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Health Survey – 2000

Final Report

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Note for Users

1. (-): Means not applicable.
2. (0.0): Means that the percentage is less than 0.05%.

Preface

The Health Survey of 1996 and the Demographic Survey of 1995 were among the pioneering household surveys in the establishment phase of PCBS. The two surveys were complementary to each other and were designed to provide detailed accounting and baseline data and statistics on the demographic and health status of Palestinian households and individuals.

An update of the health survey was deemed necessary by PCBS and the Ministry of Health in order to update the baseline data on health situation in Palestine. The health Survey-2000 comes as a timely update of the various indicators, which were measured by the previous surveys, and as an answer to the statistical needs of the planners within government, NGO's, and interested international agencies working in Palestine. This survey is in fact a realization of a partnership, which was formulated between PCBS, Ministry of Health, UNFPA and UNICEF in order to pool the demand side on data and produce a relevant data set for various stakeholders.

The survey has tried to provide estimates for many indicators within the framework of UNICEF's efforts to support countries to come up with assessment of End Decade Goals as set out by UNICEF. It also tried to come up with the baseline data, which could be used in drafting a country strategy and a CPA exercise by UNFPA. The survey has also tried to provide enough details to allow the Ministry of Health to finalize its strategic plan.

This report introduces data on various health indicators related to households and health services in the Palestinian Territory. In addition to providing baseline data on health of mother and children under five years of age.

November, 2001

Hasan Abu-Libdeh, Ph.D.
**President of PCBS/
National Director of the Survey**

Table of Contents

Subject	Page
List of Tables	
List of Figures	
Definitions and Explanations	
Map of Palestine	
1. Demographic Health Overview	37
1.1 Introduction	37
1.2 Population and Demography	37
1.3 The health system in the Palestinian Territory	38
1.4 The state of health	39
1.5 The objectives of the health survey - 2000	40
1.6 Organizing and implementing the survey	40
1.7 Data processing	43
1.8 Data quality	44
2. Households and Individuals' Characteristics	47
2.1 Introduction	47
2.2 Population's Characteristics	47
2.3 Household structure	49
2.4 Education	51
2.5 Enrollments rates	54
2.6 Dwelling characteristics	55
2.7 Background characteristics of interviewed eligible women	57
2.8 Women's labor force status	58
2.9 Eligible children aged 0-17 years interviewed in the sample	59
3. Fertility	63
3.1 Introduction	63
3.2 Fertility levels	63
3.3 Fertility trends	64
3.4 Fertility differentials	66
3.5 Children ever born and living	66

Subject	Page
3.6 Birth intervals	68
3.7 Age at first birth	70
3.8 Teenage fertility	71
4. Fertility Determinants	75
4.1 Introduction	75
4.2 Marital status	75
4.3 Age at first marriage	77
4.4 Relatives marriage	80
4.5 Age at first birth	82
4.6 Child spacing period	84
4.7 Duration of marriage	84
4.8 Use of contraception	86
4.9 Work	87
4.10 Education	88
5. Family Planning	93
5.1 Introduction	93
5.2 Knowledge of family planning methods and sources	93
5.3 Use of a contraceptive method	96
5.4 None use of a contraceptive method	105
6. Fertility Preferences	109
6.1 Introduction	109
6.2 Desire to have children	109
6.3 Preferred number of additional sons/daughters	112
6.4 Need for family planning services	114
6.5 Ideal number of children	115
6.7 Planning status of births	117
7. Child and Infant Mortality	121
7.1 Introduction	121
7.2 Data quality	122
7.3 Mortality levels and trends	123
7.4 Estimated mortality rates by direct methods	124

Subject	Page
7.5 Risk factors for infant and child mortality	126
7.6 Causes of infant and child deaths	129
8. Maternal Care	131
8.1 Introduction	131
8.2 Prenatal care	131
8.3 Natal care	142
8.4 Postnatal care	148
9. Child's Health	159
9.1 Introduction	159
9.2 Procedure for data collection	159
9.3 Vaccination	159
9.4 Breast-Feeding and supplementation	165
9.5 Vitamin supplementation	170
9.6 Nutrition	171
9.7 Diarrhea	174
9.8 Acute respiratory infection	179
10. Public Health	189
10.1 Introduction	189
10.2 Health insurance coverage	189
10.3 Smoking	190
10.4 Chronic diseases	192
10.5 Seeking medical care for the under-five children	192
10.6 Symptoms of reproductive morbidity	193
10.7 The concept of reproductive health	194
10.8 Aids	195
11. Child's Rights	203
11.1 Introduction	203
11.2 Child birth registration	204
11.3 Orphans and institutionalized children	207

Subject	Page
11.4 Child education	209
11.5 Child labor	213
References	219
Annex 1: Sampling	223
Annex 2: Questionnaire	231

List of Tables

<u>Table</u>	<u>Page</u>
Table 2.1: Percentage distribution of persons by age, sex, and region (April, 2000)	48
Table 2.2: Percentage distribution of population in the Palestinian Territory by age in 1995, 1997, and 2000	49
Table 2.3: Percentage distribution of households by size, sex of head of household, and selected background characteristics, 2000	49
Table 2.4: Households by type and region in 1995, 1997, and 2000	51
Table 2.5: Percentage of persons aged 15 years and over who are literate by selected background characteristics and sex	52
Table 2.6: Percentage distribution of males aged 10 and over by educational attainment and selected background characteristics, 2000	53
Table 2.7: Percentage distribution of females aged 10 and over by educational attainment and selected background characteristics, 2000	54
Table 2.8: Enrollment rates by age, sex, and region, 2000	55
Table 2.9: Distribution of households by characteristics of dwelling, region, and type of locality, 2000	56
Table 2.10: Percentage distribution of interviewed eligible women aged 15-49 years by selected background characteristics, 2000	57
Table 2.11: Percentage distribution of interviewed eligible women aged 15-49 by educational attainment and selected background characteristics, 2000	58
Table 2.12: Percentage distribution of interviewed eligible women aged 15-49 years by labor force status and selected background characteristics, 2000	59
Table 2.13: Percentage distribution of children under five years by selected background characteristics, 2000	60
Table 2.14: Percentage distribution of children (5-17 years) by selected background characteristics, 2000	61
Table 3.1 : Age-specific fertility rates (per thousand women) and TFR for one year preceding the surveys by region 1994, 1999	63
Table 3.2: Total fertility rates (TFR) for one year preceding the survey by background characteristics (1999)	66
Table 3.3: Percentage distribution of ever-married women and currently-married women by number of children ever-born, mean number of children ever born, and mean number of children ever born and living by age groups	67

<u>Table</u>	<u>Page</u>
Table 3.4: Mean number of children ever born, and mean number of children ever born and living for ever- married women by region and age group	68
Table 3.5: Number of births and birth intervals (months) in the five years preceding the survey by selected background characteristics	69
Table 3.6: Proportion of women with short birth intervals (defined less than 18 months) by women’s current age and region	69
Table 3.7: Percentage distribution of women by age at first birth and current age	70
Table 3.8: Median age at first birth for 25-49 years old women by current age and selected background characteristics	71
Table 3.9: Percentage of women 15-19 years old who are mothers or pregnant for the first birth by single years of age and region, 2000	72
Table 3.10: Percentage of women 15-19 years old who are mothers or pregnant for the first birth by single years of age and region, 1995	72
Table 3.11: Percentage of women 15-19 years old who are mothers or pregnant for the first birth by single years of age and type of locality	72
Table 4.1: Percentage distribution of women (15-49 years) by age, marital status, and region, 2000	76
Table 4.2: Percentage distribution of ever-married women (15-49 years) by current age and age at first marriage, 2000	77
Table 4.3: Percentage distribution of married women by age at first marriage, number of ever-born children, average number of living children, and region, 2000	79
Table 4.4: Percentage distribution of currently married women by age, number of ever-born children, average number of ever-born children, average number of living children, and region, 2000	80
Table 4.5: Percentage distribution of ever-married women (15-49 years) by consanguinity, age, and region, 2000	81
Table 4.6: Percentage distribution of currently married women aged 15-49 by number of ever-born children, average number of living children, and degree of consanguinity, 2000	82
Table 4.7: Median age at first birth in the 25-49 years age group by age and selected background characteristics in 2000	82
Table 4.8: Percentage distribution of currently married women by number and average number of ever-born children, average number of living children, and age at first birth, 2000	83
Table 4.9: Percentage of women with short interval (defined less than 18 months) by women current age and region, 2000	84

<u>Table</u>	<u>Page</u>
Table 4.10: Percentage distribution of ever-married women by duration of marriage and number of ever-born children in the Palestinian Territory, 2000	85
Table 4.11: Percentage distribution of currently married women by duration of marriage, number and average of ever-born children, average number of living children, and region, 2000	85
Table 4.12: Percentage of ever-married women who used contraception by age, educational attainment, and region, 2000	86
Table 4.13: Percentage of currently married women (15-49 years) who or their husbands use contraception by selected background characteristics, 2000	87
Table 4.14: Percentage distribution of currently married women by labor force status, number and average of ever-born children, average number of living children, and region, 2000	88
Table 4.15: Percentage distribution of currently married women by educational attainment, number and average of ever-born children, average number of living children, and region, 2000	89
Table 6.1: Percentage of currently married women who desire to stop having children by region and type of locality	110
Table 6.2: Percentage distribution of currently married women who desire to stop having children by age group and region	110
Table 6.3: Percentage distribution of currently married women by fertility preferences and number of living children	110
Table 6.4: Percentage distribution of currently married women by fertility preferences and woman's age group	111
Table 6.5: Percentage distribution of currently married women who desire to stop having children by woman's age group, (1995,2000)	111
Table 6.6: Percentage distribution of currently married women by number of living children, mother's current age and expected number of children	112
Table 6.7: Percentage distribution of currently married women by number of sons/daughters ever born and preferred number of additional sons/daughters	113
Table 6.8: Percentage distribution of currently married women 15-49 years old who are not pregnant by fertility preferences, use of contraceptives, and region	114
Table 6.9: Percentage distribution of currently married women 15-49 years old who want more children by intended duration of spacing and region	115
Table 6.10: Mean ideal number of children reported by women by number of living children and mother's current age	116

<u>Table</u>	<u>Page</u>
Table 6.11: Mean ideal number of children reported by women and background characteristics	116
Table 6.12: Percentage distribution of women by number of living children and ideal number of children	117
Table 7.1: Direct estimates of infant and child mortality rates for selected years by region	123
Table 7.2: Direct estimates of infant and child mortality rates for five years preceding the survey by selected background characteristics (1995-1999)	127
Table 7.3: Relationship between proportion of children death by mother's age and region	128
Table 7.4: Relationship between number of children ever born and number of deceased children	128
Table 7.5: Crude birth rate and infant mortality rate in selected countries (WHO report 1996)	128
Table 8.1: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by personnel provided care and region	135
Table 8.2: Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by place of check-up and reason for choosing it	137
Table 8.3: Percentage of births (last two) born in the last three years preceding the survey whose mothers have had certain health problems by Type of problem and selected background characteristics	139
Table 8.4: Percentage of mothers who gave birth during the last year preceding the survey and received tetanus toxoid by selected background characteristics and number of doses	140
Table 8.5: Percentage distribution of births (last two) born in the last three years preceding the survey by place of delivery and selected background characteristics	143
Table 8.6: Percentage distribution of births (last two) born in the last three years preceding the survey by personnel assisted at birth and selected Background Characteristics	144
Table 8.7: Percentage distribution of births (last two) born in the last three years preceding the survey occurred at health institutions by place of delivery and the reason for choosing it	145
Table 8.8: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received postnatal care in the six weeks after delivery by personnel provided care and selected background characteristics	150

<u>Table</u>	<u>Page</u>
Table 8.9: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers suffered from complications after delivery by background characteristics	152
Table 8.10: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers suffered from at least one complication after delivery and were treated by place of treatment, type of locality, and region	153
Table 9.1: Percentage of children aged 12-23 months in the Palestinian Territory, whom immunization cards were/not seen and received specific immunization	160
Table 9.2: Percentage of children under five years of age for whom immunization card was seen and received specific immunization by selected background characteristics	162
Table 9.3: Percentage of children aged 12-23 months whom immunization Card was seen and received measles immunization in the Palestinian Territory/ excluding Jerusalem Governorate by type of locality	162
Table 9.4: Percentage of children under five years of age for whom immunization card was seen and received specific immunization by selected background characteristics	163
Table 9.5: Percentage of children aged 12-23 months whom immunization card was seen and received specific immunization in the Palestinian Territory excluding Jerusalem governorate by selected background characteristics	164
Table 9.6: Percentage of children vaccinated aged 12-23 months, whom immunization card was seen 1996, 2000	165
Table 9.7: Percentage of children vaccinated aged 24-35 months, whom immunization card was seen 1996, 2000	165
Table 9.8: Percentage distribution of children (last birth) born in the last three years preceding the survey who were breast-fed by interval between birth and timing of first breast-fed, region and type of locality	165
Table 9.9: Percentage of living children (last child) born in the last three years preceding the survey, by breast feeding status and selected background characteristics	166
Table 9.10: Percentage distribution of children (last child) born in the last three years preceding the survey by mother's age, current breast feeding status and child's age	167
Table 9.11: Percentage distribution of children born in the last three years preceding the survey (last child) who have been weaned by reasons for weaning, child's age and	167

<u>Table</u>	<u>Page</u>
Table 9.12: Mean age of children at supplementation (with liquids and solids by mother's age and region	168
Table 9.13: Timely complementary feeding rate for children 6-9 months by mother's educational attainment and region	168
Table 9.14: Percentage of children who were given specified type of liquids and solids by type of complementary feeding and child's age	168
Table 9.15: Percentage distribution of children aged 6 months and over, born in the last three years preceding the survey by whether they have received vitamin A supplementation within the last six months by selected background characteristics	170
Table 9.16: Percentage of households consuming adequately iodized salt by region and type of locality	171
Table 9.17: Percentage of children under five years that were severely or moderately malnourished by selected background characteristics	173
Table 9.18: Weight for height by height for age standard deviation categories, using the International reference population	173
Table 9.19: Percentage of the population by main source of drinking water and type of locality	175
Table 9.20: Percentage distribution of households by type of sewage disposal system, region and type of locality	175
Table 9.21: Percentage of children under five years of age with diarrhea in the last two weeks preceding the survey and have treatment by type of treatment and selected background characteristics	176
Table 9.22: Percentage of children under five years of age with diarrhea in the last two weeks preceding the survey who took increased fluids or food by selected background characteristics	177
Table 9.23: Percentage of children under five years of age who had diarrhea in the last two weeks preceding the survey and received consultation by source and selected background characteristics	178
Table 9.24: Percentage of children who had a cough with or without rapid breathing in the last two weeks preceding the survey and received medical consultation by selected background characteristics	180
Table 9.25: Percentage of children with acute respiratory infection by housing density and background characteristics	180
Table 9.26: Percentage of children with and without acute respiratory infection by percentage of smoking in household and selected background characteristics	181

<u>Table</u>		<u>Page</u>
Table 9.27:	Percentage of children who had cough with or without rapid breathing in the last two weeks preceding the survey and received medical consultation by source and selected background characteristics	182
Table 11.1:	Percentage distribution of children under 5 years by birth registration status and selected background characteristics	205
Table 11.2:	Percentage distribution of children 0-17 years by living arrangements, type of locality and region	208
Table 11.3:	Percentage of children 36-59 months attending organized early childhood education by selected background characteristics	210
Table 11.4:	Percentage of school aged children attending basic school by sex and selected background characteristics	212
Table 11.5:	Percentage of children 5-17 years working 4 or more hours/day by selected background characteristics	213

List of Figures

<u>Figure</u>		<u>Page</u>
Figure 2.1:	Population pyramid in the Palestinian Territory. Projected mid year 2000	48
Figure 3.1:	Age-specific fertility rates (1994 ,1999)	64
Figure 3.2:	Age-specific fertility rates (per thousand women) for one year preceding the 2000 health survey by region (1999)	65
Figure 3.3:	Age-specific rates for reference periods preceding the 1955 Demographic Survey	65
Figure 3.4:	Mean number of children ever born for ever-married women by age group (1995, 2000)	66
Figure 4.1:	Median age at first marriage for ever-married women aged 15-49 by age and region	78
Figure 5.1:	Percentages of ever-married women aged 15-49 years by source of information about a contraceptive method and region	94
Figure 5.2:	Percentage of ever-married women aged 15-49 years reporting knowledge of a contraceptive supply source by region	95
Figure 5.3:	Percentages of ever-married women aged 15-49 years reporting knowledge of a contraceptive supply source by type of locality	96
Figure 5.4:	Percentage of ever married women who ever used a contraceptive method by current age and region	96
Figure 5.5:	Percentage distribution of women ever users by number of living children at first use and region	97
Figure 5.6:	Percentages of ever married and ever used women aged 15-49 Years by type of contraceptive method firstly used	98
Figure 5.7:	Percentage of currently married women using or whose partner is using a contraceptive method by age	100
Figure 5.8:	Percentage of currently married women using or whose partner is using a contraceptive method by type of locality	100
Figure 5.9:	Percentage of currently married women using or whose partner is using a contraceptive method by type of method	101
Figure 5.10:	Percentage distribution of currently married women current use of modern contraceptives by source of method	102
Figure 5.11:	Percentage of currently married women currently using a modern contraceptive method by source and reason behind such choice	103

<u>Figure</u>		<u>Page</u>
Figure 5.12:	Percentage distribution of currently married women who are using a modern contraceptive method by source of method and region	104
Figure 5.13:	Percentage distribution of currently married women who are not currently using any contraceptive method by main reason	105
Figure 6.1:	Fertility preferences for currently married women 15-49 years old	109
Figure 6.2:	Percentage distribution of persons who decides on the number of children in the family	112
Figure 6.3:	Percentage of women by ideal number of children	115
Figure 6.4:	Desire of currently pregnant women to become pregnant at the time of pregnancy	118
Figure 6.5:	Desire of ever married women who had at least one live birth during the past three years to become pregnant then	118
Figure 7.1:	Direct estimates of infant and child mortality rates per 1000 live birth for selected years	124
Figure 7.2:	Direct estimates of infant and child mortality rates per 1000 live birth for selected years by region	124
Figure 7.3:	Comparison of infant and child mortality in the Palestinian Territory with the mortality rates in some of the Eastern Mediterranean Region (1999)	126
Figure 7.4:	Total fertility rate by age for the years 1994-1997 in the Palestinian Territory	129
Figure 8.1:	Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by region 1996,2000	132
Figure 8.2:	Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by selected background characteristics	132
Figure 8.3:	Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by number of visits and region, 2000	133
Figure 8.4:	Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by duration of pregnancy at first visit and region	134
Figure 8.5:	Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by place of check-up and region	135

<u>Figure</u>	<u>Page</u>
Figure 8.6: Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by reason for choosing place of check-up	136
Figure 8.7: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers did not receive prenatal care by reason and region	137
Figure 8.8: Percentage of births (last two) born in the last three years preceding the survey whose mothers encountered pregnancy complications by type of complication and region	138
Figure 8.9: Percentage of births (last two) born in the last three years preceding the survey whose mothers received folic acid by region	141
Figure 8.10: Percentage of births (last two) born in the last three years preceding the survey whose mothers received iron tablets by region	141
Figure 8.11: Percentage of births (last two) born in the last three years preceding the survey whose mothers received medication, 1996-2000	142
Figure 8.12: Percentage distribution of births (last two) born in the last three years preceding the survey by nature of delivery	146
Figure 8.13: Percentage distribution of births (last two) born in the last three years preceding the survey by nature of delivery and mother's age	146
Figure 8.14: Percentage distribution of births (last two) born at hospitals in the last three years preceding the survey whose mothers received health education by topic and region	147
Figure 8.15: Percentage distribution of births (last two) born in the last three years preceding the survey occurred at health institutions by reasons for leaving before completion of the 24 hours	148
Figure 8.16: Percentage distribution of births (last two) born in the last three years preceding the survey by whether their mothers received postnatal care or not and region 1996,2000	149
Figure 8.17: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers suffered from complications in the six weeks after delivery by type of such complication and region	151
Figure 8.18: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers suffered from complications after delivery by whether they treated or not and type of locality	152

<u>Figure</u>		<u>Page</u>
Figure 8.19:	Percentage distribution of births (last two) born in the last three years preceding the survey by whether their mothers received professional postnatal care home visit and region	154
Figure 8.20:	Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received professional postnatal care home visit by selected background characteristics	154
Figure 8.21:	Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received health education by topic	155
Figure 9.1:	Percentage of children, who were under 2SD for weight for height, weight for age and height for age using local reference population and weight for height using International reference population 1996, 2000	174
Figure 9.2:	Percentage of children under five years of age who had diarrhea in the last two weeks preceding the survey of 1996 and 2000 and received consultation by source	179
Figure 9.3:	Percentage of children under five years of age who had ARI in the last two weeks preceding the surveys of 1996 and 2000 and received consultation by source	182
Figure 10.1:	Percentage distribution of persons by type of health insurance and region 1996,2000	189
Figure 10.2:	Percentage distribution of individuals aged 12 year and over who practice smoking by region	191
Figure 10.3:	Percentage of persons aged 12 and over who practice smoking by region and sex	191
Figure 10.4:	Percentage of persons who indicated receiving treatment for chronic diseases by type of disease	192
Figure 10.5:	Percentage of ever married women who had certain symptoms in the last year preceding the survey by region	193
Figure 10.6:	Percentage of ever-married women who had certain symptoms in the last year preceding the survey by type of locality	194
Figure 10.7:	Percentage of ever married women hearing about reproductive health by component	195
Figure 10.8:	Percentage of women aged 15-49 years and the extent of their knowledge about transmission of HIV/AIDS by type of locality	196
Figure 10.9:	Percentage of women aged 15-49 years who know about the main ways of preventing HIV transmission by region	197

<u>Figure</u>		<u>Page</u>
Figure 10.10:	Percentage of women aged 15-49 years and the extent of their knowledge about means of HIV transmission from mother to child by region	197
Figure 10.11:	Percentage of women aged 15-49 years and their identification of misconceptions about HIV/AIDS by type of locality	198
Figure 10.12:	Percentage of women aged 15-49 years who expressed discriminatory attitudes towards people with HIV/AIDS by region	199

Definitions and Explanations

Acute Respiratory Infections (ARI):	Acute respiratory infections are the most common illness suffered by children, no matter where they live. ARIs are caused by a wide variety of disease agents, these include form of the vaccine preventable tangent disease: diphtheria, Pertusis and tuberculosis. ARIs are traditionally divided into two main categories: those of the upper respiratory tract (the common cold) and those of the lower reparatory tract (primarily pneumonia). Their principal transmission factors are: high population density, crowded conditions, and seasonal changes that favor the spread of disease.
Adequately Iodized Salt:	Salt that contains at least 15 parts per million of iodine.
Age:	The completed age in years of the enumerated person, which is the difference between the date of birth and the survey reference period. The exact age is the time elapsed between the day of birth and a given day, including parts of a year.
Age – Sex Structure:	The composition of a population as determined by the number or proportion of males and females in each age category. The age – structure of a population is the cumulative result of past trends in fertility, mortality, and migration rates. Information on age – sex composition is an essential prerequisite for the description and analysis of demographic data.
Age at Marriage:	The age of the individual in years at the time of his / her actual marriage.
Age Heaping:	A general tendency to misreport a preferred number as one’s age or to round one’s age to a number ending with the digits 0 or 5, or, as a multiple of 6 or 12 months for children. This type of age misreporting results in false concentration of persons at particular ages or in particular age groups.
Anthropometry:	The technique that deals with the measurement of size weights and proportions of the human body. The anthropometric measurements described here are standing height, recumbent length and weight, in relation to the age and sex of the child and in accordance with the guidelines developed by the CDC and recommended by the WHO.
Assistant Measurer:	An enumerator who assists the measurer by helping to hold the child in place during the measurement proceeding and records the measurements on a questionnaire. An untrained assistant such as the mother can be used to help hold the child. If so, then the measurer measures the child also records the measurement.
Birth Weight:	The first weight for the newborn obtained after birth.
Breast Feeding:	The child has received breast milk (direct from the breast or expressed).
Cell:	The smallest geographical unit in which fieldwork is carried out. Cells boundaries must be clear and easy to recognize in the field.

	Geographic markers such as road streets are usually used as cell's boundaries.
Complementary Feeding:	The child has received both breast milk and solid / semi-solid i.e. juice, formula, etc.
Continue Breastfeeding Rate (CBFR):	The proportion of children aged (9-12) months who are being breastfed.
De Jure Population:	The population enumerated as the basis of usual residence excluding temporary visitors and including residents temporarily absent. All persons who have been temporarily absent for up to 1 year are considered usual residents in this survey.
Dehydration:	Lack or shortage of body fluids. A child who has diarrhea soon loses a lot of fluids in her/his stools thus becoming dehydrated.
Diarrhea:	Three or more loose or watery stools per day, or blood in the stool on any day, or as defined by the mother.
Disease:	A disorder or impairment of the normal state of well-being.
DPT Vaccination:	It is a common vaccine given against three injections diseases (Diphtheria, pertussis, and tetanus), which is given as a muscle injection at the age of 2, 4 and six months, the booster dose is given at the age of one year.
Dwelling Unit:	A room or number of rooms occupied or vacant and are used as a separate dwelling, providing that there is either <ol style="list-style-type: none"> 1. Direct entrance from the outside or through a hall, or 2. Complete kitchen facilities used only by the unit's inhabitants regardless of whether they use them or not.
Family Household:	Consists of household members who are related to each other by blood, marriage, or adoption.
Family Planning Method:	It is a method needed for delaying or stopping pregnancy.
Condom:	It is a sheet or covering made to fit over a man's erect penis or inserted into a woman's vagina, it is made of thin latex rubber.
Contraceptive Injection:	A shot that is normally given every 3 or 6 months and is also known as Depo-Provera or Noretisterat.
Contraceptive Pill:	One of the methods used by women for delaying or avoiding the coming pregnancy by taking a tablet every day.
Diaphragm, Foam, Jelly:	In this case we have grouped together a large number of female methods that are used in the vagina, including diaphragm, sperm foam, jelly, foaming tablets, etc.
Female Sterilization:	Inability of the women to conceive as a result of surgical operation, there are several types of sterilization operations women can have for example, "tubal ligation", or removal of the uterus, or ovaries.
IUD:	It is an intrauterine device flexible, plastic. It often has copper wire or

	sleeves on it. It is inserted into the women's uterus through her vagina.
Male Sterilization:	This is a comparatively minor operation done on men for contraceptive purposes.
Withdrawal:	It is a traditional family planning method used by couples by ejaculating outside the vagina.
Fertility:	The actual reproductive performance of an individual, a couple, a group, or a population.
Head of Household:	The person who usually lives with the household and is recognized as head of household by its other members. Often he/she is the main decision-maker or responsible for financial support and welfare of the household at the time the survey is conducted.
Health Care Provider:	An individual whose responsibility involves one or more of the following: the provision, administration, teaching, and development of health services, activities or supplies. The provider may have direct or indirect interest in health industry.
Health Insurance:	Indemnity coverage against financial losses associated with the occurrence or treatment of health problem.
Health Status:	The state of health (often in a broad sense) of specified individual, group or population.
Health:	Many definitions exist. As defined by the World Health Organization: "A state of complete physical, mental and social well being and not merely the absence of disease or infirmity".
Height:	Height of the child measured in centimeters as: <ol style="list-style-type: none"> 1. Recumbent Length: distance from the crown of the head to the sole while the child is measured lying supine (for children less than two years of age). 2. Standing Height: distance from the crown of the head to the sole while the child is measured standing children more than two years of age).
High Birth Weight:	Weight of newborn of more than 4 kgs.
High Measuring Board:	A measuring board that can be used to measure either standing height or recumbent length, to the nearest 0.1 cm.
Hospital:	An institution whose primary function is to provide services (diagnostic and therapeutic) for variety of medical conditions, both surgical and non-surgical. Most hospitals also provide some outpatient services, particularly emergency care.
Household Membership:	Persons staying in the dwelling unit at the time of an interview are considered members of the household if (1) the dwelling unit is their usual or only place of residence, or (2) a place of residence is maintained for them here and elsewhere, but they spend most of their time in this residence.
Household:	One person or group of persons with or without a family relationship who live in the same dwelling unit, who share meals and make joint

provisions for food and other essentials of living.

Illiterate:	A person who cannot read or write a short abstract about his life and understand it is considered illiterate.
Immunization:	Immunization is one of the sharpest tools for cutting into the vicious infections cycle and reducing the severity and frequency of setbacks to the normal development of the child in its formative years.
Infant Mortality Rate:	The numbers of infant deaths under one year of age in a given year per 1,000 live births during the year.
Infant:	A live-born child from the moment of birth through the completion of the first year.
Live Birth:	A birth is considered alive if the newborn has shouted, cried, or shown any characteristics of life upon birth.
Low Birth Weight:	Weight of a newborn of less than 2.5 kg.
Malnutrition:	The term malnutrition is used to cover a multiplicity of disorders, ranging from deficiencies of specific micronutrients, such as vitamins and minerals to gross starvation or (at the other extreme) obesity. This discussion is largely limited to protein and calorie malnutrition, which is manifested primarily by retardation of physical growth in terms of height and weight.
Marital Status:	The status of those 12 years old and over in terms of marriage traditions and laws in the country. It might be one of the following:
Single:	The individual 12 years old and over who did not actually marry according to the existing norms and traditions.
Married:	The individual 12 years old and over who is actually married according to the existing norms regardless of whether he/she is living with a spouse, at the time of the interview or not.
Divorced:	The individual 12 years old and over who was married but his/her marriage was revoked by a legally registered divorce, and he/she did not marry again.
Widower:	The individual 12 years old and over who was married, but his/her marriage was revoked because of the death of his/her partner, and he/she did not marry again.
Marriage Duration:	The duration between the date of the actual marriage and the survey reference date, calculated in years.
Maternity Care/ Ante-Natal Care:	Giving birth requires the most sustained medical attention that should be provided through a comprehensive program of maternity care. Such program should include examination, evaluation, observation, treatment and education of the pregnant, and should be directed toward making pregnancy, labor, and delivery as normal and safe as possible for mothers and their infants.
Measles Vaccination:	An injection given once in life at nine months of age to immunize child against Measles.

Measurer:	A trained enumerator who actually measures the height and weight of children.
Median Age:	The age that divides a population into two numerically equal groups: that is, half of the people are younger than this age and half are older.
MMR:	An injection given at 15 months of age in order to immunize the child against Measles, Mumps, and Rubella.
Modern Methods of Contraception:	Include male and female sterilization, pill, IUD, injection, male and female condom, diaphragm and foam/jelly.
Mortality:	Deaths as a component of population change.
Neonatal Death Rate:	The number of infant (one month of age) death per 1000 live birth in a given year.
Neonatal Period:	The first 28 days of life.
Neo-natal Tetanus:	It is a disease that kills many babies. This disease can be easily prevented by a woman receiving an immunization against tetanus while she is pregnant with the baby before birth. This immunization is usually given to the pregnant women as an injection in the arm. However, more than one injection may be required in order to provide protection.
Normal Birth Weight:	Weight of the newborn between 2.5-4.0 kgs.
Nutritional Status:	It measures and allows us to describe the current status of the child, both in terms of immediate acute factors such as inadequate current intake of food, childhood diseases and diarrhea leading to wasting, as well as accumulated impact of chronic deprivation leading to stunting.
Occupation:	Refers to the kind of work done by the employed persons, irrespective of their training or education. Thus, the occupation refers to the tasks carried out by a person. If the person had more than one occupation, the one in which he/she spent most of his/her time was accepted as his/her occupation.
Oral Dehydration Salts (ORS) :	A solution prepared from commercially produced packets of oral rehydration salts.
Oral Rehydration Therapy (ORT):	ORT is given to prevent and treat dehydration episode of diarrhea by giving a child fluids by mouth. ORT is a three strategy that combines administration of a simple solution of sugar and salt with continued feeding through a diarrhea episode and referral when appropriate.
Pilot Survey:	Duplication of the final proposed survey design on a small scale from beginning to end.
Place of Residence:	Place of residence are divided into urban, camps, Rural. Population outside municipal boundaries and camps are considered village population.
Polio Vaccination:	It is given orally as drops or injection at the same age as DPT.
Post Neonatal Death	The number of infant (from 1-11 month of age) deaths per 1000 live

Rate:	births in a given year.
Post-Neonatal Period:	The time between the end of the first month of life and the first year.
Prevalence:	The number of cases of disease, infected persons with some other attribute present at a particular time and in relation to the size of the population from which it is drawn.
Primary Health Care:	First contact and continuing comprehensive health care, including basic or initial diagnosis and treatment, health, supervision, management of chronic conditions and preventive health services. The provision of primary care does not necessarily require highly sophisticated equipment or specialized resources.
Reference Date:	The date referred to in calculating the vital rates and ages. In this survey it is 29/04/2000.
Reproductive Health:	It is not the absence of disease or disorders of the reproductive process. Rather it is a condition in which the reproductive process is accomplished in a state of complete physical, mental and social well-being. This means that people have the ability to reproduce, that women can go through pregnancy and childbirth safely, and that reproduction is carried to successful outcomes, i.e. infants survive and grow up healthy. It implies further that people are able to regulate their fertility without risks to their health and that they are safe in having sex.
Room:	The dwelling unit or part of it surrounded with walls and has a ceiling providing that its area is not less than 4 square meters. The balconies surrounded with glass are considered rooms; while kitchens, bathrooms, other balconies, corridors, halls, and half rooms are not considered rooms. Also, rooms used for work purposes such as a doctor's room or a sewing room are not considered rooms in this survey.
Safe Drinking Water:	Water piped into the dwelling or yard, a public tap, a tube, a well or borehole with pump, a protected well or spring, or rainwater.
School:	Any educational institution excluding kindergartens, regardless of students number and grade structure, providing that the lowest grade is the first basic grade and the highest grade the last grade (university degree and above).
Skilled Health Personnel:	Include doctors, nurses, and midwives, community health workers, health educator, etc.
Smoker:	The individual 12 years old and over who smokes one cigarette or more a day including pipe and waterpipe smokers.
Standard Weight for Age:	The average weight of children from standard population in a given age group.
Stunting:	Low height-for-age indicates, "stunting". One important cause of stunting is chronic malnutrition i.e. chronic wasting, but infectious diseases and socio-economic conditions may also cause stunting.

Supplementary Feeding:	Any liquid (including milk) or solid given while the child is still receiving breast milk.
Tetanus Toxoid Vaccination:	Tetanus Toxoid injections are given during pregnancy for prevention of neonatal tetanus.
Tetanus:	Widely spread disease among rural areas children, caused by clostridia tetny anaerobic bacteria through injuries.
Timely Complementary Feeding Rate:	It is the proportion of infants 6-9 months of age who are receiving breast milk and complementary foods.
Total Fertility Rate:	The average number of children that would be born alive to a women (or group of women) during her life time if she were to pass through her childbearing years conforming to the age specific fertility rates of a given year. The sum of age specific fertility rates is multiplied by 5.
Under Five Mortality:	The proportion of children born who die before reaching their fifth birthday.
Vitamin A:	One of the most useful clues to high prevalence of retinal deficiency is the use of a local word for night blindness indicating the effect of retinal deficiency on the retina.
Wasting:	Low weight-for-height indicates wasting (i.e. "thinness"), which is one of the best indicators of current and acute malnutrition i.e. a deficit in tissues and fat mass compared with what expected in a normal child of the same length/height. Generally associated with failure to gain weight or loss of weight.
Weaning:	The process whereby the child becomes accustomed to taking liquids or solids other than breast milk.
Weight:	Measurement of a child's total body mass underside.
Weight-For-Age (Under Weight)	It is a composite of weight-for-height and Height-for-Age, and fails to distinguish tall, thin children from short, well-proportioned children.
Years of Schooling:	It is the total number of years that have been completed successfully at a school/university by the respondent.

Map of Palestine

Chapter One

Demographic Health Overview

1.1 Introduction:

The Palestinian Central Bureau of Statistics has planned and carried out several surveys aiming at providing accurate, scientific, and reliable database that can be used by concerned institutions for studying and analyzing demographic, social, health, and environmental characteristics of the Palestinian society. The database could be used in various aspects of policies of planning development. The Health Survey- 2000 was one of the greatest achievements of PCBS. Its data were disseminated in January 2000 and included accurate and recent information about health indicators and prioritized health programs. Moreover, the Survey provided a detailed study on the status of health of the Palestinian Territory paying special attention to mothers, children and focusing on reproductive health services, educational level, and nutrition. The implementation of the survey was in line with the national objectives in terms of mothers and children's health.

This Chapter deals with population's demography, status of health in the Palestinian Territory, objectives, organization and implementation of the survey, and the data quality.

1.2 Population and Demography:

According to the 1997 Census, the Palestinian population totaled 2,895,683¹, of which 1,873,476 in the West Bank and 1,022,207 in Gaza Strip. The population was distributed on the three types of localities as follows: 53.1% in urban areas, 31.0% in rural areas, and 15.9% in refugee camps. The projected population of mid 2000 is 3,150,056 and the population density is estimated at 525 persons for every square kilometer. The growth rate for mid 2000 is 3.6%. Data shows that the crude birth rate of mid 2000 is 40.7 live births per 1,000 people, on the other hand, the crude death rate of the same period reaches 4.4 per 1,000 people.

Fertility rates of the Palestinian Territory are higher than those of other countries. This could be caused by early marriage especially among females and the desire to give birth to male children as well as the low rates of females' participation in the labor force and the inherent traditions of the Palestinian communities. Also, the political situation, which might have had an impact on fertility rates. However, the trend of fertility rates began to drop in recent years and that the crude birth rates have actually been dropping since the seventies. As has been previously indicated, the political situation could play a role in the rise and fall of fertility rates; for instance, the first Palestinian Intifada (uprising) witnessed a rise in such rates, which reached 46.7 per 1,000 people in the West Bank and 54.7 in Gaza Strip in 1990. Fertility rates started to drop with the establishment of the Palestinian National Authority in 1994 when estimates indicated an increase in the crude death rate of the newly born in the second half of the past decade. The gross birth rate of 1997 was estimated at 42.7 with 41.2 in the West Bank and 45.4 for Gaza Strip.

Moreover, the total fertility rate also dropped from 6.4 in 1985-1989 to 6.1 in 1995 and dropped further to 6.0 in 1997 according to the Population, Housing and Establishments Census 1997. In

¹ Includes population counted during the period of 10-24/12/1997, uncounted population estimates according to post enumeration survey and population estimates for those parts of Jerusalem annexed by Israel in 1967.

1999, the rate dropped again to 5.93 children. This has resulted from the increase in education among females as well as the improvement in the health conditions and the increasing use of family planning methods. 45.2% of females used family planning methods in 1996. According to the health survey of 2000, the figure rose to 51.4%. It is expected that the percentage will continue to rise due to the policy of the Ministry of Health (MoH), which focuses on females' health and reproductive health.

Mortality rates of the Palestinian Territory are rather low when compared to the rates of the developing and neighboring Arab countries. Such rates in general and specifically among infants dropped in the past ten years. In mid 2000, the gross mortality rate totaled 4.4 per 1,000 people whereas it was 4.8 in 1997. According to the Demographic Survey 1995, infants' mortality rate was 27.3 per 1,000 live births with 25.5 for the West Bank and 30.2 in Gaza Strip. Life expectancy in 1997 was 69.8 years for males and 73.0 years for females. In addition, According to the Health Survey 2000, infants' mortality rates dropped during the period 1995-1999 to 25.5 per 1,000 with 24.4 for the West Bank and 27.3 for the Gaza Strip.

The results of the 1995 Demographic Survey revealed the maternal mortality rates at 70-80 per 1,000 live births during 1990-1994, which is low when compared to some neighboring countries. The mortality rates are expected to drop even further in the coming years especially among infants, which would lead to higher life expectancy for males and females. In 2001, for example, life expectancy in the Palestinian Territory is expected to rise to 70.43 for males and 73.57 for females, and in 2010. it is expected to rise up to 71.8 years for males and 74.8 years for females.

1.3 The health system in the Palestinian Territory:

The creation of the Palestinian High Council of Health was the result of the massive efforts of the MoH, the Palestinian Red Crescent Society, the UNRWA and the other health establishments to improve the state of health in the Palestinian Territory. The Council represents a central authority that evaluates, plans, monitors, and coordinates the various programs of healthcare. Henceforth, plans were set forth in order to organize the function of the health sector and bridge the health gap the Israeli occupation has created. New health centers were built and the existing ones were improved. Moreover, family planning centers were established and health education programs were intensified. The MoH also introduced the comprehensive health insurance system.

The following are the main providers of health care in the Palestinian Territory:

1. The Public Sector: MoH is in charge of this sector and runs 341 primary healthcare centers, including mother and child centers as well as family planning, in the West Bank and Gaza Strip (excluding J1: those parts of Jerusalem which were annexed by Israel in 1967). In 2000 there were supervising 15 hospitals.
2. The Non-Governmental Sector: This sector includes charities and NGOs such as the Palestinian Red Crescent Society, the Health Work Committees, the Union of Palestinian Medical Relief Committees (UPMRC), the Union of Zakat Committees, and other institutions. They run 167 clinics and 22 hospitals in the West Bank and Gaza Strip and mostly rely on donor countries' funding.

3. The UNRWA Health Department: It provides health services to Palestinian refugees and has two regional offices in the West Bank and Gaza Strip. The UNRWA Health Department is in charge of 47 clinics and one hospital.

The private health sector is operated by private individuals or institutions and enjoys a high level of services but at a higher cost.

The National Strategic Health Plan:

MoH has put forth a five-year strategic health plan for 1999-2003; it aims at achieving the following:

1. Improve the efficiency and cost-effectiveness of organizational management for integrated and sector-wide health systems development in Palestine.
2. Strengthen sustainable human resource development in identified areas needing improvement, including health management, support services, organizational development, planning, research, health economics, continuing health education, quality of care, public health and computer systems analysis.
3. Improve quality of health services at all levels, while ensuring equity via expanded access to appropriate levels of care.
4. Implement an on-going systems for the monitoring and evaluation of MoH plans and revising plans based on changing circumstances.
5. Reform the health financing system and adopt appropriate cost recovery and health insurance alternatives to improve financial sustainability and self-sufficiency.
6. Utilize the full potential of existing primary health care services, day-care alternatives, and reduce unnecessary care, while improving secondary and tertiary services.
7. Organize and manage donor technical assistance activities and projects in accordance with Palestinian needs and expectations.
8. Develop a workable system for coordination harmonization, and cooperation between the public and other sectors, including NGOs, UNRWA, the private sector and the community in order to avoid duplication and minimize unnecessary developments.

1.4 The state of health:

Health indicators show development in the state of health in the previous five years. Such development is seen in the drop in the infants' mortality rate and the rise in life expectancy of males and females in the year 2000. Many common and contagious diseases have been brought under control such as mumps, whooping cough, tetanus, measles, and polio. Moreover, diseases of the digestive system have been wiped out from the records as being main causes of infants' mortality. Vaccination of children under five years of age also improved and family planning has also been on the rise. More females now receive prenatal care and give birth at health institutions.

However, there is still a gap in the mother and child's health indicators, for example, respiratory system infections and pneumonia are still the main causes of mortality among children under five years of age in the West Bank. Whereas, in Gaza Strip, road accidents and cerebral palsy remain on top of the list of mortality rates of the same age group. Receiving tetanus shots is still low among pregnant females when compared to the rates of receiving prenatal healthcare. Additionally, the percentage of females who receive postnatal healthcare is still low.

1.5 The objectives of the health survey - 2000:

The Health Survey - 2000 aimed at providing indicators about the end-of-decade goals in order to evaluate the state of the Palestinian child and the state of health of the Palestinian people especially mothers and children. It also aimed at monitoring changing indicators of mother and child health since 1996 when the first Health Survey was carried out. Such monitoring was based on comprehensive and accurate database on health indicators like fertility, family planning, vaccination, breast-feeding, prenatal and postnatal care, and births occurred under the supervision of skilled health persons. The Survey provides database for researchers to enable them to study fertility, family planning, vaccination of mother and child, birth registration, child labor and education, and reproductive health.

1.6 Organizing and implementing the survey:

1.6.1 The survey organization:

The PCBS carried out the survey in cooperation with MoH and with limited technical assistance from the UNICEF and UNFPA. These international organizations and the PNA financed the survey, which provided indicators that did not exist before and updated many of the existing ones. A technical committee of PCBS' experts and MoH's doctors and experts supervised the survey.

1.6.2 The sample and the framework:

The recommendations of the UNICEF were taken into consideration in the design of the sample of the Survey. And it was essential to make available a sample of households who receive healthcare services from the centers of the MoH so as to evaluate such services. The survey targeted all Palestinian households usually reside in the Palestinian Territory with an emphasis, as is the case with such surveys, on ever married females aged less than 55 years as well as the state of health of the children under five years of age.

When the 1997 Census was completed, a framework was set for the households of the Palestinian Territory and a stratified cluster random sample was selected out of the framework. It included and represented the Palestinian Territory and constituted of 481 enumeration areas to be later used in selecting partial samples for various households' surveys. The enumeration area is a group of neighboring households that contains about 120 households. The sample of the Health Survey - 2000 was chosen from the inclusive sample.

1.6.3 Response rates:

The number of qualified households for the interview of the sample reached 6,349 with 4,295 in the West Bank and 2,054 in the Gaza Strip. Actually, 6,204 households were interviewed (4,164 in the West Bank and 2,040 in Gaza Strip). Response rate stood at 97.7% with 96.9% in the West Bank and 99.3% in Gaza Strip as shown in the following table.

Sample's characteristics and response rates by region

Item	West Bank	Gaza Strip	Palestinian Territory
Number of households in the sample	4,463	2,137	6,600
Households qualified for the interview	4,295	2,054	6,349
Interviewed households	4,164	2,040	6,204
Response rate	96.9	99.3	97.7
Eligible women (ever married women within the age group of 12-54 years):			
Number of eligible women	3,646	2,119	5,765
Interviewed	3,626	2,103	5,729
Response rate	99.5	99.2	99.4
Children under five years of age:			
Number of qualified children	3,819	2,360	6,179
Interviewed	3,811	2,358	6,169
Response rate	99.8	99.9	99.8

1.6.4 Survey's questionnaire:

The questionnaire was designed to fulfill the requirements of the Survey taking into consideration local, regional, and international experiments as well as the questionnaires of the PCBS' Demographic Survey of 1995 and the Health Survey of 1996. The UNICEF's Multiple Indicator Clusture Survey (MICSII), the questionnaires of many demographic and health surveys (DHS) for various countries, and standered DHS questionnaire were also considered.

The questionnaire of the Health Survey - 2000 contained three main sections:

Section One: The Household Questionnaire, which was specifically designed to gather information on households' members including age, sex, education, labor force status, orphanhood cases, marital status of people aged 12 years and over, health insurance, smoking, chronic diseases (such as cancer, diabetes, heart diseases,) and other aspects. The Questionnaire also included data on dwelling such as number of rooms, main sources of drinking water, sewage diposal system, type of toilet. The section also provides data on households' consumption of iodized salt.

Section Two: Mother's Health Questionnaire, which deals with ever-married women whose age is under 55 years, was allocated to gather data on respondents' background characteristics maternal care, vaccination against tetanus, breast-feeding, family planning, reproduction and reproductin desire, health awarness, and knowledge of AIDS.

Section Three: The Child's Questionnaire: It deals with obtaining data on children under five years as well as the education and child labor of the age group of 5-17 years. It also gathered information on vaccination, diarrhea, respiratory system infection, ophthalmic health, height and weight of children under 5 years.

1.6.5 Pilot survey:

The pilot survey is a miniature reflection of the main Survey. It was designed to include the entire aspects and characteristics for the purpose of carrying out the Survey and included checking training, fieldwork, Survey's questionnaire, interviewing, data processing, and the sample.

A sample of 117 households (69 in the West Bank and 48 in Gaza Strip) was selected to represent the two regions of the Palestinian Territory including Ramallah, Silwad, and Jalazone refugee camp in the West Bank, and Gaza city, Al Braij refugee camp, and Al Qarara in Gaza Strip. An enumeration area was selected in each locality and then a cell was chosen from each enumeration area.

The fieldwork commenced on February 20, 2000 and went on for five days then a meeting of interviewers was held in order to discuss their remarks. The questionnaire and training manuals and other documents were then evaluated and amended in accordance with the recommendations.

1.6.6 Instructions and Training manual:

The training manual covered all aspects dealing with fieldwork and filling in questionnaires. Moreover, it dealt with the tasks of each fieldworker, interviewing, and questionnaires' completion. More training manuals for supervisors and editors were prepared so as to secure team training and success of project. A training course was held in Ramallah and in Gaza city between March 20-April 9 with the participation of 147 trainees, 100 in the West Bank and 47 in Gaza Strip. It went on for 16 days for fieldworkers and additional two days for supervisors, editors, and assistants.

The training of trainees was divided into two parts: **The first part** discussed general issues such as designing statistical surveys, reaching selected households, interviewing, tasks and duties and running the fieldwork. **The second part** emphasized the objectives of the Survey and allowed exercises on filling in questionnaires. Moreover, specialized doctors gave lectures on medical topics to support fieldworkers' knowledge so that they can be more accurate and careful while completing the questionnaires. The lectures were videotaped so that both regions can have the same training.

1.6.7 Main fieldwork:

A plan for the fieldwork for both regions was placed. At this stage, the fieldwork team and the tools (questionnaires, maps, sample lists, weight and height measuring units) were prepared. Two teams were set up to carry out the fieldwork:

Team one: It included 51 interviewers, 12 supervisors, 13 assistants, and 7 (female) editors. They were divided in the northern, middle, and southern areas of the West Bank.

Team two: Included 21 interviewers, 5 supervisors, 3 assistants, and 5 editors. They were divided in the northern, central, and southern parts of Gaza Strip.

The teams were distributed on the governorates where one or two teams operated. Each team constituted of 3-5 interviewers, one supervisor, one assistant supervisor, one editor, and one fieldwork coordinator and assistant.

1.6.8 Data collection:

The teams started collecting data on April 10th, 2000 and finished on May 31st, 2000.

1.6.9 Data editing in the field:

The project's management developed a clear mechanism for editing the data and trained the team of editors accordingly. The mechanism was as follows:

- Receiving completed questionnaires on daily basis;
- Inspecting each questionnaire to make sure that they were completed and that the data covered all eligible women and children. The inspection also checked the accuracy of the answers to the questions.
- Returning the uncompleted questionnaires as well as those with errors to the field for completion.
- Re-interviewing 10% of the sample households using a special questionnaire for the supervisors to ensure the accuracy of the data when compared to the interviewers' completed questionnaires.
- Spot checking of ages for eligible women and children.

1.6.10 Following up and supervision:

Special follow-up patterns were designed for handing in and receiving questionnaires for all levels as well as the daily accomplishments of the interviewers. Supervisors had the task of allocating work to the teams using the map and the list. They provided daily and weekly reports to the fieldwork coordinator and the project's administration explaining the completed interviews, refusal cases, the inapplicable cases such as vacant housing units, interviews were results were not determined, and the cases that could not be communicated (after three contact attempts). The reports also included the technicians and coordinators' supervisory field visits.

1.7 Data processing:

1.7.1 Preparing data entry programs:

The IMPS program was used in data entry. The designing of the programs and entry monitors took the following aspects into consideration:

1. Matching the form of the questionnaire;
2. Matching the arrangement of sections and pages;
3. Including limits and conditions in the program in line with the questionnaire's questions, sections, allowed values, and error alerts;
4. Easy access to the questionnaire for any changes.

1.7.2 Data entry:

When the programs were checked and completed, data entry started by the trained entry operators. The actual Survey's data entry began on April 18th, 2000 and was finalized on June 8th, 2000. Staff worked two shifts on data entry; the morning shift, which included 20 people and the evening shift where 17 people worked. 9 data entry operators, editors, and supervisors worked half shift.

1.7.2 Data editing:

Data were edited after entry as follows:

1. Editing allowed changes and values. They had very limited problems.
2. Verifying the logical matching of the questions of the sections.
3. Carrying out checks based on certain relations between the different questions. In this process, a list of questionnaires that did not match was reviewed in order to identify the sources of errors. Data entry errors were immediately corrected. The questionnaires with errors resulting from the fieldwork were sent back for correction. Data editing included two stages: Stage one: Editing the Health Survey data, which concentrated on the age, date of birth, and marital status of eligible women. And the matching between the different sections of the mothers' questionnaire. There was also emphasis on qualified children with connection to age and date of birth at this stage. Stage two concentrated on checking the matching between the Health Survey - 2000 and that of 1996 as well as the 1997 Census and the data of the Demographic Survey of 1995.

1.8 Data quality:

Two types of errors affect the quality of the data; sampling and non-sampling errors. The sampling errors are easy to measure; however, the non-sampling errors could occur at any stage of the survey. They include response and non-response errors, interview errors, and data entry errors. However, to minimize non-sampling errors, the interviewers received intensive training. The data entry operators were trained to use the data entry programs and the programs were tried on the data of the pilot survey and the questionnaires, which were completed during the field training. The editors and supervisors were updated on regular basis through meetings and visits to the branch offices. Interviewers were provided with instructions and memos and explanations.

1.8.1 Evaluation of health and demographic data:

They were evaluated in terms of the following aspects:

1. The demographic characteristics that are related to the date of birth and the estimated rates of fertility and mortality.
2. Antenatal care and Maternal care.
3. Breast-feeding and nutrition.
4. Child vaccination.
5. Child growth (height and weight measurements).

There are different methods of evaluating data. They vary according to subjects and include:

1. Repetition of missing values and "others" or "don't know" answers and when sections do not match. And inspecting internal matching of data as part of their logic and completion.
2. Comparing the data of the survey with the surveys of other countries with similar situation like the Palestinian Territory and the related surveys of the Palestinian Territory.

1.8.1.1 The demographic characteristics related to date of birth and the estimates of fertility and mortality rates:

The eligibility of women was based on the date of birth and marital status. The date of birth was obtained from the birth certificates, the ID card, or other official papers. There could be some errors in the ages of those who did not have such documents. As for children, they had no problems of having birth certificates. 99.4% of eligible women were interviewed and data were collected on 99.8% of eligible children. The accuracy of identifying the birth dates is essential since the survey was concentrated on limited age groups since age has very important in terms of the health state of individuals. Determining age was based on the date of birth and April 29 was considered the time reference date.

The errors of age registration data were caused by errors in informing the age or misunderstanding the question or age data entry errors or the respondents' failure to recognize his/her age. Such errors occur in all surveys. Official papers were used whenever possible to obtain age data.

The standardized method of evaluating age data is the testing of the size and the extent of age heaping and at certain single years, generally, at digits 0 and 5. The value of Wipple index used for testing age data was 103.9 for both sexes, which indicated that the data were free of age heaping at digits 0 and 5. Mayers and Bachi indices are 5.1 and 2.9 respectively, which indicates that there was no age heaping at the single years. Age structure and the sex rate according to age drawn from the data of this Survey match the rates of other sources. The results show that the data of the survey of a high quality.

A complete birth register on ever-married women whose ages were under 55 was obtained and the fertility and mortality rates' estimations were drawn from the births' table. women in this category were asked about all of the children they gave birth to and whether such children were alive or deceased. The results were good especially when compared to the questions about the total numbers of births and deaths. However, the data were still subjected to errors such as incomplete birth registration due to forgetfulness or errors in registering date of birth or age at death, which are important to be completed.

1.8.1.2 Antenatal care:

Female respondents who gave birth in the three years prior to the survey were asked whether they had received antenatal care for any birth and, if so, what type of person provided the care. If the woman saw more than one type of provider, all were recorded in the questionnaire.

1.8.1.3 Child immunization:

In health survey - 2000, mothers were asked to provide vaccination cards for children under the age of five. Interviewers copied vaccination information from the cards into the survey questionnaire. Mothers were also probed to report any vaccinations the child received that did not appear on the card. If the child did not have a card, the mother was read a short description of each vaccine and asked to recall whether or not the child had received it and, for DPT and Polio, how many times.

1.8.1.4 Breastfeeding:

Breastfeeding status is based on women's reports of children's consumption in the 24 hours prior to the interview. Exclusive breastfeeding refers to children who receive only breast milk and vitamins, mineral supplements, or medicine. Complementary feeding refers to children who receive breast milk and solid or semi-solid food. In this survey, data on breastfeeding was collected for children born during the three years preceding the survey.

1.8.1.5 Child nutrition:

Children who were weighed and measured and those whose measurements are outside a plausible range are excluded. In addition, a small number of children whose birth dates are not known are excluded. Children under the age of two years were measured lying down, while children above two years and under the age of five years were measured standing up as recommended.

1.8.1.6 Illnesses:

In the Health Survey – 2000 questionnaire, mothers (or caretakers) were asked to report whether their child had diarrhea in the two weeks prior to the survey. If so, the mother was asked a series of questions about what the child had to drink and eat during the episode and whether this was more or less than the child usually ate and drank.

Children with acute respiratory infection are defined as those who had an illness with a cough accompanied by rapid or difficult breathing and whose symptoms were due to a problem in the chest, or both problems in the chest and a blocked nose, or whose mother did not know the source of the problem.

Chapter Two

Households and Individuals' Characteristics

1.2 Introduction:

The most significant characteristics of the selected demographic, social, and economic aspects of the households included in the survey will be dealt with in this chapter. It also presents a brief summary on each of the following features: Population's age and sex structure, household structure, educational attainment and enrollment, dwelling characteristics, age structure and educational attainment of eligible women and their labor force status, and selected background characteristics for children under five years and those aged 5-17 years.

2.2 Population's characteristics:

The demographic and social data of all individuals usually reside in the Palestinian Territory on regular basis were collected in the health survey-2000. The most prominent demographic and social characteristics were as follows:

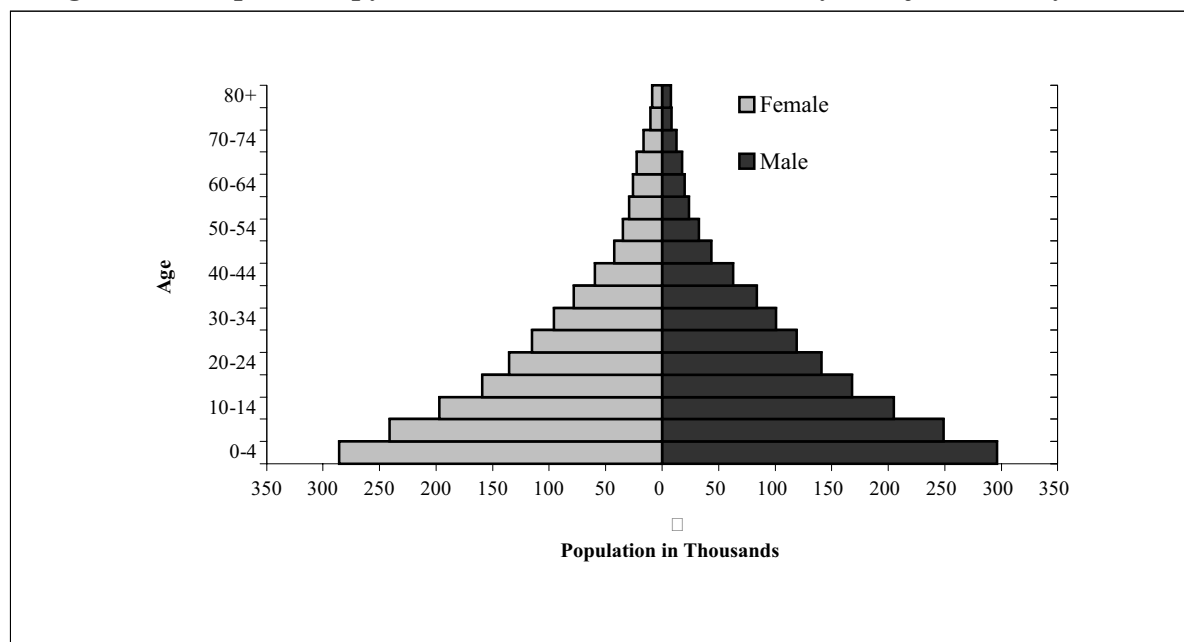
1.2.2 Population's age and sex structure:

Table (2.1) below examines the percentage distribution of the individuals included in the survey according to sex and age. The type of age distribution of the Palestinian Territory is similar to that of the countries of high fertility and mortality rates, henceforth; the percentage of individuals below the age of fifteen is high at 47%, whereas, the percentage of elderly people stands at a low rate of 3.4%. Additionally, the figures are close to those of 1996 at 46% and 4% respectively, which indicates that the Palestinian society is young and has a high fertility rate.

The population distribution by age according to various sources is presented in table (2.2). It shows that the Median age of the population remained fixed at 16.0 years for 1995, 1997, and 2000. Moreover, the percentage of population included in the wide age groups remained almost the same during 1995, 1997, and 2000: For instance, the percentage of individuals whose age is below 15 years was 46.5% in 1995 and 46.9% in 2000. This means that fertility rates are still high, however, the percentage of individuals over 64 years of age was the same for both years at 3.4%.

Dependency rates are on the rise; however they are relatively unchanging in the 15-64 years' age group. Furthermore, the sex ratio (males/females) of the Palestinian Territory is 102; with a high figure of 103.5 among those below 15 years of age and a low figure in the 65+ age group at 78.6 and 102.3 in the 15-64 years' age group.

Figure 2.1: Population pyramid in the Palestinian Territory. Projected mid year 2000



Source: Palestinian Central Bureau of Statistics, 2001. *The data base of the Health Survey-2000*. Ramallah-Palestine.

Table 2.1: Percentage distribution of persons by age, sex, and region (April, 2000)

Age Groups	West Bank			Gaza Strip			Palestinian Territory		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
0-4	17.9	17.6	17.8	20.0	19.7	19.8	18.7	18.4	18.5
5-9	14.9	14.7	14.8	16.9	16.8	16.9	15.6	15.5	15.6
10-14	12.4	12.2	12.3	13.7	13.4	13.5	12.9	12.6	12.8
15-19	10.5	10.1	10.3	10.7	10.4	10.5	10.5	10.2	10.4
20-24	9.1	8.8	9.0	8.5	8.5	8.5	8.9	8.7	8.8
25-29	7.9	7.8	7.8	6.7	6.7	6.7	7.5	7.4	7.4
30-34	6.7	6.5	6.6	5.7	5.5	5.6	6.3	6.1	6.2
35-39	5.5	5.2	5.4	5.0	4.5	4.8	5.3	5.0	5.1
40-44	4.1	4.0	4.0	3.6	3.4	3.5	3.9	3.8	3.8
45-49	2.8	2.8	2.8	2.6	2.7	2.6	2.7	2.7	2.7
50-54	2.1	2.3	2.2	1.9	2.1	2.0	2.0	2.3	2.1
55-59	1.6	2.0	1.8	1.2	1.6	1.4	1.5	1.9	1.7
60-64	1.4	1.8	1.6	1.1	1.5	1.3	1.3	1.7	1.5
65-69	1.0	1.6	1.3	1.0	1.1	1.1	1.0	1.4	1.2
70-74	0.9	1.2	1.0	0.7	1.1	0.9	0.8	1.1	1.0
75-79	0.7	0.5	0.6	0.4	0.5	0.4	0.6	0.5	0.6
80-84	0.3	0.4	0.4	0.2	0.3	0.3	0.3	0.4	0.3
85+	0.2	0.4	0.3	0.1	0.2	0.2	0.2	0.3	0.3
Don't know	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No. of Persons	1,007,009	985,096	1,992,105	567,185	558,000	1,125,185	1,574,194	1,543,096	3,117,290

Source: Palestinian Central Bureau of Statistics, 2000. *Health Survey-2000: Main Findings*. Ramallah-Palestine.

Table 2.2: Percentage distribution of population in the Palestinian Territory by age in 1995, 1997, and 2000

Age	Demographic Survey - 1995 *	1997 Census **	Health Survey - 2000
Less than 15 years	46.5	47.0	46.9
15-64	50.1	49.5	49.7
65+	3.4	3.5	3.4
Total	100	100	100
Depndancy rate	99.6	102.0	101.2
Median age	16.0	16.0	16.0

Sources: * **Palestinian Central Bureau of Statistics, 1997.** *The Demographic Survey in the West Bank and Gaza Strip-Final Results.* Ramallah, Palestine.

** **Palestinian Central Bureau of Statistics, 1999.** *Population, Housing, and Establishment Census - 1997, Statistical Brief (Summary of Census Results).* Ramallah, Palestine.

2.3 Household structure:

According to Table (2.3) below, which reflects the distribution of the sample's households by sex of head of household, number of persons, and region. Two-thirds of the households reside in the West Bank and one third resides in Gaza Strip. The table also includes the average household size, which is essential to identify crowded living conditions and their impact on the household's environment, health, and economic conditions.

