother's education |  |  |  |  |
| No education | 88.9 | 71.9 | 4.9 | 6,730 |
| Primary incomplete | 81.6 | 65.3 | 8.4 | 2,058 |
| Primary complete/ some secondary | 76.0 | 57.9 | 11.2 | 2,024 |
| Secondary complete/higher | 53.1 | 43.8 | 20.4 | 4,747 |
| Work status |  |  |  |  |
| Working for cash | 57.0 | 45.5 | 18.6 | 2,264 |
| Not working for cash | 78.4 | 63.2 | 9.6 | 13,295 |
| Total | 75.3 | 60.7 | 10.9 | 15,559 |

### 14.4 Trends in Circumcision Indicators

Figure 14.1 and Table 14.5 present trends between the 1995 and 2000 EDHS surveys in two key circumcision indicators: (1) the percentage of all ever-married women age 15-49 who believe the practice should continue and (2) the percentage of women with at least one daughter who reported that a daughter has been circumcised or who expressed the intention to have their daughter circumcised in the future. As Figure 14.1 shows, there was somewhat less support for circumcision at the time of the 2000 EDHS than in 1995; three-quarters of all ever-married women at the time of the 2000 EDHS expressed the opinion that the practice should continue, compared with 82 percent of the ever-married women at the time of the 1995 EDHS. Table 14.5 shows that the proportion of women who either report that at least one of their daughters has been circumcised or who say they intend to have their daughter circumcised in the future decreased from 87 percent in 1995 to 81 percent in 2000.

The decline in both indicators was most evident in the Urban Governorates. Women in the Frontier Governorates and women with at least a primary education showed among the least change in both indicators.


| Table 14.5 Trends in circumcision indicators, Egypt 1995-2000 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Trends in percentage of ever-married women who believe practice of circumcision should continue and the percentage of ever-married women with daughter(s) who report at least one daughter is circumcised or who intend to have their daughter(s) circumcised, by selected background characteristics, Egypt 1995-2000 |  |  |  |  |
|  | Percentage who belive the practice of circumcision should continue |  | Percentage who report at least one daughter is circumcised or who intend to have their daughter(s) circumcised |  |
| characteristic | 1995 | 2000 | 1995 | 2000 |
| Age |  |  |  |  |
| 15-19 | 84.8 | 80.5 | 93.8 | 80.5 |
| 20-24 | 83.9 | 75.4 | 89.2 | 74.8 |
| 25-29 | 81.6 | 75.7 | 84.7 | 76.0 |
| 30-34 | 79.2 | 72.8 | 84.0 | 74.4 |
| 35-39 | 81.3 | 74.8 | 87.7 | 82.4 |
| 40-44 | 80.8 | 75.5 | 88.6 | 85.4 |
| 45-49 | 82.1 | 76.8 | 90.1 | 90.0 |
| Urban-rural residence |  |  |  |  |
| Urban | 70.3 | 62.6 | 77.0 | 68.9 |
| Rural | 91.2 | 85.3 | 95.9 | 90.0 |
| Place of residence |  |  |  |  |
| Urban Governorates | 66.4 | 56.2 | 73.0 | 62.6 |
| Lower Egypt | 86.9 | 80.7 | 91.5 | 84.8 |
| Urban ${ }^{\text {a }}$ | 75.1 | 68.3 | 81.2 | 72.6 |
| Rural | 91.8 | 85.6 | 95.7 | 89.6 |
| Upper Egypt | 85.5 | 79.6 | 91.7 | 86.1 |
| Urban | 73.1 | 67.1 | 80.7 | 75.2 |
| Rural | 91.0 | 85.7 | 96.7 | 91.2 |
| Frontier Governorates | 60.7 | 59.9 | 66.9 | 63.1 |
| Education |  |  |  |  |
| No education | 93.1 | 88.9 | 97.5 | 93.8 |
| Primary incomplete | 89.2 | 81.6 | 95.4 | 89.8 |
| Primary complete/ some secondary | 76.7 | 76.0 | 85.0 | 82.3 |
| Secondary complete/higher | 56.5 | 53.1 | 56.9 | 53.3 |
| Work status |  |  |  |  |
| Working for cash | 65.3 | 68.4 | 70.1 | 62.0 |
| Not working for cash | 84.6 | 78.7 | 90.5 | 84.1 |
| Total | 81.6 | 75.3 | 87.3 | 80.9 |

Source: El-Zanaty et al., 1996, Tables 13.1 and 13.3

### 14.5 Reasons for Support of Female Circumcision

To gain some greater understanding of Egyptian women's reasons for supporting the practice of circumcision, the EDHS included several questions to gain insights into the reasons for women's attitudes. First, EDHS respondents were asked both about the benefits of being circumcised and not being circumcised for a girl. Second, the 2000 EDHS included a number of statements about specific beliefs about circumcision with which women were asked to agree or disagree.

## Benefits/Drawbacks of Circumcision

Table 14.6 presents the responses of evermarried women 15-49 to the questions about the benefits of being circumcised and not being circumcised for a girl. Almost all women see circumcision as benefitting a girl. Only one in nine report that there are no benefits from circumcision.

The responses to the question about the benefits of circumcision make it clear that for many Egyptian women, circumcision is an important traditional practice. About three in five women mentioned that a girl who is circumcised benefits from conforming with tradition. Other related but less frequently cited benefits included the religious approval (12 percent) and social acceptance ( 4 percent) a girl receives from being circumcised.

A number of Egyptian women see as one of the benefits of circumcision the fact that it serves to limit a woman's sexual desire. Thirtytwo percent of women cited a reduction in sexual desire as a benefit of circumcision, and 9 percent mentioned the preservation of the girl's virginity. Somewhat surprisingly, relatively few mentioned the practice as contributing directly to a girl's marriage prospects ( 4 percent). This may be because the majority of girls are circumcised, and it is only if a girl is not circumcised

Table 14.6 Benefits from undergoing and from not undergoing circumcision

Percentage of ever-married women 15-49 who report various benefits for girls if they are circumcised and various benefits from not undergoing the procedure, Egypt 2000

| Benefits | Percent |
| :--- | ---: |
| Benefits from undergoing <br> circumcision |  |
| Uphold tradition |  |
| Gain religious approval | 57.7 |
| Social acceptance | 12.1 |
| Reduce sexual desire | 4.2 |
| Preservation of virginity | 31.8 |
| Cleanliness/hygiene | 9.3 |
| Better marriage prospect | 3.6 |
| Greater pleasure of husband | 1.8 |
| Other benefits | 3.8 |
| No benefits from circumcision | 11.0 |
| Benefits from not undergoing |  |
| circumcision |  |
| Follow religion | 2.2 |
| Avoid pain | 10.0 |
| Fewer medical problems | 7.2 |
| Greater sexual pleasure |  |
| $\quad$ for self |  |
| for husband | 5.5 |
| Other reasons |  |
| No benefits from not being |  |
| circumcised | 4.7 |
| Number of women | 5.9 | that there would be concerns about her marriage prospects.

Another frequently mentioned benefit of circumcision is its contribution to a woman's personal cleanliness or hygiene; 29 percent of women cited this as a benefit of the practice.

Finally, Table 14.6 shows that most women ( 75 percent) felt that there a girl would experience no benefits if she failed to conform to the traditional practice. Among the minority of women who do see some benefit to a girl from not being circumcised, avoiding pain and having fewer medical problems were the most frequently cited benefits ( 10 percent and 7 percent, respectively).

## Beliefs about Circumcision

Table 14.7 shows the pattern of agreement or disagreement with the various beliefs about circumcision. The results provide further insight into the factors that contribute to the widespread support for the practice.

Among 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. Furthermore, many women see circumcision as ensuring that a woman will remain faithful to her husband; half of the women agree that circumcision prevents adultery.

The results in Table 14.7 also suggest that comparatively few women recognize potential adverse consequences of the practice for women. For example, only 29 percent of women agree with the statement that circumcision can cause severe complications that may lead to a girl's death. Moreover, only small proportions of women believe that circumcision can cause a woman to have problems becoming pregnant or that childbirth is more difficult for circumcised women than for other women ( 8 percent each). Women are somewhat more likely to recognize that circumcision may have an effect on sexual relations; 37 percent agree that circumcision lessens sexual satisfaction for a couple.

| Table 14.7 Beliefs about female circumcision |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women who agree with various statements about female circumcision, by selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |
| Background characteristic | Religious tradition | Husband prefers | Prevents adultery | Can lead to death | Causes infertility | Childbirth difficult | Lessens sexual satisfaction | Number of women |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 74.4 | 71.1 | 46.8 | 23.4 | 7.8 | 6.5 | 33.5 | 615 |
| 20-24 | 71.7 | 68.6 | 50.2 | 28.0 | 7.8 | 7.4 | 35.2 | 2,244 |
| 25-29 | 73.9 | 67.3 | 50.5 | 29.2 | 8.5 | 7.5 | 38.1 | 2,847 |
| 30-34 | 70.6 | 64.8 | 52.2 | 31.3 | 7.0 | 7.0 | 39.4 | 2,695 |
| 35-39 | 72.8 | 67.3 | 52.4 | 31.5 | 7.2 | 7.1 | 37.9 | 2,673 |
| 40-44 | 73.3 | 66.5 | 52.6 | 29.8 | 8.2 | 8.6 | 35.1 | 2,180 |
| 45-49 | 73.0 | 67.6 | 51.8 | 25.7 | 7.9 | 8.1 | 36.2 | 2,304 |
| Urban-rural residence |  |  |  |  |  |  |  |  |
| Urban | 64.7 | 53.1 | 46.2 | 37.3 | 7.2 | 7.1 | 45.1 | 6,860 |
| Rural | 78.9 | 78.2 | 55.6 | 22.7 | 8.2 | 7.9 | 30.6 | 8,699 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban Governorates | 59.1 | 38.9 | 41.8 | 36.4 | 5.4 | 4.3 | 44.8 | 2,983 |
| Lower Egypt | 76.3 | 73.3 | 57.3 | 24.0 | 6.6 | 5.7 | 30.6 | 6,825 |
| Urban | 69.0 | 64.2 | 55.7 | 34.8 | 7.4 | 6.2 | 39.5 | 1,945 |
| Rural | 79.3 | 76.9 | 58.0 | 19.7 | 6.2 | 5.5 | 27.0 | 4,880 |
| Upper Egypt | 76.0 | 75.1 | 49.9 | 31.3 | 10.7 | 11.7 | 40.9 | 5,544 |
| Urban | 69.6 | 64.2 | 43.8 | 41.0 | 10.1 | 12.6 | 51.9 | 1,807 |
| Rural | 79.0 | 80.4 | 52.9 | 26.6 | 10.9 | 11.2 | 35.5 | 3,737 |
| Frontier Governorates | 55.1 | 58.5 | 35.7 | 36.1 | 5.0 | 5.1 | 31.8 | 207 |
| Education |  |  |  |  |  |  |  |  |
| No education | 80.6 | 78.3 | 55.5 | 20.5 | 7.7 | 7.6 | 27.7 | 6,730 |
| Primary incomplete | 78.0 | 72.1 | 56.7 | 24.2 | 7.0 | 7.5 | 36.6 | 2,058 |
| Primary complete/ some secondary | 74.4 | 67.1 | 51.0 | 29.2 | 7.7 | 8.0 | 38.1 | 2,024 |
| Secondary complete/higher | 58.2 | 49.1 | 43.5 | 43.5 | 8.3 | 7.3 | 49.8 | 4,747 |
| Work status |  |  |  |  |  |  |  |  |
| Working for cash | 61.3 | 51.4 | 45.4 | 40.9 | 8.1 | 8.1 | 47.6 | 2,264 |
| Not working for cash | 74.6 | 69.8 | 52.4 | 27.1 | 7.7 | 7.4 | 35.2 | 13,295 |
| Total | 72.6 | 67.1 | 51.4 | 29.1 | 7.8 | 7.5 | 37.0 | 15,559 |

The differentials shown in Table 14.7 suggest that women living in urban areas, particularly in the Urban Governorates and the Frontier Governorates, highly educated women, and women who work for cash are considerably less likely than other women to believe that circumcision is an important aspect of religious tradition or that men prefer wives to be circumcised. For example, about four in ten women in the Urban Governorates agree with the statement that husbands prefer wives to be circumcised, compared with eight in ten women in rural Upper Egypt. There is somewhat less variability among women in the percentages believing that circumcision prevents adultery; however, urban women, highly educated women, and women working for cash are somewhat less likely than other women to hold this belief.

Beliefs that circumcision has adverse consequences for a woman's health and fertility or for a couple's sexual satisfaction are more evident among urban women, highly educated women, or women who work for cash than among other women in Egypt. However, even in these groups, the majority of women generally do not believe that circumcision has any of these adverse consequences. The proportion agreeing with any of the beliefs about the adverse consequences of circumcision reaches half or more of women in only two subgroups (women with at least a secondary education and women from urban Upper Egypt), and this is only in the case of the belief that circumcision lessens sexual satisfaction.

### 14.6 Exposure to Discussion/Information about Circumcision

Table 14.8 summarizes the results of questions related to the level of interpersonal communication about circumcision and the channels through which women have recently received information about circumcision during the year before the survey. The table shows that interpersonal communication about circumcision was not widespread among women during the year prior to the survey. However, a third of the women had talked about circumcision with their family or friends and neighbors during the year before the survey.

Regarding sources of information about circumcision, television appeared to be the primary source. Among ever-married women, 73 percent reported that they received information about circumcision during the year before the 2000 EDHS on television, 37 percent had gotten information from the radio, and 20 percent had gotten information from a newspaper or magazine. Relatively few women cited either a community meeting or the mosque or church as a source of information about circumcision. Typically, urban women, highly educated women, and women working for cash were more likely than other women to have received information from any of the communication channels.

## Table 14.8 Exposure to discussion or information about female circumcision

Percentage of ever-married women who report discussing female circumcision with relatives, friends, or neighbors during the past year and the percentage who reported hearing or seeing something about female circumcision through various communication channels during the year prior to the survey, by selected background characteristics, Egypt 2000

| Background characteristic | Discussed with family/ friends/ neighbors | Information from TV | Information from radio | Information from newspaper/ magazine | Information from community meeting | Information from mosque | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |
| 15-19 | 26.4 | 67.6 | 28.0 | 11.9 | 2.8 | 1.9 | 615 |
| 20-24 | 30.8 | 73.6 | 37.8 | 20.5 | 2.2 | 3.3 | 2,244 |
| 25-29 | 34.3 | 74.5 | 37.8 | 22.7 | 3.2 | 3.4 | 2,847 |
| 30-34 | 38.6 | 75.8 | 39.5 | 24.1 | 3.9 | 4.5 | 2,695 |
| 35-39 | 33.1 | 72.1 | 37.9 | 21.3 | 3.8 | 4.4 | 2,673 |
| 40-44 | 32.0 | 71.0 | 36.2 | 18.8 | 3.7 | 4.8 | 2,180 |
| 45-49 | 29.8 | 69.4 | 32.7 | 15.5 | 3.1 | 3.9 | 2,304 |
| Urban-rural residence |  |  |  |  |  |  |  |
| Urban | 39.9 | 80.8 | 47.7 | 32.1 | 4.4 | 5.7 | 6,860 |
| Rural | 27.7 | 66.2 | 28.2 | 11.1 | 2.5 | 2.6 | 8,699 |
| Place of residence |  |  |  |  |  |  |  |
| Urban Governorates | 45.5 | 76.1 | 44.9 | 32.4 | 5.2 | 6.7 | 2,983 |
| Lower Egypt | 26.3 | 74.1 | 36.1 | 18.6 | 3.5 | 2.9 | 6,825 |
| Urban | 34.0 | 86.4 | 50.9 | 31.9 | 4.5 | 4.4 | 1,945 |
| Rural | 23.2 | 69.2 | 30.2 | 13.3 | 3.1 | 2.3 | 4,880 |
| Upper Egypt | 34.4 | 69.1 | 33.6 | 16.1 | 2.1 | 3.8 | 5,544 |
| Urban | 36.5 | 82.0 | 49.9 | 32.5 | 3.2 | 5.7 | 1,807 |
| Rural | 33.5 | 62.8 | 25.7 | 8.2 | 1.6 | 3.0 | 3,737 |
| Frontier Governorates | 39.7 | 72.0 | 27.0 | 17.2 | 2.3 | 3.4 | 207 |
| Education |  |  |  |  |  |  |  |
| No education | 26.0 | 62.2 | 23.6 | 3.7 | 1.3 | 2.1 | 6,730 |
| Primary incomplete | 33.0 | 71.1 | 31.4 | 8.4 | 2.1 | 3.0 | 2,058 |
| Primary complete/ some secondary | 35.4 | 76.9 | 40.1 | 20.4 | 3.1 | 4.1 | 2,024 |
| Secondary complete/higher | 42.1 | 86.4 | 56.3 | 49.1 | 6.7 | 6.9 | 4,747 |
| Work status |  |  |  |  |  |  |  |
| Working for cash | 39.8 | 82.6 | 53.9 | 47.0 | 7.9 | 7.3 | 2,264 |
| Not working for cash | 31.9 | 71.0 | 33.8 | 15.8 | 2.5 | 3.4 | 13,295 |
| Total | 33.0 | 72.7 | 36.8 | 20.4 | 3.3 | 3.9 | 15,559 |

## CHILDREN'S EDUCATION

The 2000 EDHS included a special module that was designed to collect information on schooling patterns among children 6-15 years. Specifically, the module included questions on whether children 6-15 were attending school, and, if not, why they had never gone to school or why they had dropped out. The survey also considered whether children had repeated one or more grades in school. For those children who were in school at the time of the survey, questions were asked about how often the child missed school, the reasons for missing school, and the various costs associated with school attendance. The information in the module was collected from the ever-married women 15-49 who were interviewed in the 2000 EDHS. Thus, it does not include information for children 6-15 whose mother had died, was age 50 and over, or was not interviewed for other reasons.

### 15.1 Attendance at School

Information from the children's education module is useful in looking at several important aspects of school attendance among Egyptian children, including the proportion of children 6-15 years who were currently attending school, the proportion who started school but later dropped out, and the proportion who repeated at least one grade at school. Table 15.1 presents attendance and grade repetition patterns for children age 6-15 years.

Table 15.1 shows that, 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 before the survey. Most children who attended school had started school by age 6, the official age for entry at the primary level. The majority of children who had dropped out of school stopped attending school between 9 and 12 years of age. Among those ever attending school, 14 percent had repeated at least one grade.

Table 15.2 presents differences in school attendance, dropout, and grade repetition levels by gender and other background characteristics.

Table 15.1 School attendance pattern and age started or dropped out

Percent distribution of children 6-15 by the school attendance pattern, percent distribution of children ever attending school by the age at which the child started school and the child's grade repetition experience, and percent distribution of children who dropped out of school by the age of the child at the time of dropout, Egypt 2000

| Characteristic | Percentage <br> of children |
| :--- | ---: |
| School attendance |  |
| Ever attended | 88.7 |
| Currently attending | 84.3 |
| Attended in past | 4.5 |
| Never attended | 0.0 |
| Don't know if ever attended | 100.0 |
| Total | 20,567 |


| Age child started attending school |  |
| :--- | ---: |
| 6 years or younger | 91.9 |
| 7 years. | 7.8 |
| 8 years or older | 0.3 |
| Don't know/missing | 0.0 |
| Total | 100.0 |
| Number of children 6-15 | 18,252 |
| ever attending school |  |


| Repetition of grade |  |
| :---: | :---: |
| Ever repeated | 14.0 |
| Never repeated | 85.9 |
| Don't know/missing | 0.1 |
| Total | 100.0 |
| Number of children 6-15 |  |
| ever attending school | 18,252 |


| Age child stopped attending school |  |
| :--- | ---: |
| 6-8 years |  |
| $9-12$ years | 17.9 |
| 13-15 years | 6.0 |
| Don't know/missing | 12.3 |
|  | 6.8 |
| Total | 100.0 |
| Number children 6-15 |  |
| $\quad$ who dropped out | 920 |


| Table 15.2 School attendance by background characteristics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all children 6-15 years who never have attended school, and among those who attended school, the percentage who dropped out of school and percentage who repeated at least one grade, by sex of child and selected background characteristics, Egypt 2000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | All children 6-15 years |  |  |  |  |  | Children 6-15 years who ever attended school |  |  |  |  |  |  |  |  |
|  | Percentage never having attended school |  |  | Number of children |  |  | Percentage who dropped out |  |  | Percentage who repeated at least 1 grade |  |  | Number of children |  |  |
|  | Boy | Girl | Total | Boy | Girl | Total | Boy | Girl | Total | Boy | Girl | Total | Boy | Girl | Total |
| Child's current age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6-8 | 17.2 | 19.9 | 18.6 | 2,933 | 2,846 | 5,779 | 0.3 | 0.3 | 0.3 | 2.5 | 2.7 | 2.6 | 2,428 | 2,279 | 4,707 |
| 9-12 | 3.5 | 10.2 | 6.7 | 4,480 | 4,255 | 8,735 | 3.6 | 2.7 | 3.2 | 14.9 | 9.9 | 12.6 | 4,324 | 3,823 | 8,147 |
| 13-15 | 5.1 | 15.3 | 10.1 | 3,115 | 2,939 | 6,053 | 12.8 | 10.7 | 11.9 | 29.2 | 22.3 | 26.0 | 2,957 | 2,488 | 5,445 |
| Urban-rural residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 6.4 | 6.9 | 6.7 | 4,051 | 3,986 | 8,037 | 5.7 | 3.3 | 4.5 | 14.9 | 11.4 | 13.2 | 3,791 | 3,709 | 7,500 |
| Rural | 8.6 | 19.4 | 13.8 | 6,476 | 6,054 | 12,531 | 5.5 | 5.2 | 5.4 | 16.9 | 11.7 | 14.6 | 5,918 | 4,881 | 10,798 |
| Place of residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban Governorates | 6.1 | 7.2 | 6.6 | 1,625 | 1,603 | 3,228 | 5.5 | 3.7 | 4.6 | 14.2 | 11.7 | 13.0 | 1,525 | 1,489 | 3,014 |
| Lower Egypt | 6.3 | 11.1 | 8.6 | 4,501 | 4,301 | 8,802 | 6.3 | 4.0 | 5.2 | 18.0 | 12.8 | 15.5 | 4,219 | 3,825 | 8,044 |
| Urban | 4.8 | 6.0 | 5.4 | 1,141 | 1,139 | 2,280 | 6.7 | 2.8 | 4.8 | 15.2 | 11.5 | 13.4 | 1,087 | 1,070 | 2,157 |
| Rural | 6.8 | 12.9 | 9.7 | 3,359 | 3,163 | 6,522 | 6.1 | 4.5 | 5.4 | 19.0 | 13.4 | 16.3 | 3,132 | 2,755 | 5,887 |
| Upper Egypt | 9.9 | 20.8 | 15.2 | 4,249 | 4,000 | 8,248 | 5.0 | 5.1 | 5.0 | 14.8 | 10.1 | 12.7 | 3,827 | 3,166 | 6,993 |
| Urban | 8.6 | 7.6 | 8.1 | 1,195 | 1,165 | 2,360 | 5.3 | 3.0 | 4.2 | 15.2 | 10.9 | 13.1 | 1,092 | 1,076 | 2,168 |
| Rural | 10.4 | 26.3 | 18.1 | 3,054 | 2,835 | 5,889 | 4.8 | 6.2 | 5.4 | 14.7 | 9.6 | 12.5 | 2,735 | 2,090 | 4,825 |
| Frontier Governorates | 10.6 | 18.6 | 14.4 | 154 | 135 | 289 | 2.4 | 6.3 | 4.1 | 16.9 | 10.4 | 14.0 | 138 | 110 | 248 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 9.9 | 21.7 | 15.6 | 5,817 | 5,383 | 11,200 | 8.3 | 6.8 | 7.7 | 20.9 | 15.4 | 18.4 | 5,242 | 4,216 | 9,457 |
| Primary incomplete | 6.3 | 8.2 | 7.2 | 1,628 | 1,591 | 3,219 | 5.6 | 4.6 | 5.1 | 18.4 | 13.2 | 15.8 | 1,525 | 1,461 | 2,986 |
| Primary complete/ some secondary | 4.4 | 6.7 | 5.6 | 973 | 972 | 1,946 | 2.1 | 2.0 | 2.1 | 10.9 | 9.4 | 10.2 | 931 | 907 | 1,837 |
| Secondary complete/ higher | 4.6 | 4.2 | 4.4 | 2,110 | 2,097 | 4,203 | 0.1 | 0.2 | 0.1 | 4.5 | 3.5 | 4.0 | 2,012 | 2,006 | 4,018 |
| Total | 7.8 | 14.4 | 11.0 | 10,528 | 10,040 | 20,567 | 5.6 | 4.4 | 5.0 | 16.1 | 11.6 | 14.0 | 9,709 | 8,589 | 18,298 |

There are striking differences by gender, particularly for the proportions never having attended school (Figure 15.1). Girls age 6-15 years are almost twice as likely as boys in that age range to have never attended school. Regarding dropout levels, boys are somewhat more likely than girls to have started and then stopped having attended school. Regarding grade repetition, boys are also more likely to have repeated a grade than girls.

Looking at the differentials by the child's age, the relatively high proportion of children age 6-8 years who never have attended school likely includes some children who will start school in the future. The gender gap in school attendance levels increases with the age of the chid, with girls age 13-15 being three times as likely as boys in the same age group to have never attended school. Drop-out rates and repetition rates go up with the child's age.

Gender differences in children's school attendance patterns are more striking in rural areas in Egypt than in urban areas. For example, 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. Nearly a fifth of the girls age 6-15 years in the Frontier Governorates and more than a quarter of the girls in rural Upper Egypt have never attended school. The proportions never having attended school among boys in those areas are much lower (10 percent and 11 percent, respectively).


The mother's educational level is negatively associated with school attendance, dropout, and grade repetition levels. In particular, the proportion of children never having attended school is much higher for children born to mothers who themselves had never gone to school than among children whose mothers had ever attended school. Gender differences in children's school attendance levels decrease substantially as the mother's education level rises.

### 15.2 Reasons for Not Attending School

Mothers of children 6-15 who were not attending school were asked about the reasons their children had never attended or had dropped out of school. Table 15.3 presents the reasons that children had never attended school and Table 15.4 shows the reasons for dropping out. Mothers were able to cite up to three reasons for their children's nonattendance so that the percentages shown in these tables do not add to 100 percent.

## Reasons for Never Having attended school

For children who have never attended school, Table 15.3 shows that more than half of the mothers cite child-related factors, particularly the fact that the child was still too young to attend school ( 36 percent). Two in five mothers mention cost as a factor, either the actual expense of sending the child to school or the loss of the contribution that the child's labor makes to the household's welfare. One in five mothers cites other factors, especially tradition or custom, as reasons for the child never having attended school. Few mothers mentioned school-related factors (e.g., distance or quality) as reasons that a child did not start school.

| Table 15.3 Reasons for never having attended school |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| For children 6-15 years who never have attended school, percentage of mothers citing various reasons that the child never attended school, Egypt 2000 |  |  |  |  |  |
| Reason for never attending | Sex of child |  | Residence |  | Total |
|  | Boy | Girl | Urban | Rural |  |
| Cost-related reasons | 29.9 | 44.9 | 25.7 | 43.7 | 39.4 |
| Too expensive | 23.7 | 34.8 | 19.7 | 34.3 | 30.8 |
| Labor needed at home/farm | 9.4 | 14.3 | 8.5 | 13.8 | 12.5 |
| Child-related reasons | 70.5 | 41.5 | 67.8 | 47.1 | 52.0 |
| Too young | 51.4 | 27.3 | 54.0 | 30.4 | 36.0 |
| Child not interested | 12.0 | 11.5 | 7.1 | 13.2 | 11.7 |
| Child ill/disabled | 7.9 | 2.9 | 7.2 | 3.9 | 4.7 |
| School-related reasons | 2.1 | 3.1 | 2.0 | 3.0 | 2.8 |
| School of poor quality | 0.3 | 0.4 | 0.5 | 0.3 | 0.3 |
| School too far | 1.8 | 2.8 | 1.5 | 2.8 | 2.5 |
| Other reasons | 7.4 | 27.8 | 13.2 | 22.7 | 20.5 |
| School not important | 3.8 | 6.4 | 2.4 | 6.4 | 5.4 |
| Tradition/custom | 1.0 | 15.8 | 6.6 | 11.7 | 10.5 |
| Other | 2.8 | 7.6 | 5.5 | 6.0 | 5.9 |
| Number of children never having attended school | 819 | 1,450 | 537 | 1,732 | 2,269 |

The reasons that mothers give for children never having attended school vary by the child's gender and residence. Mothers are much more likely to say that a girl has not attended school because it was too costly or because of custom or tradition than they are to offer those reasons for a boy never having attended school. Mothers living in rural Egypt are also more likely to cite those factors as reasons that children have never attended school than are urban mothers.

## Reasons for Dropping Out of School

Overall, Table 15.4 shows that more than eight in ten mothers mentioned child-related factors as the reasons for dropping out of school, particularly the child's lack of interest in school ( 54 percent) or the child's failing or repeating a grade ( 38 percent). Costs were a factor in about one-fifth of the cases in which a child started but then dropped out of school. The belief that school was not important was mentioned as a reason for leaving school for one in eight of the children who dropped out. School-related factors were rarely mentioned as reasons for dropping out.

Although most mothers cited child-related factors as the reasons for leaving school, there was some variation by gender and residence in the reasons for dropping out. For example, mothers were somewhat more likely to cite costs as a reason that a child dropped out of school for girls than for boys ( 24 percent and 18 percent, respectively). Cost-related factors were also cited more frequently as the reason for dropping out by rural mothers than by urban mothers.

| Table 15.4 Reasons for dropping out of school |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| For children 6-15 years who dropped out of school, percentage of mothers citing various reasons that the child dropped out, Egypt 2000 |  |  |  |  |  |
| Reasons for dropping out | Sex of child |  | Residence |  | Total |
|  | Boy | Girl | Urban | Rural |  |
| Cost-related reasons | 18.4 | 23.9 | 16.3 | 23.1 | 20.6 |
| Too expensive | 8.8 | 12.9 | 10.5 | 10.5 | 10.5 |
| Labor needed at home/farm | 11.5 | 13.2 | 7.6 | 14.9 | 12.2 |
| Child-related reasons | 89.0 | 75.1 | 85.2 | 82.2 | 83.3 |
| Child failed or repeated grade | 40.8 | 34.5 | 41.8 | 36.1 | 38.2 |
| Child not interested | 58.3 | 46.8 | 46.8 | 57.6 | 53.6 |
| Child got married | 0.0 | 0.7 | 0.7 | 0.0 | 0.3 |
| Child ill/disabled | 3.4 | 3.0 | 4.3 | 2.6 | 3.3 |
| School-related reasons | 3.8 | 8.6 | 5.0 | 6.2 | 5.7 |
| School of poor quality | 2.6 | 2.6 | 2.2 | 2.9 | 2.6 |
| School too far | 0.7 | 1.9 | 1.6 | 0.9 | 1.2 |
| Enough education | 0.4 | 4.1 | 1.2 | 2.4 | 1.9 |
| Other reasons | 13.5 | 13.8 | 15.0 | 12.8 | 13.6 |
| School not important | 13.2 | 11.9 | 14.4 | 11.7 | 12.7 |
| Tradition/custom | 0.0 | 2.0 | 1.3 | 0.5 | 0.8 |
| Other | 0.4 | 0.8 | 0.0 | 0.9 | 0.6 |
| Number of children who dropped out of school | 544 | 377 | 339 | 582 | 920 |

### 15.3 Absence from School

Absences from school, if they are frequent or of long duration, may affect a child's performance in school. To obtain information on this issue, mothers of children age $6-15$ were asked whether the child had been absent from school during the two-week period before the survey and, if so, the number of days the child had missed and the main reason for the absence. Table 15.5 shows that about one in ten children had missed school in the two-week period before the survey. Among those missing school, the majority ( 6 percent of all children) had missed only one day of school during the period. There was virtually no difference between boys and girls in the proportion reported absent in the two-week period before the survey. However, children in urban areas were less likely to have missed school than rural children.

| Table 15.5 Absence from school |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of children 6-15 years of who are currently attending school by number of school days child was absent during the two weeks prior to the survey, according to sex and urban-rural residence, Egypt 2000 |  |  |  |  |  |
| Number of days child missed school | Sex of child |  | Residence |  | Total |
|  | Boy | Girl | Urban | Rural |  |
| No days | 88.8 | 89.7 | 85.4 | 91.9 | 89.2 |
| One day | 6.2 | 5.9 | 8.1 | 4.6 | 6.1 |
| Two days | 2.9 | 2.8 | 3.9 | 2.1 | 2.8 |
| $3+$ days | 2.1 | 1.6 | 2.7 | 1.4 | 1.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of children currently attending school | 9,054 | 8,135 | 7,089 | 10,100 | 17,189 |

Regarding the reasons that a child was absent, Table 15.6 shows that illness was the reason most often given by mothers. More than a fifth of the children missed school because they did not want to go; mothers of boys and rural mothers gave this reason somewhat more often than other mothers.

| Table 15.6 Main reasons for missing school |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of children 6-15 years who were absent from school during the past two weeks, by the main reason for absence, Egypt 2000 |  |  |  |  |  |
| Main reason for missing school | Sex of child |  | Residence |  | Total |
|  | Boy | Girl | Urban | Rural |  |
| Illness | 44.1 | 45.8 | 44.6 | 45.1 | 44.8 |
| Bad weather | 5.5 | 6.2 | 7.6 | 3.5 | 5.8 |
| Abuse by teachers | 1.9 | 0.6 | 1.1 | 1.7 | 1.3 |
| Child didn't want to go | 25.9 | 20.2 | 21.9 | 25.2 | 23.3 |
| Child needed at home | 3.6 | 7.6 | 1.9 | 9.9 | 5.4 |
| Other | 18.2 | 19.4 | 22.7 | 13.7 | 18.8 |
| Don't know/Missing | 0.8 | 0.2 | 0.1 | 1.0 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of children absent from school | 1,014 | 839 | 1,038 | 815 | 1,852 |

### 15.4 Expenditures on Schooling

The 2000 EDHS children's education module included a number of questions related to the costs of schooling for children. Specifically, since the costs of schooling are related to the kind of school the child attends, mothers were asked about the type of school that the child attended (public, private secular, or religious). Questions were also asked about the amounts that were spent during the school year on registration and tuition fees; uniforms, clothing, and school bags; school supplies (textbooks, exercise books, pens, etc.); tutoring or special classes; and other incidental expenses (transportation, etc.). The responses to these questions must be considered as the mother's best estimates of the expenditures on various school-related expenses. However, they provide some indication of the overall costs of schooling in Egypt.

## Type of School

Table 15.7 shows the distribution of children 6-15 years according to the type of school attended. As expected, most children attended public schools, with about one in eight children attending either private secular schools ( 6 percent) or religious (Azhari) schools ( 7 percent). Virtually all of the children attending private secular schools lived in urban areas, particularly the Urban Governorates. Attendance at religious schools is more common in rural than in urban areas ( 9 and 4 percent, respectively). Children whose mother had completed at least secondary education are much more likely to attend private secular schools than other children, while the proportion attending religious schools is highest among children whose mother never attended school.

| Table 15.7 Type of school attended |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of children 6-15 years currently attending school by type of school attended, according to selected background characteristics, Egypt 2000 |  |  |  |  |  |
| Background characteristic | Public school | Private school | Religious (Azhari) school | Total | Number of children |
| Sex of child |  |  |  |  |  |
| Boy | 86.4 | 5.5 | 8.1 | 100.0 | 9,054 |
| Girl | 88.6 | 5.8 | 5.6 | 100.0 | 8,135 |
| Urban-rural residence |  |  |  |  |  |
| Urban | 83.4 | 12.7 | 3.8 | 100.0 | 7,089 |
| Rural | 90.2 | 0.7 | 9.1 | 100.0 | 10,100 |
| Place of residence |  |  |  |  |  |
| Urban Governorates | 78.2 | 19.2 | 2.6 | 100.0 | 2,838 |
| Lower Egypt | 89.7 | 1.7 | 8.5 | 100.0 | 7,556 |
| Urban | 90.2 | 5.1 | 4.7 | 100.0 | 2,036 |
| Rural | 89.5 | 0.5 | 9.9 | 100.0 | 5,520 |
| Upper Egypt | 88.4 | 4.5 | 7.0 | 100.0 | 6,559 |
| Urban | 83.0 | 12.3 | 4.7 | 100.0 | 2,060 |
| Rural | 90.9 | 0.9 | 8.1 | 100.0 | 4,498 |
| Frontier Governorates | 96.1 | 0.5 | 3.3 | 100.0 | 236 |
| Mother's education |  |  |  |  |  |
| No education | 90.7 | 0.6 | 8.7 | 100.0 | 8,619 |
| Primary incomplete | 92.1 | 1.3 | 6.5 | 100.0 | 2,801 |
| Primary complete/ some secondary | 91.0 | 4.1 | 4.9 | 100.0 | 1,781 |
| Secondary complete/higher | 75.3 | 20.4 | 4.3 | 100.0 | 3,989 |
| Total | 87.4 | 5.7 | 6.9 | 100.0 | 17,189 |

## Costs of Schooling

As noted above, for each of their children age 6-15 years, women were to provide an estimate of expenditures during the school year on a number of school-related costs ranging from registration and tuition fees to other incidental expenses. Table 15.8 shows that the majority of mothers provided information on expenditures for all of the items; the proportion of mothers indicating that they did not know the amount expended for an item or for whom information on expenditures was missing varied from 3 percent in the case of expenditures for tutoring or special classes to 14 percent in the case of textbooks or supplies. Comparatively large proportions of mothers indicated that no money had been expended for tutoring or special classes and incidental expenses ( 38 percent and 57 percent, respectively).

## Table 15.8 Expenditures on schooling

Percent distribution of children 6-15 years currently attending school by whether money was spent on various school-related items, Egypt 2000

|  | Expenditure <br> reported | No <br> expenditure <br> reported | Don't <br> nnow/ <br> Missing | Total | Number <br> of <br> children |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Registration and tuition fees | 85.6 | 6.9 | 7.5 | 100.0 | 17,189 |
| Uniforms/other clothing/bags | 89.0 | 4.4 | 6.6 | 100.0 | 17,189 |
| Textbook/supplies | 85.0 | 0.7 | 14.3 | 100.0 | 17,189 |
| Tutoring/special classes | 59.5 | 37.6 | 2.9 | 100.0 | 17,189 |
| Other incidental expenses | 37.9 | 56.9 | 5.3 | 100.0 | 17,189 |

Table 15.9 shows the median amounts spent on the various items according to selected background characteristics. Since more than half of the mothers did not report spending money on incidental expenses, medians are not shown in the table for this item. The results in Table 15.9 indicate that the average Egyptian household spends about 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 on tutoring or special classes.

As expected, expenditures are highest for children attending private secular schools and lowest for those attending religious schools. For example, the median expenditure for registration fees and tuition was 600 pounds per child for private secular schools, compared with 25 pounds per child for public schools and 12 pounds per child for religious schools.

There is virtually no difference between boys and girls in the median expenditure on any of the items. Expenditures per child were higher in urban areas than in rural areas for all items. Regardless of the item, expenditures also tended to increase with the mother's educational level. The urban-rural differences in expenditures may in part be due to the fact that more urban than rural children attended private secular schools.

| Table 15.9 Median expenditures on schooling |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Median expenditure per child among children age 6-15 years by type of expenditure, according to selected background characteristics, Egypt 2000 |  |  |  |  |
| Background characteristic | Registration and tuition fees | Uniforms/ other clothing/ bags | Textbooks/ supplies | Tutoring/ special classes |
| Type of school |  |  |  |  |
| Public | 25.3 | 66.7 | 31.8 | 10.1 |
| Private | 600.5 | 150.5 | 60.6 | 13.6 |
| Religious (Azhari) | 12.4 | 55.4 | 25.6 | 5.6 |
| Sex of child |  |  |  |  |
| Boy | 25.3 | 70.1 | 32.8 | 10.0 |
| Girl | 25.4 | 70.2 | 33.5 | 10.0 |
| Urban-rural residence |  |  |  |  |
| Urban | 30.5 | 100.1 | 45.3 | 20.0 |
| Rural | 23.4 | 57.8 | 30.2 | 5.6 |
| Place of residence |  |  |  |  |
| Urban Governorates | 35.1 | 100.2 | 42.1 | 25.4 |
| Lower Egypt | 25.1 | 70.4 | 40.9 | 10.4 |
| Urban | 25.9 | 100.1 | 50.6 | 16.7 |
| Rural | 23.9 | 66.3 | 35.8 | 10.0 |
| Upper Egypt | 23.9 | 51.0 | 25.5 | - |
| Urban | 26.7 | 80.2 | 33.1 | 10.7 |
| Rural | 22.9 | 50.6 | 21.2 | - |
| Frontier Governorates | 22.9 | 95.8 | 35.4 | - |
| Education |  |  |  |  |
| No education | 23.5 | 50.9 | 30.2 | 5.7 |
| Primary incomplete | 24.4 | 60.9 | 30.9 | 10.3 |
| Primary complete/ some secondary | 25.8 | 80.4 | 33.8 | 15.4 |
| Secondary complete/higher | r 31.5 | 100.5 | 50.4 | 15.5 |
| Total | 25.3 | 70.2 | 33.2 | 10.0 |
| Note: Medians exclude children for whom the mother did not know the amount expended for a specific school-related cost. Since more than half of mothers reported that there were no expenditures on incidental expenses, medians are not calculated for that item. |  |  |  |  |

### 15.5 Attitude about University Education

The children's education module sought to obtain some insight into 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. Table 15.10 shows that 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. Overall, almost two in five women felt the parents should send the son to the university if they could afford to send only one child, compared with 7 percent who felt that the daughter should be sent.

Women in the Frontier Governorates showed the most evidence of son preference in response to the question; nearly half of the women in the Frontier Governorates felt that the son should be sent to the university, compared with 41 percent who responded that it would depend on the capabilities of the children and 6 percent who felt that the daughter should be sent. Rural women, especially those living in rural Upper Egypt, were more likely than urban women to feel that the son should be sent rather than the daughter. The women's own educational status was positively related to the likelihood that the woman would respond that it depended on the son's or daughter's capabilities and was negatively related to the likelihood of saying that the son should receive the university education rather than the daughter.

Table 15.10 Opinion about university education for sons or daughters
Percent distribution of women 15-49 with a child age 6-15 years by opinion as to what parents should do about university education for children, according to selected background characteristics, Egypt 2000

| Background characteristic | $\begin{gathered} \text { Send } \\ \text { son } \end{gathered}$ | Send daughter | Depends on capabilities | Not sure/ missing | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| 15-19 | * | * | * | * | 100.0 | 2 |
| 20-24 | 46.3 | 6.5 | 43.4 | 3.8 | 100.0 | 183 |
| 25-29 | 36.0 | 7.7 | 53.1 | 3.2 | 100.0 | 1,285 |
| 30-34 | 38.1 | 7.1 | 52.6 | 2.2 | 100.0 | 2,206 |
| 35-39 | 39.1 | 7.1 | 51.3 | 2.5 | 100.0 | 2,412 |
| 40-44 | 35.1 | 6.8 | 55.1 | 3.0 | 100.0 | 1,807 |
| 45-49 | 42.4 | 6.3 | 47.1 | 4.2 | 100.0 | 1,516 |
| Urban-rural residence |  |  |  |  |  |  |
| Urban | 33.8 | 7.2 | 56.5 | 2.5 | 100.0 | 4,072 |
| Rural | 41.8 | 6.8 | 48.1 | 3.2 | 100.0 | 5,340 |
| Place of residence |  |  |  |  |  |  |
| Urban Governorates | 39.0 | 6.9 | 50.6 | 3.4 | 100.0 | 1,731 |
| Lower Egypt | 35.3 | 9.3 | 52.6 | 2.8 | 100.0 | 4,094 |
| Urban | 31.2 | 9.6 | 57.3 | 2.0 | 100.0 | 1,157 |
| Rural | 36.9 | 9.2 | 50.8 | 3.1 | 100.0 | 2,936 |
| Upper Egypt | 41.2 | 4.3 | 51.7 | 2.8 | 100.0 | 3,460 |
| Urban | 28.1 | 5.2 | 65.2 | 1.5 | 100.0 | 1,108 |
| Rural | 47.5 | 3.9 | 45.3 | 3.3 | 100.0 | 2,352 |
| Frontier Governorates | 49.3 | 6.1 | 41.4 | 3.2 | 100.0 | 127 |
| Education |  |  |  |  |  |  |
| No education | 46.6 | 6.3 | 42.7 | 4.4 | 100.0 | 4,693 |
| Primary incomplete | 37.9 | 8.5 | 51.8 | 1.9 | 100.0 | 1,438 |
| Primary complete/ some secondary | 33.4 | 9.1 | 55.8 | 1.7 | 100.0 | 999 |
| Secondary complete/higher | 23.9 | 6.6 | 68.5 | 1.0 | 100.0 | 2,282 |
| Work status |  |  |  |  |  |  |
| Working for cash | 26.9 | 7.6 | 63.8 | 1.7 | 100.0 | 1,504 |
| Not working for cash | 40.5 | 6.9 | 49.4 | 3.1 | 100.0 | 7,908 |
| Total | 38.4 | 7.0 | 51.7 | 2.9 | 100.0 | 9,412 |

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

## REFERENCES

Abdel-Azeem, F., S. Farid, and A.M. Khalifa. 1993. Egypt Maternal and Child Health Survey. Cairo: Central Agency for Public Mobilization and Statistics [Arab Republic of Egypt] and the Pan Arab Program for Child Development [Arab League].

Central Agency for Public Mobilization and Statistics (CAPMAS). 2000. Statistical Year Book 1999. Cairo: CAPMAS.

Central Agency for Public Mobilization and Statistics (CAPMAS). 1999. Statistical Year Book 1998. Cairo: CAPMAS.

El-Zanaty and Associates and Macro International Inc. 1999. 1998 Egypt Interim Demographic and Health Survey. Cairo: El-Zanaty and Associates and Macro International Inc.

El-Zanaty and Associates and Macro International Inc. 1998. 1997 Egypt Interim Demographic and Health Survey. Cairo: El-Zanaty and Associates and Macro International Inc.

El-Zanaty, Fatma, Enas M. Hussein, Gihan A. Shawky, Ann A. Way and Sunita Kishor. 1996. Egypt Demographic and Health Survey 1995. Calverton, Maryland: National Population Council and Macro International Inc.

El-Zanaty, F., H.A.A. Sayed, H. Zaky, and A. Way. 1993. Egypt Demographic and Health Survey 1992. Calverton, Maryland: National Population Council [Arab Republic of Egypt] and Macro International Inc.

Hallouda, A.M., S.Z. Amin, and S. Farid, eds. 1983. The Egyptian Fertility Survey. 4 vols. Cairo: Central Agency for Public Mobilization and Statistics.

Institute of National Planning (INP). 1998. Egypt Human Development Report 1997/1998. Cairo, Egypt: the Institute of National Planning.

Macro International Inc. 1993. An Assessment of the Quality of Health Data in DHS-I Surveys. DHS Methodological Reports No. 2. Calverton, Maryland: Macro International Inc.

Martorell, R. and J.-P. Habicht. 1986. Growth in early childhood in developing countries. In Human growth: A comprehensive treatise, ed. F. Falkner and J.M. Tanner, Vol. 3. New York: Plenum Press. 241-262.

Sayed, H.A.A., M. Osman, F. El-Zanaty, and A. Way. 1989. Egypt Demographic and Health Survey 1988. Columbia, Maryland: National Population Council [Arab Republic of Egypt] and Institute for Resource Development/Macro Systems, Inc.

Sayed, H.A.A., M.N. El-Khorazaty, and A.A. Way. 1985. Fertility and family planning in Egypt. Columbia, Maryland: Egypt National Population Council [Arab Republic of Egypt] and Westinghouse Public Applied Systems.

Sommerfelt, A. Elisabeth and Andrea L. Piani. 1997. Childhood Immunization: 1990-1994. DHS Comparative Reports No. 22. Calverton, Maryland: Macro International Inc..

United Nations Development Program. 2000. Human Development Report 2000. New York: Oxford University Press.

# Technical and Administrative Staff 

Technical Director

Dr. Fatma Hassan El-Zanaty

## Senior Technical Staff

Dr. Zakaria Abd El-Sameea Abd El-Wahed, Assistant Director For Sampling and Data Processing
Mrs. Faten Abd El-Fattah, Assistant Director For Training and Data Collection
Dr. Madiha El-Banhawy, Assistant Director For Health Issues
Senior Field Staff
Abd El-Aziz Mahmoud, Field Coordinator
Mohamed Farag Allah, Assistant
Osama Radwan Mohamed, Assistant
Senior Data Processing Staff
Dr. Rashad Hamed, Data Processing Expert
Mohamed Abo El Alla, Data Processing Coordinator
Anthropometric Consultants
Dr. Abd El-Monem Darwesh
Dr. Sanaa Hassan Abd El-Mouhsen
Mr. Mohamed Kamal
Macro International Staff
Dr. Ann Way, Country Monitor
Dr. Alfredo Aliaga, Sampling Specialist
Dr. Almaz Sharman, Health Specialist
Jeanne Cushing, Data Processing Specialist
Hena Khan, Communications Specialist
Sidney Moore, Senior Editor
Celia Khan, Document Production Specialist
Kaye Mitchell, Document Production Specialist
Office Staff
Atef Mohamed Sayed, Supervisor
Ahmed Gomaa, Topographer

Mohamed Ismail
Attia Mohamed Khedr
Sameh Said Amin

Nagwa Metwaly Fahmy
Osama Metwaly Fahmy

## Administrative Staff

Wegdan Yehia, Accountant
Samia Hanafy, Secretary

## Quick Count and Re-Quick Count Staff

Supervisors
Alaa Badr Mosaad
Mohamed Ahmed El-Sayed
Sherif Ahmed Abo-Shady
Mohamed Darwesh Omar
Osman Awad Osman
Mohamed Salem Hussien
Mohamed Mahros Mahros

## Counters

Ibrahim Mohamed Abd El-Hakim
Mohamed Sameh Mohamed
Ayman Abass El-Koumy
Haisam Mahmoud Abd El-Razik
Ahmed Hamed Fahmy
Anour Mahmoud Ibrahim
Ehab Zakaria Goumaa
Wael Abd El-Karim Mohamed
Yasser Khalifa Metwaly
Yasser Abd El-Ghany Mohamed
Rashed Issam El-Deen Mohamed
Moustafa El-Tabaay Ibrahim

Amr Mahmoud Abd El-Hameed<br>Ali Ali Badr<br>Mahmoud Shehata Hassanin<br>Hany Mohamed Abd El-Monem<br>Ahmed Mohamed Youssef<br>Mohamed Moustafa Sayed

Wael Mahmoud Ibrahim Ashrf Abd El-Fattah Mahmoud Ahmed Tawfik El-Sayed Ashraf Ali Badr
Khalid Mohamed Abd El-Fattah
Waleid El-Gameel El-Sayed
Mohamed Gebaly Abd El-Azeem
Abo-Baker Taha Mohamed
Mohamed Farouk Ahmed
Hany Ghaze El-Sayed
Mohamed Noaaman Abd El-Malek
Khalid Said Emam

## Listing and Re-listing Staff

## Supervisors

Mohamed Moustafa sayed
Khalid Said Emam
Yasser Khalifa Metwaly
Ali Ali Badr
Mahmoud Shehata Hassanin
Osman Awad Osman

## Listers

Ahmed El Said
Moustafa El-Tabaay Ibrahim
Wael Mahmoud Ibrahim
Mohamed Gebaly Abd El-Azeem
Hany Ghazy El-Sayed
Ibrahim Mohamed Abd El Hakim
Mahmoud Abd El Rehem
Mohamed Abo Shady
Anour Mahmoud Ibrahim
Ehab Zakaria Goumaa
Mohamed Sameh
Mohamed Noaaman Abd El-Malek

Amr Mahmoud Abd El-Hameed
Mohamed Mahros Mahros
Mohamed Salem Hussien
Hany Mohamed Abd El-Moneem
Ahmed Mohamed Youssef
Alaa Badr Mosaad

Montaser Allam
Mohamed Abd El-Naser
Waleid El-Gameel El-Sayed
Khalid Mohamed Abd El-Fattah
Haisam Mahmoud Abd El-Razik
Taha Ismail
Mohamed Ismail
Amr Shokry
Ashraf Ali Badr
Mohamed Farouk Ibrahim
Khalid Shebl

## Interviewing and Reinterviewing Staff

Supervisors
Fayez Amin Khalil
Mohamed Moustafa Sayed
Hany Mohamed Abd El-Moneem
Hany Mohamed Halmy
Mohamed Ahmed El-Dabaa
Mohamed Darwesh Omar
Gamal Hashem Said
Field Editors
Sara Helmy
Hala Ahmed Abd Allah
Ghada Moustafa
Naglaa Fathy Abd El Hameed
Randa Abd El-Kadeer
Afaf Awad
Mona El Said
Interviewers
Marwa Mahmoud Ahmed
Saadia Mansour
Sanaa Ahmed Fouaad
Mervat Zaghloul
Hanaa Abd El-Karim
Zenab Ahmed Hamdy
Mervat Farouk
Manal Mamdouh
Naglaa Abd El-Wahab
Neven Sabry
Fareda Said
Eman Ramadan
Asmaa Younis
Eman Sayed Moustafa
Heba Abd El-Satar
Naglaa Fathy Saad
Hanan Mousa
Naglaa Fathy Ali
Asmaa Zakaria
Fatma Mahmoud
Hanaa Soliman
Doaa Ibrahim Mohamed
Randa Moustafa
Neven Nage
Hayam Moustafa
Hanaa Abd El-Aziz
Ola Fouaad

Tohamy Sayed
Alaa Badr Mosaad
Safwat Salah El-Deen
Ahmed Mohamed Youssef
Mohamed Ahmed El-Sayed
Ali Ali Badr

Houda Mahmoud
Amera Abd El Raouf
Taghreed Alaa
Doaa Mohamed Hassan
Noha Fakhry
Lamiaa Abd Allah

Walaa Said Hanafy
Sahar Abd El-Rahman
El Sayda Helmy
Reham Hussien
Marwa Mohamed Taha
Mervat Abd El- Aziz
Safaa Mohamed El Said
Noura Fathy saad
Eman Karm
Reda Said Saad
Rabab Abd El-Magd
Rabab Abd El-Fattah
Amal Hassan
Reda Farouk
Ranya Abd El-Razik
Abeer Sayed Essa
Naglaa Ali Ahmed
Abeer Ahmed Mahmoud
Sahar Mohamed Ahmed
Asmaa Gad El-Rab
Ebtesam Mahmoud
Sherren Ayman
Hanaa Ibrahim Mohamed
Samia Mohamed Hamd
Marleen Shaweky Ahmed
Nahed Abd El-Wahab
Hameeda Youssef

# Anemia Testing and Anthropometric Staff 

Dr.Rania Mahmoud
Dr. Moustafa Abd El-Razik
Dr. Samira Abd Allah
Dr. Rabab Farouk
Dr. Manal Taha
Dr. Asmaa Farg
Dr. Nour El-Hoda Ahmed
Dr. Mohamed El-Tokhy
Dr. Bader Bayoumy
Dr. Wael Abd El-Kerim Mohamed
Naglaa Fathy
Manal Mamdouh
Marwa Abdel Monem

Ragaa Abd El Razik
Samah Abd El-Hameed
Mohamed Mahros Mahros
Mervat Farouk
Mohamed Salem Hussien
Neven Sabry
Rashed Essam El-Deen Mohamed
Yasser Khalifa Metwaly
Osman Awad Osman
Moustafa El-Tabaay Ibrahim
Yasser Abd El-Ghany Mohamed
Mahmoud Shehata
Waleid El-Gameel

## Office Editing

Editors
Nagwa Metwaly Fahmy
Sahar Abd El-Fattah
Nefessa Mohamed
Hanaa Soliman
Magda Abd El-Maksoud
Naheed Sayed Salem
Sahar Abd El-Rahman
Hala Ahmed Abd Allah
Naglaa Fathy Abd El-Wahab
Fatma Mahmoud
Shereen Ayman
Afaf Awad
Data Processing Staff
Amr Moustafa
Ashraf Amr
Ali Fawezy
Khalid Abo El-Alla
Mohamed Houssien
Safwat Salah
Ali Farouk

Coders
Sameh Said
Ehab Khalaf Allah
Hossam Ali
Hany Deyab
Mohamed Abd El Fattah
Abeer Mohamed
Mohamed Farag Allah
Osama Radwan
Reda Abd El-Hady
Dawlat El-Riash
Amaal Rafaat

Mohamed Farouk
Amr Shokry
Medhat Moustafa
Attia Mohamed Khedr
Zenab Hafiez
Nagwa Metwaly Fahmy
Gamal Hussaien

The major objective of the 2000 Egypt Demographic and Health Survey sample design was to provide estimates with acceptable precision for key demographic characteristics such as fertility, infant and child mortality, and child health indicators. The sample was designed to provide these estimates at the national level, for urban and rural areas, and for six main residential categories: Urban Governorates, urban Lower Egypt, rural Lower Egypt, urban Upper Egypt, rural Upper Egypt, and the Frontier Governorates. In addition, the sample design allows for estimates of the contraceptive prevalence rate and other basic health indicators, but not fertility and mortality rates for each of the 21 governorates in the Urban Governorates, Lower Egypt, and Upper Egypt. ${ }^{1}$ In the Frontier Governorates, the sample size for the individual governorates is not sufficiently large to allow for separate governorate level estimates.

To achieve the above objectives, a three stage probability sample was designed. The following is a detailed description of the 2000 EDHS sample design. A description of the field activities involved in the implementation of the sample design is included in Chapter I of this report.

## B. 1 Sample Design

The main concern in developing the sample design for the 2000 EDHS was to secure a sufficient number of cases in each domain in order to reduce sampling error and provide estimates of adequate precision for the purposes of the survey. Sampling error has two components, one corresponding to the variation between primary sampling units (PSUs) and the other to the variation within PSUs, with the major component usually being the variation between PSUs. Thus, the total number of PSUs is an important factor in controlling the size of the sampling error since the variation between PSUs depends on this number, i.e., generally the smaller the number of PSUs, the greater will be the variation.

The DHS sampling policy recommends a minimum of 1000-1200 women per domain. This number of cases allows for a reasonably precise estimate of the total fertility rate for the domain. Thus, given an optimal sample take of about 30 cases per PSU, a minimum of 40 PSUs were required per each of the six major areal domains and 33 PSUs for the Frontier Governorates in order to meet the demands for regional estimates.

As noted above, however, the 2000 EDHS sample had to be selected in such fashion as to also allow for estimation of contraceptive prevalence rates and other basic health indicators for 21 separate governorates. DHS sampling policy recommends that minimum of 450 completed interviews with eligible women be obtained to provide reliable estimates of these types of variables. This principle was used in determining the size and distribution of the target sample for the 2000 DHS presented in Table B. 1 by governorate.

[^17]| Table B. 1 Sample parameters |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Distribution of the target number of households and individual interviews and primary sampling units by governorate and urban-rural location and the overall sampling fractions by governorate, 2000 Egypt DHS |  |  |  |  |  |
| Governorates | Target number of households | Target number of women | Number of urban PSUs | Number of rural PSUs | Overall sampling fraction |
| Urban Governorates |  |  |  |  |  |
| Cairo | 1,532 | 1,219 | 40 | - | 0.000913 |
| Alexandria | 1,069 | 851 | 29 | - | 0.001306 |
| Port Said | 565 | 450 | 15 | - | 0.005007 |
| Suez | 566 | 450 | 15 | - | 0.005823 |
| Lower Egypt |  |  |  |  |  |
| Damietta | 503 | 450 | 4 | 11 | 0.002657 |
| Dakahlia | 894 | 799 | 7 | 19 | 0.000976 |
| Sharkia | 866 | 783 | 6 | 20 | 0.001013 |
| Kalyubia | 829 | 722 | 10 | 14 | 0.001310 |
| Kafr El-Sheikh | 605 | 546 | 4 | 14 | 0.001374 |
| Gharbia | 806 | 715 | 7 | 17 | 0.001116 |
| Menoufia | 676 | 614 | 4 | 17 | 0.001179 |
| Behera | 792 | 715 | 6 | 18 | 0.001044 |
| Ismailia | 527 | 450 | 8 | 7 | 0.004397 |
| Upper Egypt |  |  |  |  |  |
| Giza | 1,047 | 949 | 17 | 14 | 0.000961 |
| Beni Suef | 543 | 532 | 4 | 14 | 0.001797 |
| Fayoum | 566 | 557 | 4 | 15 | 0.001601 |
| Menya | 732 | 726 | 5 | 19 | 0.001172 |
| Assuit | 674 | 654 | 6 | 16 | 0.001263 |
| Souhag | 712 | 702 | 5 | 18 | 0.001360 |
| Qena | 687 | 666 | 6 | 16 | 0.001501 |
| Aswan | 482 | 450 | 6 | 9 | 0.002949 |
| Frontier Governorates |  |  |  |  |  |
| Red Sea | 181 | 201 | 5 | 2 | 0.007542 |
| New Valley | 168 | 186 | 3 | 4 | 0.006462 |
| Matrouh | 214 | 237 | 5 | 3 | 0.005609 |
| North Sinai | 234 | 259 | 5 | 3 | 0.005014 |
| South Sinai | 105 | 117 | 3 | 2 | 0.010217 |
| Total | 16,575 | 1,5000 | 228 | 272 |  |

## B. 2 Sample Frame

For each governorate, a list of all shiakhas/towns constituted the initial primary sample frame for urban areas, and a list of all villages constituted the frame for the rural areas. The Central Agency for Public Mobilization and Statistics provided the required population information for each of the administrative units in the frame based on 1996 Population Census. The frame was updated taking into consideration administrative changes that had taken place since the census.

## B. 3 Sample Selection

A total of 500 primary sampling units (PSUs) were selected from the 26 governorates with probability proportional to the size of the unit. Of these, 228 units were in urban areas and 272 units in rural areas (Table B.1). Before the selection of PSUs, the frame within each governorate and residential category (urban/rural) was arranged in serpentine order, beginning from the northwest corner of the governorate. Shiakhas or villages with less than 2,500 population were grouped with contiguous shiakhas or villages until the minimum size was obtained.

Table B. 2 shows the list of the selected PSUs allocated according to governorates and urbanrural location. Figures B.1.1-B.1.4 show the geographic distribution of the sample.

Detailed maps were obtained for the selected PSUs. The map for each unit was divided into a number of equal-sized parts, with each part including approximately 5,000 population. One part was then selected systematically with equal probability from most of the PSUs. A quick count was then carried out to divide the selected part into standard segments of about 200 households. Two segments were then selected from each part, with probability proportional to the estimated number of housing units at the quick count stage.

For shiakhas (villages) in which there were 4,000 or more households (approximately 20,000 population), the selection procedures were modified slightly. Two parts were selected systematically with equal probability from these large units. A quick count was carried out to divide each part into segments of around 200 households. One segment was then selected from each part systematically with probability to the estimated number of housing units at the quick count.

A total of 1,000 segments were selected in this stage. A household listing operation was implemented in each of selected segments. Based on the household listing, a systematic random sample of households was selected from each segment in a manner as to obtain a self-weighting sample within each governorate. However, the number of households selected from each governorate is disproportional to the governorate's share of the national population. Accordingly, the 2000 EDHS sample is non-self-weighting at the national level.

Finally, a systematic sub-sample of one half of all households was selected for the anemia testing. All ever-married women, children under age six, and adolescents 11-19 years in the households of the subsample were eligible for the anemia testing.

## B. 4 Sample Implementation

Results of the sample implementation are presented in Table B.3. The results indicate that 17,521 households were selected for the 2000 EDHS sample. The EDHS field staff successfully interviewed 16,957 of the sample households, for a response rate of 99 percent. In the interviewed households, 15,573 eligible women were interviewed with a response rate 99.5 percent. This gives an overall response rate of 99 percent.

Table B. 2 Primary sampling units by governorate, 2000 Egypt DHS

## URBAN GOVERNORATES

El-Marg El-Baharia
Al-Salam Al-Sharkia
El-Matar
Al-Zahraa and Masaken El-Helmeia
El-Ezab
Ein Shams El-Gharbia
Menyet El-Seerg
El-Zawya El-Hamra Masaken
El-Zaytoon El-Gharbia
Monshait El-Bakry
Al-Mabiada
El-Golf
El-Katamia+Kism El-Amal
El-Khazan
El-Ansha and Moneera
Arab El-Yasar
El-Basateen El-Gharbia
Dar El-Salam
Maadi El-Sarayat El-Gharbia
Helwan El-Balad

Cairo

El-Marg El-Baharia<br>Al-Salam Al-Sharkia<br>El-Matar<br>Al-Zahraa and Masaken El-Helmeia<br>El-Ezab<br>Ein Shams El-Gharbia<br>Menyet El-Seerg<br>El-Zawya El-Hamra Masaken<br>El-Zaytoon El-Gharbia<br>Monshait El-Bakry<br>Al-Mabiada<br>El-Golf<br>El-Katamia+Kism El-Amal<br>El-Khazan<br>El-Ansha and Moneera<br>Arab El-Yasar<br>El-Basateen El-Gharbia<br>Dar El-Salam<br>Helwan El-Balad

Berket El-Hag<br>Al-Asara El-Gidida<br>Al-Zahraa and Masaken El-Helmeya<br>Ein Shams El-Sharkia<br>Shagret Maryam<br>El-Sahel<br>El-Ezab<br>El-Zawya El-Heamra Masaken<br>Masaken El-Ameeria El-Shamalia<br>Hadaek El-Koba<br>Al-Shamashergy<br>Manshaat Naser<br>El-Adawaya+El-Sheikh Farag<br>El-Batnia<br>Al-Abagia<br>El-Manial El-Gharby<br>El-Basateen El-Gharbia<br>Ezbet Nafea<br>El-Maasara El-Mahata<br>Al-Hadaeeka El-Dawlia+Al-Wafaa and Al-<br>Amal City

## Alexandria

El-Seioufe Kebly<br>El-Mundara Kebly<br>El-Manshia El-Bahariya<br>Sidi Beshr Kebly<br>El-Kaseie<br>Dana El-Gidida<br>Zouroubana and El-Hamamah<br>Ezebet Saad<br>El-Tamrazia<br>Ombruze and Mouharam Bek<br>El-Gowira<br>El-Dekheila<br>El-Metrasse<br>El-Amriah Shark

El-Amrawy
El-Mundara Kebly
Sidi Beshr Kebly
El-Zahiria and Azbat El-Safieh
Hagare El-Nouatia
Dana El-Gidida
Sidi Gaber
El-Azarita and El-Shatby
El-Babe El-Gadide Sharke
Ragheb Basha
Karmouz Gharb
El-Agamy El Bahria
El-Wordianne Kebly
Kattea El-Nahdah
Al-Karah and El-Toubgiah and Kafr ElGhates

## Port Said

El-Zouhour<br>El-Zouhour<br>El-Galaa<br>El-Manakh<br>El-Arab<br>Port Fouad<br>El-Salam<br>El-Ganoub

El-Zouhour<br>El-Zouhour<br>El-Galaa<br>Abou El-Hassan<br>Ibrahim Hassanein<br>Port Fouad<br>El-Kabouty

## Suez

Fessal and El-Sabah
Fessal and El-Sabah
Sheiakha Khameth
Kism Thaleth
Kism Thaleth
Kism Thaleth
Kism Rabia

## LOWER EGYPT

## Damietta

## Urban

Ezbet El-Borg
Kafer El-Battikh
Rural
El-Anania
Shat Ezbet El-Lahm
El-Basatine
Kafr El-Wastany
El-Naseiria
Meat El-Khouly Abd Al-Allah
Kism Awal
Faraskour

Shat El-Shouara
Shat Mouhab and El-Saiala
El-Mahamadia
El-Barasheia
El-Zaetra+El-Salam

## Dakahlia

## Urban

El-Gamalia
Nabroh
Sandoub Kafr El-Manasra
Meet Ghamr
Rural
El-Zahraa
Dengway
El-Kafr El-Gadid

Belkas
Kism Awal Meet Talkha
Gedila

Monshaat Abd El-Kader
El-Dakanwa
Ashmoon El-Roman
Meet Tareef
Menyet Sandoub
Kafr Bossat+Kafr El-Kasaly
Abou Karameet
El-Deer
Atmeeda
Koom El-Nour+Kafr El-Daleel

Telbana
Batra
El-Yousefia
Tanbool El-Kobra
Monshaat El-Ekhwa
Dandeet+Kafr Mahmoud Nafee

## Sharkia

Urban
Al-Ebrahimia
Al-Hosainia
Abo Hamad
Rural
El-Gamalia
Telrak
El-Khatara
Abou Yaseen
El Hawaber
Bardeen
Meet Abou Aly
Bany Geri
Meet Bashar
Sendanhoor
Fakous
Al-Gamea
Al-Asher Men Ramadan

San El-Hagar El-Keblia
El-Hagarsa
El-Nawafaa
Harbeet
Monshaat Sahbara
Sheeba El Nakaria
Manzel Hayan+Monshaat Ghali Mansour
El-Salam
Sanhoa+Monshaat Fathi
El-Roboomia

## Kalyubia

Urban
Kafer Shokr
El-Kanater El-Khairia
Bigam
Bigam
Bigam
Rural
Kafr El-Welga+Kafr El-Shahawy Khater Degwy
Marsafa and Kafr Ahmed Hasheesh
Tant El-Gezeera
Kafr El-Deer
El-Khosoos
Nay
Abou El-Gheet

Kafer Manaker
Kalyub
Bahtim
Bahtim
Bahtim

El-Safayna
El-Ahraz
Nawa
Saryakoos
Kalma
Bahada

## Kafr El-Sheikh

Urban
\(\left.\begin{array}{ll}Sidi Salim \& El-Riad <br>
Ali Moustaffa El-Zawawi \& <br>

Desouk\end{array}\right]\)| Rural |  |
| :--- | :--- |
| El-Sahel El-Kebly (El-Wahabia) | Ketaa El-Hamoul |
| El-Abassia | El-Foukahaa El-Keblia |
| Kafr El-Masharka | Sandyon |
| Sanhour El-Madina | Kafer El-Arab |
| El-Koum El-Tawille | Arymone |
| Dakmyra | Masier |
| Kouna | Beradaa |
|  |  |
|  | Gharbia |
|  |  |
| Urban |  |
| Mahala El-Borg | Emam El-Hoseiny |
| Samanoud | El-Borsa |
| Wabour El-Nour | Sabry |
| Zifta |  |
|  |  |
| Rural |  |
| El-Gabereya | Balkeena |
| Kafr El-Bastawisy | Mansheyt Tanabra |
| Kafr Hassan | El-Sheen |
| Kafr Abo Gendy+Kafr Ahmed Shalaby | Karansho |
| El-Dalgamon | Kafr Yaakoub |
| Heset Berma | Sanadeed |
| Mahalat Menouf | El-Regabia |
| Kafr El-Sheikh Mofttah+Kafr Khazael | Hanoot |
| Kafr El-Daghayda |  |
|  |  |

## Menoufia

| Urban <br> El-Shohada <br> El-Sadat | Kafr El-Messalha <br>  <br> Ashmoun |
| :--- | :--- |
| Rural |  |
| Tookh Dalka | El-Dabayba |
| Meet Om Saleh | Sharaness |
| Manshaat Abo Zekry | El-Maay |
| Kafr Dakmak+Kafr El-Magayza | Darageel |
| Monshaat El-Sadat+Kafr Sarsamoos | Tata |
| Tamlay | Abo Seneeta+Asreega |
| Kafr El-Khadra | El-Ferooneya |
| Samadon | Sarawa |
| Monshiet Gerges |  |

## Behera

Urban
Kafr El-Dawar
Abo Hommos
Housh Issa

Rural
El-Maadia
Kom Asho
Belkitr
Samakhrt
Kafr Beni Helal+Kafr El-Hamida
Abo El-Shekaf
El-Daherya
El-Wakanya
Demishly

El-Akresha
Tamous
Wady El-Natroun

El-Wastania
El-Gorn
Sernbay
Zawyat Ghazal
Troge
Gezeiret Neklah+Zamzam
Kalishan
El-Bregat
El-Sokhna+El-Khartoum

## Ismailia

Makka
El-Heker
Hai El-Sheikh Zaid
El-Tall El-Kebeer

Abou Souer El-Balad
Nafisha
Oum Azam

## UPPER EGYPT

## Giza

El Warrak
El Mounira
Gezeiret Meet okbah
Boulak El Dakrour
Nazlet Bahgat
Geziret El Dahab
El Omrania El Gharbia
Oula El haram

El meatemedia
Kerdassa

| Wardan | Sakill |
| :--- | :--- |
| El-Manaout | Oum khanan |
| Dahshour | Al Afouaz |
| Ghoumaza El Koubra | El Messanda |
| Monshiet Abo Abass+Kafer Kassem+ | Bany Saleh |
| Monshiet Abd El-Saied |  |

## Beni Suef

Urban
Nasser
Maqbel
Rural
Abo Seer Malk
Kafr Bany Osman
Koom Abo Khalid
Abshana and Bany moosa
Sherif
Ghayada El Sharkia
El Barky
El Gezira El-Gharbia
Semastta

Bany Heidar
El Zaytoon
Kalha
Balfeya
Bani Mady
Dashasha
Talt

## Fayoum

Urban

Tamia
Kism Thany
Rural
Dar El-Salam
Nekalifia
Abo kessaeh
Zade+Rouake
El-Basyonia
Manashy El-Khatebe
El-Menya
Monshiet Fesale+Monshiet Olwy
Abshaway
Kism Rabia

Moneshaet El-Doctor El-Gamal
Kadeemine
El-Alwaia
Karoun
Talate
El-Hagar
Kasr El-Bassel

## Menya

Urban
Bani Mazar
Kism Rabia
Deir Mowas
Rural
El Baskaloun
Dahamro
El Kesse

Smallout
El Fekria

Aba El wakfe
Abshak el Ghazal
Monshiet El Sheikh Fadel+Monshiet Abou Aziz

Kofour El-Soulia<br>Deer Samalout<br>Talah<br>Abo Korkasse<br>Manhary<br>Tounet El-Gabel<br>Tanouf

El Sharania+El-Sharawia
Nazlet El-Amoudin
Tahnasha
Bany Ebead
El Rodah
Monshiet El-Maghalka

## Assuit

Urban
Dairout
El-Awla
El-Waleedia El-Keblia

Rural
Kharfa
El-Mounsha El-Koubra
Oum El-Qusour
Bani Mohamadiatte
Doronka
Awlad Badr
El-Nakhela
El-Bayadieh