Table 2.3: Percentage distribution of households by size, sex of head of household, and selected background characteristics, 2000

Background Characteristics	Region			Type of Locality		
	West Bank	Gaza Strip	Palestinian Territory	Urban	Rural	Camps
Head of Household						
Male	90.3	93.0	91.2	91.6	90.8	90.3
Female	9.7	7.0	8.8	8.4	9.2	9.7
No. of Persons						
1	4.3	2.3	3.7	3.4	4.3	3.5
2	9.8	8.5	9.4	9.7	9.0	8.8
3	9.8	7.0	8.9	9.0	9.5	7.4
4	11.2	8.5	10.3	10.8	10.2	8.6
5	13.8	8.8	12.2	13.4	12.1	7.8
6	14.2	11.8	13.5	14.6	12.0	12.3
7	12.2	12.5	12.3	11.7	13.4	12.1
8	8.8	11.3	9.6	8.9	9.3	12.9
9	6.4	8.4	7.0	6.4	7.3	9.1
10+	9.5	20.9	13.1	12.1	12.9	17.5
Total	100	100	100	100	100	100
Average household size	5.7	6.9	6.1	6.0	6.0	6.7
Distribution of households by place of residence	67.8	32.2	100.0	55.7	29.7	14.6

The average household size in the Palestinian Territory in 2000 was 6.1 with 5.7 for the West Bank and 6.9 in Gaza Strip. However, when we examine this average, we discover that it is slightly higher in refugee camps than urban and rural areas at 6.7, 6.0, and 6.0 respectively. Furthermore, the 2000 figure indicates a small drop in the average size of the household, which was 7 persons in 1995 (6.6 in the West Bank and 7.8 in Gaza Strip)¹.

20.1% of the Palestinian households consist of more than nine members which has negative socioeconomic and health impact on the households.

Females head 8.8% of households (see table 2.3) with higher percentage (9.7%) in refugee camps and the West Bank, on the other hand, the figures for Gaza Strip, and urban areas decreases at 7.0%, 8.4%, respectively, while it was 9.2% in the rural areas. The importance of such indicator rise from the fact that the sex of the head of the household affect the socioeconomic conditions of the household especially if the women were unemployed, since these households constitute mainly of a mother and children, or a mother without children, or a female who has never been married before. The comparison between the current figures with those of 1995 reflects a slight increase since they were 7.7% for the Palestinian Territory including 8.3% for the West Bank and 6.4% for Gaza Strip.²

2.3.1 Type of household:

The distribution of households in the Palestinian Territory by type is shown in table (2.4). Noticeably, the percentage of nuclear families is 77.5% whereas the percentage of extended families is 18.6%. However, the data of the Demographic Survey of 1995 and the 1997 Census indicate that nuclear families stood at 69.4% and 73.2% respectively, whereas the percentages of extended families were 27.6% in 1995 and 23.0% in 1997. This means that the rate of nuclear families is on the rise. Henceforth, a need rises for more services such as housing units, and care for old citizens.

¹ Palestinian Central Bureau of Statistics, 1997. The Demographic Survey in the West Bank and Gaza Strip-Final Results, Ramallah, Palestine.

² Ibid.

Table 2.4: Households by type and region in 1995, 1997, and 2000

Type of household and the year	West Bank	Gaza Strip	Palestinian Territory
1995*			
One person family	3.1	1.9	2.8
Nuclear family	72.2	62.7	69.4
Extended family	24.4	35.3	27.6
Composite family	0.3	0.1	0.2
Total	100	100	100
1997**			
One person family	3.7	2.6	3.3
Nuclear family	74.0	71.8	73.2
Extended family	21.7	25.3	23.0
Composite family	0.6	0.3	0.5
Total	100	100	100
2000			
One person family	4.3	2.3	3.7
Nuclear family	79.0	74.3	77.5
Extended family	16.5	23.0	18.6
Composite family	0.2	0.4	0.2
Total	100	100	100

Sources: * **Palestinian Central Bureau of Statistics,1997.** *The Demographic Survey in the West Bank and Gaza Strip-Final Results.* Ramallah, Palestine.

** **Palestinian Central Bureau of Statistics,1999.** *Population, Housing, and Establishment Census-1997, Statistical Prief.* Ramallah, Palestine.

2.4 Education:

Education is essential when it comes to family planning, reproduction, child's care and healthcare, and other related socioeconomic and health indicators.

2.4.1 Literacy:

There are information about the highest educational achievements of people aged five years and over included in the Health Survey - 2000. Table (2.5) shows literacy rates among those aged 15 years and over, which stands at 89.2% with outstanding differences between males at 94.4% and females at 83.9%. Early marriage among females and the economic hardship could be the main factors of such variation. However, literacy rates are high in urban areas but low in rural areas. Table (2.5) shows that illiteracy rates are wider among old citizens.

Table 2.5: Percentage of persons aged 15 years and over who are literate by selected background characteristics and sex

Background Characteristics	Males		Females		Total	
	Literate	Number	Literate	Number	Literate	Number
Age						
15-24	97.8	306,057	98.7	291,971	98.2	598,028
25-34	98.0	217,379	96.0	208,636	97.0	426,015
35-44	97.0	144,502	91.3	135,235	94.2	279,737
45-54	95.4	74,520	74.1	76,630	84.6	151,150
55-64	83.0	43,409	33.4	55,067	55.3	98,476
65+	54.7	45,318	9.5	57,656	29.4	102,974
Type of locality						
Urban	94.7	456,746	86.4	452,987	90.6	909,733
Rural	93.8	247,264	79.2	243,937	86.5	491,201
camp	94.4	127,175	84.2	128,271	89.2	255,446
Region						
Palestinian Territory	94.4	831,185	83.9	825,195	89.2	1,656,380
West Bank	94.7	550,872	83.6	545,571	89.2	1,096,443
Gaza Strip	93.8	280,313	84.6	279,624	89.2	559,937

2.4.2 Educational attainment for males:

According to Table (2.6), which shows the educational attainment of males aged 10 years and over, 4.7% of males are illiterate whereas 18.6% of them can read and write only. Also, a high percentage (52.5%) of males did not obtain high school education while only 13.7% have completed high school. On the other hand, 10.5% of males have associated diploma or higher. Data indicate that illiteracy is more in Gaza Strip and rural areas than that in the West Bank, urban areas, and camps, however, there are no variations in the West Bank and Gaza Strip's figures in regard to the percentage of males with associated diplomas or higher than that. Then again, the rates of associated diploma or higher is higher in the urban areas and camps than rural areas.

Table 2.6: Percentage distribution of males aged 10 and over by educational attainment and selected background characteristics, 2000

Background characteristics	Can read and write	Literate	Elementary	Preparatory	Secondary	Associated diploma and higher	Total	Number of males
Age								
10-14	0.9	54.4	44.3	0.4	-	-	100	202,495
15-19	2.1	4.6	26.5	57.9	8.9	0.0	100	166,201
20-24	2.3	5.2	18.0	36.6	29.4	8.5	100	139,856
25-29	1.9	6.5	22.8	30.5	21.1	17.2	100	117,742
30-34	2.0	8.1	23.7	25.7	21.9	18.6	100	99,637
35-39	2.5	10.0	22.9	23.3	17.7	23.6	100	82,939
40-44	3.7	11.7	27.2	23.6	11.8	22.0	100	61,563
45-49	3.9	11.8	22.1	25.0	12.8	24.4	100	42,769
50-54	5.5	16.5	20.1	20.0	17.7	20.2	100	31,751
55-59	10.7	21.2	19.4	14.3	13.7	20.7	100	23,390
60-64	24.4	28.9	18.0	9.3	8.3	11.1	100	20,019
65+	45.3	33.1	13.8	4.6	1.3	1.9	100	45,318
Don't know	65.3	34.7	0.0	0.0	0.0	0.0	100	407
Type of locality								
Urban	4.5	18.1	26.6	25.6	14.4	10.8	100	563,694
Rural	5.1	19.6	27.8	26.5	11.4	9.6	100	310,203
Camps	4.7	18.5	24.5	25.9	15.4	11.1	100	160,190
Region								
Palestinian Territory	4.7	18.6	26.6	25.9	13.7	10.5	100	1,034,087
West Bank	4.5	18.2	27.4	27.2	12.3	10.4	100	676,221
Gaza Strip	5.1	19.5	25.1	23.4	16.2	10.7	100	357,866

2.4.3 Educational attainment for females:

Table (2.7) presents the educational attainment of females aged 10 and over. The percentage of illiterate females, according to the table, is 13.2%, on the other hand, 18.2% of females can read and write. Additionally, half of literate females obtained a level of schooling that is below high school and 19.3% completed their high school and beyond. The table also shows that the percentage of illiterate women is high in the rural areas and the West Bank and that illiteracy increases with age as 95.8% of females aged 15-19 years have completed their elementary education or higher whereas 46.6% of those aged 50-54 years have similar educational attainment. Moreover, the percentage of females who obtained associated diploma and higher is still generally low and that such educational level is higher among urban areas than in rural areas and camps. It is also higher in the West Bank than in Gaza Strip.

Table 2.7: Percentage distribution of females aged 10 and over by educational attainment and selected background characteristics, 2000

Background characteristics	Can read and write	Literate	Elementary	Preparatory	Secondary	Associated diploma and higher	Don't know	Total	Number of females
Age									
10-14	0.8	55.4	43.4	0.4	-	-	0.0	100	194,805
15-19	1.1	3.0	24.7	58.3	12.8	0.0	0.1	100	157,679
20-24	1.4	6.3	19.5	33.9	29.1	9.8	0.0	100	134,292
25-29	3.4	7.6	22.7	33.4	18.3	14.6	0.0	100	114,010
30-34	4.7	11.2	22.5	26.4	18.6	16.6	0.0	100	94,626
35-39	7.1	11.7	27.8	25.1	16.9	11.4	0.0	100	77,115
40-44	10.8	18.6	24.7	23.1	14.5	8.3	0.0	100	58,120
45-49	18.9	15.6	19.8	23.8	12.9	9.0	0.0	100	42,063
50-54	34.5	18.9	17.8	10.1	11.6	7.1	0.0	100	34,567
55-59	56.5	18.7	11.1	6.3	3.7	3.7	0.0	100	29,134
60-64	77.9	13.9	4.3	2.0	0.3	1.6	0.0	100	25,933
65+	90.4	4.6	3.6	0.8	0.3	0.3	0.0	100	57,655
Don't know	60.0	12.3	0.0	0.0	0.0	4.1	23.6	100	741
Type of locality									
Urban	11.2	17.2	24.5	25.3	14.1	7.7	0.0	100	558,069
Rural	17.0	20.2	27.1	22.8	8.6	4.3	0.0	100	302,166
Camp	12.9	17.6	21.7	25.1	15.9	6.8	0.0	100	160,505
Region									
Palestinian Territory	13.2	18.2	24.8	24.5	12.7	6.6	0.0	100	1,020,740
The West Bank	13.7	18.6	25.8	24.8	10.2	6.9	0.0	100	666,127
Gaza Strip	12.3	17.3	23.1	23.9	17.4	5.9	0.1	100	354,613

The percentage of illiterate females is three times higher than males, which indicates a great gap in the educational level of both sexes. And that there are more males with associated diploma or higher than females; however, the variations in the educational level is less prominent in the younger age groups.

2.5 Enrollments rates:

According to Table (2.8), which presents the enrollment rates of both males and females aged 6 and more in accordance with sex and region, 41.5% are at school including 42.3% for males and 40.6% for females. Furthermore, enrollment rates is higher in Gaza Strip than it is the case of the West Bank.

The data of the survey show a variation in enrollments rates between males and females, which increases among the 18 years of age and over at 9.3% for males and 6.7% for females; such variation is more inherent in Gaza Strip than in the West Bank.

Table 2.8: Enrollment rates by age, sex, and region, 2000

Region and sex	Age				Total
	6-11	12-14	15-17	18+	
Palestinian Territory	95.3	96.0	74.0	8.0	41.5
Males	95.2	95.1	71.2	9.3	42.3
Females	95.4	96.9	76.9	6.7	40.6
West Bank	96.2	95.9	72.4	7.1	39.4
Males	96.1	94.9	68.1	7.7	39.8
Females	96.3	97.0	77.0	6.4	39.0
Gaza Strip	93.9	96.1	76.6	9.9	45.2
Males	93.9	95.5	76.6	12.5	47.0
Females	93.9	96.7	76.7	7.3	43.3

2.6 Dwelling characteristics:

The characteristics of dwelling has an impact on the health conditions of the household and reflects its economic status. The questionnaire of the Health Survey - 2000 embodied a few questions on the environmental conditions of the respondents relating to the dwelling characteristics such as the number of rooms, type of floor material, presence of safe source of drinking water, and sewage system.

2.6.1 Type of floor material:

Approximately 82.0% of residences have marble, ceramics, or tiles used in making their floors. The percentage rises in urban areas and in camps' residences and drops in rural areas. Table (2.9) shows that 17.4% of households reside in dwellings where cement is used in the construction of their floors. The figures go higher in rural areas. On the other hand, 0.7% of households live in dwellings where sand, soil, wood, or other materials are making their floors.

2.6.2 Number of rooms:

Table (2.9) also indicates that 7.3% of households reside in a one-room house and 20.7% occupy 5 or more room houses. The rate of persons per room is 2, but as it is evident, camps have a more prominent problem of crowded living conditions at a higher rate of 2.11 persons per room, which is higher than urban and rural areas at 1.9 and 2.0 respectively.

2.6.3 Drinking water sources:

About 96.2% of Palestinian households have safe sources of drinking water (Indoor public system, outdoor public system, piped and unpiped well). The percentage is higher in Gaza Strip, urban areas, and refugee camps than in the West Bank and the rural areas. Obviously, the majority of people use indoor public system and 2.4% use outdoor public system. Moreover, 10.7% of households rely on piped and unpiped well. The percentage goes up in the West Bank and the rural areas. The rest use tanker truck, canals, and other sources to secure their supplies of drinking water.

Table 2.9: Distribution of households by characteristics of dwelling, region, and type of locality, 2000

Dwelling characteristics	Region			Type of locality		
	West Bank	Gaza Strip	Palestinian Territory	Urban	Rural	Camp
Type of floor material						
Soil/sand	0.3	1.1	0.5	0.7	0.4	0.2
Wood	0.1	0.2	0.1	0.2	0.1	0.1
Marble, ceramics, tiles	81.9	81.8	81.9	86.1	73.3	82.9
Cement	17.6	16.9	17.4	13.0	26.1	16.7
Others	0.1	0.0	0.1	0.0	0.1	0.1
Number of rooms						
1	8.0	5.8	7.3	6.6	8.4	7.4
2	20.8	13.1	18.3	17.5	20.8	16.7
3	31.1	23.0	28.5	27.9	29.3	28.9
4	23.3	29.1	25.2	25.4	24.2	26.4
5+	16.8	29.0	20.7	22.6	17.3	20.6
Housing density (person per room)	1.98	2.02	1.99	1.93	2.04	2.11
Percentage distribution of households by source of drinking water						
Indoor public system	79.6	89.2	83.1	91.9	63.3	89.4
Outdoor public system	0.4	6.1	2.4	2.0	0.9	7.0
Piped well	11.9	2.6	8.5	3.5	21.9	1.0
Unpiped well	3.0	0.7	2.2	0.9	5.3	0.6
Tank	3.8	0.9	2.7	1.4	6.0	1.1
Springs/ canals	1.2	0.0	0.8	0.0	2.5	0.2
Other source	0.1	0.5	0.3	0.3	0.1	0.7
Safe source of drinking water*	94.9	98.6	96.2	98.3	91.4	98.0
Sewers system						
Public sewers system	36.5	59.3	43.9	56.4	6.8	71.2
Cesspit	62.4	40.6	55.4	43.0	92.0	28.2
Others	0.5	0.0	0.3	0.2	0.6	0.4
None	0.6	0.1	0.4	0.4	0.6	0.2
Discharge of wastewater						
Modern bathroom	25.4	16.5	22.2	25.9	19.3	14.9
Traditional toilet	48.4	45.8	47.5	39.1	58.7	55.1
Both	25.6	37.6	29.9	34.6	21.5	29.9
None	0.6	0.1	0.4	0.4	0.5	0.1

* Includes: Indoor public system, outdoor public system, piped and unpiped well.

2.6.4 Sewers system:

According to results, 99.6% of households have a way to discharge their wastewater and that 22.2% have flush toilets whereas about half of the households still use traditional toilets. Table (2.9) shows that 43.9% of the households are connected to the public sewers system. The table also shows differences in such connection according to type of locality where they increase in urban areas and refugee camps and drop in rural areas. This fact, however, does not mean that

refugee camps enjoy utmost sewers system conditions since most sewers there are open. Moreover, 92.0% of rural households discharge their wastewater into cesspits.

2.7 Background characteristics of interviewed eligible women:

Table (2.10) presents the distribution of interviewed ever-married women within the age group of 15-49 years by selected background characteristics like their age, region, education, type of locality, and social status. Results show that less than half of them are under 30 years of age and that about one fifth of them are 40 years or over. The Table also indicates that most of the eligible women are married and that the percentage of the widows and the divorced is the same and stands at 2.1% for both statuses.

Table 2.10: Percentage distribution of interviewed eligible women aged 15-49 years by selected background characteristics, 2000

Background characteristics	Percentage
Region	
West Bank	64.7
Gaza Strip	35.3
Type of locality	
Urban	55.8
Rural	28.4
Refugee camps	15.8
Age	
15-19	6.6
20-24	18.3
25-29	20.8
30-34	18.7
35-39	15.1
40-44	11.8
45-49	8.7
Marital status	
Married	95.8
Divorced	2.1
Widowed	2.1
Educational attainment	
None	15.7
Elementary	25.1
Preparatory	32.5
Secondary and above	26.7
Number of women	440,606

2.7.1 Variations in the educational level:

Table (2.11) exhibits the percentage distribution of interviewed eligible women according to their highest level of education by age, type of locality, and region. The Table also shows that educational attainment decrease with age, for instance, 0.4% of illiterate women are in the age group of 15-19 years whereas it is 18.9% among those aged 45-49 years. Illiteracy is high among rural and West Bank womens. However, the percentage of females with associated diploma and higher degrees in the age group 30-34 years is twice that of those aged 40-44 years.

Table 2.11: Percentage distribution of interviewed eligible women aged 15-49 by educational attainment and selected background characteristics, 2000

Background characteristics	Can read and write	Literate	Elementary	Preparatory	Secondary	Associated diploma and higher	Don't know	Total	Number of Women
Age									
15-19	0.4	4.5	28.4	54.0	12.0	0.2	0.5	100	28,967
20-24	0.8	5.6	24.8	41.8	21.4	5.6	0.0	100	80,644
25-29	2.4	7.0	24.5	36.2	17.9	12.0	0.0	100	91,702
30-34	4.6	11.3	23.5	27.2	19.2	14.2	0.0	100	82,502
35-39	6.5	12.7	28.7	25.3	17.5	9.3	0.0	100	66,637
40-44	9.8	19.1	26.1	23.4	14.5	7.1	0.0	100	52,074
45-49	18.9	15.8	20.4	23.5	12.6	8.8	0.0	100	38,080
Type of locality									
Urban	4.5	8.9	24.4	32.8	19.1	10.2	0.1	100	245,882
Rural	7.8	14.6	29.6	29.8	11.8	6.4	0.0	100	125,020
Camp	3.5	8.4	19.4	36.1	22.1	10.5	0.0	100	69,704
Region									
Palestinian Territory	5.3	10.4	25.1	32.5	17.5	9.2	0.0	100	440,606
West Bank	5.8	11.7	27.2	32.1	13.8	9.4	0.0	100	285,094
Gaza Strip	4.3	8.2	21.1	33.2	24.3	8.8	0.1	100	155,512

The percentage of women who completed high school and beyond is higher in camps than that of urban and rural areas. It is also higher in Gaza Strip than in the West Bank.

2.8 Women's labor force status:

Persons aged 10 year and over were asked questions about their labor force status during the week preceding the health survey - 2000. Table (2.12) shows the percentage distribution of eligible women aged 15-49, who were interviewed, by labor force status, age, region, and type of locality.

Noticeably, women aged 15-49 years have low participation in the labor force at 7.4%. The percentage rises among urban, West Bank, and those aged 40-44, while drops in rural areas and Gaza Strip. Unfortunately, 91.2% of eiligible women are unemployed.

Table 2.12: Percentage distribution of interviewed eligible women aged 15-49 years by labor force status and selected background characteristics, 2000

Background characteristics	Employed	Unemployed ever work	Never worked before	Other	Total	Number of women
Age						
15-19	0.6	0.0	0.4	99.0	100	28,967
20-24	4.3	0.6	0.5	94.6	100	80,644
25-29	6.4	1.5	0.5	91.6	100	91,702
30-34	8.6	1.0	0.7	89.7	100	82,502
35-39	9.6	1.7	0.1	88.6	100	66,637
40-44	11.2	0.9	0.3	87.6	100	52,074
45-49	9.5	0.7	0.2	89.6	100	38,080
Type of locality						
Urban	7.9	1.1	0.3	90.7	100	245,882
Rural	6.2	0.5	0.1	93.2	100	125,020
Camp	7.7	1.9	1.2	89.2	100	69,704
Region						
Palestinian Territory	7.4	1.0	0.4	91.2	100	440,606
West Bank	8.0	0.6	0.1	91.3	100	285,094
Gaza Strip	6.1	1.9	1.0	91.0	100	155,512

2.9 Eligible children aged 0-17 years interviewed in the sample:

The questionnaire, which was specifically allocated for children aged 0-17 years of the health survey-2000, requested information about education and child labor of those aged 5-17 years. Moreover, the questionnaire also collected data on birth registration, immunization, illnesses, ophthalmic health, and nutritional status of those under 5 years of age.

2.9.1 Background characteristics of children under five years of age:

The percentage distribution of children below five in accordance with sex, region, type of locality, and other background characteristics is presented in table (2.13). As the Table shows, the percentage of male children in this age group is slightly higher than that of female children at 50.9% and 49.1% respectively. The results match those of the developing countries where the percentage of males below five is higher than females. Additionally, there is a small variation in infants and children's mortality rates by sex. However, such variations do not have a major impact on the sex of children below five, as is the case at birth.

According to results, two thirds of children under five years live in the West Bank (the rest live in Gaza Strip) and about half of the West Bank children live in urban areas.

Table 2.13: Percentage distribution of children under five years by selected background characteristics, 2000

Background characteristics	Percentage
Sex	
Males	50.9
Females	49.1
Region	
West Bank	61.3
Gaza Strip	38.7
Type of locality	
Urban	55.2
Rural	28.8
Camp	16.0
Age in months	
Less than 6	11.4
6-11	10.0
12-23	20.8
24-35	20.1
36-47	19.1
48-59	18.6
Mothers' educational attainment	
None	12.8
Elementary	25.9
Preperatory	34.8
Secondary and above	26.5
Total	100
Number of children	577,350

The percentage of children aged 12-23 months is 20.8% whereas the percentage of children in the age group 24-35 months is 20.1% and it is 10.0% for those aged 6-11 months. There were 6,179 children (eligible) to be included in the sample and 6,169 or 99.8% of them were interviewed.

2.9.2 Background characteristics of children aged 5-17 years:

Table (2.14) shows the percentage distribution of the sample's children (5-17 years) according to selected background characteristics. The table also shows that 44.8% of the children are aged 5-9 years and that the percentage of males and females are close (in the same age group). 47.6% of them live in camps and less than half live in rural and urban areas. Furthermore, 23.1% of children are aged 10-12 years, 13.6% of them are aged 13-14 years, and 18.5% of them belong to the 15-17 years age group.

Table 2.14: Percentage distribution of children (5-17 years) by selected background characteristics, 2000

Background characteristics	Age				Total	Number of children
	5-9	10-12	13-14	15-17		
Sex						
Males	44.6	22.9	13.8	18.7	100	551,955
Females	44.9	23.4	13.3	18.4	100	531,362
Region						
West Bank	44.3	22.9	13.8	19.0	100	667,468
Gaza Strip	45.6	23.5	13.1	17.8	100	415,849
Type of locality						
Urban	44.2	22.9	13.6	19.3	100	577,563
Rural	44.2	23.5	13.8	18.5	100	324,676
Camp	47.6	23.1	12.9	16.4	100	181,078
Total	44.8	23.1	13.6	18.5	100	1,083,317

Excutive summary:

- * 47.0% of the Palestinian population in the Palestinian Territory are under fifteen years old and 3.4% of them are old citizens aged 65 years and over, which indicates that the Palestinian Territory has high fertility rates.
- * Two-thirds of households live in the West Bank and one-third live in Gaza Strip.
- * Palestinians households are large and 20.1% of them consist of more than 8 members.
- * 8.8% of the households are headed by females and the percentage rises in the West Bank and the camps.
- * Nuclear families constitute 77.5% of the Palestinian Territory's families while extended families form 18.6%. composite families are 0.2% and one person families constitute 3.7%.
- * 89.2% of persons aged 15 years and over are literate with significant variation between males and females at 94.4% and 83.9% respectively.
- * Males and females' illiteracy increases with age.
- * Of the 6 years and over group, 41.5% are at school including 42.3% for males and 40.6% for females. The percentages for Gaza Strip are higher than those of the West Bank.
- * Housing density rate is 2; there are 2 persons per room in the Palestinian Territory, however, refugee camps have more crowded living conditions at 2.11, which high than rural areas, which stands at 2.04 and urban areas at 1.93 persons per room.
- * 96.2% of Palestinian dwellings have safe sources of drinking water; the percentage goes up in Gaza Strip, urban areas, and camps but it drops in the West Bank and in the rural areas.
- * 99.6% of households posses a certain method of discharging their wastewater and 44.0% of them are connected to public sewers system.
- * 91.2% of women in the age group 15-49 years are unemployed.
- * The percentage of male children under five years of age is slightly higher than that of females in the same age group and stands at 50.9% for males and 49.1% for females. The figures match those of the developing countries where the sex ratio are 103.6 males for every 100 females.

Fertility

3.1 Introduction:

This chapter aims at providing estimates for the fertility rates of the Palestinian Territory for the year preceding the 2000 Health survey. Fertility measures at this chapter are based on reported birth histories of ever married women aged 15-49 who were interviewed. However, fertility estimates are made for all women of reproductive age regardless of their marital status. Data were collected in two sections. Each woman was asked a series of questions on the number of her sons and daughters living with her, the number living elsewhere, and the number who had died. And, for each live birth, she was asked to report the sex, date of birth, whether the birth was single or multiple, and whether the child was living in the household or elsewhere. The survival status of each child was also asked. For deceased children, the age at death was recorded. As an indicator of future fertility, information were collected on whether married women were pregnant at the time of the interview. The high quality of age and date reporting provide the quality of basic data used in the estimation of fertility measures.

Change in the fertility rates during the past 5 years is also examined. An analysis of demographic and socioeconomic factors associated with fertility and geographical fertility variations is conducted. Additional topics related to fertility, including children ever born, birth intervals, age at first birth, and teenage fertility, are also examined.

3.2 Fertility levels:

Table (3.1) presents age-specific fertility rates (per thousand women) and total fertility rates (TFR) for the year preceding the 2000 Health Survey, along with fertility rates for the year preceding the 1995 Demographic survey. Total Fertility Rate is the sum of age-specific fertility rates and represents the average number of children a woman would have during her lifetime if she were to pass through her childbearing years conforming to the age specific fertility rates of a given year. At current levels, a woman in the Palestinian Territory would give birth to 5.93 children in her lifetime.

Table 3.1: Age-specific fertility rates (per thousand women) and TFR for one year preceding the surveys by region 1994, 1999

Age groups	1994*			1999		
	West Bank	Gaza Strip	Palestinian Territory	West Bank	Gaza Strip	Palestinian Territory
15-19	100	144	114	79	72	77
20-24	273	340	294	285	365	311
25-29	264	347	291	290	319	300
30-34	229	289	248	244	321	268
35-39	155	230	177	158	192	169
40-44	62	123	82	41	93	57
45-49	5	5	5	7	0	4
Total Fertility Rate	5.44	7.41	6.06	5.52	6.81	5.93

* **Palestinian Central Bureau of Statistics, 1997.** *The Demographic Survey in the West Bank and Gaza Strip: Final Report.* Ramallah- Palestine.

In comparison with fertility levels in neighboring countries for which data is available from DHS surveys, the TFR in the Palestinian Territory is quite high. Most other countries had lower fertility rates, including Jordan (4.4 births in 1995-1997), Egypt (3.6 births in 1993-1995), Tunisia (3.0 births in 1993-1995), and Morocco (3.3 births in 1993-1995). However, Yemen had a higher fertility rate (6.5 births in 1995-1997).

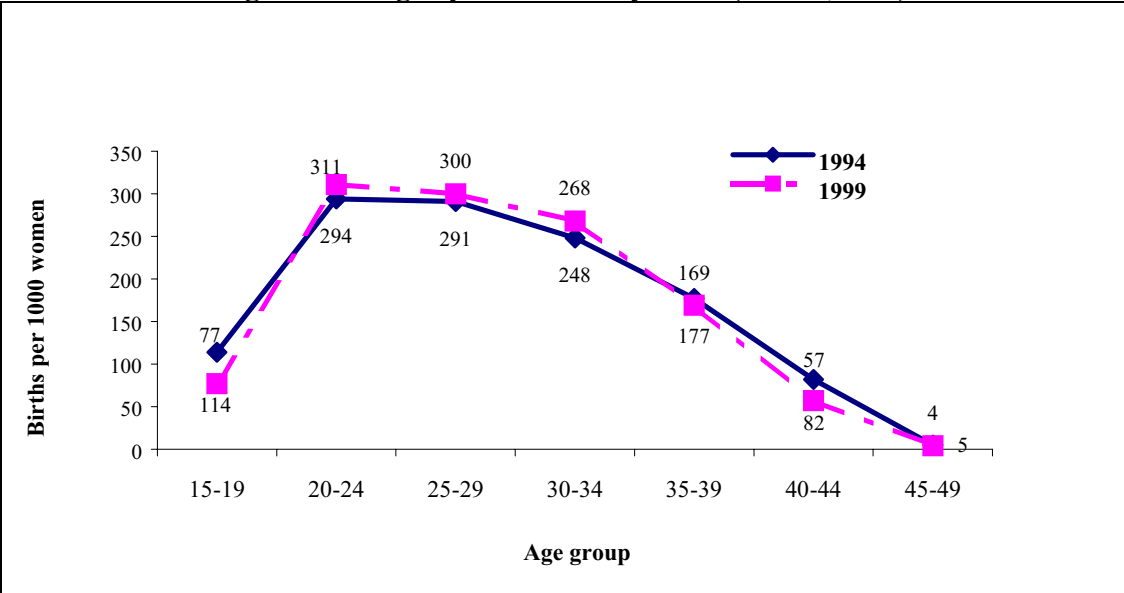
The high fertility level in the Palestinian Territory is related to several socio-demographic, economic, cultural, and political factors. Low age at first marriage and pregnancy, the desire for large families, low women participation in the labor force, and the importance of the demographic factor in the Palestinian-Israeli conflict are all factors contributing to the high fertility levels in the Palestinian Territory. The current fertility rates will have dramatic effects on future population growth.

TFR in the Palestinian Territory varies by region (5.52 in the West Bank versus 6.81 in Gaza Strip). This difference might be related to the lower socio-economic conditions in Gaza Strip as compared to the West Bank. TFR in the Palestinian territory decreased slightly from 6.1 in 1994 to 5.9 in 1999. Change in TFR between 1994 and 1999 varied by region. The West Bank experienced a slight increase in TFR during the same period (5.4 in 1994 versus 5.5 in 1999), while Gaza Strip experienced a decrease in TFR (7.4 in 1994 versus 6.8 in 1999).

3.3 Fertility trends:

Figure (3.1) shows age-specific fertility rates (per thousand women) for one year preceding the 1995 demographic survey* and the 2000 health survey in the Palestinian Territory. Age-specific fertility rates for women aged 20-34 years old increased slightly between the years 1995 and 2000. However, there was a decline in age-specific fertility rates for women younger than 20 years and women older than 35 years during the same period.

Figure 3.1: Age-specific fertility rates (1994* ,1999)



*Palestinian Central Bureau of Statistics, 1997. *The Demographic Survey in the West Bank and Gaza Strip: Final Report*. Ramallah- Palestine.

Figure (3.2) shows age-specific fertility rates (per thousand women) for the one year preceding the 2000 health survey by region. Gaza Strip has higher age-specific fertility rates

for age groups 20-44 than the West Bank. The differences between the two regions are higher among the 20-24 and 30-34 age groups.

Figure 3.2: Age-specific fertility rates (per thousand women) for one year preceding the 2000 health survey by region (1999)

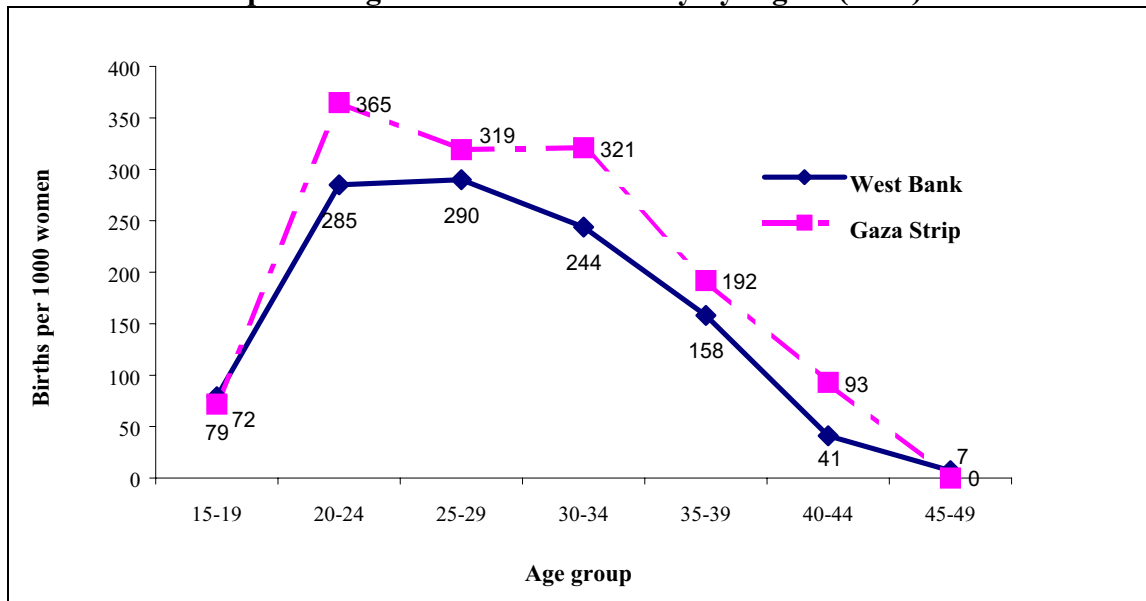
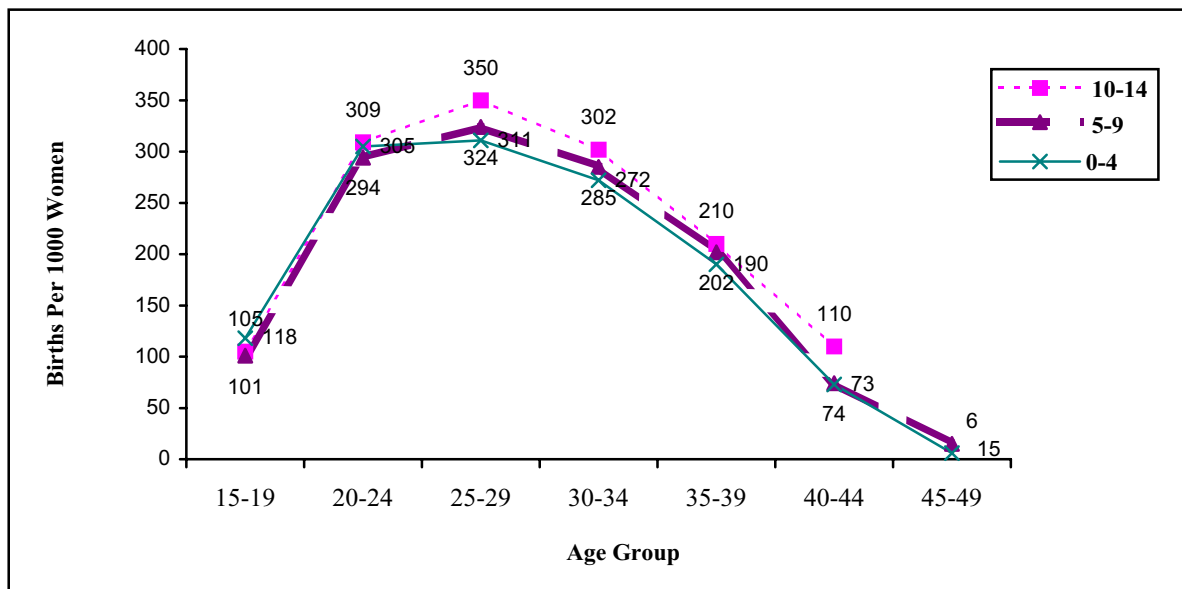


Figure (3.3) shows age-specific fertility rates (per thousand women) for reference periods preceding the 1995 demographic survey* by mother's age at time of birth. An overall decline in fertility rates is observed throughout the years.

Figure 3.3: Age-specific rates for reference periods preceding the 1955 Demographic Survey*



*Palestinian Central Bureau of Statistics, 1997. *The Demographic Survey in the West Bank and Gaza Strip: Final Report*. Ramallah- Palestine.

3.4 Fertility differentials:

An analysis of fertility differentials between subgroups of the population is conducted. Table (3.2) presents TFR by background characteristics. TFR is higher among rural and camp residents (6.07 and 6.06 respectively) than urban residents (5.85). Additionally, TFR is negatively associated with the level of woman's education and stands at 6.64 for women with less than secondary education, 5.37 for women with a secondary education, and 4.1 for women with more than secondary education. Lower level of education is associated with lower age at first marriage and pregnancy and therefore higher fertility levels. Women living in urban areas are attaining higher levels of education as compared to women living in rural areas or camps and they hence have lower fertility rates. This differential may be as a result of differential in socio-economic status among different subgroups of population.

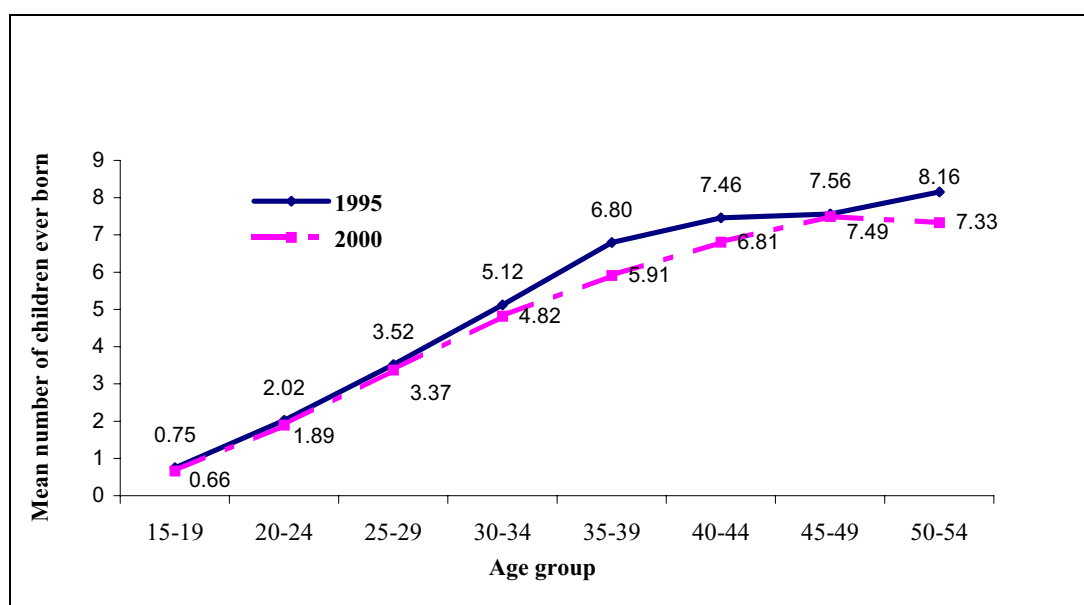
Table 3.2: Total fertility rates (TFR) for one year preceding the survey by background characteristics (1999)

Background characteristics	TFR
Type of locality	
Urban	5.85
Rural	6.07
Camp	6.06
Educational attainment	
Less than secondary	6.64
Secondary	5.37
More than secondary	4.10

3.5 Children ever born and living:

Mean number of children ever born (CEB) per woman is an indicator of cumulative fertility and reflects the fertility of older women who are nearing the end of their reproductive period.

Figure 3.4: Mean number of children ever born for ever-married women by age group (1995*, 2000)



* Palestinian Central Bureau of Statistics, 1997. *The Demographic Survey in the West Bank and Gaza Strip: Final Report*. Ramallah- Palestine.

Figure (3.4) shows the mean number of children ever born for ever-married women in the Palestinian Territory according to age groups in 1995 and 2000. Mean number of CEB per woman declined from 4.76 to 4.54 between 1995 and 2000. The decline was detected for all age groups.

Table (3.3) presents the percentage distribution of ever-married woman and currently married women by number of children ever born, mean number of children ever born, and mean number of children ever born and living. Thirty percent of ever-married women of all age groups have up to 2 children (replacement fertility). On average, ever-married Palestinian women have 4.54 children, 4.31 of which remain alive.

Table 3.3: Percentage distribution of ever-married women and currently-married women by number of children ever-born, mean number of children ever born, and mean number of children ever born and living by age groups

Age group	Number of children ever born (CEB)											Number of women	Mean no. of CEB	Mean no. of living children
	0	1	2	3	4	5	6	7	8	9	10+			
Ever-married women														
15-19	52.6	30.8	15.2	0.8	0.6	-	-	-	-	-	-	28,659	0.66	0.64
20-24	14.9	25.9	27.3	21.3	8.6	1.5	0.4	0.1	-	-	-	80,200	1.89	1.84
25-29	7.4	9.0	13.8	19.7	24.6	14.4	7.1	3.3	0.7	-	-	91,280	3.37	3.27
30-34	4.0	2.1	6.1	12.4	18.6	21.3	16.0	10.1	4.7	2.6	2.1	82,065	4.82	4.64
35-39	4.9	4.7	3.3	5.5	10.9	11.6	16.3	13.5	12.3	7.4	9.6	66,479	5.91	5.65
40-44	5.8	2.6	3.7	3.9	9.7	10.0	8.1	10.7	12.3	10.8	22.4	51,773	6.81	6.41
45-49	4.8	1.5	4.2	2.8	5.1	10.0	6.9	13.2	10.9	10.4	30.2	37,460	7.49	6.98
50-54	6.1	0.3	3.2	3.9	7.7	8.2	8.2	9.1	10.2	15.4	27.7	31,279	7.33	6.71
Total	10.0	9.5	10.8	11.4	13.1	10.9	8.5	7.2	5.6	4.5	8.5	469,195	4.54	4.31
Currently-married women														
15-19	52.6	30.8	15.2	0.8	0.6	-	-	-	-	-	-	28,659	0.66	0.64
20-24	14.3	25.6	27.5	21.7	8.8	1.6	0.4	0.1	-	-	-	78,199	1.92	1.87
25-29	6.7	8.8	13.6	19.9	25.1	14.6	7.3	3.3	0.7	-	-	89,194	3.42	3.32
30-34	3.5	2.0	5.4	12.3	19.0	21.8	16.1	10.3	4.8	2.7	2.1	79,418	4.89	4.70
35-39	4.5	3.6	3.2	5.1	10.9	11.7	16.7	13.9	12.8	7.6	10.0	63,854	6.04	5.77
40-44	4.4	2.2	3.1	3.4	9.3	9.9	8.1	11.4	12.4	11.5	24.3	47,025	7.09	6.68
45-49	4.3	1.1	3.7	2.4	4.5	10.6	6.0	13.4	11.6	11.1	31.3	33,373	7.68	7.16
50-54	5.0	0.4	2.0	2.9	7.7	9.0	7.5	9.8	9.5	16.0	30.2	25,873	7.62	6.97
Total	9.6	9.4	10.7	11.5	13.3	11.1	8.5	7.3	5.6	4.5	8.5	445,595	4.57	4.34

As table (3.3) shows, mean number of children ever born and children ever born and living for ever married and currently married women increases with increased age of women between 15 and 49 years of age, and decreases slightly between ages 50 and 54 years.

Table (3.4) shows the mean number of children ever born and children ever born and living for ever-married women by region and age group. Mean number of children ever born and children ever born and living is higher in the 20 - 49 years age group of ever-married women living in Gaza Strip than their counterparts who live in the West Bank. However, women living in Gaza Strip who are 15-19 or 50-54 years of age have lower mean number of children ever born and children ever born and living when compared to their counterparts of the West Bank.

Table 3.4: Mean number of children ever born, and mean number of children ever born and living for ever- married women by region and age group

Age group	West Bank		Gaza Strip	
	Mean Number of children ever born (CEB)	Mean number of children ever born and living	Mean Number of children ever born (CEB)	Mean number of children ever born and living
15-19	0.70	0.68	0.60	0.57
20-24	1.87	1.83	1.95	1.86
25-29	3.23	3.13	3.64	3.54
30-34	4.58	4.42	5.28	5.06
35-39	5.56	5.32	6.55	6.26
40-44	6.44	6.07	7.55	7.08
45-49	7.25	6.65	7.93	7.58
50-54	7.41	6.86	7.19	6.45
Total	4.39	4.17	4.82	4.58

3.6 Birth intervals:

Birth interval is the period of time between two successive live births. Mean birth interval for women in the Palestinian Territory in the five years preceding the survey is 33 months. Table (3.5) presents information on the number of births and birth intervals in the five years preceding the survey by selected background characteristics. Mean birth interval is positively associated with woman's age, ranging from 18.8 months for women 15-19 years old to 48.8 months for women aged 40-44 years.

Additionally, employed women have higher mean birth intervals than unemployed women who ever worked, unemployed women who never worked and other women (36.2 months versus 27.3 months, 32.5 months, and 32.9 months respectively). There were no significant differences in birth intervals by level of woman's education.

Moreover, women living in the West Bank have generally higher birth intervals than women living in Gaza Strip (34.1 months versus 31.2 months respectively). And women living in urban and rural areas have higher birth intervals than women living in camps (33.6 months and 33.6 months versus 30.0 months respectively).

A comparison with 1995¹ figures shows that there has been a 50% increase in the birth intervals since then. Mean birth interval in the Palestinians Territory increased from 21.8 months in 1995 to 33.0 months in 2000. Similar increases were detected in the West Bank (21.9 months in 1995 to 34.1 months in 2000) and Gaza Strip (21.6 months in 1995 to 31.2 months in 2000). Short birth interval is defined as a birth interval of less than 18 months. Measuring the prevalence of women with short birth intervals is relevant since having short birth intervals negatively affects the woman and child's health.

* Palestinian Central Bureau of Statistics, 1997. The Demographic Survey in the West Bank and Gaza Strip: Final Report. Ramallah- Palestine.

Table 3.5: Number of births and birth intervals (months) in the five years preceding the survey by selected background characteristics

Background characteristic	Number of Births	Mean birth interval (Months)
Age		
15-19	4,927	18.8
20-24	72,821	22.6
25-29	126,667	28.5
30-34	110,652	34.9
35-39	62,986	41.6
40-44	26,854	48.8
45-49	5,217	46.0
Educational attainment		
Less than secondary	309,728	33.0
Secondary	68,765	32.6
More than secondary	31,631	34.5
Employment		
Employed	19,999	36.2
Unemployed (ever worked)	4,067	27.3
Unemployed (never worked)	1,499	32.5
Others	384,559	32.9
Region		
Palestinian Territory	410,124	33.0
West Bank	255,407	34.1
Gaza strip	154,717	31.2
Type of locality		
Urban	222,924	33.6
Rural	121,898	33.6
Camp	65,302	30.0

The percent distribution of women with short birth intervals by women's current age and region is presented in table (3.6).

Table 3.6: Proportion of women with short birth intervals (defined less than 18 months) by women's current age and region

Current age	1995*			2000		
	Region			Region		
	West Bank	Gaza Strip	Palestinian Territory	West Bank	Gaza Strip	Palestinian Territory
15-19	61.6	61.9	61.7	7.8	6.4	7.2
20-24	58.8	63.9	60.7	30.3	31.5	30.7
25-29	63.2	67.2	64.6	45.3	45.4	45.3
30-34	70.6	72.0	71.0	57.8	63.0	59.5
35-39	75.9	76.7	76.1	60.7	68.0	63.3
40-44	75.6	77.3	76.2	65.8	70.6	67.4
45-49	73.2	69.5	72.0	73.0	66.8	70.8
Total	69.2	69.8	69.4	49.8	51.2	50.3

* Palestinian Central Bureau of Statistics, 1997. *The Demographic Survey in the West Bank and Gaza Strip: Final Report*. Ramallah- Palestine.

In 2000, 50% of women in the Palestinian Territory have short birth intervals, as compared to 69% of women in 1995. Percent of women with short birth intervals did not vary much by region in both surveys.

3.7 Age at first birth:

Age at first birth is an important indicator of fertility. The postponement of first births (reflecting a later age at first marriage) would be associated with declines in fertility rates. Table (3.7) shows the percent distribution of women by age at first birth, and current age. About one-third of all women in the Palestinian Territory had their first birth at age 18 or younger, one-third of them had their first birth between the ages of 19 and 21 years, and the rest had their first birth at ages older than 21 years.

Table 3.7: Percentage distribution of women by age at first birth and current age

Age at first birth	Current age								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	Total
<17	32.3	15.1	8.7	7.5	8.1	11.7	9.6	10.8	10.8
17	32.4	13.9	12.0	9.3	9.7	8.8	8.7	11.0	11.4
18	24.2	16.7	17.1	9.8	11.5	8.6	8.7	11.3	12.9
19	11.1	20.0	16.0	11.1	12.3	13.8	10.3	7.6	13.7
20	-	16.7	11.2	12.3	9.4	11.5	10.2	8.8	11.5
21	-	9.4	9.7	11.0	10.5	8.7	10.2	8.1	9.5
22	-	5.6	6.2	8.8	8.5	5.1	7.2	5.0	6.6
23	-	1.8	5.8	9.1	4.9	6.6	7.8	5.5	5.7
24	-	0.8	4.7	5.4	6.7	6.7	5.6	8.1	4.9
25+	-	-	8.6	15.7	18.4	18.5	21.7	23.8	13.0
Number of women	13,594	68,237	84,522	78,749	63,237	48,794	35,674	29,374	422,181

An analysis of median age at first birth for those aged 25-49 years by current age and selected background characteristics is presented in table (3.8). Median age at first birth for women in the Palestinian Territory is 20 years.

Table 3.8: Median age at first birth for 25-49 years old women by current age and selected background characteristics

Background characteristics	Current age					Total
	25-29	30-34	35-39	40-44	45-49	
Educational attainment						
Secondary or less	19.0	20.0	20.0	20.0	20.0	20.0
More than secondary	24.0	23.0	25.0	26.0	25.0	24.0
Type of locality						
Urban	19.0	20.0	20.0	20.0	20.0	20.0
Rural	19.0	20.0	21.0	20.0	21.0	20.0
Camp	19.0	21.0	21.0	20.0	21.0	20.0
Region						
Palestinian Territory	19.0	21.0	20.0	20.0	21.0	20.0
West Bank	19.0	21.0	20.0	20.0	20.0	20.0
Gaza Strip	19.0	20.0	20.0	20.0	21.0	20.0

Median age at first birth varies by level of education, ranging from 20 for women with up to secondary education to 24 for women with more than a secondary education. Additionally, median age at first birth increases with age groups. However, median age at first birth did not vary significantly by region or type of locality.

A comparison with 1995² figures shows that median age at first birth decreased slightly from 20.7 years in 1995 to 20.0 years in 2000.

3.8 Teenage fertility:

Teenage pregnancy and motherhood is an important issue because the young age of the mother is associated with an increased risk of illness and death for the mother and baby. Early pregnancy and motherhood also reduce the woman's chances of attaining higher education and participating in the labor force and therefore negatively affect her socioeconomic conditions. Table (3.9) shows the percentage of women aged 15 to 19 years who are mothers or pregnant for the first birth by single years of age and region. 8.6% of women aged 15-19 years in the Palestinian Territory are already mothers. An additional 4.4% are pregnant with the first baby. About one third of women aged 19 years in the Palestinian Territory are already mothers or pregnant with their first birth.

* Palestinian Central Bureau of Statistics, 1997. The Demographic Survey in the West Bank and Gaza Strip: Final Report. Ramallah- Palestine.

Table 3.9: Percentage of women 15-19 years old who are mothers or pregnant for the first birth by single years of age and region, 2000

Single years of age	West Bank		Gaza Strip		Palestinian Territory	
	Pregnant with first baby	Mothers	Pregnant with first baby	Mothers	Pregnant with first baby	Mothers
15	1.1	0.0	0.6	0.0	0.9	0.0
16	2.1	0.0	1.4	1.7	1.9	0.7
17	5.4	7.4	12.1	3.3	7.8	6.0
18	6.9	14.7	7.0	9.9	6.9	13.0
19	4.5	26.3	5.3	26.1	4.8	26.2
Total	4.0	9.2	5.1	7.6	4.4	8.6

Table (3.10) shows the percentage of women aged 15-19 years who are mothers or pregnant for the first birth by single years of age and region in 1995*. A decline is detected in teenage pregnancy (5.0 to 4.4) and motherhood (12.3 to 8.6) levels since 1995. The decline in teenage pregnancy was noticed for ages 15, 16, and 19 years, however the decline in teenage motherhood was noticed for ages 15 to 19 years.

Table 3.10: Percentage of women 15-19 years old who are mothers or pregnant for the first birth by single years of age and region, 1995

Single years of age	West Bank		Gaza Strip		Palestinian Territory	
	Pregnant with first baby	Mothers	Pregnant with first baby	Mothers	Pregnant with first baby	Mothers
15	1.3	0.5	2.5	1.3	1.7	0.8
16	4.6	2.0	4.5	4.4	4.6	2.8
17	5.4	7.4	5.1	17.7	5.3	10.6
18	6.8	16.9	6.5	26.3	6.7	19.9
19	6.5	28.9	7.8	32.8	7.0	30.1
Total	4.8	10.6	5.2	16.1	5.0	12.3

* Palestinian Central Bureau of Statistics, 1997. *The Demographic Survey in the West Bank and Gaza Strip: Final Report*. Ramallah- Palestine.

Table (3.11) shows the percentage of women aged 15-19 years who are mothers or pregnant for the first birth by single years of age and type of locality. A smaller percentage of women living in camps are already mothers as compared to women living in urban and rural areas (6.9 versus 8.9 and 8.9) respectively.

Table 3.11: Percentage of women 15-19 years old who are mothers or pregnant for the first birth by single years of age and type of locality

Single years of age	Urban		Rural		Camp	
	Pregnant with first baby	Mothers	Pregnant with first baby	Mothers	Pregnant with first baby	Mothers
15	1.1	0.0	0.0	0.0	2.2	0.0
16	2.7	0.7	0.0	0.0	1.7	1.7
17	10.1	5.4	3.7	7.7	5.9	4.8
18	5.6	14.7	8.7	14.6	8.3	3.2
19	4.2	28.4	4.1	23.9	7.9	23.7
Total	4.7	8.9	3.3	8.9	5.2	6.9

Executive summary:

The 2000 Health survey indicates that fertility levels are quite high in the Palestinian Territory. Additionally, fertility rates are declining slowly over the years. Results indicate that on average women in 2000 have 5.93 children in their lifetime, which is only 0.13 children less than 1995.

Fertility levels vary across regions. The total fertility rate is 5.52 births per woman in the West Bank, and 6.81 births per woman in Gaza Strip.

Fertility levels vary largely by educational attainment of women. Therefore women with less than secondary education have 6.6 children in their lifetime, while women with secondary education have 5.4 children in their lifetime, and women with more than secondary education have 4.1 children in their lifetime.

Mean number of children ever born per woman declined from 4.76 to 4.54 in 1995 to 2000.

Mean birth interval for women in the Palestinian Territory in the five years preceding the survey is 33 months. There has been a 50% increase in birth intervals since 1995.

About one-third of all women in the Palestinian Territory had their first birth at age of 18 years or younger, one-third of them had their first birth between the ages of 19 and 21 years, and the rest had their first birth at ages older than 21 years.

8.6% of women aged 15-19 years in the Palestinian territory are already mothers. An additional 4.4% are pregnant with the first baby.

Recommendations:

Maternal and Child Health (MCH) programs should emphasize health benefits for the mother and the child of smaller families, longer birth intervals, and delayed first pregnancies until after teenage years in their health education programs.

Chapter Four

Fertility Determinants

4.1 Introduction:

This Chapter discusses the biological, demographic, health, social, and economic factors that affect reproduction and henceforth affect the fertility rates in the Palestinian Territory. Marital status, age at first marriage, cousins marriages, age at first birth, births spacing, duration of marriage, use of contraception, number of ever-born children, work, and education are all factors with an impact on the fertility rates. Marriage, divorce, and the death of one of the spouses influence pregnancy and reproduction. In the Palestinian society as well as Arab societies marriage is the first step on the way to pregnancy and reproduction because having children before marriage is a taboo.

Despite the slight drop in the fertility rates in the Palestinian Territory, they are still higher than other countries. Social traditions like early marriage and the desire to have male children could play a role in that. Politics also influence fertility rates. In any case, the indicators affirm a drop in such rates in the past few years. They also reflect a decrease in the gross rate of births in the second half of the past decade, which was estimated at 42.7 per 1,000 people in 1997 with 41.2 for the West Bank and 45.4 for Gaza Strip¹. Actually, the figures started to drop in the mid 1970s but during the first Palestinian Intifada, which started in 1987, they rose to reach 46.7 per 1000 people for the West Bank and 54.7 per 1000 people in Gaza Strip in 1990², and dropped again when the Palestinian National Authority took control in 1994. Furthermore, the total fertility rates dropped from 6.4 children in 1985-1989 to 6.1 in 1995, then, according to the 1997 Census, it dropped again to 6.0. This could be the result of more female participation in the labor force, more political stability, improved health conditions, better female education, and more use of contraception. It is worth noting that the Gaza Strip's fertility rates are higher than those of the West Bank, for instance, the total fertility rate of the Palestinian Territory in 1999 was 5.9 birth with 5.4 in the West Bank and a high 6.8 in Gaza Strip (the results of the health survey -2000.)

4.2 Marital status:

Marriage has socioeconomic and demographic dimensions. Available data on females' marital status provide information on marriage in general, age, and the expected age of marriage. The data also explain the significant role marital status plays in the limitations of the fertility rates.

¹Palestinian Central Bureau of Statistics, 1999. The Population of the Palestinian Territory 1997-2025, Ramallah, Palestine.

² Palestinian Central Bureau of Statistics, 1997. The Demographic Survey in the West Bank and Gaza Strip- Final Results: Ramallah, Palestine.

Table 4.1: Percentage distribution of women (15-49 years) by age, marital status, and region, 2000

Age and region	Marital status				Number of women
	Single	Married	Divorced	Widowed	
Palestinian Territory					
15-19	81.6	18.4	0.0	0.0	157,679
20-24	39.9	58.6	1.5	0.0	134,292
25-29	19.6	78.5	1.7	0.2	114,010
30-34	12.8	84.4	1.8	1.0	94,626
35-39	13.6	82.9	1.5	2.0	77,115
40-44	10.4	81.1	3.2	5.3	58,120
45-49	9.5	80.7	1.6	8.2	42,063
Total	35.0	62.3	1.4	1.3	677,905
West Bank					
15-19	82.8	17.2	0.0	0.0	99,867
20-24	40.7	57.7	1.6	0.0	87,039
25-29	22.0	75.9	1.9	0.2	76,374
30-34	14.8	83.1	1.4	0.7	64,036
35-39	16.1	79.5	1.8	2.6	51,696
40-44	12.3	79.8	3.1	4.8	39,301
45-49	10.7	79.6	1.4	8.3	27,248
Total	36.0	61.2	1.4	1.4	445,561
Gaza Strip					
15-19	79.6	20.4	0.0	0.0	57,812
20-24	38.6	60.1	1.3	0.0	47,253
25-29	14.6	83.9	1.5	0.0	37,636
30-34	8.5	87.2	2.7	1.6	30,590
35-39	8.5	89.7	1.0	0.8	25,419
40-44	6.4	84.1	3.4	6.1	18,819
45-49	7.2	82.7	2.1	8.0	14,815
Total	33.1	64.3	1.4	1.2	232,344

According to table (4.1), 62.3% of women who are at reproductive age are married, 1.3% of them are widows, 1.4% divorced, and 35.0% of them have never been married before.

Additionally, the data indicate that 18.4% of women aged 15-19 years are married. The percentage of married women in the age group 20-24 years stands at a high (58.6%). Moreover, the percentage of widows increases with age and stands at 8.0% among those aged 45-49 years. Table (4.1) also shows that 1.5%-3.2% of women aged 20 and over are divorced.

Moreover, 61.2% of the West Bank women who are at pregnancy age are married, however, the figure for Gaza Strip is higher and stands at 64.3%, which explains the high fertility rates in the Palestinian Territory. The percentages of divorcees and widows are almost equal for the two regions and there are more single women in the West Bank than in Gaza Strip.

4.3 Age at first marriage:

According to Article 5 of the Personal Status Law No. (61) of 1976, which is effective in the Palestinian Territory, the legal male age at marriage is 16 Hijri years (lunar years; according to the Islamic calendar,) whereas the female's age is 15 years.

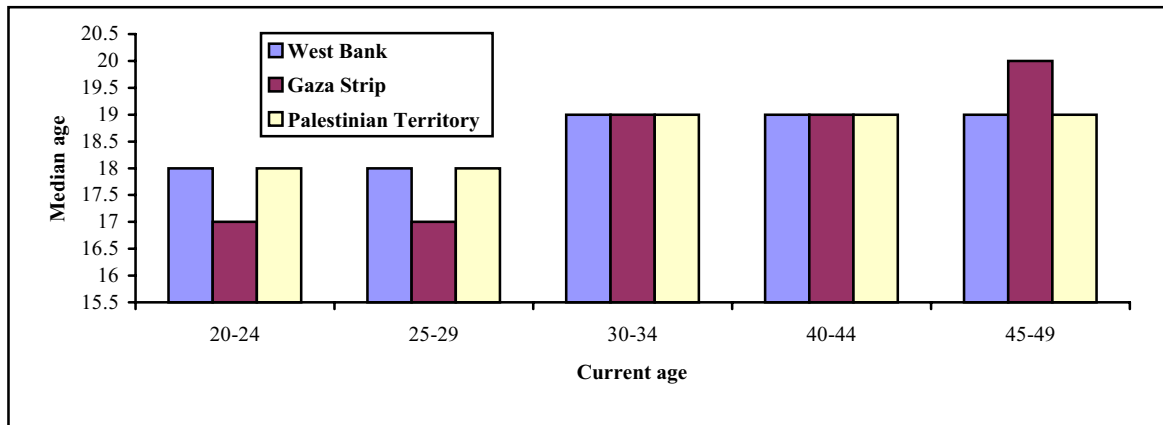
Table 4.2: Percentage distribution of ever-married women (15-49 years) by current age and age at first marriage, 2000

Age at first marriage	Current age							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Ever-married women								
Less than 14	5.6	6.2	4.6	3.8	4.5	6.8	5.1	5.1
15	22.6	11.6	9.2	6.9	8.6	8.7	8.9	9.9
16	23.0	15.5	13.5	10.5	11.1	10.5	10.1	12.9
17	29.1	15.0	16.5	9.9	11.0	8.5	7.4	13.3
18	16.4	17.4	15.1	12.1	14.3	13.8	9.7	14.3
19	3.3	15.2	10.6	11.4	8.4	11.0	12.2	11.0
20	-	8.3	7.2	11.4	11.2	6.9	9.7	8.5
21	-	5.8	4.2	7.0	5.3	5.2	5.6	5.2
22	-	3.1	4.5	8.6	4.4	6.1	7.6	5.1
23	-	1.4	4.3	5.0	5.5	4.9	5.8	4.0
24	-	0.5	4.2	3.9	3.5	2.5	4.2	2.9
25+	-	-	6.1	9.5	12.2	15.1	13.7	7.8
Number of women	28,659	80,200	91,280	82,065	66,479	51,773	37,460	437,916

Age at first marriage largely influences reproduction levels and consequently the fertility rates. Early marriage increases the fertility rates and late marriage decreases them.