Manflout
El-Sadesa
Sahel Selim

Masarah
Koser El-Amarnah
Gohdam
El-Zawia
Mousha
El-Shamia
Deir El-Ganadlah
Negoe El-Maadi

## Souhag

Urban

Tahta
Mazen
El-Baliana
Rural
El-Madmar
Sahel Tahta
El-Sheikh Youssef +El Aamour
Fawagly
Awlad Azoz
El-Khananse Gharb
El-Hager Be Awlad Yehia
El-Magabra
El-Samta
Akhmiem
Gerga

El-Khazendaria
Guhayna El Sharkia
Shandawiel
Arab El-Atawla
Demno
Awlad Hamza
Awlad Yehia Bahary
Kharfa Gerga
Monshiet Bardees

## Qena

Urban
Deshna
Farshout
El-Karena

Kism Thaleth
Qous
Armant

Rural

## Aswan

Urban
Edfo
Draw
Shiakha Thania

Rural
El-Hagz Bahary
El-kalh Shark
Akleet
Maleeha
El Kobania Gezeirt Behrif
Koum-Ombou
Shiakha Thania
Khazan Aswan+Abo Sombol El Siahia City

El-Ramady Bahary
El-Dekka
El-Manshia El-Gidida
Benban

## FRONTIER GOVERNORATES

## Red Sea

Urban

Ras Ghareb
El-Hurgada
El-Koseir
Rural
Hurgada Port+Gamasa+ El Zaafarana+Deers

Ras Ghareb
Safaga

Oum El Huwetat and El Gowasees+ El-Lakeeta+Mokawenat Nokta 85+ Heger Kena

New Valley
Urban

| El-Kharga <br> Mout | El-Kharga |
| :--- | :--- |
| Rural |  |
| El Max El Kibly+El Shirkah+El Monira El-Gidida <br> El Maasara+El-Kalamon Ezab El Kasr+El Mowhob |  |

El-Gidida
Ezab El Kasr+El Mowhob

## Matrouh

Urban
El-Saloom
Matrouh
El-Dabaa
Matrouh
El-Hammam+El Alamin

Rural
El-Mathany+El Zougheiraat Kora El Kheregeen
Koshook Ageera+El Zayat+Aloush+ El-Nasr+Awlad Maree

## North Sinai

Urban
Rafah
Shiakhet Kism Thani El Ariesh
Shiakhet Kism Awel El Ariesh
Beir El Abd
El Ahtem+El Salamia+El Sharagba+
El Kashef+Aroug+Fakher El dein
Rural
Shaibana+El Berth
Kattia+Romanah
El -Sakaska and El Taweel

South Sinai
Urban
Nowiba + Dahab+Sant-katrin
Tor Sinai

Rural
Gherendal+AlHoweesh+AlRamsha+ AlGobeil+Seel Habran+Seel Meear+ AlRamla+AlSahw+El Kilo 9+El Kilo 45+ Wady Altoor +Wady Asla+Wady Habran+ Wady Aaboura Wady Romouz+ Wady Maseead+Wady Meear+
Wady Wagran+Wady Aareen+Wady Khadra+
Faan+Raas Gara+Sheikh Moussa

Figure B.1.1 Distribution of Sampling Points, Urban Governorates, 2000 EDHS


Figure B.1.2 Distribution of Sampling Points, Lower Egypt, 2000 EDHS

Figure B.1.3 Distribution of Sampling Points, Upper Egypt, 2000 EDHS


Figure B.1.4 Distribution of Sampling Points, Frontier Governorates, 2000 EDHS


## Table B. 3 Sample implementation

Percent distribution of households and eligible women by results of the interview, and household response rates, eligible woman response rates, and overall response rates, according to sample domain, urban-rural residence, and place of residence, 2000 Egypt DHS

| Interview results | Urban | Rural | Place of residence |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Urban Governorates | Lower Egypt |  |  | Upper Egypt |  |  | Frontier Governorates |  |
|  |  |  |  | Total | Urban | Rural | Total | Urban | Rural |  |  |
| Selected households |  |  |  |  |  |  |  |  |  |  |  |
| Completed (C) | 95.3 | 98.4 | 94.4 | 97.3 | 95.2 | 98.4 | 97.8 | 96.8 | 98.3 | 97.9 | 96.8 |
| Household present but no competent respondent at home (HP) | 0.9 | 0.3 | 1.2 | 0.5 | 0.9 | 0.2 | 0.4 | 0.5 | 0.4 | 0.0 | 0.6 |
| Postponed (P) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Refused (R) | 0.0 | 0.2 | 0.4 | 0.1 | 0.4 | 0.0 | 0.1 | 0.4 | 0.0 | 0.1 | 0.4 |
| Dwelling not found (DNF) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Household absent (HA) | 0.3 | 0.9 | 1.9 | 0.6 | 1.0 | 0.4 | 0.3 | 0.4 | 0.3 | 0.9 | 1.3 |
| Dwelling vacant/address not a dwelling (DV) | 2.0 | 0.9 | 1.9 | 1.5 | 2.4 | 1.0 | 1.2 | 1.8 | 0.8 | 1.1 | 1.4 |
| Dwelling destroyed (DD) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Other (O) | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of households | 9,119 | 8,402 | 4,173 | 6,661 | 2,354 | 4,307 | 5,748 | 1,968 | 3,780 | 939.0 | 17,521 |
| Household response rate (HRR) ${ }^{1}$ | 98.7 | 99.7 | 98.3 | 99.4 | 98.6 | 99.7 | 99.4 | 99.2 | 99.5 | 99.9 | 99.1 |
| Eligible women |  |  |  |  |  |  |  |  |  |  |  |
| Completed (EWC) | 99.5 | 99.5 | 99.4 | 99.6 | 99.7 | 99.5 | 99.5 | 99.6 | 99.4 | 99.9 | 99.5 |
| Not at home (EWNH) | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.5 | 0.0 | 0.4 |
| Postponed (EWP) | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Refused (EWR) | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 |
| Partly completed (EWPC) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 7,211 | 8,438 | 3,122 | 6,135 | 1,837 | 4,298 | 5,441 | 1,677 | 3,764 | 951.0 | 15,649 |
| Eligible woman response rate (EWRR) ${ }^{2}$ | 99.5 | 99.5 | 99.4 | 99.6 | 99.7 | 99.5 | 99.5 | 99.6 | 99.4 | 99.9 | 99.5 |
| Overall response rate (ORR) ${ }^{3}$ | 98.2 | 99.2 | 97.6 | 98.9 | 98.3 | 99.3 | 98.9 | 98.8 | 99.0 | 99.8 | 98.7 |

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

$$
\frac{C}{C+H P+P+R+D N F}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:
$\qquad$
$E W C+E W N H+E W P+E W R+E W P C$
${ }^{3}$ The overall response rate (ORR) is calculated as:

$$
\mathrm{ORR}=\mathrm{HRR} * \mathrm{EWRR}
$$

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2000 EDHS to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2000 EDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2000 EDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2000 EDHS is the ISSA Sampling Error Module (ISSAS). This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jacknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r=y / x$, where $y$ represents the total sample value for variable $y$, and $x$ represents the total number of cases in the group or subgroup under consideration. The variance of $r$ is computed using the formula given below, with the standard error being the square root of the variance:

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

in which

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

where $\quad h \quad$ represents the stratum which varies from 1 to H ,
$m_{h} \quad$ is the total number of enumeration areas selected in the $h^{\text {th }}$ stratum,
$y_{h i} \quad$ is the sum of the values of variable $y$ in EA $i$ in the $h^{\text {th }}$ stratum,
$x_{h i} \quad$ is the sum of the number of cases in EA $i$ in the $h^{\text {th }}$ stratum, and
$f \quad$ is the overall sampling fraction, which is so small that it is ignored.
The Jacknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers all but one clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2000 EDHS, there were 1,000 non-empty clusters ( 2 clusters per PSU). Hence, 1,000 replications were created. The variance of a rate $r$ is calculated as follows:

$$
\operatorname{var}(\gamma)=\frac{l}{k(k-l)} \sum_{i=1}^{\ell}\left(\gamma_{i}-\gamma\right)^{2}
$$

in which

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

where $r$ is the estimate computed from the full sample of 1000 clusters,
$r_{(i)} \quad$ is the estimate computed from the reduced sample of 999 clusters ( $i^{\text {th }}$ cluster excluded), and
$k \quad$ is the total number of clusters.
In addition to the standard error, ISSAS computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. ISSAS also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2000 EDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the residential categories: Urban Governorates, total Lower Egypt, urban Lower Egypt, rural Lower Egypt, total Upper Egypt, urban Upper Egypt, rural Upper Egypt, and Frontier Governorates. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table C.1. Tables C. 2 to C. 12 present the value of the statistic ( R ), its standard error (SE), the number of unweighted $(\mathrm{N})$ and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ( $\mathrm{R} \pm 2 \mathrm{SE}$ ), for each variable. The DEFT is considered undefined when the standard error considering simple ramdom sample is zero (when the estimate is close to 0 or 1 ).

In general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. There are some differentials in the relative standard error for the estimates of sub-populations. For example, for the variable contraceptive use for currently married women age 15-49, the relative standard errors as a percent of the estimated mean for the whole country, for urban areas, and for rural areas are 1.2 percent, 1.4 percent, and 1.8 percent, respectively.

The confidence interval (e.g., as calculated for contraceptive use for currently married women age $15-49$ ) can be interpreted as follows: the overall national sample proportion is 0.561 and its standard error is .006 . Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e. $0.561 \pm 2(.006)$. There is a high probability ( 95 percent) that the true average proportion of contraceptive use for currently married women age 15 to 49 is between 0.549 and 0.573 .

## Table C. 1 List of selected variables for sampling errors, 2000 Egypt DHS

| Variable name | Estimate | Base population |
| :---: | :---: | :---: |
| No education | Proportion | Ever-married women 15-49 |
| Completed secondary/higher | Proportion | Ever-married women 15-49 |
| Currently married | Proportion | Ever-married women 15-49 |
| Children ever born | Mean | All women 15-49 |
| Childrn surviving | Mean | All women 15-49 |
| Ever used any method | Proportion | Currently married women 15-49 |
| Currently using any method | Proportion | Currently married women 15-49 |
| Currently using any modern method | Proportion | Currently married women 15-49 |
| Currently using pills | Proportion | Currently married women 15-49 |
| Currently using IUD | Proportion | Currently married women 15-49 |
| Currently using injectables | Proportion | Currently married women 15-49 |
| Currently using norplant | Proportion | Currently married women 15-49 |
| Currently using condom | Proportion | Currently married women 15-49 |
| Currently using female sterilization | Proportion | Currently married women 15-49 |
| Currently using periodic abstinence | Proportion | Currently married women 15-49 |
| Currently using withdrawal | Proportion | Currently married women 15-49 |
| Using public sector source | Proportion | Currently married women 15-49 |
| Want no more children | Proportion | Currently married women 15-49 |
| Delay at least two years | Proportion | Currently married women 15-49 |
| Ideal number of children | Mean | Ever-married women 15-49 |
| Mothers received tetanus injection | Proportion | Births in last 5 years |
| Mothers received medical care at delivery | Proportion | Births in last 5 years |
| Child had diarrhea in last two weeks | Proportion | Children 0-59 months |
| Treated with ORS packets | Proportion | Children under 5 with diarrhea in last 2 weeks |
| Consulted medical personnel | Proportion | Children under 5 with diarrhea in last 2 weeks |
| Had immunization record | Proportion | Children 12-23 months |
| Received BCG vaccination | Proportion | Children 12-23 months |
| Received DPT vaccination (3 doses) | Proportion | Children 12-23 months |
| Received polio vaccination (3 doses) | Proportion | Children 12-23 months |
| Received measles vaccination | Proportion | Children 12-23 months |
| Fully immunized | Proportion | Children 12-23 months |
| Weight-for-height | Proportion | Children 0-59 months |
| Height-for-age | Proportion | Children 0-59 months |
| Weight-for-age | Proportion | Children 0-59 months |
| Anemia among ever-married women | Proportion | Ever-married women 15-49 |
| Anemia among children under age five | Proportion | Children 6-59 months |
| Total fertility rate (3 years) | Rate | Women-years of exposure to childbearing |
| Neonatal mortality rate (0-9 years) | Rate | Number of births |
| Postneonatal mortality rate (0-9 years) | Rate | Number of births |
| Infant mortality rate (0-9 years) | Rate | Number of births |
| Child mortality rate (0-9 years) | Rate | Number of births |
| Under-five mortality rate (0-9 years) | Rate | Number of births |

## Table C. 2 Sampling errors - National sample, 2000 Egypt DHS

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $R+2 S E$ |
| No education | 0.432 | 0.009 | 15573 | 15573 | 2.202 | 0.020 | 0.415 | 0.450 |
| Completed secondary or higher | 0.305 | 0.008 | 15573 | 15573 | 2.254 | 0.027 | 0.289 | 0.322 |
| Currently married | 0.924 | 0.003 | 15573 | 15573 | 1.235 | 0.003 | 0.918 | 0.929 |
| Children ever born | 2.387 | 0.051 | 22614 | 22884 | 1.147 | 0.021 | 2.286 | 2.488 |
| Children surviving | 2.114 | 0.045 | 22614 | 22884 | 1.156 | 0.021 | 2.025 | 2.204 |
| Ever used any method | 0.773 | 0.005 | 14393 | 14382 | 1.453 | 0.007 | 0.763 | 0.783 |
| Currently using any method | 0.561 | 0.006 | 14393 | 14382 | 1.340 | 0.010 | 0.550 | 0.573 |
| Currently using any modern method | 0.539 | 0.006 | 14393 | 14382 | 1.362 | 0.011 | 0.527 | 0.550 |
| Currently using pills | 0.095 | 0.003 | 14393 | 14382 | 1.268 | 0.033 | 0.088 | 0.101 |
| Currently using IUD | 0.355 | 0.005 | 14393 | 14382 | 1.368 | 0.015 | 0.345 | 0.366 |
| Currently using injectables | 0.061 | 0.003 | 14393 | 14382 | 1.296 | 0.042 | 0.056 | 0.066 |
| Currently using norplant | 0.002 | 0.000 | 14393 | 14382 | 1.213 | 0.216 | 0.001 | 0.003 |
| Currently using condom | 0.010 | 0.001 | 14393 | 14382 | 0.975 | 0.082 | 0.008 | 0.011 |
| Currently female sterilization | 0.014 | 0.001 | 14393 | 14382 | 1.074 | 0.074 | 0.012 | 0.016 |
| Currently using periodic abstinence | 0.006 | 0.001 | 14393 | 14382 | 1.081 | 0.114 | 0.005 | 0.008 |
| Currently using withdrawal | 0.002 | 0.000 | 14393 | 14382 | 1.078 | 0.185 | 0.001 | 0.003 |
| Using public sector source | 0.486 | 0.008 | 7559 | 7760 | 1.449 | 0.017 | 0.469 | 0.503 |
| Want no more children | 0.640 | 0.005 | 14393 | 14382 | 1.163 | 0.007 | 0.630 | 0.649 |
| Delay at least two years | 0.138 | 0.003 | 14393 | 14382 | 1.180 | 0.025 | 0.131 | 0.145 |
| Ideal number of children | 2.942 | 0.015 | 12107 | 12109 | 1.252 | 0.005 | 2.912 | 2.973 |
| Mothers received tetanus injection | 0.726 | 0.007 | 11467 | 11361 | 1.422 | 0.010 | 0.712 | 0.740 |
| Mothers received medical care at delivery | 0.609 | 0.009 | 11467 | 11361 | 1.660 | 0.015 | 0.590 | 0.627 |
| Child had diarrhea in last 2 weeks | 0.071 | 0.003 | 10951 | 10855 | 1.248 | 0.045 | 0.065 | 0.078 |
| Treated with ORS packets | 0.337 | 0.016 | 816 | 771 | 0.918 | 0.048 | 0.305 | 0.370 |
| Consulted medical personnel | 0.463 | 0.022 | 816 | 771 | 1.138 | 0.047 | 0.420 | 0.506 |
| Had immunization record | 0.725 | 0.011 | 2198 | 2170 | 1.117 | 0.015 | 0.703 | 0.747 |
| Received BCG vaccination | 0.993 | 0.002 | 2198 | 2170 | 1.029 | 0.002 | 0.990 | 0.997 |
| Received DPT vaccination (3 doses) | 0.940 | 0.006 | 2198 | 2170 | 1.201 | 0.007 | 0.928 | 0.952 |
| Received polio vaccinations (3 doses) | 0.949 | 0.006 | 2198 | 2170 | 1.194 | 0.006 | 0.938 | 0.960 |
| Received measles vaccination | 0.969 | 0.004 | 2198 | 2170 | 1.164 | 0.005 | 0.960 | 0.977 |
| Fully immunized | 0.922 | 0.007 | 2198 | 2170 | 1.136 | 0.007 | 0.909 | 0.935 |
| Weight-for-height | 0.025 | 0.002 | 10296 | 10194 | 1.307 | 0.082 | 0.021 | 0.029 |
| Height-for-age | 0.187 | 0.006 | 10296 | 10194 | 1.406 | 0.031 | 0.175 | 0.198 |
| Weight-for-age | 0.040 | 0.002 | 10296 | 10194 | 1.143 | 0.057 | 0.036 | 0.045 |
| Anemia among ever-married women | 0.292 | 0.007 | 7683 | 7684 | 1.358 | 0.024 | 0.278 | 0.306 |
| Anemia among children under age five | 0.299 | 0.009 | 4770 | 4708 | 1.208 | 0.029 | 0.282 | 0.316 |
| Total fertility rate | 3.526 | 0.048 | 444818 | 446180 | 1.317 | 0.014 | 3.431 | 3.621 |
| Neonatal mortality rate (0-9 years) | 28.959 | 1.309 | 23036 | 22875 | 1.051 | 0.045 | 26.216 | 31.431 |
| Postneonatal mortality rate (0-9 years) | 25.782 | 1.367 | 23058 | 22894 | 1.179 | 0.053 | 23.048 | 28.516 |
| Infant mortality rate (0-9 years) | 54.741 | 1.972 | 23060 | 22897 | 1.160 | 0.036 | 50.797 | 58.685 |
| Child mortality rate (0-9 years) | 15.322 | 0.972 | 23106 | 22947 | 1.090 | 0.063 | 13.378 | 17.266 |
| Under-five mortality rate (0-9 years) | 69.224 | 2.338 | 23132 | 22972 | 1.222 | 0.034 | 64.548 | 73.901 |
| NA = Not applicable |  |  |  |  |  |  |  |  |

## Table C. 3 Sampling errors - Urban sample, 2000 Egypt DHS

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect <br> (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.259 | 0.013 | 7178 | 6871 | 2.452 | 0.049 | 0.233 | 0.284 |
| Completed secondary or higher | 0.458 | 0.015 | 7178 | 6871 | 2.574 | 0.033 | 0.428 | 0.489 |
| Currently married | 0.921 | 0.004 | 7178 | 6871 | 1.289 | 0.004 | 0.913 | 0.929 |
| Children ever born | 2.351 | 0.073 | 9366 | 9028 | 1.220 | 0.031 | 2.205 | 2.496 |
| Children surviving | 2.137 | 0.067 | 9366 | 9028 | 1.238 | 0.031 | 2.003 | 2.270 |
| Ever used any method | 0.827 | 0.006 | 6621 | 6328 | 1.336 | 0.007 | 0.815 | 0.840 |
| Currently using any method | 0.612 | 0.007 | 6621 | 6328 | 1.239 | 0.012 | 0.597 | 0.627 |
| Currently using any modern method | 0.589 | 0.008 | 6621 | 6328 | 1.261 | 0.013 | 0.574 | 0.604 |
| Currently using pills | 0.103 | 0.004 | 6621 | 6328 | 1.199 | 0.043 | 0.094 | 0.112 |
| Currently using IUD | 0.410 | 0.008 | 6621 | 6328 | 1.287 | 0.019 | 0.394 | 0.425 |
| Currently using injectables | 0.040 | 0.003 | 6621 | 6328 | 1.277 | 0.077 | 0.034 | 0.046 |
| Currently using norplant | 0.002 | 0.001 | 6621 | 6328 | 1.086 | 0.306 | 0.001 | 0.003 |
| Currently using condom | 0.017 | 0.002 | 6621 | 6328 | 0.979 | 0.093 | 0.014 | 0.020 |
| Currently female sterilization | 0.016 | 0.002 | 6621 | 6328 | 1.233 | 0.118 | 0.012 | 0.020 |
| Currently using periodic abstinence | 0.012 | 0.002 | 6621 | 6328 | 1.160 | 0.131 | 0.009 | 0.015 |
| Currently using withdrawal | 0.004 | 0.001 | 6621 | 6328 | 1.167 | 0.224 | 0.002 | 0.006 |
| Using public sector source | 0.420 | 0.012 | 3805 | 3735 | 1.552 | 0.030 | 0.395 | 0.445 |
| Want no more children | 0.654 | 0.008 | 6621 | 6328 | 1.351 | 0.012 | 0.639 | 0.670 |
| Delay at least two years | 0.135 | 0.006 | 6621 | 6328 | 1.367 | 0.042 | 0.124 | 0.147 |
| Ideal number of children | 2.715 | 0.019 | 5858 | 5585 | 1.308 | 0.007 | 2.676 | 2.754 |
| Mothers received tetanus injection | 0.701 | 0.011 | 4634 | 4374 | 1.424 | 0.016 | 0.678 | 0.724 |
| Mothers received medical care at delivery | 0.814 | 0.012 | 4634 | 4374 | 1.778 | 0.015 | 0.789 | 0.839 |
| Child had diarrhea in last 2 weeks | 0.061 | 0.005 | 4456 | 4209 | 1.298 | 0.079 | 0.051 | 0.070 |
| Treated with ORS packets | 0.242 | 0.027 | 294 | 255 | 1.019 | 0.112 | 0.188 | 0.296 |
| Consulted medical personnel | 0.522 | 0.036 | 294 | 255 | 1.131 | 0.069 | 0.451 | 0.594 |
| Had immunization record | 0.689 | 0.018 | 896 | 843 | 1.141 | 0.026 | 0.653 | 0.725 |
| Received BCG vaccination | 0.997 | 0.002 | 896 | 843 | 0.999 | 0.002 | 0.993 | 1.001 |
| Received DPT vaccination (3 doses) | 0.935 | 0.009 | 896 | 843 | 1.124 | 0.010 | 0.916 | 0.954 |
| Received polio vaccinations (3 doses) | 0.943 | 0.009 | 896 | 843 | 1.159 | 0.010 | 0.925 | 0.961 |
| Received measles vaccination | 0.978 | 0.006 | 896 | 843 | 1.204 | 0.006 | 0.966 | 0.990 |
| Fully immunized | 0.928 | 0.009 | 896 | 843 | 1.063 | 0.010 | 0.909 | 0.946 |
| Weight-for-height | 0.023 | 0.003 | 4221 | 3972 | 1.293 | 0.134 | 0.017 | 0.030 |
| Height-for-age | 0.138 | 0.008 | 4221 | 3972 | 1.521 | 0.061 | 0.121 | 0.155 |
| Weight-for-age | 0.030 | 0.003 | 4221 | 3972 | 1.227 | 0.110 | 0.023 | 0.037 |
| Anemia among ever-married women | 0.273 | 0.012 | 3534 | 3392 | 1.588 | 0.044 | 0.249 | 0.297 |
| Anemia among children under age five | 0.236 | 0.013 | 1962 | 1840 | 1.244 | 0.053 | 0.211 | 0.261 |
| Total fertility rate | 3.087 | 0.058 | NA | 204229 | 1.250 | 0.019 | 2.971 | 3.202 |
| Neonatal mortality rate (0-9 years) | 26.494 | 1.849 | 9113 | 8664 | 0.974 | 0.069 | 22.792 | 30.116 |
| Postneonatal mortality rate (0-9 years) | 16.601 | 1.856 | 9121 | 8671 | 1.236 | 0.112 | 12.889 | 20.313 |
| Infant mortality rate (0-9 years) | 43.095 | 2.660 | 9122 | 8672 | 1.094 | 0.062 | 37.775 | 48.414 |
| Child mortality rate (0-9 years) | 10.125 | 1.264 | 9135 | 8686 | 1.071 | 0.125 | 7.597 | 12.653 |
| Under-five mortality rate (0-9 years) | 52.783 | 3.226 | 9145 | 8694 | 1.181 | 0.061 | 46.331 | 59.236 |
| NA $=$ Not applicable |  |  |  |  |  |  |  |  |


| Variable | Value <br> (R) | Standard <br> error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- |  |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.570 | 0.011 | 8395 | 8702 | 1.995 | 0.019 | 0.548 | 0.591 |
| Completed secondary or higher | 0.184 | 0.008 | 8395 | 8702 | 1.956 | 0.045 | 0.168 | 0.201 |
| Currently married | 0.926 | 0.003 | 8395 | 8702 | 1.192 | 0.004 | 0.919 | 0.932 |
| Children ever born | 2.411 | 0.071 | 13248 | 13856 | 1.138 | 0.029 | 2.269 | 2.552 |
| Children surviving | 2.100 | 0.061 | 13248 | 13856 | 1.132 | 0.029 | 1.978 | 2.222 |
| Ever used any method | 0.731 | 0.008 | 7772 | 8054 | 1.515 | 0.010 | 0.716 | 0.746 |
| Currently using any method | 0.520 | 0.009 | 7772 | 8054 | 1.549 | 0.017 | 0.503 | 0.538 |
| Currently using any modern method | 0.499 | 0.008 | 7772 | 8054 | 1.477 | 0.017 | 0.483 | 0.516 |
| Currently using pills | 0.088 | 0.004 | 7772 | 8054 | 1.332 | 0.049 | 0.079 | 0.096 |
| Currently using IUD | 0.313 | 0.007 | 7772 | 8054 | 1.423 | 0.024 | 0.298 | 0.328 |
| Currently using injectables | 0.077 | 0.004 | 7772 | 8054 | 1.281 | 0.050 | 0.070 | 0.085 |
| Currently using norplant | 0.002 | 0.001 | 7772 | 8054 | 1.276 | 0.294 | 0.001 | 0.004 |
| Currently using condom | 0.004 | 0.001 | 7772 | 8054 | 1.022 | 0.176 | 0.003 | 0.006 |
| Currently female sterilization | 0.014 | 0.001 | 7772 | 8054 | 0.996 | 0.094 | 0.012 | 0.017 |
| Currently using periodic abstinence | 0.002 | 0.001 | 7772 | 8054 | 1.050 | 0.275 | 0.001 | 0.003 |
| Currently using withdrawal | 0.001 | 0.000 | 7772 | 8054 | 0.844 | 0.305 | 0.000 | 0.002 |
| Using public sector source | 0.548 | 0.011 | 3754 | 4025 | 1.323 | 0.020 | 0.526 | 0.569 |
| Wanting no more children | 0.628 | 0.006 | 7772 | 8054 | 1.023 | 0.009 | 0.617 | 0.639 |
| Delay at least two years | 0.141 | 0.004 | 7772 | 8054 | 1.029 | 0.029 | 0.132 | 0.149 |
| Ideal number of children | 3.137 | 0.022 | 6249 | 6525 | 1.169 | 0.007 | 3.093 | 3.180 |
| Mothers received tetanus injection | 0.739 | 0.010 | 6833 | 6987 | 1.480 | 0.013 | 0.719 | 0.759 |
| Mothers received medical care at delivery | 0.480 | 0.012 | 6833 | 6987 | 1.619 | 0.025 | 0.456 | 0.504 |
| Child had diarrhea in last 2 weeks | 0.078 | 0.004 | 6495 | 6646 | 1.192 | 0.054 | 0.069 | 0.086 |
| Treated with ORS packets | 0.384 | 0.020 | 522 | 516 | 0.866 | 0.052 | 0.345 | 0.424 |
| Consulted medical personnel | 0.434 | 0.027 | 522 | 516 | 1.130 | 0.062 | 0.380 | 0.488 |
| Had immunization record | 0.747 | 0.014 | 1302 | 1327 | 1.098 | 0.018 | 0.720 | 0.775 |
| Received BCG vaccination | 0.991 | 0.003 | 1302 | 1327 | 1.030 | 0.003 | 0.985 | 0.996 |
| Received DPT vaccination (3 doses) | 0.943 | 0.008 | 1302 | 1327 | 1.240 | 0.009 | 0.927 | 0.960 |
| Received polio vaccinations (3 doses) | 0.953 | 0.007 | 1302 | 1327 | 1.209 | 0.008 | 0.939 | 0.967 |
| Received measles vaccination | 0.962 | 0.006 | 1302 | 1327 | 1.136 | 0.006 | 0.950 | 0.975 |
| Fully immunized | 0.918 | 0.009 | 1302 | 1327 | 1.166 | 0.010 | 0.900 | 0.936 |
| Weight-for-height | 0.026 | 0.003 | 6075 | 6222 | 1.311 | 0.104 | 0.021 | 0.032 |
| Height-for-age | 0.218 | 0.008 | 6075 | 6222 | 1.341 | 0.035 | 0.203 | 0.233 |
| Weight-for-age | 0.047 | 0.003 | 6075 | 6222 | 1.129 | 0.068 | 0.041 | 0.053 |
| Anemia among ever-married women | 0.307 | 0.009 | 4149 | 4292 | 1.198 | 0.028 | 0.289 | 0.325 |
| Anemia among children under age five | 0.340 | 0.011 | 2808 | 2868 | 1.158 | 0.033 | 0.318 | 0.362 |
| Total fertility rate | 3.883 | 0.074 | NA | 240977 | 1.321 | 0.019 | 3.734 | 4.031 |
| Neonatal mortality rate (0-9 years) | 30.463 | 1.783 | 13923 | 14210 | 1.081 | 0.059 | 26.711 | 33.826 |
| Postneonatal mortality rate (0-9 years) | 31.354 | 1.809 | 13937 | 14223 | 1.106 | 0.058 | 27.737 | 34.971 |
| Infant mortality rate (0-9 years) | 61.817 | 2.656 | 13938 | 14225 | 1.149 | 0.043 | 56.504 | 67.130 |
| Child mortality rate (0-9 years) | 18.536 | 1.329 | 13971 | 14262 | 1.061 | 0.072 | 15.878 | 21.194 |
| Under-five mortality rate (0-9 years) | 79.207 | 3.074 | 13987 | 14278 | 1.183 | 0.039 | 73.059 | 85.355 |

## Table C. 5 Sampling errors - Urban Governorates sample, 2000 Egypt DHS

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect <br> (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.239 | 0.022 | 3102 | 2992 | 2.868 | 0.092 | 0.195 | 0.283 |
| Completed secondary or higher | 0.471 | 0.027 | 3102 | 2992 | 3.064 | 0.058 | 0.416 | 0.526 |
| Currently married | 0.919 | 0.008 | 3102 | 2992 | 1.549 | 0.008 | 0.904 | 0.934 |
| Children ever born | 2.347 | 0.088 | 1400 | 2137 | 1.060 | 0.038 | 2.171 | 2.523 |
| Children surviving | 2.159 | 0.078 | 1400 | 2137 | 1.054 | 0.036 | 2.003 | 2.316 |
| Ever used any method | 0.847 | 0.013 | 1022 | 1560 | 1.183 | 0.016 | 0.821 | 0.874 |
| Currently using any method | 0.627 | 0.008 | 2865 | 2749 | 0.848 | 0.012 | 0.612 | 0.643 |
| Currently using any modern method | 0.599 | 0.008 | 2865 | 2749 | 0.905 | 0.014 | 0.583 | 0.616 |
| Currently using pills | 0.081 | 0.005 | 2865 | 2749 | 1.051 | 0.066 | 0.070 | 0.092 |
| Currently using IUD | 0.443 | 0.011 | 2865 | 2749 | 1.164 | 0.024 | 0.421 | 0.465 |
| Currently using injectables | 0.039 | 0.004 | 2865 | 2749 | 1.204 | 0.112 | 0.030 | 0.048 |
| Currently using norplant | 0.002 | 0.001 | 2865 | 2749 | 0.765 | 0.296 | 0.001 | 0.004 |
| Currently using condom | 0.019 | 0.003 | 2865 | 2749 | 0.976 | 0.130 | 0.014 | 0.024 |
| Currently female sterilization | 0.013 | 0.002 | 2865 | 2749 | 0.977 | 0.161 | 0.009 | 0.017 |
| Currently using periodic abstinence | 0.015 | 0.003 | 2865 | 2749 | 1.158 | 0.174 | 0.010 | 0.021 |
| Currently using withdrawal | 0.006 | 0.002 | 2865 | 2749 | 1.308 | 0.319 | 0.002 | 0.010 |
| Using public sector source | 0.435 | 0.020 | 1690 | 1655 | 1.644 | 0.046 | 0.396 | 0.475 |
| Want no more children | 0.680 | 0.012 | 2865 | 2749 | 1.425 | 0.018 | 0.655 | 0.704 |
| Delay at least two years | 0.124 | 0.009 | 2865 | 2749 | 1.431 | 0.071 | 0.106 | 0.142 |
| Ideal number of children | 2.595 | 0.025 | 2634 | 2466 | 1.205 | 0.010 | 2.544 | 2.646 |
| Mothers received tetanus injection | 0.624 | 0.018 | 1867 | 1813 | 1.324 | 0.028 | 0.589 | 0.660 |
| Mothers received medical care at delivery | 0.838 | 0.025 | 1867 | 1813 | 2.342 | 0.029 | 0.788 | 0.887 |
| Child had diarrhea in last 2 weeks | 0.049 | 0.007 | 1803 | 1754 | 1.270 | 0.134 | 0.036 | 0.063 |
| Treated with ORS packets | 0.078 | 0.025 | 92 | 87 | 0.809 | 0.316 | 0.029 | 0.127 |
| Consulted medical personnel | 0.540 | 0.075 | 92 | 87 | 1.390 | 0.139 | 0.390 | 0.690 |
| Had immunization record | 0.641 | 0.023 | 372 | 360 | 0.938 | 0.037 | 0.594 | 0.688 |
| Received BCG vaccination | 0.994 | 0.004 | 372 | 360 | 1.031 | 0.004 | 0.986 | 1.002 |
| Received DPT vaccination (3 doses) | 0.927 | 0.016 | 372 | 360 | 1.170 | 0.017 | 0.895 | 0.958 |
| Received polio vaccinations (3 doses) | 0.937 | 0.015 | 372 | 360 | 1.226 | 0.016 | 0.907 | 0.968 |
| Received measles vaccination | 0.969 | 0.011 | 372 | 360 | 1.240 | 0.011 | 0.947 | 0.992 |
| Fully immunized | 0.919 | 0.016 | 372 | 360 | 1.165 | 0.018 | 0.886 | 0.952 |
| Weight-for-height | 0.018 | 0.004 | 1713 | 1663 | 1.107 | 0.196 | 0.011 | 0.025 |
| Height-for-age | 0.085 | 0.009 | 1713 | 1663 | 1.325 | 0.107 | 0.067 | 0.103 |
| Weight-for-age | 0.025 | 0.006 | 1713 | 1663 | 1.464 | 0.224 | 0.014 | 0.036 |
| Anemia among ever-married women | 0.296 | 0.022 | 1546 | 1491 | 1.925 | 0.076 | 0.251 | 0.341 |
| Anemia among children under age five | 0.167 | 0.020 | 802 | 773 | 1.432 | 0.121 | 0.127 | 0.208 |
| Total fertility rate | 2.891 | 0.094 | NA | 97664 | 1.348 | 0.033 | 2.703 | 3.079 |
| Neonatal mortality rate (0-9 years) | 23.569 | 2.895 | 3616 | 3528 | 1.037 | 0.120 | 18.094 | 29.550 |
| Postneonatal mortality rate (0-9 years) | 13.866 | 2.287 | 3616 | 3528 | 1.102 | 0.165 | 9.293 | 18.439 |
| Infant mortality rate (0-9 years) | 37.435 | 3.765 | 3617 | 3529 | 1.071 | 0.101 | 29.905 | 44.964 |
| Child mortality rate (0-9 years) | 7.723 | 1.837 | 3622 | 3533 | 1.201 | 0.238 | 4.050 | 11.397 |
| Under-five mortality rate (0-9 years) | 44.869 | 4.412 | 3624 | 3535 | 1.173 | 0.098 | 36.045 | 53.693 |
| NA $=$ Not applicable |  |  |  |  |  |  |  |  |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.449 | 0.014 | 6108 | 6826 | 2.190 | 0.031 | 0.422 | 0.477 |
| Completed secondary or higher | 0.301 | 0.011 | 6108 | 6826 | 1.955 | 0.038 | 0.278 | 0.324 |
| Currently married | 0.926 | 0.004 | 6108 | 6826 | 1.140 | 0.004 | 0.919 | 0.934 |
| Children ever born | 2.381 | 0.072 | 8573 | 9673 | 1.203 | 0.030 | 2.237 | 2.525 |
| Children surviving | 2.149 | 0.064 | 8573 | 9673 | 1.193 | 0.030 | 2.021 | 2.277 |
| Ever used any method | 0.827 | 0.007 | 5656 | 6324 | 1.425 | 0.009 | 0.813 | 0.841 |
| Currently using any method | 0.624 | 0.009 | 5656 | 6324 | 1.338 | 0.014 | 0.607 | 0.642 |
| Currently using any modern method | 0.609 | 0.008 | 5656 | 6324 | 1.306 | 0.014 | 0.592 | 0.626 |
| Currently using pills | 0.102 | 0.005 | 5656 | 6324 | 1.332 | 0.053 | 0.091 | 0.113 |
| Currently using IUD | 0.409 | 0.009 | 5656 | 6324 | 1.307 | 0.021 | 0.392 | 0.426 |
| Currently using injectables | 0.069 | 0.004 | 5656 | 6324 | 1.333 | 0.065 | 0.060 | 0.078 |
| Currently using norplant | 0.002 | 0.001 | 5656 | 6324 | 1.384 | 0.425 | 0.000 | 0.003 |
| Currently using condom | 0.007 | 0.001 | 5656 | 6324 | 0.932 | 0.146 | 0.005 | 0.009 |
| Currently female sterilization | 0.019 | 0.002 | 5656 | 6324 | 1.068 | 0.102 | 0.015 | 0.023 |
| Currently using periodic abstinence | 0.004 | 0.001 | 5656 | 6324 | 0.965 | 0.202 | 0.002 | 0.006 |
| Currently using withdrawal | 0.002 | 0.000 | 5656 | 6324 | 0.782 | 0.227 | 0.001 | 0.003 |
| Using public sector source | 0.502 | 0.011 | 3430 | 3856 | 1.322 | 0.023 | 0.479 | 0.524 |
| Wanting no more children | 0.676 | 0.006 | 5656 | 6324 | 1.012 | 0.009 | 0.663 | 0.688 |
| Delay at least two years | 0.134 | 0.005 | 5656 | 6324 | 1.061 | 0.036 | 0.124 | 0.143 |
| Ideal number of children | 2.834 | 0.018 | 4923 | 5527 | 1.137 | 0.006 | 2.798 | 2.871 |
| Mothers received tetanus injection | 0.791 | 0.010 | 4170 | 4679 | 1.302 | 0.012 | 0.772 | 0.810 |
| Mothers received medical care at delivery | 0.651 | 0.014 | 4170 | 4679 | 1.610 | 0.022 | 0.623 | 0.679 |
| Child had diarrhea in last 2 weeks | 0.061 | 0.005 | 4014 | 4504 | 1.163 | 0.078 | 0.052 | 0.070 |
| Treated with ORS packets | 0.409 | 0.030 | 248 | 275 | 0.882 | 0.072 | 0.350 | 0.469 |
| Consulted medical personnel | 0.539 | 0.039 | 248 | 275 | 1.122 | 0.072 | 0.461 | 0.617 |
| Had immunization record | 0.750 | 0.018 | 810 | 904 | 1.135 | 0.024 | 0.715 | 0.786 |
| Received BCG vaccination | 0.996 | 0.003 | 810 | 904 | 1.101 | 0.003 | 0.990 | 1.001 |
| Received DPT vaccination (3 doses) | 0.946 | 0.009 | 810 | 904 | 1.134 | 0.010 | 0.927 | 0.964 |
| Received polio vaccinations (3 doses) | 0.954 | 0.008 | 810 | 904 | 1.123 | 0.009 | 0.938 | 0.971 |
| Received measles vaccination | 0.973 | 0.007 | 810 | 904 | 1.213 | 0.007 | 0.959 | 0.987 |
| Fully immunized | 0.925 | 0.009 | 810 | 904 | 0.935 | 0.010 | 0.907 | 0.943 |
| Weight-for-height | 0.031 | 0.004 | 3838 | 4304 | 1.391 | 0.129 | 0.023 | 0.039 |
| Height-for-age | 0.160 | 0.008 | 3838 | 4304 | 1.261 | 0.048 | 0.144 | 0.175 |
| Weight-for-age | 0.026 | 0.003 | 3838 | 4304 | 1.146 | 0.116 | 0.020 | 0.032 |
| Anemia among ever-married women | 0.277 | 0.010 | 3001 | 3348 | 1.261 | 0.037 | 0.256 | 0.297 |
| Anemia among children under age five | 0.289 | 0.014 | 1765 | 1963 | 1.247 | 0.049 | 0.261 | 0.318 |
| Total fertility rate | 3.244 | 0.061 | NA | 197521 | 1.131 | 0.019 | 3.122 | 3.367 |
| Neonatal mortality rate (0-9 years) | 26.527 | 1.890 | 8431 | 9481 | 0.980 | 0.071 | 22.747 | 30.306 |
| Postneonatal mortality rate (0-9 years) | 18.761 | 1.673 | 8438 | 9489 | 1.053 | 0.089 | 15.415 | 22.107 |
| Infant mortality rate (0-9 years) | 45.287 | 2.502 | 8439 | 9490 | 0.980 | 0.055 | 40.284 | 50.291 |
| Child mortality rate (0-9 years) | 13.934 | 1.441 | 8456 | 9509 | 1.103 | 0.103 | 11.051 | 16.817 |
| Under-five mortality rate (0-9 years) | 58.591 | 3.018 | 8465 | 9520 | 1.047 | 0.052 | 52.554 | 64.627 |
| NA $=$ Not applicable |  |  |  |  |  |  |  |  |

## Table C.7.1 Sampling errors - Lower Egypt Urban sample, 2000 Egypt DHS

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.262 | 0.023 | 1831 | 1946 | 2.209 | 0.087 | 0.217 | 0.308 |
| Completed secondary or higher | 0.468 | 0.024 | 1831 | 1946 | 2.041 | 0.051 | 0.421 | 0.516 |
| Currently married | 0.925 | 0.005 | 1831 | 1946 | 0.873 | 0.006 | 0.914 | 0.935 |
| Children ever born | 2.403 | 0.088 | 2321 | 2466 | 1.342 | 0.037 | 2.227 | 2.579 |
| Children surviving | 2.204 | 0.081 | 2321 | 2466 | 1.379 | 0.037 | 2.042 | 2.367 |
| Ever used any method | 0.856 | 0.012 | 1690 | 1799 | 1.356 | 0.014 | 0.833 | 0.879 |
| Currently using any method | 0.649 | 0.014 | 1690 | 1799 | 1.185 | 0.021 | 0.622 | 0.677 |
| Currently using any modern method | 0.632 | 0.014 | 1690 | 1799 | 1.222 | 0.023 | 0.603 | 0.660 |
| Currently using pills | 0.126 | 0.010 | 1690 | 1799 | 1.189 | 0.076 | 0.107 | 0.145 |
| Currently using IUD | 0.420 | 0.015 | 1690 | 1799 | 1.279 | 0.037 | 0.389 | 0.450 |
| Currently using injectables | 0.046 | 0.007 | 1690 | 1799 | 1.362 | 0.151 | 0.032 | 0.060 |
| Currently using norplant | 0.000 | 0.000 | 1690 | 1799 | 0.701 | 1.008 | 0.000 | 0.001 |
| Currently using condom | 0.014 | 0.003 | 1690 | 1799 | 0.890 | 0.181 | 0.009 | 0.019 |
| Currently female sterilization | 0.022 | 0.004 | 1690 | 1799 | 1.223 | 0.197 | 0.014 | 0.031 |
| Currently using periodic abstinence | 0.010 | 0.002 | 1690 | 1799 | 1.022 | 0.246 | 0.005 | 0.015 |
| Currently using withdrawal | 0.003 | 0.001 | 1690 | 1799 | 0.756 | 0.338 | 0.001 | 0.005 |
| Using public sector source | 0.409 | 0.019 | 1061 | 1138 | 1.283 | 0.047 | 0.370 | 0.448 |
| Want no more children | 0.677 | 0.017 | 1690 | 1799 | 1.454 | 0.024 | 0.643 | 0.710 |
| Delay at least two years | 0.141 | 0.011 | 1690 | 1799 | 1.332 | 0.080 | 0.118 | 0.163 |
| Ideal number of children | 2.728 | 0.033 | 1509 | 1620 | 1.240 | 0.012 | 2.662 | 2.793 |
| Mothers received tetanus injection | 0.753 | 0.018 | 1146 | 1230 | 1.229 | 0.024 | 0.718 | 0.789 |
| Mothers received medical care at delivery | 0.847 | 0.015 | 1146 | 1230 | 1.265 | 0.018 | 0.817 | 0.878 |
| Child had diarrhea in last 2 weeks | 0.060 | 0.010 | 1106 | 1186 | 1.314 | 0.162 | 0.041 | 0.079 |
| Treated with ORS packets | 0.306 | 0.053 | 65 | 71 | 0.916 | 0.172 | 0.201 | 0.411 |
| Consulted medical personnel | 0.594 | 0.074 | 65 | 71 | 1.160 | 0.124 | 0.446 | 0.741 |
| Had immunization record | 0.746 | 0.036 | 223 | 238 | 1.237 | 0.049 | 0.673 | 0.818 |
| Received BCG vaccination | 1.000 | 0.000 | 223 | 238 | NA | 0.000 | 1.000 | 1.000 |
| Received DPT vaccination (3 doses) | 0.938 | 0.016 | 223 | 238 | 0.970 | 0.017 | 0.906 | 0.969 |
| Received polio vaccinations (3 doses) | 0.944 | 0.015 | 223 | 238 | 0.980 | 0.016 | 0.914 | 0.974 |
| Received measles vaccination | 0.975 | 0.012 | 223 | 238 | 1.111 | 0.012 | 0.951 | 0.998 |
| Fully immunized | 0.926 | 0.013 | 223 | 238 | 0.763 | 0.014 | 0.899 | 0.952 |
| Weight-for-height | 0.033 | 0.008 | 1053 | 1128 | 1.387 | 0.250 | 0.016 | 0.049 |
| Height-for-age | 0.137 | 0.012 | 1053 | 1128 | 1.100 | 0.086 | 0.114 | 0.161 |
| Weight-for-age | 0.019 | 0.005 | 1053 | 1128 | 1.115 | 0.262 | 0.009 | 0.028 |
| Anemia among ever-married women | 0.252 | 0.018 | 885 | 940 | 1.236 | 0.072 | 0.216 | 0.288 |
| Anemia among children under age five | 0.246 | 0.026 | 471 | 494 | 1.310 | 0.107 | 0.193 | 0.298 |
| Total fertility rate | 3.049 | 0.087 | NA | 58925 | 1.034 | 0.028 | 2.876 | 3.222 |
| Neonatal mortality rate (0-9 years) | 28.920 | 3.009 | 2249 | 2423 | 0.793 | 0.104 | 22.704 | 34.619 |
| Postneonatal mortality rate (0-9 years) | 11.357 | 2.541 | 2252 | 2427 | 1.107 | 0.224 | 6.275 | 16.439 |
| Infant mortality rate (0-9 years) | 40.277 | 3.925 | 2252 | 2427 | 0.876 | 0.097 | 32.428 | 48.126 |
| Child mortality rate (0-9 years) | 12.129 | 2.189 | 2256 | 2431 | 0.921 | 0.180 | 7.751 | 16.508 |
| Under-five mortality rate (0-9 years) | 51.918 | 4.826 | 2259 | 2434 | 0.931 | 0.093 | 42.267 | 61.570 |
| NA = Not applicable |  |  |  |  |  |  |  |  |

## Table C.7.2 Sampling errors - Lower Egypt Rural sample, 2000 Egypt DHS

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect <br> (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- |  |  |  |  |  |
|  |  |  | ( N ) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.524 | 0.016 | 4277 | 4880 | 2.080 | 0.030 | 0.492 | 0.556 |
| Completed secondary or higher | 0.234 | 0.012 | 4277 | 4880 | 1.881 | 0.052 | 0.210 | 0.259 |
| Currently married | 0.927 | 0.005 | 4277 | 4880 | 1.224 | 0.005 | 0.917 | 0.937 |
| Children ever born | 2.374 | 0.092 | 6252 | 7207 | 1.183 | 0.039 | 2.190 | 2.558 |
| Children surviving | 2.130 | 0.081 | 6252 | 7207 | 1.165 | 0.038 | 1.969 | 2.292 |
| Ever used any method | 0.815 | 0.009 | 3966 | 4524 | 1.407 | 0.011 | 0.798 | 0.833 |
| Currently using any method | 0.614 | 0.011 | 3966 | 4524 | 1.407 | 0.018 | 0.593 | 0.636 |
| Currently using any modern method | 0.600 | 0.010 | 3966 | 4524 | 1.345 | 0.017 | 0.579 | 0.621 |
| Currently using pills | 0.093 | 0.006 | 3966 | 4524 | 1.386 | 0.069 | 0.080 | 0.105 |
| Currently using IUD | 0.404 | 0.010 | 3966 | 4524 | 1.312 | 0.025 | 0.384 | 0.425 |
| Currently using injectables | 0.078 | 0.006 | 3966 | 4524 | 1.312 | 0.071 | 0.067 | 0.090 |
| Currently using norplant | 0.002 | 0.001 | 3966 | 4524 | 1.395 | 0.443 | 0.000 | 0.005 |
| Currently using condom | 0.004 | 0.001 | 3966 | 4524 | 0.999 | 0.239 | 0.002 | 0.007 |
| Currently female sterilization | 0.017 | 0.002 | 3966 | 4524 | 0.908 | 0.109 | 0.013 | 0.021 |
| Currently using periodic abstinence | 0.002 | 0.001 | 3966 | 4524 | 1.024 | 0.406 | 0.000 | 0.003 |
| Currently using withdrawal | 0.002 | 0.001 | 3966 | 4524 | 0.809 | 0.306 | 0.001 | 0.003 |
| Using public sector source | 0.541 | 0.013 | 2369 | 2718 | 1.267 | 0.024 | 0.515 | 0.567 |
| Want no more children | 0.675 | 0.006 | 3966 | 4524 | 0.787 | 0.009 | 0.664 | 0.687 |
| Delay at least two years | 0.131 | 0.005 | 3966 | 4524 | 0.929 | 0.038 | 0.121 | 0.141 |
| Ideal number of children | 2.879 | 0.022 | 3414 | 3907 | 1.087 | 0.008 | 2.835 | 2.922 |
| Mothers received tetanus injection | 0.804 | 0.012 | 3024 | 3448 | 1.332 | 0.014 | 0.781 | 0.828 |
| Mothers received medical care at delivery | 0.581 | 0.018 | 3024 | 3448 | 1.660 | 0.030 | 0.546 | 0.617 |
| Child had diarrhea in last 2 weeks | 0.061 | 0.005 | 2908 | 3317 | 1.110 | 0.088 | 0.051 | 0.072 |
| Treated with ORS packets | 0.446 | 0.035 | 183 | 204 | 0.880 | 0.079 | 0.375 | 0.516 |
| Consulted medical personnel | 0.520 | 0.046 | 183 | 204 | 1.118 | 0.089 | 0.428 | 0.612 |
| Had immunization record | 0.752 | 0.020 | 587 | 666 | 1.097 | 0.027 | 0.711 | 0.792 |
| Received BCG vaccination | 0.994 | 0.004 | 587 | 666 | 1.090 | 0.004 | 0.987 | 1.001 |
| Received DPT vaccination (3 doses) | 0.949 | 0.011 | 587 | 666 | 1.186 | 0.012 | 0.926 | 0.971 |
| Received polio vaccinations (3 doses) | 0.958 | 0.010 | 587 | 666 | 1.175 | 0.010 | 0.938 | 0.977 |
| Received measles vaccination | 0.972 | 0.009 | 587 | 666 | 1.234 | 0.009 | 0.955 | 0.990 |
| Fully immunized | 0.925 | 0.011 | 587 | 666 | 0.979 | 0.012 | 0.903 | 0.947 |
| Weight-for-height | 0.031 | 0.005 | 2785 | 3176 | 1.389 | 0.150 | 0.021 | 0.040 |
| Height-for-age | 0.168 | 0.009 | 2785 | 3176 | 1.296 | 0.056 | 0.149 | 0.187 |
| Weight-for-age | 0.028 | 0.004 | 2785 | 3176 | 1.155 | 0.130 | 0.021 | 0.035 |
| Anemia among ever-married women | 0.286 | 0.012 | 2116 | 2408 | 1.233 | 0.042 | 0.262 | 0.310 |
| Anemia among children under age five | 0.304 | 0.017 | 1294 | 1469 | 1.228 | 0.055 | 0.270 | 0.337 |
| Total fertility rate | 3.309 | 0.077 | NA | 133819 | 1.110 | 0.023 | 3.155 | 3.462 |
| Neonatal mortality rate (0-9 years) | 25.703 | 2.320 | 6182 | 7057 | 1.033 | 0.091 | 20.925 | 30.203 |
| Postneonatal mortality rate (0-9 years) | 21.286 | 2.001 | 6186 | 7062 | 1.007 | 0.094 | 17.285 | 25.287 |
| Infant mortality rate (0-9 years) | 46.989 | 3.070 | 6187 | 7063 | 0.999 | 0.065 | 40.849 | 53.129 |
| Child mortality rate (0-9 years) | 14.544 | 1.780 | 6200 | 7079 | 1.138 | 0.122 | 10.985 | 18.104 |
| Under-five mortality rate (0-9 years) | 60.849 | 3.676 | 6206 | 7086 | 1.064 | 0.060 | 53.496 | 68.202 |
| NA = Not applicable |  |  |  |  |  |  |  |  |

## Table C. 8 Sampling errors - Upper Egypt sample, 2000 Egypt DHS

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect <br> (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- |  |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.516 | 0.013 | 5413 | 5546 | 1.946 | 0.026 | 0.489 | 0.542 |
| Completed secondary or higher | 0.221 | 0.011 | 5413 | 5546 | 2.031 | 0.052 | 0.198 | 0.243 |
| Currently married | 0.922 | 0.004 | 5413 | 5546 | 1.087 | 0.004 | 0.914 | 0.930 |
| Children ever born | 2.399 | 0.097 | 9007 | 9247 | 1.073 | 0.040 | 2.205 | 2.593 |
| Children surviving | 2.049 | 0.084 | 9007 | 9247 | 1.094 | 0.041 | 1.881 | 2.217 |
| Ever used any method | 0.679 | 0.010 | 4983 | 5113 | 1.443 | 0.014 | 0.660 | 0.698 |
| Currently using any method | 0.451 | 0.010 | 4983 | 5113 | 1.472 | 0.023 | 0.431 | 0.472 |
| Currently using any modern method | 0.424 | 0.010 | 4983 | 5113 | 1.467 | 0.024 | 0.404 | 0.445 |
| Currently using pills | 0.092 | 0.005 | 4983 | 5113 | 1.138 | 0.051 | 0.082 | 0.101 |
| Currently using IUD | 0.249 | 0.009 | 4983 | 5113 | 1.411 | 0.035 | 0.231 | 0.266 |
| Currently using injectables | 0.063 | 0.004 | 4983 | 5113 | 1.169 | 0.064 | 0.055 | 0.071 |
| Currently using norplant | 0.003 | 0.001 | 4983 | 5113 | 1.140 | 0.320 | 0.001 | 0.004 |
| Currently using condom | 0.007 | 0.001 | 4983 | 5113 | 0.935 | 0.153 | 0.005 | 0.010 |
| Currently female sterilization | 0.010 | 0.001 | 4983 | 5113 | 1.008 | 0.142 | 0.007 | 0.013 |
| Currently using periodic abstinence | 0.004 | 0.001 | 4983 | 5113 | 1.137 | 0.250 | 0.002 | 0.006 |
| Currently using withdrawal | 0.001 | 0.000 | 4983 | 5113 | 1.064 | 0.553 | 0.000 | 0.002 |
| Using public sector source | 0.500 | 0.016 | 2066 | 2168 | 1.440 | 0.032 | 0.468 | 0.531 |
| Want no more children | 0.579 | 0.008 | 4983 | 5113 | 1.161 | 0.014 | 0.562 | 0.595 |
| Delay at least two years | 0.150 | 0.006 | 4983 | 5113 | 1.158 | 0.039 | 0.138 | 0.161 |
| Ideal number of children | 3.286 | 0.030 | 3890 | 3971 | 1.123 | 0.009 | 3.227 | 3.345 |
| Mothers received tetanus injection | 0.700 | 0.013 | 4624 | 4690 | 1.554 | 0.019 | 0.673 | 0.726 |
| Mothers received medical care at delivery | 0.478 | 0.015 | 4624 | 4690 | 1.697 | 0.032 | 0.447 | 0.509 |
| Child had diarrhea in last 2 weeks | 0.090 | 0.006 | 4354 | 4423 | 1.259 | 0.063 | 0.079 | 0.101 |
| Treated with ORS packets | 0.346 | 0.022 | 418 | 398 | 0.890 | 0.063 | 0.302 | 0.390 |
| Consulted medical personnel | 0.395 | 0.027 | 418 | 398 | 1.045 | 0.069 | 0.340 | 0.449 |
| Had immunization record | 0.730 | 0.017 | 853 | 871 | 1.123 | 0.024 | 0.695 | 0.764 |
| Received BCG vaccination | 0.991 | 0.003 | 853 | 871 | 0.990 | 0.003 | 0.985 | 0.997 |
| Received DPT vaccination (3 doses) | 0.942 | 0.010 | 853 | 871 | 1.244 | 0.011 | 0.922 | 0.962 |
| Received polio vaccinations (3 doses) | 0.951 | 0.009 | 853 | 871 | 1.211 | 0.009 | 0.934 | 0.969 |
| Received measles vaccination | 0.964 | 0.007 | 853 | 871 | 1.046 | 0.007 | 0.951 | 0.978 |
| Fully immunized | 0.923 | 0.012 | 853 | 871 | 1.283 | 0.013 | 0.899 | 0.946 |
| Weight-for-height | 0.022 | 0.003 | 3999 | 4061 | 1.076 | 0.113 | 0.017 | 0.028 |
| Height-for-age | 0.258 | 0.009 | 3999 | 4061 | 1.274 | 0.037 | 0.239 | 0.276 |
| Weight-for-age | 0.063 | 0.004 | 3999 | 4061 | 1.077 | 0.068 | 0.055 | 0.072 |
| Anemia among ever-married women | 0.305 | 0.009 | 2671 | 2742 | 1.006 | 0.029 | 0.287 | 0.323 |
| Anemia among children under age five | 0.360 | 0.013 | 1855 | 1895 | 1.077 | 0.036 | 0.334 | 0.385 |
| Total fertility rate | 4.236 | 0.085 | NA | 159624 | 1.344 | 0.020 | 4.066 | 4.406 |
| Neonatal mortality rate (0-9 years) | 33.650 | 2.233 | 9412 | 9515 | 1.045 | 0.066 | 29.185 | 38.116 |
| Postneonatal mortality rate (0-9 years) | 37.530 | 2.320 | 9425 | 9526 | 1.053 | 0.062 | 32.890 | 42.171 |
| Infant mortality rate (0-9 years) | 71.181 | 3.271 | 9425 | 9526 | 1.090 | 0.046 | 64.638 | 77.723 |
| Child mortality rate (0-9 years) | 19.833 | 1.647 | 9449 | 9553 | 0.991 | 0.083 | 16.539 | 16.817 |
| Under-five mortality rate (0-9 years) | 89.602 | 3.793 | 9462 | 9564 | 1.120 | 0.042 | 82.017 | 97.187 |
| NA = Not applicable |  |  |  |  |  |  |  |  |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $R+2 S E$ |
| No education | 0.286 | 0.021 | 1670 | 1808 | 1.864 | 0.072 | 0.245 | 0.327 |
| Completed secondary or higher | 0.428 | 0.024 | 1670 | 1808 | 1.953 | 0.055 | 0.381 | 0.475 |
| Currently married | 0.919 | 0.007 | 1670 | 1808 | 1.086 | 0.008 | 0.905 | 0.934 |
| Children ever born | 2.294 | 0.210 | 2510 | 2710 | 1.137 | 0.092 | 1.873 | 2.715 |
| Children surviving | 2.029 | 0.190 | 2510 | 2710 | 1.164 | 0.094 | 1.649 | 2.408 |
| Ever used any method | 0.793 | 0.012 | 1528 | 1662 | 1.125 | 0.015 | 0.770 | 0.816 |
| Currently using any method | 0.554 | 0.016 | 1528 | 1662 | 1.287 | 0.029 | 0.521 | 0.586 |
| Currently using any modern method | 0.533 | 0.016 | 1528 | 1662 | 1.281 | 0.031 | 0.500 | 0.566 |
| Currently using pills | 0.113 | 0.009 | 1528 | 1662 | 1.141 | 0.082 | 0.095 | 0.132 |
| Currently using IUD | 0.357 | 0.015 | 1528 | 1662 | 1.215 | 0.042 | 0.327 | 0.386 |
| Currently using injectables | 0.034 | 0.005 | 1528 | 1662 | 1.165 | 0.158 | 0.024 | 0.045 |
| Currently using norplant | 0.003 | 0.002 | 1528 | 1662 | 1.329 | 0.627 | 0.000 | 0.007 |
| Currently using condom | 0.014 | 0.003 | 1528 | 1662 | 0.908 | 0.193 | 0.009 | 0.020 |
| Currently female sterilization | 0.010 | 0.002 | 1528 | 1662 | 0.923 | 0.235 | 0.005 | 0.015 |
| Currently using periodic abstinence | 0.008 | 0.003 | 1528 | 1662 | 1.207 | 0.342 | 0.003 | 0.014 |
| Currently using withdrawal | 0.002 | 0.001 | 1528 | 1662 | 1.011 | 0.540 | 0.000 | 0.005 |
| Using public sector source | 0.408 | 0.027 | 798 | 886 | 1.573 | 0.067 | 0.353 | 0.463 |
| Want no more children | 0.596 | 0.013 | 1528 | 1662 | 0.997 | 0.021 | 0.571 | 0.621 |
| Delay at least two years | 0.144 | 0.011 | 1528 | 1662 | 1.230 | 0.077 | 0.122 | 0.166 |
| Ideal number of children | 2.881 | 0.043 | 1300 | 1409 | 1.197 | 0.015 | 2.795 | 2.967 |
| Mothers received tetanus injection | 0.754 | 0.023 | 1145 | 1227 | 1.505 | 0.031 | 0.707 | 0.801 |
| Mothers received medical care at delivery | 0.747 | 0.022 | 1145 | 1227 | 1.389 | 0.030 | 0.702 | 0.791 |
| Child had diarrhea in last 2 weeks | 0.076 | 0.010 | 1091 | 1169 | 1.219 | 0.131 | 0.056 | 0.096 |
| Treated with ORS packets | 0.348 | 0.052 | 96 | 89 | 1.004 | 0.151 | 0.243 | 0.453 |
| Consulted medical personnel | 0.454 | 0.042 | 96 | 89 | 0.750 | 0.093 | 0.369 | 0.539 |
| Had immunization record | 0.697 | 0.041 | 207 | 225 | 1.276 | 0.058 | 0.616 | 0.778 |
| Received BCG vaccination | 1.000 | 0.000 | 207 | 225 | NA | 0.000 | 1.000 | 1.000 |
| Received DPT vaccination (3 doses) | 0.950 | 0.017 | 207 | 225 | 1.133 | 0.018 | 0.916 | 0.984 |
| Received polio vaccinations (3 doses) | 0.954 | 0.017 | 207 | 225 | 1.151 | 0.018 | 0.921 | 0.988 |
| Received measles vaccination | 0.996 | 0.004 | 207 | 225 | 0.892 | 0.004 | 0.989 | 1.004 |
| Fully immunized | 0.950 | 0.017 | 207 | 225 | 1.133 | 0.018 | 0.916 | 0.984 |
| Weight-for-height | 0.023 | 0.005 | 1012 | 1084 | 1.048 | 0.213 | 0.013 | 0.033 |
| Height-for-age | 0.219 | 0.017 | 1012 | 1084 | 1.277 | 0.080 | 0.184 | 0.254 |
| Weight-for-age | 0.050 | 0.007 | 1012 | 1084 | 0.978 | 0.136 | 0.036 | 0.064 |
| Anemia among ever-married women | 0.250 | 0.014 | 823 | 899 | 0.940 | 0.057 | 0.222 | 0.278 |
| Anemia among children under age five | 0.319 | 0.022 | 485 | 528 | 1.023 | 0.070 | 0.274 | 0.363 |
| Total fertility rate | 3.391 | 0.123 | NA | 55297 | 1.195 | 0.036 | 3.144 | 3.637 |
| Neonatal mortality rate (0-9 years) | 28.768 | 3.957 | 2361 | 2520 | 0.969 | 0.138 | 20.703 | 36.426 |
| Postneonatal mortality rate (0-9 years) | 25.537 | 4.417 | 2365 | 2522 | 1.143 | 0.173 | 16.704 | 34.370 |
| Infant mortality rate (0-9 years) | 54.305 | 5.936 | 2365 | 2522 | 1.068 | 0.109 | 42.433 | 66.178 |
| Child mortality rate (0-9 years) | 11.563 | 2.837 | 2369 | 2528 | 1.023 | 0.245 | 5.889 | 17.237 |
| Under-five mortality rate (0-9 years) | 65.240 | 7.450 | 2373 | 2531 | 1.156 | 0.114 | 50.341 | 80.140 |
| NA $=$ Not applicable |  |  |  |  |  |  |  |  |

## Table C.9.2 Sampling errors - Upper Egypt Rural sample, 2000 Egypt DHS

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.627 | 0.014 | 3743 | 3738 | 1.772 | 0.022 | 0.599 | 0.655 |
| Completed secondary or higher | 0.120 | 0.011 | 3743 | 3738 | 1.989 | 0.088 | 0.099 | 0.141 |
| Currently married | 0.923 | 0.005 | 3743 | 3738 | 1.090 | 0.005 | 0.914 | 0.933 |
| Children surviving | 2.057 | 0.093 | 6496 | 6537 | 1.088 | 0.045 | 1.871 | 2.242 |
| Ever used any method | 0.624 | 0.013 | 3455 | 3451 | 1.527 | 0.020 | 0.599 | 0.649 |
| Currently using any method | 0.402 | 0.014 | 3455 | 3451 | 1.662 | 0.035 | 0.374 | 0.430 |
| Currently using any modern method | 0.372 | 0.013 | 3455 | 3451 | 1.624 | 0.036 | 0.345 | 0.398 |
| Currently using pills | 0.081 | 0.005 | 3455 | 3451 | 1.142 | 0.065 | 0.071 | 0.092 |
| Currently using IUD | 0.197 | 0.011 | 3455 | 3451 | 1.591 | 0.055 | 0.175 | 0.218 |
| Currently using injectables | 0.076 | 0.005 | 3455 | 3451 | 1.170 | 0.069 | 0.066 | 0.087 |
| Currently using norplant | 0.002 | 0.001 | 3455 | 3451 | 0.986 | 0.346 | 0.001 | 0.004 |
| Currently using condom | 0.004 | 0.001 | 3455 | 3451 | 1.015 | 0.268 | 0.002 | 0.006 |
| Currently female sterilization | 0.010 | 0.002 | 3455 | 3451 | 1.047 | 0.176 | 0.007 | 0.014 |
| Currently using periodic abstinence | 0.002 | 0.001 | 3455 | 3451 | 1.054 | 0.380 | 0.001 | 0.004 |
| Currently using withdrawal | 0.000 | 0.000 | 3455 | 3451 | 0.000 | 0.000 | 0.000 | 0.000 |
| Using public sector source | 0.563 | 0.019 | 1268 | 1282 | 1.384 | 0.034 | 0.524 | 0.601 |
| Want no more children | 0.570 | 0.010 | 3455 | 3451 | 1.239 | 0.018 | 0.549 | 0.591 |
| Delay at least two years | 0.152 | 0.007 | 3455 | 3451 | 1.117 | 0.045 | 0.139 | 0.166 |
| Ideal number of children | 3.509 | 0.038 | 2590 | 2563 | 1.106 | 0.011 | 3.432 | 3.586 |
| Mothers received tetanus injection | 0.681 | 0.016 | 3479 | 3463 | 1.590 | 0.024 | 0.648 | 0.713 |
| Mothers received medical care at delivery | 0.383 | 0.017 | 3479 | 3463 | 1.636 | 0.043 | 0.350 | 0.416 |
| Child had diarrhea in last 2 weeks | 0.095 | 0.007 | 3263 | 3254 | 1.260 | 0.071 | 0.081 | 0.108 |
| Treated with ORS packets | 0.346 | 0.024 | 322 | 309 | 0.859 | 0.069 | 0.298 | 0.394 |
| Consulted medical personnel | 0.378 | 0.033 | 322 | 309 | 1.127 | 0.087 | 0.312 | 0.443 |
| Had immunization record | 0.741 | 0.019 | 646 | 645 | 1.073 | 0.025 | 0.704 | 0.779 |
| Received BCG vaccination | 0.988 | 0.004 | 646 | 645 | 1.005 | 0.004 | 0.979 | 0.997 |
| Received DPT vaccination (3 doses) | 0.939 | 0.012 | 646 | 645 | 1.284 | 0.013 | 0.915 | 0.963 |
| Received polio vaccinations (3 doses) | 0.950 | 0.011 | 646 | 645 | 1.236 | 0.011 | 0.929 | 0.972 |
| Received measles vaccination | 0.953 | 0.009 | 646 | 645 | 1.061 | 0.009 | 0.935 | 0.971 |
| Fully immunized | 0.913 | 0.015 | 646 | 645 | 1.329 | 0.016 | 0.884 | 0.942 |
| Weight-for-height | 0.022 | 0.003 | 2987 | 2977 | 1.091 | 0.133 | 0.016 | 0.028 |
| Height-for-age | 0.272 | 0.012 | 2987 | 2977 | 1.320 | 0.042 | 0.249 | 0.295 |
| Weight-for-age | 0.068 | 0.005 | 2987 | 2977 | 1.120 | 0.079 | 0.057 | 0.079 |
| Anemia among ever-married women | 0.332 | 0.012 | 1848 | 1843 | 1.138 | 0.038 | 0.307 | 0.357 |
| Anemia among children under age five | 0.376 | 0.015 | 1370 | 1366 | 1.046 | 0.039 | 0.346 | 0.405 |
| Total fertility rate | 4.660 | 0.109 | NA | 97888 | 1.233 | 0.023 | 4.442 | 4.878 |
| Neonatal mortality rate (0-9 years) | 35.417 | 2.687 | 7051 | 6995 | 1.076 | 0.076 | 29.813 | 40.511 |
| Postneonatal mortality rate (0-9 years) | 41.864 | 2.698 | 7060 | 7004 | 1.025 | 0.064 | 36.467 | 47.261 |
| Infant mortality rate (0-9 years) | 77.280 | 3.861 | 7060 | 7004 | 1.092 | 0.050 | 69.558 | 85.002 |
| Child mortality rate (0-9 years) | 22.965 | 1.953 | 7080 | 7025 | 0.977 | 0.085 | 19.058 | 26.871 |
| Under-five mortality rate (0-9 years) | 98.470 | 4.283 | 7089 | 7033 | 1.092 | 0.043 | 89.905 | 107.036 |
| NA = Not applicable |  |  |  |  |  |  |  |  |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.438 | 0.058 | 950 | 209 | 3.603 | 0.133 | 0.322 | 0.554 |
| Completed secondary or higher | 0.316 | 0.059 | 950 | 209 | 3.894 | 0.186 | 0.198 | 0.433 |
| Currently married | 0.938 | 0.008 | 950 | 209 | 0.992 | 0.008 | 0.922 | 0.953 |
| Children ever born | 2.787 | 0.110 | 1248 | 276 | 0.932 | 0.039 | 2.568 | 3.006 |
| Children surviving | 2.532 | 0.101 | 1248 | 276 | 0.958 | 0.040 | 2.331 | 2.734 |
| Ever used any method | 0.654 | 0.037 | 889 | 196 | 2.326 | 0.057 | 0.580 | 0.729 |
| Currently using any method | 0.430 | 0.036 | 889 | 196 | 2.182 | 0.084 | 0.358 | 0.503 |
| Currently using any modern method | 0.414 | 0.035 | 889 | 196 | 2.121 | 0.085 | 0.344 | 0.484 |
| Currently using pills | 0.126 | 0.015 | 889 | 196 | 1.345 | 0.118 | 0.096 | 0.156 |
| Currently using IUD | 0.196 | 0.025 | 889 | 196 | 1.857 | 0.126 | 0.147 | 0.245 |
| Currently using injectables | 0.058 | 0.009 | 889 | 196 | 1.134 | 0.154 | 0.040 | 0.075 |
| Currently using norplant | 0.002 | 0.001 | 889 | 196 | 0.986 | 0.754 | 0.000 | 0.005 |
| Currently using condom | 0.017 | 0.010 | 889 | 196 | 2.332 | 0.590 | 0.000 | 0.038 |
| Currently female sterilization | 0.015 | 0.004 | 889 | 196 | 0.897 | 0.245 | 0.008 | 0.022 |
| Currently using periodic abstinence | 0.004 | 0.002 | 889 | 196 | 1.051 | 0.527 | 0.000 | 0.009 |
| Currently using withdrawal | 0.004 | 0.002 | 889 | 196 | 0.959 | 0.528 | 0.000 | 0.008 |
| Using public sector source | 0.410 | 0.031 | 373 | 81 | 1.228 | 0.076 | 0.348 | 0.473 |
| Want no more children | 0.508 | 0.018 | 889 | 196 | 1.068 | 0.035 | 0.472 | 0.544 |
| Delay at least two years | 0.186 | 0.013 | 889 | 196 | 0.961 | 0.067 | 0.161 | 0.211 |
| Ideal number of children | 3.547 | 0.166 | 660 | 145 | 2.799 | 0.047 | 3.214 | 3.879 |
| Mothers received tetanus injection | 0.642 | 0.072 | 806 | 179 | 3.243 | 0.112 | 0.498 | 0.786 |
| Mothers received medical care at delivery | 0.604 | 0.055 | 806 | 179 | 2.550 | 0.091 | 0.494 | 0.714 |
| Child had diarrhea in last 2 weeks | 0.069 | 0.013 | 780 | 174 | 1.350 | 0.191 | 0.043 | 0.096 |
| Treated with ORS packets | 0.256 | 0.049 | 58 | 12 | 0.824 | 0.193 | 0.158 | 0.355 |
| Consulted medical personnel | 0.442 | 0.072 | 58 | 12 | 0.999 | 0.163 | 0.298 | 0.586 |
| Had immunization record | 0.802 | 0.030 | 163 | 36 | 0.946 | 0.037 | 0.742 | 0.861 |
| Received BCG vaccination | 0.975 | 0.014 | 163 | 36 | 1.184 | 0.015 | 0.946 | 1.004 |
| Received DPT vaccination (3 doses) | 0.874 | 0.028 | 163 | 36 | 1.085 | 0.032 | 0.817 | 0.930 |
| Received polio vaccinations (3 doses) | 0.886 | 0.029 | 163 | 36 | 1.178 | 0.033 | 0.828 | 0.945 |
| Received measles vaccination | 0.956 | 0.017 | 163 | 36 | 1.091 | 0.018 | 0.921 | 0.991 |
| Fully immunized | 0.856 | 0.033 | 163 | 36 | 1.186 | 0.038 | 0.791 | 0.921 |
| Weight-for-height | 0.008 | 0.003 | 746 | 166 | 1.062 | 0.429 | 0.001 | 0.015 |
| Height-for-age | 0.167 | 0.025 | 746 | 166 | 1.658 | 0.151 | 0.117 | 0.218 |
| Weight-for-age | 0.023 | 0.008 | 746 | 166 | 1.370 | 0.355 | 0.007 | 0.040 |
| Anemia among ever-married women | 0.364 | 0.023 | 465 | 102 | 1.023 | 0.063 | 0.318 | 0.410 |
| Anemia among children under age five | 0.379 | 0.034 | 348 | 77 | 1.296 | 0.091 | 0.310 | 0.448 |
| Total fertility rate | 3.798 | 0.240 | NA | 6320 | 1.457 | 0.063 | 3.317 | 4.278 |
| Neonatal mortality rate (0-9 years) | 21.477 | 4.667 | 1577 | 351 | 1.210 | 0.218 | 12.015 | 30.582 |
| Postneonatal mortality rate (0-9 years) | 15.805 | 2.722 | 1579 | 352 | 0.893 | 0.172 | 10.361 | 21.249 |
| Infant mortality rate (0-9 years) | 37.282 | 5.877 | 1579 | 352 | 1.165 | 0.158 | 25.528 | 49.036 |
| Child mortality rate (0-9 years) | 9.266 | 2.473 | 1579 | 352 | 1.061 | 0.267 | 4.321 | 14.211 |
| Under-five mortality rate (0-9 years) | 46.203 | 5.985 | 1581 | 352 | 1.114 | 0.130 | 34.233 | 58.172 |
| NA = Not applicable |  |  |  |  |  |  |  |  |