Table (4.2) reveals that 5.1% of ever-married women actually got married at the age of 14 years or under. 5.6% of them are now aged 15-19 years and 6.2% belong to the age group of 20-24. According to the table, marriage mostly occurs at an early age of 15, 16, 17, or 18 years. The median age at marriage is still low and stands at 18 years for both regions, which means that 50% of women got married before turning 18. In addition to raising fertility rates, early marriage has a bad health impact on females and children as well as women education as it becomes an obstacle in the face of further educational achievements for women or their participation in the labor force.

Figure 4.1: Median age at first marriage for ever-married women aged 15-49 by age and region



The results of the Demographic Survey 1995 show no change in terms of medium age at first marriage since 1995, the median age stands at 18 years³.

4.3.1 Age at first marriage and the number of ever-born children:

As has been previously mentioned, age at first marriage and the number of ever-born children have a significant impact on the fertility rates of the Palestinian Territory. Also, early marriage increases the potentials of reproduction and therefore raises the fertility rates. It is important to relate the effect of married women with age at first marriage and the number of ever-born children in order to assess the current fertility rate. Obviously, early marriage leads to more children. The percentage of married women who gave birth to 0-3 children totaled 41.2%, whereas, the percentage of married females with 4-7 children reached 40.2% and those of the same category with 8 or more children topped 18.6%. The average number of ever-born children is 4.6.

³ Palestinian Central Bureau of Statistics, 1997. The Demographic Survey in the West Bank and Gaza Strip- Final Results: Ramallah, Palestine.

Table 4.3: Percentage distribution of married women by age at first marriage, number of ever-born children, average number of living children, and region, 2000

Age at first marriage and region	Number of ever-born children			Average number of children	Average number of living children	Number of women
	0-3	4-7	8+			
Palestinian Territory						
Less than 14	22.5	44.7	32.8	6.26	5.83	23,355
15-19	39.5	39.9	20.6	4.77	4.53	271,413
20-24	42.4	42.7	14.9	4.27	4.09	114,556
25+	61.3	32.4	6.3	2.93	2.81	36,271
Total	41.2	40.2	18.6	4.57	4.34	445,595
West Bank						
Less than 14	17.3	47.4	35.3	6.68	6.23	12,315
15-19	39.5	42.0	18.5	4.70	4.47	173,832
20-24	46.1	43.0	10.9	3.96	3.80	76,556
25+	64.9	31.7	3.4	2.63	2.56	25,480
Total	42.6	41.7	15.7	4.40	4.19	288,183
Gaza Strip						
Less than 14	28.2	41.8	30.0	5.79	5.37	11,040
15-19	39.4	36.1	24.5	4.89	4.64	97,581
20-24	35.2	42.0	22.8	4.89	4.68	38,000
25+	52.7	33.7	13.6	3.62	3.42	10,791
Total	38.5	37.8	23.7	4.86	4.62	157,412

Table (4.3) shows that when age at first marriage increases, the average number of ever-born children decreases with existing variations between the West Bank and Gaza Strip at 4.4 and 4.9 respectively.

About 17.3% of the West Bank women who are currently married got married at age 14 or less gave birth to 0-3 children, however, the percentage of Gaza Strip's women who have the same number of children reached 28.2%. Moreover, 15.7% of the women who gave birth to more than 8 children are from the West Bank and 23.7% of them come from Gaza Strip, which explains why fertility rates in Gaza Strip are higher than the West Bank.

4.3.2 Mother's age:

There is a clear relationship between mother's age and the number of ever-born children in terms of affecting the fertility rates. According to the data of table (4.4), there is no difference in the fertility rates of married women who affect the current fertility rates and the ever-married women who have previously influenced such rates.

Table 4.4: Percentage distribution of currently married women by age, number of ever-born children, average number of ever-born children, average number of living children, and region, 2000

Mothers' age	Number of children			Average number of ever-born children	Average number of living children	Number of women
	0-3	4-7	8+			
Palestinian Territory						
15-19	99.4	0.6	0.0	0.66	0.64	28,659
20-24	89.1	10.9	0.0	1.92	1.87	78,199
25-29	49.0	50.2	0.8	3.42	3.32	89,194
30-54	16.6	50.5	32.9	6.25	5.91	249,543
Total	41.2	40.2	18.6	4.57	4.34	445,595
West Bank						
15-19	100	0.0	0.0	0.70	0.68	17,198
20-24	89.8	10.2	0.0	1.89	1.86	49,964
25-29	52.7	46.8	0.5	3.28	3.18	57,947
30-54	18.4	53.7	27.9	5.96	5.64	163,074
Total	42.6	41.7	15.7	4.40	4.19	288,183
Gaza Strip						
15-19	98.4	1.6	0.0	0.60	0.57	11,461
20-24	87.8	12.2	0.0	1.97	1.89	28,235
25-29	42.0	56.9	1.1	3.67	3.57	31,247
30-54	13.3	43.9	42.8	6.8	6.42	86,469
Total	38.5	37.8	23.7	4.86	4.62	157,412

Table (4.4) shows that the percentage of currently married women in the age group of 15-19 years and gave birth to 0-3 children is 99.4% and the average number of ever-born children is 0.7. And 41.2% of married women have 0-3 children, whereas, those of the same category but have 8 or more children occupy a percentage of 18.6%. Clearly, ever-born children increase with the increase of age due to the extended period of the possibility of getting pregnant. This affirms the fact about the rise in the percentage of the women who gave birth to more than 4 children in the age group 30-54, which totaled 83.4%. The average of ever-born children also increases with age and stands at 6.25 children for women in the same age group.

4.4 Relatives marriage:

Cousin marriage is a widespread trend in the Palestinian Territory as is the case in the rest of the Arab countries. It stems from various traditional factors such as protecting the family ties and social relations. The trend can influence the early marriage phenomenon and the high fertility rates thereafter. Families play a major role in determining the number of children especially males who are considered as some kind of social security for parents in their old age. Male children reserve the family's name and provide an additional source of income when they come to the age of joining the labor force. They are also seen as significant players in the political factor of the demographic conflict of the region. Table 4.5 shows that 48.3% of ever-married females have married their first cousins, including 52.5% in Gaza Strip and 46.1% in the West Bank. The figures do not significantly vary from those of the 1995 figures,

which stood at 52% for Gaza Strip and 47% for the West Bank⁴. Such trend has a negative impact on children's health since it increases the potential of the spread of hereditary diseases.

Table 4.5: Percentage distribution of ever-married women (15-49 years) by consanguinity, age, and region, 2000

Consanguinity and region	Age							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Palestinian Territory								
First cousins	29.7	29.0	28.6	27.2	30.2	27.5	26.9	28.4
From the same family	18.4	19.2	19.0	20.9	18.5	22.8	21.2	19.9
No relative	51.9	51.8	52.4	51.9	51.3	49.7	51.7	51.7
Number of women	28,659	80,199	91,280	82,065	66,479	51,774	37,460	437,916
West Bank								
First cousins	27.8	29.6	25.9	25.6	28.5	23.6	26.0	26.8
From the same family	20.2	19.5	18.9	18.5	18.7	21.9	19.0	19.3
No relative	52.0	50.9	55.2	55.9	52.8	54.5	55.0	53.9
Number of women	17,198	51,345	59,488	54,093	43,226	34,463	23,934	283,747
Gaza Strip								
First cousins	32.6	27.9	33.5	30.3	33.4	35.2	28.6	31.5
From the same family	15.6	18.7	19.4	25.4	18.2	24.6	24.9	21.0
No relative	51.8	53.4	47.1	44.3	48.4	40.2	46.5	47.5
Number of women	11,461	28,854	31,792	27,972	23,253	17,311	13,526	154,169

Table (4.6) reflects a slight difference between those who marry people from the same family and those who do not marry relatives. The average number of ever-born children in the first category is 4.5, whereas, in the second category, the average is 3.9 children.

⁴ Palestinian Central Bureau of Statistics, 1998. The Demographic Survey in the West Bank and Gaza Strip, Series (3) Marriage.

Table 4.6: Percentage distribution of currently married women aged 15-49 by number of ever-born children, average number of living children, and degree of consanguinity, 2000

Degree of consanguinity and region	Number of ever-born children			Average number of born children	Average number of living children	Number of women
	0-3	4-7	8+			
Palestinian Territory						
First cousins	40.7	39.5	19.8	4.54	4.27	120,196
From the same family	37.2	41.0	21.8	4.82	4.63	85,003
No relative	46.6	41.2	12.2	3.95	3.79	214,523
Total	43.0	40.7	16.3	4.29	4.10	419,722
West Bank						
First cousins	42.1	41.9	16.0	4.34	4.08	72,896
From the same family	38.9	42.6	18.5	4.64	4.46	53,111
No relative	47.9	41.5	10.6	3.85	3.70	145,588
Total	44.6	41.8	13.6	4.14	3.95	271,595
Gaza Strip						
First cousins	38.6	35.8	25.6	4.85	4.56	47,300
From the same family	34.4	38.3	27.3	5.11	4.91	31,893
No relative	43.9	40.5	15.6	4.15	4.00	68,935
Total	40.2	38.5	13.6	4.58	4.37	148,128

4.5 Age at first birth:

Age at first birth is another factor that influences the fertility rates. It is connected with age at first marriage. The median age at first birth for women aged 25-49 is 20 years, which means that half of the ever-married women in this age group have given birth to the first baby before they turned 20. It is rather low since at this age, women are supposed to be studying, and because the median age at first marriage is low too and stands at 18 years.

Table 4.7: Median age at first birth in the 25-49 years age group by age and selected background characteristics in 2000

Background characteristics	Age					Total
	25-29	30-34	35-39	40-44	45-49	
Years of schooling						
0	18.0	19.0	20.0	19.0	21.0	20.0
1-6	18.0	20.0	19.0	19.0	19.0	19.0
7-9	18.0	19.0	19.0	20.0	20.0	19.0
10-12	20.0	20.0	21.0	21.0	21.0	20.0
13+	23.0	23.0	25.0	26.0	25.0	24.0
Type of locality						
Urban	19.0	20.0	20.0	20.0	20.0	20.0
Rural	19.0	20.0	21.0	20.0	21.0	20.0
Camps	19.0	21.0	21.0	20.0	21.0	20.0
Region						
Palestinian Territory	19.0	21.0	20.0	20.0	21.0	20.0
West Bank	19.0	21.0	20.0	20.0	20.0	20.0
Gaza Strip	19.0	20.0	20.0	20.0	21.0	20.0

Education affects fertility rates and age at first birth. More women's education means that they would be older at first birth since they would be older when they get married for the first time. Moreover, education gives women more abilities to determine what is good for their families. However, since most women marry at an early age, giving birth comes at an early age, too. Therefore, the percentage of those who gave birth at an early age is high. For example, 42.3% of women delivered before they turned 17 and had 4-7 children. On the other hand, 31.1% of women of the same age category have more than 8 children. The average number of children for this category is 6.0 children.

Table 4.8: Percentage distribution of currently married women by number and average number of ever-born children, average number of living children, and age at first birth, 2000

Age at first birth and region	Number of ever-born children			Average number of ever-born children	Average number of living children	Number of women
	1-3	4-7	8+			
Palestinian Territory						
Less than 17	26.6	42.3	31.1	6.05	5.66	42,870
17	27.6	43.7	28.7	5.74	5.46	46,026
18	32.5	46.7	20.8	5.21	4.90	53,038
19	33.9	44.1	22.0	5.12	4.87	55,718
20	36.1	44.1	19.8	4.99	4.80	46,266
21	36.7	45.4	17.9	4.80	4.60	38,266
22	35.1	49.3	15.6	4.75	4.54	26,620
23	35.4	44.1	20.5	5.08	4.86	23,113
24	31.8	50.4	17.8	4.80	4.61	19,638
25+	50.4	40.4	9.2	3.83	3.68	51,374
Total	43.9	44.5	20.6	5.05	4.80	402,928
West Bank						
Less than 17	24.2	43.5	32.3	6.20	5.83	27,899
17	30.3	44.4	25.3	5.50	5.20	28,676
18	35.2	46.1	18.7	5.08	4.77	36,587
19	35.1	45.7	19.2	4.96	4.72	36,608
20	36.7	48.3	15.0	4.70	4.54	28,281
21	38.1	48.3	13.6	4.57	4.37	26,134
22	40.0	47.4	12.6	4.40	4.21	16,430
23	39.1	45.5	15.4	4.70	4.50	14,067
24	36.7	51.7	11.6	4.37	4.21	12,361
25+	53.7	40.8	5.5	3.53	3.43	35,793
Total	37.0	45.6	17.4	4.83	4.60	262,835
Gaza Strip						
Less than 17	31.0	40.5	28.5	5.79	5.33	14,971
17	23.3	42.3	34.4	6.15	5.88	17,350
18	26.5	47.8	25.7	5.51	5.19	16,451
19	31.6	41.1	27.3	5.42	5.17	19,109
20	34.8	37.7	27.5	5.45	5.21	17,985
21	33.6	39.1	27.3	5.29	5.10	12,133
22	27.4	52.3	20.3	5.33	5.06	10,191
23	30.0	41.9	28.1	5.66	5.41	9,045
24	23.6	48.1	28.3	5.53	5.30	7,277
25+	42.9	39.5	17.6	4.50	4.27	15,581
Total	30.9	42.5	26.6	5.46	5.19	140,093

According to table (4.8), 24.2% of the West Bank's married women who delivered before turning 17 have 1-3 children and the figure for Gaza Strip is 31.0%. However, the percentage is higher for the West Bank when it comes to those who belonged to the same age at first birth

and have 4-7 children since it stands at 43.5% for the West Bank and 40.5% in Gaza Strip. The average number of children for this category is 6.2 in the West Bank and 5.8 in Gaza Strip.

4.6 Child spacing period:

Birth spacing period is short and stands at less than two years.

Table 4.9: Percentage of women with short interval (defined less than 18 months) by women current age and region, 2000

Age	Region		
	West Bank	Gaza Strip	Palestinian Territory
15-19	7.8	6.4	7.2
20-24	30.3	31.5	30.7
25-29	45.3	45.4	45.3
30-34	57.8	63.0	59.5
35-39	60.7	68.0	63.3
40-44	65.8	70.6	67.4
45-49	73.0	66.8	70.8
Total	49.8	51.2	50.3

The table above tells us that half of the women who have had children had a short interval between each delivery (less than 18 months). The variations between the two regions are minimal. However, looking at the present data and the 1995 data, we find out that the break between each delivery is now increasing. The 1995 figure was 69.4% but in 2000, it dropped to 50.3%. The same figures dropped from 69.2% to 49.8% in the West Bank and from 69.8% in Gaza Strip to 51.2%⁵. Education could be behind such increase in the gaps between deliveries since it gives women the opportunity to realize the negative health impact of shorter gaps between giving births. It also allows women to see its bad effects on the size of the family and the population growth.

4.7 Duration of marriage:

Duration of marriage is another major factor in determining fertility rates. The longer the duration of marriage is, the more potential children can be possibly born. Table (4.10) shows that 99.6% of ever-married women who spent 0-4 years with their spouses have 0-3 children, whereas, 67.2% of married women with a marital life span of 30 years or more have 8 or more children. The number of children goes up with the marriage life. For instance, the average number of children of those who spent 30 or more married years is 8.8 children. The variations between the two regions are small. In the West Bank, females whose marriage lasted from 0-4 years have an average of 1.05 children whereas the figure for Gaza Strip is 0.97 children. As for the second category (30 married years or more), the figures are 8.6 in the West Bank and 9.2 in Gaza Strip.

⁵ Palestinian Central Bureau of Statistics, 1997. The demographic survey in the West Bank and Gaza Strip: Final results. Ramallah-Palestine.

Table 4.10: Percentage distribution of ever-married women by duration of marriage and number of ever-born children in the Palestinian Territory, 2000

Duration of marriage	Number of ever-born children		
	0-3	4-7	8+
0-4	99.6	0.4	0.0
5-9	64.4	35.5	0.1
10-14	20.8	76.1	3.1
15-19	12.7	59.3	28.1
20-24	8.2	44.5	47.3
25-29	7.0	33.0	60.0
30+	6.0	26.8	67.2

Table (4.11) presents the fact that 99.7% of the women who spent 0-4 years in marriage gave birth to 0-3 children, which reflects a pattern of stability among married women in any category. The percentage did not significantly vary between Gaza Strip and the West Bank.

Table 4.11: Percentage distribution of currently married women by duration of marriage, number and average of ever-born children, average number of living children, and region, 2000

Duration of marriage and region	Number of ever-born children			Average number of ever-born children	Average number of living children	Number of women
	0-3	4-7	8+			
Palestinian Territory						
0-4	99.7	0.3	0.0	1.02	1.00	93,182
5-9	64.0	36.0	0.0	3.05	2.96	89,654
10-14	19.9	77.4	2.7	4.62	4.47	91,088
15-19	12.2	59.5	28.3	6.10	5.82	60,570
20-24	7.5	45.2	47.3	7.23	6.85	47,308
25-29	7.3	32.2	60.5	8.07	7.55	36,611
30+	4.8	26.8	68.4	8.78	8.01	27,182
Total	41.2	40.2	18.6	4.57	4.34	445,595
West Bank						
0-4	99.9	0.1	0.0	1.05	1.03	62,453
5-9	65.2	34.8	0.0	3.06	2.99	58,118
10-14	20.6	77.7	1.7	4.49	4.34	57,462
15-19	15.0	63.7	21.3	5.74	5.48	38,228
20-24	8.1	53.7	38.2	6.87	6.53	29,906
25-29	6.5	37.5	56.0	7.83	7.29	23,676
30+	4.9	31.1	64.0	8.58	7.86	18,340
Total	42.6	41.7	15.7	4.40	4.19	288,183
Gaza Strip						
0-4	99.6	0.4	0.0	0.97	0.93	30,729
5-9	61.8	38.2	0.0	3.02	2.92	31,536
10-14	18.3	76.7	5.0	4.84	4.69	33,626
15-19	7.4	52.3	40.3	6.71	6.40	22,342
20-24	6.5	30.8	62.7	7.84	7.40	17,402
25-29	8.9	22.4	68.7	8.50	8.01	12,935
30+	4.9	17.8	77.3	9.18	8.31	8,842
Total	38.5	37.8	23.7	4.86	4.62	157,412

4.8 Use of contraception:

Use of contraception largely controls reproduction. The process is relatively easy these days since contraception is widely diversified and easy to use.

Table 4.12: Percentage of ever-married women who used contraception by age, educational attainment, and region, 2000

Educational attainment and region	Age				Number of women
	Less than 30		30-49		
	Any method	Modern method	Any method	Modern method	
Palestinian Territory					
None	56.9	43.3	71.6	62.6	68,408
Elementary	64.6	51.6	79.3	71.4	110,343
Preperatory	65.0	49.2	84.8	76.4	142,305
Secondary and above	64.4	48.5	83.6	73.7	116,860
Total	64.1	49.2	80.1	71.3	437,916
West Bank					
Non	60.6	46.1	74.5	66.1	49,680
Elementary	69.4	54.7	81.3	73.4	77,631
Preperatory	68.6	51.3	88.4	79.5	91,039
Secondary and above	69.4	51.2	87.2	76.5	65,398
Total	68.3	51.8	82.7	73.8	283,748
Gaza Strip					
None	48.4	37.1	63.6	53.0	18,728
Elementary	53.1	44.1	74.5	66.5	32,712
Preperatory	58.9	45.6	78.0	70.6	51,266
Secondary and above	57.5	44.9	79.3	70.4	51,462
Total	56.6	44.6	75.2	66.6	154,168

However, it seems that use of contraception may not be efficient in reducing the fertility rates for several reasons such as age at first use. It also seems that contraception is used at a later stage in marriage as the women gets older. In fact, 83.9% of married females aged less than 20 years do not use contraception. Then again education and participation in labor force may play a role in the use of contraception. According to data, 54.7% of uneducated women do not use contraception. In any case, there is a tendency towards more use of contraception since 51.4% of married women of the Palestinian Territory use them. This can be the result of more women education and more participation in the labor force. The increase in health awareness may be another factor leading to more family planning.

Table 4.13: Percentage of currently married women (15-49 years) who or their husbands use contraception by selected background characteristics, 2000

Background characteristics	Uses any method	Does not use any method	Number of women
Age			
Less than 20	16.1	83.9	28,659
20-24	41.1	58.9	78,199
25-49	57.3	42.7	312,864
Mother's educational attainment			
None	45.3	54.7	62,975
Elementary	52.3	47.7	106,307
Preparatory	51.9	48.1	138,214
Secondary+	53.6	46.4	112,226
Type of locality			
Urban	51.1	48.9	234,813
Rural	52.9	47.1	119,667
Camp	50.1	49.9	65,242
Region			
Palestinian Territory	51.4	48.6	419,722
West Bank	54.3	45.7	271,594
Gaza Strip	46.1	53.9	148,128

However, the fertility rate is still high and stands at 5.93 with 6.81 for the Gaza Strip and 5.52 for the West Bank (the main findings of the Health Survey - 2000). There are variations in this regard between the two regions since 54.3% of the West Bank females use contraception whereas 46.1% of Gaza Strip's females use such methods. According to table (4.13), the percentage of women aged less than 20 years and use contraception is 16.1% whereas 57.3% of those aged 25-49 use contraception, which means that the older the female is, the more willing she would be to use family planning methods. Also, on the one hand 45.3% of uneducated females use contraception, on the other hand, 53.6% of women with high school diploma or more use contraception, which indicates that education plays another role in deciding to use the methods.

4.9 Work:

women's involvement in the labor force is another important factor in deciding the number of children. Working females tend to reduce the burdens of responsibilities inside and outside home by reducing the number of children they are going to have. Data indicate that 48.0% of working females have 0-4 children while on the contrary, 59.3% of non-working women have more than four children. The average number of children for working women is 3.7 and it is 4.6 for the non-working women.

Table 4.14: Percentage distribution of currently married women by labor force status, number and average of ever-born children, average number of living children, and region, 2000

Labor force status	Number of ever-born children			Average number of ever-born children	Average number of living children	Number of women
	0-3	4-7	8+			
Palestinian Territory						
Employed	48.0	37.5	14.5	3.74	3.52	29,455
Others	40.6	40.5	18.9	4.60	4.38	416,141
Total	41.2	40.2	18.6	4.54	4.31	445,595
West Bank						
Employed	50.3	41.2	8.5	3.57	3.42	20,816
Others	41.9	41.7	16.4	4.47	4.26	267,368
Total	42.5	41.7	15.8	4.40	4.19	288,183
Gaza Strip						
Employed	42.5	28.6	28.9	3.47	3.30	8639
Others	38.3	38.3	23.4	4.47	4.25	148,773
Total	38.5	37.7	23.8	4.39	4.17	157,412

4.10 Education:

Education also plays a major role in determining the number of children a woman desires to have. According to table (4.15), 21.2% of uneducated females have 0-3 children but 78.8% of them have four or more children. The figures tell us that uneducated women tend to have more children than educated women. The percentage of women who have 0-3 children is high among educated females. When it comes to having more than four children, the percentage of educated women is low. The average number of ever-born children for educated women is 3.6 while it is 6.6 for uneducated women.

Table 4.15: Percentage distribution of currently married women by educational attainment, number and average of ever-born children, average number of living children, and region, 2000

Educational attainment and region	Number of ever-born children			Average number of ever-born children	Average number of living children	Number of women
	0-3	4-7	8+			
Palestinian Territory						
None	21.2	36.4	42.4	6.59	6.10	76,975
Elementary	37.3	39.9	22.8	4.93	4.69	111,225
Preparatory	45.8	43.3	10.9	4.01	3.85	140,426
Secondary and above	52.3	39.6	8.1	3.56	3.46	116,969
Total	41.2	40.2	18.6	4.57	4.34	445,595
West Bank						
None	20.8	37.3	41.9	6.61	6.11	55,829
Elementary	38.2	43.2	18.6	4.73	4.51	78,261
Preparatory	48.1	45.6	6.3	3.70	3.58	89,466
Secondary and above	59.0	38.0	3.0	3.08	3.00	64,627
Total	42.6	41.7	15.7	4.40	4.19	288,183
Gaza Strip						
None	22.5	33.4	44.1	6.54	6.06	21,146
Elementary	34.7	32.5	32.8	5.40	5.11	32,964
Preparatory	42.0	39.0	19.0	4.55	4.31	50,960
Secondary and above	44.2	41.5	14.3	4.16	4.02	52,342
Total	38.5	37.8	23.7	4.86	4.62	157,412

Executive summary:

Marital status

- * Tendencies in married life play a role in determining fertility since marriage is the most influential demographic factor in population growth.
- * Early marriage is a trend in the Palestinian society; it increases the fertility rates;

Age at first marriage

- * Early marriage leads to higher fertility rates, while late marriage does the opposite because it means a shorter reproduction period.
- * Education is a major influential factor in determining age at first marriage; educated women get married at an age older than uneducated ones.
- * 50% of the women in the Palestinian Territory got married before turning 18 years.
- * The median age at first marriage has not changed since 1995 and stands at 18 years.

Age at first marriage and the number of ever-born children

- * Early marriage raises the number of children.
- * 15.7% of married women in the West Bank and 23.7% of married women in Gaza Strip have 8 or more children.

Mother's age

- * The number of ever-born children increases with age as the period of potential pregnancy gets longer.
- * 99.4% of females aged 15-19 years have 0-3 children, whereas, 16.6% of females aged 30-54 years have the same number of children.

Relatives marriage

- * Relatives marriage is still a trend in the Palestinian Society; however, it is more widespread in Gaza Strip than the West Bank.
- * The average number of children for first cousin marriages is 4.5 whereas it is 3.9 for those who do not marry a relative.

Age at first birth

- * Half of ever-married women in the age group 15-49 years gave birth to their first baby before turning 20 years.
- * Age at first marriage and womens' education influence age at first delivery.

Birth spacing

- * Birth spacing period is rather short and stands at an average of less than two years.
- * Shorter gaps between deliveries have bad impact on mothers' health, baby, size of family, and the population growth rates.

Family planning

- * Use of contraception limits the rise in the fertility rates.
- * 51.4% of women use contraception.
- * Education and age determine the use of contraception; the older and more educated the women is, the more likely she would use contraception.
- * 54.3% of the women of the West Bank use contraception, which is higher than the Gaza Strip, where the figure stands at 46.1%. The fertility rates are still high; they stand at 5.52 in the West Bank and 6.81 in Gaza Strip (1999 figures).
- * Contraception might not play a significant role in reducing the fertility rates due to the age when it is first used, duration of use, womens' education and work.

Work

- * Non-working women tend to have more than four children since 59.3% of them are willing to have that number of children. 48.0% of working women tend to have 0-3 children.

Education

- * Uneducated women tend to have more children than their educated counterparts since 78.8% of them have more than four children.
- * The average number of ever-born children drops when the level of education increases.

Family Planning

5.1 Introduction:

When people are under profound atrocity and agony, when children are killed and wounded only for the national identity they hold, when an average of 2-3 lives are lost every day, speaking of family planning becomes somehow out of context.

That was the case when this piece of work was completed. It was the Al-Aqsa Intifada. It was when Palestinians were returning to their previously held view of their need to combat Israel demographically and so therefore force the Palestinian decision maker to put aside family planning concerns, even if for a limited period of time. In spite of this, insistent on the right of the coming generations to a bright future and better quality of life, and fully committed to its national role Palestine Central Bureau of Statistics (PCBS) opted to proceed with its plan of studying family planning matters, amongst many other issues, in its Second National Health Survey.

The chapter below encompasses a number of family planning-related health indicators from the year 2000 health survey with special emphasis on the; knowledge of Palestinian women about family planning, ever use, first use, and current use of contraceptive methods, and rate and reasons for nonuse.

When feasible, findings from the year 2000 survey are compared with those from the 1996 one.

5.2 Knowledge of family planning methods and sources:

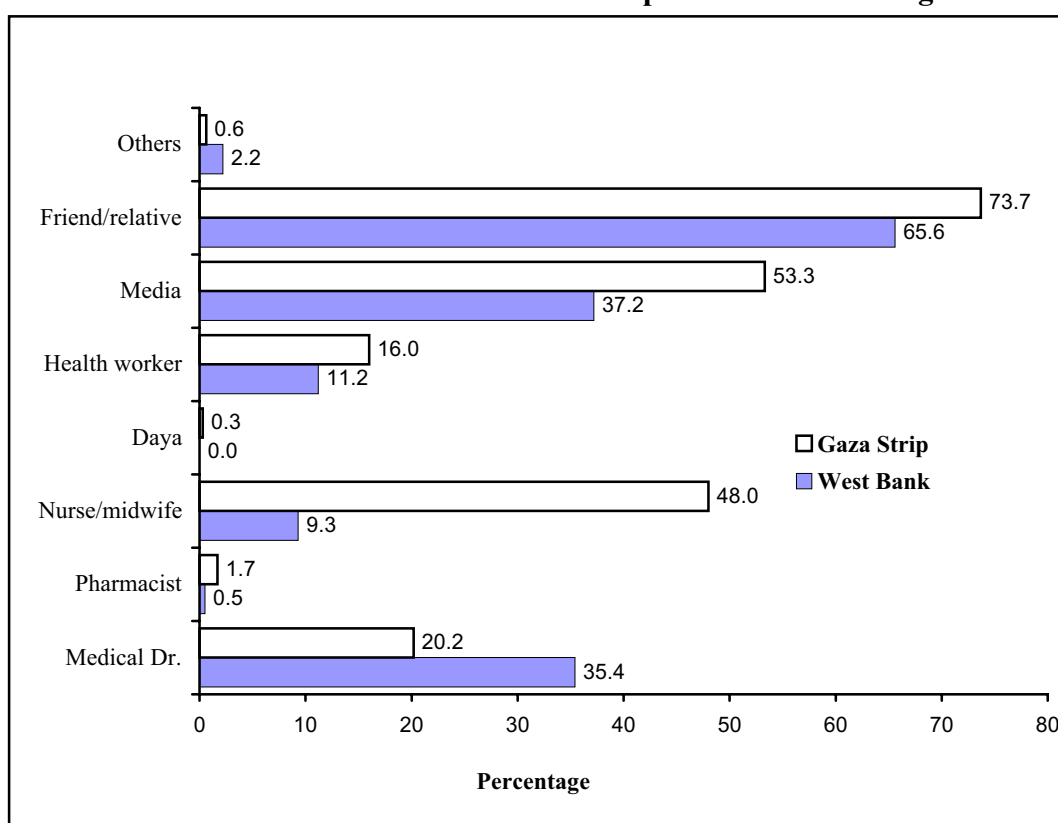
In a Weighted sample of 419,722 respondent women, 99% reported knowing about a modern contraceptive method

While the PA has no explicit population policy intended at influencing the fertility level, it acknowledges the right of all Palestinian men and women to access appropriate information. In the National Strategic Health Plan for Palestine the Ministry of Health has stated the 'development of community-based and culturally sensitive interventions to promote reproductive health education campaign' as one of its two national objectives in the field of reproductive health, of which family planning is a major component (National Strategic Health Plan: Palestine 1999-2003, 1999).

Logically speaking, knowledge is a prerequisite to use or nonuse. In this health survey, a total of 419,722 currently married women aged 15-49 years were asked about if they know about any contraceptive method or any modern contraceptive method¹. No substantial differences were observed between the two regions of the West Bank and Gaza, neither there were any discrepancies amongst various age groups.

¹ Modern methods include; pills, intrauterine devices, injections, vaginal methods, female jelly, female sterilization, male sterilization and condom.

Figure 5.1: Percentages of ever-married women aged 15-49 years by source of information about a contraceptive method and region

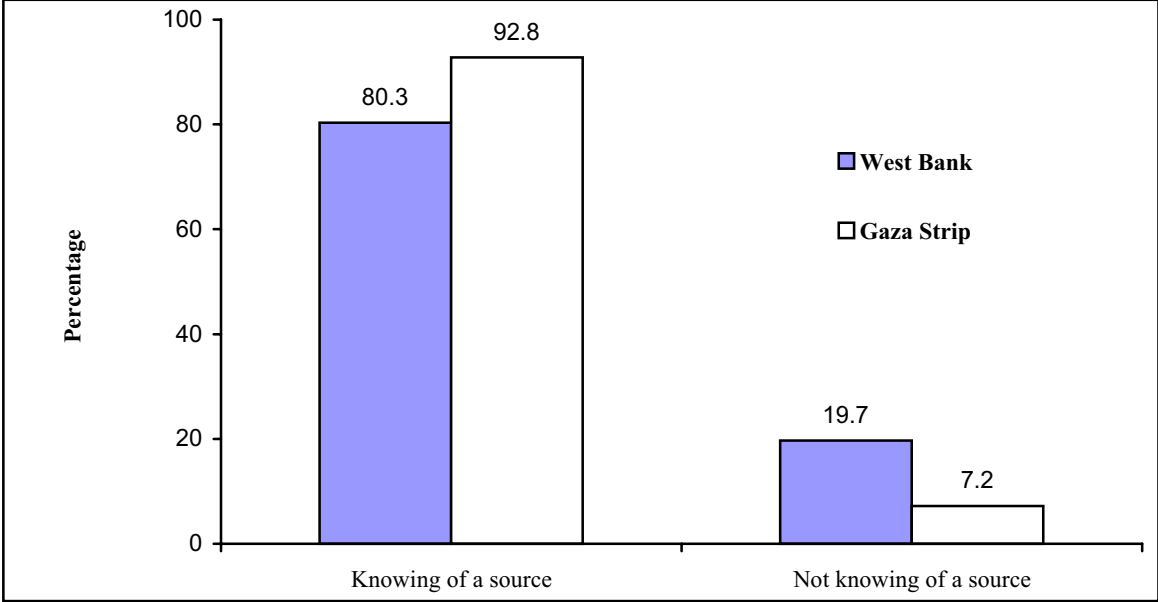


Ever married women were asked about their source of information. Bearing in mind that they were able to state more than one source, some regional variations were registered as can be seen in the figure above. While the West Bank women stated medical doctors (35%) as a source of information on contraceptive methods Gazan women did that to a lesser extent (20%). Alternatively, about half of them (48%) stated nurses or midwives as their sources for the same kind of information at the time when only 9% of the West Bank women stated this same source. Additionally, Gazan women stated health workers and media as further sources of information. Meanwhile, in both regions ‘dayas’ were minimally stated. This implies that this livelihood is losing much of its old reliability and is therefore fading away on behalf of the professionally oriented scientifically based practice of midwifery. All together, these findings reveal a considerable gap between the West Bank and Gaza on behalf of the later, in adopting the internationally recommended community orientation of family planning work particularly its awareness and education components. Notwithstanding, scoring 66% in the West Bank and 74% in Gaza for friends and relatives as a source of information on family planning methods rings the bell as to the extent of accuracy and rightfulness of the relevant information being in exchange and wide spread amongst Palestinian women. In cases where this source is only one amongst many it can easily contribute to confused and confusing information especially when contradictions come about.

Women were asked about whether they know where to obtain a contraceptive method. As shown in figure 5.2 below, 80% of West Bank women responded positively to this compared to 93% of the Gazan ones. By locality, Camp women fared best. Ninety four percent of them reported their knowledge of a place followed by urban and rural women, with a percent of 84 and 80, sequentially. Notably, the gap between the later two localities is substantially smaller

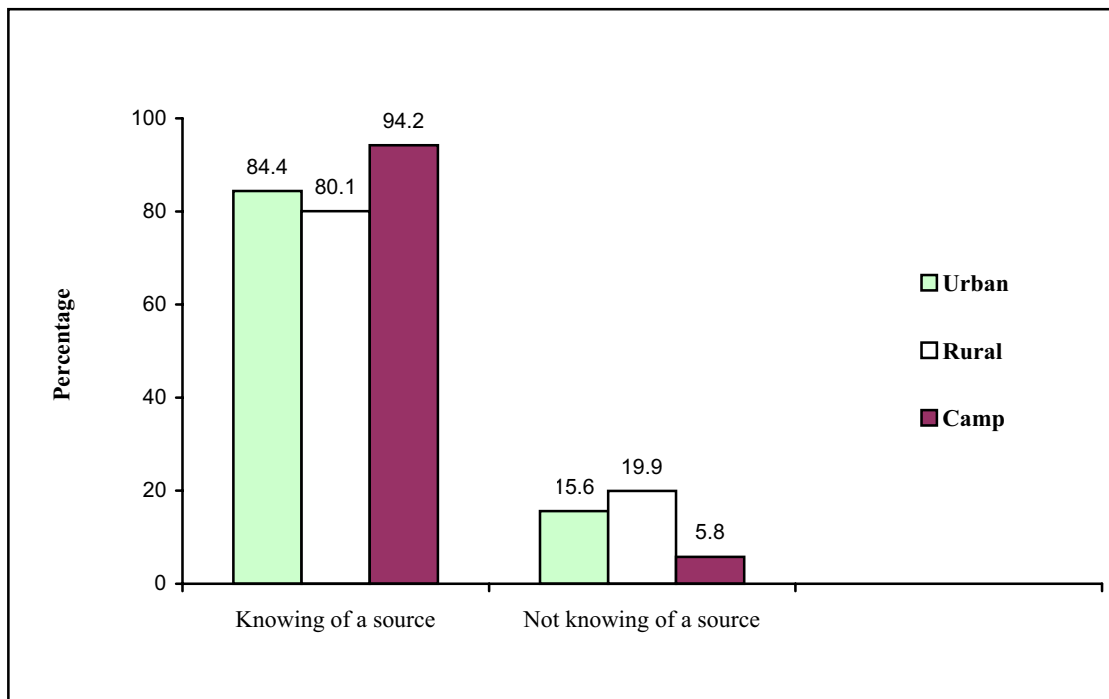
than that seen between both of them on the one side and the camp women category on the other. Visual presentation of this can be clearly seen in figure 5.3 below.

Figure 5.2: Percentage of ever-married women aged 15-49 years reporting knowledge of a contraceptive supply source by region



Looking into the findings presented in figures (5.2) and (5.3) it can be noticed that the region of Gaza Strip and the camp locality, where the situation is the most favorable, both share a distinctive presence and contribution of UNRWA. For that while a substantial majority of the Gazan population are in refugee status and are therefore entitled for the free of charge UNRWA services all those residing in camps fall under the same population category and so have the same entitlements. Hence it can be concluded that the philosophical grounds and approach adopted in the UNRWA’s Maternal Health Program including the regular outreach activity and the huge investment UNRWA has made in activating the utilization of midwives in its MCH settings is the reason behind such peculiarity. In complement to this the role of the Ministry of Health and its various relevant initiatives supported mainly by various donor agencies must be recognized as well.

Figure 5.3: Percentages of ever-married women aged 15-49 years reporting knowledge of a contraceptive supply source by type of locality

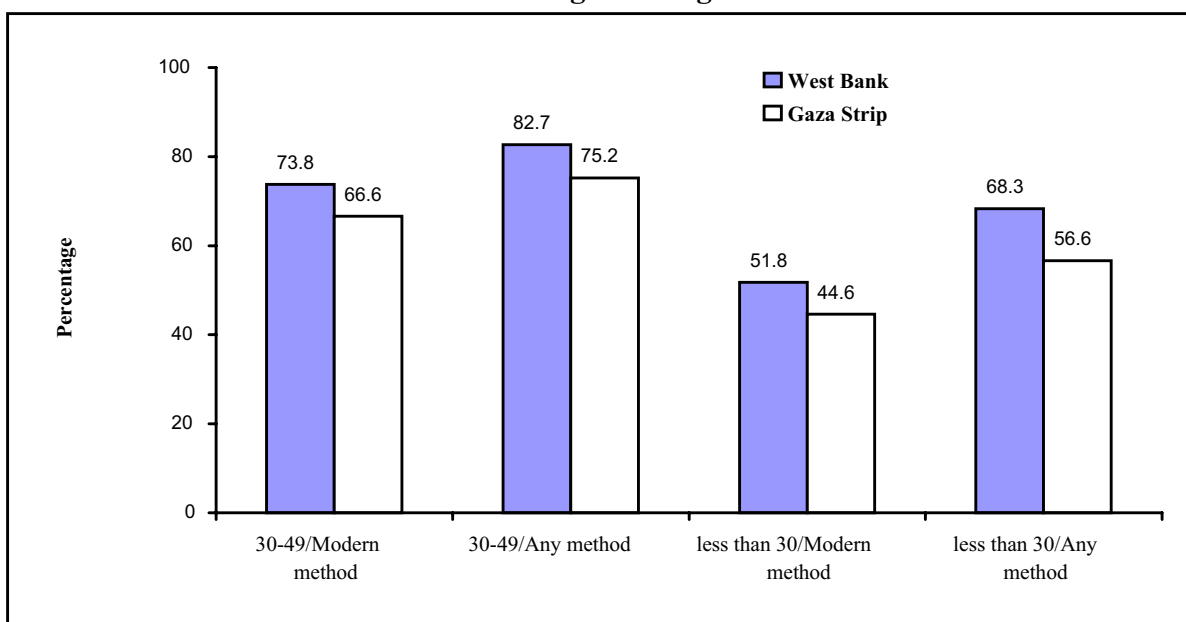


A final remark on this is that the large size of the weighted sample (437852 women) compels taking the 20 or so percent of women who reported not knowing about a contraceptive supply source serious enough by all involved parties so as to intervene.

5.3 Use of a contraceptive method:

5.3.1 Ever use of a contraceptive method:

Figure 5.4: Percentage of ever married women who ever used a contraceptive method by current age and region

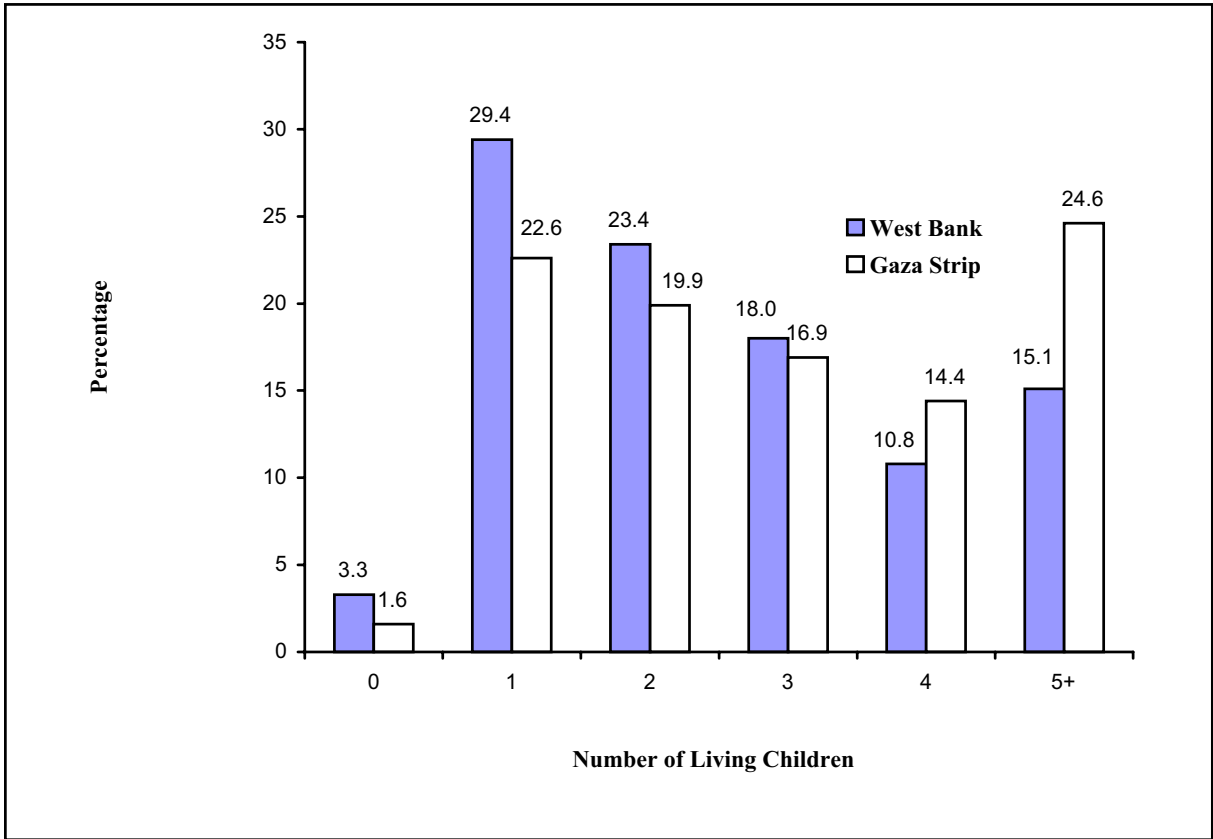


The findings presented in the figure above show that in all cases Gazan women of all ages are less inclined to use a contraceptive method than those of the West Bank. Apart from the less than 30 years/ any method category where the gap is as high as 12%, a gap of 7% difference in contraceptives ever use between women from the two regions is apparent.

In total, for the two regions of the West Bank and Gaza the highest percentage of ever use of a contraceptive method was registered for women within the age group 30-49 years who reported using any contraceptive method (80%). Meanwhile, a considerable drop is observed in the same category amongst women under 30 years of age where a percent of 64 was registered. Modern methods were reported to have been used least by women under 30 years of age in the two regions scoring 44.6% for Gaza and 51.8% for the West Bank. This coupled with the fact that the women’s median age of marriage is 18 years puts these women under the pregnancy associated risks for a longer period of time (PCBS 1997 and Women’s Affairs Center 1999).

Comparing these findings with the ever used contraceptive methods reported in the 1996 PCBS health survey an average rise of 13% in Gaza and 4% in the West Bank is registered in this recent survey. This denotes some improvement in the knowledge and attitudes on the side of the women themselves and better service on the side of care providers.

Figure 5.5: Percentage distribution of women ever users by number of living children at first use and region



Women ever users of a contraceptive method were asked about number of living children at their first use of a method. The highest percent of them reported doing that after having had one living child scoring 29.4% for the West Bank and 22.6% for Gaza. Nonetheless, a substantial percent (24.6%) of women in Gaza choose to do that after having had 5+ living

children, while 15.1% of women in the West Bank go for the same choice. A similar picture was also seen in the 1996 PCBS health survey with regional variations being less pronounced. This falls in agreement with the range of 4-6 and 5-6 as an ideal number of children reported in a number of studies (Rifai 1996, PCBS 1997, and PCBS 2000).

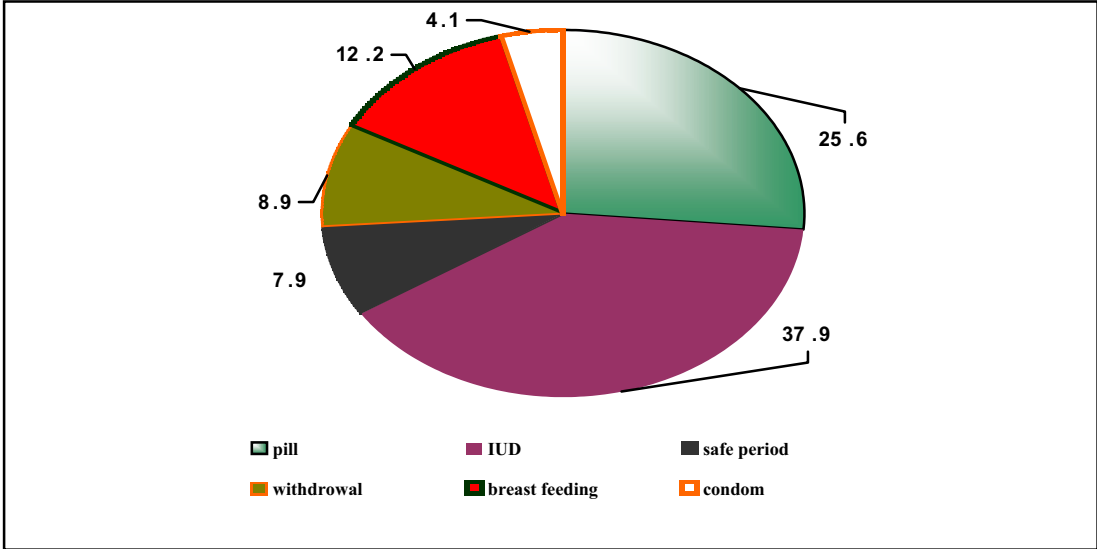
Although it might be claimed that the presentation in figure 5.5 is not promising but a closer look reveals an important change in the trend of contraceptives use amongst Palestinian women, which is that it is becoming less bound to later parity as it used to be earlier. A substantial percent of women reported using a contraceptive method as early as having had the first child. Smaller percentages of women reported an initial contraceptives use after having had 2,3 or 4 children with a percent of ; 22.3, 17.6 and 12, consecutively.

Overall, women seem to have become better informed about this matter making them less inhibited to start using a contraceptive method at their convenience even when they intend to bear more children. The major information gap, however, seems to still be present amongst young couples and those with no children. As seen in the figure above only 3.3% of the West Bank women and 1.6% of the Gazan ones reported using a contraceptive method while they were still childless. Within the Palestinian socio cultural context newly married couples are usually under a profound pressure and concern to assess their fertility status (PCBS, 2000) . This, together with the many misconceptions pervading about contraceptives use particularly before having had the first child, imply that there is a need to focus on educating young couples about family planning and various contraceptive methods. Doing this at an earlier stage with the youth is expected to even yield better outcomes.

The PCBS has come to a much similar conclusion in its qualitative national study of the Palestinian Maternal and Child Health conducted lately in July 2000.

5.3.2 First use of a contraceptive method:

Figure 5.6: Percentages of ever married and ever used women aged 15-49 Years by type of contraceptive method firstly used



Out of 11 options offered to women in order to respond to a question about their first use of a contraceptive method only 6 were picked, except for a total of 3.4 % for the other 5 options altogether. Trivial as such this percent was ignored.

As expected and shown in many previous studies (Keileh 1993, Mousa 1994, Rifai 1996, PCBS 1997, Women's Affairs Center 1999 and PCBS 2000) intrauterine devices (IUD) fared best amongst all other contraceptive methods used followed by pills. Breast-feeding, withdrawal, safe period and condom, sequentially followed but with a considerable gap between them and the two former methods.

Notably, out of the six methods three are traditional with low reliability but are noninvasive in the same time.

In a Weighted sample of 318409 ever married women aged 15-49 years, intrauterine devices (IUD) and pills were reported to be firstly used by a total of 63.5% of the survey sample

Amongst the modern noninvasive contraceptive methods condom use occupies the lowest percentage that is equal to 4.1. Within this context, it is worthwhile to remember the important role condom plays in controlling and preventing STDs including AIDS. Hence social marketing programs and males awareness raising and education in particular must be emphasized and paid more attention.

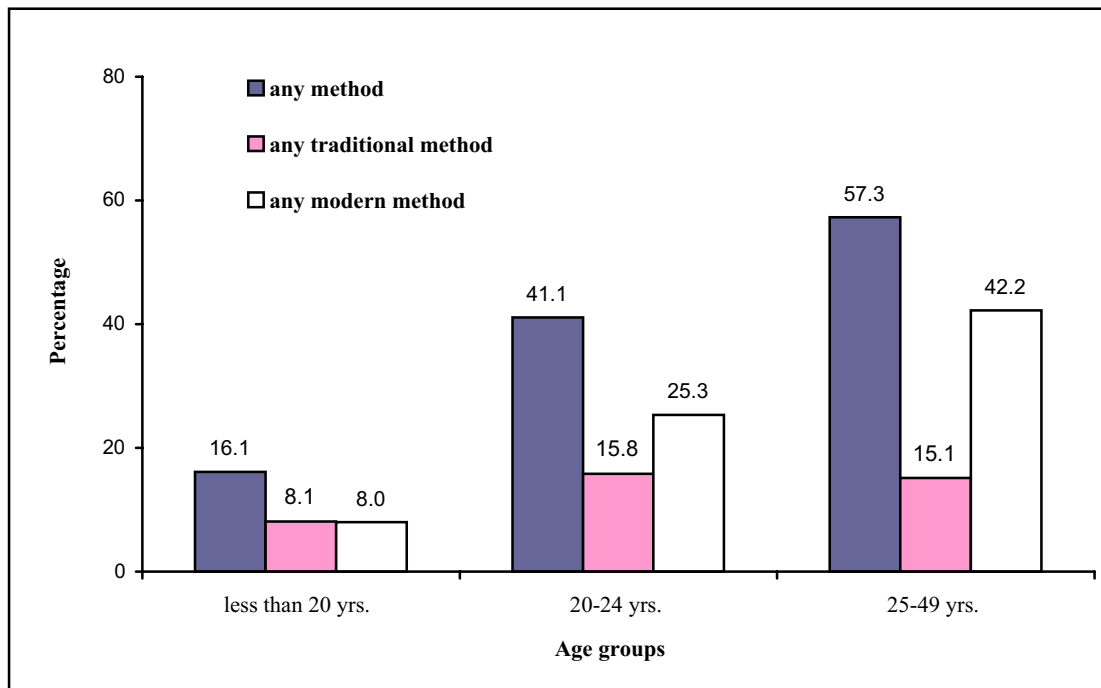
5.3.3 Current use of contraceptive methods:

Women's knowledge of contraceptive methods is 99% while use is 51.4% compared to 45.2% for the 1996 pcbs health survey

The statement in the box above provides evidence to a significant progress in the use of contraceptives methods in such a short period of time, with only four years span between the two PCBS health surveys. Undoubtedly, a weighted sample as large as 419722 currently married women provides further credit to the newly yielded findings.

Examining the data presented in figure 5.7 below it can be seen that the older the women are the more their tendency for using a contraceptive method is. This is regardless of the type of the method being used. Under the age of 20 minimal use of contraceptives is evident with a percent of 16.1, 8.1 and 8 for; any method, any traditional method and any modern method, sequentially. By the time women reach 20 years of age most of them would have assessed their fertility and secured the number of children they would have wanted. Afterwards, they are more of a mind to use a contraceptive method. This is particularly true for the modern methods in specific. Between the ages 25-49 years 42.2% of the respondent women reported using a modern contraceptive method.

Figure 5.7: Percentage of currently married women using or whose partner is using a contraceptive method by age



Looking at the same set of data by type of locality it can well be observed that there are no substantial differences in the contraceptives utilization patterns between women in the three localities of; camp, rural and urban. Minor distinction of the camp women can be noted as per the modern methods use, while the distinction is for rural women under the two other categories. Figure 5.8 below holds the visual presentation to this.

Figure 5.8: Percentage of currently married women using or whose partner is using a contraceptive method by type of locality

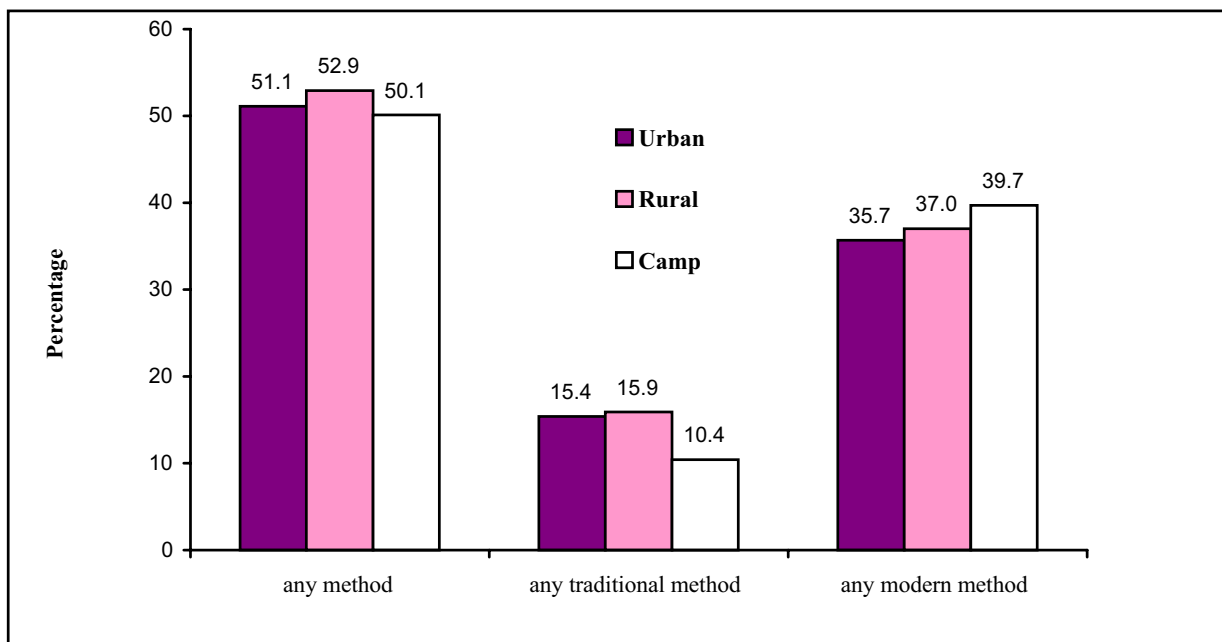


Figure 5.9 below provides a clear view of the use and the none use of contraceptive methods, in addition to the various methods being used as well. A distinct gap in the none use exists between the two regions of the West Bank and Gaza with a percent of 8.2 difference between both of them on behalf of the later region; 45.7% for the West Bank compared to 53.9% for Gaza.

Still, IUD is the preferred method followed by pills in both regions with a slightly higher percent of women using it in the West Bank (27.9% compared to 18.5%) . Meanwhile, the use of condoms, though trivial as it appears, amounted more than double the percent in Gaza (4.4%) when compared to the West Bank (2%). Overall, the percentage of women using a contraceptive method is far less from desirable.

Figure 5.9: Percentage of currently married women using or whose partner is using a contraceptive method by type of method

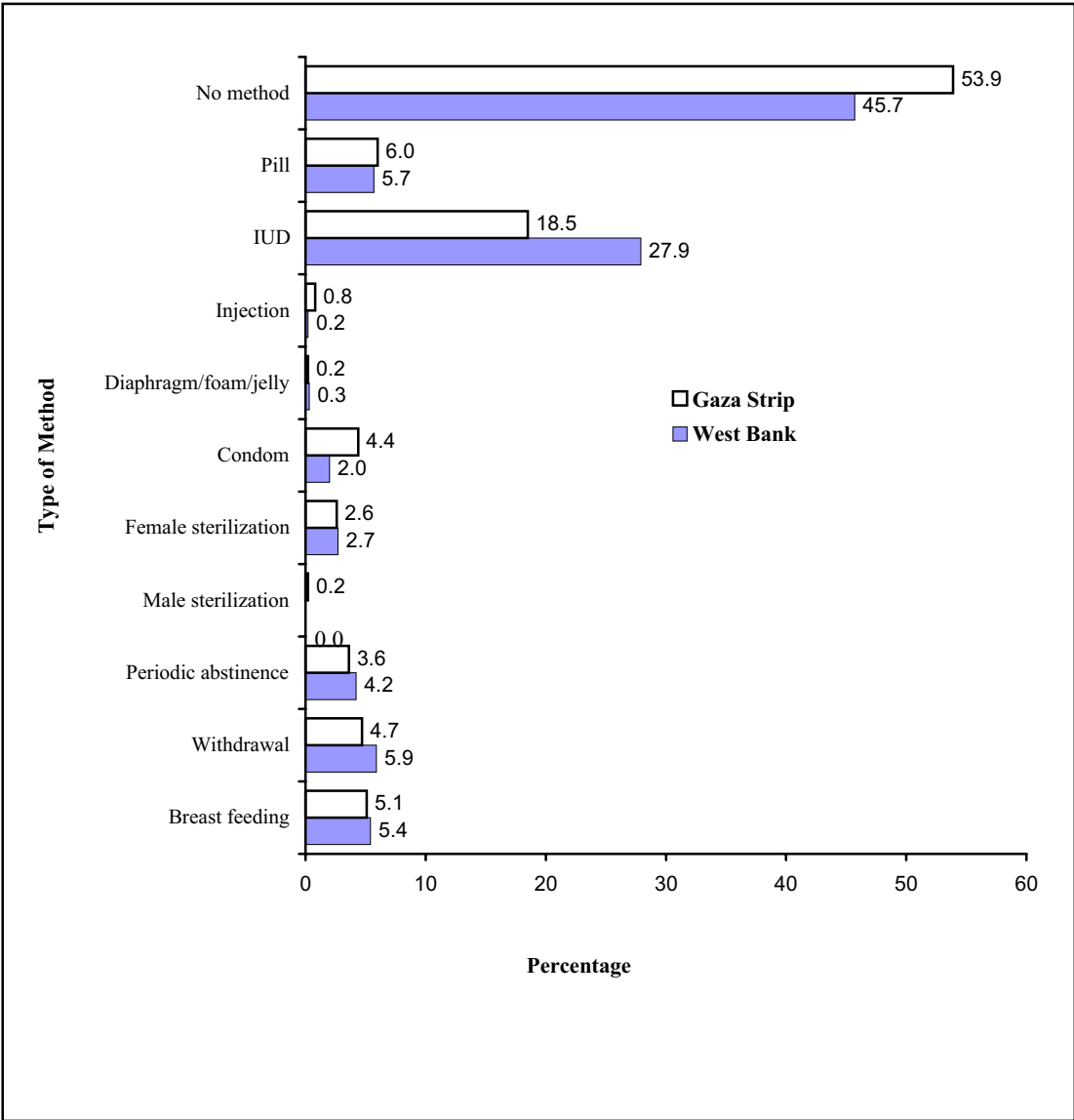
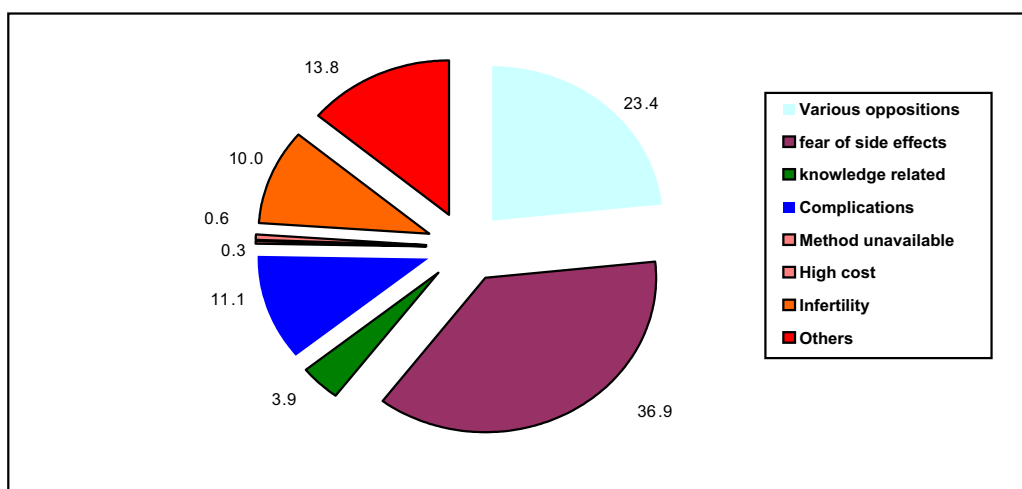


Figure 5.10: Percentage distribution of currently married women current use of modern contraceptives by source of method



Note: male and female sterilization methods were excluded.

The figure above clearly shows that about half (43.7%) of the modern contraceptives users seek their method in a private clinic, hospital or center. Simultaneously, IUD is the preferred and most broadly used contraceptive method as shown in figure (5.9) above. So is there a link between these two findings? Answering this question compels looking into the whole picture. First: private sector institutions are created for profit making purposes at the first place. Second: IUD insertion is a profitable services when compared to the few other contraceptive method used, especially if the device is sold in the facility or clinic itself. Third, private health care institutions are known to hire less but income generating health professionals who are mostly medical doctors and gynecologist in this case. In addition, they are men in their vast majority. As a result, women care providers such as health workers and midwives are excluded. At another level as has been documented in literature women and their husbands defer to medical advice on choice of contraceptives (Zaher 1997, EMRO 1998, & PCBS 2000)². As such, condusively, the answer to the question above would most probably be positive.

One final thought on this is on the need of the service to be gender sensitive where women are given the opportunity to express feelings, needs, fears and worries. It is only a woman care provider who can listen and understand all that. Therefore, it is imperative that attention is paid so that women health care professionals are the main providers of family planning services, particularly at the primary health care level. It is only then that women get well informed and are thus able to make informed choices.