## Table D. 1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Egypt 2000

| Age | Males |  | Females |  | Age | Males |  | Females |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |  | Number | Percent | Number | Percent |
| 0 | 1,217 | 2.7 | 1,173 | 2.7 | 37 | 465 | 1.0 | 424 | 1.0 |
| 1 | 1,134 | 2.6 | 1,026 | 2.3 | 38 | 510 | 1.2 | 505 | 1.1 |
| 2 | 1,119 | 2.5 | 1,092 | 2.5 | 39 | 369 | 0.8 | 370 | 0.8 |
| 3 | 1,146 | 2.6 | 1,030 | 2.3 | 40 | 839 | 1.9 | 886 | 2.0 |
| 4 | 1,000 | 2.3 | 1,000 | 2.3 | 41 | 241 | 0.5 | 239 | 0.5 |
| 5 | 1,122 | 2.5 | 1,154 | 2.6 | 42 | 481 | 1.1 | 475 | 1.1 |
| 6 | 1,092 | 2.5 | 1,009 | 2.3 | 43 | 351 | 0.8 | 369 | 0.8 |
| 7 | 871 | 2.0 | 853 | 1.9 | 44 | 216 | 0.5 | 277 | 0.6 |
| 8 | 971 | 2.2 | 953 | 2.2 | 45 | 753 | 1.7 | 816 | 1.9 |
| 9 | 1,155 | 2.6 | 1,102 | 2.5 | 46 | 305 | 0.7 | 294 | 0.7 |
| 10 | 1,236 | 2.8 | 1,196 | 2.7 | 47 | 326 | 0.7 | 404 | 0.9 |
| 11 | 1,160 | 2.6 | 1,093 | 2.5 | 48 | 346 | 0.8 | 514 | 1.2 |
| 12 | 1,297 | 2.9 | 1,173 | 2.7 | 49 | 267 | 0.6 | 288 | 0.7 |
| 13 | 1,168 | 2.6 | 1,131 | 2.6 | 50 | 636 | 1.4 | 233 | 0.5 |
| 14 | 1,131 | 2.6 | 1,123 | 2.5 | 51 | 191 | 0.4 | 222 | 0.5 |
| 15 | 1,204 | 2.7 | 1,071 | 2.4 | 52 | 347 | 0.8 | 330 | 0.7 |
| 16 | 1,214 | 2.7 | 1,129 | 2.6 | 53 | 219 | 0.5 | 228 | 0.5 |
| 17 | 979 | 2.2 | 959 | 2.2 | 54 | 240 | 0.5 | 220 | 0.5 |
| 18 | 1,061 | 2.4 | 1,053 | 2.4 | 55 | 459 | 1.0 | 728 | 1.7 |
| 19 | 923 | 2.1 | 912 | 2.1 | 56 | 174 | 0.4 | 129 | 0.3 |
| 20 | 1,010 | 2.3 | 1,182 | 2.7 | 57 | 152 | 0.3 | 129 | 0.3 |
| 21 | 704 | 1.6 | 747 | 1.7 | 58 | 227 | 0.5 | 161 | 0.4 |
| 22 | 828 | 1.9 | 837 | 1.9 | 59 | 166 | 0.4 | 126 | 0.3 |
| 23 | 742 | 1.7 | 751 | 1.7 | 60 | 480 | 1.1 | 725 | 1.6 |
| 24 | 639 | 1.4 | 653 | 1.5 | 61 | 105 | 0.2 | 65 | 0.1 |
| 25 | 819 | 1.8 | 1,022 | 2.3 | 62 | 180 | 0.4 | 133 | 0.3 |
| 26 | 594 | 1.3 | 583 | 1.3 | 63 | 185 | 0.4 | 104 | 0.2 |
| 27 | 630 | 1.4 | 632 | 1.4 | 64 | 134 | 0.3 | 51 | 0.1 |
| 28 | 545 | 1.2 | 617 | 1.4 | 65 | 447 | 1.0 | 465 | 1.1 |
| 29 | 471 | 1.1 | 498 | 1.1 | 66 | 72 | 0.2 | 39 | 0.1 |
| 30 | 894 | 2.0 | 1,017 | 2.3 | 67 | 105 | 0.2 | 61 | 0.1 |
| 31 | 407 | 0.9 | 350 | 0.8 | 68 | 60 | 0.1 | 32 | 0.1 |
| 32 | 534 | 1.2 | 630 | 1.4 | 69 | 48 | 0.1 | 30 | 0.1 |
| 33 | 457 | 1.0 | 453 | 1.0 | 70+ | 952 | 2.1 | 910 | 2.1 |
| 34 | 357 | 0.8 | 393 | 0.9 | DK/missing | g 4 | 0.0 | 3 | 0.0 |
| 35 | 984 | 2.2 | 1,080 | 2.5 |  |  |  |  |  |
| 36 | 439 | 1.0 | 395 | 0.9 | Total 4 | 44,304 | 100.0 | 44,061 | 100.0 |

Note: The de facto population includes all residents and nonresidents who slept in the household the night before the interview.

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

Five-year age distribution of the de facto household population of women aged 15-49, fiveyear age distribution of interviewed ever-married women aged 15-49, and percentage of eligible women who were interviewed (weighted), Egypt 2000

| Age | Household population |  |  |  | Ever-married women interviewed |  | Percentage interviewed (weighted) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All women |  | Ever-married women |  |  |  |  |
|  | Number | Percent | Number | Percent | Number | Percent |  |
| 15-19 | 5,124 | 22.4 | 572 | 3.7 | 570 | 3.7 | 99.6 |
| 20-24 | 4,171 | 18.3 | 2,280 | 14.7 | 2,275 | 14.7 | 99.8 |
| 25-29 | 3,353 | 14.7 | 2,840 | 18.3 | 2,826 | 18.3 | 99.5 |
| 30-34 | 2,843 | 12.5 | 2,668 | 17.2 | 2,659 | 17.2 | 99.7 |
| 35-39 | 2,774 | 12.2 | 2,696 | 17.3 | 2,679 | 17.3 | 99.4 |
| 40-44 | 2,245 | 9.8 | 2,204 | 14.2 | 2,181 | 14.1 | 98.9 |
| 45-49 | 2,317 | 10.2 | 2,286 | 14.7 | 2,276 | 14.7 | 99.5 |
| 15-49 | 22,827 | NA | 15,546 | NA | 15,465 | NA | 99.5 |

Note: The de facto population includes all residents and nonresidents who slept in the household the night before interview.
NA = Not applicable

## Table D. 3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Egypt 2000

| Subject | Reference group | Percentage <br> missing <br> information | Number <br> of <br> cases |
| :--- | :--- | :---: | :---: |
| Birth date <br> Month only <br> Month and year <br> Age at death Births in last 15 years | 9.6 | 34,420 |  |
| Age/date at first union ${ }^{1}$ | Ever-married women | $<0.1$ | 34,420 |
| Respondent's education | Ever-married women | 0.0 | 2,609 |
| Anthropometry | 0.3 | 15,573 |  |
| Height missing <br> Weight missing <br> Height or weight missing | Living children 0-59 months <br> Living children 0-59 months children 0-59 months | 0.0 | 15,573 |
| Diarrhea in last 2 weeks | Living children age 0-59 months | 2.2 | 10,855 |

[^18]Table D. 4 Births by calendar years
Distribution of births by calendar years for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year, Egypt 2000

| Year | Number of births |  |  | Percentage with complete birth date ${ }^{1}$ |  |  | Sex ratio at birth ${ }^{2}$ |  |  | Calendar ratio ${ }^{3}$ |  |  | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L | D | T | L | D | T | L | D | T | L | D | T | L | D | T | L | D | T |
| 2000 | 646 | 20 | 666 | 100.0 | 100.0 | 100.0 | 117.1 | 95.3 | 116.3 | NA | NA | NA | 348 | 10 | 358 | 297 | 10 | 308 |
| 1999 | 2,316 | 92 | 2,407 | 100.0 | 100.0 | 100.0 | 102.4 | 128.3 | 103.2 | 162.8 | 141.5 | 161.8 | 1,171 | 52 | 1,223 | 1,144 | 40 | 1,184 |
| 1998 | 2,200 | 109 | 2,309 | 100.0 | 100.0 | 100.0 | 108.8 | 95.6 | 108.2 | 97.7 | 115.4 | 98.4 | 1,146 | 53 | 1,200 | 1,053 | 56 | 1,109 |
| 1997 | 2,188 | 97 | 2,285 | 100.0 | 100.0 | 100.0 | 98.5 | 137.3 | 99.9 | 101.0 | 90.8 | 100.5 | 1,086 | 56 | 1,142 | 1,102 | 41 | 1,143 |
| 1996 | 2,134 | 105 | 2,239 | 100.0 | 100.0 | 100.0 | 112.9 | 88.5 | 111.7 | 104.5 | 108.0 | 104.6 | 1,132 | 50 | 1,181 | 1,002 | 56 | 1,058 |
| 1995 | 1,898 | 98 | 1,996 | 99.9 | 97.7 | 99.8 | 99.0 | 146.9 | 100.9 | 85.2 | 66.1 | 84.0 | 944 | 58 | 1,003 | 954 | 40 | 993 |
| 1994 | 2,322 | 191 | 2,513 | 98.2 | 73.4 | 96.3 | 100.0 | 88.8 | 99.1 | 118.9 | 150.5 | 120.9 | 1,161 | 90 | 1,251 | 1,161 | 101 | 1,262 |
| 1993 | 2,007 | 156 | 2,163 | 92.1 | 59.5 | 89.8 | 106.0 | 79.0 | 103.8 | 97.1 | 75.6 | 95.1 | 1,033 | 69 | 1,101 | 974 | 87 | 1,061 |
| 1992 | 1,811 | 221 | 2,032 | 89.8 | 60.3 | 86.6 | 97.0 | 112.6 | 98.6 | 91.8 | 128.5 | 94.7 | 892 | 117 | 1,009 | 919 | 104 | 1,023 |
| 1991 | 1,940 | 189 | 2,129 | 89.1 | 57.4 | 86.2 | 103.7 | 110.2 | 104.3 | NA | NA | NA | 988 | 99 | 1,087 | 952 | 90 | 1,042 |
| 1996-2000 | 9,483 | 424 | 9,907 | 100.0 | 100.0 | 100.0 | 106.2 | 108.5 | 106.3 | NA | NA | NA | 4,884 | 221 | 5,104 | 4,599 | 203 | 4,803 |
| 1991-1995 | 9,978 | 855 | 10,833 | 94.0 | 66.7 | 91.9 | 101.2 | 102.7 | 101.3 | NA | NA | NA | 5,018 | 433 | 5,451 | 4,960 | 422 | 5,382 |
| 1986-1990 | 10,867 | 1,144 | 12,011 | 85.5 | 54.2 | 82.5 | 106.0 | 101.1 | 105.6 | NA | NA | NA | 5,593 | 575 | 6,168 | 5,275 | 569 | 5,843 |
| 1981-1985 | 8,940 | 1,378 | 10,318 | 85.9 | 51.9 | 81.4 | 105.9 | 109.1 | 106.4 | NA | NA | NA | 4,599 | 719 | 5,318 | 4,341 | 659 | 5,000 |
| < 1981 | 9,117 | 2,436 | 11,553 | 80.0 | 46.8 | 73.0 | 105.5 | 110.3 | 106.5 | NA | NA | NA | 4,681 | 1,278 | 5,959 | 4,436 | 1,158 | 5,595 |
| All | 48,385 | 6,237 | 54,622 | 89.1 | 55.7 | 85.3 | 104.9 | 107.1 | 105.2 | NA | NA | NA | 24,774 | 3,226 | 28,000 | 23,611 | 3,011 | 26,622 |

[^19]| Table D. 5 Reporting of age at death in days |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods preceding the survey, Egypt 2000 |  |  |  |  |  |
| Age at death (in days) | Number of years preceding the survey |  |  |  |  |
|  | 0-4 | 5-9 | 10-14 | 15-19 | 0-19 |
| <1 | 48 | 48 | 38 | 33 | 167 |
| 1 | 50 | 95 | 76 | 52 | 272 |
| 2 | 24 | 24 | 30 | 32 | 110 |
| 3 | 41 | 37 | 28 | 30 | 136 |
| 4 | 13 | 12 | 17 | 13 | 55 |
| 5 | 4 | 12 | 12 | 9 | 37 |
| 6 | 4 | 6 | 25 | 18 | 53 |
| 7 | 43 | 79 | 133 | 158 | 413 |
| 8 | 4 | 4 | 7 | 10 | 24 |
| 9 | 1 | 4 | 4 | 7 | 16 |
| 10 | 9 | 10 | 4 | 16 | 38 |
| 11 | 2 | 4 | 2 | 4 | 11 |
| 12 | 2 | 4 | 5 | 6 | 17 |
| 13 | 4 | 1 | 2 | 3 | 10 |
| 14 | 0 | 0 | 2 | 6 | 8 |
| 15 | 10 | 20 | 16 | 28 | 74 |
| 16 | 0 | 4 | 3 | 0 | 7 |
| 17 | 3 | 2 | 0 | 1 | 7 |
| 18 | 0 | 1 | 2 | 0 | 3 |
| 19 | 0 | 0 | 1 | 0 | 1 |
| 20 | 5 | 5 | 11 | 8 | 29 |
| 21 | 0 | 0 | 0 | 1 | 1 |
| 22 | 0 | 3 | 4 | 0 | 7 |
| 23 | 0 | 2 | 0 | 0 | 2 |
| 24 | 0 | 2 | 1 | 0 | 3 |
| 25 | 1 | 2 | 2 | 3 | 8 |
| 26 | 1 | 0 | 0 | 0 | 1 |
| 27 | 0 | 1 | 2 | 3 | 5 |
| 28 | 1 | 0 | 0 | 0 | 2 |
| 29 | 2 | 0 | 1 | 0 | 4 |
| 30 | 1 | 1 | 0 | 1 | 3 |
| Total 0-30 | 271 | 383 | 427 | 444 | 1,524 |
| Percent early neonatal ${ }^{1}$ | 67.2 | 60.8 | 53.3 | 42.2 | 54.4 |
| ${ }^{1}$ (0-6 days/0-30 days) * 100 |  |  |  |  |  |



# Egypt <br> Demographic and Health Survey 2000 

Fatma El-Zanaty

Ann A. Way

January 2001

## Table D. 6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods preceding the survey, Egypt 2000

| Age at death (in months) | Number of years preceding the survey |  |  |  | $\begin{aligned} & \text { Total } \\ & 0-19 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-4 | 5-9 | 10-14 | 15-19 |  |
| $<1^{\text {a }}$ | 271 | 384 | 427 | 444 | 1,525 |
| 1 | 29 | 67 | 79 | 61 | 236 |
| 2 | 18 | 47 | 45 | 54 | 164 |
| 3 | 26 | 45 | 45 | 57 | 173 |
| 4 | 25 | 38 | 36 | 64 | 163 |
| 5 | 14 | 28 | 25 | 41 | 108 |
| 6 | 26 | 46 | 50 | 65 | 186 |
| 7 | 15 | 24 | 49 | 41 | 128 |
| 8 | 9 | 18 | 33 | 35 | 95 |
| 9 | 12 | 27 | 37 | 48 | 124 |
| 10 | 6 | 9 | 7 | 22 | 45 |
| 11 | 5 | 8 | 11 | 15 | 39 |
| 12 | 14 | 67 | 86 | 134 | 301 |
| 13 | 1 | 1 | 2 | 2 | 7 |
| 14 | 2 | 1 | 9 | 8 | 20 |
| 15 | 2 | 5 | 4 | 8 | 20 |
| 16 | 0 | 3 | 2 | 0 | 6 |
| 17 | 0 | 0 | 1 | 0 | 1 |
| 18 | 4 | 20 | 45 | 50 | 119 |
| 19 | 0 | 1 | 1 | 0 | 3 |
| 20 | 1 | 0 | 0 | 2 | 3 |
| 21 | 1 | 0 | 0 | 0 | 1 |
| 22 | 0 | 0 | 1 | 0 | 1 |
| 1 year | 0 | 0 | 1 | 1 | 2 |
| Total 0-11 | 455 | 741 | 845 | 946 | 2,987 |
| Percent neonatal ${ }^{\text {b }}$ | 59.6 | 51.8 | 50.5 | 46.9 | 51.1 |
| ${ }^{\mathrm{a}}$ Includes deaths under 1 month reported in days (Under 1 month/under 1 year) * 100 |  |  |  |  |  |

ARAB REPUBLIC OF EGYPT
MINISTRY OF HEALTH AND POPULATION
NATIONAL POPULATION COUNCIL

# EGYPT DEMOGRAPHIC AND HEALTH 

SURVEY 2000

HOUSEHOLD QUESTIONNAIRE

EGYPT DEMOGRAPHIC AND HEALTH SURVEY 2000 HOUSEHOLD QUESTIONNAIRE




We would like some information about people who usually live in your household or who are staying with you now.


| $\begin{aligned} & \text { LINE } \\ & \text { NO. } \end{aligned}$ | PARENTAL SURVIVORSHIP AND RESIDENCE |  |  |  |  | EDUCATION |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF 0-14 YEARS OLD |  |  |  | IF AGE 6 YEARS OR OLDER |  |  |
| 001 | 015 | 016 | 017 | 018 | 019 | 020 | 021 |
|  | Is (NAME'S) natural mother still alive? <br> QUESTION REFERS TO CHILD'S BIOLOGICAL MOTHER. <br> If ALIVE ASK 016, OTHERWISE GO TO 017. | IF ALIVE: <br> Is (NAME'S) natural mother a usual household member or was she present in the household last night? <br> IF YES: What is her name? <br> CHECK 002 AND RECORD MOTHER'S LINE NUMBER. <br> IF NO: <br> RECORD 00. | Is (NAME'S) natural father still alive? <br> QUESTION REFERS TO CHILD'S BIOLOGICAL FATHER. IF ALIVE ASK 018, OTHERWISE GO TO 019. | IF ALIVE: <br> is (NAME'S) natural father a usual household member or was he present in the household last night? <br> IF YES: <br> What is his name? <br> CHECK 002 AND <br> RECORD FATHER'S <br> LINE NUMBER. <br> IF NO: <br> RECORD 00. | Has (NAME) ever been to school? <br> IF YES: <br> ASK QUESTIONS 020-028 AS <br> APPROPRIATE. <br> IF NO: <br> GO TO 029. | IF ATTENDED SCH <br> What is the highest level of school (NAME) attended? <br> 1 PRIMARY <br> 2 PREPARATORY <br> 3 SECONDARY <br> 4 UPPER INTERMEDIATE <br> 5 UNIVERSITY <br> B MORE THAN UNIVERSITY | OOL <br> What is the highest grade he/she successfully completed at that level? |
| 01 | $\begin{array}{ccc} \text { YES } & \text { NO } & \text { DK } \\ 1 & 2 & 8 \end{array}$ |  | YES NO DK <br> 1 2 8 |  | $\begin{array}{cc} \text { YES } & \text { NO } \\ 1 & 2 \end{array}$ | LEVEL | GRADE |
| 02 | 128 |  | 128 |  | 12 | $\square$ | $\square$ |
| 03 | 128 |  | 128 | $\square$ | 12 | $\square$ | $\square$ |
| 04 | 128 |  | 128 | $\square$ | 12 | $\square$ | $\square$ |
| 05 | $\begin{array}{lll}1 & 2\end{array}$ |  | 120 | $1$ | 12 | $\square$ | $\square$ |
| 06 | 128 | $\square$ | 128 | $\square$ | 12 | $\square$ | $\square$ |
| 07 | 128 |  | 128 |  | 12 | $\square$ | $\square$ |
| 08 | 128 |  | 128 | $1$ | 12 | $\square$ | $\square$ |
| 09 | 126 |  | 128 |  | 12 | $\square$ | $\square$ |
| 10 | $\begin{array}{lll}1 & 2\end{array}$ |  | 128 |  | 12 | $\square$ | $\square$ |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP TO |
| :---: | :---: | :---: | :---: | :---: |
| 035 | What type of dwelling does your household live in? | APARTMENT <br> FREE STANDING HOUSE <br> OTHER $\qquad$ <br> (SPECIFY) | $2$ |  |
| 036 | Is your dwelling owned by your household or not? <br> IF OWNED: Is it owned solely by your household or jointly with someone else? | OWNED <br> OWNED JOINTLY <br> RENTED <br> OTHER $\qquad$ <br> (SPECIFY) | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 037 | MAIN MATERIAL OF THE FLOOR. RECORD YOUR OBSERVATIONS. | NATURAL FLOOR <br> EARTH/SAND <br> RUDIMENTARY FLOOR <br> WOOD PLANKS <br> FINISHED FLOOR <br> PARQUET OR POLISHED WOOD <br> CERAMIC/MARBLE TILES <br> Cement tiles <br> CEMENT <br> WALL-TO-WALL CARPET <br> VINYL <br> OTHER $\qquad$ | 11 <br> 21 <br> 31 <br> 32 <br> 33 <br> 34 <br> 35 <br> 36 <br> 96 |  |
| 038 | How many rooms does your household use for living (excluding the bathrooms, kitchens and stairway areas)? | ROOMS |  |  |
| 039 | What is the main source of drinking water for members of your household? | PIPED WATER <br> PIPED INTO RESIDENCE <br> PIPED INTO YARD/PLOT <br> PUBLIC TAP <br> WATER FROM OPEN WELL <br> OPEN WELL IN RESIDENCE <br> OPEN WELL IN YARD/PLOT <br> OPEN PUBLIC WELL <br> WATER FROM PROTECTED WELL <br> PROTECTED WELL IN RESIDENCE <br> PROTECTED WELL IN YARD/PLOT <br> PROTECTED PUBLIC WELL <br> SURFACE WATER <br> NILECANALS <br> BOTTLED WATER <br> OTHER $\qquad$ <br> (SPECIFY) | $\begin{aligned} & 11- \\ & 12- \\ & 13 \\ & 21- \\ & 22 \\ & 23 \\ & 31- \\ & 32- \\ & 33 \\ & 41 \\ & 51- \\ & 96 \end{aligned}$ | $\begin{aligned} \rightarrow & 041 \\ \rightarrow & 041 \\ \rightarrow & 041 \\ \rightarrow & 041 \\ \rightarrow & 041 \\ \rightarrow & 041 \\ \rightarrow & 041 \end{aligned}$ |
| 040 | How long does it take to go there, get water, and come back? | MINUTES ...................... $\square$ |  |  |
| 041 | What kind of toilet facility do most members of your household use? | MODERN FLUSH TOILET <br> TRADITIONAL WITH TANK FLUSH TRADITIONAL WITH BUCKET FLUSH PIT TOILET/LATRINE NO FACILITY OTHER $\qquad$ (SPECIFY) | $\begin{aligned} & 11 \\ & 12 \\ & 13 \\ & 21 \\ & 31 \\ & 96 \end{aligned}$ | 043 |
| 042 | Do you share this facility with other households? | YES <br> NO |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP TO |
| :---: | :---: | :---: | :---: | :---: |
| 043 | What type of fuel does your household use for cooking? | ELECTRICITY <br> LPG/NATURAL GAS <br> KEROSENE <br> COALIGNITE <br> CHARCOAL <br> FIREWOOD/STRAW <br> DUNG <br> OTHER $\qquad$ (SPECIFY) | $\begin{aligned} & 01 \\ & 02 \\ & 03 \\ & 04 \\ & 05 \\ & 06 \\ & 07 \\ & 96 \end{aligned}$ |  |
| 044 | Does your household have: <br> Electricity? <br> A radio with cassette recorder? <br> A television? <br> A video? <br> A telephone? |  | $\begin{gathered} \text { NO } \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \end{gathered}$ |  |
| (0) ${ }^{\text {i }}$ | Does your household have: <br> An electric fan? <br> A water heater? <br> A refrigerator? <br> A sewing machine? <br> An automatic washing machine? <br> Any other washing machine? |  | $\begin{gathered} \text { NO } \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \end{gathered}$ |  |
| 046 | Do you or any member of your household own: <br> A bicycle'? <br> A motorcycle or motor scooter? <br> A car/van/truck? <br> Farm or other land? <br> Livestock (donkeys, horses, cows, sheep, etc.)/poultry? |  | $\begin{gathered} \text { No } \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \end{gathered}$ |  |
| 047 | Does your household have any place used for hand washing? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 049$ |
| 048 | ASK TO SEE THE PLACE USED MOST OFTEN FOR HAND WASHING and observe if the following items are present. <br> Water/tap <br> Soap, ash or other cleansing agent <br> Basin |  | $\begin{gathered} \text { NO } \\ 2 \\ 2 \\ 2 \end{gathered}$ |  |
| 049 | ASK RESPONDENT FOR A TEASPOON OF SALT. TEST SALT FOR IODINE. <br> RECORD PPM (PARTS PER MILLION) | O PPM (NO IODINE ) <br> 1-25 PPM <br> 26. 50 PPM <br> 51-75 PPM <br> 76 - 100 PPM | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |

050 CHECK QUESTIONS 042 AND 013 AND IDENTIFY ALL ELIGIBLE EVER-MARRIED WOMEN 15-49 AND CHILDREN UNDER AGE 6. RECORD THE LINE NUMBERS, NAMES AND AGES OF THE WOMEN AND CHILDREN FROM THE HOUSEHOLD SCHEDULE IN THE APPROPRIATE GRID BELOW. USE AN ADDITIONAL QUESTIONNAIRE IF THERE ARE NOT SUFFICIENT LINES TO RECORD ALL OF THE ELIGIBLE WOMEN AND CHILDREN.

| ELIGIBLE WOMEN 15-49 |  |  |  | HEIGHT AND WEIGHT MEASUREMENT OF ELIGIBLE WOMEN 15.48 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LINE NO. CHECK COLUMN 001 | NAME <br> CHECK <br> COLUMN <br> 002 | AGE <br> CHECK <br> COLUMN <br> 010 |  | WEIGHT (KILOGRAMS) | $\begin{aligned} & \text { HEIGHT } \\ & \text { (CENTIMETERS) } \end{aligned}$ |  | RESULT: <br> 1 MEASURED <br> 2 NOT PRESENT <br> 3 REFUSED <br> 8 OTHER |
| 051 | 052 | 053 | 054 | 055 | 056 | 057 | 058 |
|  | - |  |  |  |  |  |  |
|  |  | $1 .$ |  |  |  |  |  |
|  | - |  |  |  |  |  |  |



060 CHECK COVER PAGE TO DE TERMINE IF HOUSEHOLD IS INCLUDED IN THE SUBSAMPLE FOR ANEMIA TESTING.


CHECK QUESTIONS 012, 013 AND 014 AND RECORD THE LINE NUMBERS FROM THE HOUSEHOLD SCHEDULE FOR EACH ELIGIBLE WOMAN, CHILD, AND ADOLESCENT IN THE APPROPRIATE GRIDS BELOW. USE AN ADDITIONAL QUESTIONNAIRE IF THERE ARE NOT SUFFICIENT LINES WITHIN A GRID TO RECORD ALL OF THE ELIGIBLE INDIVIDUALS.

## CONSENT STATEMENT

As part of the survey, we are studying anemia among women, children and adolescents. Anemia is a serious health problem which results from poor nutrition. This survey will assist the government to develop programs to prevent and treat anemia.

We request that all ever-married women aged $15-49$, children under 6 and adolescents $11-19$ participate in the anemia testing and give a drop of blood from the finger. The test uses sterile instruments that are clean and completely safe. The blood will be tested using special equipment and the results will be given to you right away. However, if you decide not to have the test done, it is your right and we will respect your decision. Now may I ask if (YOU / NAME OF CHILD OR ADDOLESCENT) would participate in the anemia test?




## OBSERVATIONS



# EGYPT DEMOGRAPHIC AND HEALTH 

SURVEY 2000

## WOMAN'S QUESTIONNAIRE



(


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP TO |
| :---: | :---: | :---: | :---: |
| 107 | What is your current marital status? |  |  |
| 108 | Now I would like to ask you some questions about your marriage (s). <br> How many times have you been married? | NUMBER OF TIMES MARRIED .... $\square$ |  |
| 109 | CHECK 108:  <br> MARRIED ONCE MARRIED TWO TIMES <br> OR MORE <br> In what month and year <br> did you enter into a <br> marriage contract with <br> your husband? Now we would like to ask <br> about your first husband. <br> In what month and year <br> did you enter into a <br> marriage contract with <br> your first husband? | MONTH $\square$ <br> DON'T KNOW MONTH <br> 98 <br> YEAR $\square$ DON'T KNOW YEAR $\qquad$ 9998 | 111 |
| 110 | How old were you when you entered into a marriage contract with your first husband? | AGE IN COMPLETED YEARS.. |  |
| 111 | CHECK 108: <br> MARRIED ONCE MARRIED TWO TIMES $\square$ OR MORE <br> In what month and year did you start living with your husband? <br> In what month and year did you start living with your first husband? | MONTH $\qquad$ $\square$ <br> DON'T KNOW MONTH $\qquad$ 98 <br> yEAR $\qquad$ <br> DON'T KNOW YEAR $\square$ | 113 |
| 112 | How old were you when you started living together with your (first) husband? | AGE IN COMPLETED YEARS. |  |
| 113 | DETERMINE MONTHS MARRIED SINCE JANUARY 1995. ENTER "X" MONTH MARRIED, AND ENTER "0" FOR EACH MONTH NOT MARRIED, <br> FOR WOMEN WHO ARE NOT CURRENTLY MARRIED OR WHO HAV date widowed, divorced, or Separated, and for starting | n Column 1 of the calendar for each SINCE JANUARY 1085. <br> MARRIED MORE THAN ONCE: PROBE FOR dit of any subsequent marriage. |  |
| 114 | Have you ever attended school? |  | 201 |
| 115 | What is the highest level of school you attended? | PRIMARY ................................. 1 <br> PREPARATORY ..................... 2 <br> SECONDARY ............................ 3 <br> UPPER INTERMIDIATE ................ 4 <br> UNIVERSITY ....................... 5 <br> MORE THAN UNIVERSITY ............ 6 |  |
| 116 | What is the highest grade which you successfully completed at that level? | GRADE ........................ $\square$ |  |