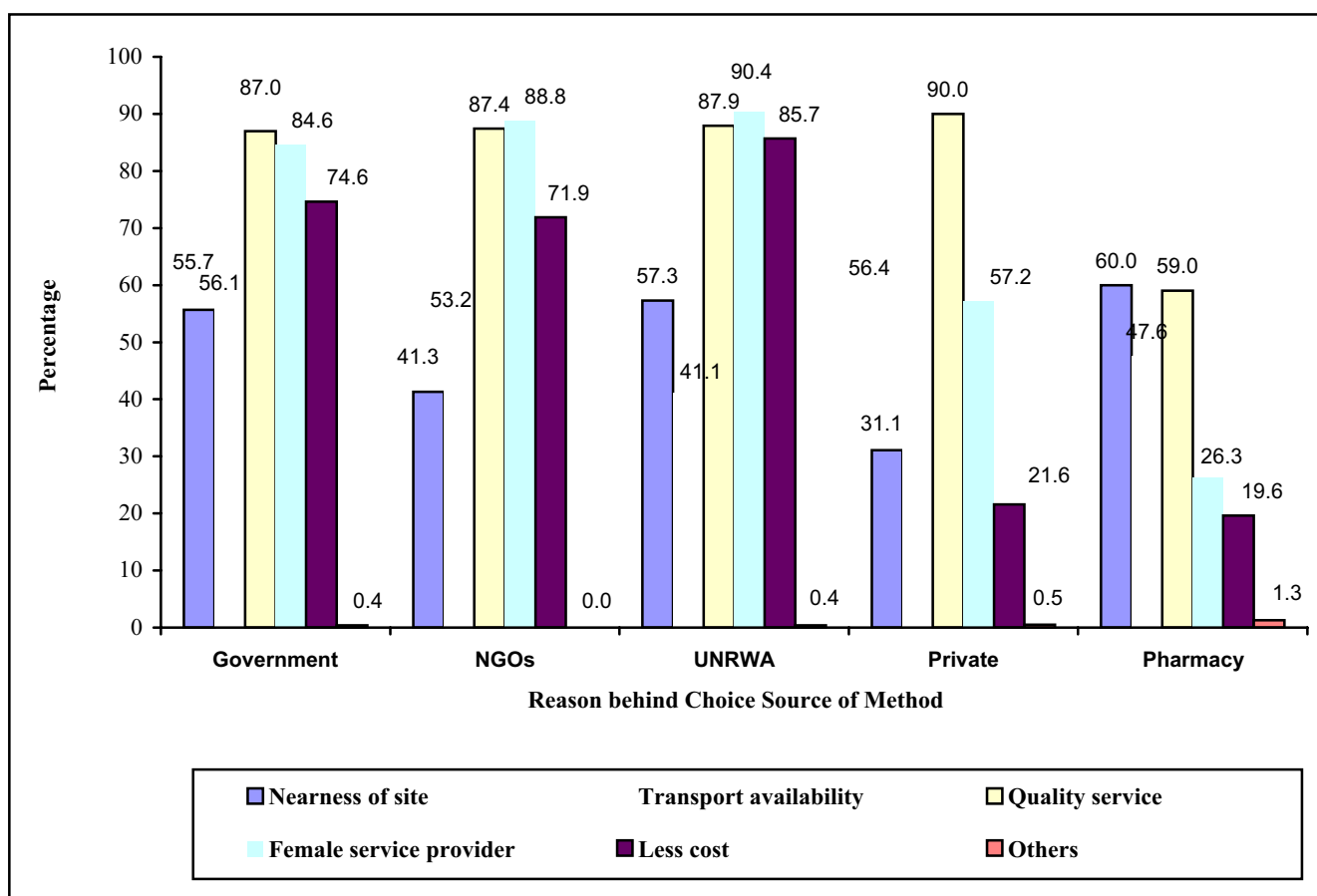
As a matter of fact, the ever growing lately witnessed international investment in midwifery falls into full shape with the argument above.

² A study on the women's satisfaction with the counseling services integrated in the family planning clinics of the Egyptian Family Planning Association has shown that the doctor has chosen the contraceptive method for 54% of the IUD cases. Furthermore, another study in Kenya has shown that the service provider chooses the contraceptive method for 46% of the service seekers.

Amongst the 142225 current users of modern contraceptive methods 85.2% stated service quality and 67.3% stated female service provider as the main underlying reasons for their choice of a specific site

Women who are currently using a modern contraceptive method were asked about reasons underlying their choice of the site from where they get their contraceptive method. Regardless of site, quality of the service ranked first amongst all other reasons with 85.2% of respondents stating it as the reason. Female service provider, transport availability, cost lowness, and nearness of the health facility were sequentially stated as follows; 67.3, 51.5, 47.1 and 44.4 percent each³. Figure (5.11) below provides further details.

Figure 5.11: Percentage of currently married women currently using a modern contraceptive method by source and reason behind such choice



*Note: Male and female sterilization methods were excluded.

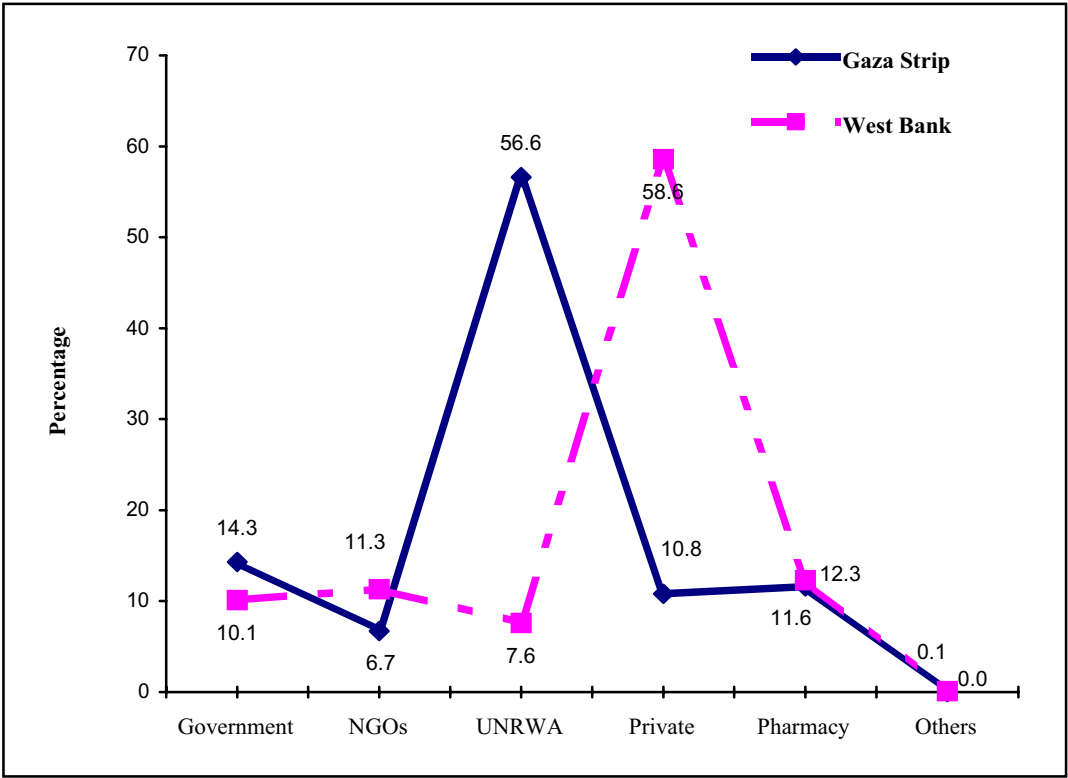
By facility chosen, the perceived good quality of the service at the private sector institutions was the main attractor for 90% of those targeting this type of health care facilities.

³ Every woman was asked to respond positively or negatively to each reason as stated in the survey instrument. This meant that a woman could have responded positively to more than one reason bringing the total percentage to more than a hundred.

Meanwhile, quality of the service and female care provider followed by the less cost factor were the three major determinants for those seeking a contraceptive method service at an NGO, UNRWA or governmental facilities. The fact that quality ranked second for those seeking the service from a pharmacy puts under questioning the definition and understanding of the respondent women to “quality” as a term...! For that how much of a quality will someone see as a purchaser in a pharmacy? . The question statement in the survey tool could as well be another aspect of inquiry.

By region, in Gaza Strip more than half (56.6%) current users of modern contraceptive methods seek the service at UNRWA settings while 58.6% of those in the West Bank do so at private health facilities. Other institutions such as NGOs and government are more or less similarly targeted in the two regions of Gaza Strip and West Bank. Figure 5.12 below demonstrates the exact picture.

Figure 5.12: Percentage distribution of currently married women who are using a modern contraceptive method by source of method and region



Note: Male and female sterilization methods were excluded.

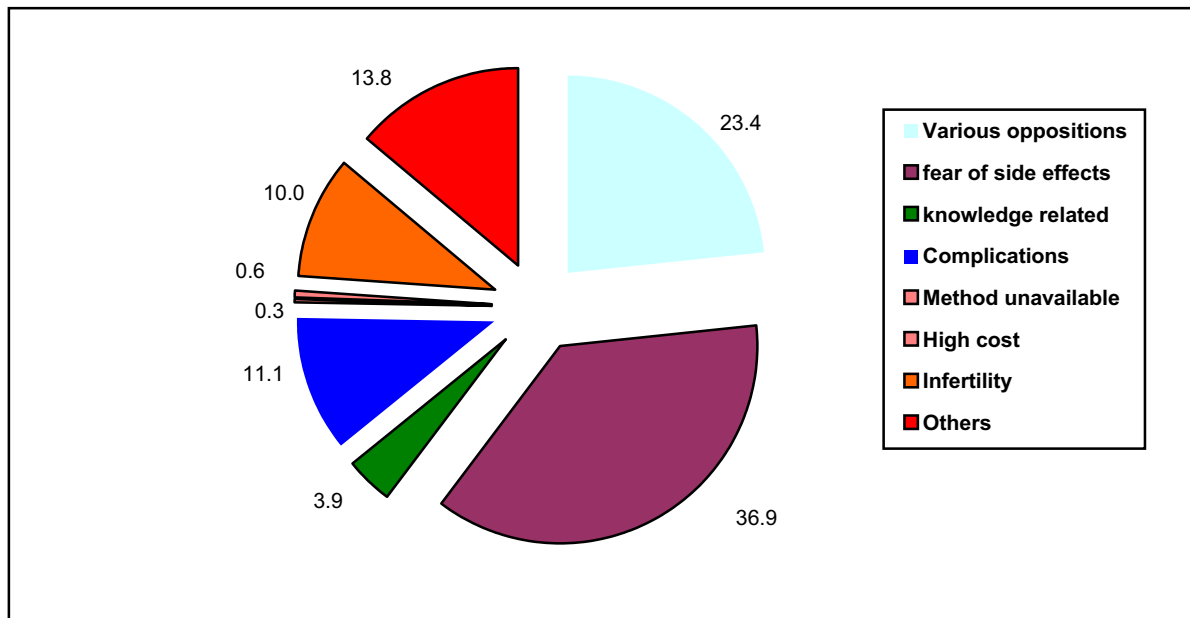
Asked about the time needed to arrive at the service delivery point from home 61.1% of the surveyed women reported the time range 0-29 minutes, while, 28% reported that of 30-59, at the time when 9.3% reported 60-89 minutes. Only 1.6% reported more than these time ranges. This indicates that, in general, service accessibility in terms of distance from home is not a problem to the women seeking the service.

5.4 None use of a contraceptive method:

A Total of 63.1% of women respondents gave various oppositions and fear of side effects as the main two reasons for not using a contraceptive method

The main reason for not using a modern contraceptive method was “Fear of Side Effects” as reported by 36.9% of the none users, from whom women who are willing to have more children, menopausal women, and women of whom the husband is absent, were excluded. This is a strong indicator on the serious weakness and limited effort invested in the information, education and communication (IEC) work. Especially that this is a key strategy that is highly recommended for safeguarding the women’s right of “access to information” and making them better informed. Not to forget that this in turn plays a significant role in the perception and attitudes matters which takes us to the second main reason for none use.

Figure 5.13: Percentage distribution of currently married women who are not currently using any contraceptive method by main reason



In total 23.4% of women gave ‘various oppositions’ as the main reason for not using a contraceptive method. This includes; self, husband, relatives, and religion opposing the practice of family planning. The assumption that religion ‘Islam’ opposes family planning has already been proven wrong in many parts of the Islamic world. Ample evidence is present in the Islamic literature showing that the practice of family planning has never been forbidden since the very early days of Islam. The International Islamic Center (IIC) together with Al-Azhar University in Cairo has extensively worked on this area and jointly released a number of relevant publications (IIC & Al-Azhar University, 1997). In brief, this is no more than a serious misconception that is deeply rooted in the Palestinian customs and social system rather than religion. And this in fact is the true reason behind self, husband and relatives opposing the practice of family planning.

Executive summary:

- In a weighted sample of as large as 419,722 currently married women, more than 99% reported knowing about a modern contraceptive method, with no substantial differences between regions or age groups.
- West Bank women considerably rely on medical doctors (35%) as a source of information on contraceptive methods, while the Gazan women major source of information are nurses and midwives (48%). This was pronounced in spite of the fact that women were given the opportunity to state more than one source.
- 80% of West Bank women compared to 93% of Gazan ones know where to obtain a contraceptive method.
- The Region of Gaza Strip and the camp locality, where knowledge about contraceptive methods is at its best, share a distinctive presence and involvement of UNRWA.
- Gazan women of all ages are less inclined to use a contraceptive method than those of the West Bank.
- The highest percent of ever use of a contraceptive method was registered for women within the age group 30-49 years, of whom 80% reported having used any contraceptive method.
- In both regions, ever use of modern methods was reported to be the least by women under 30 years of age scoring 44.6% for Gaza Strip and 51.8% for the West Bank.
- Comparing these findings with those of the 1996 Health Survey, an average rise of 13% in Gaza and 4% in the West Bank in contraceptives ever use is registered in the recent survey.
- The highest percent of women reported contraceptives first use after having had their first baby (29.4% in the West Bank and 22.6% in Gaza Strip).
- However, only 3.3% of the West Bank women and 1.6 of the Gazan women reported contraceptives first use before having had their first baby.
- In a weighted sample equal to 318409 women, IUDs and pills were reported to be firstly used by a total of 63.5% of the survey sample.
- Women's knowledge of contraceptive methods is over 99% while use is 51.4% compared to 45.2% for the 1996 PCBS Health Survey.
- The gap between the two regions of Gaza Strip and West Bank in contraceptives none use equals 8.2% on behalf of the former region.
- Condom use, though trivial, amounted more than double the percent in Gaza Strip (4.4%) as in the West Bank (2.0%).

- In total, 43.7% of the modern contraceptives users seek their method in a private clinic, hospital or center.
- Amongst the 142,225 current users of modern contraceptive methods 85.2% stated service quality and 67.3% stated female service provider as the main underlying reasons for their choice of a specific site.
- In Gaza more than half (56.6%) of the current users of modern contraceptive methods seek the service at UNRWA settings, while 58.6% of those in the West Bank do so at private health facilities.
- The main reason for not using modern contraceptive methods is “fear of side effects” as reported by 36.9% of none users, compared to 10.8% reporting the same reason in the 1996 PCBS health survey.
- Meanwhile, in total 23.4% of women none users reported “various oppositions” including those of; husband, self, relatives and religion as the main reason for none use. This is compared to 38.9% women saying the same in the 1996 PCBS Health Survey.

Recommendations:

Both data presented and discussion completed indicate that some progress in family planning matters has been attained in the period between the 1996 PCBS Health Survey and this recent one. However, challenges ahead are still enormous. Recommendations proposed below fall under four broad but necessarily complementary areas where only collective efforts of all those involved would make the difference.

Before proceeding it should be emphasized that considering the Palestinian socio cultural context, the fact that reproductive health in general and family planning in particular hold so much of womanly biological connotation qualifies the field to gender related concerns more than it does in other fields of health. This, in fact, was borne in mind in crafting the recommendations hereafter.

- **Gender sensitive Information, Education, and Communication (IEC) strategy.** Undoubtedly, some very vital information gaps has been bridged within the last three years. This was well manifested in the survey findings, such as the changes in the Contraception Utilization Pattern. Data has shown that utilization is less confined to later parity. More women are initiating use after having had their first or second baby. This could be an indicator on women being better informed and thus able to make decisions they would not dare to make before possessing adequate knowledge. It may also indicate that gender relations are getting more balanced and so women are gaining some control over their reproductive experience. At the same time, major information gaps were noted amongst young couples and new wed. For that their contraception utilization rate did not exceed 3.3% at the best. Information on the type of contraceptive methods these 3.3% young couples use helps establishing the link between the method used and the extent of gender sensitivity inherent in it. Condom use, for example, implies at a sense of shared responsibility towards reproduction, contrary to the women-centered methods, which are used by 63.5% of Palestinian women in the form of IUDs and pills, as revealed in the survey. The main two reasons for none use; fear of side effects and various oppositions are strong indicators on the great deficit in the gender sensitive IEC activities. Had the women and men received adequate information on contraceptive methods they would not perceive

such a lot of side effects to fear them to the extent reported. Had a gender sensitive IEC work been adequately done less opposition could have been seen. So therefore it is highly recommended to capitalize on the already existing efforts of various NGOs and MoH by producing more gender sensitive IEC packages targeting both men and women with a particular emphasis on youth, and policy makers. . Needless to say that PCBS is eligible to play an instrumental role in this process through its gender and health statistics programs.

- **Gender sensitive family planning and reproductive health services.** Findings on; contraceptive utilization rate by type, reasons for choice of a specific health facility as well as knowledge of a source of a method are all indicators on the extent of service availability, quality, and accessibility. Data has shown that women-used contraceptive methods are the most broadly used ones while men- used methods are trivially used. It has also shown that the perceived quality of the service in addition to the presence of a female health provider are the two top reasons for seeking a contraceptive method at a certain site. Finally, it revealed that knowledge about a source for a contraceptive method is not as desired. Altogether, these findings suggest that family planning services need to be made more gender sensitive by making equally available and accessible to service users both men and women-used contraceptive methods. This is first. Second, both men and women should be fully informed about family planning community resources so that their right to target, access, and use the method of their choice is safeguarded. This stems in the previously spoken about IEC where special emphasis should be placed on males involvement and social marketing programs. Lastly, reasons given by women for choosing a specific health facility are in themselves an explicit expression of their needs and priorities where serious investments should be made.
- **Gender sensitive research and policies.** Overall, data clearly showed that emphasis in this survey was largely placed on maternal health excluding women beyond their procreative role in addition to total absence of men. This is believed to leave a substantial information gap unfilled. For that it hinders full understanding of the background variables that affect and shape women's reproductive behaviors and decisions, in addition to its total blindness to the interrelatedness in life experiences of both men and women, which is the essence of gender after all. In respect to family planning, this is particularly true because decisions on the use or none use of a contraceptive method, for example, largely rest on the formerly gained knowledge as well as power relations between men and women within the family. So therefore, it is highly recommended to include women outside the reproductive role as well as men in future surveys. In addition, presentation and analysis of data disaggregated by sex must be promoted further, so as to sensitize policy makers for integrating women's needs and views in development plans wherein health is a major constituent.
- **Regional variations:** Although the gap between the two regions of the West Bank and Gaza Strip is in constant decline, some more work still needs to be put in overcoming the persisting variations, such as bringing closer and higher the contraceptives utilization rate in both regions where a 7% gap was registered. It should be observed here that Gaza Strip proved to be in a better shape than the West Bank in a number of areas, such as its effective use of available health professionals resources particularly in terms of gaining access to relevant information. This could be related to the exceptional investment that was specially made in the Strip by most involved parties including donor agencies, Ministry of Health as well as local and international NGOs.

Fertility Preferences

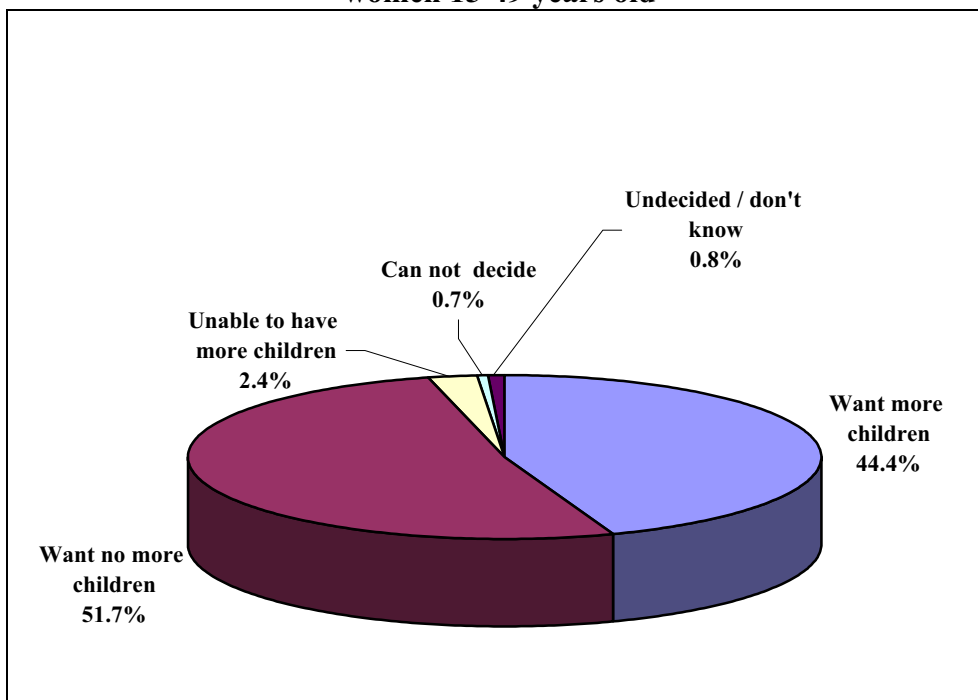
6.1 Introduction:

This chapter examines fertility preferences among currently married female respondents of reproductive age (15-49 years). It also addresses questions about the need for contraception and the extent of unwanted fertility. Respondents who were not pregnant at the time of the survey were asked whether they wanted to have more children; and if so, the gender and length of time they would prefer to wait before having the next child. Pregnant respondents were asked whether they wanted to have more children after they give birth to the baby they are expecting; and if so, the gender and length of time they would prefer to wait after the delivery and before having the next child. Respondents were also asked about the number of children they would like if they could start anew. An assessment of the respondents' desire for children, need for family planning services, ideal number of children, and planning status of births is performed.

6.2 Desire to have children:

Data on the desire to have more children, among women who are potentially able to bear them, provide information on future fertility and the potential need for contraceptive services. About half of currently married women who are in their childbearing age desire to stop having children, 44.4% want to have more children, 2.4% are not able to have more children, and 1.5% are undecided / don't know (see figure 6.1). More women in Gaza Strip prefer to have children as compared to women in the West Bank (49.7% versus 41.5% respectively).

Figure 6.1: Fertility preferences for currently married women 15-49 years old



Differentials in women's desire to stop having children by region and type of locality are presented in table 6.1. The percentage of women who desire to stop having children is higher in the West Bank at (54.3%) than in Gaza Strip (46.8%). The percentage is also higher

among rural residents (56.2%) compared to urban and refugee camp residents (49.9% and 49.7% respectively).

Table 6.1: Percentage of currently married women who desire to stop having children by region and type of locality

Region and type of locality	Women who desire to stop having children
Region	
West Bank	54.3
Gaza Strip	46.8
Type of locality	
Urban	49.9
Rural	56.2
Camp	49.7
Palestinian Territory	51.7

The age distribution of women who desire to stop having children by region is presented in table (6.2). Half of these women are below the age of 35 years.

Table 6.2: Percentage distribution of currently married women who desire to stop having children by age group and region

Current Age	West Bank	Gaza Strip	Palestinian Territory
15-19	1.6	1.0	1.4
20-24	10.4	5.9	9.0
25-29	18.0	17.0	17.6
30-34	22.5	22.8	22.6
35-39	20.5	22.5	21.2
40-44	16.3	17.9	16.8
45-49	10.7	12.9	11.4
Total	100.0	100.0	100.0
Number of women	143,443	67,512	210,955

The distribution of women's desire to have more children by number of living children and woman's age is presented in tables 6.3 and 6.4 respectively.

Table 6.3: Percentage distribution of currently married women by fertility preferences and number of living children

Fertility preferences	Number of living children							Total
	0	1	2	3	4	5	6+	
Want more children	83.6	81.8	71.7	58.6	38.9	24.6	9.5	44.4
Want no more children	4.3	14.7	26.1	39.6	58.8	71.1	87.1	51.7
Unable to have more children	10.0	0.9	0.8	0.6	0.5	2.0	2.8	2.4
Can not decide	0.9	1.6	0.1	0.2	1.0	0.8	0.4	0.7
Undecided / don't know	1.2	1.0	1.3	1.0	0.8	1.5	0.2	0.8
Number of women	41,735	43,313	48,329	53,586	57,023	48,197	116,137	408,321

The percentage of women who desire to stop having children is positively related to the number of living children the woman already has, ranging from 4.3% for women who have no living children to 87.1% for women who have 6 or more living children (see table 6.3).

Additionally, the percentage of women who desire to have more children is positively related to woman’s current age, ranging from 10.4% for women 15-19 years old to 83.3% for women 40-44 years old (see table 6.4).

Table 6.4: Percentage distribution of currently married women by fertility preferences and woman’s age group

Fertility preferences	Age groups							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Want more children	86.9	73.6	55.7	36.9	23.5	11.4	4.0	44.4
Want no more children	10.4	24.2	41.8	60.9	72.7	83.3	79.6	51.7
Unable to have more children	0.0	0.5	0.5	0.6	2.6	4.6	16.3	2.4
Can not decide	1.0	0.6	0.5	0.8	0.8	0.7	0.1	0.7
Undecided / don't know	1.7	1.1	1.5	0.8	0.4	0.0	0.0	0.8
Number of women	28,659	78,199	89,024	78,209	61,431	42,580	30,218	408,321

The same set of questions was asked to women during the 1995 Demographic Survey in the West Bank and Gaza Strip. Current percentages of women who do not want to have more children are higher than percentages obtained from the 1995 Demographic Survey for women aged 15-34 years and are lower for women aged 35-49 years (See table 6.5).

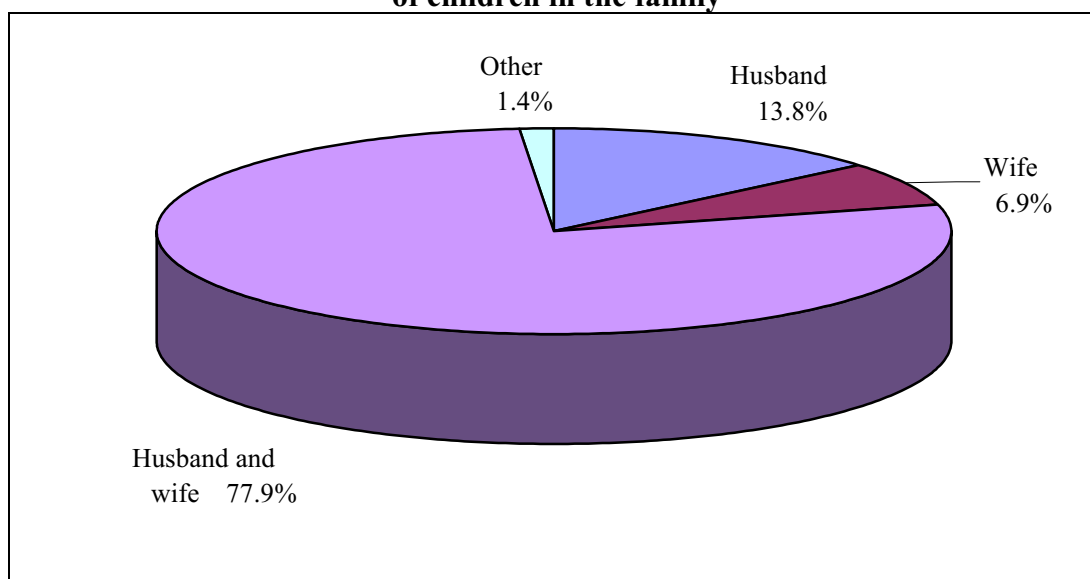
Table 6.5: Percentage distribution of currently married women who desire to stop having children by woman’s age group, (1995*,2000)

Age groups	1995*	2000
15-19	1.1	1.4
20-24	7.2	9.0
25-29	13.8	17.6
30-34	19.9	22.6
35-39	22.4	21.2
40-44	19.4	16.8
45-49	16.2	11.4

* Palestinian Central Bureau of Statistics, 1997. *The Demographic Survey in the West Bank and Gaza Strip: Final Report*. Ramallah- Palestine.

Figure (6.2) shows that both husband and wife decide on the number of children in the family in 77.9% of the cases, while the wife alone decides in 6.9% of cases, and the husband alone decides in 13.8% of the cases. Since a majority of women are not able to decide on the number of children in the family alone, husbands should be involved in family planning and health education programs.

Figure 6.2: Percentage distribution of persons who decides on the number of children in the family



6.3 Preferred number of additional sons/daughters:

When asked about the number of children a woman would like to have in the future in addition to children she already has, 54.1% of respondents stated that they did not want to have more children or were unable to have more children.

Table 6.6: Percentage distribution of currently married women by number of living children, mother's current age and expected number of children

Number of living children	Expected number of children								Number of women
	0	1	2	3	4	5	6+	Non-numeric	
0	14.3	0.2	14.3	9.9	39.0	4.9	10.8	6.6	41,735
1	15.6	7.5	13.5	22.5	18.2	8.7	8.0	6.0	43,313
2	27.7	6.4	30.1	8.9	13.0	3.2	5.4	5.3	48,596
3	41.1	18.0	16.4	10.4	5.1	2.4	2.2	4.4	54,246
4	59.8	15.3	13.3	3.2	1.9	1.6	1.6	3.3	57,853
5	73.6	12.5	6.4	1.7	0.6	0.3	0.8	4.1	49,021
6+	90.7	4.1	2.6	0.2	0.5	0.2	0.5	1.2	124,887
Mother's current age									
15-19	10.4	1.4	12.2	15.5	36.1	6.8	11.2	6.4	28,659
20-24	24.8	7.9	18.5	13.7	17.8	4.6	7.4	5.3	78,199
25-29	42.4	12.3	18.9	7.9	7.4	3.4	3.0	4.7	89,124
30-34	62.1	14.3	9.5	3.6	3.8	1.1	1.7	3.9	79,417
35-39	76.4	8.9	7.9	1.7	1.4	0.8	0.8	2.1	63,854
40-44	89.4	2.7	3.6	0.8	0.9	0.1	0.5	2.0	47,025
45-49	96.2	1.4	0.7	0.9	0.1	0.0	0.2	0.5	33,373
Total	55.4	8.6	11.7	6.4	8.4	2.4	3.3	3.8	419,651

The percentage of women who did not want to have more children or were unable to have more children is positively related to the number of living children the woman already has, ranging from 14.3% for women who have no living children to 90.7% for women who have 6 or more living children (see table 6.6). Additionally, the percentage of women who did not

want to have more children or were unable to have more children is positively related to the mother's current age, ranging from 10.4% for mothers aged 15-19 years to 96.2% for mothers aged 45-49 years (see table 6.6).

An increase in the percentage of women who did not want to have more children since 1995 is detected. In 1995, the percentage of women who did not want to have more children ranged from 2.8% for women who have no children to 83.7% for women who have 6 or more children, and ranged from 5.6% for mothers aged 15-19 years to 90.8% for mothers aged 45-49 years.¹

Women were specifically asked about the number of sons and daughters they would like to have in the future in addition to the sons and daughters ever born. When asked about the preferred number of additional sons they would like to have, 59.1% of respondents stated that they did not want to have additional sons, 30.4% stated that they wanted to have 1 or 2 additional sons, and 7.0% stated that they wanted to have 3 or more additional sons. The percentage of women who did not want to have more sons is positively related to the number of sons ever born, ranging from 16.9% for women with no sons ever born to 93.7% for women with 4 or more sons ever born (see table 6.7).

Table 6.7: Percentage distribution of currently married women by number of sons/daughters ever born and preferred number of additional sons/daughters

Number of sons ever born	Preferred number of additional sons						Number of women
	0	1	2	3	4+	Non-numeric	
0	16.9	15.7	43.0	10.8	7.3	6.3	80,432
1	33.5	31.2	21.5	5.9	4.4	3.5	86,630
2	66.9	15.9	9.7	2.9	0.9	3.7	88,250
3	82.8	8.3	4.1	1.1	1.3	2.4	71,643
4+	93.7	2.1	1.4	0.2	0.9	1.7	92,696
Total	59.1	14.7	15.7	4.1	2.9	3.5	419,651
Number of daughters ever born	Preferred number of additional daughters						Number of women
	0	1	2	3	4+	Non-numeric	
0	27.5	25.2	36.2	4.6	1.6	4.9	93,776
1	47.2	33.3	12.5	2.4	0.9	3.7	93,344
2	80.9	10.1	4.5	0.8	0.2	3.5	83,010
3	90.3	4.1	1.8	1.2	0.2	2.4	61,773
4+	97.0	1.2	0.3	0.0	0.4	1.1	87,748
Total	66.2	15.9	12.1	1.9	0.7	3.2	419,651

When asked about the preferred number of additional daughters they would like to have, 66.2% of respondents stated that they did not want to have additional daughters, 28.0% stated that they wanted to have 1 or 2 additional daughters, and 2.6% stated that they wanted to have 3 or more additional daughters. The percentage of women who did not want to have more daughters is positively related to the number of daughters ever born, ranging from 27.5% for women with no daughters ever born to 97.0% for women with 4 or more daughters ever born (see table 6.7). These figures show an increased preference for having additional sons than having additional daughters, given similar numbers of sons and daughters ever born.

* Palestinian Central Bureau of Statistics, 1997. The Demographic Survey in the West Bank and Gaza Strip: Final Report. Ramallah- Palestine.

For women who never had sons, more women in the West Bank prefer to have 0-2 additional sons, while more women in Gaza Strip prefer to have 2 or more additional sons. For women who never had daughters, more women in the West Bank prefer to have no additional daughters, while more women in Gaza Strip prefer to have 1 or more additional daughters.⁽²⁾

For women who never had sons, more women in rural areas prefer to have no more additional sons than women in urban areas or camps. For women who never had daughters, more women in rural areas prefer to have 0-1 additional daughters, while more women in urban areas and camps prefer to have 2 or more additional daughters.²

6.4 Need for family planning services:

Women with unmet needs for family planning services include those who are not pregnant and who want to delay their next birth or do not want more children, but are not using any family planning methods, and pregnant women whose last pregnancy was mistimed or unwanted.

Table 6.8 presents the percentage distribution of currently married women aged 15-49 years who are not pregnant by fertility preferences, use of contraceptives, and region. Sixty percent of women who are not pregnant in the Palestinian Territory use contraceptives. This percentage varies between women who want more children (47.4%) and women who do not want more children (73.7%). Women who want no more children and are not currently using contraceptives are at risk of becoming pregnant and are therefore considered to have unmet

Table 6.8: Percentage distribution of currently married women 15-49 years old who are not pregnant by fertility preferences, use of contraceptives, and region

Contraceptive use and region	Fertility Preferences					Total
	Want more children	Want no more children	Unable to have more children	Can not decide	Undecided / don't know	
West Bank						
Use contraceptives	52.0	75.5	2.5	29.9	51.1	63.1
Do not use contraceptives	48.0	24.5	97.5	70.1	48.9	36.9
Number of women	90,730	121,445	7,374	1,198	1,152	221,900
Gaza Strip						
Use contraceptives	40.1	69.9	9.3	53.3	77.8	54.3
Do not use contraceptives	59.9	30.1	90.7	46.7	22.2	45.7
Number of women	57,121	57,662	2,418	784	966	118,950
Palestinian Territory						
Use contraceptives	47.4	73.7	4.2	39.2	63.3	60.0
Do not use contraceptives	52.6	26.3	95.8	60.8	36.7	40.0
Number of women	147,851	179,107	9,792	1,982	2,118	340,850

needs for family planning services (24.5% of women who want no more children in the West Bank, and 30.1% in Gaza Strip).

21.4% of women who want to have more children, were willing to wait less than 2 years, whereas 52.2% of them want to wait 2 or more years. 26.4% gave a non-numeric response to the question about intended duration of birth spacing (see table 6.9). More women in the West

² Palestinian Central Bureau of Statistics, 2000, Health Survey –2000, Main Findings. Ramallah – Palestine.

Bank want to wait less than 2 years, while more women in Gaza Strip want to wait 2 or more years.

Table 6.9: Percentage distribution of currently married women 15-49 years old who want more children by intended duration of spacing and region

Duration of birth spacing	West Bank	Gaza Strip	Palestinian Territory
Less than 2 years	25.4	15.2	21.4
2 Years or more	50.8	54.3	52.2
Non-Numeric response	23.8	30.5	26.4
Total	100.0	100.0	100.0
Number of women	113,197	74,377	187,574

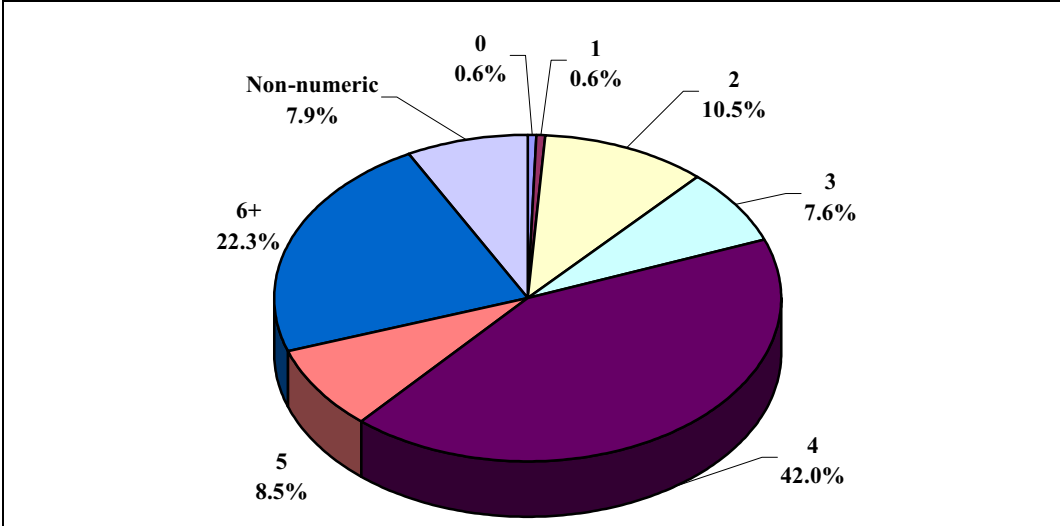
Additionally, women who are currently pregnant, who did not want to become pregnant or wanted to delay the pregnancy are considered to have unmet needs for family planning services (see section 6.6: planning status of births).

6.5 Ideal number of children:

Respondents were asked to specify the ideal number of children they would like to have if they could start again and choose the number of children they will have, independent of their actual number of children.

Figure 6.3 depicts the ideal number of children for currently married women of reproductive age (15-49 years). Only 1.2% of respondents stated an ideal family size of less than 2 children (replacement level fertility), 10.5% indicated an ideal family size of 2 children, 7.6%

Figure 6.3: Percentage of women by ideal number of children



indicated an ideal family size of 3 children, 42.0% indicated an ideal family size of 4 children, 30.8% indicated an ideal family size of more than 4 children. These figures indicate that, in general, respondents have preference for large families. More women living in Gaza Strip have ideal family sizes of 3, 5, 6 children, while more women living in the West Bank have ideal family sizes of 0, 2, 4 children.

The mean ideal number of children varies by the number of living children the woman has (ranging from 4.00 for women with no living children to 5.32 for women with 6 or more

living children) and the woman's current age (ranging from 4.06 for women aged 15-19 years to 5.64 for women aged 50-54 years (see table 6.10).

Table 6.10: Mean ideal number of children reported by women by number of living children and mother's current age

Number of living children and mother's current age	Mean ideal number of children
Number of living children	
0	4.00
1	3.97
2	4.14
3	4.20
4	4.37
5	4.83
6+	5.32
Mother's current age	
15-19	4.06
20-24	4.17
25-29	4.28
30-34	4.60
35-39	4.76
40-44	4.85
45-49	5.26
50-54	5.64
Total	4.58

Differentials in women's mean ideal number of children by background characteristics are presented in table 6.11 below.

Table 6.11: Mean ideal number of children reported by women and background characteristics

Background characteristics	Mean ideal number of children
Region	
West Bank	4.46
Gaza Strip	4.80
Type of locality	
Urban	4.55
Rural	4.50
Camp	4.81
Women's education	
None	5.16
Elementary	4.76
Preparatory	4.44
Secondary or higher	4.22
Palestinian Territory	4.58

Women living in Gaza Strip have a higher mean ideal number of children as compared to women living in the West Bank (4.80 versus 4.46 respectively). Women living in refugee camps have a higher mean ideal number of births as compared to women living in urban or rural areas (4.81 versus 4.55 and 4.50 respectively).

Additionally, the mean ideal number of children is negatively related to level of education attained, ranging from 5.16 for women with no formal education to 4.22 for women with secondary or higher education

Table 6.12 below shows the percentage distribution of women by number of living children and ideal number of children. By looking at the table, we can identify the percentages of women with number of living children higher than the number of ideal children.

Table 6.12: Percentage distribution of women by number of living children and ideal number of children

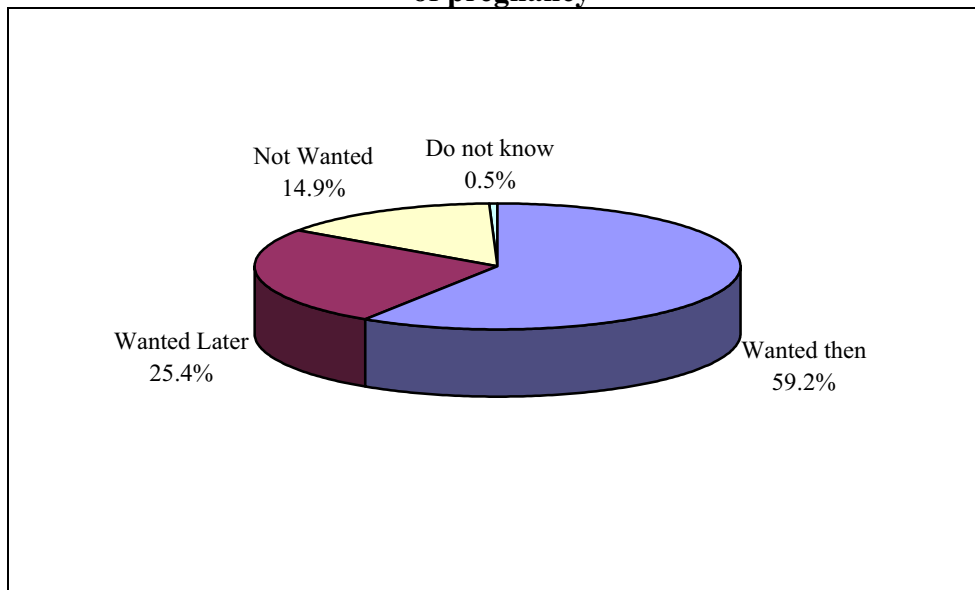
Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
0	0.5	0.1	0.6	0.2	0.8	0.9	0.8	0.6
1	1.0	2.3	0.8	0.1	0.2	0.9	0.2	0.6
2	19.0	14.1	16.7	10.0	9.9	9.1	5.4	10.5
3	9.2	11.5	7.7	11.9	4.3	6.6	5.9	7.6
4	44.5	46.5	46.0	49.3	51.8	36.6	33.6	42.0
5	7.0	7.0	6.9	10.5	8.6	16.9	6.0	8.5
6+	12.5	12.8	16.6	14.6	19.0	21.7	34.9	22.3
Non-numeric	6.3	5.7	4.7	3.4	5.4	7.3	13.2	7.9
Number of women	47,432	46,489	52,282	57,443	62,031	53,923	149,524	469,124

6.6 Planning status of births:

Pregnant respondents were asked questions to determine whether their current pregnancy was wanted then, wanted at a later date, or not wanted at all. Additionally, ever-married respondents who had at least 1 live birth during the past 3 years were asked questions to determine whether their last two pregnancies during the past 3 years were wanted then, wanted at a later date, or not wanted at all.

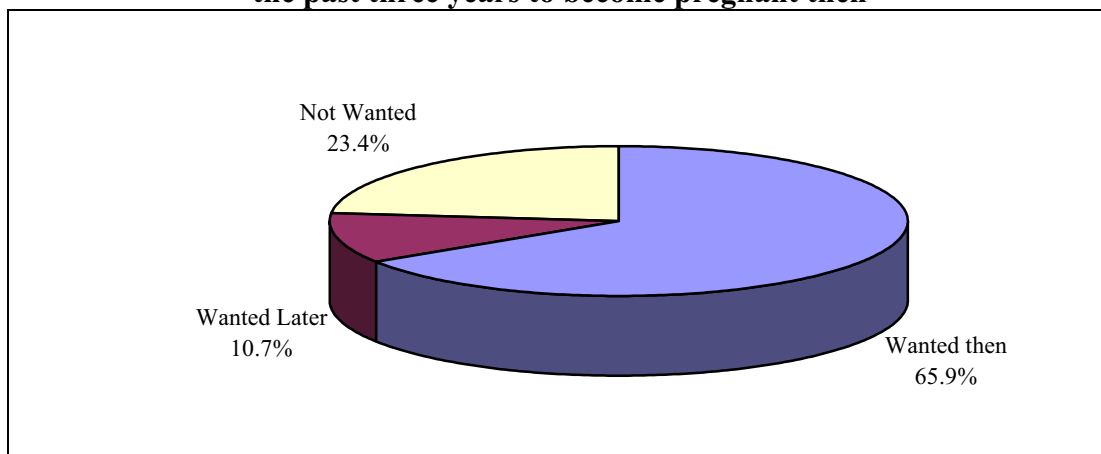
Figure 6.4 shows the desire of currently pregnant women to become pregnant at the time of pregnancy. 59.2% of them wanted to become pregnant at the time of pregnancy, 25.4% wanted to become pregnant later, 14.9% did not want to become pregnant at all, and 0.5% did not know. Therefore, 40.3% of currently pregnant women had an unmet need for family planning services either to delay their pregnancy or to stop childbearing.

Figure 6.4: Desire of currently pregnant women to become pregnant at the time of pregnancy



65.9% ever married women, who had at least one live birth during the past three years wanted to become pregnant at the time of pregnancy, 10.7% of them wanted to become pregnant later, and 23.4% did not want to become pregnant at all (see figure 6.5). Therefore, 34.1% of these women had an unmet need for family planning services either to delay their pregnancy or to stop childbearing.

Figure 6.5: Desire of ever married women who had at least one live birth during the past three years to become pregnant then



There were no major differences in the desire of currently pregnant women or ever-married women who had at least one birth during the past three years to become pregnant at the time of pregnancy by region or type of locality.

Executive summary:

- * About half of currently married women who are in their childbearing age desire to stop having children, 44.4% want to have more children, 2.4% are not able to have more children, and 1.5% are not sure.
- * The percentage of women who desire to stop having children is higher in the West Bank (54.3%) than in Gaza Strip (46.8%). The percentage is also higher among rural residents (56.2%) compared to urban and refugee camp residents (49.9% and 49.7% respectively).
- * Both husband and wife decide on the number of children in the family in 77.9% of the cases, while the wife alone decides in 6.9% of cases, and the husband alone decides in 13.8% of the cases.
- * 24.5% of women who want no more children in the West Bank, and 30.1% in Gaza Strip are not currently using contraceptives and are at risk of becoming pregnant, therefore they are considered to have unmet needs for family planning services.
- * 21.4% of women who want to have more children, are willing to wait less than 2 years, 52.2% want to wait 2 or more years, and 26.4% gave a non-numeric response to the question about intended duration of birth spacing.
- * In general, respondents have preference for large families. Only 1.2% of respondents stated an ideal family size of less than 2 children (replacement level fertility), 10.5% indicated an ideal family size of 2 children, 7.6% indicated an ideal family size of 3 children, 42.0% indicated an ideal family size of 4 children, 30.8% indicated an ideal family size of more than 4 children.

Recommendations:

Maternal and Child Health (MCH) programs need to focus on efforts to deal with unmet needs for family planning for Palestinian women.

Child and Infant Mortality

7.1 Introduction:

Estimates of child and infant mortality rates are parts of the most important health indices, which reflect the health status and social level of the community. Studies of these indicators and their levels and trends are important to demonstrate changes in health status through time. They contribute to the process of health surveillance and evaluation of the population health programs. Many countries set their health policies based on change of these indices. Developing countries develop hospitals and diagnostic services with high cost, while countries of the world adopt policies to support the primary health care services such as maternal and child health services. This supports programs that reduce child mortality due to common diseases especially vaccine preventable diseases. This policy results in a marked reduction in child mortality in most of the countries.

Generally, it is observed that countries with high fertility and high birth rates, as demonstrated later, suffer from high child mortality. There is a correlation between the two issues and one factor could cause the other. There are variations among countries in the reported child mortality. In 1999 under 5 years mortality rate was less than 5 per 1000 live births in Japan, Finland and Sweden. It was more than 200 deaths per 1000 live birth in Maley, Somalia and Angola. Afghanistan reported the highest rate of under five mortality of 275 per 1000 live births. This means, that more than a quarter of born children died before reaching five years of age ⁽¹⁾.

In 1994, a National Health plan was adopted in the Palestinian Territory ⁽²⁾. Accordingly, primary health services became the backbone of the Palestinian health care system. In this system women and child health has a top priority. One of the main goals to reduce morbidity and mortality among women and children. One of the strategic objective is stated as: "By the year 2000 to reduce Infant mortality rate by 30% of the present level ⁽²⁾". Years latter Maternal and Child Health centers are established, expanded and supported by the relevant health programs.

The strategic health plan for the years (1999-2003) calls for establishment of primary health care centers that provide maternal and child health services in the deprived areas in the Palestinian Territory ⁽³⁾.

Each health Indicator reflects a time period of child life. This chapter discusses four indicators that measure the level and trends of infant and child mortality rates. They are:

1. Neonatal Mortality: Probability of death in the first 28 days.
2. Post Neonatal Mortality: Probability of death after 28 days and before the end of the first year of life.
3. Infant Mortality: Probability of death during the first year of life. This includes the sum of the first and the second indicators.
4. Under five-year Mortality: probability of the children death before turning five years of age.

⁽¹⁾ World Health Organization. Annual Report (2000).

⁽²⁾ Ministry of Health. National Health Plan. Strategies and objectives, 1994.

⁽³⁾ Ministry of Health. National Strategic Health Plan. (1999-2003).

These rates are calculated by dividing the number of deaths during the specified period by the total number live of births in the same year and multiplying it by 1000. They are expressed as mortality rate per one thousand live births.

Each of these indicators reflects specific health hazards and reflects health services affecting the child life. For example: Neonatal mortality is mainly due to pre-maturity, congenital anomalies and complications of delivery. Reduction of neonatal mortality necessitates improvement of antenatal care and improvement of delivery place and neonatal services in hospitals. Post-neonatal mortality is mainly caused by respiratory and enteric diseases. These necessitate improvement of the environmental conditions and support of the primary health care services.

7.2 Data quality:

Accuracy of child and infant mortality rates depends on the capacity of investigators to have accurate numbers of total deaths in each period and accuracy of reported live births for the same population at the same time. Variation of the results in the Palestinian Territory is due to:

- 1- Incomplete registration of live births
- 2- Un-notified cases of deaths for different reasons
- 3- Variation of study designs and data collection whether by the direct or indirect methods

During the health survey 2000, in the Palestinian Territory, there was a real attempt to avoid problems in the previous registrations and health surveys:-

1. The sample includes all governorates in the West Bank and the Gaza Strip and includes urban, rural and refugee camps. The sample is a random multi-stage stratified cluster sample. It was appropriate to the population size in the area included in the survey⁽⁴⁾.

The calculation of child and infant mortality rates are based on the data collected in the third part of the questionnaire regarding reproductive history. Women were asked about the number of born children with details about name, sex and birth date. The same variables were reported for all deceased children beside date of death. It is worth-wise to mention that households were asked about two major events during life, birth and death. No one can forget these events. This will minimize the chance of recall bias in estimation of births and deaths. Active steps improved validity and reliability of the collected data. Training of the field workers and pilot study was conducted to test and improve validity and reliability of the collected data. Response rate was registered at a high 94%.

Data collected in this survey is exposed to some bias such as:

1. Inaccurate registration of birth and death dates leads to overlap of data. This may lead to a negative bias in estimation of Infant mortality. This effect is mild where the group that could be affected is those died in the twelfth month, which is always very low. During this survey the data was calculated by day for those who died in the first month and by month for deaths in the first two years of life and by year for death after the second year. This process minimizes the bias and improves the validity.
2. During determination of risk factors for infant and child deaths, the survey depends on questioning women about non documented variables such as years of education. This error

⁽⁴⁾ Palestinian Central Bureau of Statistics, 2000. Health Survey – 2000: Main Findings. Ramallah – Palestine.

remains among women in the middle class of education. The use of the scientific approach in the sample selection and training of the staff improve validity and give the chance for having a realistic data.

7.3 Mortality levels and trends:

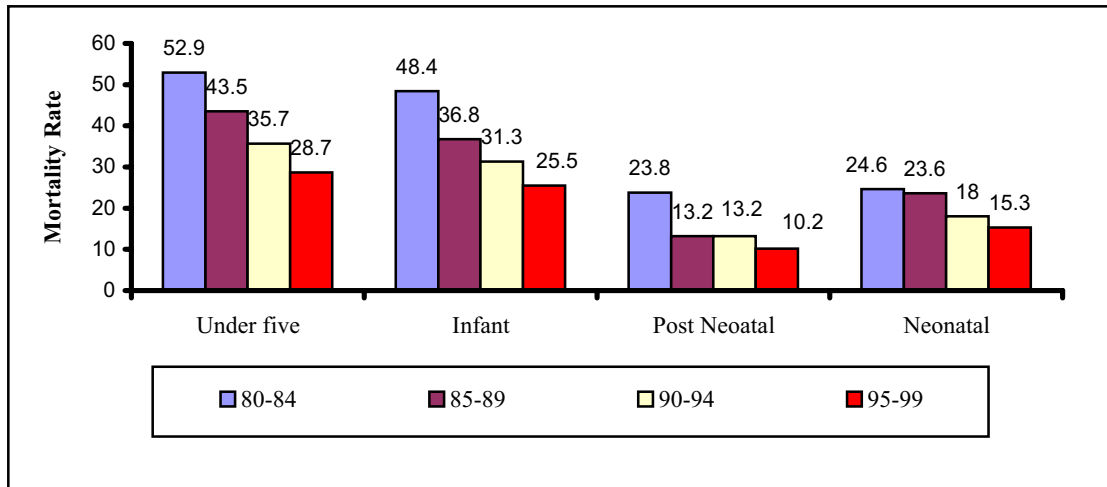
During the health survey 2000 infant and child mortality rates are estimated in the 20 years preceding the survey. The 20 years are divided to 4 periods, five years each.

Table (1.7) and figure (1.7) demonstrate a gradual regular decline in mortality rates through time. Neonatal mortality is reduced from 24.6 in the first period (1980-1984) to reach 15.3 per thousand live births in the last 5 years. Post-neonatal mortality rate is reduced from 23.8 in the first period to reach 10.2 per 1000 live birth in the last 5 years. This is reflected on infant mortality where probability of infant death is the sum of neo-natal and post-neonatal probability of death. During the first period (1980-1984) infant mortality was 48.4 and dropped to reach 25.5 per 1000 live births in the last five years after gradual decline through the past 20 years. Under five mortality was reduced by the same pattern from 52.9 in the first period to reach 29.7 per 1000 live birth in the last 5 years.

Table 7.1: Direct estimates of infant and child mortality rates for selected years by region

Years preceding Survey	Neonatal Mortality	Post neonatal Mortality	Infant Mortality	Under 5 Mortality
Palestinian Territory				
1980-1984	24.6	23.8	48.4	52.9
1985-1989	23.6	13.2	36.8	43.5
1990-1994	18.0	13.2	31.3	35.7
1995-1999	15.3	10.2	25.5	28.7
West Bank				
1980-1984	25.8	25.6	51.4	55.1
1985-1989	26.0	11.4	37.4	42.6
1990-1994	17.2	10.7	28.0	30.7
1995-1999	14.6	9.8	24.4	27.2
Gaza Strip				
1980-1984	22.4	20.8	43.1	49.3
1985-1989	19.9	16.0	35.9	45.1
1990-1994	19.2	17.0	36.2	43.2
1995-1999	16.4	10.9	27.3	31.2

Figure 7.1: Direct estimates of infant and child mortality rates per 1000 live birth for selected years



7.4 Estimated mortality rates by direct methods:

When the child’s age increases the risk of death decreases. Neonatal mortality (less than 29 days) equals Post-neonatal mortality (29-365 days) in the first period. In the last 5 year period neonatal mortality rate is 1.5 times higher than post-neonatal rate. This indicates the high risk in the first 4 weeks of life when compared with the following months of the first year of life.

Figure 7.2: Direct estimates of infant and child mortality rates per 1000 live birth for selected years by region

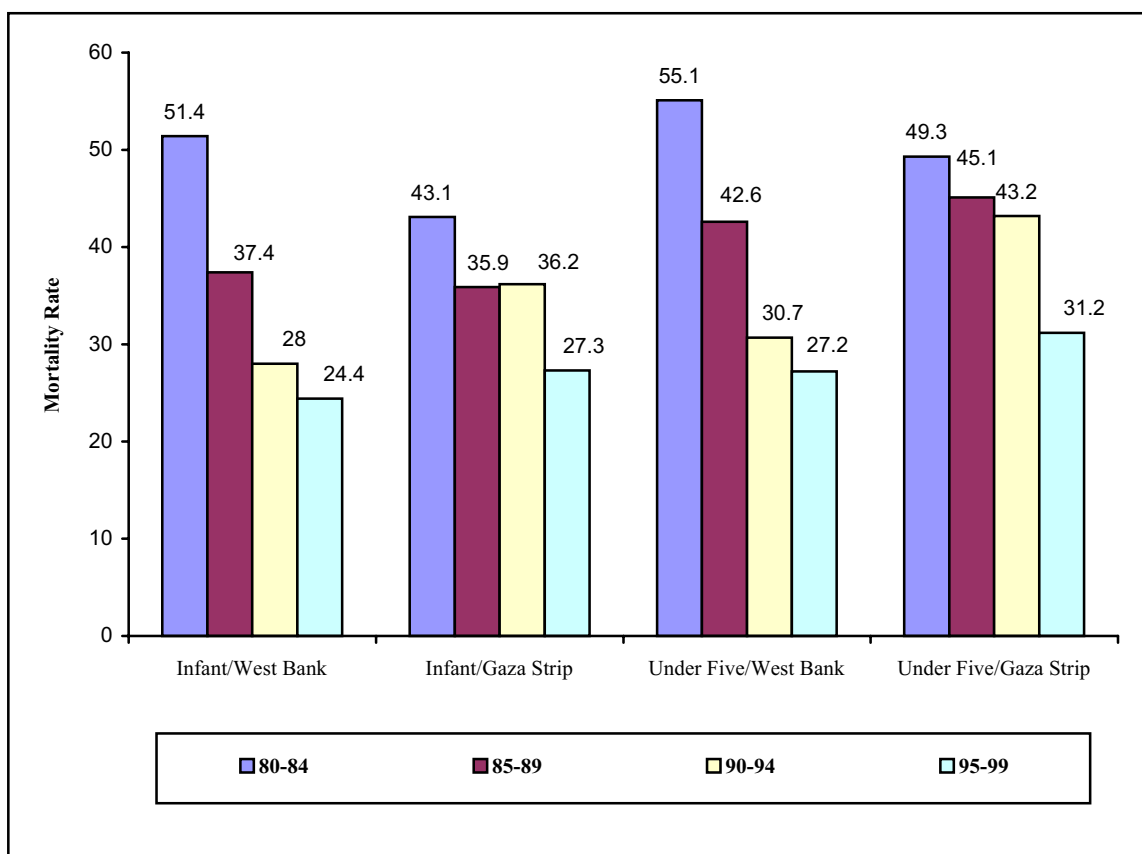


Table (7.1) and figure (7.2) demonstrate the same trend of decline in infant and child mortality in both Gaza Strip and the West Bank. The rates were higher in the West Bank than Gaza strip in the first 5 years (1980-1984). Infant mortality was 51.4 per thousand in the West Bank and 43.1 per thousand in Gaza Strip. Under five mortalities were 55.1 per thousand in the West Bank and 49.3 per thousand in Gaza Strip. The same table and figure demonstrate a better situation in the last 5 years (1995-1999) than the rates for Gaza Strip. Infant mortality rate in the West Bank dropped to 24.4 per thousand and to 27.3 in Gaza Strip per thousand. Under five-year mortality in the West Bank reached 27.3 per thousand and 31.2 per 1000 live birth in Gaza Strip

Changes in the mortality trends in the two regions are referred to two major reasons. The first is the expansion of the Maternal and Child Health centers especially in the West Bank. These centers provide the population with better health services that reduce mortality. The second reason is improvement in data collection that resulted in more accurate rates.

Generally, the regional differences are small while the decline of infant and child mortality is higher in the West Bank than Gaza Strip.

Decline of infant and child mortality rates in the present estimation in health survey-2000 exceeds the estimates of the demographic survey 1995 for the West Bank and Gaza Strip. The estimated infant mortality for the Palestinian Territory for the year 2000 was 30.3 compare to 25.5 per thousand in the present survey. Estimated infant mortality was 30.98 for the West Bank and 29.47 for the Gaza Strip, while the present direct estimate for infant mortality is 24.4 and 27.3 per thousand respectively for the two regions ⁽⁵⁾.

There are similarities between previous health surveys of the West Bank and Gaza Strip (1993-1997) completed by indirect method for estimation of infant and child mortality and the health survey -2000 estimation. The final report of the demographic survey for the West Bank and Gaza Strip (August 1997), shows that infant mortality in the last 5 years preceding the survey was 27.3 per-thousand in the Palestinian Territory. Neonatal mortality was 16.3 and post neonate mortality was 11.3 per 1000 live birth. Under five Mortality was 33.2 per thousand. The same results showed higher rates in Gaza Strip than in the West Bank. The estimations in this survey were by direct method. Time factor between the demographic survey 1995 and the health survey - 2000 may be the cause of lower rates in the recent survey ⁽⁶⁾.

Palestinian Central Bureau of Statistics (September 1999) estimated infant mortality for the period 1997-2000 in the Palestinian Territory to be 22.7 per thousand. It was 21.1 for the West Bank and 25.1 per thousand for Gaza Strip ⁽⁷⁾.

Reported infant and child health mortality rates by Ministry of Health is less than the rates reported by the health survey-2000. The ministry of Health reported infant mortality at 20.1 per-thousand in Gaza Strip and 12.6 per-thousand in the West Bank. Under five-year mortality rates were 25.5 in Gaza Strip and 17.5 per thousand in the West Bank. The Ministry's report refers to probability of under reporting where deaths included in the report are those notified and registered to official health offices ⁽⁸⁾.

⁽⁵⁾ Palestinian Bureau of Statistics, 1994. Demography of the Palesinian people in the West Bank and Gaza Strip. Current Status Report, No. (1).