SECTION 2: REPRODUCTION

| NO. | QUESTIONS AND FITTERS | CODNG WAFEORIES |  |
| :---: | :---: | :---: | :---: |
| 201 | Now I would like to ask about all the births you have had during your life. Have you ever given birth? | $\begin{array}{lll} \text { YES ................................................................................................................... } \\ \text { NO ......... } \end{array}$ | $\rightarrow 206$ |
| 202 | Do you have any sons or daughters to whom you have given birth who are now living with you? |  | $\rightarrow 204$ |
| 203 | How many sons live with you? <br> And how many daughters live with you? <br> IF NONE RECORD "00" | SONS AT HOME DAUGHTERS AT HOME $\square$ |  |
| 204 | Do you have any sons or daughters to whom you have given birth who are alive but do not live with you? |  | $\rightarrow 206$ |
| 205 | How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? <br> IF NONE RECORD "00" | SONS ELSEWHERE $\qquad$ <br> DAUGHTERS ELSEWHERE $\qquad$ $\square$ |  |
| 206 | Have you ever given birth to a boy or a girl who was born alive but later died? IF NO PROBE: Any baby who cried or showed any sign of life but only survived a few hours or days? |  | $\rightarrow 208$ |
| 207 | In all, how many boys have died? And how many girls have died? <br> IF NONE RECORD "00" | BOYS DEAD <br> GIRLS DEAD |  |
| 208 | SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE RECORD "00" | Total ................................. $\square$ |  |
| 209 | CHECK 208: <br> Just to make sure that I have this right: you have had in total $\qquad$ births during your life. Is that correct? <br> YEs no $\square$ — PROBE AND CORRECT 201-209 AS NECESSARY |  |  |
| 210 | CHECK 208: <br> ONE OR MORE BIRTHS | NO BIRTHS | $\rightarrow 226$ |


| 211 | now I would like to record the names of all your births, whether still alive or not, starting with the first one you had. <br> RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES AND MARK WITH A BRACKET. COMPLETE 213-221 FOR EACH BIRTH. USE ADDITIONAL FORMS IF THERE ARE MORE THAN TEN BIRTHS. AFTER COMPLETING ALL BIRTHS, GO TO 222. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 |
| What name was given to your (first/next) baby? | RECORD SINGLE OR MULTIPLE status. | Is (NAME) a boy or a girl? | In what month and year was (NAME) born? <br> PROBE: <br> What is his/her birthday? OR: In what season was he/she born? | Is (NAME) still alive? | How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLET- ED YEARS. | IFALIVE Is (NAME) living with you? | RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD "00" IF CHILD NOT LISTED IN THE HOUSEHOLD SCHEDULE). | IF DEAD: <br> How old was (NAME) when he/she died? <br> IF '1 YR.' PROBE: How many months old was (NAME)? <br> RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS. | Were there any other live births between (WHEN YOU FIRST MARRIED NAME OF PREVIOUS BIRTH) and (NAME)? |
| 01 <br> (NAME) | $\left\lvert\, \begin{array}{lll}\text { SING } \ldots . . . & 1 \\ \text { MULT .... } & 2\end{array}\right.$ | $\begin{array}{lll} \text { BOY } \ldots \ldots . . & 1 \\ & & \\ \text { GIRL } \ldots \ldots . & 2 \end{array}$ |  |  | AGE IN YEARS $\square$ | YES ...... 1 | HOUSEHOLD LINE NUMBER <br> Go to 221 | DAYS. MONTHS.... 2 YEARS...... 3 $\square$ |  |
| $\square$ <br> 02 <br> (NAME) | $\begin{array}{ll} \text { SING ....... } & 1 \\ \text { MULT ..... } & 2 \end{array}$ | $\left\{\begin{array}{lll} \text { BOY } \ldots . . . . & 1 \\ \text { GIRL } \ldots \ldots . & 2 \end{array}\right.$ |  |  | AGE IN <br> YEARS $\square$ | $\begin{array}{llll} \text { YES } & \ldots & . . & 1 \\ \text { NO } & \ldots & \ldots & . \\ 2 \end{array}$ | HOUSEHOLD <br> LINE NUMBER | DAYS $\qquad$ MONTHS.... 2 YEARS...... 3 $\square$ |  |
| $\square$ <br> 03 $\qquad$ <br> (NAME) | $\left\lvert\, \begin{array}{lll}\text { SING ...... } & 1 \\ \text { MULT ..... } & 2\end{array}\right.$ | $\begin{array}{lll} \text { BOY } \ldots . . . . & 1 \\ \text { GIRL ....... } & 2 \end{array}$ | MONTH $\square$ <br> YEAR $\square$ |  | AGE IN <br> YEARS | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } & \ldots & . \\ \text { NO } & \ldots & 1 \\ \hline \end{array}\right.\right)$ | HOUSEHOLD LINE NUMBER | DAYS MONTHS.... 2 YEARS...... 3 $\square$ |  |
| 04 <br> (NAME) | SING ....... 1 | $\begin{array}{ll} \text { BOY ........ } 1 \\ \text { GIRL ....... } 2 \end{array}$ |  |  | AGEIN <br> YEARS | $\left\lvert\, \begin{array}{ccc} \text { YES } & \ldots & \ldots \\ \text { NO } & \ldots & 1 \\ \hline \end{array}\right.$ | HOUSEHOLD LINE NUMBER <br> Go to 221 | DAYS MONTHS.... 2 YEARS...... 3 |  |
| 05 $\qquad$ <br> (NAME) | SING ...... 11 | $\begin{array}{lll} \text { BOY } \ldots . . . . & 1 \\ \text { GIRL ....... } & 2 \end{array}$ |  |  | AGEIN YEARS $\square$ | $\left\|\begin{array}{ccc} \text { YES } & \ldots & . \\ \text { NO } & \ldots & 1 \\ \hline \end{array}\right\|$ | HOUSEHOLD <br> LINE NUMBER <br> Go to 221 | DAYS. <br> MONTHS.... 2 <br> YEARS |  |
| 06 <br> (NAME) | $\left\|\begin{array}{lll} \operatorname{SING} \ldots \ldots . & 1 \\ \text { MULT } \ldots . . & 2 \end{array}\right\|$ | $\begin{array}{lll} \text { BOY } \ldots . . . & 1 \\ \text { GIRL } \ldots . . . . & 2 \end{array}$ | MONTH $\square$ <br> YEAR $\square$ |  | AGEIN <br> YEARS | $\left\|\begin{array}{cccc} \text { YES } & \ldots & . & 1 \\ \text { NO } & \ldots & \ldots & \\ 2 \end{array}\right\|$ | HOUSEHOLD <br> LINE NUMBER <br> Go to 221 | DAYS MONTHS.... 2 YEARS...... 3 |  |
| 07 <br> (NAME) | $\left.\begin{array}{\|cc} \text { SING ....... } & 1 \\ \text { MULT ..... } & 2 \end{array} \right\rvert\,$ | $\begin{array}{lll} \text { BOY } \ldots . . . . & 1 \\ \text { GIRL } \ldots \ldots . & 2 \end{array}$ | MONTH $\square$ <br> YEAR $\square$ |  | AGE IN YEARS $\square$ | $\left\|\begin{array}{llll} \text { YES } & \ldots & . & 1 \\ \text { NO } & \ldots & \ldots & 2 \end{array}\right\|$ | HOUSEHOLD <br> LINE NUMBER <br> Go to 224 | Days. MONTHS.... 2 YEARS...... 3 |  |


| 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RECORD SINGLE OR MULTIPLE status. | Is (NAME) a boy or a girl? | In what month and year was (NAME) born? <br> PROBE: <br> What is his/her birthday? OR: In what season was he/she born? | $\begin{gathered} \text { is } \\ \text { (NAME) } \\ \text { still alive? } \end{gathered}$ | How old was (NAME) at his/her last birthday? <br> RECORD AGE IN COMPLETED YEARS. | If ALIV <br> Is (NAME) <br> living with <br> you? | RECORD household LINE NUMBER OF CHLLD (RECORD "00" IF CHILD NOT LISTED IN THE household schedule). | IF DEAD: How old was (NAME) when he/she died? <br> IF '1 YR.' PROBE: How many months old was (NAME)? <br> RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS. | Were there any other live births between (WHEN YOU FIRST MARRIED/NAME OF PREVIOUS BIRTH) and (NAME)? <br> CORRECTIF NECESSARY |
| 08 <br> (NAME) | $\begin{array}{lll} \text { SING ....... } & 1 \\ \text { MULT ..... } & 2 \end{array}$ | $\begin{aligned} & \text { BOY ........ } 1 \\ & \text { GIRL ....... } 2 \end{aligned}$ |  |  | AGE IN YEARS $\square$ | res ...... | household Line number | Days. MONTHS.... 2 YEARS...... 3 $\square$ |  |
| 09 <br> (NAME) | $\begin{array}{llll} \operatorname{SING} & . . . . . . & 1 \\ \text { MULT } . . . . . & 2 \end{array}$ | $\begin{array}{ll} \text { BOY ........ } 1 \\ \text { GIRL ....... } & 2 \end{array}$ |  |  | AGE IN YEARS $\square$ | Yes ...... | household LINE NUMBER <br> Go to 221 | DAYS. MONTHS.... 2 YEARS...... 3 $\square$ |  |
| 10 <br> (NAME) | $\begin{array}{lll} \hline \text { SING } \ldots . . . . & 1 \\ \text { MULT } \ldots . . & 2 \end{array}$ | BOY $\qquad$ 1 <br> GIRL $\qquad$ 2 |  |  | AGE IN YEARS $\square$ | $\begin{aligned} & \text { Yes ...... } \\ & \text { no ........ } \end{aligned}$ | HOUSEHOLD LINE NUMBER <br> Go to 221 | DAYS. $\qquad$ MONTHS.... 2 YEARS...... 3 $\square$ |  |
| 222 | Have you BIRTH)? <br> CORRECT | had any live <br> E BIRTH HISTO | births since <br> RY If NECESSA | the birth of RY. | AME OF | $\overline{\mathrm{AST}}$ |  |  | $\underset{2}{ } \longrightarrow$ TADLE |
| 223 | COMPARE <br> C | 208 WITH NUMBE <br> UMBERS ARE SA <br> ECK: FOR EACH <br> FOREACH <br> FOR EACH <br> FOR AGE A | R OF BIRTHS IN <br> ame $\square$ <br> BIRTH: YEAR OF LIVING CHILD: C DEAD CHILD: AG T DEATH 12 MON | HISTORY ABO NUMBER <br> F BIRTH IS REC CURRENT AGE GE AT DEATH IS NTHS OR 1 YEAR | OVE AND MA <br> S ARE DIFF <br> CORDED. <br> IS RECORDE <br> IS RECORDED <br> AR: PROBE | D. D. O DETERM | EXACT NUMBE | OBE ANO RECONCILE) <br> OF MONTHS. |  |
| 224 | CHECK 215 IF NONE, | AND ENTER THE ECORD "0" AND | NUMBER OF BIR GO TO 226. | IRTHS SINCE JA | ANUARY 188 |  |  |  |  |
| 225 | FOR EACH <br> THE MONTH <br> FOR EACH <br> EACH OF TH <br> (NOTE: THE <br> WRITE THE | BIRTH SINCE JAN AND YEAR OF BIRTH ENTERED E PRECEDING M NUMBER OF P's NAME OF THE C | NUARY 1995, EN THE MOST RECE IN THE CALEND MONTHS ACCOR mUST BE ONE HILD TO THE RIG | NTER "B" IN TH ENT BIRTH PRIO DAR, ASK THE ding to the LESS THAN TH GHT OF THE "E" | HE MONTH <br> OR TO JANU <br> NUMBER OF <br> duration <br> E NUMBER <br> " CODE. | F BIRTH IN ARY 1995 (IF MONTHS TH OF THE PREG OF MONTHS | COLUMN 2 OF TH ANY) AT THE BO E PREGNANCY L NANCY. <br> THAT THE PREGN | he calendar. also ent TTOM OF THE CALENDAR ASTEO AND RECORD "P <br> nancy Lasted.) |  |
| 226 | Are you p | regnant now? |  |  |  |  | URE |  | $\left.\begin{array}{l\|l} 1 \\ 2 \\ 8 \end{array}\right] \rightarrow 230$ |
| 227 | How ma | months preg RECOR | nant are you? <br> D IN COMPLETED | MONTHS |  |  | Hs .......... | $\ldots$ |  |
| 228 | RECORD COMPLET | UMBER OF CO MONTHS, BEG | MPLETED MON inning in the m | THS. ENTER MONTH OF IN | "Ps" IN COL ERVIEW. | UMN 2 | ALENDAR FOR | THE TOTAL NUMBER |  |
| 229 |  | e you becam hen, did you ome pregnan | me pregnant, want to wait t at all? | did you w until later, | ant to beco or did you |  | R <br> AT ALL |  | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ |


|  |  |  | KIPTO |
| :---: | :---: | :---: | :---: |
| 230 | Unfortunately many women have pregnancies that do not end in a live birth. <br> Sometimes a baby is still born, that is, the baby is born who does not breathe or show any life. <br> Other times women have a miscarriage or abortion early during a pregnancy. <br> It is very important in our study to know about such pregnancies so health programs can be developed for women. <br> USING THE INFORMATION IN THE CALENDAR, PROBE TO DETERMINE IF THE WOMAN HAD ANY STILL BIRTHS, MISCARRIAGES, OR ABORTONS BACK TO JANUARY 1995. <br> IF THE WOMAN REPORTS A PREGNANCY THAT DID NOT END IN A LIVE BIRTH, ASK ABOUT THE MONTH AND YEAR IN WHICH THE PREGNANCY ENDED. <br> RECORD THE APPROPRIATE CODE FOR THE PREGNANCY OUTCOME ON THAT DATE IN COLUMN 2 IN THE CALENDAR. ("S" FOR STILL BIRTH, "M" FOR MISCARRIAGE AND "A" FOR ABORTION). <br> then ask about the number of months the pregnancy lasted and record "p" in each of the preceding MONTHS ACCORDING TO THE DURATION OF THE PREGNANCY. <br> (NOTE: THE DURATION OF THE PREGNANCY SHOULD BE RECORDED IN COMPLETED MONTHS. THE NUMBER OF P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.) <br> illustrative questions <br> TO IDENTIFY NONLIVE BIRTH PREGNANCIES, ASK: <br> INTERVAL BETWEEN CURRENT PREGNANCY AND PRIOR BIRTH (LSAT BIRTH): <br> Did you have any pregnancy that ended in a still birth after the birth of (NAME OF LAST BIRTH) and before your current pregnancy? Or any pregnancy that ended in a miscarriage or abortion? <br> INTERVAL BETWEEN LAST AND PRIOR BIRTH: <br> Did you have any pregnancy that ended in a still birth between (NAME OF LAST BIRTH) and (NAME OF PRIOR BIRTH)? Or any pregnancy that ended in a miscarriage or abortion? <br> INTERVAL BETWEEN NEXT-TO-LAST BIRTH AND PRIOR BIRTH: <br> Did you have any pregnancy that ended in a still birth between (NAME OF NEXT-TO-LAST BIRTH) and (NAME OF PRIOR BIRTH)? Or any pregnancy that ended in a miscarriage or abortion? <br> - WOMEN WITH NO LIVE BIRTHS BUT WITH CURRENT PREGNANCY <br> Before your current pregnancy, did you ever have any other pregnancy that ended in a still birth? Or any other pregnancy that ended in a miscarriage or abortion? <br> - WOMEN WITH NO LIVE BIRTHS AND NOT CURRENTLY PREGNANT <br> Have you ever had a still birth? If YES: When did the last still birth occur? <br> Have you ever had a miscarriage or abortion? If YES: When did the last miscarriage or abortion occur? <br> - FOR EACH PREGNANCY TERMINATION, ASK: <br> How many months pregnant were you when the pregnancy ended? |  |  |
| 231 | IN THE BOXES AT THE BOTTOM OF THE CALENDAR, FILL IN THE MONTH AND YEAR AND OUTCOME OF THE LAST PREGNANCY THAT TERMINATED IN A MISCARRIAGE, ABORTION OR STILL BIRTH PRIOR TO JANUARY 1995. |  |  |
| 232 | When did your last menstrual period start? | DAYS AGO ............................... 1 WEEKS AGO ............................. 2 MONTHS AGO ............................ 3 YEARS AGO .......................... 4 <br> IN MENOPAUSEJHAD HYSTERECTOMY <br> BEFORE LAST BIRTH <br> never menstruated |  |
| 233 | From one menstrual period until the next, is there a time when a woman is more likely to become pregnant if she has sexual relations? | YES <br> NO <br> DON'T KNOW | 30 |
| 234 | Is this time just before the period begins, during her period, right after her period or half way between two periods? | JUST BEFORE HER PERIOD BEGINS <br> DURING HER PERIOD $\qquad$ <br> RIGHT AFTER HER PERIOO HAS ENDED <br> HALF WAY BETWEEN PERIODS .......... <br> OTHER $\qquad$ <br> (SPECIFY) <br> DON'T KNOW $\qquad$ |  |

## SECTION 3: CONTRACEPTIVE KNOWLEDGE AND USE

| NO* |  |  |  |
| :---: | :---: | :---: | :---: |
| 301 | Now I would like to talk about family planning: the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about? <br> CIRCLE CODE 1 IN 302 FOR EACH METHOD MENTIONED SPONTANEOUSLY. <br> then proceed down the column, reading the name and description of each method not mentioned spontaneously. CIRCLE CODE 1 IF METHOD IS RECOGNIZED AND CODE 2 IF NOT RECOGNIZED. <br> THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 302, ASK 303 BEFORE PROCEEDING TO THE NEXT METHOD. |  |  |
|  | METHOD | 302 Have you ever heard of (METHOD)? READ DESCRIPTION OF EACH METHOD $\|$ | 303 Have you ever used (METHOD)? |
| 01 | PILL A woman can take a pill every day. | YES ......................... 1 | YeS ........................ <br> NO ....................... |
| 02 | ivo A woman can have a loop or coil placed inside her by a doctor or a nurse. | YES ......................... 17 | $\begin{aligned} & \text { YES .......................................................... } 2 \end{aligned}$ |
| 03 | INJECTABLES A woman can have an injection by a doctor or a nurse which stops her from becoming pregnant for several months. | YES ..................... 1 1 ${ }^{\text {NO .................. }} 27$ | $\begin{array}{\|l\|l} \text { YES ....................................................... } \\ \text { NO ......... } \end{array}$ |
| 04 | NORPLANT A woman can have small rods placed in her arm by a doctor which stops her from becoming pregnant for several years. |  | YES ............................ 1 <br> NO ....................... 2 |
| 05 | DIAPHRAGM, FOAM, JELLY A woman can place a sponge, suppository, diaphragm, jelly or cream inside her vagina before intercourse. | $\left.\begin{array}{ccc}\text { YES ......................... } & 1 \downarrow \\ \text { NO ............................... } & 2\end{array}\right]$ | YES .............................. 1 <br> No .................... 2 |
| 06 | CONDOM A man can use a rubber covering during sexual intercourse. | YeS ............................. 1 1 NO ..................... 27 | $\begin{array}{lll} \text { Yes ............................ } & 1 \\ \text { NO ........................ } & 2 \end{array}$ |
| 07 | FEmALE STERILIZATION A woman can have an operation to avoid having any more children. | $\left.\begin{array}{lll}\text { YES .......................... } & 1 \downarrow \\ \text { NO ....................... } & 2\end{array}\right]$ | Have you ever had an operation to avoid having any more children? <br> YES $\qquad$ 1 <br> NO $\qquad$ 2 |
| 08 | male sterilization a man can have an operation to avoid having any more children. | YES ......................... 1 <br> NO ........................ 2 <br>   | Have you ever had a husband who had an operation to avoid having children? |
| 09 | RHYTHM OR PERIODIC ABSTINENCE A couple can avoid having sexual intercourse on certain days of the month when the woman is more likely to become pregnant. |  |  |
| 10 | withorawal a man can be careful and pull out before ejaculation. | YES ........................... <br> NO ...................... <br> 2$\|$ |  |
| 11 | PROLONGED BREASTFEEDING A woman can prolong the time that she breastfeeds her baby to delay the next pregnancy. | YES ........................... 1 <br> NO ....................... 2 <br> 7  | $\begin{aligned} & \text { YES ............................. } 1 \\ & \text { NO ......................... } \\ & 2 \end{aligned}$ |
| 12 | Have you heard of any other ways or methods that a woman or a man can use to avoid pregnancy? |  | YES ........................... 1 <br> NO .................  <br> YES ...................... 1 <br> NO ..................... 1 <br> YES .................... 1 <br> NO .................... 1 |

\begin{tabular}{|c|c|c|c|}
\hline NO. \& QUESTIONS AND FITTERS \& Conna chiecories \& SKIP TO \\
\hline 304 \& \begin{tabular}{l}
CHECK 303: \\
NOT A SINGLE "YES" \(\square\) \\
(NEVER USED)
\end{tabular} \& AT LEAST ONE "YES" (EVER USED) \& - 308 \\
\hline 305 \& Have you ever used anything or tried in any way to delay or avoid getting pregnant? \& YES ........................................... 1 -
NO ..................................... 2 \& 307 \\
\hline 306 \& ENTER "0" IN COLUMN 2 OF CALENDAR IN EACH BLANK MONTH \& \& \(\rightarrow 401\) \\
\hline 307 \& What have you used or done? CORRECT 303 -305 (AND 302 IF NECESSARY) \& (SPECIFY) \& \\
\hline 308 \& \begin{tabular}{l}
Now I would like to ask you about the first time you did something or used a method to avoid getting pregnant. \\
How many living children did you have at that time if any? \\
IF NONE, RECORD "00"
\end{tabular} \& NUMBER OF CHILDREN ........ \(\quad \square\) \& \\
\hline 309 \& \begin{tabular}{l}
CHECK 303 (FEMALE STERILIZATION): \\
WOMAN NOT STERILIZED

\end{tabular} \& WOMAN STERILIZED \& $\rightarrow 313 \mathrm{~A}$ <br>

\hline 310 \& | CHECK 107: |
| :--- |
| CURRENTLY MARRIED | \& OWED/ DIVORCED/ ARATED

$\square$ \& $\rightarrow 353$ <br>

\hline 311 \& | CHECK 228: |
| :--- |
| NOT PREGNANT OR UNSURE | \& PREGNANT \& - 353 <br>

\hline 312 \& Are you currently doing something or using any method to delay or avoid getting pregnant? \&  \& -353 <br>

\hline 313 \& | Which method are you using? |
| :--- |
| RECORD ALL RESPONSES |
| CIRCLE "7" FOR FEMALE STERILIZATION. | \&  \& $\rightarrow 314 \mathrm{~A}$ <br>

\hline 314

314A \& \begin{tabular}{l}
ASK FOR HIGHEST METHOD CODED IN Q 313: <br>
In what month and year did you begin this current segment of use of (METHOD)? <br>
In what month and year was the sterilization performed?

 \& 

MONTH $\square$
$\square$ <br>
YEAR $\qquad$
$\square$
\end{tabular} \& <br>

\hline 315 \& | IN CURRENT MONTH IN COLUMN 2 IN CALENDAR, ENTER CODE SHOWN TO T method circled in q.313. then enter method code in each month of the current segment or to january 1995 IF The current segment of illustrative questions: |
| :--- |
| - When did you start using (Method) continuously? |
| - How long have you been using (Method) continuously? | \& the left of the calendar for the highest F USE BACK TO THE DATE THE WOMAN BEGAN USE BEGAN BEFORE JANUARY 1995. \& <br>

\hline
\end{tabular}



|  |  | CODING CATEGORIES | SKIP TO |
| :---: | :---: | :---: | :---: |
| 320 | Write the name and address of the source from which the respondent obtained / got advice about the method. probe if necessary to identify the type of source and then circle the APPROPRLATE CODE. <br> (MAME AND ADDRESS OF PLACE) $\qquad$ $\square$ $\square$ $\square$ $\square$ |  |  |
| 321 | At the time that you began using (METHOD) during this current period of use, did you obtain / get advice about your (METHOD) at (SOURCE IN 320) or did you go to somewhere else? | YES, SAME PLACE .......................... 1 <br> NO, SOMEWHERE ELSE .................. 2 - | 323 |
| 322 | ENTER THE CODE FOR THE SOURCE RECORDED IN 320 IN COLUMN 3 OF THE began since january 1095, the source code should be entered in t of use began. write the adress of the source to the right of coul began before january 1995, no Code will be entered in the caland AFTER. | CaLENDAR. IF THE CURRENT SEGMENT OF USE he month and year in which the segment Lumn 3. IF The Current segment of use AR IN COLUMN 3 IN JANUARY 1905. GO TO 325 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES , | SKIP TC |
| :---: | :---: | :---: | :---: |
| 323 | Where did you first obtain/ get advice about (METHOD) during your current period of use? <br> Write the name and address of the place where the respondent had obtained the method advice. probe if necessary to identify THE TYPE OF SOURCE AND THEN CIRCLE THE APPROPRIATE CODE. $\qquad$ $\qquad$ <br> (NAME AND ADDRESS OF PLACE) <br> OFFICE: CODE SOURCE $\qquad$ $\square$ |  |  |
| 324 | ENTER THE CODE FOR THE SOURCE RECORDED IN 323 IN COLUMN 3 OF THE BEGAN SINCE JANUARY 1995, THE SOURCE CODE SHOULD BE ENTERED IN OF USE BEGAN. WRITE THE ADdRESS OF THE SOURCE TO THE RIGHT OF BEGAN BEFORE JANUARY 1995, NO CODE WIL BE ENTERED IN COLUMN 3 IN THE | CaLENDAR. IF THE CURRENT SE GMENT OF USE E MONTH AND YEAR IN WHICH THE SEGMENT LUMN 3. IF The Current segment of use CALANDAR. |  |
| 325 |  | SOURCES / KED $\square$ | 332 |
| 326 | Who usually goes to the pharmacy to obtain (CURRENT METHOD)? | RESPONDENT HERSELF .................... 01  <br> HUSBAND ................................ 02  <br> CHILDREN ............................... 03  <br> OTHER FEMALE RELATIVE(S) ............ 04  <br> OTHER MALE RELATIVE(S) .............. 05  <br> FRIEND(S) ........................... 06  <br> OTHER   <br> (SPECIFY)   | $\rightarrow 328$ |
| 327 | During this current period of use, did you yourself ever go to the pharmacy to obtain/ get advice about (CURRENT METHOD)? | YES ...................................................................................... 1 | $\rightarrow 332$ |
| 328 | At any time when you went to the pharmacy during this current period of use to obtain/get advice about (METHOD), did anyone tell or show you how to use the (METHOD)? | YES ........................................ 1 <br> NO ................................... 2 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP TC |
| :---: | :---: | :---: | :---: | :---: |
| 329 | At any time when you went to the pharmacy during this current period of use, were you told about side effects or health problems you might have with the method? | YES <br> No |  | $\rightarrow 331$ |
| 330 | Were you told what to do if you experienced side effects or health problems? | YES <br> NO | 1 2 |  |
| 331 | Were you told about other methods of family planning which you could use? | YES <br> NO | 1 2 |  |
| 332 | CHECK 317, 320, 323: <br> METHOD OBTAINED AT CLINICAL SOURCE | MACY 1 R SOURCES $/$ NOT ASKED |  | $\rightarrow 336$ |
| 333 | At any time when you went to the (SOURCE IN 317, 320, 323) during this current period of use to (OBTAIN/ GET ADVICE ABOUT CURRENT METHOD), were you told about side effects or health problems you might have with the method? | $\begin{aligned} & \text { YEs ............................................................................................ } \\ & \text { no ........ } \end{aligned}$ |  | $\rightarrow 335$ |
| 334 | Were you told what to do if you experienced side effects or health problems? | YES <br> No | 1 2 |  |
| 335 | Were you told about other methods of family planning which you could use? | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 336 | CHECK 316 AND CALENDAR: <br> CURRENTLY USING IUD $\square$ CURRENTLY <br> CURRENTLY <br> OTHER METHO | ING PILL $\square$ <br> ING $\square$ |  | $\begin{aligned} & \rightarrow 342 \\ & \rightarrow 349 \end{aligned}$ |
| 337 | I would like to ask about when you began using the IUD during this current period of use. <br> First of all did you get the IUD at (SOURCE IN 317) or did you buy it from somewhere else? | YES, SAME PLACE <br> NO, SOMEWHERE ELSE |  | $\rightarrow 340$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES $\quad$ SKIP TC |
| :---: | :---: | :---: |
| 338 | From where did you buy the IUD? <br> write the name and address of the source from which the respondent obtained the iud. probe if necessary to identify the TYPE OF SOURCE AND THEN CIRCLE THE APPROPRLATE CODE. $\qquad$ $\qquad$ <br> (NAME AND ADDRESS OF PLACE) <br> OFFICE: CODE SOURCE $\qquad$ $\square$ |  |
| 339 | How much did it cost to buy the IUD from that place? | COST (IN POUNDS) $\qquad$ $\square$ <br> FREE $\qquad$ <br> DON'T KNOW $\qquad$ |
| 340 | How much did it cost to have the IUD inserted (including all fees)? | COST (IN POUNDS) $\qquad$ $\square$ <br> FREE $\qquad$ <br> DON'T KNOW $\qquad$ 998 |
| 341 | Would you be willing to pay the following for an IUD (including all costs): <br> (IF YES, CONTINUE WITH NEXT AMOUNT. IF NO GO TO 353. <br> FOR AMOUNT MORE THAN 200 POUNDS, RECORD YES OR NO AND GO TO 353.) <br> 5 pounds? <br> 10 pounds? <br> 25 pounds? <br> 50 pounds? <br> 100 pounds? <br> 150 pounds? <br> 200 pounds? <br> More than 200 pounds? |  |


| No. | W, QUESTIONS AND FILERS | CODING CATEGORIES | SKIP TC |
| :---: | :---: | :---: | :---: |
| 342 | Now I would like to ask you some additional questions about this current segment of use of the pill. <br> May I see the package of pills you are using now? <br> RECORD NAME OF BRAND | PACKAGE SEEN $\qquad$ 1 <br> BRAND NAME $\qquad$ $\square$ ] <br> (SPECIFY) <br> PACKAGE NOT SEEN $\qquad$ | $\rightarrow 344$ |
| 343 | Do you know the brand name of the pill which you are using now? <br> RECORD NAME OF BRAND | BRAND NAME $\qquad$ $\square$ (SPECIFY) <br> DON'T KNOW $\qquad$ 98 |  |
| 344 | How much does one cycle of pills cost? |  |  |
| 345 | Would you be willing to pay the following for a cycle of pills? <br> 〔IF YES, CONTINUE WITH NEXT AMOUNT. IF NO GO TO 348. <br> AFTER ASKING ABOUT AMOUNT MORE THAN 5 POUNDS, RECORD YES OR NO AND GO TO 346.) <br> 50 piasters? <br> 75 piasters? <br> 1 pound? <br> 2 pounds? <br> 5 pounds? <br> More than 5 pounds? |  | 346 <br> 346 |
| 346 | When was the last time you took a pill? IF LESS THAN 24 HOURS, WRITE "00". | days ago $\square$ <br> MORE THAN ONE MONTH AGO |  |
| 347 | CHECK 346 : <br> MORE THAN TWO $\square$ <br> DAYS AGO | dAYS AgO $\square$ <br> SS | $\longrightarrow 353$ |
| 348 | Why aren't you taking the pill these days? |  | $\rightarrow 353$ |
| 349 | CHECK CALENDAR AND RECORD SOURCE WHERE METHOD OBTAINED AT <br> SOURCE CODES <br> (1-9, A - L) $\square$ | Ginning of Current segment <br> RCE CODES $\square$ <br> (X, | $\longrightarrow 353$ |
| 350 | When you began using (METHOD IN 316) this time, how much did it cost you to obtain/ get advice about the method at (SOURCE RECORDED IN COLUMN 3 OF CALENDAR)? |  |  |
| 351 | CHECK 318:USING <br> INJECTABLES | USiNg <br> ctables $\square$ | $\longrightarrow 353$ |



|  |  |
| :---: | :---: |
| 353 | I would like to ask some questions about all of the (other) periods in the last few years during which you or your husband used a method to avoid getting pregnant. <br> COLUMN 2-SEGMENTS OF CONTRACEPTIVE USE SINCE JANUARY 1995 <br> PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH THE MOST RECENT PERIOD OF USE AND GOING BACK TO JANUARY 1985. <br> USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. <br> RECORD PERIODS OF USE AND NONUSE IN COLUMN 2 OF THE CALENDAR. FOR EACH MONTH IN WHICH A METHOD WAS USED, ENTER THE CODE FOR THE METHOD; ENTER " 0 " IN THOSE MONTHS WHEN NO METHOD WAS USED. <br> ILLUSTRATIVE QUESTIONS FOR COLUMN 2 : <br> - When was the last time you used a method? Which method was that? <br> - When did you start using that method? How long after the birth of (NAME)? <br> - How long did you use the method then? <br> IF THERE ARE NO PRIOR SEGMENTS OF USE, GO TO 401. <br> COLUMN 3 - SOURCE OF CONTRACEPTIVE METHOD SINCE JANUARY 1995 <br> ASK FOR THE SOURCE OF THE METHOD FOR EACH SEGMENT OF USE PRIOR TO THE CURRENT SEGMENT OF USE IN THE CALENDAR THAT BEGAN IN JANUARY 1995 OR LATER. RECORD THE CODE OF THE SOURCE IN COLUMN 3 IN THE MONTH AND YEAR IN WHICH the segment of use began. <br> FOR THE PILL,CONDOM,INJECTABLES AND DIAPHRAGM/ FAOM/ JELLY, THE SOURCE SHOULD BE THE PLACE FROM WHICH THE method was obtained at the time the segment of use began. <br> ILLUSTRATIVE QUESTIONS FOR COLUMN 3 <br> FOR MODERN METHODS (CODES 1-8) <br> Where did you obtain the (method) when you began using it that time? <br> IF PHARMACYIOTHER SOURCE (CODES I,X) <br> Did you consult a doctor or a clinic, when you began using the (method) that time? <br> IF YES: Where did you consult? <br> IF NO: RECORD CODE FOR PHARMACY (H) OR OTHER SOURCE AS APPROPRIATE. <br> PROBE FOR THE EXACT ADDRESS OF EACH SOURCE. WRITE THE NAME TO THE RIGHT OF COLUMN 3 OF THE CALENDAR IN THE MONTH IN WHICH THE SEGMENT OF USE BEGAN. <br> FOR TRADITIONAL ME THODS (CODES 9,L-X) <br> - Did you seek advice about how to use (METHOD) when you began using it that time? <br> NUMBER OF CODES ENTERED IN COLUMN 3 MUST BE THE SAME AS THE NUMBER OF COMPLETE SEGMENTS OF CONTRACEPTIVE USE IN COLUMN 2. <br> COLUMN 4 -REASON FOR DISCONTINUATION <br> FOR EACH PERIOD OF USE, ASK WHY SHE STOPPED USING THE METHOD AND RECORD THE REASON FOR dISCONTINUATION IN COLUMN 4 OF THE CALENDAR IN THE MONTH IN WHICH THE SEGMENT OF USE WAS TERMINATED. |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

SECTION 4: FERTILITY PREFERENCES AND ATTITUDES ABOUT FAMILY PLANNING

| No. | QuEstions AnB FluTERS | CODINC CATECORIES | SKIP TC |
| :---: | :---: | :---: | :---: |
| 401 | CHECK 107: <br> CURRENTLY MARRIED $\square$ | ORCED/ WIDOWED/ parated | $\rightarrow 417$ |
| 402 | CHECK 313: <br> NEITHER STERILIZED | HE OR HE ERILIZED | - 405 |
| 403 |  | $\begin{array}{ll} \text { HAVE A (ANOTHER) CHILD .................... } & 1 \\ \text { NO MORE / NONE ............................. } & 2- \\ \text { SAYS SHE CAN'T GET PREGNANT ........ } & 3- \\ \text { UNDECIDED OR DON'T KNOW ............ } & 8 \end{array}$ | $\begin{aligned} & \rightarrow 405 \\ & \rightarrow 417 \\ & \rightarrow 405 \end{aligned}$ |
| 404 | CHECK 226: <br> NOT PREGNANT <br> OR UNSURE <br> How long would you like to wait from now before the birth of (a / another) child? <br> PREGNANT $\square$ <br> How long would you like to wait after the birth of the child you are expecting before the birth of another child? |  | $411$ |
| 405 | CHECK 226: <br> NOT PREGNANT $\square$ OR UNSURE |  | 412 |
| 406 | CHECK 313: <br> NOT CURRENTLY USING/ NOT ASKED $\square$ | CURRENTLY USING | 410 |
| 407 | CHECK 403: <br> WANTS NO MORE <br> UNDECIDEDI UNSURE |  | $\begin{aligned} & \rightarrow 409 \\ & \rightarrow 410 \end{aligned}$ |
| 408 | CHECK 404: <br> WANTS AFTER 24 OR MORE MONTHS $\square$ WANTS WITHIN OR 00-01 YEARS $00-23$ MONTHS OR 00.01 YEARS |  | 412 |


| NO. | Q QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP TC |
| :---: | :---: | :---: | :---: | :---: |
| 409 | CHECK 403: <br> WANTS WANTS NO <br> A / ANOTHER CHILD <br> You have said that you do not want (a / another) child soon, but you are not using any method to delay a pregnancy. Can you tell me why? <br> PROBE: Are there any other reasons? <br> MORE CHILDREN <br> You have said that you do not want any (more) children, but you are not using any method to avoid a pregnancy. Can you tell me why? <br> PROBE: Are there any other reasons? $\qquad$ $\qquad$ | FERTILITY-RELATED REASONS <br> NOT HAVING SEX $\qquad$ <br> INFREQUENT SEX <br> MENOPAUSAL / HYSTERECTOMY <br> SUBFECUND $\qquad$ <br> INFECUND <br> POSTPARTUM AMENORRHEIC <br> BREASTFEEDING <br> FATALISTIC <br> OPPOSITION TO USE RESPONDENT OPPOSED <br> HUSBAND OPPOSED $\qquad$ <br> OTHER OPPOSED $\qquad$ <br> RELIGIOUS PROHIBITION <br> LACK OF KNOWLEDGE KNOWS NO METHOD $\qquad$ <br> KNOWS NO SOURCE $\qquad$ <br> METHOD RELATED REASONS <br> HEALTH CONCERNS $\qquad$ <br> FEAR OF SIDE EFFECTS $\qquad$ <br> LACK OF ACCESS / TOO FAR $\qquad$ <br> COST TOO MUCH INCONVENIENT TO USE $\qquad$ <br> INTERFERES WITH BODY'S NORMAL PROCESSES $\qquad$ <br> OTHER $\qquad$ $\qquad$ | A <br> B <br> C <br> D <br> E <br> F <br> G <br> H <br> I <br> J <br> L <br> M <br> N <br> 0 <br> $P$ <br> Q <br> R <br> S <br> X <br> Z |  |
| 410 | In the next few weeks, if you discovered that you were pregnant, would it be a big problem, a small problem or no problem at all for you? | BIG PROBLEM <br> SMALL PROBLEM $\qquad$ <br> NO PROBLEM AT ALL $\qquad$ | 1 2 3 |  |
| 411 | CHECK 313: <br> not Currently USING/ NOT ASKED | RENTLY <br> G $\square$ |  | 417 |
| 412 | Do you know of a place where you can obtain a method of family planning? | $\begin{array}{\|l\|} \hline \text { YES } \\ \text { NO } . \end{array}$ |  | $\rightarrow 414$ |




| NO. |  | COONNG CATEGORIES |  | SKIP TC |
| :---: | :---: | :---: | :---: | :---: |
| 421 | Would you consider it appropriate for a newly married couple to use family planning before the first pregnancy? | YES <br> No <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 422 | In the past six months have you discussed family planning with your friends, neighbours or relatives? |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 424$ |
| 423 | With whom? <br> Anyone else? <br> RECORD ALL MENTIONED | MOTHER $\qquad$ <br> FATHER $\qquad$ <br> SISTER (S) $\qquad$ <br> BROTHER (S) $\qquad$ <br> DAUGHTER $\qquad$ <br> MOTHER-HN-LAW $\qquad$ <br> FRIENDS / NEIGHBORS <br> OTHER $\qquad$ <br> (SPECIFY) | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \mathrm{C} \\ & \mathrm{D} \\ & \mathrm{E} \\ & \mathrm{~F} \\ & \mathrm{G} \\ & \mathrm{X} \end{aligned}$ |  |
| 424 | In the past six months did a health worker, a raida rifia, or anyone else visit you to talk about family planning? <br> IF YES: Who visited you? | VISITED BY: <br> HEALTH WORKER $\qquad$ <br> RAIDA $\qquad$ <br> OTHER $\qquad$ (SPECIFY) <br> NO ONE VISITED $\qquad$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \mathrm{X} \\ & \mathrm{Y} \end{aligned}$ |  |
| 425 | Have you visited any governmental health facility for any reason during the past six months? | $\begin{aligned} & \text { YES } \\ & \text { NO . } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | 427 |
| 426 | Did any staff member at the health facility speak to you about family planning methods during any of your visits? | YES No | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 427 | Have you visited a private doctor or clinic for any reason during the past six months? | $\begin{aligned} & \text { YES } \\ & \text { NO .. } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2- \end{aligned}$ | $\rightarrow 428$ |
| 428 | Did the doctor or any staff person there speak to you about family planning methods during any of your visits? | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 429 | During the past six months have you heard about family planning? <br> On television? <br> On radio? <br> In a newspaper or magazine? <br> From a poster? <br> From leaflets or brochures? <br> From billboards or signboards? <br> At a community meeting? <br> From other sources? |  | $\begin{gathered} \text { NO } \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \end{gathered}$ |  |
| 430 | CHECK 302: <br> KNOWS PILL <br> DOESN'T | OW PILL $\square$ |  | $\rightarrow 432$ |
| 431 | Are you aware there is a special brand of pill that is appropriate for a woman to use while breastfeeding? <br> IF YES: What brand is that? <br> (MENTIONED HER EXACT WORDS) | YES, KNOW BRAND yes, but can't name brand NOT AWARE $\qquad$ | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 432 |  | RCED/ WIDOWED/ ARATED $\square$ |  | $\rightarrow 501$ |


|  |  | CODING CATEGORIES |  | BKIP TC |
| :---: | :---: | :---: | :---: | :---: |
| 433 | Do you think that your husband approves or disapproves of couples using a method to avoid pregnancy? | APPROVES $\qquad$ DISAPPROVES $\qquad$ <br> DON'T KNOW $\qquad$ | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 434 | In the past six months have you discussed family planning with your husband? | NEVER <br> ONCE OR TWICE <br> MORE OFTEN | 1 2 3 |  |
| 435 | Do you think that your husband approves or disapproves of couples using a method to avoid pregnancy? | APPROVES DISAPPROVES DON'T KNOW | 1 2 8 |  |
| 436 | Do you think your husband wants the same number of children you want, or does he want more or fewer than you want? | SAME NUMBER $\qquad$ <br> MORE $\qquad$ <br> FEWER $\qquad$ <br> DON'T KNOW $\qquad$ | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 8 \end{aligned}$ |  |