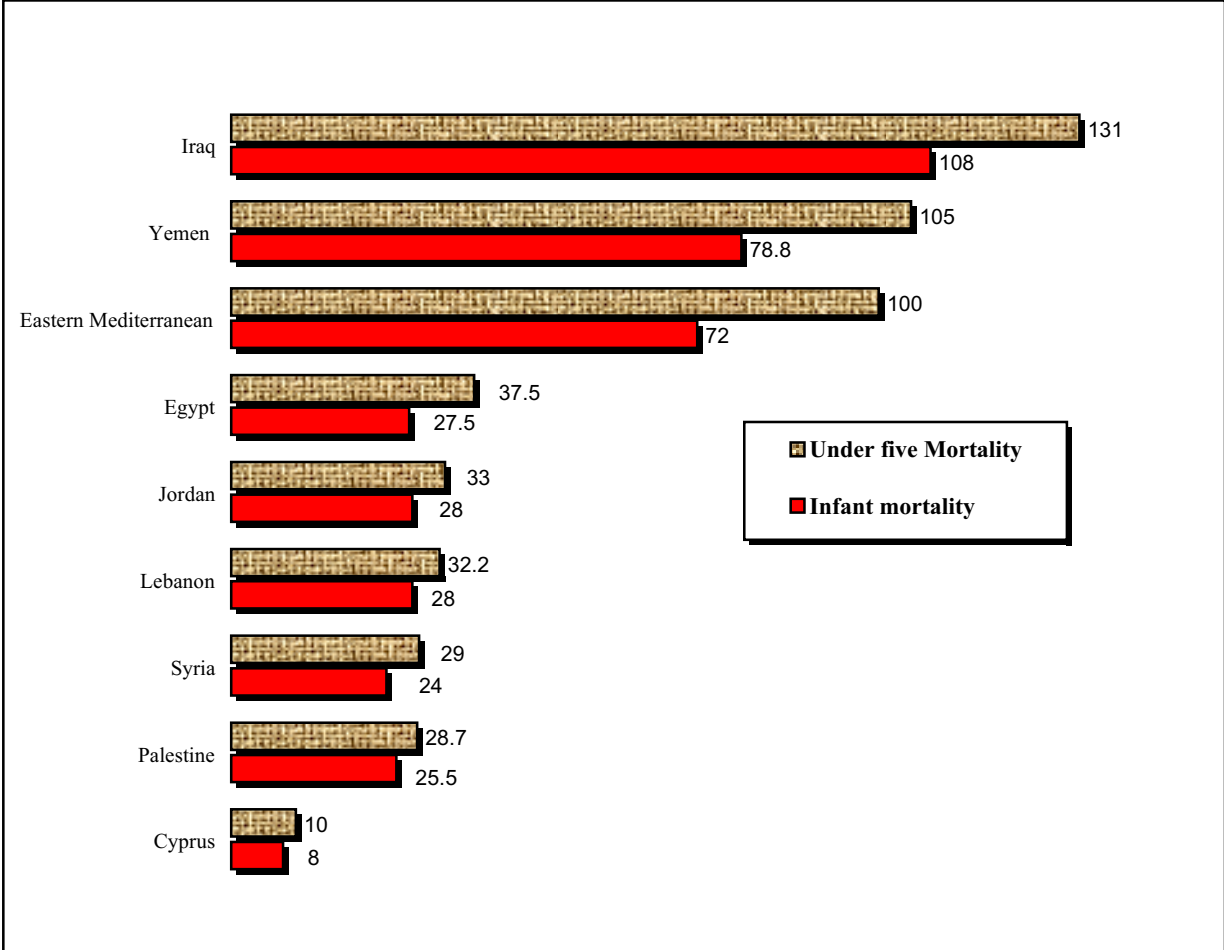
⁽⁶⁾ PCBS, 1997. Demographic Surrey in the West Bank and Gaza Strip, 1997: Final Results.

⁽⁷⁾ PCBS, 1999. Population in the Palestinian Territory (1997-2025).

⁽⁸⁾ Palestinian National Authority. Ministry of Health, the Status of Health in Palestine. Annual Report, 1997, Palestine.

Figure (7.3) compares infant and child mortality as reported in the health survey 2000 in the Palestinian Territory with the mortality rates in some of the Eastern Mediterranean region as reported by the World Health Organization in 1999. Infant and child mortality in the Palestinian Territory are less than the reported rates in the neighboring countries and less than the average of the reported rates in the Eastern Mediterranean Region⁽⁹⁾.

Figure 7.3: Comparison of infant and child mortality in the Palestinian Territory with the mortality rates in some of the Eastern Mediterranean Region (1999)



Source: WHO-EMRO (1999).

7.5 Risk factors for infant and child mortality:

This chapter discusses some possible risk factors for infant and child mortality indicated in the health survey-2000 in the Palestinian Territory. These risk factors are compared with similar risk factors studied during health surveys in Arab countries like Egypt, Jordan, Yemen and Libya. Other risk factors could not be explored from the available data.

- 1. Sex:** The results of the health survey 2000 (table 7.2) demonstrated equity between males and females regarding infant and child mortality. Probability of death among males is higher than females during the neonatal period, while probability of females death during post neonatal period is higher. Similar results are reported in health surveys in Egypt, Jordan, Yemen and Libya. The Demographic survey (1995) showed more differences in mortality than the health survey 2000. Infant mortality was 30.3 per

⁽⁹⁾ EMRO: Demographic and Health Indicators for the Eastern Mediterranean, Annual Report 1999.

thousand among males and 24 per thousand among females. Under five mortality was 36.7 per thousand for males and 29.3 per thousand for females. The results of health survey 2000 exclude presence of differences among males and females on the social level and health services provision level in the Palestinian Territory.

- 2. Mother's education:** Table (7.2) shows that the probability of infant and child mortality decreases as education levels increase. Women with low education level have children with Neonatal Mortality (17.3 per thousand) three times higher than neonates of women with high education level (5.1 per thousand). There is similarity between the health survey findings in the Palestinian Territory and findings of health surveys conducted in Arab countries. The same findings were reported in the projections which were published by PCBS in 1999⁽¹⁰⁾ that demonstrated inverse relationship between childhood mortality and the educational level of the mother.

Table 7.2: Direct estimates of infant and child mortality rates for five years preceding the survey by selected background characteristics (1995-1999)

Background Characteristics	Neonatal Mortality	Post neonatal Mortality	Infant Mortality	Under Five Mortality
Sex				
Males	16.3	9.0	25.3	29.1
Females	14.1	11.5	25.6	28.3
Education				
Less than secondary	17.3	11.3	28.6	32.1
Secondary	11.6	7.4	18.9	22.2
Secondary +	5.1	6.0	11.1	12.0
Type of locality				
Urban	15.7	9.7	25.4	28.8
Rural	11.7	8.9	20.6	23.5
Camp	20.1	14.1	34.2	37.5
Region				
West Bank	14.6	9.8	24.4	27.2
Gaza Strip	16.4	10.8	27.3	31.2
Palestinian Territory	15.3	10.2	25.5	28.7

- 3. Type of locality:** According to the results presented in table (7.2), the residents of camps have the highest infant and child mortality rates. Residents of the rural areas have the lowest probability of death for the same age groups. According to health surveys conducted in neighboring countries rural areas reported higher infant and child mortality rates than the urban areas. The demographic survey (1995) showed higher risk of infant and child mortality in the villages. Variation between results could be due to changes in operational definition of a village.
- 4. Region:** The results of the health survey 2000 show that infant mortality (neonatal and post neonatal) and under five mortality rates in Gaza Strip are slightly higher than those of the West Bank in (1995-1999). These differences were discussed in the section of levels and trends.
- 5. Mother's age:** The lowest child mortality rates are reported among women aged 20-29 years. Probability of child death increase when mothers age is less than 20 years. After the age of 30 years, the probability of child death increase to reach the highest level when

⁽¹⁰⁾ PCBS, 1999. Population in the Palestinian Territory (1997-2025).

women are 45 years and over. The results of the health survey in the Palestinian Territory are similar to the findings of the health surveys of Egypt and Jordan. However surveys of Yemen and Libya do not show similar results.

Table 7.3: Relationship between proportion of children death by mother's age and region

Mother's Age	Percentage of children death		
	West Bank	Gaza Strip	Palestinian Territory
15-19	3.0	5.0	4.0
20-24	2.0	4.0	3.0
25-29	3.0	3.0	3.0
30-34	3.0	4.0	4.0
35-39	4.0	5.0	4.0
40-44	6.0	6.0	6.0
45-49	8.0	4.0	7.0

6. Parity: Table (7.4) shows that probability of death one child increase when parity increases to reach the highest probability for women who delivered 8 children or more. The same table shows that probability of two deceased children and more increase as parity increases. These results match in accordance with the results of the health surveys of Egypt Jordan, and Yemen.

Table 7.4: Relationship between number of children ever born and number of deceased children

Number of Children	Number of Deceased Children		
	One Child	Two Children	Three Children and more
Ever born			
1 - 3	3.4	0.2	0.0
4 - 7	13.3	2.5	6.3
8 +	26.1	9.5	7.2

Inverse relationship can be observed when comparing crude birth rates and infant mortality rates in selected countries in the World. Table (7.5) demonstrates this relationship and confirms our findings in the health survey 2000 in the Palestinian Territory, regarding the relationship between child mortality and high fertility.

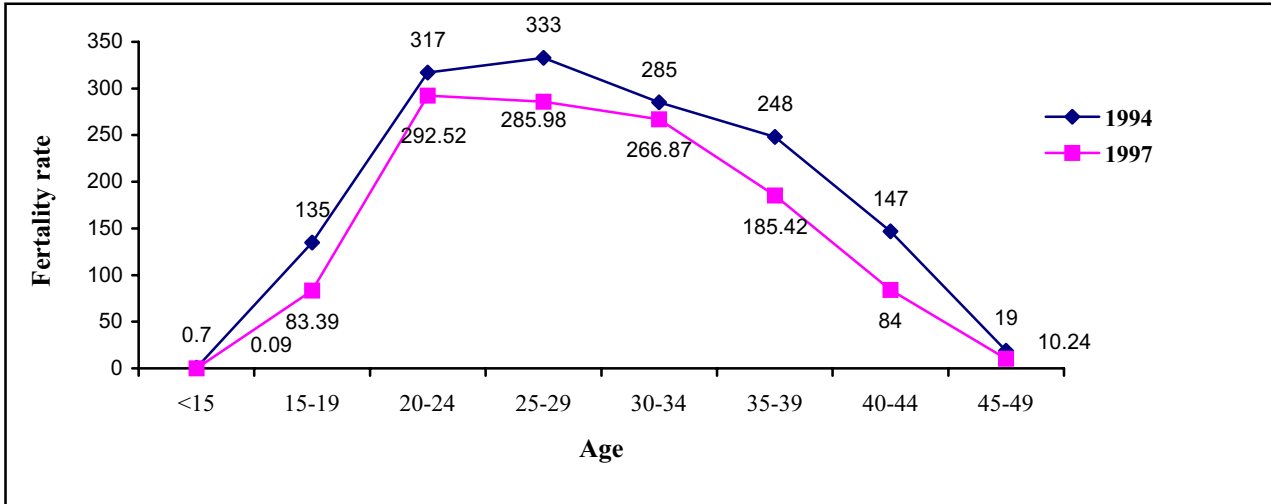
Table 7.5: Crude birth rate and infant mortality rate in selected countries (WHO report 1996)

Country	Infant mortality rate	Crude death rate
Afghanistan	154.4	53.4
Uganda	112.8	51.1
Somalia	111.9	50.0
Egypt	54.4	26.1
Turkey	43.7	21.9
United kingdom	6.1	11.9
Switzerland	5.1	10.9

Source: World Health Statistics 1996.

This risk factor is under-control in the Palestinian Territory. The ministry of Health report shows a decline in total fertility rate especially among women at high risk (Figure 7.4).

Figure 7.4: Total fertility rate by age for the years 1994-1997 in the Palestinian Territory



Source: Ministry of Health . *Annual Report of health status in Palestinian Territory 1997.*

The relationship between antenatal care and infant and child mortality cannot be examined because 95% of women in the Palestinian Territory received antenatal care. This also makes comparison a difficult task. The question about quality of antenatal care needs more investigations.

7.6 Causes of infant and child deaths:

According to the Ministry of Health report, pneumonia, respiratory diseases, congenital anomalies, prematurely and septicemia's are the main causes of infant mortality. The main causes of death among under five children are pneumonia, respiratory disorders, accidents and congenital anomalies. A large proportion of these mortalities are preventable⁽¹¹⁾. Health Survey 2000 does not explore causes of infant and child mortality.

⁽¹¹⁾ Palestinian National Authority, Ministry of Health, the Status of Health in Palestine. Annual Report, 1997. Palestine.

Executive summary:

Results of the health survey 2000, in the Palestinian Territory showed that infant and child mortality rates are acceptable when compared with the countries in the region. Moreover, these rates do not reach the level of developed countries. Neonatal and post neonatal and the under five mortality rates declined in the past 20 years in both Gaza Strip and the West Bank. There are no major differences in these rates between the two areas. These rates are equal for both males and females. The results pointed risk factors for mortality mainly mother's age, women less than 20 years and more than 30 years of age. The second risk factor is the parity where the probability of death increases as parity increases. Mother Education has a major role where probability of child death is higher among less educated mothers. The highest child mortality rates reported in the refugee camps, while children in rural areas have the lowest probability of death. Causes of death are not mentioned in this survey. Moreover the data of the Ministry of Health could be used to define main causes of deaths and to plan for the relevant health programs to minimize infant and child mortality rates. More efforts are required to reduce infant and child mortality rates. This necessitates support of primary health care programs and care of pregnant women. Improvement of maternity's and neo-natal departments are required to reduce neonatal mortality

Recommendations:

1. Continuity of health surveys to define the main causes of infant and child deaths and the related risk factors.
2. Support of women health by encouraging education, provision of antenatal and postnatal care and discouragement of early marriage.
3. Coordination between the national health services and UNRWA services to work together to reduce infant and child mortality in the refugee camps.
4. Reduction of neonatal mortalities by all health providers by:-
 - a) Support of antenatal care and family planning programs.
 - b) Improvement of maternity sections in the hospitals to ensure safety for the mother and the newborn
 - c) Proper management for premature births.

Chapter Eight

Maternal Care

8.1 Introduction:

Maternal care is one of the most important elements of reproductive health because it reduces mortality rates among mothers and the neonatal as well as the complications of pregnancy and delivery. Regular prenatal care is essential since it helps uncover health risks and threats to mothers and children's health. Also, such care helps provide tetanus vaccination and prevent anemia. It provides health education and support to pregnant women who are need of such support during pregnancy.

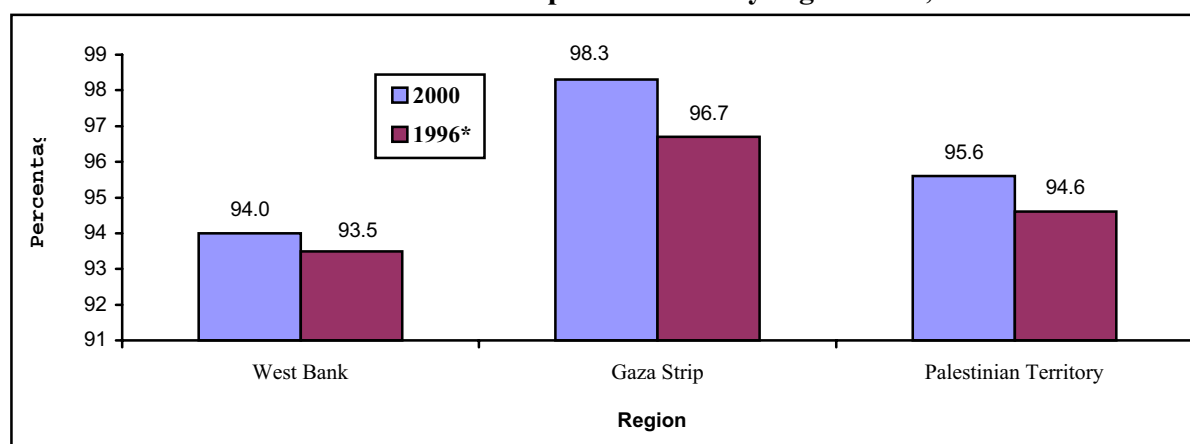
The World Health Organization (WHO) calls for early prenatal care and assures that pregnant women should visit a health center at least four times during "normal" pregnancy. The requirements are found in the Palestinian Reproduction Manual of 2000, which states that all pregnant women in the Palestinian Territory should receive regular prenatal care. Women should pay 6-8 visits to care centers in normal pregnancy and more than that in case of risk.

The health survey - 2000 included several questions about pre and postnatal care during the three years preceding the Survey. The questions required information such as whether the mother received prenatal care or not, the place where such care was provided, the quality of the healthcare services, the reason behind not receiving such care, complications during pregnancy and delivery, and health education.

8.2 Prenatal care:

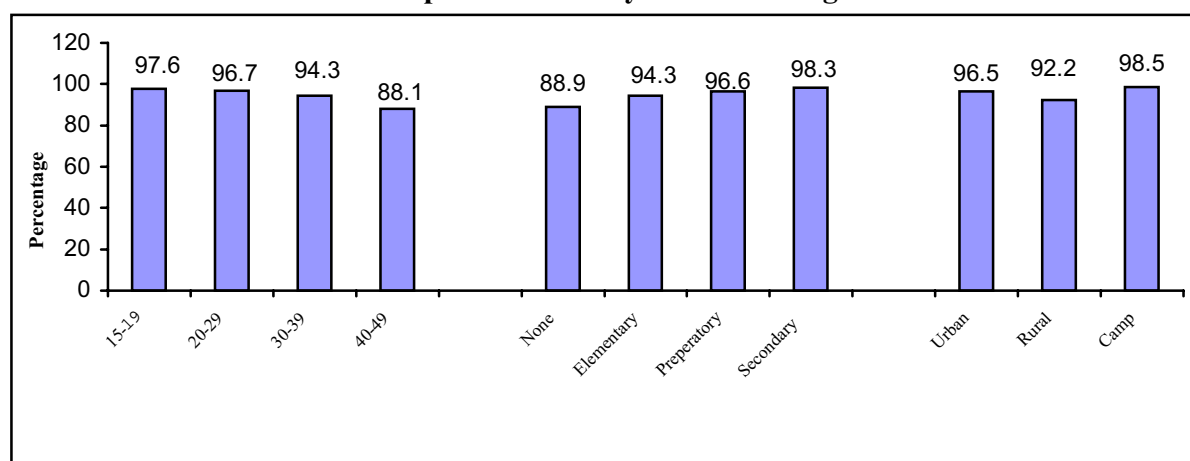
Figure (8.1) shows that 95.6% of women obtained prenatal care during the three years preceding the survey including 94% in the West Bank and 98.3% in Gaza Strip. The figure reflects an improvement from 1996 when the percentage was 94.6% (93.5% for the West Bank and 96.7% in Gaza Strip). The considerations were based on mothers' statements regarding visiting maternal care centers even for one time.

Figure 8.1: Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by region 1996,2000



Source: Palestinian Central Bureau of Statistics, 1997. *The Health Survey of the West Bank and Gaza Strip 1996,, Main Findings*. Ramallah, Palestine.

Figure 8.2: Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by selected background characteristics



According to Figure 8.2, younger and more educated women living in camps benefit most from the prenatal care. Moreover, 97.6% of women aged 15-19 years received such services, whereas only 88.1% of those in the age group of 40-49 years, which is the most susceptible to pregnancy complications, received prenatal care. Results indicate that 18.0% of the West Bank women aged 40-49 did not receive prenatal healthcare, which is higher than Gaza Strip where only 3.0% of women of the same age group category did not receive such care¹.

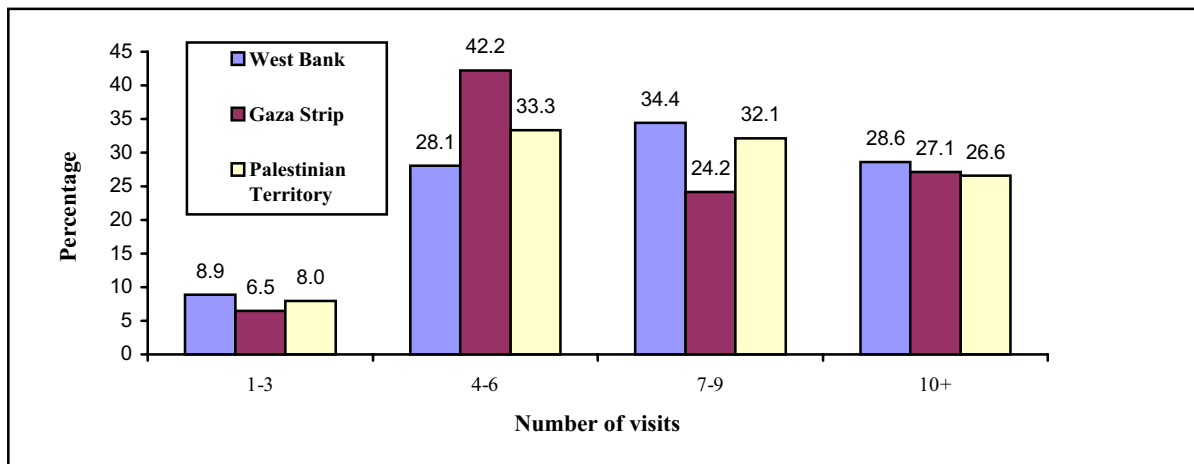
Surveys in countries around the world proved that education is one of the most significant factors in determining women’s benefiting from health services. The health survey-1996 proved that this fact is true for the Palestinian Territory since 98.3% of women who achieved high school education or beyond that received prenatal care. On the other hand, the percentage for

¹ Palestinian Central Bureau of Statistics, 2001. The health survey-2000 database.

uneducated women who received prenatal care is 89.0%. Results also showed that women living in camps pay more visits to healthcare centers, where the UNRWA provides free of charge services. Still, according to results, 8.0% of rural women did not receive prenatal care due to distance and the difficulties to reach to healthcare centers, which are not available in small localities.

8.2.1 Number of visits:

Figure 8.3: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by number of visits and region, 2000



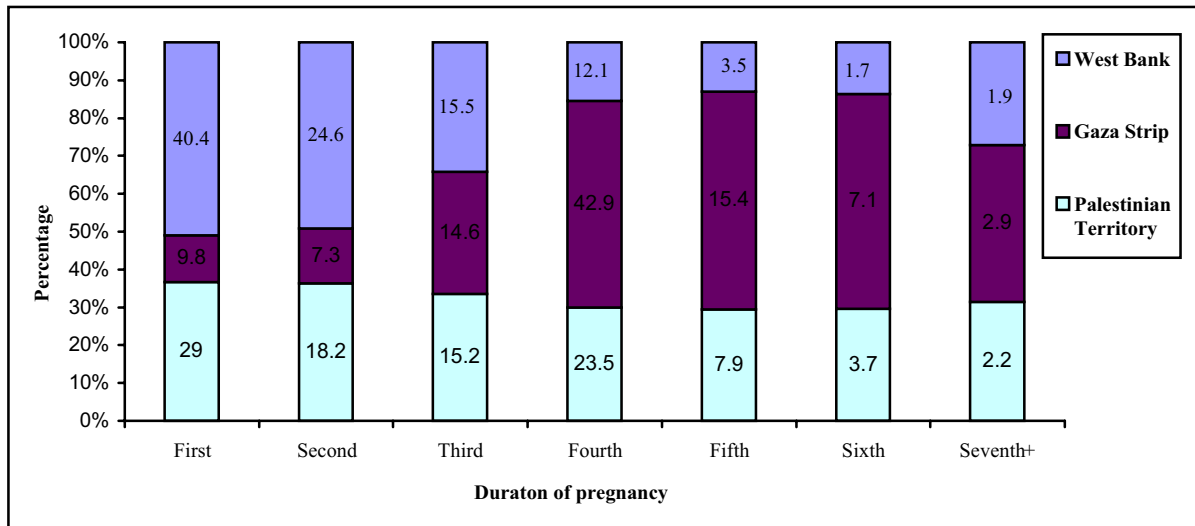
The WHO recommends that pregnant women should pay at least four visits to healthcare centers; the visits need to be distributed on the 1st, 2nd, and 3rd trimesters.

According to the survey results, 92.0% of women who gave birth during the three years preceding the survey visited healthcare centers at least 4 times; at 91% and 93.5% for the West Bank and Gaza Strip respectively. More than half of women visited such centers seven or more times (see figure 8.3). This indicates that women are aware of the importance of prenatal care. Some studies of Palestinian NGOs (such as the Health Survey of the West Bank and Gaza Strip by HDIP in 1998) came out with similar results revealing that the average number of visits paid by pregnant women to healthcare centers is 7.5 times. Additionally, results show that only 8.0% of women who did receive healthcare during pregnancy paid the less than the minimal number of visits of 1-3 times (8.9% in the West Bank and 6.5% in the Gaza Strip.)

8.2.2 Duration of pregnancy at first visit:

The first months of pregnancy are always troublesome, henceforth, WHO emphasizes the importance of receiving prenatal care during such period. Early prenatal health follow-up allows specialist the opportunity to provide care and advice in order to avoid any future complications.

Figure 8.4: Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by duration of pregnancy at first visit and region

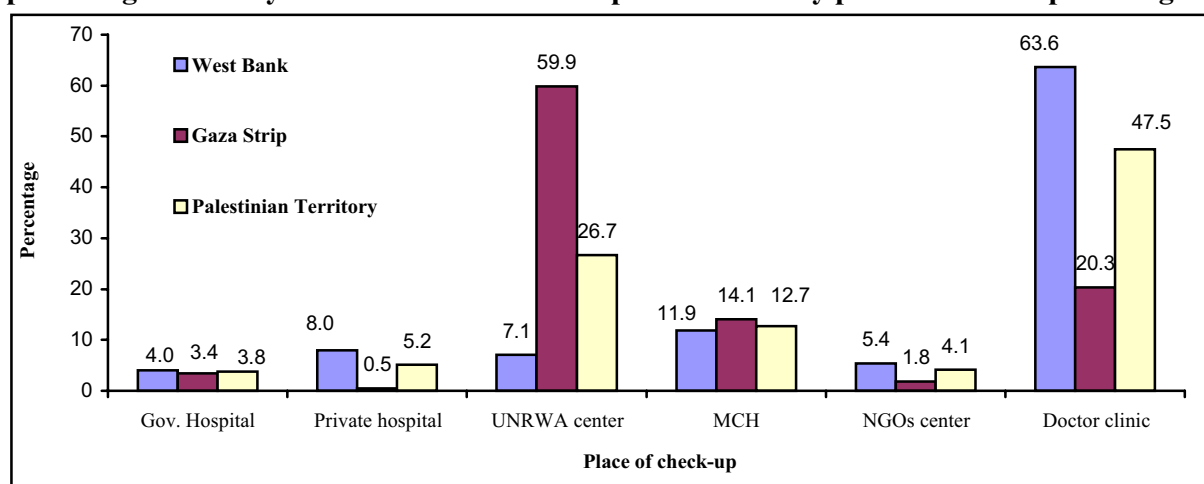


According to the figure above, 40.4% of the West Bank’s pregnant women visited care centers in the first month of pregnancy. In Gaza Strip, however, 10% of women of the aforementioned category received care in the first month of pregnancy and 42.9% obtained such care during the fourth month. This is in line with the UNRWA prenatal care programs, which allow pregnant women to receive prenatal care at the start of the fourth month. Results indicate that 86.0% (92.6% in the West Bank and 74.6% in the Gaza Strip) of women who gave birth during the three years preceding the survey received prenatal care during the first and fourth months of pregnancy.

8.2.3 Place of check - up:

Figure 8.5 states that private clinics occupy the first place on the list of prenatal healthcare providers at 47.5%, followed by the UNRWA centers at 26.7%, and MCH centers at 12.7%. Though MoH provides free healthcare services for pregnant women, it occupies the last place on the list perhaps because there is a widespread belief that the Ministry’s services are of a lesser quality.

Figure 8.5: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by place of check-up and region



71.6% of the pregnant women of the West Bank go to private clinics for prenatal care and 20.8% of women in the same category obtain the same private services in Gaza Strip. This outstanding variation could be the result of the economic hardship, which has taken its toll on the residents of Gaza Strip more than the people of the West Bank. However, one must not forget that 60% of Gazan pregnant women go to UNRWA clinics for prenatal care since they are abundant there where the majority of people are refugees.

In any case, 57.0% of pregnant women pay for the health services they get whether at private or at the NGOs' centers. On the other hand, the MoH and UNRWA pays for the rest (43.0%).

8.2.4 Personnel providing prenatal care:

Table (8.1) indicates that 78.3% of pregnant women received prenatal care provided by doctor whereas 32.6% received care from a midwife/nurse. There is a tiny percentage of women who received prenatal care from just a daya. Noticeably, that prenatal care provided by skilled health persons in the Palestinian Territory and women are more aware of the fact that dayas cannot be relied on for pregnancy care (though, according to the Health Survey - 2000, 2.7% of deliveries were under dayas' supervision).

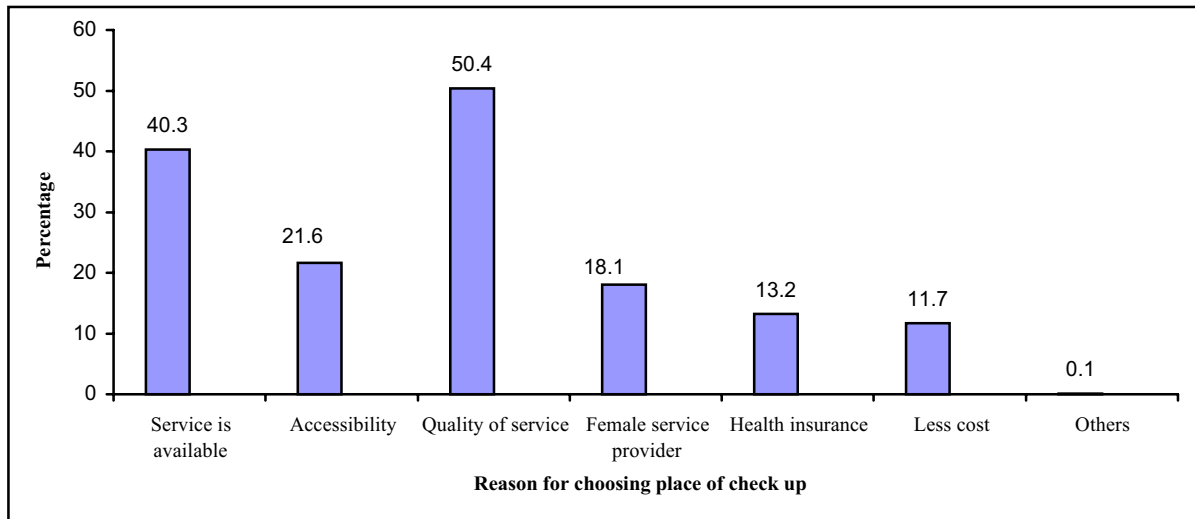
Table 8.1: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by personnel provided care and region

Region	Personnel provided care					Number of births
	Doctor	Nurse/midwife	Daya	None	Others	
Palestinian Territory	78.3	32.6	0.3	0.1	0.1	295,621
West Bank	93.1	10.2	0.2	0.2	0.1	186,015
Gaza Strip	53.2	70.6	0.3	0.0	0.0	109,606

There is a major variation between the West Bank and Gaza Strip in terms of healthcare provider since 93% of the first region's pregnant women went to doctor for care and only 10% received

the services of a nurse/midwife. In Gaza Strip, on the other hand, the majority of women get their care from a nurse/midwife. This variation is the result of the UNRWA health policy, which depends largely on nurses/midwives. There are no variations between both regions in terms of relying on just a daya.

Figure 8.6: Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by reason for choosing place of check-up



According to Figure (8.6), 50.4% of respondents chose healthcare centers because of the quality of services they provided. Alternatively, 40% relied on the availability of needed services in choosing the care providing centers and 21.6% choose easy to reach centers. 11.7% of respondents choose such place due to less cost. Services availability is crucial but the quality of the services is another essential element that exceeds availability, costs, and easy to reach factors. 18% of respondents choose their healthcare centers due to female service provider.

However, table (8.2) presents the fact that respondents choose public health institutions and UNRWA clinics for having prenatal care due to availability of the service and health insurance coverage. The quality of services is the main reason for choosing private health institutions and choosing a public health center relied mostly on easy access.

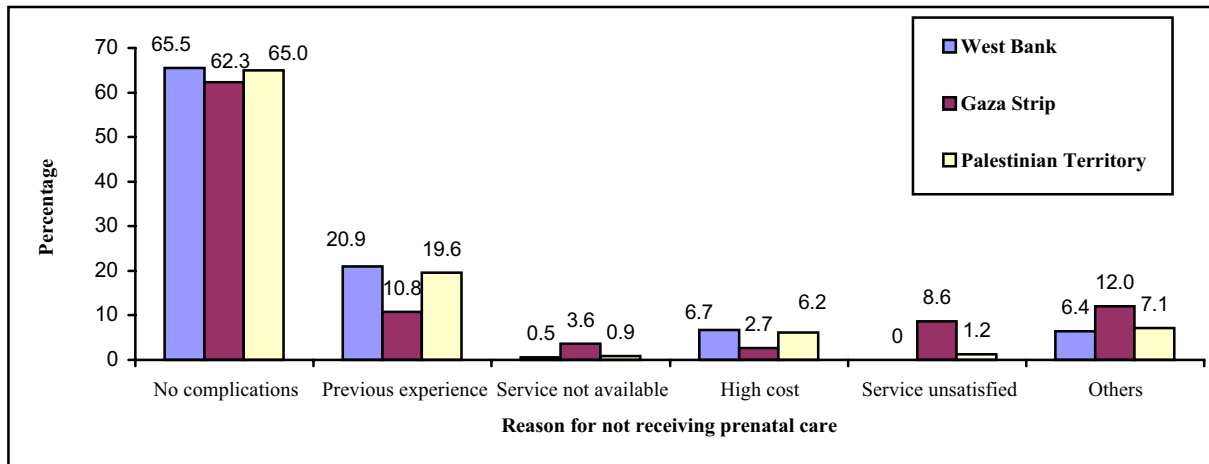
Table 8.2: Percentage of births (last two) born in the last three years preceding the survey whose mothers received prenatal care by place of check-up and reason for choosing it

Healthcare institution	The reason for choosing a healthcare institution							Number of births
	Services available	Accessibility	Quality of services	Female care provider	Health insurance covers services	Less costs	Others	
Gov. hospital	39.0	31.2	23.2	10.8	32.8	10.9	0.0	11,278
Private hospital	34.5	20.6	47.3	7.3	20.2	5.3	0.0	15,334
UNRWA center	60.8	31.2	36.7	26.8	22.6	30.7	0.0	78,900
Gov. health center	40.4	44.0	27.5	14.4	15.2	12.9	0.0	30,820
MCH	50.8	27.2	39.4	18.1	9.8	6.5	0.0	6,805
Private clinic	29.9	9.8	67.7	15.3	5.2	1.6	0.1	140,476
NGOs' health center	30.6	27.3	32.6	22.9	14.6	14.3	0.0	12,008
Total	40.3	21.6	50.4	18.1	13.2	11.7	0.1	295,621

33.0% of those who choose NGOs' health centers relied on the good quality services they provided and 23.0% of them choose them for having a female specialist.

8.2.5 Reasons for not receiving prenatal care:

Figure 8.7: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers did not receive prenatal care by reason and region



It is important to know the obstacles that prevent women from receiving prenatal care, therefore, women were asked about the reason behind not receiving prenatal care. 65% of them referred to having no pregnancy complications (65.5% for the West Bank and 62.3% for Gaza Strip), 19.6% (20.9% and 10.8% for both regions respectively) stated that they were not in need of care since they had had the experience, 6.2% (in the West Bank at 6.7% and in Gaza Strip at 3%) blamed

high costs, 1% said that services had not been available, and 1.2% were unsatisfied with the quality of such healthcare services (see figure 8.7).

The West Bank and Gaza Strips' figures are fairly close in terms of not receiving prenatal care due to having no complications. They vary when it comes to having the previous experience and blaming it on the cost since most people in Gaza Strip receive the free health services the UNRWA provides. Being not satisfied with the services, which is an indicator to quality, is not a prominent factor in the West Bank but a significant one in Gaza Strip.

8.2.6 Pregnancy complications:

Respondents were asked about health problems during pregnancy such as urinary system infection, vaginal bleeding, high blood pressure, symptoms of premature birth, and gestational diabetes or eclampsia.

Figure 8.8: Percentage of births (last two) born in the last three years preceding the survey whose mothers encountered pregnancy complications by type of complication and region

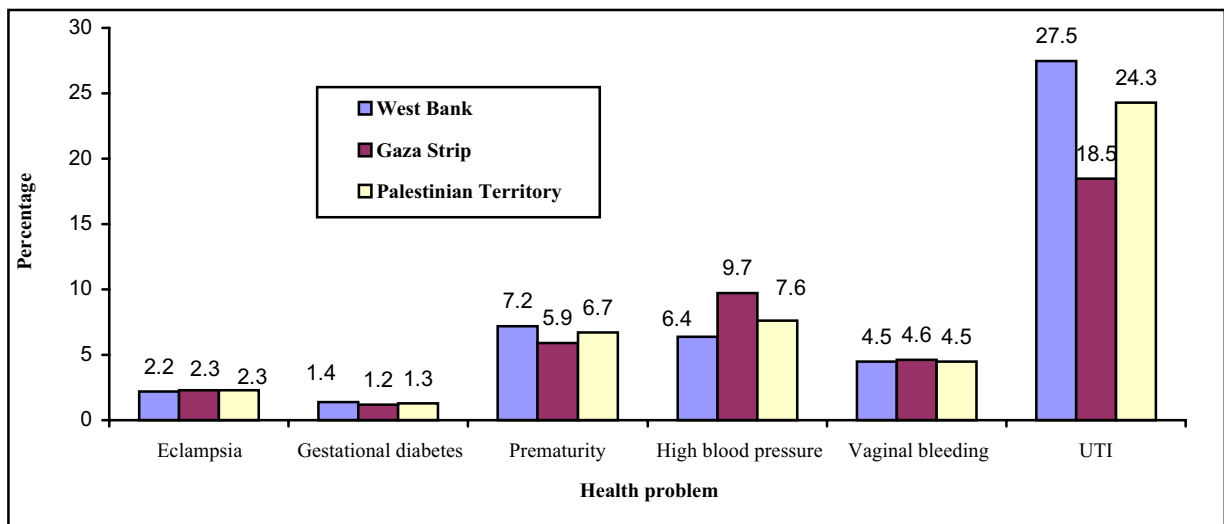


Figure (8.8) states that 24.3% of pregnant women had urinary system infection, which turned to be the most common problem among women during pregnancy. The problem was more inherent in the West Bank than in Gaza Strip at 27.5% and 18.5% respectively. Also, 7.6% of respondents suffered high blood pressure including 6.4% and 9.7% for both regions respectively. Premature birth symptoms were more prominent in the West Bank than Gaza Strip and stood at 7.2% whereas in Gaza Strip, they stood at 5.9%. Gestational diabetes and eclampsia reached 1.3% and 2.3% respectively.

Table 8.3: Percentage of births (last two) born in the last three years preceding the survey whose mothers have had certain health problems by Type of problem and selected background characteristics

Background characteristics	Health problem during pregnancy					
	Eclampsia	Gestational Diabetes	Prematurity	High blood pressure	Vaginal bleeding	UTI
Mothers' age						
Less than 30	1.8	0.7	6.7	5.3	4.1	26.0
30-49	2.9	2.3	6.7	11.3	5.3	21.4
Mothers' educational attainment						
None	3.4	2.5	4.5	10.0	4.2	21.9
Elementary	1.6	1.5	6.8	8.8	3.5	23.8
Preparatory	2.5	1.0	7.6	7.0	5.3	27.0
Secondary and above	2.0	1.0	6.5	6.3	4.6	22.2
Type of locality						
Urban	2.0	1.4	6.9	6.3	4.3	23.2
Rural	2.7	1.1	6.3	8.2	4.4	26.0
Camp	2.4	1.3	6.9	11.2	5.6	24.8

In light of the data above (table 8.3) older uneducated women are more subject to high blood pressure, gestational diabetes, and eclampsia than the other categories. Camps' women dwellers suffered from high blood pressure than those living in rural and urban areas at 11.2%, 8.2%, and 6.3% respectively. The variations in regard of the other health problems are minimal.

8.2.7 Vaccination against tetanus:

Vaccination against tetanus during pregnancy is very important. It protects the newly born from neonatal tetanus, which is one of the main causes of infant mortality in the developing countries especially when delivery takes place at home. However, the percentage of vaccination against tetanus is low though MoH, UNRWA, and health NGOs stress the need for it. The vaccination is taken in three doses; during the first visit to a healthcare center, one month from the first dose, and one-year after the first dose. Survey's data confirm that 20.3% of women who gave birth during the year preceding the survey received only two doses last within three years. On the other hand, 7.2% took the three doses last within ten years. In total, 27.5% were vaccinated against tetanus (see table 8.4).

Table 8.4: Percentage of mothers who gave birth during the last year preceding the survey and received tetanus toxoid by selected background characteristics and number of doses

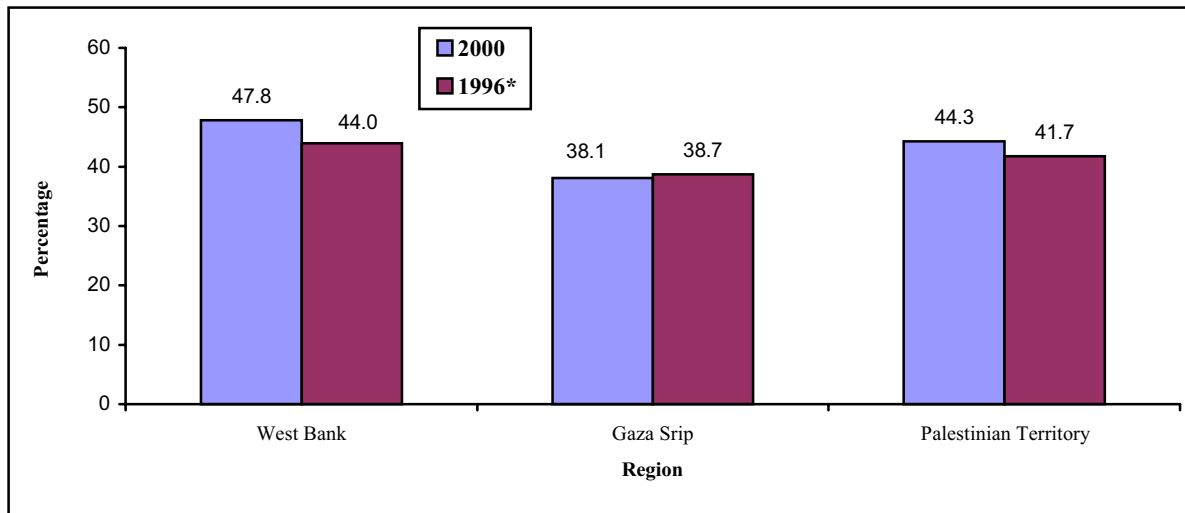
Background characteristics	Number of tetanus vaccine doses				Number of women
	2 doses last within 3 years	3 doses last within 10 years	5 doses during life time	Received tetanus toxoid	
Mother's educational attainment					
None	21.1	4.7	0.0	25.8	11,891
Elementary	17.8	6.0	0.0	23.8	26,086
Preparatory	18.6	7.5	0.0	26.1	39,015
Secondary and above	24.0	9.0	0.0	33.0	31,830
Type of locality					
Urban	19.7	8.5	0.0	28.2	60,585
Rural	16.9	6.0	0.0	22.9	32,301
Camp	29.6	4.8	0.0	34.4	15,936
Region					
Palestinian Territory	20.3	7.2	0.0	27.5	108,822
West Bank	17.5	5.5	0.0	23.0	69,741
Gaza Strip	25.3	10.4	0.0	35.7	39,081

The percentages of vaccination against tetanus in Gaza Strip (35.7%) are higher than those of the West Bank (23%). Educated women and camp residents registered higher rates in comparison with other women categories. None of the respondents took five doses in their lifetime irrespective of education or type of locality.

The low rates of vaccination against tetanus could be the result of the high dependence on private healthcare institutions, which do not provide pregnant women with the vaccine or send them to public health institutions for such service. Moreover, doctors largely believe that tetanus is not a major threat to the life of the newly born since 95% of deliveries take place at hospitals where cleanliness is taken care of.

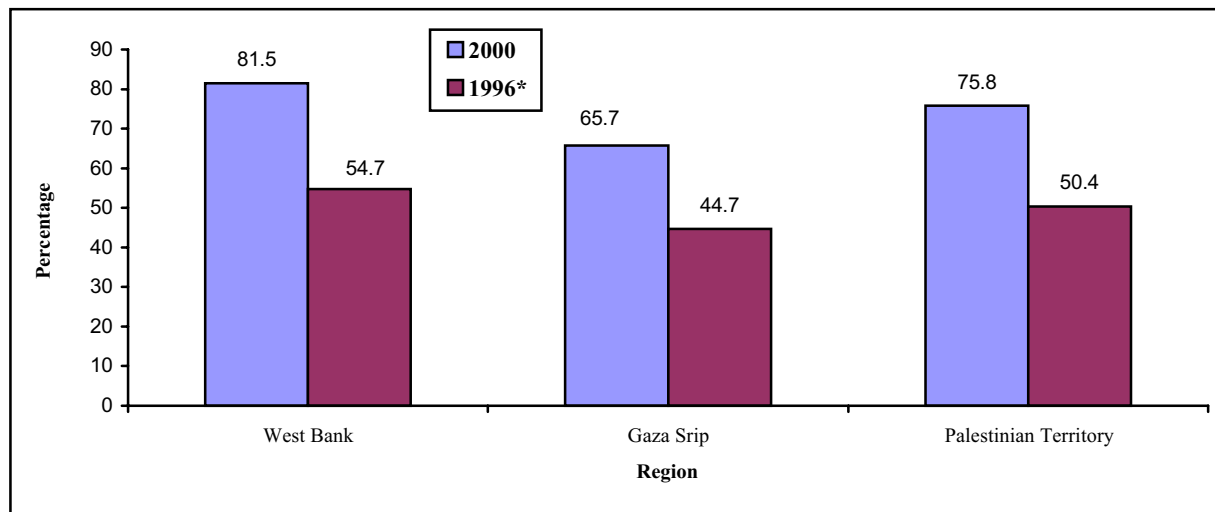
8.2.8 Iron and folic acid tablets:

Figure 8.9: Percentage of births (last two) born in the last three years preceding the survey whose mothers received folic acid by region



* Source: Palestinian Central Bureau of Statistics, 1997. *The Health Survey in the West Bank and Gaza Strip – 1996: Main Findings*. Ramallah, Palestine.

Figure 8.10: Percentage of births (last two) born in the last three years preceding the survey whose mothers received iron tablets by region

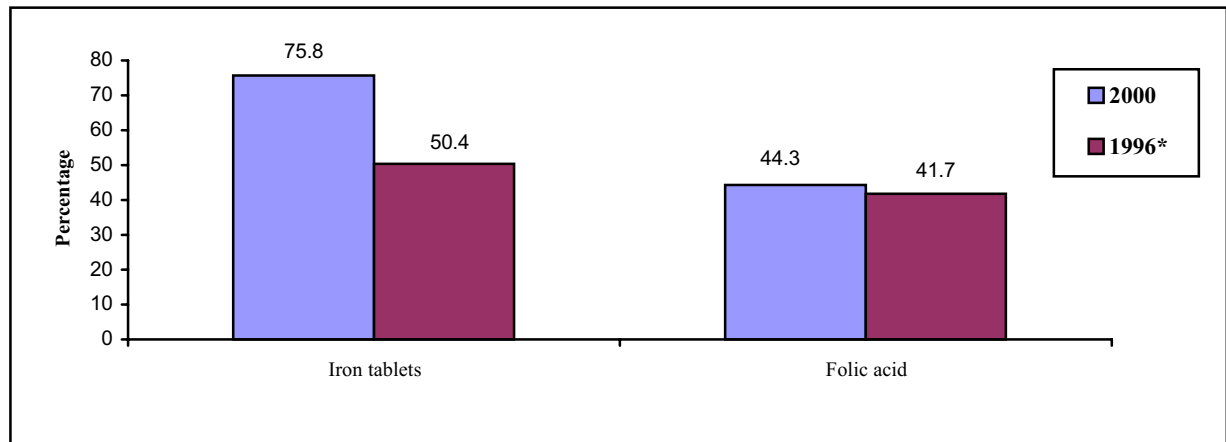


* Source: Palestinian Central Bureau of Statistics, 1997. *The Health Survey in the West Bank and Gaza Strip – 1996: Main Findings*. Ramallah, Palestine.

Anemia is the biggest problem that developing countries' women encounter, which is according to WHO's estimations, reaches up to a high 61.0%. Pregnant women are usually instructed to take folic acid and iron tablets in order to fight the disease. WHO recommends a dose of 60 milligrams of iron and 250 micrograms of folic acid during the second and third trimesters on regular basis as a method of protection against anemia. During the survey, 76.0% of respondents

stated that they had taken iron pills and 44.0% said that they had had folic acid tablets (see Figure 8.11). On the other hand, according to the health survey -1996, 50.0% of respondents affirmed taking iron tablets whereas 42.0% took folic acid pills. There are more women taking folic acid and iron pills in the West Bank than Gaza Strip. Furthermore, the trend is more common among educated women than uneducated ones (see Figures 8.9 and 8.10.)

Figure 8.11: Percentage of births (last two) born in the last three years preceding the survey whose mothers received medication, 1996-2000



* Source: Palestinian Central Bureau of Statistics, 1997. *The Health Survey in the West Bank and Gaza Strip – 1996: Main Findings*. Ramallah, Palestine.

8.3 Natal care:

8.3.1 Place of delivery:

The Health Survey - 2000 shows that 94.8% of deliveries in the Palestinian Territories occur at health institutions. Only 5.2% of respondents gave birth at home (7.7% in the West Bank and 0.8% in Gaza Strip). An increasing drop in the percentages of giving birth at home took place in the past five years because in 1996, 18% of West Bank women delivered their babies at home, in 1997, 12.7% of birth cases took place at home. The figures of the Gaza Strip were 9.9% and 6.3% for both years respectively, and in 1998, 3.1% of babies were born at home². Furthermore, the World Bank estimated that one third of the Palestinian Territory birth cases took place at home without proper medical supervision (World Bank 1993.)

² Palestinian National Authority, Ministry of Health, *State of Health in Palestine, Annual Report, 1998*.

Table 8.5: Percentage distribution of births (last two) born in the last three years preceding the survey by place of delivery and selected background characteristics

Background characteristics	Place of delivery						Total	Number of births
	Gov. hospital /center	Private hospital /center	UNRWA hospital/ center	NGOs' hospital /center	Private clinic	At home		
Mothers' age								
15-19	42.8	31.1	5.9	5.9	12.9	1.4	100	16,880
20-29	41.5	28.0	8.1	6.2	11.1	5.1	100	174,972
30-39	45.6	27.0	6.1	5.0	10.6	5.7	100	102,079
40-49	48.0	26.5	6.1	4.0	7.7	7.7	100	15,452
Mothers' educational attainment								
None	48.2	19.5	7.2	5.0	9.3	10.8	100	37,222
Elementary	46.9	24.6	5.8	5.3	12.2	5.2	100	77,335
Preparatory	42.9	28.9	7.4	4.9	10.6	5.3	100	110,582
Secondary and above	38.2	32.8	8.3	7.3	10.7	2.7	100	84,244
Type of locality								
Urban	38.8	30.8	6.6	6.6	13.5	3.7	100	171,075
Rural	52.2	29.1	1.7	3.8	3.8	9.4	100	91,153
Camp	42.2	14.2	20.0	5.7	15.1	2.8	100	47,155
Region								
Palestinian Territory	43.3	27.8	7.2	5.6	10.9	5.2	100	309,383
West Bank	41.4	40.2	2.5	5.5	2.7	7.7	100	197,919
Gaza Strip	46.6	5.7	15.5	6.0	25.4	0.8	100	111,464

Table (8.5) shows that 43.3% of respondents gave birth to their babies at governmental hospitals, 27.8% of them delivered at private hospitals, 7.2% used UNRWA hospitals, 5.6% went to NGOs' hospitals, and 10.9% gave birth at a private clinic. The West Bank registered high rates of deliveries at private hospitals at 40.2% when the same figure for 1996 was 28.3%. This was the result of the development in private health services since the Palestinian National Authority took control. The table also shows that younger urban more educated women have higher tendencies to deliver their babies at private hospitals, whereas older rural uneducated women tend to have their babies at governmental hospitals.

The data of the survey indicate that more women give birth at home in the West Bank than in Gaza Strip at 7.7% and 0.8% respectively. The same applies for older, uneducated, and rural women at 7.7%, 10.8%, and 9.4% respectively.

8.3.2 Personnel assisting at birth:

Table 8.6: Percentage distribution of births (last two) born in the last three years preceding the survey by personnel assisted at birth and selected Background Characteristics

Background characteristics	Personnel assisted at birth						Total
	Doctor	Nurse/ midwife	Daya	Relatives /friends	Others	None	
Mothers' age							
15-19	70.8	26.6	2.4	0.2	0.0	0.0	100
20-29	59.1	37.7	2.7	0.3	0.0	0.2	100
30-39	60.4	36.3	2.9	0.3	0.0	0.1	100
40-49	60.6	35.9	2.3	0.0	0.0	1.2	100
Mothers' educational attainment							
None	51.5	40.5	7.0	0.4	0.0	0.6	100
Elementary	57.1	39.1	3.1	0.4	0.1	0.2	100
Preparatory	59.8	37.4	2.5	0.1	0.0	0.2	100
Secondary and above	67.6	31.3	0.8	0.2	0.0	0.1	100
Type of locality							
Urban	65.9	31.6	1.8	0.4	0.0	0.3	100
Rural	49.3	45.4	4.8	0.3	0.1	0.1	100
Camp	60.9	37.1	2.0	0.0	0.0	0.0	100
Region							
Palestinian Territory	60.3	36.5	2.7	0.3	0.0	0.2	100
West Bank	51.4	44.3	3.8	0.2	0.0	0.3	100
Gaza Strip	75.9	22.9	0.9	0.3	0.0	0.1	100

Table (8.6) indicates that 60.3% of childbirth in the last three years preceding the survey were supervised by doctor, 36.5% were supervised by a nurse/midwife, 2.7% were carried out under a daya's supervision, and 0.2% had no supervision. Doctor supervised mostly the childbirth of the women of the age group of 15-19 years and those who completed their high school education or beyond that. Dayas play a major role in assisting rural and uneducated women in their childbirth. Those who had no assistance during giving birth were in the age group of 40-49 years.

Data also show that doctors took care of more childbirth in Gaza Strip than the West Bank at 75.9% and 51.4% respectively. Consequently, dayas supervised 3.8% of the West Bank childbirth and 0.9% of the Gaza Strip's childbirth.

8.3.3 Reason for choosing place of delivery:

Table 8.7: Percentage distribution of births (last two) born in the last three years preceding the survey occurred at health institutions by place of delivery and the reason for choosing it

Reason	Place of delivery					Total
	Gov. hospital/center	Private hospital/Center	UNRWA hospital/center	NGOs' hospital	Private clinic	
Service is satisfactory	25.1	64.1	55.1	57.4	56.1	44.3
Difficult to reach other place	4.9	2.8	3.1	3.3	1.8	3.7
Premature/sudden birth	2.8	2.5	3.3	1.7	5.0	3.0
Costs less/insurance covers	38.7	10.0	29.9	13.0	1.4	23.7
Where my doctor is	2.5	11.2	0.3	14.0	18.3	7.4
Complications	20.6	6.8	3.1	8.8	16.4	14.0
No other place	5.3	2.5	4.7	0.4	1.0	3.7
Others	0.1	0.1	0.5	1.4	0.0	0.2
Total	100	100	100	100	100	100
Number of births	133,898	85,884	22,345	17,531	33,606	293,264

Quality of services, cost, and pregnancy complications were the main elements of making a choice about a health institution for giving birth. Quality of services stood at 44.3%, less costs /insurance covers came in the second place at 23.7%, and pregnancy complications came third at 14.0%. Furthermore, according to table (8.7), 38.7% of respondents who delivered their babies at public hospitals chose them for costing less or for being covered by the health insurance. 20.6% of respondents chose the same hospitals for fearing that other institutions were medically unsafe. On the other hand, 64.1% of those who delivered birth at private hospitals chose them for their high quality health services and 10% of them chose these private institutions for being covered with the health insurance, and 6.8% thought they were more medically safer than others.

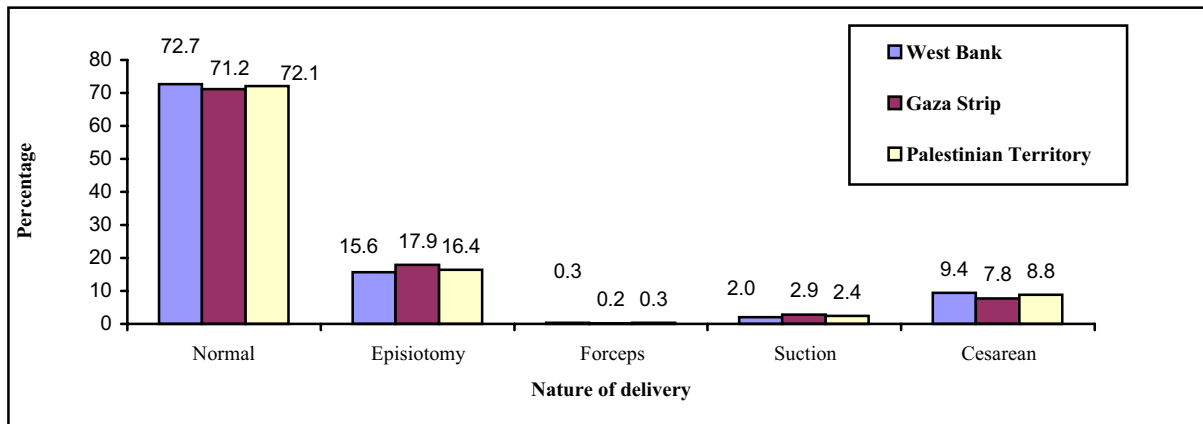
About 55.1% of those admitted to UNRWA hospitals for childbirth decided that they were of high medical quality services, 29.9% chose them since they cost less or for being covered by health insurance, and 3.1% thought that other places were more medically unsafe.

Respondents who delivered at NGOs' hospitals said their choice was based on high quality services at 57.4%, lesser costs or health insurance coverage at 13%, and 8.8% thought they were more medically secure. However, those who chose private clinics for giving birth thought of the better quality services at 56.1% and 16.4% thought other place were unsafe in terms of health services.

8.3.4 Nature of delivery:

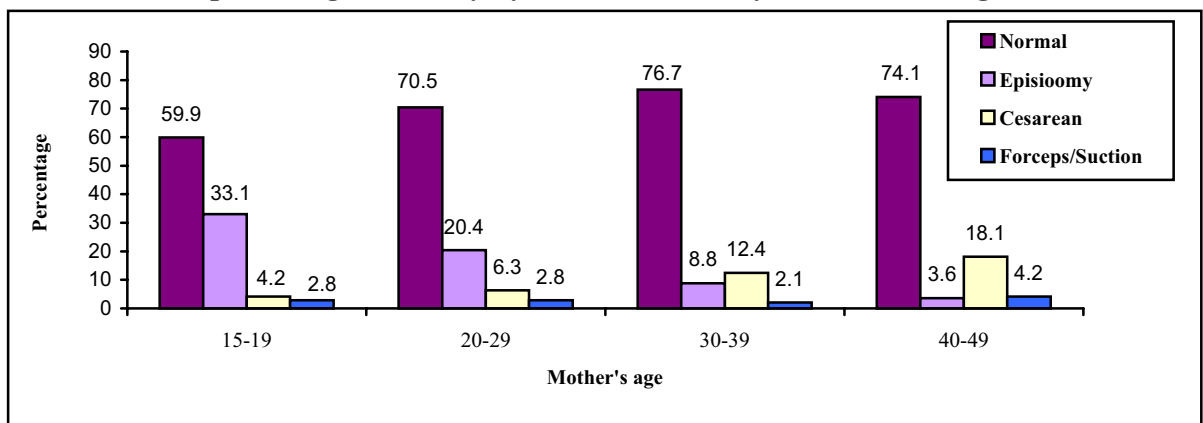
The results of the survey show that 72% of deliveries in the three years preceding the survey were normal, 16.4% had to undergo episiotomy, 2.4% occurred through suction, and 8.8% were Cesarean Sections. There has been a rise in the percentage of Cesarean, which used to be 6.6% in 1996 and a drop in normal delivery, which was 76% in the same year.³

Figure 8.12: Percentage distribution of births (last two) born in the last three years preceding the survey by nature of delivery



Cesarean sections are higher in the West Bank than in Gaza Strip (9.4% and 7.8% respectively), and episiotomy is higher in Gaza Strip than the West Bank (17.9% and 15.6%).

Figure 8.13: Percentage distribution of births (last two) born in the last three years preceding the survey by nature of delivery and mother's age



The highest percentage of normal deliveries was among women aged 30-39 years, the highest percentage of childbirth that required episiotomy was among those aged 15-19 and then among

³ Palestinian Central Bureau of Statistics, 1997. the Health Survey of the West Bank and Gaza Strip - 1996, Main Findings, Ramallah, Palestine.

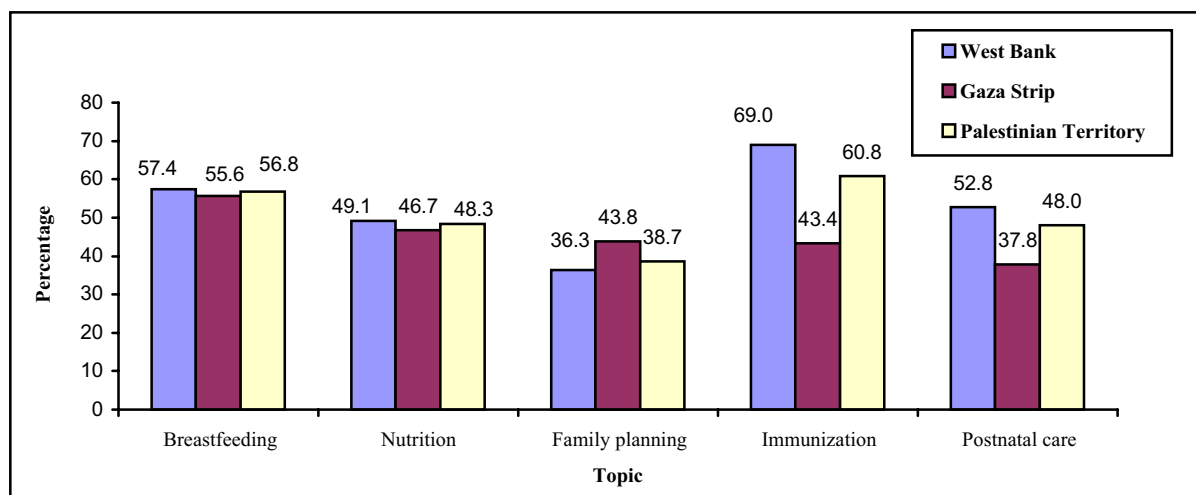
those aged 20-29 years. Childbirth through suction was the highest within the age group of 40-49. Cesarean sections, however, were among the eldest and uneducated.⁴

8.3.5 Health education:

Health education and advice on breast-feeding, nutrition, immunization, baby care, and family planning are good indicators to the quality of health services since they determine future mother and childcare trends. The survey inquired about whether women who delivered at hospitals received any health education. 60.8% stated that they received information about immunization of children (including 69.0% in the West Bank and 43.3% in Gaza Strip). On the other hand, 52.8% of the West Bank's women and 37.8% of the Gaza Strip's women learned about postnatal healthcare. However, in 1996, only 19.6% of women obtained postnatal healthcare.⁵

About 38.7% of women stated that they discussed family planning with specialists. In Gaza Strip, women learned more about family planning than the West Bank (43.8% and 36.3% respectively).

Figure 8.14: Percentage distribution of births (last two) born at hospitals in the last three years preceding the survey whose mothers received health education by topic and region



8.3.6 Mean duration in hospitals after delivery:

Recent studies assured that 60.0% of deaths among mothers occur during the first week of delivery and 45.0% occur during 24 hours after delivery. Therefore, it is essential that a female stays at hospital after delivery for more medical attention for a certain period of time since that reduces maternal mortality rate⁶. In any case, health institutions usually keep mothers hospitalized for at least 24 hours after delivery but, according to the health survey - 2000, 34.0% of mothers left hospital before they completed the 24-hour-period. Respondents justified that by

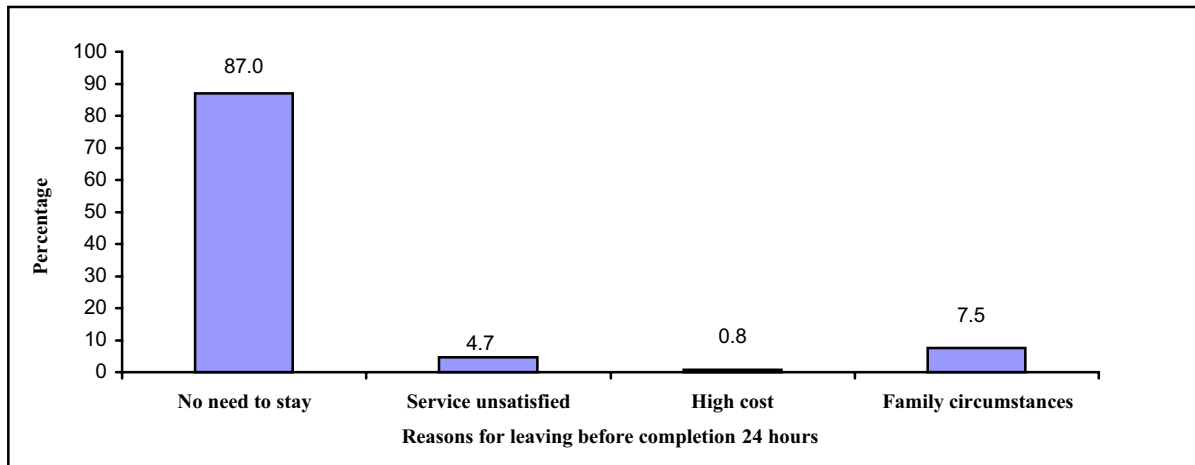
⁴ Palestinian Central Bureau of Statistics, 2000. Health Survey - 2000, Main Findings: (Table 91). Ramallah, Palestine.

⁵ Palestinian Central Bureau of Statistics, 1997. The Health Survey of the West Bank and Gaza Strip - 1996, Main Findings: Ramallah, Palestine.

⁶ CARE, Better Mother and Childcare Quality, Programs Managers' Manual, 1998.

believing that there was no need to stay at 87%, 7.5% blamed it on private family circumstances, 4.7% blamed inadequate services, and about 1% stated that the costs were too high (see Figure 8.15).

Figure 8.15: Percentage distribution of births (last two) born in the last three years preceding the survey occurred at health institutions by reasons for leaving before completion of the 24 hours



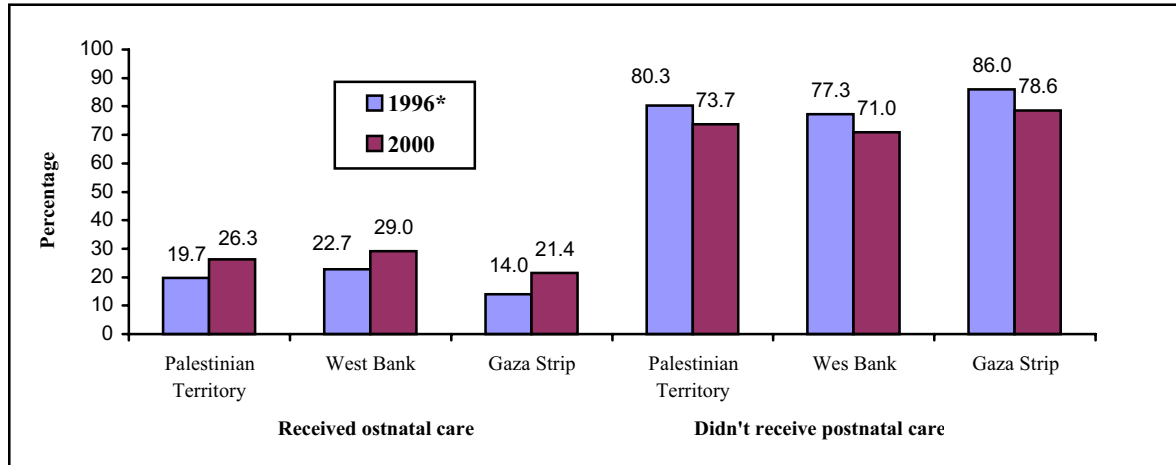
8.4 Postnatal care:

Mothers need to be medically cared for during the first 6 weeks of childbirth; such professional care protects mothers' health, psyche, and childcare. It also prevents further complications such as bleeding, fever, reproductive and urinary systems' infection, and depression. It protects infants from suffocation, infections, low temperatures, and breast-feeding and nutrition problems. Postnatal care comes in different forms; care at home or professional care at health centers.

The Palestinian Territory's weakest reproductive health element is postnatal care. Only 26.3% of women who delivered in the last three years preceding the survey received such care while the rest (73.7%) did not receive it. However, the figures are an improvement when compared to 1996 when only 19.7% of women had had postnatal care and 80.3% did not⁷. Such care is more received in the West Bank than in Gaza Strip (29.0% and 21.4% for both regions respectively).

⁷ Palestinian Central Bureau of Statistics, 1997. The Health Survey of the West Bank and Gaza Strip – 1996: Main Findings. Ramallah, Palestine.

Figure 8.16: Percentage distribution of births (last two) born in the last three years preceding the survey by whether their mothers received postnatal care or not and region 1996,2000



* **Palestinian Central Bureau of Statistics,1997.** *The Health Survey of the West Bank and Gaza Strip - 1996, Main Findings.* Ramallah, Palestine.

Postnatal care remains very low though, according to the survey, other forms of maternal care during pregnancy and delivery are high. The trend has not changed since it was a dominant factor in the 1996 Health Survey. The reason behind that could be the widespread belief among mothers that postnatal care is only about them and not about their newly born infants.

8.4.1 Personnel providing postnatal care:

About 20.1% of women who delivered babies in the last three years preceding the survey received postnatal care from specialized physicians, 3.3% received such care from a general practitioner, 2.8% were cared for by nurses/midwives, and very few 0.1% were cared for by dayas only.

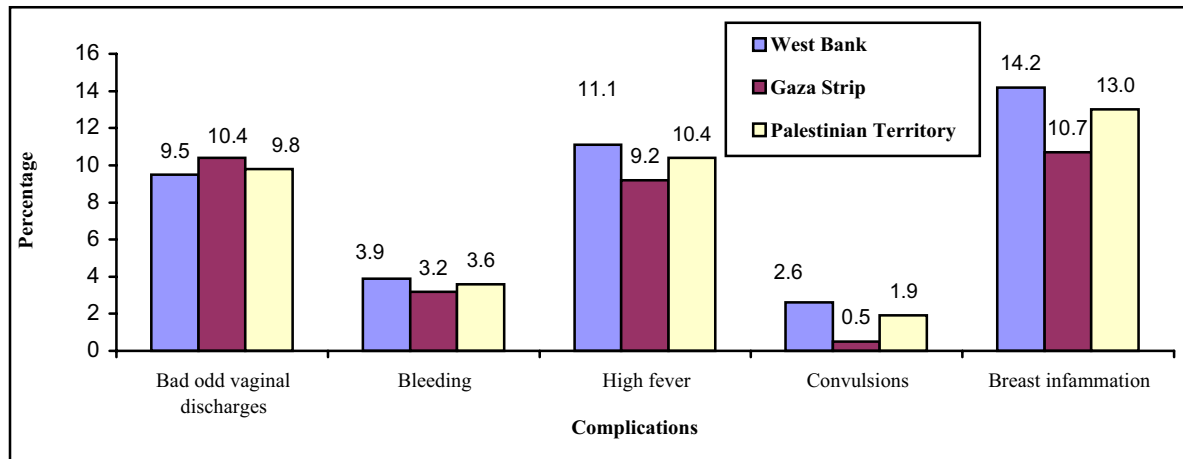
Table 8.8: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received postnatal care in the six weeks after delivery by personnel provided care and selected background characteristics

Background characteristics	Personnel provided care					Total
	General practitioner	Specialized physician	Nurse/ Midwife	Daya	None	
Mother's age						
15-19	3.8	17.6	2.5	0.0	76.1	100
20-29	2.8	19.3	2.8	0.1	75.0	100
30-39	3.8	21.0	3.0	0.3	71.9	100
40-49	5.7	22.0	2.7	0.0	69.6	100
Mother's educational attainment						
None	3.3	17.0	1.7	0.9	77.1	100
Elementary	3.8	17.6	1.9	0.1	76.6	100
Preperatory	3.2	21.2	3.5	0.0	72.1	100
Secondary and above	3.0	21.9	3.3	0.0	71.8	100
Type of locality						
Urban	3.0	19.9	2.1	0.1	74.9	100
Rural	3.2	21.9	0.8	0.3	73.8	100
Camp	4.9	16.4	9.2	0.0	69.5	100
Region						
Palestinian Territory	3.3	20.1	2.8	0.1	73.7	100
West Bank	3.3	24.0	1.5	0.2	71.0	100
Gaza Strip	3.4	12.8	5.2	0.0	78.6	100

Women aged 40-49 years, those with high school education or higher, and rural women had the highest tendency to obtain postnatal care from specialized physicians. Those receiving dayas' postnatal care were mostly uneducated. Also, the highest percentage of women who did not receive postnatal care were among the age group of 15-19 years at 76.1%, the less educated at 77.1%, and those living in urban areas at 74.9% (see table 8.8).

8.4.2 Complications after delivery:

Figure 8.17: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers suffered from complications in the six weeks after delivery by type of such complication and region



According to the Survey, 26.7% of respondents stated that they had had at least one health problem after delivery (the problems include bad odd vaginal discharge, bleeding, fever, breast inflammations, and convulsions). The problems were more inherent in the West Bank than in Gaza Strip at 27.0% and 26.1% respectively⁸, which could be the results of more home childbirth in the first region. Figure (8.17) shows that breast inflammation was the most common complication among women and that West Bank's women were subjected to different kinds of complications more than the women of the Gaza Strip. Convulsions among women in the West Bank were five times higher than those of Gaza Strip.

Age plays a role in having postnatal health problems. For instance, younger women aged 15-19 suffered more breast inflammations than the older ones since they lack the experience of proper breast-feeding. They also suffered more bad odd vaginal discharge and more convulsions. On the other hand, the older women (aged 40-49) suffered more from fever than the younger ones.

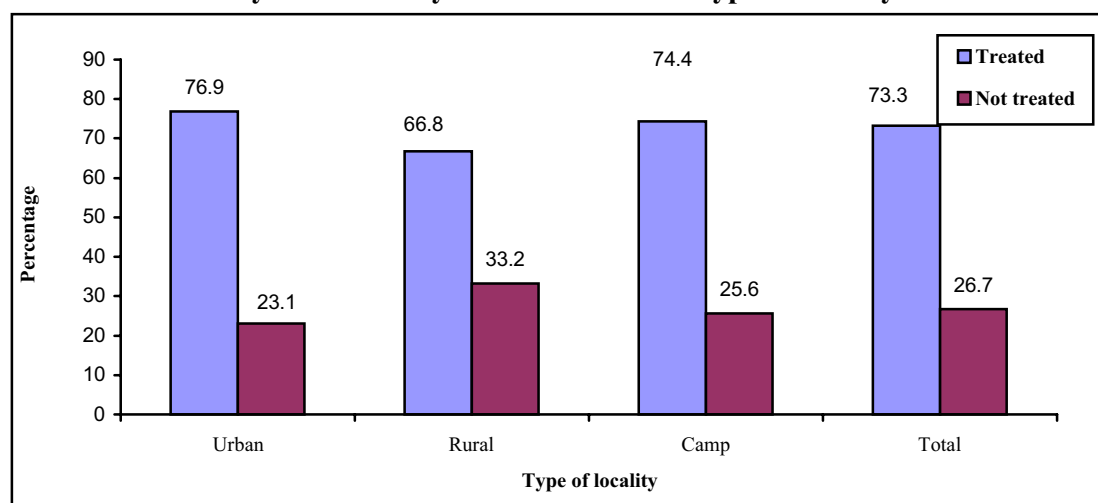
⁸ Palestinian Central Bureau of Statistics, 2001. The Database of the Health Survey - 2000, Ramallah, Palestine.

Table 8.9: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers suffered from complications after delivery by background characteristics

Background characteristics	Complications (6 months after delivery)					Number of childbirth
	Bad odd vaginal discharge	Bleeding	Fever	Convulsions	Breast inflammations	
Age group						
15-19	11.1	3.7	9.6	3.2	17.5	168,80
20-24	12.3	4.3	10.0	1.7	14.5	877,10
25-29	10.0	3.7	9.7	2.0	13.6	872,61
30-34	8.7	3.5	10.0	2.0	10.9	643,99
35-39	6.9	2.5	13.0	2.0	11.4	376,81
40-44	5.3	3.2	13.3	0.0	9.2	131,32
45-49	3.0	1.7	12.9	0.0	4.5	2,319
Type of locality						
Urban	8.7	3.2	9.8	1.9	13.0	171,076
Rural	11.3	4.4	11.6	2.3	13.4	91,153
Camp	10.9	3.8	10.4	1.2	12.0	47,155
Total	9.8	3.6	10.4	1.9	13.0	309,383

Data above (table 8.9) shows that women aged 15-19 are most susceptible to complications after delivery and that rural women suffered from these problems more than urban and refugee camps' women. This could be blamed on childbirth at home and lack of health education.

Figure 8.18: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers suffered from complications after delivery by whether they treated or not and type of locality



26.7% of women were not treated for their health complications after delivery. Moreover, women in rural areas are less concerned about their health when complications take place than those living in urban areas and refugee camps (66.8%, 76.9%, and 74.4% respectively).

Table 8.10: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers suffered from at least one complication after delivery and were treated by place of treatment, type of locality, and region

Type of locality and region	Place of treatment								Number of births
	Gov. hospital	Private hospital	UNRWA hospital	Public health center	NGOs' clinic	Private clinic	Pharmacy	Others	
Type of locality									
Urban	13.8	8.4	6.4	5.6	4.4	40.8	19.9	0.7	33,997
Rural	18.1	9.7	1.8	4.2	4.1	51.4	10.7	0.0	18,172
Cmp	12.6	4.8	36.8	1.2	5.3	26.8	11.6	0.9	10,329
Region									
Palestinian Territory	14.8	8.2	10.0	4.5	4.5	41.6	15.9	0.5	62,498
West Bank	13.4	11.0	3.7	3.3	4.6	50.7	12.8	0.5	40,682
Gaza Strip	17.5	3.0	22.1	6.6	4.3	24.5	21.5	0.5	21,816

Table 8.10 shows that 41.6% of women were treated for postnatal problems at private clinics, 14.8% went to governmental hospitals, and 10% were treated at UNRWA run hospitals. Astonishingly, 16% of respondents took over the counter medications to treat their complications without referring to a specialist. Urban women have higher percentages for pharmacy treatment than rural areas and camps (20%, 10.7%, and 11.6% respectively). Avoiding doctors' fees could have triggered such trend; however, it requires further research.

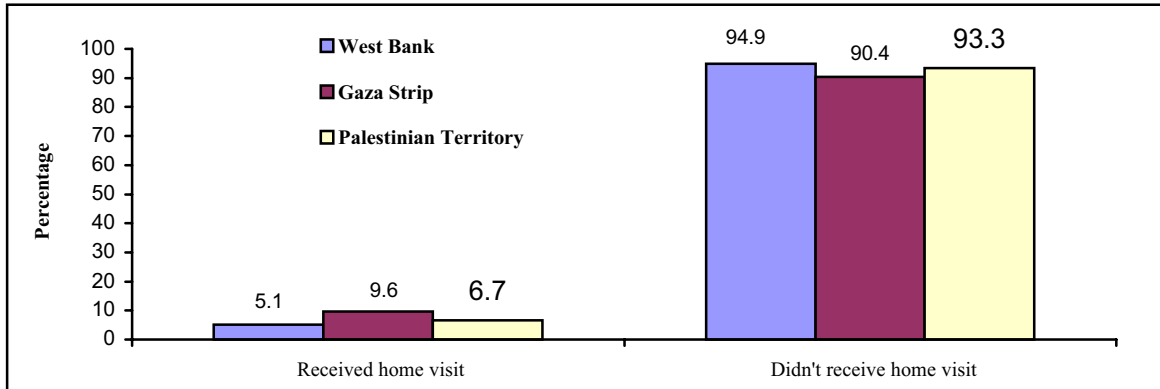
8.4.3 Home visits after delivery:

Postnatal professional medical follow up at home is another crucial factor in maternal care, henceforth, the American Nursing and Midwifery College recommends the following schedule:

1. First visit: To be paid during the first six hours of childbirth;
2. Second visit: On the third day of delivery;
3. Third visit: On the 14th day of delivery;
4. Fourth visit: On the 40th day of delivery.

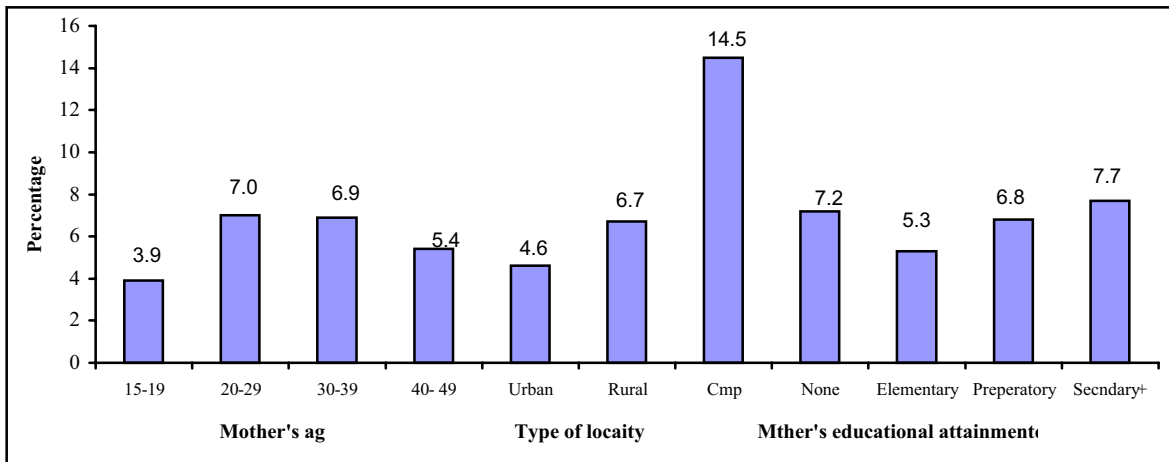
However, when delivery takes place at hospital, mothers are taken care of for a period of 24 hours immediately after birth. In this case, the first home healthcare visit should be paid on the 4th day of delivery. The visitors must be qualified medical personnel such as midwives, nurses, or public health officers). The Palestinian Reproductive Health Manual requires one visit at least during the first week of giving birth.

Figure 8.19: Percentage distribution of births (last two) born in the last three years preceding the survey by whether their mothers received professional postnatal care home visit and region



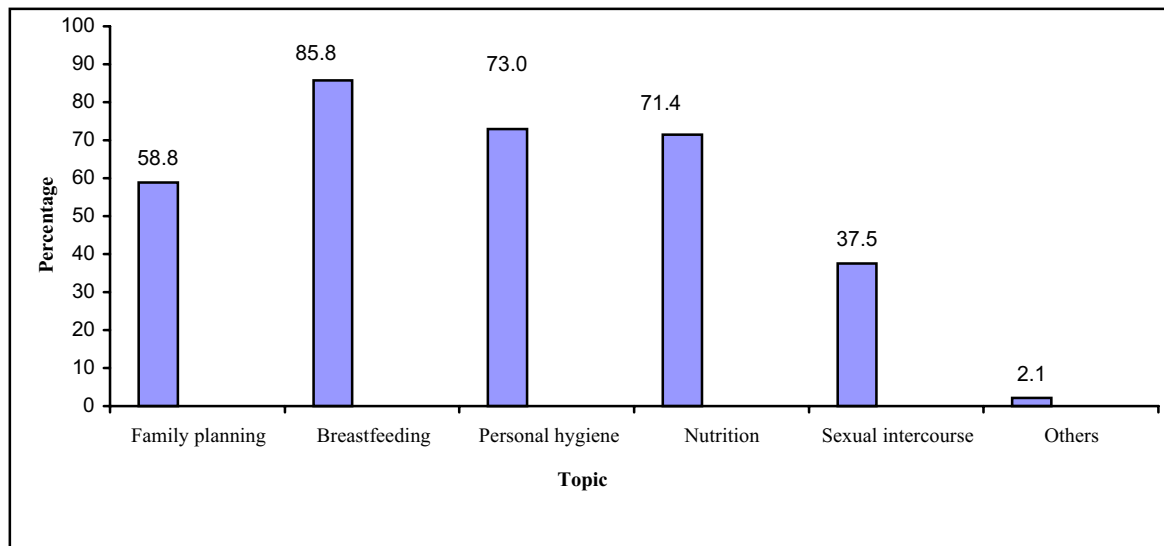
According to Figure 8.19, only 6.7% of respondents received professional postnatal healthcare at home (5.1% in the West Bank and 9.6% in Gaza Strip).

Figure 8.20: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received professional postnatal care home visit by selected background characteristics



The highest percentage of professional healthcare home visits after birth was at camps at 14.5% and the lowest was at urban areas at 4.6%. Though they are the most susceptible to complications and the least concerned about postnatal healthcare, women aged 15-19 years received the lowest percentage of visits at 3.9%.

Figure 8.21: Percentage distribution of births (last two) born in the last three years preceding the survey whose mothers received health education by topic



Professional medical care home visits to mothers after delivery aim at providing advice and education as well as support. Medical teams carry out check ups on the mother and infant during the visits they make. The results of the survey indicate that breast-feeding was on top of the agenda of such visits since 86% of respondents stated that they had had education on this topic.

On the other hand, 73.0% were taught about personal hygiene, 71.4% learned about nutrition, 58.8% received information about family planning, and 37.5% were told about sexual intercourse after childbirth. This means that postnatal healthcare in this regard is still inadequate. Results also show that health institutions do not have clear postnatal care policies. Finally, health institutions need to take this matter more seriously and start providing more adequate postnatal healthcare services.

Executive summary:

According to the results of the survey, maternal care and postnatal care have improved in the Palestinian Territory.

- 95.6% of women who delivered during the three years that preceded the survey received prenatal care. The figure is high for the Middle East region.
- 86.0% of pregnant women paid early pregnancy visits to care centers (during the first and fourth months) and 92.0% paid at least 4 visits to such centers.
- While pregnant, 60.0% of West Bank women received prenatal care at private clinics and 60% of Gazan women received prenatal care at UNRWA health centers. The quality of services was the most prominent determining element in choosing certain care centers. Women who didn't receive prenatal care did that due to not having prenatal complications.
- Personnel provided prenatal care is highly qualified since 78.3% of pregnant women received care by doctor and 32.0% were cared for by nurses or midwives.
- Receiving iron tablets and folic acid is on the rise at 76.0% and 44.0% respectively.
- Immunization against tetanus is low since only 20.0% of respondents stated that they had had two dose last within 3 years.
- 94.8% of deliveries took place at hospitals, 60.3% of which were under doctors' supervision and 36.5% were supervised by midwives or nurses. 3.0% were only taken care of by dayas. Furthermore, 34.0% of women in the same category left hospital before they completed the 24-hours after delivery.
- 26.7% received postnatal care mostly from specialist physicians. Younger and less educated women showed little tendency toward postnatal care services though they are the most susceptible to postnatal complications.
- 26.7% of respondents suffered postnatal complications especially breast inflammations. More than one quarter of respondents who had postnatal complications did not treated. However, those who did receive treatment received it from physicians. 16.0% said that they received treatment directly from pharmacy.
- Only 6.5% of respondents received postnatal professional healthcare home visits indicating a dangerous shortage in such services.

Recommendations:

- More attention needs to be paid to health education and awareness about the importance of postnatal care since, according to the results of the survey, 87.0% of respondents said that they had left hospital within less than 24 hours of delivery believing that there was no need for further hospitalization. Also, most of women who did receive postnatal care received it because they had complications. It is essential to convince women of the fact that postnatal healthcare is crucial for the benefit of the mother and the baby and that it should not be only considered when complications occur. This can happen through utilizing the media to serve this purpose through nationwide health promotional campaigns.
- Postnatal care programs must be developed and women should be encouraged to benefit from them. The development can be created through training programs on medical and communication skills. Time needs to be made available through efficient utilization and recruiting of more staff so that high quality services can be provided. Consequently, high quality programs that provide health education and protect privacy and respect and leave room for discussion will encourage women to join and benefit from them.
- Postnatal services need to be made part of the services provided for the newly born infants. Furthermore, postnatal information systems must be incorporated in the care programs of the newly born. Though MoH and UNRWA's care centers provide services for both mother and child, mothers tend to believe that only children require care after birth. Therefore, this belief must change since it restricts the services the centers provide. Medical staff should play a role in that by convincing mothers that they too need postnatal care. This could be done through making appointments for mothers' checkup one month after childbirth when mother come for infants' immunization. Also, for this end, mothers' postnatal care cards should be envisaged with the childcare cards.
- New standards must be put forth to ensure that mothers stay at hospital after delivery for further checkups so that they can be protected from life threatening postnatal complications. The standards must be written and made public and monitored by MoH. For this end, more hospital beds are required.
- Attention needs to be paid to health education and awareness through professional medical postnatal home visits. The visits need to be organized, which requires recruiting more skilled health personnel, who, once recruited will require continuous training and follow up. NGOs have proven successful in this field and the governmental health sector should learn from them. The team that would pay home visits to mothers after delivery should have special cards on which they document health information about mother and child.

Chapter Nine

Child's Health

9.1 Introduction:

This chapter looks at several indicators of child health which have been promoted by UNICEF, WHO and UNISCO. The idea is to assess the child's health every several years, to look at trends, compare the results with other countries, and evaluate the success of programs aimed at prevention of communicable diseases and promoting child's health in developing countries. These indicators address vaccination coverage, feeding practices, vitamin supplementation, child's nutritional status and prevalence and management of the two major diseases: acute respiratory infection and diarrhea. All these indicators are known to affect the health and development of the child worldwide by preventing infectious diseases, dehydration, pneumonia, weight loss, blindness, goiter and death.

This chapter presents and analyzes data obtained from the health survey 2000. The data then are compared with data from the health survey 1996 to examine trends, and to see if health objectives were met.

9.2 Procedure of data collection:

Information on childhood immunization were collected in two ways: the first through examining children's vaccination cards and the second through relying on mothers' memory when such cards were not available.

For data on breast-feeding, mothers were asked if their last born child or all children born in the three years preceding the survey were breastfed in relation to initiation of breast-feeding and to the child's age. Then they were asked if the child received in addition to breast milk any solid/semi solid food, the age at which the food was introduced and the type of food given.

Mothers who had children born in the three years preceding the survey were asked if their children had vitamin A drops. The salt at every household, if available, was tested for iodine. Adequate concentrations of iodine in the salt were considered 15 parts per million and more.

For nutritional data, all children of interviewed women in the survey who were born in the last five years had their height and weight measured, 96.4% of males and 97.3% of females.

For diarrhea, mothers of children under five years of age were asked if any of their children had diarrhea in the two weeks prior to the survey, the kind of treatment they had, if they had any increase in their fluids or food intake and if they sought consultation. Consultation was then verified by source and selected background characteristics.

Information about acute respiratory infection were obtained through asking mothers if their under five years of age children had had cough with/without rapid breathing, in the two weeks prior to the survey. Then they were asked whether they had sought medical consultation or not by source and selected background characteristics.

9.3 Vaccination:

Vaccination is the most important program in the prevention of childhood infectious diseases. It became a right to all children all over the world in the International Conference on the Rights of the Child, which took place in New York in 1990. The immunization program for

the Palestinian Territory is includes immunizations recommended by UNICEF and WHO for developing countries (DTP, BCG and Polio). In addition it includes hepatitis B, Measles and Measles, Mumps and Rubella (MMR). For those living in annexed Jerusalem, BCG and measles vaccines are not provided, consistent with the Israeli vaccination program, instead, Haemophilus influenza type B and Hepatitis A are given.

9.3.1 Vaccination of children:

There are three different agencies that provide vaccination for children in the Palestinian Territory. UNRWA immunizes refugee children in the camps and will provide immunization for children living in the area regardless of their refugee status. The Palestinian Ministry of Health immunizes all children at their clinics. The Israeli Ministry of Health in annexed Jerusalem will immunize all the children whose mothers are holders of Israeli or Jerusalem identity cards and anybody with a foreign passport who seeks immunization at their clinics.

UNRWA has always vaccinated refugee children through providing four doses of DTP and polio, BCG at birth and measles at 9 months of age. The government has provided the same except for BCG and measles vaccines. In 1988 and 1992 MMR and three doses of hepatitis B respectively were introduced to the Government and UNRWA clinics in the West Bank and the Gaza Strip. The Israeli Ministry of Health introduced the same vaccines to children living in Israel and Jerusalem at the same time.

When the Palestinian Authority took control of the health sector in 1995, an attempt was made to unify immunization programs between the MoH and the UNRWA. As a result, the MOH introduced measles vaccine at 9 months of age in Jan. 1996 and BCG vaccine within the first month from birth in Jan. 1999. The Israeli Ministry of Health on the other hand did not introduce these vaccines.

As a result children vaccinated at Israeli MCH centers will not receive BCG or Measles. And children immunized at the MOH clinics would have not received BCG if they were older than one month in Jan. of 1999 and would have not received measles vaccine if they were older than 9 months in Jan. of 1996.

Relying on mothers’ memory was not very accurate when vaccination data were obtained as compared to inspecting the vaccination cards. This was particularly obvious for children 12-23 of age months whose vaccination data were based on their mothers recall, 3rd dose of OPV was at 86.6% and 3rd dose of DTP recorded 22.7%. In contrast children whose cards were seen for the same age group, 3rd dose OPV and DTP were at 98.3% and 98.7% respectively.

Table 9.1: Percentage of children aged 12-23 months in the Palestinian Territory, whom immunization cards were/not seen and received specific immunization

Immunization Card Status	Third dose OPV	Third dose DTP
Immunization cards seen	98.3	98.7
Immunization cards not seen	86.6	22.7

For this reason and because a high percentage of cards were available (85.9%) for those aged 12-23 months and 71.4% for children under five years, vaccination results from the cards will be used where possible and if necessary.

9.3.2 Immunization coverage:

Because of the different dates in introducing certain vaccines, they were grouped according to the introduction date, then interpreted and compared with 1996 data.

BCG

BCG was introduced in Jan. 1999, and the survey was carried out in April 2000, which makes the percentage of coverage of BCG difficult to interpret unless we look at those aged 0-15 months who were eligible for the vaccine at the time of the survey and of course children living in the camps who have been receiving it for sometimes. This age group is not presented in the HS 2000 and the nearest is 6-11 months. Looking at BCG uptake in the Palestinian Territory by reviewing the cards (95.3% available) of children aged 6-11 months, the uptake was 91.6%. In the same age group, the uptake was 86.7% for the West Bank and 99.2% for the GS. This means the entire deficit in vaccination coverage is coming from the WB. Part of this can be attributed to children living in Jerusalem who are vaccinated at the Israeli MCH centers and not receiving BCG. Other causes which might explain the difference in the uptake between children less than five years of age living in rural (49.0%) and urban (74.0%) areas is that rural areas have the highest percentage of deliveries at home 9.4% vs. 2.8% in the camps and 3.7% in urban areas¹. It is possible that these mothers might not be aware of the BCG vaccine because they delivered at home and because of its recent introduction. Other reasons were suggested by nurses working at MCH centers in the WB, as the BCG vial contains 30 doses, consequently the immunization is delayed in rural areas until a sufficient number of children are gathered to justify opening the vial and occasionally, mothers from rural areas were sent to large MCH clinics in urban areas for BCG vaccine to avoid wasting a vial, causing delay in the vaccination uptake.

The overall coverage of BCG for children aged 2 years and above was more than 50% even though non refugee children were not receiving it. This can raise questions, as the refugee population in the Palestinian Territories is under 50%. This might be due to UNRWA clinics vaccinating children living in the surrounding areas and this includes giving BCG to children who are not registered as refugees, increasing the coverage of BCG in non-refugee children. There is no sex difference in the uptake of BCG for children under five years of age.

Measles

The vaccine was introduced in Jan. of 1996 to be given at 9 months of age. The survey was conducted in April 2000, which means that children older than 9 months and up to five years at the time of the survey were eligible to receive it. This might explain the low uptake in children aged 0-5 years in GS at 74.9%, the WB at 67.1%, and the camps at 73.6% as this includes children aged 0-9 months who are not eligible for the vaccine. Looking at age groups, children less than 6 months have hardly any uptake, and children aged 6-11 months have a low uptake due to dilutional effect of having children younger than 9 months in this age group. The maximum uptake was for children 12-23 months (92.7%) and then a plateau of 89.0% for children above 2 years of age. This meant the uptake for children aged 12-23 months is high and is better than children aged 24-35 months maintaining an incremental increase in the number of children vaccinated born in 1998 compared to children born in 1997, which is expected.

There is no sex difference in the uptake of measles for children under five years of age.

¹ Palestinian Central Bureau of Statistics, 2000. Health Survey-2000: Main Findings. Ramallah, Palestine. P154, Table 88.

Table 9.2: Percentage of children under five years of age for whom immunization card was seen and received specific immunization by selected background characteristics

Background Characteristics	BCG	Measles
Sex		
Males	69.4	70.6
Females	70.1	69.3
Type of locality		
Urban	74.0	68.7
Rural	49.0	70.5
Camp	96.4	73.6
Age of child in months		
Less than 6	85.7	0.8
6-11	91.6	37.9
12-23	73.0	92.7
24-35	59.6	89.1
36+	54.7	89.0
Region		
Palestinian Territory	69.8	69.9
West Bank	53.0	67.1
Gaza Strip	99.5	74.9

The lowest uptake of measles vaccine was in urban areas at 68.7% for children aged 0-5 years compared to rural areas at 70.5% and the camps at 73.6%. The difference is slight and might be due to children immunized at Israeli MCH centers, as they are more likely to live in urban area of Jerusalem. This has been confirmed through looking at immunization cards of children aged 12-23 months for measles in the Palestinian Territory including or excluding Jerusalem Governorate. The table below shows a definite increase in the uptake of measles when Jerusalem Governorate is excluded, particularly in urban area.

Table 9.3 :Percentage of children aged 12-23 months whom immunization Card was seen and received measles immunization in the Palestinian Territory/ excluding Jerusalem Governorate by type of locality

Type of locality	Palestinian Territory	Palestinian Territory excluding Jerusalem
Urban	93.1	98.6
Rural	92.0	95.3
Camp	92.3	95.0
Total	92.7	97.1

DTP, Polio, MMR and Hepatitis B vaccines

UNRWA and Govt. MCH clinics in the WB, GS and in Israel have been providing the above vaccines for more than 7 years, so the introduction date will not affect the uptake of the children in the survey.

The percentages given in Table 9.4 are the average vaccine uptake, so they are not accurate as absolute numbers, because of the inclusion of children who are not eligible for the vaccine in the same age group, but they are accurate for making comparisons between children with different characteristics.

The data showed that there is no difference between males and females uptake of vaccination. A slightly better coverage for Hepatitis B and MMR is observed in urban and rural area, immunized at the Govt. MCH clinics, while a better coverage for DTP and Polio in the camp, immunized at UNRWA MCH clinics. These differences are reflected upon GS and the WB because of the variation in UNRWA vs. Govt. coverage in those regions depending on the number of refugee population.

If one looks closely at age specific coverage percentage, one observes that the highest coverage is for children above one year for 3rd dose of DTP, Polio and hepatitis B, and above 2 years for MMR, ranging from 94.1% for 3rd dose of Hepatitis B to 98.7% for 3rd dose of DTP, which is the coverage reported by the MOH.

Table 9.4: Percentage of children under five years of age for whom immunization card was seen and received specific immunization by selected background characteristics

Background Characteristics	DTP			Polio			MMR	Hepatitis B		
	1	2	3	1	2	3		1	2	3
Sex										
Males	93.2	89.7	83.9	94.9	90.6	84.2	64.0	97.7	93.6	76.6
Females	93.8	89.1	83.9	94.3	89.4	84.2	64.1	97.9	94.0	76.8
Type of locality										
Urban	93.7	89.7	83.9	95.0	90.2	84.3	64.1	98.2	94.3	76.8
Rural	92.9	88.4	82.6	93.8	88.7	82.3	65.2	98.1	95.3	78.2
Camp	93.9	90.6	86.6	95.1	92.0	87.9	61.3	96.0	89.0	73.3
Age of child (months)										
Less than 6	64.4	37.6	13.1	68.1	39.8	16.6	1.1	96.3	74.5	2.2
6-11	98.2	97.0	86.7	98.9	97.6	84.8	4.5	97.4	95.6	70.8
12-23	98.9	99.0	98.7	99.6	99.5	98.3	74.7	99.2	97.9	94.1
24-35	99.5	99.5	98.8	99.7	98.9	98.3	95.3	98.2	98.0	93.7
36 +	97.8	98.0	97.0	98.8	98.8	97.9	95.6	97.4	96.9	92.2
Region										
Palestinian Territory	93.5	89.4	83.9	94.6	90.0	84.2	64.1	97.8	93.8	76.7
West Bank	92.9	88.2	81.6	93.6	88.3	81.0	64.2	97.4	94.5	77.5
Gaza Strip	94.6	91.6	87.9	96.4	93.0	90.0	63.8	98.7	92.6	75.3

9.3.3 Immunization coverage by background characteristics:

In this section the uptake of immunization was looked at in children 12-23 months, excluding children living in Jerusalem Governorate, who had their cards reviewed in accordance with DHS reports of other countries.

No significant sex difference was noted in vaccination uptake. Gaza Strip has a better coverage for BCG, measles, MMR, 3rd dose of DTP and Polio, while the West Bank has a better coverage for 3rd dose of Hepatitis B.

BCG has a low coverage in rural and urban areas, while the camp has a very high coverage. On the other hand the camps coverage for MMR and 3rd dose of Hepatitis B is the lowest compared to rural areas and urban areas.

Mother's education does not seem to have a particular trend with immunization uptake, probably because the uptake is so high not to allow variation. Vaccines with lower uptake such as BCG and MMR, did show an increase with mother's education, similar to other countries.

Table 9.5: Percentage of children aged 12-23 months whom immunization card was seen and received specific immunization in the Palestinian Territory excluding Jerusalem governorate by selected background characteristics

Background characteristics	BCG	MMR	3 rd Polio	3 rd DTP	3 rd Hepatitis B	Measles
Sex						
Males	74.3	76.8	99.7	99.7	95.4	98.2
Females	76.1	70.3	99.2	98.8	92.8	96.0
Type of locality						
Urban	79.0	75.3	99.6	99.4	94.1	98.6
Rural	54.3	72.8	99.1	98.8	97.6	95.3
Camp	98.6	68.2	99.6	99.6	87.6	95.0
Mother's educational attainment						
None	64.9	70.1	99.3	96.5	98.4	97.8
Elementary	76.3	69.8	99.4	99.4	91.5	97.4
Preparatory	76.2	74.1	99.8	100.0	95.0	97.2
Secondary and above	76.9	77.2	99.2	99.2	93.3	96.9
Region						
Palestinian Territory	75.2	73.5	99.5	99.3	94.1	97.1
West Bank	56.3	70.4	99.3	99.1	94.5	96.2
Gaza Strip	100	77.5	99.7	99.4	93.4	98.2

Trends in immunization coverage:

The Health Survey (HS) of 1996 was similar in methodology to the one in 2000. The only differences were that BCG vaccination was not introduced to the Government MCH centers at that time, and measles vaccine has been introduced 7 months prior to the survey. Therefore the coverage of these vaccines at Govt. MCH centers will be omitted, but discussed only in relation to the coverage in the camps.

71.4% of children for the year 2000 had their cards available compared to 66.8 % of children in 1996. The lowest cards available were from children living in the camps in both years (65.3% for 2000 and 54.8% for 1996). One wonders if there is an element of dependency in the refugee population compared to urban areas and rural areas.

It is difficult to compare coverage percentage between 1996 and 2000, as the procedure might affect the result of the two surveys. The error in the differences can be reduced if one compares the uptake for the age group 12-23 months. The only exception is MMR; given at 15 months of age, therefore age group 24-35 months might be a better age group to examine for trends.

The uptake for 3rd dose of Polio, DTP and 3rd dose of Hepatitis B have improved in the year 2000 compared to 1996 particularly for Hepatitis B.

Table 9.6: Percentage of children vaccinated aged 12-23 months, whom immunization card was seen 1996, 2000

Year	3 rd dose of DTP	3 rd dose of Polio	3 rd dose of Hepatitis B	Percent with cards seen
HS 1996	96.4	95.8	79.0	78.7
HS 2000	98.7	98.3	94.1	85.9

For MMR, there was a slight improvement in the coverage, though one cannot draw many conclusions as 70% and less of the children had their cards reviewed.

Table 9.7: Percentage of children vaccinated aged 24-35 months, whom immunization card was seen 1996, 2000

Year	MMR	Cards seen
HS 1996	93.8	65.4
HS 2000	95.3	70.0

9.4 Breast-Feeding and supplementation:

The pattern of infant feeding has an important influence on the health of the children. Feeding is the principle determinants of a young child nutritional status and have been shown to increase the risk of illness and death among young children. Breast-feeding practices have also an effect on the mother's fertility. More frequent breast-feeding for longer duration is associated with a longer period of postpartum amenorrhea and thus longer period of birth interval and lower fertility.

9.4.1 Initiation of breast-feeding:

Early initiation of breast-feeding is important for the mother and the child. For the mother, early sucking promotes the release of a hormone that helps the uterus to contract and reduce the risk of postpartum hemorrhage. It is important for the child to receive the colostrum, which is the first milk after delivery, since it is rich in antibodies that protect the newborn from infections.

Table 9.8: Percentage distribution of children (last birth) born in the last three years preceding the survey who were breast-fed by interval between birth and timing of first breast-fed, region and type of locality

Region and Type of locality	< 1 hour	1-2 hours	3-5 hours	6 + hours
Type of locality				
Urban	49.5	26.3	9.1	15.1
Rural	51.9	22.1	8.6	17.4
Camp	50.2	25.5	9.4	14.9
Region				
Palestinian Territory	50.3	24.9	9.0	15.8
West Bank	51.9	22.2	8.7	17.2
Gaza Strip	47.5	29.6	9.5	13.4

In the HS 2000, half of the newborns were breast-fed in the first hour, more in the West Bank than GS. In general 84.2% were fed within 5 hours, slightly more in GS (86.6%) and the camps (85.1%).

9.4.2 Breast-feeding:

Exclusive breast-feeding percentage is 28.8%, more in Gaza Strip and the camps. No trend was noted between the percentage of exclusive breast-feeding and mother's education status or with sex of the child.

Almost 80% of children aged 6-9 months received solid/semi solid food, which is appropriate practice to allow the child to taste different types of food and to obtain the extra requirement of iron and vitamins needed for growth. More children receiving solid food were from the camps, GS, females and children of mothers who have secondary + education. Half of the children aged 12-15 months were breast-fed, more in the camps, GS, males and in children of mothers with no education. Only 10.5% of the children aged 20-23 months were breast-fed, mainly in rural areas, the WB, and of mothers with lower education. Continued BF percentage was 68.8%, lowest in urban areas and for mothers with secondary + education. This might be due to that educated mothers are likely to work and therefore more likely to stop breast-feeding. Mean duration of breast-feeding is 11.1 months, highest in the camps at 12.4 months.

Percentage of breast-feeding is 97.2% for the last child born in the last three years. Children weaned from breast milk in the first three months were 14%. Males were breast fed longer than females, more males were weaned within three months than females but more females were on solids at 6-9 months.

There is a gradual reduction of the percentage of never breast fed women from 3.9% for the age group 40-49 year to 2.0% for the age group 20-24 years. Women 15-19 years old had an exceptionally higher percentage at 3.4% possibly implying there are more young mothers not breast-feeding than before.

Table 9.9: Percentage of living children (last child) born in the last three years preceding the survey, by breast feeding status and selected background characteristics

Background Characteristics	Exclusive BF	6-9 months On solid	CBFR	12-15 months BF	20-23 months BF	BF (Last child)	Weaned within 3 months (Last child)	Duration of BF
Sex								
Males	29.0	75.3	70.2	50.8	10.6	96.7	15.4	11.4
Females	28.6	80.8	67.4	46.9	10.5	97.8	12.5	10.7
Mother's educational attainment								
None	23.0	76.1	71.2	60.4	21.2	96.6	12.8	11.6
Elementary	31.0	70.5	72.3	45.1	12.2	97.0	16.0	11.1
Preparatory	26.0	77.7	73.5	52.3	9.7	97.5	13.6	11.5
Secondary and above	32.5	84.2	59.6	42.5	4.6	97.5	13.3	10.4
Type of locality								
Urban	26.7	75.4	64.8	48.7	9.6	96.9	13.9	11.0
Rural	28.1	80.9	71.2	44.3	14.2	97.7	15.5	10.5
Camp	36.5	82.0	76.4	57.6	6.2	97.9	11.5	12.4
Region								
Palestinian Territory	28.8	77.9	68.8	48.8	10.5	97.2	14.0	11.1
West Bank	27.5	76.2	67.4	45.7	12.3	96.8	15.3	10.4
Gaza Strip	30.8	80.4	71.1	54.1	7.1	98.0	11.7	12.4

The status of females who breastfed and those who had stopped breastfeeding directly related to mothers and children's age; the older the mother and the child the more likely the mother to have stopped breast-feeding.

Table 9.10: Percentage distribution of children (last child) born in the last three years preceding the survey by mother's age, current breast feeding status and child's age

Mother's age	Breast feeding status			Age distribution of last born child (months)		
	Never breast fed	Still breast feeding	Stopped breast feeding			
				< 6	6-11	12 +
15-19	3.4	57.0	39.6	31.2	32.9	35.9
20-24	2.0	50.2	47.8	23.8	26.4	49.8
25-29	2.1	46.4	51.5	22.6	18.9	58.5
30-39	3.5	44.1	52.4	19.5	17.9	62.6
40-49	3.9	35.9	60.2	13.2	5.8	81.0
Total	2.8	46.5	50.7	21.7	20.5	57.8

9.4.3 Reasons for weaning:

Reasons for weaning depend on the child's age. The main reasons for weaning the last child who is less than 6 months were: insufficient breast milk at (36.3%) and child refused the breast at (23.1%). Other reasons were uncommon, like the death of the child (8.6%), the child is sick (7.1%) etc. For the age group 6-11 months, common reasons were insufficient breast milk (32.5%), the mother got pregnant (24.0) and child refused the breast (15.8%). For a child older than 24 months, the main reason was the child is old enough (87.0%). As for weaning children less than 6 months, more mothers in the WB reported insufficient breast milk at (39.6%) and fewer mothers reported child refusal of breast milk at (18.6%) compared to (27.2% and 35.2% respectively) in GS.

Table 9. 11: Percentage distribution of children born in the last three years preceding the survey (last child) who have been weaned by reasons for weaning, child's age and region

Reason for weaning	West Bank				Gaza Strip				Palestinian Territory			
	< 6	6-11	12-23	24+	< 6	6-11	12-23	24+	< 6	6-11	12-23	24+
Mother sick	7.7	9.2	6.0	0.0	8.3	7.5	4.6	0.0	7.8	8.8	5.4	0.0
Child Sick	6.2	1.3	4.2	0.0	9.6	1.7	4.1	2.1	7.1	1.4	4.1	0.7
Dead Child	7.8	0.0	0.1	0.0	10.8	1.5	0.0	0.0	8.6	0.4	0.1	0.0
Nipple problem	8.2	3.5	2.3	0.7	4.5	2.7	3.5	0.0	7.2	3.3	2.8	0.4
Insufficient milk	39.6	34.3	12.6	0.0	27.2	27.5	12.9	3.0	36.3	32.5	12.8	1.1
Desire to work	2.4	4.8	1.1	0.0	2.1	0.0	0.9	0.0	2.3	3.6	1.0	0.0
Child refused	18.6	12.6	5.0	3.7	35.2	25.1	1.7	0.0	23.1	15.8	3.6	2.4
Child old enough	2.0	8.5	51.6	86.3	0.0	6.2	54.0	88.3	1.5	7.9	52.6	87.0
Mother became pregnant	4.8	23.4	13.8	9.4	1.7	25.8	16.4	6.6	4.0	24.0	14.9	8.4
Use of family planning method	1.5	1.0	1.7	0.0	0.0	1.1	1.7	0.0	1.1	1.0	1.7	0.0
Others	1.2	1.4	1.6	0.0	0.6	0.9	0.2	0.0	1.0	1.3	1.0	0.0
Total	100	100	100	100	100	100	100	100	100	100	100	100

9.4.4 Complementary feeding:

Age at introducing liquids was higher for the WB (3.4 months) than GS (2.4 months) while age at introducing solid food was the same for both regions at 5.7-5.8 months. There was no obvious variation with the age of introduction and mother's age.

Table 9.12: Mean age of children at supplementation (with liquids and solids) by mother's age and region

Mother's age (years)	Mean age at supplementation with liquids (months)			Mean age at supplementation with solids (months)		
	West Bank	Gaza Strip	Total	West Bank	Gaza Strip	Total
15-19	3.2	2.3	2.9	5.9	5.6	5.8
20-24	3.2	2.6	3.0	5.6	5.7	5.6
25-29	3.6	2.3	3.1	6.0	5.6	5.9
30-39	3.3	2.3	2.9	5.7	5.7	5.7
40-49	3.4	2.0	2.8	6.4	5.8	6.2
Total	3.4	2.4	3.0	5.8	5.7	5.8

Timely complementary feeding rate for children age 6-9 months showed no variation with mother's education or region. Looking at type of complementary feeding, 83% of children age 6-11 were having solids, after which the percentage increased to 95.6% at 12-17 months. Less than 40% of the children had powdered milk at any age. Around 60% of children had fruit juice at any age. Herbal drinks were popular, given to 85% of children aged 24 + months.

Table 9.13: Timely complementary feeding rate for children 6-9 months by mother's educational attainment and region

Mother's educational attainment	West Bank	Gaza Strip	Total
None	100.0	95.0	98.1
Elementary	84.3	100.0	90.1
Preparatory	93.3	87.0	91.0
Secondary and above	97.2	95.8	96.5
Total	93.2	93.3	93.3

Unwanted habits as in giving fresh milk to infants was at 2.4% and 13% for children less than 6 months and 6-11 months respectively. Other unwanted habit as in giving sugar water at any age was at 6.9%.

Table 9.14: Percentage of children who were given specified type of liquids and solids by type of complementary feeding and child's age

Supplementary feeding	Child's age (months)					Total
	0-5	6-11	12-17	18-23	24+	
Mineral water / piped	46.1	90.9	97.9	98.6	98.3	87.9
Powdered milk	39.0	38.3	39.4	36.0	24.4	33.3
Fresh milk	2.4	13.0	26.3	31.3	29.6	21.9
Fruit Juice	16.6	49.2	61.2	60.2	61.3	51.3
Sugar water	7.8	6.4	5.5	8.6	6.7	6.9
Herbal drinks	33.4	40.1	66.3	81.9	85.1	65.4
Vitamins	18.6	17.9	11.8	6.4	4.2	10.4
Family food	23.1	83.0	95.6	96.8	97.5	81.6
ORS	0.7	1.5	2.3	0.6	1.2	1.2
Other liquids	12.4	41.2	50.6	52.1	53.5	43.6

Comparison with HS data 1996:

The HS 1996 indicated that 76% of children were breast fed in the first five hours after birth, more in GS (82.3%) than the WB (72.8%)², which is less than the HS 2000, as 84.2% of children were breast fed in the first 5 hours, slightly more in GS (86.6%) than the WB (82.8%). The gap in breast-feeding practices between the two regions has diminished in the four years interval, mainly due to improvement in breast-feeding practice in urban areas (73.4% in 1996³ to 84.9% in 2000).

Exclusive breast-feeding percentage for children age 0-3 months was not measured for the year 1996.

Timely complementary feeding percentage for children aged 6-9 months were 93.3% for the year 2000, compared to 96.3% for the year 1996⁴.

Continued BF rate was 58.3% for the year 1996⁵, which is less than the year 2000 figure of (68.8%). Mean duration of breast-feeding was similar in the two surveys at 11 months, highest in the camps at 12 months and in mothers with lower education⁶.

All Children weaned from breast milk in the first three months were 7.4 %⁷ in 1996 compared to 12.9% for the year 2000, lowest in the camps, highest in the rural area and the percentage did not relate to mother's education. The percentage for the last born child was higher at 14% for the year 2000 and 7.8% for 1996⁸.

Percentage of breast-feeding of the last child born in the last five years was 96.1% in the HS 1996⁹ compared to 97.2% for the last child born in the three years preceding the HS 2000. The percentage was lower when looking at all children together.

On the question of breast-feeding status, the percentage of never breast fed in the HS 1996¹⁰, has decreased gradually from 5.0% for age group 40-49 years to 1.7% for the age group 14-19 years. This reduction has continued in the HS 2000 showing gradual decrease from 3.9% for the age group 40-49 year old to 2.0% in the age group 20-24 years old. There is no explanation though for the increase in the age group 15-19 to 3.4% in the year 2000 survey except that the percentage of never breast-fed mothers is on the increase again.

Reasons for weaning depended on the child's age. Generally, there was no difference in the two surveys. The most common reason for weaning the last child was "child old enough" at 33.2% for 2000 and 36.1% for 1996¹¹. "Mother became pregnant" was 12.9% for HS 2000

² Palestinian Central Bureau of Statistics, 1996. The Health Survey of the West Bank and Gaza Strip: Main Findings. Ramallah, Palestine 1997. P 124, Table 57.

³ Ibid, Table 57. Page 124

⁴ Palestinian Central Bureau of Statistics, 1996. The Health Survey of the West Bank and Gaza Strip: Main Findings. Ramallah, Palestine 1997. Table 59. Page 127

⁵ Ibid, Table 56. Page 124

⁶ Palestinian Central Bureau of Statistics, 1996. The Health Survey of the West Bank and Gaza Strip: Main Findings. Ramallah, Palestine 1997. Table 56. Page 124

⁷ Ibid, Page 121. Table 53

⁸ Palestinian Central Bureau of Statistics, 1996. The Health Survey of the West Bank and Gaza Strip: Main Findings. Ramallah, Palestine 1997. Page 121. Table 53

⁹ Ibid, Page 114. Table 46

¹⁰ Palestinian Central Bureau of Statistics, 1996. The Health Survey of the West Bank and Gaza Strip: Main Findings. Ramallah, Palestine 1997. Page 118. Table 50

¹¹ Ibid, Page 137. Table 69

and 15.2% for the health survey 1996. Preventable causes were “insufficient breast milk” and “child refused the breast” were at 32.8% in total for 2000 and 33.6% for the year 1996¹².

Age at introducing complementary food was the same in the two surveys at around 6 months¹³. What was also common is the age at introducing complementary feeding was consistently earlier in GS than in the WB.

Comparing type of complementary feeding, the variables were slightly different. Important variables were fresh milk and sugar water. The percentages were much higher for the 1996¹⁴ survey. Fresh milk at 5.6% and 20.2% for 1996 for children aged less than 6 months and 6-11 months respectively, Vs 2.4% and 13% for the year 2000 and sugar water was at 21.6% and 15.7% for the year 1996 for children less than 6 months and 6-11 months respectively Vs 7.8% and 6.4% respectively for the year 2000.

9.5 Vitamin supplementation:

Vitamins are used for the prevention and treatment of specific deficiency cases or where the diet is known to be inadequate.

Supplementation of infants with vitamin A has been encouraged world wide to prevent night blindness in malnourished children. It has been practiced in the Palestinian Territory for many years. It is given to children from birth to one year in the form of two drops of vitamin A & D. Some physicians discourage the practice if the child is receiving formula milk because it contains adequate amounts of vitamin A and D.

Table 9.15: Percentage distribution of children aged 6 months and over, born in the last three years preceding the survey by whether they have received vitamin A supplementation within the last six months by selected background characteristics

Background Characteristics	Children Who Received Vitamin A			Don't Know if Received	Never received
	Within the last six months	Prior to last six months	Not Sure When		
Sex					
Males	17.2	34.6	1.1	0.7	46.4
Females	13.7	33.4	0.7	1.0	51.2
Type of locality					
Urban	15.3	35.1	0.7	0.5	48.4
Rural	17.8	33.9	1.1	1.5	45.7
Camp	11.6	30.4	1.4	0.7	55.9
Mother's educational attainment					
None	11.2	24.2	1.4	1.5	61.7
Elementary	15.1	35.2	0.9	0.9	47.9
Preparatory	16.9	34.3	1.0	0.7	47.1
Secondary and above	15.8	36.9	0.6	0.7	45.8
Region					
Palestinian Territory	15.5	34.0	0.9	0.9	48.7
West Bank	19.3	37.3	1.3	1.1	41.0
Gaza Strip	8.6	28.2	0.2	0.5	62.5

¹² HS 1996. Page 137. Table 69

¹³ HS1996. Page 126. Table 58

¹⁴ HS 1996. Page 134. Table 66

Vitamin A coverage for children born in the three years preceding the survey was around 50%. It was slightly higher in males, in rural areas, in the WB, and increases with mother education and does not relate to child’s age.

Endemic goiter, caused by Iodine deficiency in the diet is found to be common among schools children in the Palestinian Territory. Iodizing of salt has been introduced over the last couple of years to prevent goiter among schools children.

Households consuming adequate Iodized salt were at 37.4%. The highest percentage was at the West Bank at 47.3%, while the Gaza Strip at 16.6%. Looking at the different locality, the lowest percentage is in the camps at 24.6%. This means all the localities of the Gaza Strip have a very low Iodized salt compared to the West Bank.

Table 9.16: Percentage of households consuming adequately iodized salt by region and type of locality

Background Characteristics	Percentage of households in which salt was tested	Iodized salt test	
		PPM 15 +	PPM < 15
Region			
West Bank	98.8	47.3	52.7
Gaza Strip	98.6	16.6	83.4
Type of locality			
Urban	98.8	39.7	60.3
Rural	98.6	39.4	60.6
Camp	99.1	24.6	75.4
Total	98.8	37.4	62.6

9.6 Nutrition:

Nutritional status is a primary determinant of a child’s health and well being. Both inadequate or unbalanced diet and chronic illness are associated with poor nutritional status among children.

In order to assess the nutritional status, measurement of weight, height for children older than 2 years and length for children up to 2 years and age of the child can produce three standard indices of physical growth, namely weight for age, weight for height/length and height/length for age.

Each of the indices measures somewhat different aspects of the nutritional status of the children.

Children whose height/length for age is below -2 standard deviation from the median of the referenced population are considered short for their age or stunted. Children who are less than -3 standard deviation 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 effect of recurrent or chronic illness.

The weight for height/length index measures body mass in relation to body length/height. Children whose weight for height/length index is below -2 SD from the median of the referenced population are thin for their height/length, or wasted. Severely wasted children are the ones who are -3 SD below the referenced population. Wasting means failure to receive

adequate nutrition in the period immediately before the survey, and be the result of an acute illness or acute food shortage.

Weight for age measures body mass in relation to the age of the child. Children below -2SD from the median of the referenced population are considered underweight for their age. Those below -3SD are considered severely underweight. A child can be underweight because he is stunted, wasted or both.

It is worth noting that height for age for older children measures optimal health of the child, as in developed countries, improvement in socioeconomic status, vitamin supplementation and having adequate varied diet improves the height of the children as noted in the UK after world war II and in the Chinese immigrants to the USA. Weight for height/length takes away this notion of optimal health as it allows a short and thin child to be healthy using weight for height/length index. This is important to keep in mind when analyzing the 2000 survey to prevent confusion.

As recommended by the WHO, evaluation of the nutritional status should be compared to a population of well-nourished children. Therefore the measurements in this survey were analyzed according to the local population, then compared to the international referenced population as defined by the US National Center for Health Statistics (NCHS) and accepted by the WHO and the center for Disease Control.

9.6.1 Levels of malnourished child:

Palestinian children are relatively well nourished compared to other third world countries. The worst index is height/length for age (stunted), as children below -2SD make 7.5% of the children whose height/length was measured. Next comes weight for age (underweight) at 2.5% and children's weight for height/length (Wasted) at 1.4% of the children is below -2SD. Females are more stunted and underweight than males, but fewer females are wasted compared to males.

Mother's education correlates positively with the height/length of the child and the weight of the child i.e., with more education, more children are in the normal range for height/length for age and weight for age. No correlation exists with wasting.

Children at 6-11 months have the highest percentage of underweight and wasting, dropping gradually as the child grows older, possibly relating to the time of weaning. Height/length has a similar trend but the maximum stunting is at 12-23 months then decreasing gradually.

The camps have the lowest percentage of children who are stunted, underweight or wasted. Rural areas have the highest percentage of children, who are stunted, while urban areas have the highest percentage of children who are wasted. In addition, GS has a lower percentage of children who are wasted and underweight compared to the WB, but higher percentage in stunting. This is difficult to explain, because GS has a large percentage of camps children who have the lowest percentage of stunted children. The only explanation is that rural and urban children in GS are much more stunted than the rural and urban children in the WB to account for the high stunting rate in GS.

Table 9.17: Percentage of children under five years that were severely or moderately malnourished by selected background characteristics

Background Characteristics	Weight for height		Height for age		Weight for age	
	-2SD	-3SD	-2SD	-3SD	-2SD	-3SD
Sex						
Males	1.6	0.3	7.0	1.3	2.2	0.1
Females	1.3	0.3	8.1	1.9	2.8	0.3
Age of the child (months)						
Less than 6	1.9	0.6	3.4	1.3	1.9	0.1
6-11	4.1	0.3	3.5	0.8	3.0	0.0
12-23	2.0	0.3	10.5	1.8	2.9	0.2
24-35	0.7	0.4	7.4	1.6	2.6	0.4
36-47	0.3	0.1	8.3	2.0	2.0	0.3
48 +	1.0	0.2	8.1	1.5	2.4	0.2
Mother's educational attainment						
None	1.5	0.6	11.5	3.0	4.9	1.0
Elementary	1.7	0.4	8.8	1.7	2.9	0.2
Preparatory	1.2	0.0	6.3	1.2	1.7	0.0
Secondary and above	1.5	0.4	5.7	1.1	2.0	0.1
Type of locality						
Urban	1.6	0.2	7.6	1.8	2.4	0.1
Rural	1.4	0.5	8.1	1.6	3.3	0.4
Camp	1.1	0.2	6.2	1.1	1.3	0.1
Region						
Palestinian Territory	1.4	0.3	7.5	1.6	2.5	0.2
West Bank	1.5	0.3	7.0	1.4	2.6	0.2
Gaza Strip	1.4	0.2	8.3	1.9	2.4	0.2

Using the International reference population, 8.2% of Palestinian children are stunted and 2.0% are wasted. The percentage of stunting is higher than the result obtained from using the local population reference (7.5%). This means, in general Palestinian children are shorter than the referenced population.

Table 9.18: Weight for height by height for age standard deviation categories, using the International reference population

Nutritional Status	West Bank	Gaza Strip	Total
Stunted	7.8	8.9	8.2
Wasted	2.1	2.0	2.0

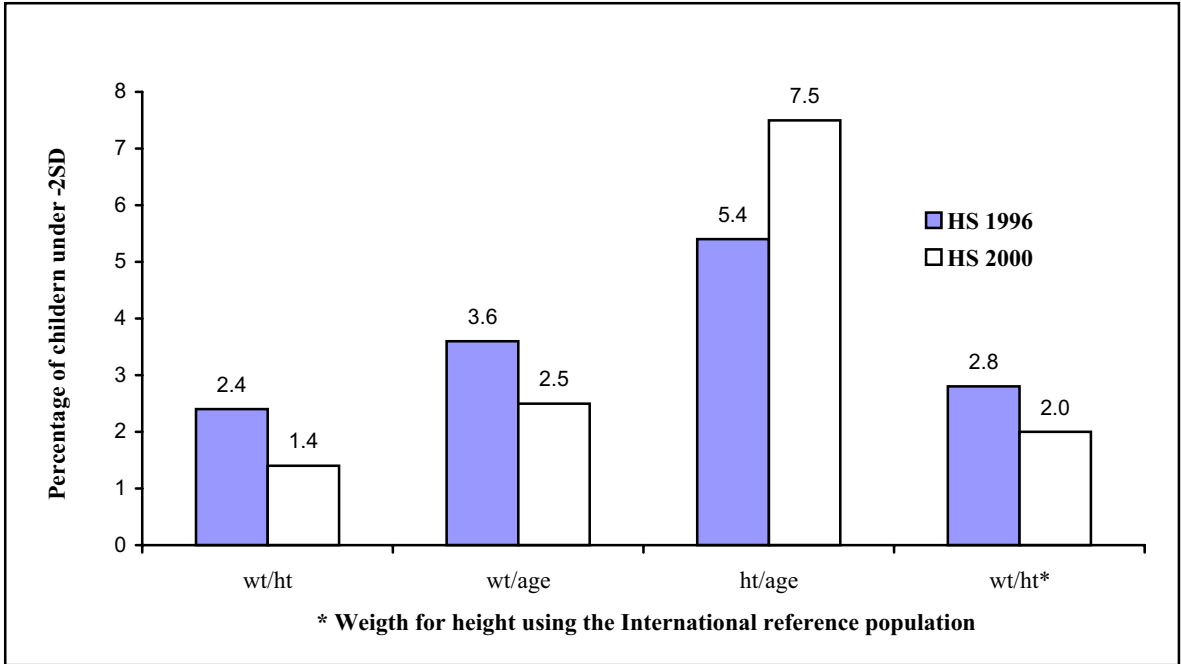
Comparison with HS data of 1996:

According to comparison between the data of the health survey of 1996 and 2000, there are less underweight and wasted children in the year 2000, yet there is more stunting. The percentage of stunting is doubled for children less than 6 and 12-23 months. This is difficult to explain from the data available, but plainly what it means is that Palestinian children are shorter than their counterparts of 1996. Since stunting is a product of chronic insult to children, causes are variable; from chronic malnutrition, unlikely in this case as underweight children are less (2.5% in HS 2000 and 4.4% in the HS 1996¹⁵), recurrent illnesses, chronic infection, mental stress etc. The most likely cause is worsening of the nutrition of

¹⁵ HS 1996. Page 178. Table 110.

marginalized children over the years (not available for the year 2000) increasing the overall percentage of stunting. This was presented in the 1996 data, as it showed stunted children were mainly from the villages of the WB (9.5%) and the cities and the camps of GS (9.3% and 8.7%) respectively¹⁶.