SECTION 5: PREGNANCY AND BREASTFEEDING


|  |  | LAST BIRTH <br> NAME | $\begin{aligned} & \text { NEXT-TO-LAST } \\ & \text { BIRTH } \end{aligned}$ | SECOND-FROM-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: | :---: |
| 511 | CHECK 510: <br> NUMBER OF RECEIVED ANTENATAL CARE |  |  |  |
| 512 | How many months pregnant were you when you last saw someone for an antenatal care for this pregnancy? | MONTHS $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 | MONTHS $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 | MONTHS $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 |
| 513 | When you were pregnant with (NAME), were you given any injection in the arm to prevent the baby from getting tetanus, that is, convulsion after birth? | YES .............................. 1 <br> NO .............................. 2 <br> DON'T KNOW .................. 8 | $\left.\begin{array}{l}\text { YES .............................. } 1 \\ \text { NO ............................... } \\ \hline \\ \text { DON'T KNOW .................. } \\ \hline\end{array}\right]$ | $\left.\begin{array}{lllll}\text { YES ............................. } & 1 \\ \text { NO ............................. } & 2 \\ \text { DON'T KNOW .................. } & 8 \\ \hline\end{array}\right]$ |
| 514 | During this pregnancy, How many times did you get this injection? | TIMES $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ | TSMES $\qquad$ <br> DON'T KNOW $\qquad$ 8 | TIMES $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ |
| 515 | Where did you receive the tetanus injection (s)? <br> RECORD ALL PLACES |  |  |  |
| 516 | When you received the tetanus toxoid injection, did anyone tell you that you should go for (other) antenatal care? |  |  |  |
| 517 | At that time, did anyone talk to you about family planning? | YES ............................... 1 <br> NO ................................ 2 <br> DON'T KNOW ................... 8 |  |  |
| 518 | When you were pregnant with (NAME), did you see a doctor, nurse or other health worker for any other reason (other than for an antenatal checkup or a tetanus injection)? <br> IF YES: Whom did you see? Anyone else? <br> RECORD ALL PERSONS SEEN |  |  | HEALTH PROFESSIONAL DOCTOR $\qquad$ A <br> NURSE / MIDWIFE $\qquad$ B <br> OTHER PERSON <br> DAYA $\qquad$ C <br> OTHER $\qquad$ X (SPECIFY) <br> NO ONE $\qquad$ <br> (SKIP TO 524) |
| 519 | Where did you go to see the doctor (nurse and / or health worker)? <br> RECORD ALL PLACES |  | PUBLIC SECTOR <br> GVT. HOSPITAL $\qquad$ <br> GVT. HEALTH UNIT $\qquad$ B <br> MCH CENTER $\qquad$ C <br> PRIVATE SECTOR <br> PVT. HOSPITAUCLINIC.. D <br> PVT. DOCTOR $\qquad$ E <br> OTHER $\qquad$ X <br> (SPECIFY) | PUBLIC SECTOR <br> GVT. HOSPITAL $\qquad$ A <br> GVT. HEALTH UNIT $\qquad$ B <br> MCH CENTER $\qquad$ C <br> PRIVATE SECTOR <br> PVT. HOSPITAUCLINIC. D <br> PVT. DOCTOR $\qquad$ E <br> OTHER $\qquad$ X |


|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST Birth | $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 520 | CHECK Q 507: <br> HAD ANTENATAL CARE |  |  |  |
| 521 | At any time did you seek this care because you thought there was a problem with the pregnancy? |  | YES ............................... 1  <br> NO ................................. 2  <br> DONT KNOW ................. 8 | YES ............................... 1 NO ................................. 2 DONT KNOW ................. 8 |
| 522 | How many times during this pregnancy, did you see a doctor, nurse, midwife or other health worker? | TIMES ......................... $\quad \square$ DON'T KNOW .................... 8 | TIMES $\square$ <br> DON'T KNOW | TIMES $\square$ <br> DON'T KNOW |
| 523 | How many months pregnant were you when you last saw a health worker during this pregnancy? | MONTHS $\ldots . . . . . . . . . . . . . . ~$ $\square$ <br> DON'T KNOW .................. 98 | MONTHS <br> DON'T KNOW | MONTHS $\square$ <br> DON'T KNOW |
| 524 | CHECK IF THE RESPONDENT HAD: <br> Q 507: ANTENATAL CARE <br> Q 513: TETANUS INJECTION <br> Q 510: OTHER CARE |  YES NO  <br> ANTENATL CARE ........ 1 2 <br> TETANUS INJECTION.... 1 2 <br> OTher CARE ............. 1 2 |  yes no  <br> Antenatl care ........ 1 2 <br> tetanus injection.... 1 2 <br> Other care ............. 1 2 |  Yes no <br> Antenatl care ........ 1 2 <br> TETANUS inJection.... 1 2 <br> Other Care ............. 1 2 |
| 525 | CHECK Q 520: |  |  |  |
| 526 | During the time that you were pregnant with (NAME), were any of the following done: <br> Were you weighed? <br> Was your height measured? <br> Was your blood pressure measured? <br> Did you give a urine sample? <br> Did you give a blood sample? |  YES NO <br> WEIGHT ............... 1 2 <br> HEIGHT ............. 1 2 <br> BLOOD PRESSURE.. 1 2 <br>    <br> URINE SAMPLE ...... 1 2 <br> BLOOD SAMPLE .... 1 2 |  |  YES NO <br> WEIGHT .............. 1 2 <br> HEIGHT .................. 1 2 <br> BLOOD PRESSURE.. 1 2 <br> URINE SAMPLE ...... 1 2 <br> BLOOD SAMPLE ..... 1 2 |
| 527 | Were you told about the signs of pregnancy complications? |  |  |  |
| 528 | Were you told about where to go if you had any of those complications? | YES $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ 1 <br> NO ......................................... 2 <br> DON'T KNOW ................. 8 |  | YES ............................... 1 NO .................................. 2 DON'T KNOW ................. 8 |
| 529 | During this pregnancy were you given or did you buy iron tablets or iron syrup? |  |  |  |


|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST MAME BIRTH | $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 530 | During the whole pregnancy, for how many days did you take the tablets or syrup? | DAYS $\qquad$ . DON'T KNOW | DAYS <br> DON'T KNOW | DAYS <br> DON'T KNOW 998 |
| 531 | Where did you give birth to (NAME)? | HOME <br> YOUR HOME $\qquad$ <br> OTHER HOME $\qquad$ <br> PUBLIC SECTOR <br> GVT. HOSPITAL $\qquad$ <br> GVT. HEALTH UNIT ...... <br> MCH CENTER $\qquad$ <br> PRIVATE SECTOR PVT. HOSPITAL/CLINIC. OTHER $\qquad$ (SPECIFY) | HOME <br> YOUR HOME ................ 11 <br> OTHER HOME .............. 12 <br> PUBLIC SECTOR <br> GVT. HOSPITAL ........... 21 <br> GVT. HEALTH UNIT ...... 22 <br> MCH CENTER ............... 23 <br> PRIVATE SECTOR <br> PVT. HOSPITAL/CLINIC.. 31 <br> OTHER $\qquad$ 96 <br> (SPECIFY) | HONE <br> YOUR HOME ............... 11 <br> OTHER HOME .............. 12 <br> PUBLIC SECTOR <br> GVT. HOSPITAL ............ 21 <br> OVT. HEALTH UNIT ....... 22 MCH CENTER ............ 23 <br> PRIVATE SECTOR <br> PVT. HOSPITALJCLINIC.. 31 <br> OTHER $\qquad$ 96 <br> (SPECIFY) |
| 532 | Who assisted with the delivery of (NAME)? <br> Anyone else? <br> PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS assisting. | HEALTH PROFESSIONAL DOCTOR. $\qquad$ NURSE / MIDWIFE ......... <br> OTHER PERSON <br> DAYA <br> RELATIVES/ FRIENDS <br> OTHER $\qquad$ (SPECIFY) NO ONE $\qquad$ (SKIP TO 534) | health professional $\qquad$ <br> NURSE / MIDWIFE ......... B <br> OTHER PERSON <br> DAYA .......................... C <br> RELATIVES/ FRIENDS ... D <br> OTHER $\qquad$ X <br> (SPECIFY) <br> NO ONE $\qquad$ <br> (SKIP TO 534) H | HEALTH PROFESSIONAL $\qquad$ <br> NURSE / MIDWIFE ......... B <br> OTHER PERSON <br> DAYA .......................... C <br> RELATIVES/ FRIENDS ... D <br> OTHER $\qquad$ X <br> (SPECIFY) <br> NO ONE $\qquad$ ${ }^{\mathrm{Y}}$ |
| 533 | Was (name) delivered normal or caeserean? | NORMAL <br> CAESEREAN |  |  |
| 534 | Around the time of the birth of (NAME), did you have any of the following problems: <br> Long labor, that is, did your regular contractions last more than 12 hours? <br> Excessive bleeding that was so much that you feared it threatened your life? <br> A high fever with bad smelling vaginal discharge? <br> Convulsions not caused by fever? |  |  |  |
| 535 | When (NAME) was born, was he/she: <br> very large, larger than average, average, smaller than average, or very small? | VERY LARGE <br> LaRGER THAN AVERAGE average smaller than average. VERY SMALL DON'T KNOW | VERY LARGE ................... 1 <br> LARGER THAN AVERAGE ... 2 <br> AVERAGE ..................... 3 <br> SMALLER THAN AVERAGE... 4 <br> VERY SMALL ................. 5 <br> DON'T KNOW .............. 8 | VERY LARGE ..................... 1 <br> LARGER THAN AVERAGE ... 2 <br> AVERAGE ......................... 3 <br> SMALLER THAN AVERAGE.. 4 <br> VERY SMALL ................... 5 <br> DON't KNOW ................ 8 |
| 536 | Was (NAME) weighed at birth? | YES <br> NO $\qquad$ <br> DON'T KNOW $\qquad$ <br> (SKIP TO 538) $\qquad$ |  | YES ................................ 1 NO .................................. 20 DON'T KNOW .................. $8-1$ (SKIP TO 538) |


|  |  | LAST BIRTH | NEXT-YO-LAST BIRTH <br> NAME | SECOND-FROM-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: | :---: |
| 537 | How much did (NAME) weigh? <br> RECORD WEIGHT FROM HEALTH CARD OR OTHER RECORD IF AVAILABLE. | GRAMS FROM CARD ...... 1 $\square$ <br> GRAMS FROM RECALL ... 2 $\square$ <br> DON'T KNOW $\qquad$ 99998 | GRAMS FROM CARD ...... 1 $\square$ <br> GRAMS FROM <br> RECALL ... 2 $\square$ <br> DON'T KNOW $\qquad$ 99998 | GRAMS FROM CARD ...... 1 $\square$ <br> GRAMS FROM RECALL ... 2 $\square$ <br> DON'T KNOW $\qquad$ 99998 |
| 538 | After (NAME) was born, did a doctor, nurse or other health worker or the daya check on your health? | YES ............................... 1 <br> NO ..................................... 2 <br> DON'T KNOW .................. 8 <br>   <br> (SKIP TO 542) $\longleftarrow$ | YES .............................. 1 <br> NO ................................ 2 <br> DON'T KNOW ................. 8 |  |
| 539 | How many days or weeks after the delivery did the first check take place? | DAYS $\qquad$ 1 $\square$ <br> WEEKS $\qquad$ 2 $\square$ <br> DON'T KNOW $\qquad$ 998 |  | DAYS $\qquad$ 1 $\square$ <br> WEEKS $\qquad$ 2 $\square$ <br> DON'T KNOW $\qquad$ 998 |
| 540 | Who checked on your health for the first time? <br> Anyone else? | HEALTH PROFESSIONAL DOCTOR ....................... 1 <br> NURSE / MIDWIFE ......... 2 <br> OTHER PERSON <br> DAYA $\qquad$ <br> RELATIVES/ FRIENDS ...... 4 <br> OTHER $\qquad$ | HEALTH PROFESSIONAL <br> DOCTOR ....................... I <br> NURSE / MIDWIFE ......... 2 <br> OTHER PERSON <br> DAYA $\qquad$ 3 <br> RELATIVES/ FRIENDS ... 4 <br> OTHER $\qquad$ | HEALTH PROFESSIONAL <br> DOCTOR $\qquad$ 1 <br> NURSE / MIDWIFE $\qquad$ 2 <br> OTHER PERSON <br> DAYA $\qquad$ 3 <br> RELATIVES/ FRIENDS ... 4 <br> OTHER $\qquad$ 6 (SPECIFY) |
| 541 | Where did this first check take place? | HOME   <br> YOUR HOME.................. 11  <br> OTHER HOME................. 12  <br> PUBLIC SECTOR   <br> GVT. HOSPITAL............. 21  <br> GVT. HEALTH UNIT........ 22  <br> MCH CENTER .............. 23  <br> PRNATE SECTOR   <br> PVT. HOSPITAUCLINIC... 31  <br> OTHER__   <br> (SPECIFY)   | HOME   <br> YOUR HOME.................... 11  <br> OTHER HOME................. 12  <br> PUBLIC SECTOR   <br> GVT. HOSPITAL............. 21  <br> GVT. HEALTH UNIT......... 22  <br> MCH CENTER ............... 23  <br> PRIVATE SECTOR   <br> PVT. HOSPITAUCLINIC... 31  <br> OTHER__   <br> (SPECIFY)   | HOME   <br> YOUR HOME................... 11  <br> OTHER HOME................. 12  <br> PUBLIC SECTOR   <br> GVT. HOSPITAL.............. 21  <br> GVT. HEALTH UNIT......... 22  <br> MCH CENTER ............... 23  <br> PRIVATE SECTOR   <br> PVT. HOSPITALCLINIC... 31  <br> OTHER_(SPECIFY)   |
| 542 | In the first two months after delivery, did you receive a Vitamin A dose? <br> SHOW CAPSULE. |  | YES ............................... 1 <br> NO .................................... 2 <br> DON'T KNOW .................. 8 | YES ................................ 1 <br> NO ..................................... 2 <br> DON'T KNOW .................. 8 |
| 543 | CHECK 528: <br> ASSISTED AT DELIVERY BY DOCTOR OR NURSE/ MIDWIFE |  |  |  |
| 544 | In the first two months after delivery, did a doctor, nurse or other health worker check on his / her health? |  |  |  |
| 545 | How many days or weeks after the delivery did the first check take place? |  | DAYS $\qquad$ 1 $\square$ <br> WEEKS $\qquad$ 2 $\square$ <br> DON'T KNOW $\qquad$ 998 | DAYS $\qquad$ 1 $\square$ <br> WEEKS $\qquad$ 2 $\square$ <br> DON'T KNOW $\qquad$ 998 |


|  |  | LAST BIRTH <br> NAME | NAME $\xrightarrow{\substack{\text { NEXT-TO-LAST } \\ \text { BIRTH }}}$ | SECOND-FROM-LAST <br> BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| 546 | Has your period returned since the birth of (NAME)? |  |  |  |
| 547 | ENTER "X" IN COL. 5 OF CALENDAR IN MONTH AFTER BIRTH AND IN EACH MONTH TO CURRENT MONTH, (OR TO CURRENT PREGNANCY) (SKIP TO 549) |  |  |  |
| 548 | For how many months after the birth of (NAME) did you not have a period? | ENTER "X" IN COL. 5 OF CALENDAR FOR THE NUMBER OF SPECIFIED MONTHS WITHOUT A PERIOD, Starting in the month after birth. if less than one month without a period, enter "o" IN COL. 5 IN MONTH AFTER BIRTH. |  |  |
| 549 | CHECK 226: RESPONDENT PREGNANT? |  |  |  |
| 550 | Have you resumed sexual relations since the birth of (NAME)? |  |  |  |
| 551 | How long after birth of (NAME) did you not have sexual relations? <br> Record Period in Days if Lese Than Month And In Months Otherwlee |  |  |  |
| 552 | At the time you were pregnant with (NAME) or after you delivered, did anyone give you advice about breastfeeding? |  |  |  |
| 553 | Who gave you this advice? <br> RECORD ALL MENTIONED |  | HEALTH PROVIDER........... A <br> SOCLAL WORKER.............. B <br> daya. <br> RELIGOUS LEADERS.......... D <br> NEIGHBORS/FRIENDS....... E <br> HOUSEHOLD MEMBER....... F <br> OTHER RELATIVES ........... G <br> OTHER $\qquad$ X <br> (SPECIFY) | HEALTH PROVIDER........... A <br> SOCIAL WORKER.............. B <br> DAYA... $\qquad$ <br> RELIGOUS LEADERS......... D <br> neighbors/friends........ E <br> HOUSEHOLD MEMBER....... F <br> OTHER RELATIVES........... G <br> OTHER $\qquad$ X <br> (SPECIFY) |
| 554 | Did you ever breastfeed (NAME)? |  |  |  |
| 555 | ENTER "N" in Col. 6 Of CALENDAR IN MONTH AFTER BIRTH. THEN GO TO 562 |  |  |  |
| 556 | How long after birth did you first put (NAME) to the breast? <br> IF LESS THAN 1 HOUR, RECORD ' 00 ' HOURS. <br> If LESS THAN 24 hours, record HOURS. <br> OTHERWISE, RECORD DAYS. | immediately $\qquad$ 000 <br> HOURS $\qquad$ 1 <br> DAYS $\qquad$ 2 $\square$ | IMMEDIATELY $\qquad$ 000 <br> HOURS $\qquad$ 1 <br> DAYS $\qquad$ 2 $\square$ | immediately $\qquad$ 000 <br> HOURS $\qquad$ 1 <br> DAYS $\qquad$ 2 $\square$ |


|  |  | LAST BIRTH | NAME BIRTH | SECOND-FROM-LAST NAME BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| 557 | Within the first three days after delivery, before your milk began flowing regularly was (NAME) given anything to drink other than breast milk? |  |  | YES $\qquad$ 1 <br> NO $\qquad$ 27 <br> (SKIP TO 550) $\square$ |
| 558 | What was (NAME) given to drink before your milk began flowing regularly? <br> Anything else? <br> RECORD ALL MENTIONED |  |  | MILK IOTHER THAN <br> BREAST MILK)   |
| 559 | CHECK 504 OR 216: <br> Child alive? | ALIVE <br> DEAD <br> (SKIP TO 581) | Alive <br> dead <br> (SKIP TO 581) | ALIVE <br> DEAD $\square$ <br> (SKIP TO 581) |
| 560 | Are you still breastfeeding (NAME)? |  |  |  |
| 561 | For how many months did you breastfeed (NAME)? | ENTER "X" IN COL. 6 OF CALENDAR FOR THE NUMBER OF SPECIFIED MONTHS OF BREASTFEEDING, STARTING IN THE MONTH AFTER BIRTH. THEN GO TO 562. <br> IF LESS THAN A MONTH ENTER "0" IN THE MONTH AFTER BIRTH. |  |  |
| 562 | Why did you (never / stop) breastfeeding (NAME)? |  |  |  |
| 563 | CHECK 504 OR 216: |  |  |  |
| 564 | ENTER "X" IN COL. 6 OF CALENDAR IN MONTH AFTER BIRTH AND IN EACH MONTH TO CURRENT MONTH. |  |  |  |


|  |  | LAST BIRTH <br> NAME | NAMENEXT-TOLAST <br> BIRTH | SECOND-FROM-LAST <br> NAME BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| 565 | How many times did you breastfeed (NAME) last night between sunset and sunrise? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER | number of NIGHTTIME FEEDINGS $\square$ | NUMBER OF NIGHTTIME FEEDINGS. $\square$ | NUMBER OF NIGHTTIME FEEDINGS $\square$ |
| 566 | How many times did you breastfeed (NAME) yesterday during the daylight hours? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER | NUMBER OF dAYLIGHT FEEDINGS... $\square$ | nUMBER OF daylight feedings. $\square$ | NUMBER OF daylight feedings.. $\square$ |
| 567 | Did (NAME) drink anything from a bottle with a nipple yesterday or last night? | YES ................................. 1 <br> NO ............................ 2 <br> DON'T KNOW .................. 8 | YES ............................... 1  <br> NO .................................. 2  <br> DON't KNOW ............... 8 | Yes ............................... 1  <br> NO ........................................  <br> DON'T KNOW  <br> DO.............. 8 |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECONDFROM-LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| 568 | At any time yesterday or last night was (NAME), given any of the following: <br> Plain water? <br> Sugar water? <br> Juice? <br> Herbal tea? <br> Baby formula? <br> Fresh milk? <br> Tinned or powdered milk? <br> Any other liquid? <br> Fruit? <br> Porridge, bread, rice, macaroni, or other food made from grains? <br> Sweet potatoes or other food made from tubers? <br> Eggs, fish, or poultry meat? <br> Any other solid or semi-solid food? |  |  |  |
| 569 | CHECK 588: <br> FOOD OR LIQUID GIVEN YESTERDAY? |  |  |  |
| 570 | In total, how many times was (NAME) fed any solid or semisolid food yesterday or last night? <br> IF 7 OR MORE TIMES, RECORD ' 7 '. | NUMBER OF TIMES $\square$ DON'T KNOW | NUMBER OF TIMES $\square$ DON'T KNOW $\qquad$ | NUMBER OF TIMES $\square$ DON'T KNOW $\qquad$ |
| 571 | On how many days during the past seven days was (NAME) given any of the following: <br> Plain water? <br> Any kind of milk (other than breastmilk)? <br> Liquids other than plain water or milk? <br> Food made from gains like porridge, bread, rice and macaroni? <br> Sweet potatoes or other foods tubers? <br> Eggs, fish, or poultry? <br> Meat? <br> Fruit? <br> Any other solid or semi-solid food? | RECORD The Number of DAYS <br> PLAIN WATER $\qquad$ <br> MILK $\qquad$ <br> OTHER LIQUID $\qquad$ <br> FOODS FROM GRAINS .... <br> FOODS FROM TUBERS . $\square$ <br> EGGS/ FISH/ POULTRY. $\square$ <br> meat $\qquad$ <br> fruit $\qquad$ <br> OTHER SOLID/ <br> SEMI SOLID FOOD $\qquad$ $\square$ | RECORD THE NUMBER OF <br> DAYS <br> PLAIN WATER ................. <br> MILK ........................... |  |
| 572 | RETURN TO SOS FOR NEXT BIRTH; OR, | NO MORE BIRTHS, GO TO 801. |  |  |

SECTION 6: IMMUNIZATION AND HEALTH




|  |  | LAST BIRTH <br> NAME $\qquad$ | $\qquad$ | SECOND-FROM-LAST <br> NARE |
| :---: | :---: | :---: | :---: | :---: |
| 617 | Did anyone talk to you about any other health services (nutrition / antenatal care)? | Yes ............................... 1 <br> NO ................................... 2 <br> DON'T KNOWI UNSURE ...... 8 |  |  |
| 618 | Has (NAME) been ill with a fever at any time in the last 2 weeks? | YES ................................ 1 <br> NO ................................... 2 <br> DON'T KNOW ................. 8 |  |  |
| 619 | Has (NAME) been ill with a cough at any time in the last 2 weeks? |  |  | YES...............................$~$ 1   <br> NO ................................. 2   <br> DONT KNOW $\ldots \ldots \ldots \ldots \ldots .$. 8  <br> (SKIP TO 824) $\longleftarrow$   |
| 620 | When (NAME) had the illness with a cough, did he/she breathe faster than usual with short, rapid breaths? | Yes ................................ 1 <br> NO .......................................... 2 <br> DON'T KNOW ................ 8 |  |  |
| 621 | Did you seek advice or treatment for the cough? | YES ................................ 1 <br> NO .................................... 2 <br> (SKIP TO 823) $\longleftarrow$ | YES .................................. 1 <br> NO ........................... 2 <br> (SKIP TO 023) $\longleftarrow$ | YeS ................................. 1 <br> NO ........................... 2 <br> (SKIP TO 623) $\boxed{ }$ |
| 622 | Where did you seek advice or treatment? <br> Anywhere else? <br> RECORD ALL MENTIONED. | PUBLIC SECTOR <br> GVT. HOSPITAL .............. A <br> GVT. HEALTH UNIT ......... B <br> MCH CENTER .................. C <br> MEDICAL PRIVATE SECTOR <br> PVT. HOSPITALCLINIC.... D <br> PVT. DOCTOR ............... E <br> PHARMACY .................... $F$ <br> OTHER PRNATE SECTOR <br> TRADITIONAL <br> PRACTITIONER ............... G <br> RELATIVES/ FRIENDS ......... H <br> OTHER $\qquad$ X <br> (SPECIFY) | PUBLIC SECTOR <br> gVT. HOSPITAL ............. A <br> gVT. HEALTH UNIT ......... B <br> MCH CENTER $\qquad$ C <br> medical private sector <br> PVT. HOSPITALCLINIC.... D <br> PVT. DOCTOR ................. E <br> PHARMACY .................... F <br> OTHER PRIVATE SECTOR <br> traditional <br> PRACTITIONER ............... G <br> RELATIVES/ FRIENDS .......... H <br> OTHER $\qquad$ X <br> (SPECIFY) | PUBLIC SECTOR <br> GVT. HOSPITAL .............. A <br> GVT. HEALTH UNIT ......... B <br> MCH CENTER $\qquad$ C <br> MEDICAL PRIVATE SECTOR <br> PVI. HOSPITALCLINIC.... D <br> PVT. DOCTOR .............. E <br> PHARMACY .....................F <br> OTHER PRIVATE SECTOR <br> traditional <br> PRACTITIONER ............... G <br> RELATIVES/ FRIENDS ......... H <br> OTHER $\qquad$ X <br> (SPECIFY) |
| 623 | Was (NAME) given antibiotic to treat the cough? | YES ................................. 1 <br> NO ............................ 2 <br> OON'T KNOW .................. 8 | YES .................................. 1 <br> NO ........................... 2 <br> DON'T KNOW .................. 8 | YES .................................. 1 <br> NO ............................ 2 <br> DON'T KNOW .................. 8 |
| 624 | Has (NAME) had diarrhea in the last two weeks? |  |  |  |
| 625 | Now I would like to know how much (NAME) was offered to drink during the diarrhea, was he/she offered less than usual to drink? <br> If less, probe: Was he/ she offered much less than usual to drink or somewhat less? | MUCH LESS ..................... 1 <br> SOMEWHAT LESS ............ 2 <br> ABOUT THE SAME ............ 3 <br> MORE ........................... 4 <br> NOTHING TO DRINK .......... 5 <br> DON'T KNOW ............... 8 | MUCH LESS ..................... 1 <br> SOMEWHAT LESS ........... 2 <br> ABOUT THE SAME ............ 3 <br> MORE ............................ 4 <br> NOTHING TO DRINK .......... 5 <br> DON'T KNOW ............... 8 | MUCH LESS ..................... 1 <br> SOMEWHAT LESS ............ 2 <br> ABOUT THE SAME ........... 3 <br> MORE ........................... 4 <br> NOTHING TO DRINK .......... 5 <br> DONTT KNOW ................ 8 |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NAME $\quad$NEXT-TO-LAST <br> BIRTH | $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 626 | When (NAME) had diarrhea, was he/ she offered to eat, about the same amount, more than usual, or nothing to eat? <br> if less, probe: Was he/ she offered much less than usual to eat or somewhat less? | MUCH LESS .................... <br> SOMEWHAT LESS .......... <br> ABOUT THE SAME ............ | MUCH LESS ..................... 1 <br> SOMEWHAT LESS ........... 2 <br> ABOUT THE SAME ............ 3 <br> MORE ........................... 4 <br> STOPPED FOOD ............. 5 <br> NEVER GAVE FOOD ......... 6 <br> DON'T KNOW ................ 8 | MUCH LESS .................... 1 <br> SOMEWHAT LESS ........... 2 <br> ABOUT THE SAME ........... 3 <br> MORE .......................... 4 <br> STOPPED FOOD ............. 5 <br> NEVER GAVE FODD ......... 6 <br> DON'T KNOW ................ 8 |
| 627 | Was (NAME) given a fluid made from a special packet called mahloul moalget el-gaffaf to drink? | YES ............................... 1 <br> NO ................................... 2 <br> DON'T KNOW .................. 8 | YES ................................ 1 <br> NO .......................................... 2 <br> DONT KNOW ................. 8 | YES ................................ 1 <br> NO ................................... 2 <br> DON'T KNOW .................. 8 |
| 628 | Did anyone advice you to give (NAME) mahloul moalget el gafaf when (he/she) had diarrhea that time? <br> If YEs: Who? <br> RECORD ALL MENTIONED. | PUBLIC SECTOR <br> DOCTORJHEALTH WORKER A <br> PRNATE SECTOR <br> DOCTORHEALTH WORKER B <br> PHARMACY WORKER $\qquad$ C <br> traditional <br> PRACTITONER $\qquad$ <br> HUSBAND $\qquad$ E <br> OTHER RELATVE/FRIEND.. F <br> OTHER $\qquad$ x <br> (SPECIFY) <br> NO ONE $\qquad$ | PUBLIC SECTOR <br> DOCTORJHEALTH WORKER A <br> PRIVATE SECTOR <br> DOCTORHEALTH WORKER B <br> PHARMACY WORKER $\qquad$ C <br> TRADITIONAL <br> PRACTITIONER $\qquad$ <br> HUSBAND $\qquad$ E <br> OTHER RELATIVEFRIEND... F <br> OTHER $\qquad$ x <br> (SPECIFY) <br> NO ONE $\qquad$ | PUBLIC SECTOR <br> DOCTORHEALTH WORKER A PRIVATE SECTOR DOCTORHEALTH WORKER B PHARMACY WORKER $\qquad$ C traditional PRACTITIONER $\qquad$ <br> HUSBAND $\qquad$ E <br> OTHER RELATVE/FRIEND... F <br> OTHER $\qquad$ x <br> (SPECIFY) <br> NO ONE $\qquad$ |
| 629 | Was he/she given anything (else) to treat the diarhea? |  | YES...............................$~$ 1  <br> NO ................................ 2  <br> DON'T KNOW $\ldots \ldots \ldots . . . . . . . . . . . . . ~$ 8 <br> (SKIP TO 831) $\ldots$  |  |
| 630 | What was given to treat the diarrhea? <br> Anything else? <br> RECORD ALL MENTIONED. | HOMEMADE SUGAR, SALT <br> AND WATER SOLUTION .... A <br> ANTIBIOTIC <br> (PILL OR SYRUP) ............ B <br> OTHER PILL OR SYRUP ...... C <br> INJECTION <br> (I.V.) INTRAVENOUS .......... D <br> HOME REMEDIES! <br> HERBAL MEDICINES ......... E <br> OTHER $\qquad$ <br> (SPECIFY) | homemade sugar, salt <br> AND WATER SOLUTION .... A <br> ANTIBIOTIC <br> (PILL OR SYRUP) ............ B <br> OTHER PILL OR SYRUP ...... C <br> injection <br> (I.V.) INTRAVENOUS .......... D <br> home remedies: <br> HERBAL MEDICINES ......... E <br> OTHER $\qquad$ X | HOMEMADE SUGAR, SALT <br> AND WATER SOLUTION ... <br> ... A <br> ANTIBIOTIC <br> (PILL OR 8YRUP) $\qquad$ B <br> OTHER PILL OR SYRUP ...... C <br> INJECTION <br> (I.V.) INTRAVENOUS $\qquad$ D <br> HOME REMEDIES <br> HERBAL MEDICINES ......... E <br> OTHER $\qquad$ X <br> (SPECIFY) |
| 631 | Did you seek advice or treatment for the diarrhea? | YES ............................... <br> NO ................................... <br> (SXIP TO 833) <br> 2 | YES ................................ 1  <br> NO .................................... 2  <br> (SKIP TO 833) $\ldots$  | YES ................................ 1   <br> NO ................................... 2   <br> (SKIP TO 833) $\ldots$   |


|  |  | LAST BIRTH <br> NAME | NAME$\substack{\text { NEXT-TO-LAST } \\ \text { BIRTH } \\ \hline}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 632 | Where did you seek advice or treatment? <br> Anywhere else? <br> RECORD ALL MENTIONED. |  |  |  |
| 633 | GO BACK TO 603 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, GO TO 834. |  |  |  |
| 634 | CHECK 827, ALL COLUMNS: <br> NO CHILD RECEIVED ORS |  |  |  |
| 635 | Have you ever heard of a special product called mahloul moalget el-gaffaf you can get for the treatment of diarrhea? |  |  |  |


| No6 |  | HLTERS | CODING CATEG | ES $\quad$ SKPTC |
| :---: | :---: | :---: | :---: | :---: |
| 701 | ONE OR MORE LVING children between 6-15 YEARS |  | no living children between 6.15 YEARS | $\rightarrow 729$ |
| 702 | enter the line number of each living chld between the ages b-15 years old. begin with the youngest Child. ASK the questions for every child. if there are more than 3 Children between these ages, use an ADDITIONAL QUESTIONNAIRE. <br> Now I would like to ask you some questions about the education of your children who are between the ages 6 and 15 years of age. we will talk about one child at a time. |  |  |  |
| 703 | RECORD LINE NUMBER AND NAME FROM Q 212 | YOUNGEST CHILD <br> AGE 6 - 15 <br> NAME $\qquad$ <br> LINE NO. $\qquad$ $\square$ | SECOND YOUNGEST CHILD AGE 0-15 <br> name | THIRD YOUNGEST CHILD AGE 6 -15 |
| 704 | Has (NAME) ever attended school? |  |  |  |
| 705 | What are the most important reasons (NAME) has never attended school? <br> RECORD UP TO 3 REASONS MENTIONED | CHILD SICK / WEAK / <br> HANDICAPPED <br> CHILD TOO YOUNG. $\qquad$ <br> NEAREST SCHOOL TOO <br> FAR <br> SCHOOL OF POOR QUALITY <br> CHILD NEEDED AT HOME: TO CARE FOR YOUNGER CHILDREN...... E TO HELP WITH DOMESTIC WORK OTHER THAN CHILD CARE, WORK IN FIELDS OR TENDS ANIMALS <br> TO WORK IN FAMILY BUSINESS OR EARN MONEY FROM EMPLOYER <br> SCHOOL COSTS TOO HIGH NO MONEY TO PAY COSTS OF SCHOOLING ..... H SCHOOL NOT IMPORTANT .. <br> CHILD IS NOT INTERESTED. CHILD GOT MARRIED........ K <br> TRADITION/ CUSTOM......... L OTHER $\qquad$ x <br> (SPECIFY) <br> (SKIP TO 720) | CHILD SICK / WEAK I <br> HANDICAPPED <br> CHILD TOO YOUNG. $\qquad$ <br> NEAREST SCHOOL TOO FAR <br> SCHOOL OF POOR QUALITY <br> CHILD NEEDED AT HOME: <br> TO CARE FOR YOUNGER CHILDREN..... <br> TO HELP WITH <br> DOMESTIC WORK OTHER THAN CHILD CARE, WORK IN FIELDS F OR TENDS ANIMALS <br> TO WORK IN FAMILY BUSINESS OR EARN MONEY FROM <br> SCHOOL COSTS TOO HIGH/ NO MONEY TO PAY COSTS OF SCHOOLING ..... SCHOOL NOT IMPORTANT. <br> CHILD IS NOT INTERESTED CHILD GOT MARRIED TRADITION/ CUSTOM. OTHER $\qquad$ X <br> (SPECIFY) (SKIP TO 720) | CHILD SICK / WEAK / <br> HANDICAPPED <br> CHILD TOO YOUNG. $\qquad$ <br> NEAREST SCHOOL TOO <br> FAR. <br> SCHOOL OF POOR QUALITY $\qquad$ <br> CHILD NEEDED AT HOME: <br> TO CARE FOR YOUNGER CHILDREN..... <br> TO HELP WITH DOMESTIC WORK OTHER THAN CHILD CARE, WORK IN FIELDS F OR TENDS ANIMALS <br> TO WORK IN FAMILY BUSINESS OREARN MONEY FROM <br> SCHOOL COSTS TOO HIGHI NO MONEY TO PAY COSTS OF SCHOOLING . SCHOOL NOT IMPORTANT <br> CHILD IS NOT INTERESTED CHILD GOT MARRIED........ TRADITION/ CUSTOM......... x OTHER $\qquad$ x <br> (SPECIFY) <br> (SKIP TO 720) |
| 706 | At what age did (NAME) first start going to school? | AGE $\square$ DON'T KNOW $\qquad$ | AGE $\square$ DON'T KNOW $\qquad$ | AGE $\square$ DON'T KNOW $\qquad$ |