Figure 9.1: Percentage of children, who were under 2SD for weight for height, weight for age and height for age using local reference population and weight for height using International reference population 1996, 2000



9.7 Diarrhea:

Dehydration caused by severe diarrhea is a major cause of illness and 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 re-hydration therapy, which includes oral re-hydration salts or any other liquid¹⁷. Food is also encouraged during an episode of diarrhea in the form of breast milk for children less than 6 months and solid food for older children to avoid malnutrition, which can make the situation worse¹⁸.

Prevalence and treatment of diarrhea by selected background characteristics The survey took place in the spring, so fewer episodes of diarrhea were expected.

The overall percentage was 6.7% of children had diarrhea in the last two weeks prior to the survey. Males were affected more than females. The highest percentage was in children from 6-11 and 12-23 months as this the age when children are exposed to different organisms that can cause diarrhea due to the introduction of family food, which is not sterile and to the children putting everything into their mouth. After this age, children develop tolerance,

¹⁶ HS 1996. Page 178. Table 110.

¹⁷ El-Zanaty F, Hussein M, Shawky G, Way A and Kishor S. Egypt Demographic and Health Survey 1995. National population Council (Egypt) and Macro International Inc. 1996:P149. Calverton, MeryInd (USA).

¹⁸ WHO. Diarrhea Management Training Course, Participant Manual. 1992. P13

immunity and better hygiene resulting in a drop in the percentage of diarrhea to almost one third. Children are more likely to have exclusive breast-feeding or sterile bottle feeding and unlikely to crawl and eat from dirty hands or dirty food before six months of age. Percentage of diarrhea did not have a trend with mother's education and seemed more prevalent in children living in rural areas and in the West Bank. One of the reasons might be that rural areas have the lowest percentage of piped water at (63.3% compared to 91.9% in urban area and 89.4% in the camp).

Table 9.19: Percentage of the population by main source of drinking water and type of locality

Type of locality	Main source of drinking water					
	Indoor public system	Outdoor public system	Piped well	Un-piped well	Tanker truck	Spring canal
Urban	91.9	2.0	3.5	0.9	1.4	0.0
Rural	63.3	0.9	21.9	5.3	6.0	2.5
Camp	89.4	7.0	1.0	0.6	1.1	0.2
Total	83.1	2.4	8.5	2.2	2.7	0.8

Also rural areas are lowest to have public sewer 6.8% compared to 56.4% in urban areas and 71.2% in the camps. This allows the possible contamination of drinking water.

Children receiving appropriate treatment were looked at by background characteristics. Overall 99.1% of the children received appropriate treatment as in breast feeding, soup, home made fluids, Oral Rehydration Salt (ORS), infant formula or water with food.

Table 9.20: Percentage distribution of households by type of sewage disposal system, region and type of locality

Type of sewage disposal system	Type of locality			Region		
	Urban	Rural	Camp	West Bank	Gaza Strip	Palestinian Territory
Public Sewer	56.4	6.8	71.2	36.5	59.3	43.9
Cesspool	43.0	92.0	28.2	62.4	40.6	55.4
Other means	0.2	0.6	0.4	0.5	0.0	0.3
Doesn't exist	0.4	0.6	0.2	0.6	0.1	0.4

As the percentage of appropriate treatment were fairly high, it was difficult to see differences in the characteristics of the children. There was a small difference though in mother's education and appropriate treatment with gradual increase from 96.9% in illiterate mothers to 100% in mothers with preparatory and secondary + education. In children 0-6 months and 6-12 months, 96.4% and 76.8% of the children received breast-feeding appropriately. Most children received water with food (80.1%), then homemade fluids (71.4%), and soup (57.7%), formula milk (35.2%) and lowest were in ORS at (20.6%).

The low usage of ORS might be linked to low consultation rate (50%), as one has to obtain a prescription and then buy it from the pharmacy, while all the other foods are normally available at home. In general, the result shows that mothers were aware of the seriousness of

diarrhea and reacted accordingly by initiating some form of therapy. The percentage of no therapy was 0.9%.

Table 9.21: Percentage of children under five years of age with diarrhea in the last two weeks preceding the survey and have treatment by type of treatment and selected background characteristics

Background Characteristics	Had diarrhea	Treated	Children with diarrhea who received					
			Breast milk	Soup	Locally acceptable fluids	ORS	Other milk	Water with food
Sex								
Males	7.0	99.0	42.9	60.1	73.0	24.6	37.4	80.1
Females	6.3	99.3	39.7	54.9	69.5	15.9	32.7	80.1
Age of child (months)								
Less than 6	7.3	100	96.4	22.6	34.2	17.9	39.0	36.9
6-11	15.6	98.4	76.8	59.0	70.0	29.4	35.5	69.9
12-23	11.9	100	29.9	65.1	76.6	15.9	31.6	92.4
24-35	4.8	96.5	2.8	60.1	85.0	16.4	41.1	91.9
36-47	3.1	100	0.0	64.0	77.2	27.1	35.6	90.9
48-59	1.4	100	0.0	67.9	86.0	22.1	33.1	95.0
Mother's educational attainment								
None	6.2	96.9	40.8	51.2	63.2	26.1	27.3	71.3
Elementary	5.7	97.7	42.4	45.3	78.2	24.9	37.3	79.6
Preparatory	7.4	100	43.9	59.4	71.1	18.5	30.1	81.8
Secondary and above	6.8	100	39.0	69.3	71.4	19.1	47.0	80.5
Type of locality								
Urban	6.3	98.7	37.6	56.4	69.4	21.0	35.8	81.8
Rural	7.6	100	47.2	60.8	75.5	19.7	35.6	75.4
Camp	6.3	98.8	42.0	55.2	69.6	21.2	32.5	84.3
Region								
Palestinian Territory	6.7	99.1	41.4	57.7	71.4	20.6	35.2	80.1
West Bank	7.0	98.6	41.3	65.0	76.6	21.5	39.7	78.9
Gaza Strip	6.2	100	41.6	44.7	62.2	19.0	27.2	82.1

In children who received fluids during diarrhea, 45.1% had their fluid intake increased, while 54.5% had the same amount or less. In terms of food intake, 10.2% had the same amount of food or more while 89.8% had less or none. Mother's education was associated with increasing the amount of fluid or food. Age of the child made no difference to the percentages of increasing intake. Children living in rural areas were given less fluid compared to urban areas and the camps and children living in the West Bank were more likely to be given less/same drink or less/none food.

Table 9.22: Percentage of children under five years of age with diarrhea in the last two weeks preceding the survey who took increased fluids or food by selected background characteristics

Background Characteristics	Less or no food	Same or less fluids	More fluids	Same/more food	Increased fluids and continued eating
Sex					
Males	91.6	51.2	48.1	8.4	45.8
Females	87.8	58.4	41.6	12.2	39.6
Age of child (months)					
Less than 6	43.6	77.4	22.6	56.4	13.3
6-11	88.7	59.2	39.6	11.3	36.0
12-23	99.1	48.5	51.5	0.9	51.2
24-35	98.6	43.2	56.1	1.4	56.1
36-47	100	51.6	48.4	0.0	48.4
48-59	100	58.4	41.6	0.0	41.6
Mother's educational attainment					
None	92.4	59.9	39.3	7.6	36.6
Elementary	91.8	61.9	38.1	8.2	35.9
Preparatory	89.1	50.8	49.2	10.9	48.4
Secondary and above	87.2	49.3	49.6	12.8	45.8
Type of locality					
Urban	89.6	47.7	52.3	10.4	50.1
Rural	89.6	64.2	34.6	10.4	32.7
Camp	90.8	56.9	43.1	9.2	40.8
Region					
Palestinian Territory	89.8	54.5	45.1	10.2	43.0
West Bank	92.6	57.0	42.4	7.4	40.7
Gaza Strip	84.8	50.0	50.0	15.2	46.9

9.7.1 Seeking consultation for diarrhea by source:

Overall, 50% of the mother's sought consultation. More in Gaza Strip than in the West Bank and lowest in rural areas. Higher percentage of consultation was sought for males than for females by 3.2%, and for children aged 6-11 months, who had the highest percentage of diarrhea. One third of the children visited a physician, more from rural areas and the West Bank. Another third visited Govt. MCH clinic, mainly from Gaza Strip and rural areas. Then 13.5% visited UNRWA clinics, mainly from the camps and Gaza Strip. 10.9% of mothers from urban and rural areas visited a UNRWA center, while 37.3% of camps children visited Govt. centers. 3.5% of mothers' sought consultation at a pharmacy, all of whom were from urban areas and mainly from Gaza Strip. If public and private services are re-grouped as in table (9.23), then mothers living in the rural areas did not use None Governmental Organization (NGO) services and used private more than public services. Mothers living in urban areas used private and public equally and some NGO sector, while mothers living in the camps used mostly public sector with some private and NGO. More children had consultation from the private sector in the West Bank than Gaza Strip possibly because of higher percentage of private insurance at 17.1% for the West Bank compared to 0.3% for Gaza Strip¹⁹.

¹⁹ HS 2000. P118-119. Tables 52 & 53

Table 9.23: Percentage of children under five years of age who had diarrhea in the last two weeks preceding the survey and received consultation by source and selected background characteristics

Background Characteristics	Private sector*	Doctor Clinic	Pharmacy	Public sector**	UNRWA	Govt.	NGO	Consulted any source
Sex								
Males	42.7	33.8	2.5	54.3	15.6	38.7	3.4	51.5
Females	47.6	33.8	4.8	51.0	10.9	40.1	7.5	48.3
Age in months								
Less than 6	39.3	17.9	8.1	67.3	21.3	46	5.1	47.7
6-11	55.6	50.8	1.5	49.1	14.3	34.8	3.2	65.2
12-23	37.1	29.1	0.0	58.4	11.2	47.2	4.5	46.3
24-35	45	33.1	8.9	47.8	15.2	32.6	1.4	45.7
36+	45.5	17.8	9.4	35.5	7.3	28.2	19.0	39.7
Type of locality								
Urban	47.1	35.4	6.1	46.6	8.2	38.4	7.1	55.7
Rural	56	42.8	0.0	45.6	2.7	42.9	0.0	39.2
Camp	19.9	14.1	0.0	86.5	49.2	37.3	7.0	53.8
Region								
Palestinian Territory	44.9	33.8	3.6	52.9	13.5	39.4	5.2	50.0
West Bank	58.3	48.2	0.8	34.6	6.5	28.1	4.6	46.4
Gaza Strip	25.3	12.7	7.7	79.5	23.7	55.8	6.2	56.3

* Include: Private health center, doctor clinic, and pharmacy.

** Include: Governmental health center, UNRWA hospital\center.

Comparison with HS data 1996:

HS data for 1996 show diarrhea percentage at 14.5%²⁰, which is expected as the survey was conducted in the summer when diarrhea is more prevalent. The percentages were highest in children from 6-23 months, in rural areas and in males the same as in the HS 2000. Treatment of diarrhea in the HS 1996 was assessed in terms of ORS and home made solution; the percentages were 26.9% and 9.9% respectively. The percentage of ORS use was higher than the percentage of HS of 2000. This might relate to the severity of the diarrhea or reflect the higher percentage of mothers seeking professional care resulting in more ORS prescription (Figure 9.2). The amount of fluid given to children was more in 53.9% of the children and 33.7% of them had the same or more food. Children living in rural areas were given least extra fluids at 48.9% compared to urban areas (55.6%) and the camps (62.5%). Mother's education and region was not recorded in diarrhea management in 1996 survey, therefore there is no possibility of comparison with the HS 2000.

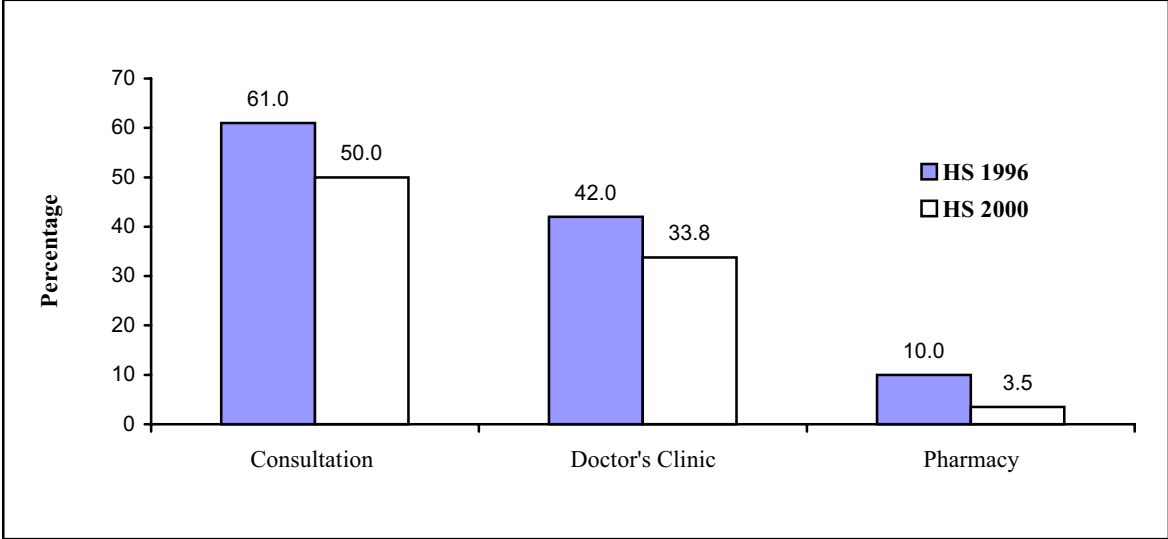
In the HS 1996, the source of consultation was different from HS 2000, therefore difficult to compare all the variables and difficult to re-group into public and private. Overall 61.1% of the children in the 1996-HS sought medical care more than 2000 survey (50%), which might explain the higher percentage of ORS use, also a much higher percentage of consultation was sought from the camps at 70.1% Vs city (59.4%) and village (58.7%)²¹ in contrast to HS 2000, where 53.8% sought advice from the camps vs. rural (39.2%) and urban areas (55.7%). 42.1% sought consultation from a doctor clinic, more from rural areas, similar to the HS 2000. More children from the HS 1996 sought consultation from a pharmacy at a percentage of 10%

²⁰ HS 1996. Page 161. Table 93.

²¹ HS 1996. Page 165. Table 97

compared to 3.5% in the HS 2000. These children were mainly from rural areas at 11.2% then the camps at 10.2%. Overall more males than females' sought medical advice in both surveys.

Figure 9.2: Percentage of children under five years of age who had diarrhea in the last two weeks preceding the survey of 1996 and 2000 and received consultation by source



9.8 Acute respiratory infection:

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 deaths due to pneumonia.

9.8.1 Prevalence of cough by selected background characteristics:

Cough was found to be more among males. More in age group 6-23 months as this is the age where children are exposed to infections and building up immunity. The percentage of cough seemed to increase with mother's education.

The lowest number of cases were found in rural areas (13.9%) and the highest in the camps (20.8%). Gaza Strip had also a higher percentage than the West Bank, probably because of overcrowding. The percentage of cough with rapid breathing, indicative of a more serious infection, was almost half of the percentage of cough alone (9.1% vs. 17%). The percentage of consultation was very high ranging from 99.3% to 100%. No difference was observed with sex, education of mother, locality and region.

Table 9.24: Percentage of children who had a cough with or without rapid breathing in the last two weeks preceding the survey and received medical consultation by selected background characteristics

Background Characteristics	Cough	Cough with rapid breathing	Percentage consulting any source
Sex			
Males	19.5	11.3	99.6
Females	14.5	6.9	99.8
Age of child (months)			
Less than 6	16.6	9.8	99.0
6-11	23.7	17.3	100
12-23	21.7	11.1	100
24-35	15.3	7.6	99.3
36-47	15.0	6.7	100.0
48-59	12.4	6.4	99.3
Mother's educational attainment			
None	11.9	6.9	100.0
Elementary	16.3	8.7	99.7
Preparatory	18.9	10.1	99.3
Secondary and above	17.8	9.3	100.0
Type of locality			
Urban	17.6	9.2	100.0
Rural	13.9	7.5	99.5
Camp	20.8	11.7	99.0
Region			
Palestinian Territory	17.0	9.1	99.7
West Bank	15.2	8.4	99.8
Gaza Strip	19.9	10.3	99.6

Since ARI is associated with increased population density, crowded conditions and smoking, it was looked at by rate of density. It was found out that there was a rapid increase in the percentage of ARI from 12.7% in children living in houses up to 0.99 person per room to a percentage of 39.6% in children living in houses from 1-1.99 person per room.

Table 9.25: Percentage of children with acute respiratory infection by housing density and background characteristics

Background characteristics	Acute Respiratory Infection (ARI)	Up to 0.99 person per room	1-1.99 person per room	2-2.99 person per room	3-3.99 person per room
Type of locality					
Urban	Does not have ARI	11.6	42.1	29.2	17.1
	Have ARI	13.0	39.1	29.1	18.8
Rural	Does not have ARI	12.6	41.6	27.6	18.2
	Have ARI	10.6	36.5	32.6	20.3
Camp	Does not have ARI	11.7	40.9	29.0	18.4
	Have ARI	14.3	44.7	22.1	18.8
Region					
West Bank	Does not have ARI	13.4	43.2	27.2	16.2
	Have ARI	14.0	38.5	26.4	21.1
Gaza Strip	Does not have ARI	9.4	39.2	31.3	20.1
	Have ARI	11.2	40.9	31.1	16.8
Palestinian Territory	Does not have ARI	11.9	41.7	28.7	17.7
	Have ARI	12.7	39.6	28.5	19.2

After that, the percentage drops gradually to reach a level of 19.2% in children living in 3+ persons per room.

There is a slight increase in smokers in the household of children with ARI in urban areas, rural areas and the West Bank, but not in the camps or Gaza Strip.

Table 9.26: Percentage of children with and without acute respiratory infection by percentage of smoking in household and selected background characteristics

Background characteristics	Acute respiratory infection (ARI)	Not smoking	Smoking
Type of locality			
Urban	Does not have ARI	39.0	61.0
	Have ARI	44.2	55.8
Rural	Does not have ARI	39.8	60.2
	Have ARI	36.3	63.7
Camp	Does not have ARI	40.1	59.9
	Have ARI	44.9	55.1
Region			
West Bank	Does not have ARI	39.3	60.7
	Have ARI	40.2	59.8
Gaza Strip	Does not have ARI	39.5	60.5
	Have ARI	45.2	54.8
Palestinian Territory	Does not have ARI	39.4	60.6
	Have ARI	42.5	57.5

This implies that there are other factors contributing to ARI apart from smoking and house density, which are beyond the scope of this report.

9.8.2 Seeking consultation for cough by source:

Overall, private and public health services were used equally at around 41.0%. Govt. services were used almost three times as much as UNRWA, which probably reflects wider range of services, availability and accessibility. Almost 5.7% sought care directly from the pharmacy, more mothers from Gaza Strip, urban and rural areas, mothers of children older than 36 months and males. Mother's education increases the use of private health care than public, in particular doctor's clinics. Children living in the camps used public services more than private. Children from rural areas used private services more than public. Govt. services were used three times as much as UNRWA services. 29.3% of the camps children used Govt. services, while 5.5% of the rural children and 4.8% of the urban children used UNRWA services. Children in the West Bank are three times more likely to use doctor's clinic than children in Gaza Strip, possibly because more of them have private insurance (17.1% in the West Bank vs. 0.3% in Gaza Strip) and have higher overall economic status than children in Gaza Strip.

Table 9.27: Percentage of children who had cough with or without rapid breathing in the last two weeks preceding the survey and received medical consultation by source and selected background characteristics

Background characteristics	Doctor Clinic	Pharmacy	UNRWA	Govt. hospital\center	Public sector*	Private sector**	NGO
Sex							
Males	26.6	6.3	14.3	30.7	45.0	40.4	5.4
Females	28.1	4.9	8.4	27.5	35.9	41.2	5.5
Age of the child (months)							
Less than 6	28.0	1.7	12.8	35.9	48.7	34.7	4.0
6-11	36.6	2.6	13.7	33.4	47.1	50.5	6.9
12-23	31.1	5.6	12.7	28.2	40.9	44.4	3.9
24-35	19.2	3.7	11.6	33.5	45.1	32.1	6.1
36-47	23.6	10.4	9.9	25.1	35.0	38.8	6.6
48 +	24.7	9.1	9.9	21.7	31.6	42.8	5.8
Mother's educational attainment							
None	13.1	0.9	20.3	28.5	48.4	22.6	1.8
Elementary	23.0	6.3	12.4	28.9	41.3	36.2	6.5
Preparatory	27.9	7.0	10.4	31.2	41.6	43.4	5.5
Secondary and above	34.6	5.3	11.0	26.5	37.5	42.8	5.9
Type of locality							
Urban	27.7	6.6	4.8	32.8	37.6	42.3	6.9
Rural	35.8	5.8	5.5	21.3	26.8	50.8	3.7
Camp	15.7	3.0	39.9	29.0	68.9	24.2	3.4
Region							
Palestinian Territory	27.2	5.7	11.8	29.3	41.1	40.8	5.5
West Bank	38.4	4.6	6.0	17.5	23.5	54.5	6.2
Gaza Strip	13.6	7.1	18.9	43.7	62.6	24.1	4.5

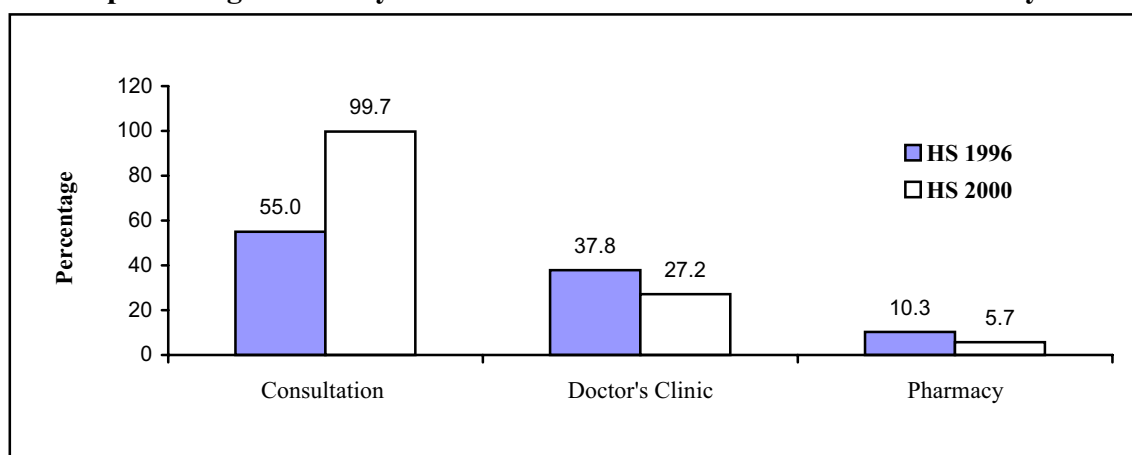
* Include: Include: Governmental health center, UNRWA hospital\center.

** Private health center, doctor clinic, and pharmacy.

Comparison with HS of 1996:

The HS of 1996, conducted in the summer showed 22.5% of the children had ARI in the last two weeks preceding the survey. In contrast, the HS 2000 was done in the spring and showed 17.0% of the children had ARI.

Figure 9.3: Percentage of children under five years of age who had ARI in the last two weeks preceding the surveys of 1996 and 2000 and received consultation by source



This is contrary to expectations, as one should find more children to have ARI in the spring than the summer. The reason for this is the differences in the method of data collection. The HS of 1996 asked the mothers if the children had a runny nose or a cough, while the HS of 2000, asked if the children had a cough or rapid breathing. More children are expected to have a runny nose than to have a cough as found in the HS of 1996.

In the HS of 1996, half of the parents' sought consultation for ARI symptoms compared to 100% for the year 2000. Also 37.8% used doctor's clinic and 10.3% used a pharmacy in 1996 compared to 27.2% and 5.7% respectively for the year 2000.

This means that parents in the year 2000 are probably more aware of the seriousness of ARI as a cause of death in young children seeking consultation in almost 100% of the cases. Also their health-seeking behavior is more appropriate in that they used pharmacies less as first line treatment.

It is difficult to comment on the less use of Doctor's clinic by parents in the year 2000 compared to 1996, as other private sector variables are not available for the year 1996.

Executive summary:

Immunization has been maintained at a high percentage except for BCG in rural and urban areas and measles in urban areas. Further research into the causes of the low uptake can be beneficial for intervention.

Diarrhea mainly affects children in rural areas and these children in particular are not managed well. Research is needed to look at causes of diarrhea in rural areas and diarrhea management should continue with emphasis on families living in rural areas.

ARI is most common in the camps, showing relation to household density and smoking within the house. Management of ARI has improved since 1996. There is a place for intervention in the camps.

One third of mothers stopped breast-feeding for reasons that could have been prevented by counseling. Weaning in the first three months was highest in the rural areas. Breast-feeding counseling should continue and expand to include all mothers especially in rural areas.

Vitamin A supplementation for infants and Iodized salt is lacking in the camps and GS in particular. Both should be made available and awareness campaigns should target health professionals and parents.

Indices of nutrition have shown that more Palestinian children are becoming under -2SD in height/length for age than in 1996. Provisional analysis suggests that differential stunting is probably affecting the poorest, mainly rural areas and the cities in GS, while children from the camps are doing well. Further research is urgently warranted as similar data from school health program have been observed in 6-year-old children over the last four years.

Vaccination:

Mother's memory is a less accurate estimate of vaccination uptake compared to reviewing the immunization cards.

Immunization cards were available for almost $\frac{3}{4}$ of the children, lowest in the camps. More cards were available for the year 2000 than 1996.

There is a slight increase in the year 2000 of the uptake of 3rd dose of DTP, 3rd dose of Polio and MMR and a significant increase in the uptake of Hepatitis B compared to 1996.

BCG has the lowest uptake with a significantly low overall uptake in the rural areas. DTP and Polio have the highest uptake in the camps provided by UNRWA, while MMR and Hepatitis B have the highest uptake in rural and urban areas provided by the Govt.

Children in the West Bank are vaccinated mainly by the Palestinian MOH immunization program and only a small percentage is vaccinated at the Israeli MOH MCH centers, as shown by the slight variation in vaccination uptake for BCG and measles when children living in Jerusalem were excluded.

Recommendations:

Mother's memory is inaccurate for immunization uptake and one should look at the vaccination cards if available.

Further research is needed to look into reasons for a low uptake of BCG vaccine. Jerusalem needs to be analyzed separately from the WB initially because of the different vaccination program, in particular to assess the effect of the uptake on BCG and Measles.

Percentage of vaccination uptake for children under five is not informative. Specific immunization uptake for children 12-23 months is more informative for all the vaccines except for MMR, where the age group specific for immunization uptake is 24-35 months.

Breast Feeding:

Early breast-feeding has improved from 1996 to 2000, mainly due to better practices in urban areas.

More children were breast-fed at 6-9 months, but more children were weaned at 3 months in the year 2000 compared to 1996. This might be due to a higher percentage of mothers going to work in the year 2000.

The percentage of never breast-fed has remained low at 2%. One third of the children were weaned for incorrect reasons such as insufficiency of breast milk or child refused the breast.

Liquids are introduced at 3 months and solids at 6 months. Fewer infants received fresh milk or sugar water in the year 2000 compared to 1996.

Recommendations:

Early weaning can be prevented through counseling the mother and supporting her. Health education targeting preventable causes for weaning can reduce the practice by one third.

Desired and undesired practices in complementary feeding can be encouraged or discouraged accordingly through better information made available to mothers.

Vitamin Supplementation:

The percentage of vitamin A coverage is 50%, low in the camps and GS. The availability of Iodized salt is generally low especially at Gaza Strip.

Recommendations:

Research into reasons for low uptake of vitamin A and Iodine should be encouraged. The public and health professionals should be made aware of the benefit of vitamin A and Iodine supplementation.

Iodized salt should be made more available, especially in the camps and GS. Vitamin A supplementation should be encouraged particularly in the camps and GS.

Nutrition:

More females are stunted and underweight than males

Mother's education positively affects the height/length of the child and to a lesser degree the weight of the child.

When nutritional indices are compared, refugee children have better health than children of rural and urban areas.

Gaza Strip has more stunting children than the West Bank and this has increased the overall stunting percentage in the Palestinian Territory.

Using the international reference population, Palestinian children are shorter than their counterparts in the referenced population.

In general there are less children in the 2000 survey under -2SD for weight for age and weight for height/length than children from the 1996 data. On the other hand, there are more children under -2SD for height/length for age than the year 1996, suggesting the children in general are getting shorter. Similar results have been observed in the school health program data in the West Bank comparing the percentage of short children at first grade from 1997-1999. The percentage has increased from 2.06% to 2.58% covering around 40,000 children per year^{22,23}. Also, similar results have been observed in the demographic surveys of 1992 and 1995 in Egypt looking at children under five years of age. The results have shown that more children are below -2SD in the three indices in 1995 compared to 1992²⁴.

Recommendations

Height/length for age and weight for age are more informative on the quality of nutritional status of children than weight for height/length.

Research is needed to look into factors affecting height/length for age in the Palestinian children, as the result of more stunting children in the year 2000 than 1996 survey is alarming.

Diarrhea:

Diarrhea is prevalent in the summer, more likely to affect males, children living in rural areas and children 6-23 months old.

The majority of children received any recommended treatment though only 45.1% had their fluids intake increased and 90% had less or no food during the diarrheal episode.

Children who received less fluid and drinks were from rural areas.

Rural children used private services while camps children mainly used public services. Urban children used private and public services equally. The use of services depended on accessibility, availability and cost.

²² Ziara S, El-Khateeb W, Skeik M, Arkoub O, Accorsi S and Cogo C. Health profile of the first grade school children in Palestine: An account of the National School Health Program 1997. Palestinian National Ministry of Health.

²³ Ministry of Health. Information and Statistics Department. Activities of school health team, scholastic year 97/98 and 98/99.

²⁴ El-Zanaty F, Hussein M, Shawky G, Way A and Kishor S. Egypt Demographic and Health Survey 1995. National population Council (Egypt) and Macro International Inc. 1996: P168. Calverton, Maryland (USA).

Fewer mothers consulted health professionals for the year 2000 than 1996; one possible explanation is education of the public and health professionals on the management of chronic diarrheal diseases, initiated by UNICEF in 1995, has made a difference.

Recommendations:

Public health services in terms of indoor piped water and sewage disposal should be available in rural areas.

Health education on the management of diarrhea targeting the public should continue with particular emphasis on mothers living in rural areas.

Research is needed to look into the reasons for one fourth of the children from the camps seeking Govt. health services. Is it inadequacy of UNRWA services, keeping in mind that working hours is the same as Govt. clinics?

50% of mothers whose children had diarrhea sought consultation. Camps children attended Govt. clinics more than urban and rural areas children attended UNRWA clinics.

ARI:

The percentage of cough is highest in the camps and lowest in rural areas.

Causes of cough are multi factorial, where house density and smoking are two of the factors contributing to the disease.

Recommendations:

Cough per se is not an accurate measure of lower respiratory tract infection, other signs and symptoms need to be collected such as fever, rapid breathing, poor feeding, etc..

Further research is necessary to look at housing density, smoking and other factors contributing to cough causation in an effort to explain the high percentage of ARI in the camps and low percentages of ARI in rural areas.

Public Health

10.1 Introduction:

Public health is a realm not to be overlooked when national priorities are at stake. In Palestine the case is even more critical because of the peculiar circumstances experienced in the long years of Israeli occupation to Palestinian lands. Detrimental effects of systematic neglect of social and health services during those years perpetuated ill health to Palestinians of all ages which was manifested in the mushrooming of a broad range of an exclusive combination of first world and third world illnesses. When anemia and parasitic diseases were commonly seen, hypertension, diabetes, cancer, and heart diseases were equally seen as well. As a result, later on, the role of the PNA was made exceedingly difficult to fulfill.

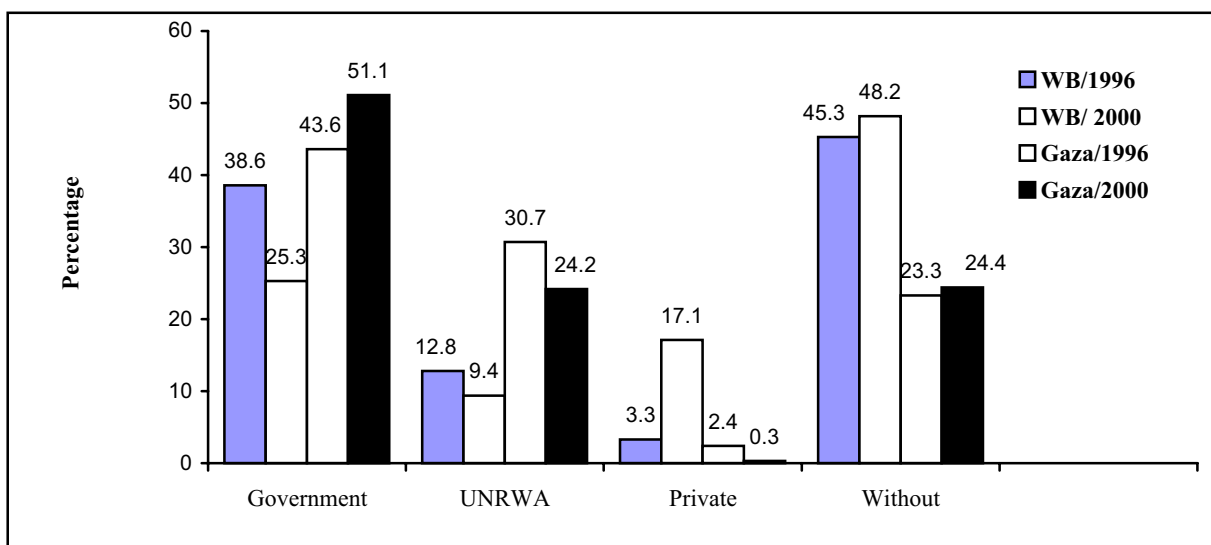
Below, is the analysis of data sets chosen from the main findings of the year 2000 PCBS Health Survey. Selections made deal with crucial public health issues such as; health insurance coverage, chronic diseases, smoking, AIDS, and reproductive health concept.

10.2 Health insurance coverage:

As a matter of fact, one of the most problematic areas in the Palestinian Health System is health insurance coverage. Paucity of national resources together with the broadness of the range of common illnesses present major obstacles to making available to Palestinian public comprehensive national insurance packages.

Health insurance is offered to Palestinian public from three main providers. These are; government, UNRWA and private insurance companies. Government health insurance falls under three categories which are; social security insurance, military insurance and MoH insurance.

Figure 10.1: Percentage distribution of persons by type of health insurance and region 1996,2000



*Please note that WB stands for West Bank while Gaza stands for Gaza Strip.

Apart from police officers, all those working in the PNA’s various ministries and affiliated institutions are covered under this last category.

Figure (10.1) above shows the percentages of insurance coverage by region and type of insurance, comparing the findings of the 1996 Health Survey with this current one. Speaking of the later, government insurance is noted to be used by 51.1% in Gaza Strip compared to 25.3% of those in the West Bank. In spite of the smaller gap between the two regions, a similar picture was registered in the 1996 Health Survey. Bearing in mind the considerably higher number of the Gazan laborers working behind the green line the explanation of this lies in the fact that each must have a health insurance. This was arranged through the MoH health insurance system contributing to the noted high utilization of this insurance category in the Gaza Strip in particular.

The other thing is that the refugee status held by the vast majority of the Gazan population makes larger UNRWA field of operation in the Strip and therefore justifies the 24.2% and 30.7% of the Gazan population being covered by UNRWA health insurance system compared to only 9.4% and 12.8% in the West Bank, as was reported in the 2000 and 1996 health survey, sequentially.

The striking finding, however, is the presence of about 24% gap between the two percentages in the two regions, under the uninsured category, on behalf of the later in both the 1996 and 2000 health survey. Nonetheless, in spite of the fact that Gaza Strip is doing better the total percentage of the insured people (75.6%) is still not as desired.

Altogether, this presents an indicator on the better economic status of West Bank Palestinians compared to those in Gaza and their access to other health services which they perceive as better quality services for which they are able and willing to pay. Bearing in mind the perception of the private insurance being the best in quality, and the fact that it is the highest in cost, this interpretation is supported further at the observation of an almost absent private insurance in Gaza (0.3%) at the time when it is used by 17.1% of West Bank Palestinians.

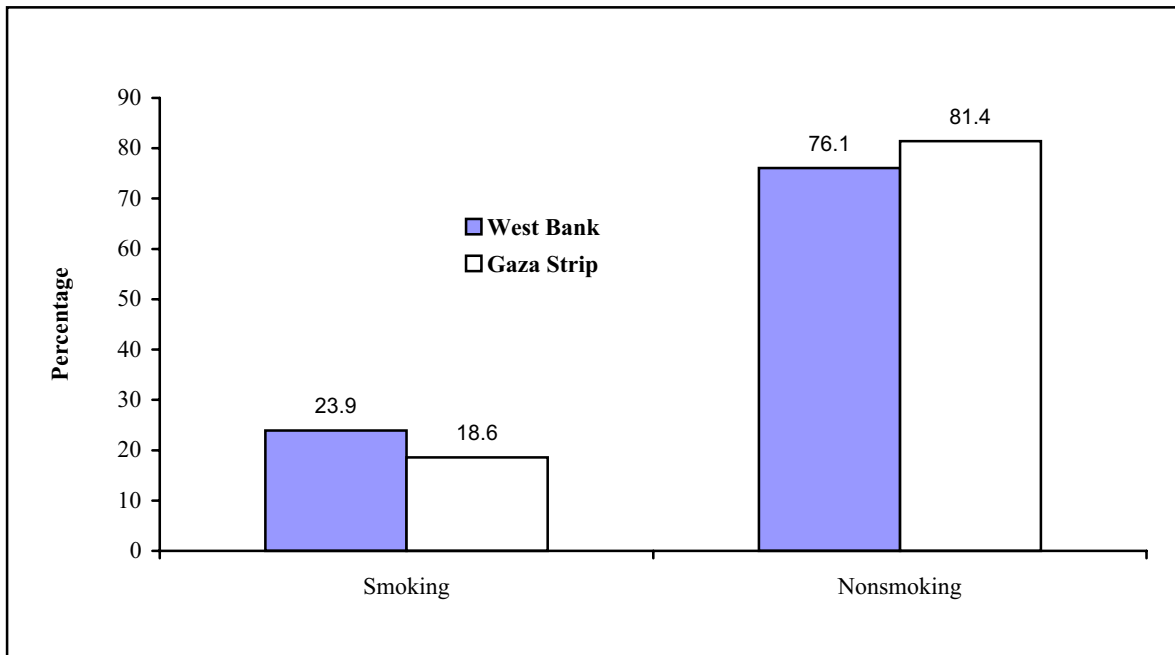
10.3 Smoking:

In a Estimated Number of 551,393 Individuals within the Age group 12-19 Years , 6.4% Practice Smoking. Meanwhile, in that of 505,900 Individuals at 20-29 Years of Age the Same Practice is Common Amongst 27.5%.

Figure 10.2 below indicates that 22%, slightly less than quarter of Palestinians aged 12 years and over practice smoking. It also reveals that smoking in the West Bank is 5.3% higher than that in Gaza Strip. Interestingly, the case was almost the same in the 1996 Health Survey. Bearing in mind the fact of more stressful life events being experienced by Palestinians residing in Gaza Strip, this finding weakens the assumption that suggests smoking as an outlet of tension or a stress release means.

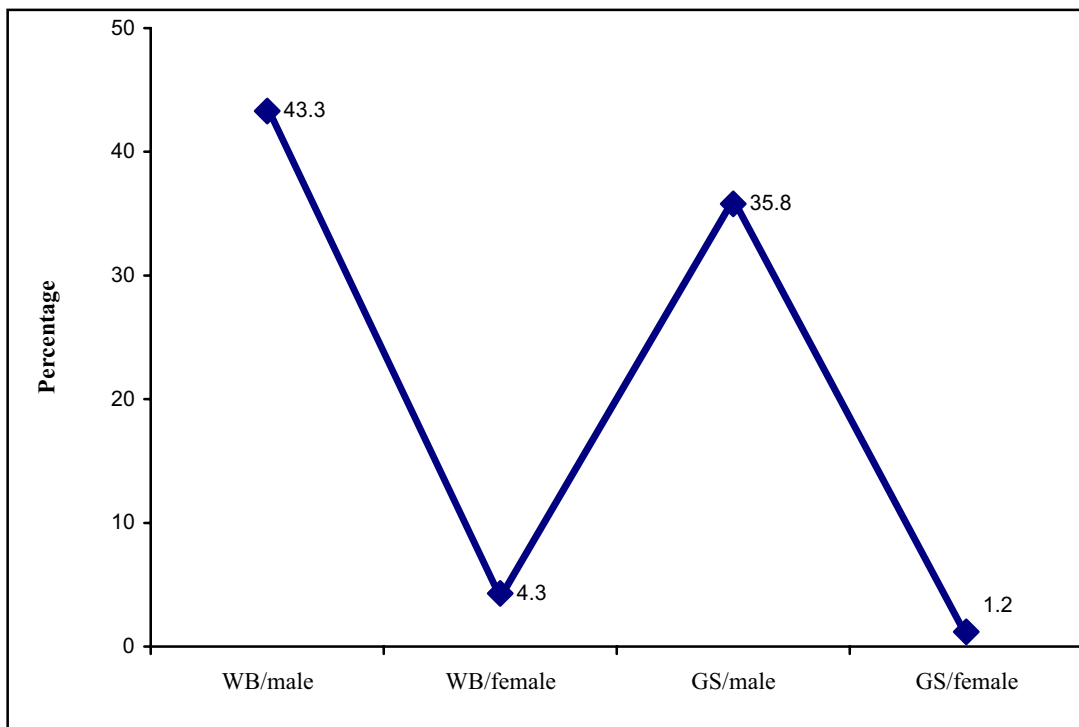
However, it supports the explanation based on the socioeconomic profile of Palestinians in the Strip, in specific. The lower socioeconomic status of the Gazan Palestinians compared to their West Bank counterparts makes such a practice an unaffordable luxury that is renounced by most Gazans. Adding to this the fact that the societal value system in the Strip views the practice of smoking as an unfavorable manner, altogether.

Figure 10.2: Percentage distribution of individuals aged 12 year and over who practice smoking by region



By region and sex, West Bank males are the prime smokers with a total of 43.3% of them practicing this habit. Meanwhile, Gazan women do this to the least extent, coming to no more than 1.2%. Smoking women in the West Bank, however, make up 4.3%, which are more than three folds of those in Gaza Strip. Exact details are presented in the figure below.

Figure 10.3: Percentage of persons aged 12 and over who practice smoking by region and sex

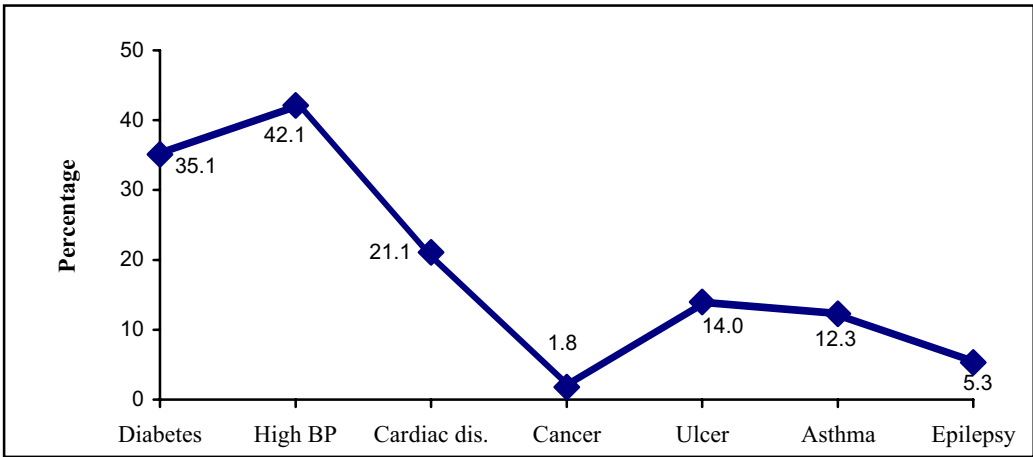


This is suggestive of the tighter social control imposed on women in Gaza, holding them back from experiencing what is socially unfavorable and to some extent defined as a matter of masculine relevance.

10.4 Chronic diseases:

Males and females from the two regions of the West Bank and Gaza Strip were asked whether they have a chronic illness for which they receive treatment.. 94.3% reported none. Those who responded positively (5.7% of the total = 177686 individuals) reported receiving treatment for the diseases: diabetes, hypertension, cardiac diseases, cancer, ulcer, asthma, and epilepsy. Taking into account that a respondent could have reported receiving treatment for more than one chronic disease, hypertension and diabetes occupied the first and second rank amongst the chronic diseases for which respondents receive treatment as can be seen in figure 10.4 below.

Figure 10.4: Percentage of persons who indicated receiving treatment for chronic diseases by type of disease



* Please note that the total used here encompasses only those with chronic illnesses= 177686 people.

A deeper look into the collected data reveals that compared to men of whom 5.1% suffer from chronic diseases, a higher percentage of the surveyed women (6.4%) suffer from the same disease category. In specific, it shows that women suffer twice as much as men from diabetes and hypertension. Cardiac diseases are suffered a little bit more by women than by men. The picture is reversed, however, for; ulcer, asthma and epilepsy. For cancer the situation is the same for both sexes.

Comparing the two regions of the West Bank and Gaza Strip it can be well observed that, overall, chronic diseases are more prevalent amongst West Bankers than amongst Gazans. Prominently, the presence of cardiac diseases, ulcer and asthma in the West Bank is twofold or more than in Gaza Strip.

10.5 Seeking medical care for the under-five children:

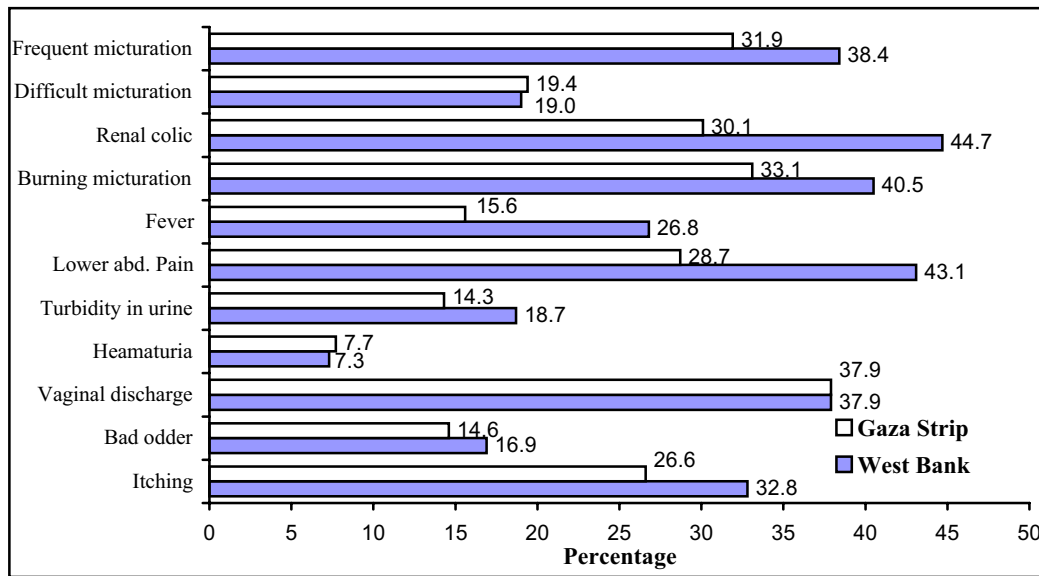
Close to 100% of the surveyed women reported knowing about the need for seeking medical care when the child shows one of the identified signs. Suggestive of high awareness about child health matters amongst Palestinian mothers and caretakers this finding needs to be investigated further within the context of the high Under-five mortality rates in Palestine.

In a Weighted Sample of 293,602 Caretakers of Children Under Five, A minimum of 96.8% Reported Knowing Signs that Require Seeking Medical Care, Except for the Sign of “ General Weakness” where only 89.4% Reported so. Linking this to Caretakers’ Educational level, Locality or Region, no Substantial Differences were Observed.

10.6 Symptoms of reproductive morbidity:

Women were asked about if they complained of certain symptoms in the year preceding the survey.

Figure 10. 5: Percentage of ever married women who had certain symptoms in the last year preceding the survey by region



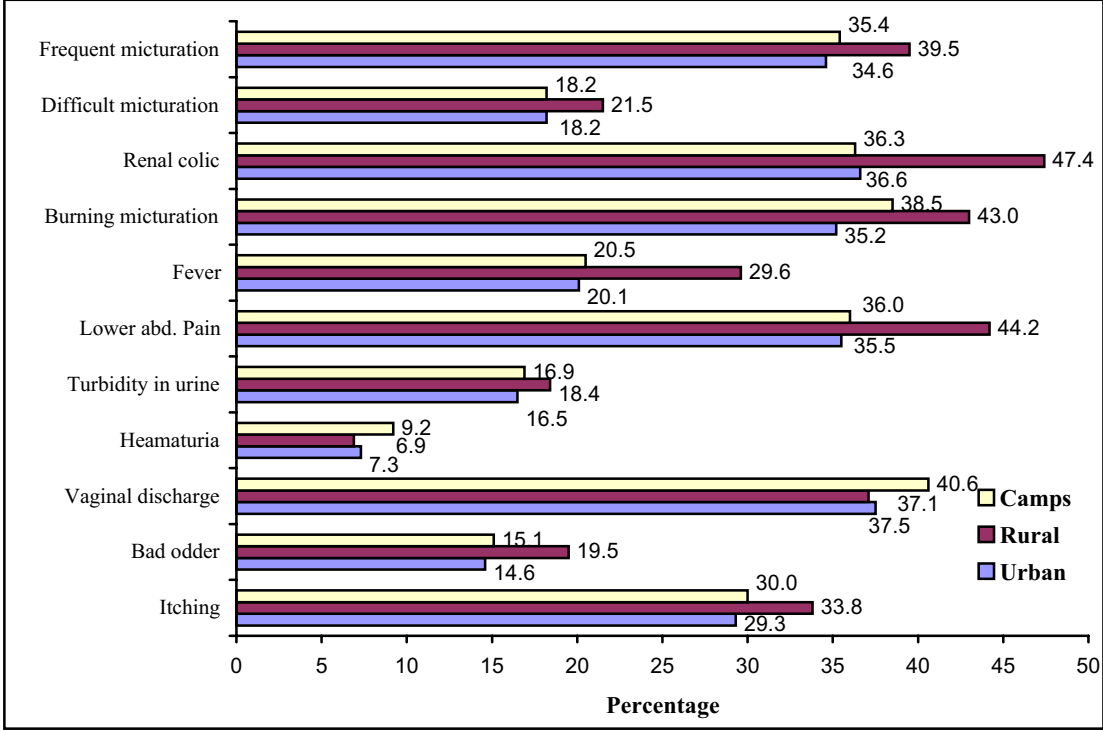
As illustrated in figure 10.5 above, almost in all cases, compared to Gazan women, a higher percent of the West Bank women reported symptoms of reproductive morbidity. This was more pronounced in respect to; renal colic, lower abdominal pain, itching, and burning or frequent micturation.

What need to be investigated further here are the reasons underpinning such disparities, for that these can vary and each has different policy implications. Examples of such reasons include; differences in the women’s perception and definition of what is health and what is illness, differences in the pain threshold between women in both regions which is perhaps related to tougher life experiences of Gazan women making them more tolerant to pain, higher inhibition amongst Gazan women to report matters of reproduction and sexuality connotation, and lastly better health education being offered to women in Gaza facilitating favorable health seeking behavior and less morbidities.

By locality, rural women are the main reporters of the symptoms mentioned above. Figure 10.6 below shows the presence of a considerable distance between the extent of their reporting and those of urban and camp women, with particular reference to the symptoms of; renal colic, fever and lower abdominal pain. This is an indicator on the great need of rural women for reproductive health education as well as for services to be brought closer to them. Having said so, it is not meant to suggest that urban and camp women are in a pleasant

situation. 29% and more of the surveyed urban and camp women experienced 6 symptoms out of the 11 identified.

Figure 10.6: Percentage of ever-married women who had certain symptoms in the last year preceding the survey by type of locality



Data have shown that women’s educational level is negatively related to their suffering from the fore mentioned symptoms of reproductive morbidity. That is to say the more women are educated the less they are prone to suffer from these symptoms. Meanwhile, the relationship these symptoms have with age is inconsistent and varied for each.

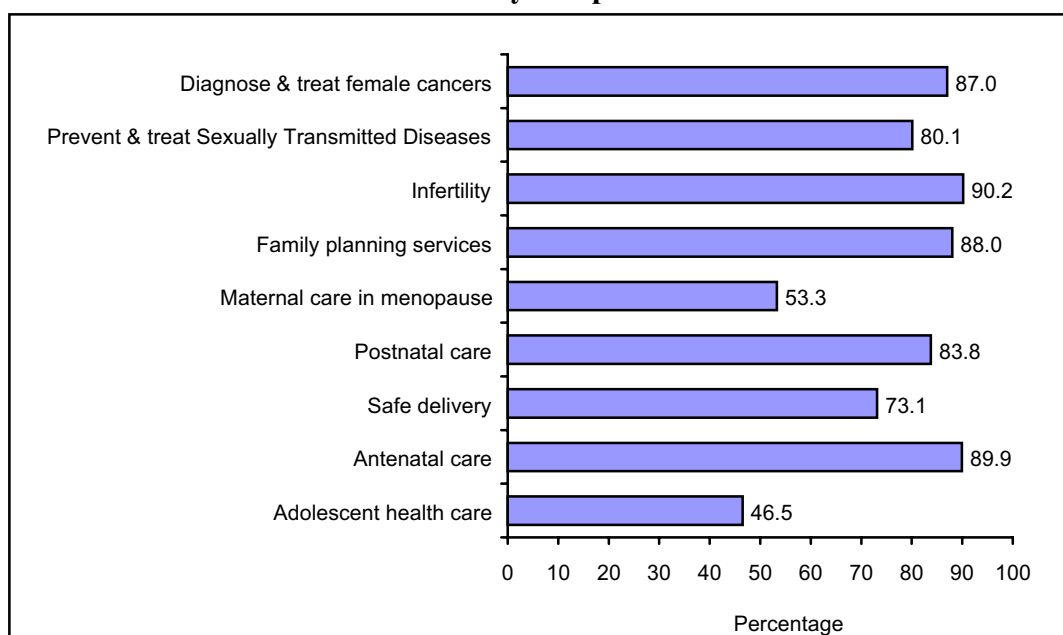
10.7 The concept of reproductive health:

Women were asked about if they have ever heard of the concept of reproductive health. As shown in the box below only 11.6% of the surveyed women responded positively. This implies at a critical inadequacy in health education programs being addressed to women and exploring reproductive health as a concept. No significant discrepancy was registered between the two regions of the West Bank and Gaza Strip.

In A weighted Sample of 469,011 Ever Married Women, only 11.6% Heard about Reproductive Health Concept

Nonetheless, when they were asked about their knowledge of reproductive health components they appeared more knowledgeable. Except for health care of adolescent women and health care of women in menopause, 70% and more of the surveyed women reported their knowledge of the identified reproductive health components. Interestingly, areas where women are least knowledgeable are congruent with the procreative and child bearing perceptual orientation of reproductive health. Figure 10.7 below shows the details.

Figure 10.7: Percentage of ever married women hearing about reproductive health by component



10.8 Aids:

On the subject of AIDS, women were asked about a number of issues, including; knowledge about an HIV/AIDS test offering facility, prevention of transmission, misconceptions, and discriminatory attitudes.

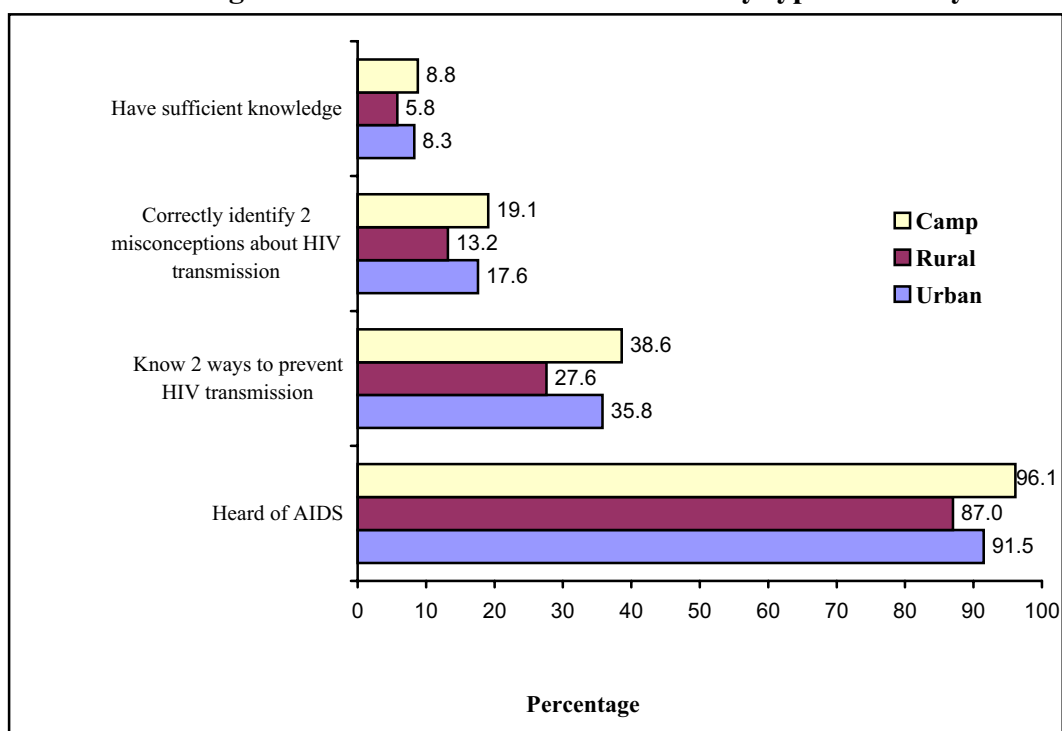
When asked about if they know of a place to target for an HIV/AIDS test, only 20.8% of the surveyed women reported such knowledge. This can either be due to limited availability of the service or women being uninformed of its presence. That is to say poor health education on AIDS, as delivered by care providers.

Out of A Total of 397,976 Ever Married Women only 20.8% Know where to go for an HIV/AIDS Test.

A total of 91.0% of the surveyed ever married women reported having heard of AIDS. As demonstrated in figure 10.8 below camp women ranked first followed by urban and rural women with the percentages of 96.1, 91.5 and 87.0, consecutively.

Taken as a whole, knowledge about transmission prevention shows that out of 14 options offered to women 57.2% identified “having only one uninfected sex partner” while 39.4% identified “condom use at every sex encounter” as two effective measures for preventing HIV transmission. A total of 33.9% know of both measures while 62.7% know of one measure only. This is at the time when 37.3% know about none.

Figure 10.8: Percentage of women aged 15-49 years and the extent of their knowledge about transmission of HIV/AIDS by type of locality



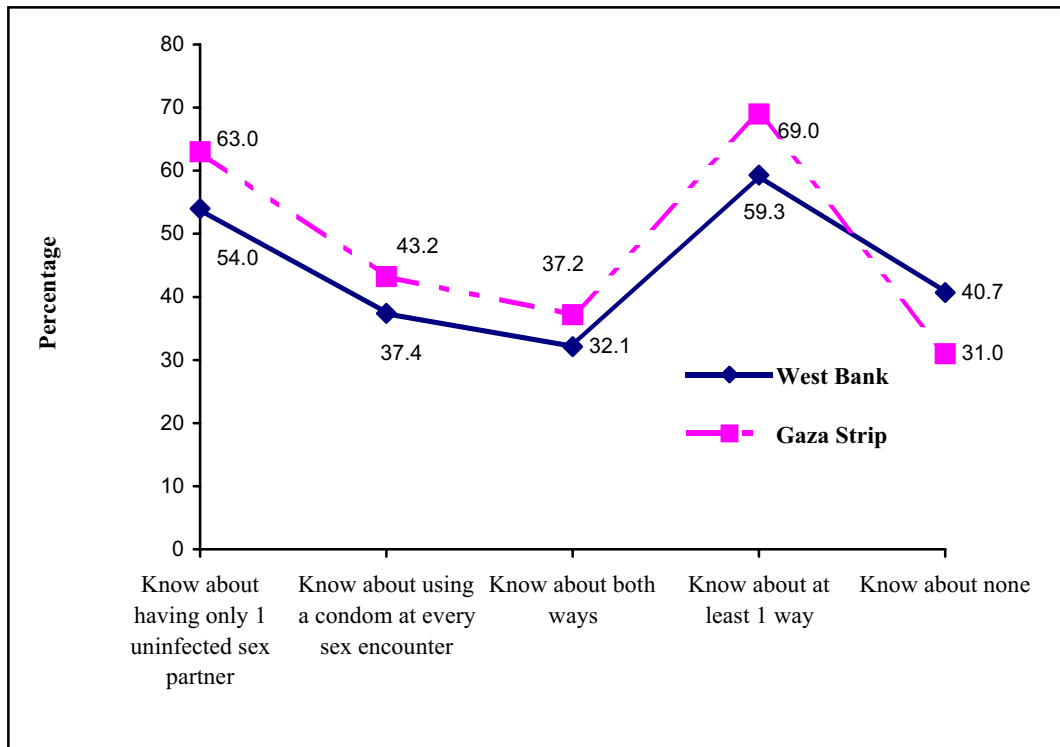
By type of locality, as can be seen in the figure above, 38.6% of the camp women identified the two measures while 35.8% and 27.6% of the urban and rural women, sequentially, managed to do so. Additionally, camp women fared best in identifying only one method of prevention (73.7%) followed by urban (64.4%) and rural (53.4%) women, consecutively.

Although the overall value of these percentages is far from aspired, individually they present clear evidence on the substantial effort UNRWA is investing in health education in its fields of operations: the camp localities. At the same time they draw the attention to the real need of the rural and to a lesser extent urban communities for receiving more aggressive and better-organized health education messages.

By region, the West Bank lagged behind Gaza Strip in all cases with an average gap of 7.2% on behalf of Gaza Strip as can be seen in figure 10.9 below. Trivial as it appears this gap rings the bell as to the reason behind its presence.

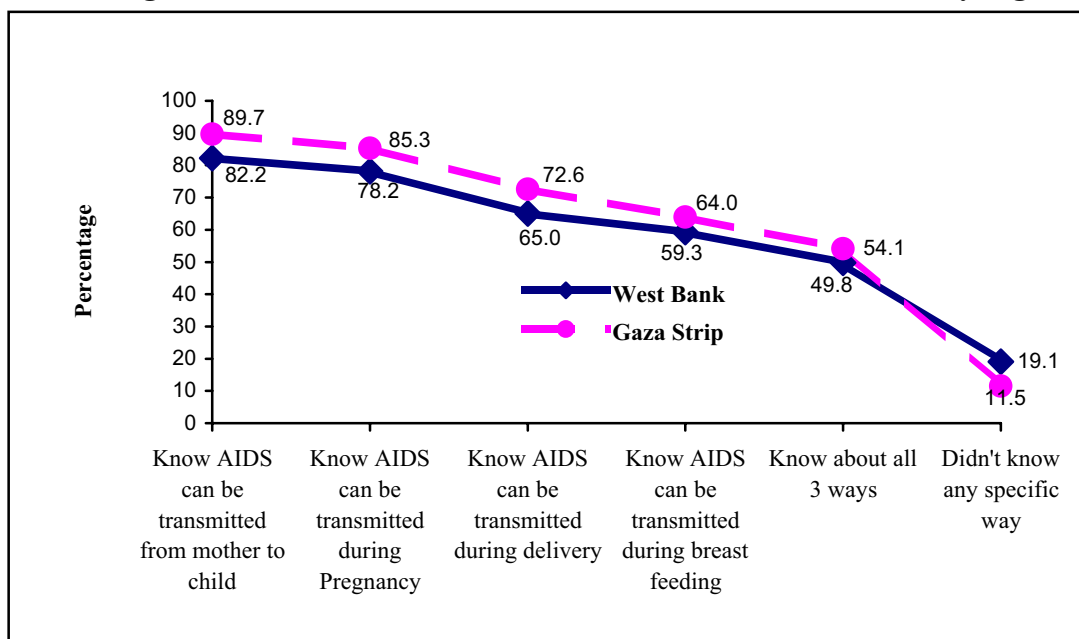
On the other hand, it gives credit to the work of all institutions operating in the Gaza field, particularly the Ministry of Health and its marked augmentation of the human and material capital invested during the last couple of years in this field.