|  |  | YOUNGEST CHILD AGE 6-15 | SECOND YOUNGEST CHILD AGE 6-15 | THIRD YOUNGEST CHILD AGE 6 - 15 |
| :---: | :---: | :---: | :---: | :---: |
| 707 | Has (NAME) ever repeated a grade of school? |  |  |  |
| 708 | Is (NAME) currently attending school? |  | YES $\qquad$ 1 <br> NO $\qquad$ 2(SKIP TO 710) |  |
| 709 | During the current school year what level and grade is (NAME) attending? |  |  | $\square$ <br> (SKJP TO 713) |
| 710 | What is the highest level of school (NAME) has attended? <br> What is the highest grade that (NAME) has completed at that level? | LEVEL <br> GRADE | GRADE | GRADE |
| 711 | At what age did (NAME) stop going to school? | AGE $\qquad$ $\square$ DON'T KNOW $\qquad$ 98 | AGE $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 | AGE $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 |
| 712 | What are the most important reasons (NAME) stopped attending school? <br> RECORD UP TO 3 REASONS MENTIONED | CHILD SICK / WEAK / <br> HANDICAPPED <br> CHILD FAILED / REPEAT <br> A YEAR $\qquad$ <br> NEAREST SCHOOL TOO FAR $\qquad$ <br> SCHOOL OF POOR QUALITY $\qquad$ <br> CHILD NEEDED AT <br> HOME: <br> TO CARE FOR YOUNGER CHILDREN..... E TO HELP WITH DOMESTIC WORK OTHER THAN CHILD CARE, WORK IN FIELDS OR TENDS ANIMALS $\qquad$ <br> TO WORK IN FAMILY BUSINESS OR EARN MONEY FROM EMPLOYER. $\qquad$ <br> CHILD IS NOT INTERESTED CHILD GOT MARRIED $\qquad$ K CHILD HAD ENOUGH EDUCATION $\qquad$ L TRADITION/ CUSTOM....... M OTHER $\qquad$ X <br> (SPECIFY) <br> (SKIP TO 720) | CHILD SICK / WEAK / HANDICAPPED <br> CHILD FAILED / REPEAT <br> A YEAR $\qquad$ <br> NEAREST SCHOOL TOO FAR $\qquad$ <br> SCHOOL OF POOR QUALITY $\qquad$ <br> CHILD NEEDED AT <br> HOME: <br> TO CARE FOR YOUNGER CHILDREN..... <br> TO HELP WITH DOMESTIC WORK OTHER THAN CHILD CARE, WORK IN FIELDS OR TENDS ANIMALS $\qquad$ F TO WORK IN FAMILY BUSINESS OR EARN MONEY FROM EMPLOYER $\qquad$ <br> SCHOOL COSTS TOO HIGH/ NO MONEY TO PAY SCHOOL COSTS $\qquad$ SCHOOL NOT IMPORTANT ...................... I <br> CHILD IS NOT INTERESTED CHILD GOT MARRIED........ K CHILD HAD ENOUGH EDUCATION ................... L TRADITION/ CUSTOM....... M OTHER $\qquad$ X <br> (SPECIFY) <br> (SKIP TO 720) | CHILD SICK / WEAK / <br> HANDICAPPED <br> CHILD FAILED / REPEAT <br> A YEAR $\qquad$ <br> NEAREST SCHOOL TOO <br> FAR $\qquad$ <br> SCHOOL OF POOR <br> QUALITY $\qquad$ <br> CHILD NEEDED AT <br> HOME: <br> TO CARE FOR YOUNGER CHILDREN..... E TO HELP WITH DOMESTIC WORK OTHER THAN CHILD CARE, WORK IN FIELDS OR TENDS ANIMALS $\qquad$ <br> TO WORK IN FAMILY BUSINESS OR EARN MONEY FROM EMPLOYER $\qquad$ SCHOOL COSTS $\qquad$ <br> SCHOOL NOT $\qquad$ <br> CHILD IS NOT INTERESTED CHILD GOT MARRIED........ K CHILD HAD ENOUGH EDUCATION ................. ... L TRADITION/ CUSTOM....... M OTHER $\qquad$ X |


|  |  | $\qquad$ <br> YOUNGEST CHILD AGE 6 - 15 <br> NAME | SECOND YOUNGEST CHILD AGE 6-15 <br> NAME | THIRD YOUNGEST CHILD AGE E-15 NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 713 | CHECK 212 AND 218: |  |  | LIVING WITH LIVING MOTHER WITH MOTHER |
| 714 | How many days in the past 2 weeks has (NAME)'s school been open? | No. Of DAYs....... $\square$ | NO. OF DAYS....... $\square$ | NO. Of DAYS.... |
| 715 | How many days in the past 2 weeks has (NAME) attended school? | No. of days....... $\square$ | NO. OF DAYS....... $\square$ | no. Of DAYS.... |
| 716 | CHECK 714 AND 715: |  | 714 AND 715 ARE THE SAME <br> ( SKIP TO 718 ) $\qquad$ <br> ANSWER 714 > 715 $\qquad$ 2 | 714 AND 715 ARE THE 8AME $\qquad$ <br> ( SKIP TO 718) $\square$ $\qquad$ <br> ANSWER 714 > 715 $\qquad$ 2 |
| 717 | What is the main reason (NAME) was absent from school in the last 2 weeks? |  |  |  |
| 718 | Does (NAME) attend a public, private secular or religious school? | PUBLIC ....................... 1 <br> PRIVATE SECULAR ...... 2 <br> RELIGFUS ............... 3 | PUGLIC ....................... 1 <br> PRIVATE SECULAR ..... 2 <br> RELIGIOUS ............... 3 |  |


|  |  | YOUNGEST CHILD AGE 0.15 <br> NAME $\qquad$ | SECOND YOUNGEST CHILD AGE 6 - 15 <br> NAME $\qquad$ | THIRD YOUNGEST CHILD AGE 0 - 15 NAME |
| :---: | :---: | :---: | :---: | :---: |
| 719 | How much did your household spend on each of these school expenditure for (NAME) during this school year: <br> Registration and tuition fees per year, for (NAME)? <br> Uniform, Clothing, Shoes, Bags bought for child to wear at school per year, for (NAME)? <br> Textbooks, Exercise books, Note books, Pens per year for (NAME)? <br> Tutoring and other money paid to teachers for special classes for (NAME)? <br> Any other expenses per year (transportation, incidentals and entertainment) for (NAME)? <br> IF NOTHING IS SPENT ENTER "0000" | REG. $\square$ <br> DON'T KNOW. $\qquad$ 9998 <br> UNIF. $\square$ DON'T KNOW $\qquad$ 9998 <br> B00кs $\square$ DON'T KNOW. $\qquad$ 9998 <br> TEACH. $\square$ <br> DON'T KNOW. $\qquad$ 9998 OTHER $\square$ DON'T KNOW. $\qquad$ 9998 $\qquad$ (SPECIFY) | REG. $\square$ <br> DON'T KNOW. $\qquad$ 9998 <br> UNIF. $\square$ DON'T KNOW. $\qquad$ 9998 <br> books $\square$ DON'T KNOW. $\qquad$ 9998 <br> teach. $\square$ DON'T KNOW $\qquad$ 9998 OTHER $\square$ DON'T KNOW. $\qquad$ 9998 (SPECIFY) | REG. $\square$ <br> DON'T KNOW $\qquad$ 9998 <br> UNIF. $\square$ DON'T KNOW $\qquad$ 9998 B00KS $\square$ DON'T KNOW. $\qquad$ 9998 TEACH. $\square$ DON'T KNOW. $\qquad$ 9998 OTHER $\square$ DON'T KNOW. $\qquad$ 9998 |
| 720 | Has (NAME) ever done any kind of work for pay (cash or kind)? | $\begin{array}{ll} \text { YES .......................... } 1 \\ \text { NO ............................ } & 2 \end{array}$ | $\begin{array}{ll} \text { YEs ....................... } & 1 \\ \text { NO ....................... } & 2 \end{array}$ | $\begin{array}{ll} \text { YES ....................... } & 1 \\ \text { NO ....................... } & 2 \end{array}$ |
| 721 | Is (NAME) currently doing any kind of work for pay ( cash or kind)? | YES ......................... 1 <br> NO .......................... 2 <br> (SKIP TO 724) $\longleftarrow$ | YES ....................... 1 <br> NO ....................... 2 <br> (SKIP TO 724) $\longleftarrow$ | YES ...................... 1  <br> NO ........................... 2  <br> (SKIP TO 724) $\longleftarrow$  |
| 722 | What is the kind of this work which (NAME) (EVER) do it? <br> RECORD ANSWER IN DETAIL | $\qquad$ | $\qquad$ | $\qquad$ |
| 723 | On average for how many hours a week does he/ she do this work? <br> IF LESS THAN ONE HOUR RECORD "00" | NO. OF HOURS.. $\square$ <br> DON'T KNOW $\qquad$ | NO. OF HOURS. $\square$ DON'T KNOW $\qquad$ | NO. OF HOURS. $\square$ DON'T KNOW 98 $\qquad$ |
| 724 | Is (NAME) regularly engaged in unpaid family work ( on the farm,etc ......)? | YES ........................ 1  <br> NO ......................... 2  <br> DON'T KNOW ......... 8  <br> (SKIP TO 728)   | YES ..................................... 1 <br> NO ................. 2 <br> DONT KNOW ........ $8-$ <br> (SKIP TO 728) $\longleftarrow \ldots$  |  |
| 725 | On average for how many hours a week does he/ she do this works? <br> IF LESS THAN ONE HOUR RECORD "OO" | NO. OF HOURS. $\square$ <br> DON'T KNOW $\qquad$ | NO. OF HOURS. $\square$ DON'T KNOW $\square$ 98 | NO. OF HOURS. $\square$ DON'T KNOW - 9 |
| 726 | Does (NAME) regularly help in household chores at home (e.g cooking, cleaning, caring for children, for animals, etc)? |  | YES ...................... 1 <br> NO ........................ 2 <br> (SKIP TO 728) $\ldots$ | $\begin{array}{ccc} \text { YES ...................... } & 1 \\ \text { NO ........................... } & 2 \\ \text { (SKIP TO 728) } & & \\ \hline \end{array}$ |


|  |  |  | Whond cha cATEGORIES |  | SKIPTC |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | YOUNGEST CHILD AGE 6 . 15 <br> NAME $\qquad$ | SECOND YOUNGEST CHILD $\text { AGE } 6 \text { - } 15$ <br> NAME $\qquad$ | THIRD YOU CHILD AGE NAME $\qquad$ | $\begin{aligned} & \text { GEST } \\ & 6.15 \\ & \hline \end{aligned}$ |
| 727 | On average for how many hours a week does he/ she do this works? <br> IF LESS THAN ONE HOUR RECORD "00" | NO. OF HOURS. $\square$ <br> DON'T KNOW $\qquad$ 98 | NO. OF HOURS. $\square$ DON'T KNOW $\qquad$ | NO. OF HOURS. DON'T KNOW |  |
| 728 | GO BACK TO 704 FOR THE NEXT CHILD IF THERE ARE NO MORE CHILDREN BETWEEN THE AGES 8 AND 15 SKIP TO 729. |  |  |  |  |
| 729 | If parents have one son and one daughter and can send only one child to the university, which child should they send? |  |  |  |  |


| NOT | auestof a Mb FI |  | $\text { 解 } 1$ |
| :---: | :---: | :---: | :---: |
| 801 | Now I would like to talk to you about a different top CHECK 214 AND 218: <br> has at least one LIVING DAUGHTER | c which is female circumcision. <br> no living GHTER | -809 |
| 802 | Have any of your daughters been circumcised? <br> If YES: How many? | NUMBER CIRCUMISED $\qquad$ $\square$ <br> NO DAUGHTERS CIRCUMISED $\qquad$ 95 | $\rightarrow 807$ |
| 803 | Which of your daughters was circumcised the latest? $\qquad$ <br> (DAUGHTER'S NAME) <br> ChECK 212 AND RECORD THE LINE NUMBER fOR THE DAUGHTER. | daughter's line number <br> FROM Q212 $\qquad$ $\square$ |  |
| 804 | How old was she when she was circumcised? | AGE IN COMPLETED YEARS. $\square$ DON'T KNOW $\qquad$ |  |
| 805 | Who performed the circumcision? <br> IF DOCTOR, PROEE: Was the doctor male or female? |  |  |
| 806 | Where was the circumcision performed? |  |  |
| 807 | Do you intend to have any (other) of your daughters circumcised? |  | $\begin{array}{r} 809 \\ +\quad 809 \end{array}$ |
| 808 | Why don't you intend to have your daughter (s) circumcised? <br> Any other reasons? <br> record all reasons mentioned | DON'T BELIEVE IN / ACCEPT IT ......... A <br> AFRAID OF COMPLICATIONS ......... B <br> against religion <br> better marriage prospects ... D <br> GREATER PLEASURE FOR HUSBAND.. E <br> OTHER $\qquad$ |  |


| No. |  |  | SKPTC |
| :---: | :---: | :---: | :---: |
| 809 | During the past year, have you heard or seen anything about female circumcision: <br> On television? <br> On radio? <br> In newspaper or magazine? <br> At community meeting? <br> At the mosque or church? |  |  |
| 810 | During the past year have you discussed female circumcision with your relatives, friends or neighbours? | $\begin{array}{lll} \text { YES ............................................... } & 1 \\ \text { NO ............................................... } & 2 \end{array}$ |  |
| 811 | Has your opinion about female circumcision changed during the past year? <br> IF YES: <br> Are you more likely or less likely to approve of circumcision now? | $\begin{array}{lll} \text { YES, MORE LIKELY TO APPROVE .... } & 1 \\ \text { YES, LESS LIKELY TO APPROVE ..... } & 2 \\ \text { NO, OPINION SAME .................... } & 3 \end{array}$ |  |
| 812 | What benefits do girls themselves get if they undergo this genital cutting? <br> PROBE: Anything else? <br> record all mentioned |  |  |
| 813 | What benefits do girls themselves get if they do not undergo this genital cutting? <br> PROBE: Anything else? <br> record all mentioned |  |  |
| 814 | Do you think that this practice should be continued, or should it be discontinued? |  |  |
| 815 | Do you think that men want this practice to be continued, or discontinued? |  |  |


| NO. |  |  | $1$ | $18$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 816 | I will read you some statements. Please tell me if you agree or disagree? <br> Circumcision is an important part of religious tradition. |  | AGREE | $\begin{aligned} & \text { DIS- } \\ & \text { AGREE } \end{aligned}$ | DK |
|  |  | IMPORTANT PART OF RELIGIOUS TRADITION | 1 | 2 | 8 |
|  | A husband will prefer his wife to be circumcised | HUSBAND PREFER ......... | 1 | 2 | 8 |
|  | Circumcision can cause severe complications, which may lead to the girl's death. | CAN LEAD TO GIRL'S death | 1 | 2 | 8 |
|  | Circumcision prevents adultery. | Prevents adultery ... | 1 | 2 | 8 |
|  | Circumcision may cause a woman to have problems in becoming pregnant. | CAUSE PROBLEMS IN GETTING PREGNANT ...... | 1 | 2 | 8 |
|  | Circumcision lessens sexual satisfaction for a couple. | LESSENS SEXUAL <br> SATISFACTION $\qquad$ | 1 | 2 | 8 |
|  | Childbirth is more difficult for a woman who has been Circumcised? | CHILDBIRTH MORE DIFFICULT $\qquad$ | 1 | 2 | 8 |


| Mrat | QUESTIONS AND FILTERS | CODING CATEGORIES | SKPTC |
| :---: | :---: | :---: | :---: |
| 901 | CHECK 107 <br> CURRENTLY DIVORCED / MARRIED SEPARATED | WIDOWED $\square$ | $\rightarrow 904$ |
| 902 | record the line number of the woman's husband from household questionnaire. if the husband is not PRESENT IN THE HOUSEHOLD, RECORD " 00 ". | HUSBAND'S LINE NUMBER .. $\square$ |  |
| 903 | Now I would like to ask some questions about your (last) husband. <br> How old was your (last) husband on his most recent birthday? | AGE IN COMPLETED YEARS.. $\square$ |  |
| 904 | In what month and year was your (last) husband born? COMPARE AND CORRECT 903 AND / OR 804 IF INCONSISTENT. |  |  |
| 905 | Before you got married was your (last) husband related to you in anyway through blood or marriage? | $\begin{aligned} & \text { YEs .............................................................................................................. } \\ & \text { NO ........ } \end{aligned}$ | $\rightarrow 907$ |
| 906 | What type of relationship was it? | FIRST COUSIN ON FATHER'SSIDE ...... 1 <br> FIRST COUSIN ON MOTHER'SSIDE ..... 2 <br> SECOND COUSIN ON FATHER'SSIDE 3 <br> SECOND COUSIN ON MOTHER'SSIDE 4 <br> OTHER BLOOD RELATIVE ............... 5 <br> OTHER RELATIVE BY MARRIAGE ..... 6 |  |
| 907 | Did your (last) husband ever attend school? | $\begin{array}{ll} \text { Yes ..................................................................................................................... } \\ \text { No ........ } \end{array}$ | $\rightarrow 910$ |
| 908 | What was the highest level of school he attended? |  | $\rightarrow 910$ |
| 909 | What was the highest grade which he completed at that level? | GRADE $\square$ DON'T KNOW |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP TC |
| :---: | :---: | :---: | :---: |
| 910 | CHECK 107 <br> CURRENTLY married | WIDOWED I DIVORCED / separated | $\longrightarrow 919$ |
| 911 | Is your husband currently employed? <br> IF NO: <br> Is he retired or unemployed? |  |  |
| 912 |  | $\qquad$ $\square$ <br> RECORD ANWSER IN DETAIL |  |
| 913 | Does (did) your (last) husband work for a member of his family, for someone else, or is he self - employed? |  | $\rightarrow 915$ |
| 914 | Does (did) he earn a regular wage or salary? | $\begin{array}{\|ll} \hline \text { Yes .............................................. } 1 \\ \text { NO .................................... } & 1 \\ \hline \end{array}$ |  |
| 915 | CHECK 910 <br> WORKS (WORKED) IN AGRICULTURE $\square$ | DID) NOT WORK CULTURE $\square$ | $\longrightarrow 917$ |
| 916 | (Does / Did) your husband mainly work on his own land or family land, or (does / did) he rent land, or (does / did) he work on someone else's land? | HIS / FAMILY LAND $\ldots . . . . . . . . . . . . . . . . . . . . . ~$ 1 <br> RENTED LAND ........................... 2  <br> SOMEONE ELSE'S LAND .............. 3  |  |
| 917 | Does your husband currently smoke cigarettes or tobacco? |  | $\rightarrow 919$ |
| 918 | On average during a day, how many times does your husband smoke? | TIMES $\qquad$ $\square$ <br> NOT SURE |  |
| 919 | Do you yourself currently smoke cigarettes or tobacco? | $\begin{aligned} & \text { YES ............................................................................................................ } \\ & \text { NO ......... } \end{aligned}$ | $\rightarrow 1001$ |
| 920 | On average during a day, how many times do you smoke? | TIMES $\square$ NOT SURE |  |

SECTION 10: WOMAN'S WORK AND DECISION MAKING

| No. | W. AUESTONS AND FITERS | codna catecories ${ }^{\text {a }}$ | 3, 4 W6 |
| :---: | :---: | :---: | :---: |
| 1001 | As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. <br> Before you married (for the first time) did you ever do any of these things or any other work? |  |  |
| 1002 | Are you currently doing any of these things or any other work? |  | $\rightarrow 1004$ |
| 1003 | Have you done any work in the last 12 months? |  | $\rightarrow 1013$ |
| 1004 | What is your occupation, that is, what kind of work do you mainly do? <br> RECORD ANSWER IN DETAIL. | $\qquad$ |  |
| 1005 | Do you do this work for a member of your family, for someone else, or are you self-employed? | FOR FAMILY MEMBER.....................$~$ <br> FOR SOMEONE ELSE ...................... <br> SELF-EMPLOYED...................... |  |
| 1006 | CHECK 1004: <br> WORKS IN AGRICULTURE $\square$ | OES NOT WORK AGRICULTURE | $\rightarrow 1008$ |
| 1007 | Do you work mainly on your own land or on family land, or do you rent land, or work on someone else's land? |  |  |
| 1008 | Do you usually work throughout the year, or do you work seasonally, or only once in a while? | $\begin{array}{lll}\text { THROUGHOUT THE YEAR ................. } & 1 \\ \text { SEASONALLY/ PART OF THE YEAR... } & 2 \\ \text { ONCE IN A WHILE ......................... } & 3\end{array}$ |  |
| 1009 | Are you paid in cash or do you earn both cash kind or are you not paid at all? |  | 1012 |
| 1010 |  | RESPONDENT DECIDES .................. 1 <br> HUSBAND DECIDES ..................... 2 <br> JOINTLY WITH HUSBAND ............... 3 <br> SOMEONE ELSE DECIDES .............. 4 <br> JOINTLY WITH SOMEONE ELSE ........ 5 |  |



| Whax |  | CODING CATEGORIES |  | SKIP TC |
| :---: | :---: | :---: | :---: | :---: |
| 1017 | CHECK 112 AND 113: <br> PRIMARY OR LESS $\square$ | PREPARATORY OR HIGHER $\square$ |  | $\rightarrow 1020$ |
| 1018 | Have you ever participated in a literacy program or any other program that involved learning to read or write (not including primary school)? | $\begin{aligned} & \text { YES } \\ & \text { NO. } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 1019 | Now I would like you to read out loud as much of this card as you can. <br> SHOW CARD TO RESPONDENT . | CAN'T READ AT ALL ........ able to read only SENTENCES ON CARD able to read all of ca | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | $\rightarrow 1021$ |
| 1020 | Do you usually read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all? | almost every day at least once a week LESS THAN ONCE A WEEK nOt AT ALL | 1 2 3 4 |  |
| 1021 | Do you usually listen to the radio almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY at Least once a week LESS THAN ONCE A WEEK not at All... | 1 2 3 4 |  |
| 1022 | Do you usually watch television almost every day, at least once a week, less than once a week or not at all? | almost every day AT LEAST ONCE A WEEK LESS THAN ONCE A WEEK NOT AT ALL | 1 2 3 4 |  |
| 1023 | RECORD THE TIME. | HOUR <br> MINUTES $\qquad$ |  |  |

## OBSERVATIONS

THANK THE RESPONDENT FOR PARTICIPATING IN THE SURVEY. COMPLETE QUESTIONS 1101 - 1102 AS APPROPRIATE. BE SURE TO REVIEW THE QUESTIONNIARE FOR COMPLETENESS BEFORE LEAVING THE HOUSEHOLD.


ISTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX OR COLUMNS 1 AND 2 ALL MONTHS SHOULD BE FILLED IN.

FORMATION TO BE CODED FOR EACH COLUMN
COLUMN 1: MARRIAGE
X MARRIED
O NOT MARRIED
COLUMN 2: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE B BIRTHS
P PREGNANCIES
m MISCARRIAGE
A ABORTION
S STHL BIRTH
O NO METHOD
1 PILL
2 IUD
3 INJECTIONS
4 NORPLANT
5 DIAPHRAGM / FAOM / JELLY
6 CONDOM
7 FEMALE STERILIZATHN

- MALE STERILIRATION
- PERIODIC ABSTINENCE

L WITHDRAWAL
G PROLONGED BREASTFEEDING X OTHER $\qquad$ (SPECIFY)

COLUMN 3: SOURCE OF METHOD
1 URBAN HOSPITAL
2 URBAN HEALTH UNIT
3 RURAL HOSPITAL
4 RURAL HEALTH UNIT
3 MCH CENTER
6 MOBILE UNITS
7 OTHER MINISTRY OF HEALTH UNIT

- TEACHING HOSPITAL
- HEALTH INSURANCE ORGANIZATION

A CURATIVE CARE ORGANIZATION
B OTHER GOVERNMENTAL
C EGYPT FAMILY PLANNING ASSOCIATION
D CSI PROJECT
E OTHER NON-GOVERNMENTAL ORGANIZATION CLINIC
F PRIVATE HOSPITAL / CLINIC
G PRIVATE DOCTOR
h Pharmacy
I MOSQUE HEALTH UNIT
J CHURCH HEALTH UNIT
$K$ OTHER VENDOR
L FRIENDS OR RELATIVES
$X$ OTHER $\qquad$
(SPECIFY)
Y NO ONE
Z DON'T KNOW
COLUMN 4: DISCONTINUATION OF CONTRACEPTIVE USE 1 BECAME PREGNANT WHILE USING
2 WANTED TO BECOME PREGNANT
3 HUSBAND DISAPPROVED
4 WANTED MORE EFFECTIVE METHOD
5 HEALTH CONCERNS
6 SIDE EFFECTS
7 LACK OF ACCESS / TOO FAR
8 COST TOO MUCH

- INCONVENIENT TO USE

F FATALISTIC
u UNABLE TO GET PREGNANT / MENOPAUSE
D MARITAL DISSOLUTION / SEPARATION
I INFREQUENT SEX/HUSBAND AWAY
$\times$ OTHER $\qquad$
(SPECIFY)
Z DON'T KNOW
COLUMN 5: POST PARTUM AMENORRHEA

> X PERIOD DID NOT RETURN

0 LESS THAN ONE MONTH
COLUMN 9 : $\operatorname{\text {RREASTFEEDING}}$
X BREAST FEEDING
o LESS THAN ONE MONTH
N NEVER BREASTFED

|  |  |  |  |  |  | CHILD'S NAME/ METHOD |  | SOURCE ADDRESS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 |  |  | 3 |  | 4 | 5 | 6 |  |  |  |
|  | JUN | 01 |  |  |  | 01 |  |  |  |  |  | 01 | JUN |  |
|  | MAY | 02 |  |  |  | 02 |  |  |  |  |  | 02 | MAY |  |
|  | APR | 03 |  |  |  | 03 |  |  |  |  |  | 03 | APR |  |
|  | MAR | 04 |  |  |  | 04 |  |  |  |  |  | 04 | MAR |  |
|  | FEB | 05 |  |  |  | 05 |  |  |  |  |  | 05 | FEB |  |
|  | JAN | 06 |  |  |  | 06 |  |  |  |  |  | 06 | JAN |  |
|  | DEC | 07 |  |  |  | 07 |  |  |  |  |  | 07 | DEC |  |
|  | NOV | 08 |  |  |  | 08 |  |  |  |  |  | 08 | NOV |  |
|  | OCT | 09 |  |  |  | 09 |  |  |  |  |  | 09 | OCT |  |
|  | SEP | 10 |  |  |  | 10 |  |  |  |  |  | 10 | SEP |  |
| 1 | AUG | 11 |  |  |  | 11 |  |  |  |  |  | 11 | AUG | 1 |
| 9 | JUL | 12 |  |  |  | 12 |  |  |  |  |  | 12 | JUL | 9 |
| 9 | JUN | 13 |  |  |  | 13 |  |  |  |  |  | 13 | JUN | 9 |
| 9 | MAY | 14 |  |  |  | 14 |  |  |  |  |  | 14 | MAY | 9 |
|  | APR | 15 |  |  |  | 15 |  |  |  |  |  | 15 | APR |  |
|  | MAR | 16 |  |  |  | 16 |  |  |  |  |  | 16 | MAR |  |
|  | FEB | 17 |  |  |  | 17 |  |  |  |  |  | 17 | FEB |  |
|  | JAN | 18 |  |  |  | 18 |  |  |  |  |  | 18 | JAN |  |
|  | DEC | 19 |  |  |  | 19 |  |  |  |  |  | 19 | DEC |  |
|  | NOV | 20 |  |  |  | 20 |  |  |  |  |  | 20 | NOV |  |
|  | OCT | 21 |  |  |  | 21 |  |  |  |  |  | 21 | OCT |  |
|  | SEP | 22 |  |  |  | 22 |  |  |  |  |  | 22 | SEP |  |
| 1 | AUG | 23 |  |  |  | 23 |  |  |  |  |  | 23 | AUG | 1 |
| 9 | JUL | 24 |  |  |  | 24 |  |  |  |  |  | 24 | JUL | 9 |
| 9 | JUN | 25 |  |  |  | 25 |  |  |  |  |  | 25 | JUN | 9 |
| 8 | MAY | 26 |  |  |  | 26 |  |  |  |  |  | 26 | MAY | 8 |
|  | APR | 27 |  |  |  | 27 |  |  |  |  |  | 27 | APR |  |
|  | MAR | 28 |  |  |  | 28 |  |  |  |  |  | 28 | MAR |  |
|  | FEB | 29 |  |  |  | 29 |  |  |  |  |  | 29 | FEB |  |
|  | JAN | 30 |  |  |  | 30 |  |  |  |  |  | 30 | JAN |  |
|  | DEC | 31 |  |  |  | 31 |  |  |  |  |  | 31 | DEC |  |
|  | NOV | 32 |  |  |  | 32 |  |  |  |  |  | 32 | NOV |  |
|  | OCT | 33 |  |  |  | 33 |  |  |  |  |  | 33 | OCT |  |
|  | SEP | 34 |  |  |  | 34 |  |  |  |  |  | 34 | SEP |  |
| 1 | AUG | 35 |  |  |  | 35 |  |  |  |  |  | 35 | AUG | 1 |
| 9 | JUL | 36 |  |  |  | 36 |  |  |  |  |  | 36 | JUL | 9 |
| 9 | JUN | 37 |  |  |  | 37 |  |  |  |  |  | 37 | JUN | 9 |
| 7 | MAY | 38 |  |  |  | 38 |  |  |  |  |  | 38 | MAY | 7 |
|  | APR | 39 |  |  |  | 39 |  |  |  |  |  | 39 | APR |  |
|  | MAR | 40 |  |  |  | 40 |  |  |  |  |  | 40 | MAR |  |
|  | FEB | 41 |  |  |  | 41 |  |  |  |  |  | 41 | FEB |  |
|  | JAN | 42 |  |  |  | 42 |  |  |  |  |  | 42 | JAN |  |
|  | DEC | 43 |  |  |  | 43 |  |  |  |  |  | 43 | DEC |  |
|  | NOV | 44 |  |  |  | 44 |  |  |  |  |  | 44 | NOV |  |
|  | OCT | 45 |  |  |  | 45 |  |  |  |  |  | 45 | OCT |  |
|  | SEP | 46 |  |  |  | 46 |  |  |  |  |  | 46 | SEP |  |
| 1 | AUG | 47 |  |  |  | 47 |  |  |  |  |  | 47 | AUG | 1 |
| 9 | JUL | 48 |  |  |  | 48 |  |  |  |  |  | 48 | JUL | 9 |
| 9 | JUN | 49 |  |  |  | 49 |  |  |  |  |  | 49 | JUN | 9 |
| 6 | MAY | 50 |  |  |  | 50 |  |  |  |  |  | 50 | MAY | 6 |
|  | APR | 51 |  |  |  | 51 |  |  |  |  |  | 51 | APR |  |
|  | MAR | 52 |  |  |  | 52 |  |  |  |  |  | 52 | MAR |  |
|  | FEB | 53 |  |  |  | 53 |  |  |  |  |  | 53 | FEB |  |
|  | JAN | 54 |  |  |  | 54 |  |  |  |  |  | 54 | JAN |  |
|  | DEC | 55 |  |  |  | 55 |  |  |  |  |  | 55 | DEC |  |
|  | NOV | 56 |  |  |  | 56 |  |  |  |  |  | 56 | NOV |  |
|  | OCT | 57 |  |  |  | 57 |  |  |  |  |  | 57 | OCT |  |
|  | SEP | 58 |  |  |  | 58 |  |  |  |  |  | 58 | SEP |  |
| 1 | AUG | 59 |  |  |  | 59 |  |  |  |  |  | 59 | AUG | 1 |
| 9 | JUL | 60 |  |  |  | 60 |  |  |  |  |  | 60 | JUL | 9 |
| 9 | JUN | 61 |  |  |  | 61 |  |  |  |  |  | 61 | JUN | 9 |
| 5 | MAY | 62 |  |  |  | 62 |  |  |  |  |  | 62 | MAY | 5 |
|  | APR | 63 |  |  |  | 63 |  |  |  |  |  | 63 | APR |  |
|  | MAR | 64 |  |  |  | 64 |  |  |  |  |  | 64 | MAR |  |
|  | FEB | 65 |  |  |  | 65 |  |  |  |  |  | 65 | FEB |  |
|  | JAN | 66 |  |  |  | 66 |  |  |  |  |  | 66 | JAN |  |



DATE AND OUTCOME OF THE LAST PREGNANCY THAT TERMINATED IN A MISCARRIAGE, ABORTION OR STILL BIRTH PRIOR TO JANUARY 1094. IF NO, RECORD "00" IN MONTH AND



[^0]:    ${ }^{1}$ A third factor influencing population growth is migration, which is not taken into account in Figure 1.1.

[^1]:    ${ }^{2}$ The 2000 EDHS is the fourth full-scale Demographic and Health Survey to be implemented in Egypt; the earlier surveys were conducted in 1988, 1992, and 1995. Two additional interim DHS surveys were carried out in 1997 and 1998. Other national-level surveys for which results are shown in this report include the 1980 Egyptian Fertility Survey (EFS), the 1984 Egypt Contraceptive Prevalence Survey (ECPS), and the 1991 Egypt Maternal and Child Health Survey (EMCHS).

[^2]:    ${ }^{1}$ The method for calculating median years of schooling that was used in the 2000 EDHS differs from the method used for such calculations in earlier DHS surveys. Consequently, the medians for the 2000 EDHS shown in Tables 2.4.1 and 2.4.2 cannot be directly compared with the medians that were calculated in earlier rounds of the DHS surveys and published in the survey reports.

[^3]:    ${ }^{1}$ Residential differentials in the TFR are not available for the 1980 and the 1984 surveys. Because of the greater sampling variability, rates are not shown for the 1997 and 1998 Interim EDHS surveys.

[^4]:    ${ }^{\text {a }}$ Less than 50 percent of the women in age group $x$ to $x+4$ have had a birth by age $x$

[^5]:    ${ }^{1}$ The percentages knowing about a source from the 1995 EDHS shown in Table 5.3 differ from the figures that were included in the 1995 EDHS report. The results presented in the 1995 report were based on yes-no responses to questions about whether women knew about source for contraceptive method they recognized. The figures for the 1995 EDHS survey shown in Table 5.3 are based on the more rigorous approach to measuring source used for the 2000 EDHS, i.e., the woman had to identify an actual place where she could obtain a contraceptive method.

[^6]:    ${ }^{1}$ Medians are calculated for ever users.

[^7]:    NA = Not applicable

[^8]:    ${ }_{2}^{1}$ Includes current pregnancy
    ${ }_{3}^{2}$ Want next birth within 2 years
    ${ }^{3}$ Want to delay next birth for 2 or more years

[^9]:    Note: Women who have been sterilized are considered to want no more children.
    Includes current pregnancy

[^10]:    ${ }^{1}$ Unmet need forspacing includes pregnant women whose pregnancy was mistimed, amenorrheic women whose last birth was mistimed, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait 2 or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrheic women who became pregnant while using a method (these women are in need of better contraception). Also excluded are menopausal or infecund women.
    ${ }^{2}$ Using for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children.
    Note that the specific methods used are not taken into account here.
    ${ }^{3}$ Contraceptive failure includes pregnant or amenorrheic women who became pregnant while using a contraceptive method. These women are considered in need of better contraception.
    ${ }^{4}$ Total demand includes pregnant or amenorrheic women who became pregnant while using a method (method failure).

[^11]:    Note: Figures are for births in the period 0-59 months preceding the survey.
    2 If the respondent mentioned more than one attendant, only the most qualified attendant is considered.
    ${ }^{2}$ Traditional birth attendants

[^12]:    ${ }^{1}$ Children who are fully vaccinated (i.e., those who have received BCG, measles, and three doses of DPT and polio vaccines)

[^13]:    ${ }^{1}$ Current status estimates of the median and mean durations of breastfeeding are calculated from the proportion of children who were reported to be currently breastfeeding by age. The current status mean and median durations differ because the mean is affected by the small number of extreme values at the upper end of the distribution while the median is not. The prevalence-incidence mean is derived by dividing the "prevalence" of breastfeeding, defined as the number of children who were breastfeeding at the time of the survey, by the "incidence," defined as the average number of births during the period.

[^14]:    ${ }^{2}$ Although the term "height" is used, children younger than 24 months were measured lying on a measuring board, while standing height was measured for older children. Weight data were obtained using a digital scale with an accuracy of 100 grams.

[^15]:    ${ }^{3}$ A microcuvette is a small, transparent laboratory vessel.

[^16]:    ${ }^{4}$ The table excludes ever-married females $15-19$ who are included in Table 13.11 as well as a small number of male adolescents ( $\mathrm{N}=4$ ) reported as ever married.

[^17]:    ${ }^{1}$ Egypt is divided into 26 governorates. Recently Luxor originally a part of Qena governorate has been given a new status as a separate administrative unit. Like the Frontier Governorates, Lux or has a relatively small population in comparison to the other governorates. Therefore, for the purposes of establishing the frame for the selection of the 2000 DHS, Luxor was combined with Qena governorate.

[^18]:    ${ }^{1}$ Both year and age missing
    ${ }^{2}$ Child not measured

[^19]:    NA = Not applicable
    Both year and month of birth given
    ${ }^{2}\left(B_{m} / B_{f}\right) * 100$, where $B_{m}$ and $B_{f}$ are the numbers of male and female births, respectively