Figure 10.9: Percentage of women aged 15-49 years who know about the main ways of preventing HIV transmission by region



Still under HIV transmission, the one occurring from mother to child was specifically highlighted. Out of the total surveyed 84.9% stated that they know AIDS can be transmitted from mother to child.

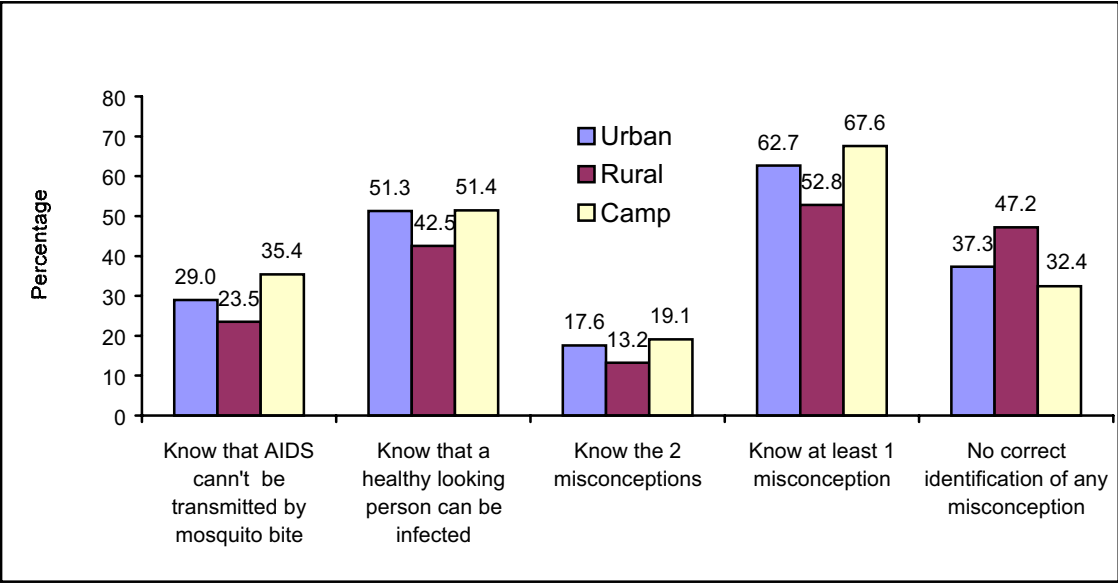
Figure 10.10: Percentage of women aged 15-49 years and the extent of their knowledge about means of HIV transmission from mother to child by region



80.7%, 67.7%, and 61.0% know it can be transmitted during pregnancy, delivery and breast feeding, respectively. All three ways were identified by 51.3% while 16.4% did not have a clue. Figure 10.10 below shows the details by region.

Figure 10.11 shows the respondents ability to correctly identify misconceptions about HIV/AIDS. As can be observed in the figure, camp women fared best in all cases, meanwhile rural women fared worst in all cases, too. Urban women as in previous data are in a mediocre position. Altogether, women from the three localities did best when they were asked to identify at least one misconception.

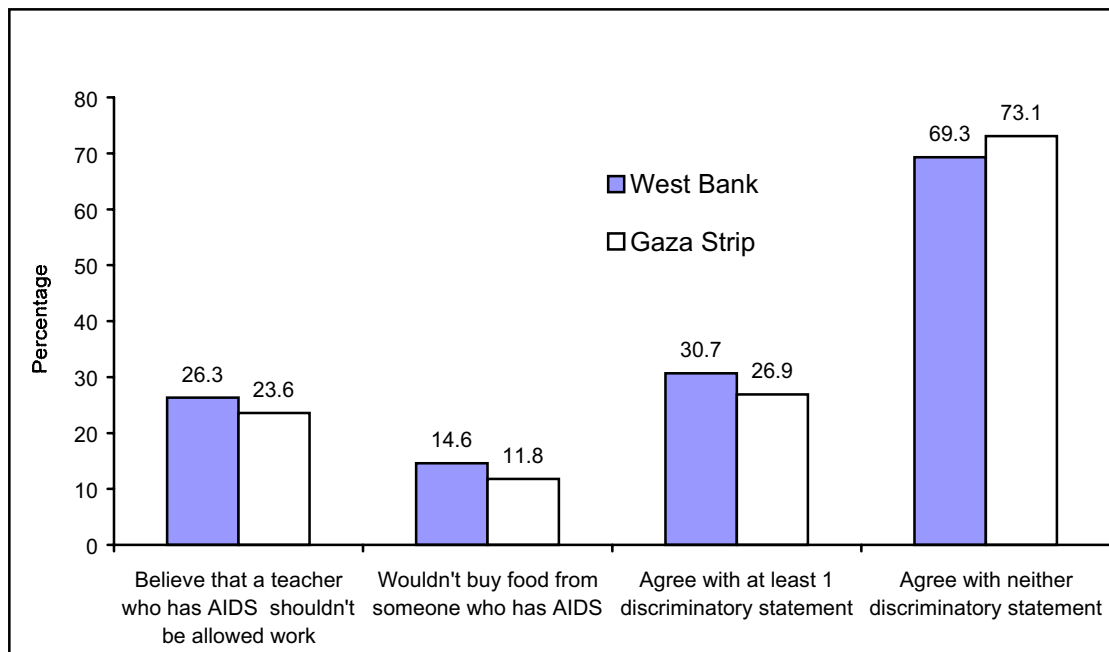
Figure 10.11: Percentage of women aged 15-49 years and their identification of misconceptions about HIV/AIDS by type of locality



A sharp decline, however, was registered under “ identification of two misconceptions”. This indicates that around this issue women’s knowledge is substantially limited, which in turn points at their need for more education and awareness raising.

Exploring discriminatory attitudes against people with HIV/AIDS showed that such attitudes are present in the Palestinian society. In a sample as large as 397,976 women 25.3% believe that a teacher with AIDS should not be allowed work. Another 13.6% would not buy food from somebody with AIDS. 29.3% agree with, at least, one statement while 70.7% disagree with both statements. Figure 10.12 below reflects a slightly more favorable position of the women in Gaza Strip than those in the West Bank.

Figure 10.12: Percentage of women aged 15-49 years who expressed discriminatory attitudes towards people with HIV/AIDS by region



Considering that only women were targeted in this survey the picture is therefore incomplete for that men's view is not integrated and hence must be explored as well. In spite of that using these findings as indicators on the whole picture implies that nationwide awareness raising campaigns on AIDS are a must for making people better informed and more health conscious, which in turn reflects positively on their own well being in addition to better understanding of the illness and more compassionate position with its victims.

Executive summary:

- Government insurance is used by 51.1% in Gaza while it is used only by 25.3% of those in the West Bank.
- Private Health insurance is used by 0.3% of the Gazan population, while it is used by 17.1% of the West Bank one.
- 24.4% of the Gazan population compared to 48.2% of the West Bank one is totally uninsured, implying a 24% gap between the two regions.
- In a total of 551,393 individuals within the age group 12-19 years, 6.4% practice smoking. Meanwhile, in a sample of 505,900 individuals at 20-29 years of age the percent rises to reach 27.5%
- 22%, slightly less than quarter of Palestinians aged 12 years and over practice smoking.
- Smoking in the West Bank is 5.3% higher than that in Gaza.
- Chronic diseases are more prevalent amongst West Bankers than amongst Gazans. Prominently, the presence of cardiac diseases, ulcer and asthma in the West Bank is twofold or more than in Gaza Strip.
- Compared to men of whom 5.1% suffer from chronic diseases, a higher percentage of the surveyed women (6.4%) suffer from the same disease category.
- Women suffer twice as much as men from diabetes and hypertension. Cardiac diseases are suffered a little bit more by women than by men. The picture is reversed, however, for; ulcer, asthma and epilepsy.
- Amongst 293,602 caretakers of the under-five children a minimum of 96.8% reported knowing signs that require seeking medical care, except for the sign of “general weakness” where only 89.4% reported so.
- Symptoms of reproductive morbidity were more prevalent amongst West Bank and rural women than amongst Gazan, urban, and camp women.
- In a sample as large as 469,011 ever married women, only 11.6% reported having heard about reproductive health concept. However, identifying it by component 70% and more reported knowing about the identified components.
- Out of a total of 397,976 respondent women only 20.8% know where to go for an HIV/AIDS test.
- 57.2% identified “having only one uninfected sex partner” and 39.4% identified “condom use at every sex encounter” as two effective measures for preventing HIV transmission.
- 84.9% of the surveyed women reported knowing that AIDS can be transmitted from mother to child.

- 80.7%, 67.7%, and 61.0% know AIDS can be transmitted during pregnancy, delivery, and breast-feeding, respectively.
- On correct identification of pertinent misconceptions, camp women fared best in all cases, meanwhile rural women fared worst in all cases, too.
- 25.3% of the women surveyed believe that a teacher with AIDS should not be allowed work. Another 13.6% would not buy food from somebody with AIDS.

Recommendations:

- **Scope of public health integration:** In spite of the broadness of the field of Public health narrow public health focus was clear in the survey. This was noted whether by looking into the data collection instrument or the actual data being collected. Leaving out major public health concerns such as that of; disability, rehabilitation facilities, outreach services, mental health matters, all types of accidents, and use of meds is a great waste of potentially rich aspect of health that could have substantially added to the survey. Therefore, expansion on this is highly recommended for the following surveys so that persistent information gaps are bridged.
- **Targeting Men for gender sensitive research and policies:** Having had women as the sole target of the survey limits gender integration and facilitates missing out the complement that provides a fuller view of the situation and a better understanding of the background variables that affect and shape women's and men's health behaviors and decisions. This is of high relevance to the public health matters where child bearing and procreation are least at stake. Therefore, it is suggested to target men in relevant components of the survey particularly the public health part.
- **Major Health Education and Awareness Deficits:** A great deal of the collected data pointed at a substantial deficit in health education and IEC work. That was particularly pronounced in question related to AIDS. Therefore, it is suggested to invest more effort, time and capital on well-studied health education programs, nationwide.
- **Regional Disparities:** Agreeably, the gap between the two regions of the West Bank and Gaza is in constant decline. Nonetheless, the interesting finding here was that the status of this gap was reversed this time. In most data sets Gaza fared better than the West Bank, particularly the knowledge related ones. As much as it is pleasing to see Gaza progressing so rapidly it stays crucial to proceed with the West Bank achievements as well, particularly in the field of health education and awareness. This in fact takes us back to the recommendation suggested above, which is investing more in health education.

Child's Rights

11.1 Introduction:

The UN General Assembly adopted the United Nations Convention on the Rights of the Child (CRC) on 20th November 1989. Most countries of the world have almost universally adopted this legally binding child rights treaty. To date, Palestine has not ratified the CRC because it does not yet have state status. However, the Palestinian National Authority and civil society have been working diligently to ensure that Palestinian children's rights are met, monitored and implemented. This is an enormous task under the best circumstances. Under the current situation it is difficult to adequately implement children's rights measures due to:

1. Lack of prioritization of children's issues and rights-overall political and economic situation takes precedence over this.
2. Lack of national sovereignty that prevents decision-makers from taking macro-level decisions that could directly/indirectly and explicitly/implicitly improve the well being of children (i.e. Legislation, macroeconomic policy decisions, and policies that are in the best interest of children, and
3. Overall lack of resources needed to ensure appropriate implementation and monitoring of children's rights.

Regardless of the limitations imposed by the circumstances of life for Palestinians (living under Israeli occupation and hence lacking a state, peace, and justice), the CRC can be used as a general framework on which to build a social, cultural, political and economic infrastructure for children that is rights-based. The starting point for a rights-based infrastructure and system would dictate that a child is any human being under the age of 18 years. Each child has the right to be respected and treated as a human being while taking into consideration each individual's evolving capacities and capabilities. Each child would have an "inherent right to life" and to be ensured to the "maximum extent possible the survival and development of the child" by the State. (CRC, Article 6).¹

The CRC has a set of general principles that form the basis of this document. These include:

1. Article 2: all rights of all children should be recognized without any form of discrimination (age, color, sex, nationality, political status, language, race, and religion),
2. Article 3: All actions taken on behalf of children should take into account the best interests of the child as its primary consideration,
3. Article 6: All children have the right to life and maximum possible survival and development,
4. Article 12: Respect for a child's view in all matters affecting the child with the opportunity to be heard in any judicial or administrative proceedings affecting the child.²

In the following section, an analysis of four different issues will be taken to assess how well children's rights are being met according the principles outlined above. Specific attention will be given to Palestinian children's rights to:

¹ United Nations (1989). UN Convention on the Rights of the Child.

² Ibid.

1. Birth registration, nationality, and knowing and being cared for by their parents (CRC Article 7)
2. Be properly cared for if parents cannot provide the necessary support and care for the child (CRC Article 21)
3. Receive an education (CRC Article 28)
4. Be protected from economic exploitation and child labor (CRC Article 32)³

Hence this section is not a complete review of children’s rights and the current status within Palestine. Other sections of this report have addressed other issues pertaining to children’s health and well being. It should also be noted that the information provided below monitor the current situation of Palestinian children but do not “monitor their rights.” This is because the data gathered examine instances of children who are working or not working, who are going to school or not going to school, who have been registered or not registered at birth, who is institutionalized or not institutionalized, but do not give us any idea of where these children are located and why their rights have not been met. This latter task is difficult to measure, but the time has come to begin to look at the “gaps” within our systems and see who are our most marginalized children and why their rights to life, development, protection and participation are not being met. This valuable information can provide the guidance needed to restructure and adapt education, social, recreational, protection and health systems that are more expansive and meet the need of all children, especially those most in need.

11.2 Child birth registration:

Article 7/CRC:

1. **The child shall be registered immediately after birth and shall have the right from birth to a name, the right to acquire a nationality and, as far as possible, the right to know and be cared for by his or her parents.**
2. **States Parties shall ensure the implementation of these rights in accordance with their national law and their obligations under the relevant international instruments in this field, in particular where the child would otherwise be stateless.**

According to national policies all children born into hospitals, clinics or by midwives should be reported directly to Ministry of Health and the Ministry of Interior. Reports on births should also be handed out to parents so that they can also go directly to offices of the Ministry of Interior to file a birth registration report and obtain a birth certificate for the child. Only after parents have filed the child’s birth papers and received a certificate is the child considered officially registered. This whole process is low cost. However, if parents do not register the children within ten days of birth they are charged a penalty fine. At the present time, there are many gaps in the system. Hospitals, clinics or midwives do not report all children’s births. Some children are born at home without even a midwife present and hence these cases are not filed either. The following data was obtained via a home-based survey method. Data was obtained directly from the mother/father or household head. Hence, the data presented does not contain a comparison of administrative records (i.e. number of births reported by hospitals, clinics and midwives) and those reported by parents and those documented in the Ministry of Interior. There is no way at this time to assess what percentage of children under five years of age are registered or not.

³ Ibid.

Table 11.1: Percentage distribution of children under 5 years by birth registration status and selected background characteristics

Background characteristics	Registered	Not registered
Sex		
Males	99.7	0.3
Females	99.3	0.7
Child's age (months)		
Less than 6	98.0	2.0
6-11	99.2	0.8
12-23	99.8	0.2
24-35	99.8	0.2
36-47	99.8	0.2
48-59	99.8	0.2
Mother's educational attainment		
None	99.8	0.2
Elementary	99.2	0.8
Preparatory	99.8	0.2
Secondary and above	99.4	0.6
Type of locality		
Urban	99.6	0.4
Rural	99.4	0.6
Camp	99.7	0.3
Region		
Palestinian Territory	99.5	0.5
West Bank	99.3	0.7
Gaza Strip	99.9	0.1
No. of Children	573,260	2,891

Most parents need to have their children registered by five years of age because they have to present a birth certificate enrollment. Parents are not aware of the importance of a birth certificate for under five-year-olds unless they want to obtain a travel document for the child. This requires formal birth registration and presentation of a birth certificate.

Only 0.5% of children surveyed had not been registered. There are no statistical differences on parental report of birth registration between boys (99.7%) and girls (99.3%), West Bank (99.3%) or Gaza Strip (99.9%), urban (99.6%), rural (99.4%), and camp (99.7%) or mother's level of education. The primary reason given for not reporting the birth of a child, was "other", followed by they were late in first time registration and had not gone because they do not want to pay the penalty fee at this time, and office for reporting the birth of the child was too far away from their home. These cases represent less than 1% of the children surveyed. The last two reasons both are affiliated with "costs" of registering a child as an obstacle preventing them from registering the child. It is worth noting that in Gaza Strip 99.9% of all children surveyed had been immediately registered by their parents. They did not report that

they had to pay fines or had difficulty reaching the registration site since these offices are located very close to their homes. It is notable that the largest group of children who were reported not to be registered were children under the age of 6 months (2%). This is to be expected (although it is not acceptable). Parents still showing a tendency not to report births at once. Parents reported that they did not report these births because fees were too high (5.8%), the registration office was distant (9.9%), they didn't want to pay a fine (16.8%), or other (67.5%). These results are indicative that parents still do not understand the importance of early birth registration. They will sometimes postpone birth registration until there is a need like getting a passport for the child, registering the child for services, etc.

These results are somewhat promising since they do indicate that the vast majority of children under five years of age are getting registered. The importance of registering children can be summed up as:

1. The first official acknowledgement of a child's existence by the State and hence the State's responsibility to this new citizen.
2. If there is no birth record, then if the child dies or disappears there will be no record either.
3. Accurate reports of births are necessary in order to plan appropriately. These information are necessary for determining infant mortality rates and causes of death.

In the first instance, the State should know how many children are being born on a regular basis in order to determine what kinds of services are needed and where. This is in terms of health services (check ups, screening, immunization) or protection for children who can not be directly provided for by their parents and family. In some countries the sale, trafficking and abduction of children is a key issue that faces young children. With proper birth registration, follow up and monitoring of these cases is much easier and accountability is higher. Although this latter case is not a problem at the current time in Palestine it is something that should be taken into account, especially if tourism increases substantially. Many areas with high influxes of tourists and travels are more amenable to sale, trafficking and abduction of children.

Birth registration is also an essential way of verifying that children born to parents with Palestinian nationality have the right to live in Palestine. At the present time, there are a complicated set of rules and regulations regarding "Palestinian nationality." A child born to parents holding valid Palestinian identity papers is allowed to have Palestinian nationality. However, children born to non-residents are not granted Palestinian identity/nationality even though their parents are Palestinians. This is a complicated issue that becomes even more complicated when children are born to parents with one holding a Jerusalem identity card and another having a "Palestinian" identity card. The Israeli regulations always work towards preventing Palestinians from living in Jerusalem and receiving a Jerusalem identity card. Similarly, the Israeli regulations also strive to keep the number of Palestinians with legal residency rights in the Palestinian Territory to a minimum. For a full review of these regulations and restrictions by the Israeli Government see Al-Haq reports on this issue. However, it should be noted that all birth registration forms should note clearly on it parents names, address and nationality status.

The present system in the Palestinian Territory is such that all hospitals, clinics, and persons/midwives all responsible for submitting administrative records on all births directly to the Ministries of Health and Interior. Copies of these records should also be forwarded to the Palestinian Central Bureau of Statistics however this is not occurring on a regular basis. In

the most recent health survey,⁴ only 5.2% of all reported births occurred within the home environment. It is important to conduct an analysis of administrative records reporting births and actual birth registration by parents to see if children are actually being registered within the first two weeks following birth. This type of analysis will indicate if the high rate of reporting of births is actually valid or not. For instance, parents may not register a child who may die within the first week of birth. Hence there will be no record of this child nor will this information feed into data on infant mortality rates. Similarly, parents may not always register children who are severely handicapped/disabled from birth assuming that the child will not live long. This results in an underestimation and reporting on number of disabled children in the country. There are many reasons parents may give for not registering a child. However, it is incumbent upon the State to ensure that all children are registered.

11.3 Orphans and institutionalized children:

In addition to the child's right to birth registration, Article 7 stipulates that all children have the right "to know and be cared for by his or her parents." This article is closely linked with Article 9 of the CRC that deals with children's separation from their parents.

Article 9/CRC:

- 1. State Parties shall ensure that a child shall not be separated from his or her parents against their will, except when competent authorities subject to judicial review determine, in accordance with applicable law and procedures, that such separation is necessary for the best interests of the child. Such determination may be necessary in a particular case such as one involving abuse or neglect of the child by the parents, or one where the parents are living separately and a decision must be made as to the child's place of residence.⁵**

Results from the Health Survey 2000⁶ indicate that 94.6% of Palestinian children are currently living with both of their parents. This is a relatively high percentage compared with many other countries. Slight variations in data collected during the PCBS Population, Housing and Establishment Census (1997)⁷ and the current Health Survey 2000. In 1997, 4.2% of all children were living in female-headed households (father deceased or living) while in 2000⁸ only 3.3% of children were living with their mothers. Approximately 1.1% of children are living with their fathers only (mother deceased or living). See table (11.2) for details on child's living conditions.

As can be noted above, the vast majority of Palestinian children (99%) are living with either both or one parent. Only 1% of children are not living with one or both parents. There are currently 0.1% (1,660) children who have both parents deceased.

⁴ Palestinian Central Bureau of Statistics, 2000. *Health Survey-2000: Main Findings*. Ramallah, Palestine.

⁵ United Nations (1989). UN Convention on the Rights of the Child.

⁶ Palestinian Central Bureau of Statistics, 2000. *Health Survey-2000: Main Findings*. Ramallah, Palestine.

⁷ Palestinian Central Bureau of Statistics, 1997. *Population, Housing and Establishment Census-1997*. Ramallah, Palestine.

⁸ Palestinian Central Bureau of Statistics, 2000. *Health Survey-2000: Main Findings*. Ramallah, Palestine.

Table 11.2: Percentage distribution of children 0-17 years by living arrangements, type of locality and region

Type of locality and region	Live with both parents	Live with mother only	Live with father only	Live with non-parent	Total	No. of Children
Type of locality						
Urban	94.4	3.1	1.3	1.2	100	896,169
Rural	95.5	3.2	0.5	0.8	100	490,911
Camp	93.8	4.1	1.3	0.8	100	273,587
Region						
Palestinian Territory	94.6	3.3	1.1	1.0	100	1,660,667
West Bank	94.9	3.3	0.8	1.0	100	1,021,626
Gaza Strip	94.3	3.3	1.4	1.0	100	639,041

However, there are currently 1.0% (16,606) children who are not living with their parents (one or both still alive.) This indicates that about 15,000 have at least one parent alive but are not living with that parent. In most instances these children are living with a member of the extended family (grandparents, aunts and uncles or with an alternative and/or adoptive families.) It is difficult to ascertain with available data the number of children actually living in alternative families or who have been adopted. This latter category of children is considered to be highly confidential. These social cases are monitored closely and information pertaining to them are not readily available or obtainable. Christian families can adopt only Palestinian Christian children. While Muslim families can assume the care of a Palestinian child (regardless of religion) under the conditions of “kefaleh” or Islamic religious care of children which is *somewhat* similar to adoption, but still the child is not granted the full rights of an adopted child.

Data obtained from the Health Survey 2000 (Table 141)⁹ indicates that there is a significant difference in the number of children living with parents based on the age of the child. It is noted that as age increases the likelihood of living with one parent increases. Hence only 85.5% of children aged 15-17 years are living with both parents as compared to 97.8% of children aged 0-4 years. It is unclear from the data provided why this is the case. More detailed data collection is needed.

At the present time, there are 1714 institutionalized children in orphanages.¹⁰ Most of them have at least one parent alive. They are institutionalized because there are problems in the family home environment (parents are divorced, separated, conflicting, or in severe poverty etc.) Information obtained by the Ministry of Social Affairs (MOSA)¹¹ indicate that slightly

⁹ Ibid.

¹⁰ Palestinian Central Bureau of Statistics (2000). *Palestinian Children-Five Years Under the PNA*. Ramallah, Palestine.

¹¹ Ministry of Social Affairs (2000). *Annual Report on Children in Difficult Circumstances*. Prepared by the Directorate General on Family and Childhood. Ramallah, Palestine.

more than 40% of children living in these institutions have both parents alive but because of social familial issues, they had to institutionalize their children.

The MOSA has been working diligently to put into effect policies and protocols that prevent the unnecessary institutionalization of children. Current policies stipulate that no child can be placed into an institutions until all efforts have been made to place the child back with the biological parents/family or with an alternative family if need be. Hence there has been a tremendous reduction in the actual number of children who have been institutionalized in the last five years. Initial reports indicated that over 3,500 children were living in institutions/orphanages in 1995 compared to slightly over 1,700 cases in the year 2000.¹² This is an improvement in meeting children's rights that should be applauded.

The information provided above indicate that according to the CRC, the following articles are being upheld:

1. Article 5, which acknowledges priority for parents caring for their children, followed by "members of the extended family or community as provided for by local custom."
2. Article 9 that requires a "child not be separated from his or her parents against their will, except when...such separation is necessary for the best interests of the child."
3. Article 18, which endorses the principle that both parents have joint responsibility for caring for their children and also the legal guardians "have the primary responsibility for the upbringing and development of the child. The best interests of the child will be their basic concern."¹³

11.4 Child education:

The family plays the central role in ensuring that children's rights to development are ensured. This includes child rearing practices that are in the best interests of the child in addition to ensuring that children learn basic knowledge, skills, attitudes and values that assist them in sound development. The education of a child is part of this holistic developmental process. As such, parents should strive to place their children in appropriate preschool programs that offer a child a social-educational environment that rounds out his/her development. Many international and local studies that have been conducted have indicated that children who attend proper preschools have a "head start" in succeeding educationally and improving their productivity as adults.

Article 28/CRC: State Parties recognize the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity, they shall, in particular:
(a) Make primary education compulsory and available free to all:
(e) Take measures to encourage regular attendance at schools and the reduction of drop out rates.¹⁴

The data obtained indicate that there has been a reduction in the number of Palestinian children aged (36-59 months) who are attending some form of early childhood education program in 2000 compared to 1997.

¹² PCBS (2000). *Palestinian Children: 5 Years under the PNA*. Ramallah, Palestine.

¹³ United Nations (1989). UN Convention on the Rights of the Child.

¹⁴ Ibid.

Table 11.3: Percentage of children 36-59 months attending organized early childhood education by selected background characteristics

Background characteristics	Number of children	Percentage attending program
Sex		
Males	110,868	19.2
Females	106,561	18.9
Child's age (months)		
36-47	110,399	7.6
48-59	107,030	30.9
Mother's educational attainment		
None	32,394	9.0
Elementary	59,398	16.1
Preparatory	70,270	19.5
Secondary and above	51,436	28.3
Type of locality		
Urban	118,024	19.6
Rural	64,195	19.5
Camp	35,210	16.4
Region		
Palestinian Territory	217,429	19.1
West Bank	133,068	22.8
Gaza Strip	84,361	13.2

Approximately 34% of children aged 4-5 years were enrolled in preschools (kindergarten class) in 1997 compared to only 31% in 2001^{15,16}. Overall the number of children aged 36-59 months reported to be enrolled in preschools is 19.1% or approximately 41,500 children. This most recent data indicates that 7.6% of children aged 36-47 months attend preschools while 30.9% of children aged 48-59 months attend preschools (kindergarten class). These results indicate that over four times as many children are attending preschool compared to children under 47 months of age. The data is indicative that parents are more supportive of early childhood programs for 4-5 years as a preparation phase for entering grade 1 (see table 11.3 for more information).

These information are pertinent especially in light of the fact that kindergarten preschool classes are not compulsory. The Ministry of Education is a pro-early childhood program, however it currently lacks the technical and material resources to provide sufficient support for this sector. Hence parents sending their children to preschool do so of their own volition and recognition that preschool education is an important aspect of a child's development. It is also important to note that the more highly educated a mother is the more likely her child will be enrolled in preschool (see Table 142 for details). Only 9% of children whose mothers had no education attend preschool compared to 28.3% of children whose mothers had a secondary education. There is a significant and positive correlation between mother's level of education and child's attendance at preschool. This relationship may be due to either mother's increased awareness and conviction on the importance of early childhood education or due to the fact

¹⁵ Palestinian Central Bureau of Statistics, Education Statistics in the West Bank and Gaza Strip, Current Status Report Series No. 5 (Ramallah, August 1995), p. 17

¹⁶ PCBS, Health Survey 2000, (Ramallah, November 2000), p. 208.

that mother's with higher education tend to live in families with higher income. Hence, the mother (family) has available more resources to pay for early childhood education for her child.

It is important to highlight gender equity in preschool attendance of boys and girls. The most recent study (PCBS, Health Survey 2000) supports previous findings that indicate boys and girls are equally represented in the preschool population. In the most recent study, approximately 19% of boys and girls between the ages of 36-59 months are attending preschool. There is no detailed information on attendance patterns for boys and girls by type of locality and region. This latter information would be of interest in identifying parental gender attitudes in more detail.

Differences in preschool attendance patterns were also noted by type of locality and region. Hence, percentage of children attending preschools was lowest in Gaza Strip and in refugee camp setting compared to West Bank urban and rural areas. Overall attendance in preschools was 22.8% for West Bank children compared to 13.2% for Gaza Strip children. Although no detailed information are available, it is highly likely that there is lower attendance in Gaza Strip due to issues of poverty and inability of parents to pay for preschool education. This is supported in part by the finding that children from refugee camps (16.2%) are least likely to attend preschools compared to their counterparts in urban (19.6%) and rural (19.5%) localities. It should be noted that refugee camp localities are the most impoverished sites and this is directly linked to both Gaza Strip and preschool attendance. More detailed analysis of preschool attendance patterns needs to be undertaken to assess this issue.

Most preschools are private and private-charitable organization sponsored with the Ministry of Education ensuring licensing and basic supervision/monitoring of preschool sites. Following discussion with the Ministry of Education's Department of General Education they report that attention should be given to early childhood education. It is foreseen that within the next 5-10 years the Ministry will not have within its capacity to include preschool education as part of the compulsory education cycle. Therefore it is essential that innovative means of educating young children be taken into account on a national basis. This is a priority that should be highlighted especially in view of the fact that over 80% of children 3-5 years of age are not enrolled in preschools. That means that the vast majority of Palestinian children do not have access to "formal" educational options outside of the home. It may be that indirect means of educating parents on the importance of preschool education, making preschool education more affordable for all children, or targeting of "at risk" children for specialized preschool/early childhood educational programs should be sought. It also indicates that reaching children at home with "active learning and educational" materials and interactions should be a priority consideration at this point in time.

The current study examined percentage of children of school age attending basic school during the latter half of year 2000. The data indicated that overall 93.7% of children aged 6-15 years were reported to be attending basic school. Only 72.3% of children aged 6 were attending basic school. This low percentage is due to registration dates for children. Only children aged 6 years prior to September of the current academic school year can be registered for the new school year.

Table 11.4: Percentage of school aged children attending basic school by sex and selected background characteristics

Background characteristics	Females	Males	Total
Age			
6	74.2	70.5	72.3
7	97.9	97.9	97.9
8	98.1	98.9	98.5
9	99.2	99.7	99.5
10	98.8	99.2	99.0
11	99.9	97.9	98.7
12	99.3	98.7	99.0
13	97.4	96.2	96.8
14	94.5	93.5	94.0
15	85.7	80.2	82.8
Type of locality			
Urban	94.5	93.4	93.9
Rural	94.3	93.3	93.8
Camp	93.3	92.2	92.8
Region			
Palestinian Territory	94.2	93.1	93.7
West Bank	94.6	93.4	93.9
Gaza Strip	93.7	92.8	93.9

Hence, a certain proportion of children aged 6 (approximately 25%) are not eligible to enroll due to actually being under the age of 6 as of September of that academic school year. Interestingly, rates for school attendance range from a low of 72.3% (6 year olds) to a high of 99.5% (9 year olds). See Table 11.4 for more information.

Table 143 of the Health Survey 2000 provides detailed information on specific numbers and percentages of children attending school by age, sex, locality and region. Slightly more girls (94.2%) than boys (93.1%) are attending school at this time. This information is highly relevant because it indicates that gender equity between Palestinian boys and girls has been successful in terms of access and attendance. The data actually indicates that a higher percentage of girls are attending school compared to boys-a 1% difference.

It is interesting to note that the percentage of girls attending school who are 15 years of age (85.7%) is significantly greater than the number of boys at that age (80.2%). It is impossible to ascertain the causes behind increased males dropout rates from the data collected. However these findings confirm previous patterns in school dropout rates for females and males. Between 1994-1999 females distributed a greater decrease in overall dropout rates compared to males.¹⁷ It is important to keep in mind the fact that a slightly greater percentage of females are also enrolled in the secondary school phase (grades 11 and 12) compared to male students. However overall secondary school dropout rates increase to 8.28% and 4.31% for females and males, respectively. So in terms of equity to education males and females appear to be on an equal par. Credit should be given to the Ministry of Education and UNRWA education department for investing in support for the girl child's education. The

¹⁷ Palestinian Central Bureau of Statistics, *Palestinian Children-Issues and Statistics*. Ramallah, April 1999, p. 58.

improvement in females attendance is noted in all reports following 1994/1995 academic year and the results of the current study confirm this achievement.

Despite these gains focused attention needs to still be given to two specific issues:

1. Who are the remaining 6.3% of children who are not attending basic school?
2. What measures can be taken to reduce school dropout rates for secondary school students?

Studies on poverty in our country have indicated that the more educated a person is the less likely they are to live in poverty conditions.¹⁸ Furthermore health and educational indicators have shown that children whose parents are more highly educated enjoy a higher social, physical and educational status in the long run.¹⁹ These are valid reasons for working towards upgrading the well being of children by improving their educational status.

11.5 Child labor:

Child labor is directly linked to poverty. It has been documented in previous studies that many children seek work when their families are not able to meet the minimum basic needs of their children.²⁰ The results of the Health Survey 2000 clearly demonstrate that child labor is increasing. Present results indicate that 19.6% of all children aged 5-17 years are working four or more hours per day. Higher rates are reported for males (25.5%) compared to females (13.5%). See Table 11.5 for more information.

Table 11.5: Percentage of children 5-17 years working 4 or more hours/day by selected background characteristics

Background characteristics	Working 4 hours or more	Working 4 hours or less
Sex		
Males	25.5	33.2
Females	13.5	65.1
Child's age (years)		
5-9	15.8	0.1
10-14	18.6	39.9
15-17	30.7	52.8
Type of locality		
Urban	18.3	51.1
Rural	20.9	38.3
Camp	21.6	60.4
Region		
Palestinian Territory	19.6	48.8
West Bank	17.7	38.9
Gaza Strip	22.7	64.8

¹⁸ National Commission on Poverty Alleviation, *Palestine Poverty Report 1998*. El-Bireh, Palestine.

¹⁹ PCBS, *Palestinian Children Annual Report 2000*. Ramallah.

²⁰ Secretariat for the National Plan of Action for Palestinian Children (2001). *Palestinian Children's Attitudes and Understanding of their Rights*. El-Bireh, Palestine.

Furthermore the data indicates that children from camps are more likely to work (4 hours or more/day) compared to rural or urban children. Similarly higher rates of child labor are reported in Gaza Strip (22.7%) compared to the West Bank (17.7%). These findings parallel poverty trends in the country. Higher rates of poverty are reported for camps and Gaza Strip.²¹ The data also indicates that child labor is on the increase if comparisons are made over the last five years.²²

As can be noted in table (11.5) child labor increases with age. Hence the younger group represents 15.8% of working children while the older age group represents 30.7% of them. This is to be expected because older children tend to drop out of school and seek employment. The existing law also allows children above the age of 14 years to work as full time employees. However, the data indicates that slightly over 15% of children are now working illegally. It should further be noted that a substantial number of children were also reported to be working 4 hours or less per day. Interestingly, more girls reported that they worked 4 hours or less (65.1%) compared to boys (33.2%). This is most likely due to the fact that girls work in their homes caring for siblings and doing routine family chores like cleaning and cooking. It appears that boys once they enter the work force quickly move into increased hours of labor. This phenomenon needs to be examined in more detail.

The available data is not very clear as to categorizing child labor and place and type of work. More in depth research needs to be conducted into the phenomenon of child labor in order to monitor this situation and develop appropriate strategies to reduce it. The high rate of child labor reported (ie. 1 out of every 5 children) is alarming and must be addressed. These findings are very disturbing because they indicate that a large proportion of children are currently child laborers. This is likely to interfere with their education and physical and mental well being.

²¹ National Commission on Poverty Alleviation, *Palestine Poverty Report 1998*. El-Bireh, Palestine.

²² PCBS, *Palestinian Children Annual Report 2000*. Ramallah.

Executive summary:

- * 0.5% of children were reported to be not registered at birth by their parents.
- * Children under the age of 6 months were most likely to be reported as non-registered.
- * 94.6% of all children surveyed were reported to be living with both of their parents.
- * 3.3% of children were living with their mothers only (fathers deceased and/or living.)
- * 1% of all children are living in alternate family conditions with neither parent.
- * 0.1% of children were reported to be living in institutions (orphanages.)
- * 31% of children 4-5 years are attending some form of early childhood education program. This is a reduction in rates reported in 1997 (34%).
- * Only 19.1% of children 36-59 months of age are currently reported to be attending early childhood education programs. No gender differences are reported and urban and rural children are more likely to attend compared to camps children.
- * Slightly more girls (94.2%) than boys (93.1%) are currently enrolled in basic education.
- * More girls (85.7%) than boys (80.2%) are enrolled at 15 years. These findings confirm trends that males are dropping out of school earlier while girls attendance is improving.
- * Almost 1 out of every 5 Palestinian children are laborers. Boys are more likely to be working than girls. Children from camps are more likely to be child laborers. Higher rates of child labor are reported in the Gaza Strip.

Recommendations:**Birth registration:**

1. Conduct a comparative analysis of administrative records reporting on births with parental birth registration information.
2. Special attention be given to Bedouin populations because they have the least/most difficult access to health services at this time. It may be that many children are born at home and are not registered for months. This makes it difficult to plan services for this population. The idea of mobile registration units for every rural areas and Bedouin populations may be necessary at this time.
3. Increase awareness by parents and health providers on the importance of birth registration so that they speed up the registration process and understand its relation to improving planning and provision of services for young children.

Orphans and institutionalized children:

1. Future collection of data and information include details on reasons that children are separated from their parents and where and with whom these children are living. This information can be used to support programs that assist parents in keeping their children and being responsible or their upbringing.
2. It is also worthwhile to track trends in single parent households. Worldwide indications are that children are more frequently living in single parent households. This should be examined in the Palestinian Territory so that steps can be taken to support children being raised with both parents.

Childhood education programs:

1. The data obtained should be used to support policy development and allocation of sufficient resources to upgrade the status and attendance of children at preschools- especially kindergarten class.
2. A qualitative assessment of preschools-teacher qualifications, curriculum, preschool environment, learning materials, and impact of attending preschool on later educational/academic achievement should be undertaken. By examining the current

situation of children in preschools one will be able to determine which measures need to be taken to enhance “early childhood educational” practices within the home and school environment.

Children and basic education:

1. Monitoring of children who do not attend basic school. This issue is of the utmost importance because it is at the heart of ensuring “all children’s right to an education and development. Very frequently those children who are not in school due to exclusion or failure to follow up on registering of students are those who are in dire need of education. These children tend to fall within the category of the “most poor and impoverished”, Bedouin children, and disabled children. These marginalized populations of children need to be enrolled in schools. Oftentimes, the system tends to overlook these “missing” children because to reach them with needed educational services is very costly and effort intensive. However this should not be accepted as a rationale for not reaching this population of out of school children.
2. Special efforts need to be made to accommodate the school to the needs of marginalized children when and where possible and feasible. The three primary causes for these children not attending is due to transportation difficulties, lack of qualified and specialized personnel to meet their specific needs, and lack of parental awareness, commitment, and prioritization of their children’s educational needs.
3. Also relevant to the first issue is the relationship between student attendance in school and actual birth registration of children. It is incumbent upon the concerned authorities to make comparisons between the actual number of children who are birth registered and those who register for the first grade. At the present time the Ministry of Interior does not forward records of children to the Ministry of Education. Under the current set up this means that the Ministry of Education only is responsible for ensuring that any parent who registers a child for school will be registered. Any child whose parents do not make the effort to register their child are not directly and legally followed up. In many schools, the headmaster/principal/school counselor or other interested ministerial staff may take special interest in ascertaining that all children within their community are enrolled. However this is a civic duty that they undertake rather than a legal obligation. If the Ministry of Interior upgrades its capacity to ensure that birth records of all children are obtained they can then forward the names and localities of these children to the Ministry of Education. The MOE then becomes responsible for ensuring that all children are enrolled in grade one. It should be noted that due to this lack of coordination it is highly likely that a greater percentage of children are actually not attending school. Because baseline data for the MOE begins with the registration of children in school and not with the actual number of children in the population.
4. Concerning the second issue it is incumbent upon parents and students to take special efforts in supporting continued education beyond the compulsory phase. The MOE currently makes available secondary educational opportunities for any student (males or females) who so desires to continue their education. It is the responsibility of the community to begin to demand compulsory education until grade 12. This is essential if we are to instill in our students the skills and knowledge they need to be successful and educated civic members.

Child laborers:

1. More detailed research and analysis needs to be conducted to elucidate the causes of child labor and develop effective strategies to reduce it.

2. Specific attention needs to be given to developing national indicators and measures for appropriately monitoring child laborers.
3. Research into male-female and locality differences in child labor should be examined.
4. The overwhelming need for a comprehensive safety net and social security system for families is of the utmost importance.
5. Measures need to be urgently taken to protect children who are working until efforts are taken to halt this practice.

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Annex 1

Sampling

Sampling

Sampling:

The sample design of the Health Survey - 2000 (HS2000) takes into account the main recommendations of UNICEF for this type of surveys.

The sample provides a subsample of household that receives health services from the Ministry of Health clinics.

Target population:

The target population consists of all Palestinian households that usually reside in the Palestinian Territory. This type of survey concentrates on 2 subpopulations, the first one is ever-married women and aged (15-54) years, the second one is, children less than 5 years.

Sample frame:

The list of all Palestinian households has been constructed with some identification variables, after finishing the Population Census 1997 processes. The master sample was drawn to be used for different sample surveys. The master sample consists of 481-enumeration area (EA) (the average sizes about 120 households). The master sample is the sample frame of the HS2000. The selected EAs were divided into small units called cells (with average size of 25 households). One cell per EA was selected.

Sample size:

Different criteria were taken into account when sample size was determined. The level of sampling error for the main indicators was considered, the result could be published at 3 subpopulations, and 10% incomplete questionnaire was assumed.

The overall sample was 272 EAs, 178 in the West Bank and 94 in Gaza Strip. The Sample cells increased to 288 cells, 194 in West Bank and 94 in Gaza Strip.

The number of households in the sample was 6,349 households, 4,295 in the West Bank and 2,054 in Gaza Strip.

Sample design:

The sample is a stratified multi-stage random sample.

Stratification:

Four levels of stratification were made:

1. Stratification by governorates.
2. Stratification by place of residence which comprised:
(a) Urban (b) Rural (c) Refugee Camps
3. Stratification by classifying localities, excluding governorate capitals, into three strata based on the ownership of households within these localities of durable goods.
4. Stratification by size of locality (number of households).

A compact cluster design was adopted because the sample frame was old. As mentioned above, the first sampling units were divided into small units (cells). Then one cell from each EA was randomly selected.

For that part of Jerusalem, which was annexed after 1967 war, a list of households for the EAs in the frame was completed in 1999. Therefore a compact cluster design was not used in this part, and a random of households from the EAs was selected.

Sampling unit:

First stage sampling units are the area units (EAs) in the master sample. The second stage-sampling units are cells.

Response rates:

The Overall sample was 6600 households from all Palestinian Territory, 4613 households from the West Bank and 2137 households from Gaza Strip. The distribution of the questionnaires by results of interview after the implementation of the survey was as illustrated by table (2):

Table (2): Sample distribution by results of interview

Region	Completed	Incomplete					Total
		Refused	Absent Household	No one at home	Dwelling Vacant	Others	
Palestinian Territories	6,204	20	93	32	223	28	6,600
West Bank	4,164	18	84	29	144	24	4,463
Gaza Strip	2,040	2	9	3	79	4	2,137

The number of eligible households (include completed questionnaires, refused, absent households, no one at home) in the survey was 6349 from all Palestinian territories, while 4295 households from the West Bank and 2054 households from Gaza Strip.

The household response rate is calculated for completed questionnaires as proportion of eligible households, and it calculated as following :

$$\text{Response rate} = \frac{\text{The number of completed Questionnaires}}{\text{The number of eligible households}} \times 100\%$$

The overall response rate was about 97.7%, while in the West Bank the response rate was about 93.3% and in Gaza Strip it was about 99.3%..

Weighting:

The Weight of a Statistical Unit is a quantity that is inverse proportional to probability of selection in the sample. The weight of a selected unit in the sample represents a number of units from the population. Weights of households have been calculated so that the Weights reflect the sampling procedures. The weighting procedures are made feasible and simple by assuming that the households have been selected directly within the EA.

It was respected in weighting procedures for individuals that the weights satisfy the total Palestinian population estimations in the beginning of the second quartet in year 2000 and their distribution according to the region, sex and agegroups.

First: household weight

Let h be the symbol for the strata of households, which are according to governorate and locality type. The procedure to calculate the weight of a household in strata h could be illustrated in the following:

1. The weight of households which belong to EAs which were selected by probability 1 and in stratum h , were calculated using the following formula:

$$W_{h1} = (HF_h / HM_h) * (HM_{h1} / HS_{h1})$$

where

W_h1 : Weight of household in EAs that were selected by probability 1, and in stratum h
 HF_h : Number of Palestinian households in stratum h from the Census Data of 1997
 HM_h : Number of Palestinian households in stratum h from the Master Sample Data
 HM_{h1} : Number of Palestinian households in EAs that were selected by probability 1, and in stratum h from Master Sample Data.
 HS_{h1} : Number of completed questionnaires in EAs that were selected by probability 1, and in stratum h from Survey Sample Data.

1. The Weight of households which belong to EAs which were selected by probability less than 1, and in stratum h :

$$W_{h2} = (HF_h / HM_h) * (HM_{h2} / HS_{h2})$$

Where

W_{h2} : Weight of household in EAs that were selected by probability less than 1, and in stratum h

HM_{h2} : Number of Palestinian households in EAs which were selected by probability less than 1, and

in stratum h from Master Sample Data.

HS_{h2} : Number of completed questionnaires in EAs which were selected by probability less than

1, and in stratum h from Survey Sample Data.

Second : Individual weight

The data collected in the survey were for all members of households selected in the sample as listing data. Besides listing data other data were collected for eligible women and eligible children.

It was respected in weighing procedures for individuals that the weights satisfy the total Palestinian population estimations in the beginning of the second quartet in year 2000 and their distribution according to the region (the West Bank and Gaza Strip), Sex (male and female) and age groups (0-4, 5-9, 10-11, 12-14, 15-17, 18-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65+)

The procedure used for adjusting individual weight as following:

1. Determining weighting adjustment fraction for each group. The formula used as following:

$$f_g = N_{97g} / N_{2000g}$$

where:

g : Group of individuals according to region, sex, and age groups.

f_g : Weighting adjustment fraction of group g

N_{97g} : Sum of initial weights of individuals in group g .

N_{2000g} : Population estimation in group g in the beginning of the second quartet in year 2000.

2. Computing the Weight of each individual by multiplying the initial weight by weighting adjustment fraction, The formula used for individuals in EAs that were selected by probability 1, and in stratum h as following:

$$W_h'1 = W_h1 * f_g$$

Where as the formula used for individuals in EAs that were selected by probability less than 1, and in stratum h as following:

$$W_h'2 = W_h2 * f_g$$

where

$W_h'1$: adjusted weight of individuals in EAs which were selected by probability 1, and in stratum h

W_h1 : initial weight of individuals in EAs which were selected by probability 1, and

- in stratum h
- $W_h'2$: adjusted weight of individual in EAs that were selected by probability less than 1, and in stratum h
- W_h2 : initial weight of individual in EAs that were selected by probability less than 1, and in stratum h

This procedure satisfy the following:

- 1- Keeping the sample design effect.
- 2- Decreasing the bias due to non-response.
- 3- The Weights represent Palestinian population estimations in the beginning of the second quartet in year 2000.

Estimations procedure:

The Estimates in Health survey are of the types: Means, proportions and ratios. Means and proportions are special types of ratios of two variables Y/X . In the case of the mean, the variable X , in the denominator of the ratio, is defined to equal 1 for each element so that the denominator is the sum of the weights in the sub-population.

In the case of proportions, the variable X in the denominator is also defined to equal 1 for all elements. But, in addition, the variable Y in the numerator is binomial and is defined to equal either 0 or 1, depending on the absence or presence, respectively, of a specified attribute in the element observed.

The estimator for a given ratio for sub-population A is the following:

$$\hat{R}_A = \frac{\hat{Y}_A}{\hat{X}_A} \quad (1)$$

Where:

$$\hat{Y}_A = \sum_h^{Dom} \sum_i \sum_{j \in A} w_{hij} y_{hij}$$

$$\hat{X}_A = \sum_h^{Dom} \sum_i \sum_{j \in A} w_{hij} x_{hij}$$

\hat{R}_A = The estimate for the ratio of two variables, Y/X , in sub-population A .

\hat{X}_A = The estimated total for variable X in sub-population A .

\hat{Y}_A = The estimated total for variable Y in sub-population A .

Calculation of variances:

It is important to calculate the sampling errors and to show it beside the estimates. This gives the data user an idea about the efficiency and accuracy of the estimates.

The total survey errors are divided into two types; sampling errors and non-sampling errors. Non-sampling errors arose from implementing data collection and data processing, such as failure to interviewer the correct unit, mistakes made by the interviewer or the respondent. It

is still difficult to estimate the non-sampling errors. But many procedures have been adopted to reduce the non-sampling errors.

Sampling errors on the other hand are a measure of the variability between all possible samples. Sampling errors can be estimated from the survey results. For this purpose we use a statistical package for variance calculation called CENEVAR.

The variance calculation uses the method of Ultimate Clusters. Within any domain of estimation, for a sub-population A , and for a characteristic Y , the formula that is The variance of an estimator of a ratio is estimated by

$$V\left(\hat{R}_A\right) = \frac{1}{\hat{X}_A^2} \left[V\left(\hat{Y}_A\right) + \hat{R}_A^2 V\left(\hat{X}_A\right) - 2 \hat{R}_A COV\left(\hat{X}_A, \hat{Y}_A\right) \right] \quad (3)$$

Where:

$$COV\left(\hat{X}_A, \hat{Y}_A\right) = \sum_h^{\text{Dom}} \frac{n_h}{n_h - 1} \sum_{i=1}^{n_h} \left(\hat{X}_{Ahi} - \frac{\hat{X}_{Ah}}{n_h} \right) \left(\hat{Y}_{Ahi} - \frac{\hat{Y}_{Ah}}{n_h} \right)$$

$$\hat{Y}_{Ahi} = \sum_{j \in A} w'_{hij} y_{hij}$$

$$\hat{Y}_{Ah} = \sum_i \sum_{j \in A} w'_{hij} y_{hij}$$

$$\hat{X}_{Ahi} = \sum_{j \in A} w'_{hij} x_{hij}$$

$$\hat{Y}_{Ah} = \sum_i \sum_{j \in A} w'_{hij} y_{hij}$$

$$V\left(\hat{Y}_A\right) = COV(\hat{Y}_A, \hat{Y}_A)$$

$$V\left(\hat{X}_A\right) = COV(\hat{X}_A, \hat{X}_A)$$

Sampling Errors

Sampling Error tables are available upon request. If you are interested in receiving them, please send a request with your name, mailing address, and e-mail with a self addressed envelope to the following address:

Department of Methods and Standards
Palestinian Central Bureau of Statistics

P.O.Box 1647,

Ramallah, Palestine

Please cite the name and publication date of this report as shown on page [two]

Correspondence not citing the name of the report and publication date will be neglected.

Annex 2
Questionnaire



IDH00- Questionnaire serial number in cell <input type="text"/> <input type="text"/> <input type="text"/>		IDH05- Building Address _____		
IDH01- Governorate _____		IDH06- Name of Household (HH) head _____		
IDH02- Locality _____ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		IDH07- Is HH exists in attached list: 1. Yes <input type="checkbox"/> 2. No <input type="checkbox"/>		
IDH03- EA code in locality <input type="text"/> <input type="text"/> <input type="text"/>		IDH08- (If answer in IDH07 is Yes) HH Number in list <input type="text"/> <input type="text"/> <input type="text"/>		
IDH04- Cell code in E.A <input type="text"/> <input type="text"/> <input type="text"/>				
Interview Record				
IR01- Schedule Visits	Month	Day		
	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	First visit	
	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	Second Visit	
	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	Third Visit	
IR02- Total Number of Visits		<input type="text"/>		
IR03- Interview Status				
		1	Interview is completed	
		2	No HH member at home or no eligible respondent at home at time of visit	
		3	Entire HH absent for extended period of time	
		4	Refusal	
		5	Dwelling is vacant	
		6	Other (Specify) _____	
IR04- Line number of respondent of HH questions <input type="text"/> <input type="text"/>		IR05- Total members of HH <input type="text"/> <input type="text"/>		
IR06- Total of eligible women		IR07- Total number of interviewed eligible women		
IR08- Number of children under 5 years		IR09- Number of interviewed children under 5 years		
IR10- Number of children from 5 to 17 years				
IR11- Interview Schedule	Day	Month	Hour	Visit
				Start of first visit
				End of first visit
				Start of second visit
				End of second visit
				Start of third visit
			End of third visit	
IR12- Interviewer's Name		IR13- Interviewer's code		
IR14- Supervisor's Name		IR15- Supervisor's code		
IR16- Editor's Name		IR17- Editor's Number		
IR18- Data Entry Person's Name		IR19- Data Entry Person's Number		

To the interviewer: please put sign (x) inside the square if you have used an additional questionnaire



IDH00- Questionnaire serial number in cell <input type="text"/> <input type="text"/> <input type="text"/>		IDH05- Building Address _____	
IDH01- Governorate _____		IDH06- Name of HH head _____	
IDH02- Locality _____ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		IDH07- Is HH exists in attached list: 1. Yes <input type="checkbox"/> 2. No <input type="checkbox"/>	
IDH03- EA code in locality <input type="text"/> <input type="text"/> <input type="text"/>		IDH08- (If answer in IDH07 is Yes) HH Number in list <input type="text"/> <input type="text"/> <input type="text"/>	
IDH04- Cell code in EA <input type="text"/> <input type="text"/> <input type="text"/>			
Interview Record			
IR01- Schedule Visits	Month	Day	
	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	First visit
	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	Second Visit
	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	Third Visit
IR02- Total Number of Visits		<input type="text"/>	
IR03- Interview Status			
		1	Interview is completed
		2	No HH member at home or no eligible respondent at home at time of visit
		3	Entire HH absent for extended period of time
		4	Refusal
		5	Dwelling is vacant
		6	Other (Specify) _____
IR04- Total number of eligible women <input type="text"/> <input type="text"/>		IR05- Total number of interviewed eligible women <input type="text"/> <input type="text"/>	
IR06- Line number of eligible woman from HH listing <input type="text"/> <input type="text"/>			

To the interviewer: please put sign (x) inside the square if you have used an additional questionnaire



IDH00- Questionnaire serial number in cell <input type="text"/> <input type="text"/> <input type="text"/>	IDH05- Building Address _____		
IDH01- Governorate _____	IDH06- Name of HH head _____		
IDH02- Locality _____ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	IDH07- Is HH exists in attached list: 1. Yes <input type="checkbox"/> 2. No <input type="checkbox"/>		
IDH03- EA code in locality <input type="text"/> <input type="text"/> <input type="text"/>	IDH08- (If answer in IDH07 is Yes) HH Number in list <input type="text"/> <input type="text"/> <input type="text"/>		
IDH04- Cell code in EA <input type="text"/> <input type="text"/> <input type="text"/>			
Interview Record			
CIR01- Schedule Visits	Month	Day	
	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	First visit
	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	Second Visit
	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	Third Visit
CIR02- Total Number of Visits	<input type="text"/>		
CIR03- Interview Status			
	1	Interview is completed	
	2	No HH member at home or no eligible respondent at home at time of visit	
	3	Entire HH absent for extended period of time	
	4	Refusal	
	5	Dwelling is vacant	
	6	Other (Specify) _____	
CIR4 – Total number of children age under 5 years <input type="text"/> <input type="text"/>	CIR5- Total number of children age 5 to 17 years <input type="text"/> <input type="text"/>		
CIR6- Total number of children less than 5 years and interviewed <input type="text"/> <input type="text"/>	CIR7- Total number of children age from 5 to 17 years and interviewed <input type="text"/> <input type="text"/>		
CIR8- Line number of mother or caretaker from HH listing <input type="text"/> <input type="text"/>			

To the interviewer: please put sign (x) inside the square if you have used an additional questionnaire

Section 1: Household Roaster

HR01	HR02	HR03	HR04	HR05	HR05A	HR06
Line no. Circle no. of respondent	Names of usual HH residents (Full names) Please give me the names of the persons who usually live in your HH including children and infants, starting with the head of HH.	What is the relationship of (name) to the head of HH? 01 Head of HH Husband/ Wife Son/ Daughter Father/ Mother Brother/ Sister Grand Father/ Mother Grand Child Daughter/ Son in Law Other Relatives Non Relatives	Is (name) Male or Female? Ma le Fe male	What is the birthday of (name) in day/ month/year? <i>Interviewer: Birthday should be taken from official documents if possible.</i>	<i>Interviewer: Compute age from birthday in HR05 and record the answer in full years. In case that birthday is not known, ask for age and record it. Record (00) if age is less than one year.</i> 98 DK.	Is (name) registered refugee or unregistered refugee or not refugee? 1. Registered refugee 2. Unregistered refugee 3. Not refugee
01						
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						

HR01	HR02	HR07	HR08	HR09	HR10	HR11
Line no. Circle no. of respondent	Names of usual HH residents (Full names) Please give me the names of the persons who usually live in your HH including children and infants, starting with the head of HH.	Is (name's) natural mother alive? Yes No ⇒ HR09 DK ⇒ HR09	<i>Interviewer: If (name's) natural mother alive, record her line no. from HR01</i> <i>Record (00) if natural mother does not live in HH.</i>	Is (name's) natural father alive? Yes No ⇒ HR11 DK ⇒ HR11	<i>Interviewer: If (name's) natural father alive, record his line no. from HR01</i> <i>Record (00) if natural father does not live in HH.</i>	Does (name) have health insurance? Yes, Governmental health insurance Yes, Military health insurance Yes, UNRWA health insurance Yes, Social welfare health insurance Yes, Private insurance Without insurance
01		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
02		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
03		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
04		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
05		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
06		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
07		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
08		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
09		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

				<i>For persons age 5 years and over</i>	<i>For persons age 10 years and over</i>		
HR01	HR02	HR12		HR13	HR14	HR15	HR16
Line no. Circle no. of respondent	Names of usual HH residents (Full names) Please give me the names of the persons who usually live in your HH including children and infants, starting with the head of HH.	Does (name) have the following diseases and receive treatment continuously? Diabetes High blood pressure Cardiac diseases Cancer Ulcer Asthma Epilepsy Healthy <i>Interviewer: Record all mentioned</i>	Is (name): Currently attending school Attended school at any time and left before completing level Attended school and graduated Never attended school	What is the educational status of (name)? Illiterate Can read and write Elementary Preparatory Secondary Associate diploma Bachelor High diploma Master Ph. D. 98 DK.	How many years did (name) successfully complete? <i>Interviewer: Record (00) if number of schooling years less than one year.</i> <i>98 DK.</i>	<i>Interviewer: Ask this question if answer of HR14 is 1 or 2 or 3</i> Can he/she read a letter or newspaper? easily With difficulty Not at all DK.	
01		1 2 3 4 5 6 7 8					
02		1 2 3 4 5 6 7 8					
03		1 2 3 4 5 6 7 8					
04		1 2 3 4 5 6 7 8					
05		1 2 3 4 5 6 7 8					
06		1 2 3 4 5 6 7 8					
07		1 2 3 4 5 6 7 8					
08		1 2 3 4 5 6 7 8					
09		1 2 3 4 5 6 7 8					
10		1 2 3 4 5 6 7 8					
11		1 2 3 4 5 6 7 8					
12		1 2 3 4 5 6 7 8					
13		1 2 3 4 5 6 7 8					
14		1 2 3 4 5 6 7 8					
15		1 2 3 4 5 6 7 8					
16		1 2 3 4 5 6 7 8					
17		1 2 3 4 5 6 7 8					

		<i>For persons age 10 years and over</i>		<i>For persons age 12 years and over</i>		
HR01	HR02	HR17	HR18		HR19	HR20
Line no. Circle no. of respondent	Names of usual HH residents (Full names) Please give me the names of the persons who usually live in your HH including children and infants, starting with the head of HH.	What did (name) work most of the time last during the past week? Employed from 1-14 hours Employed for 15 hours or above Unemployed, has ever worked Unemployed, has never worked Full time student Housewife Unable to work Doesn't work and doesn't looking for it. Other <i>Interviewer: If answer from 4 to 9 ⇒ HR19</i>	What is the occupation of (name)? <i>Interviewer: Ask this question if the person is working or unemployed ever worked.</i>		What is (name's) current marital status? Never married Legally married Currently married Divorced Widowed	Does (name) smoke? Yes, mostly cigarettes Yes, mostly pipe Yes, mostly narghile Doesn't smoke
			Profession	Code		
01		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
02		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
03		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
04		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
05		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
06		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
07		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
08		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
09		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
10		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
11		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
12		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
13		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
14		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
15		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
16		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

17								
----	--	--	--	--	--	--	--	--

<i>For persons less than 18 years</i>					
HR01	HR02	HR21	HR22	HR23	HR24
Line no. Circle no. of respondent	Names of usual HH residents (Full names) Please give me the names of the persons who usually live in your HH including children and infants, starting with the head of HH.	Who is the caretaker of (name)? <i>Interviewer: Record line no. of mother or caretaker of (name).</i>	<i>Interviewer: Circle line no. of currently or ever married woman whose age is less than 55 years (eligible woman for interview)</i>	<i>Interviewer: Circle line no. of eligible woman husband from HR01. In case that husband doesn't live with family, record (00).</i>	<i>Interviewer: Circle line no. of children under 5 years (eligible for interview)</i>
01		_ _ _ _	01	_ _ _ _	01
02		_ _ _ _	02	_ _ _ _	02
03		_ _ _ _	03	_ _ _ _	03
04		_ _ _ _	04	_ _ _ _	04
05		_ _ _ _	05	_ _ _ _	05
06		_ _ _ _	06	_ _ _ _	06
07		_ _ _ _	07	_ _ _ _	07
08		_ _ _ _	08	_ _ _ _	08
09		_ _ _ _	09	_ _ _ _	09
10		_ _ _ _	10	_ _ _ _	10
11		_ _ _ _	11	_ _ _ _	11
12		_ _ _ _	12	_ _ _ _	12
13		_ _ _ _	13	_ _ _ _	13
14		_ _ _ _	14	_ _ _ _	14
15		_ _ _ _	15	_ _ _ _	15
16		_ _ _ _	16	_ _ _ _	16
17		_ _ _ _	17	_ _ _ _	17

Interviewer: To confirm that you recorded all HH. Members, ask this question:

Is there any other HH. Member who usually live in your household such as children or infants not recorded, or is there any member of HH. Usually live in your HH, but he/she currently absent or abroad for temporary period of time? 1. Yes 2. No

Section II: Dwelling

HD01	Now I want to ask you few questions about dwelling you are living in.	Piped into dwelling	1	⇒	HD03
		Piped into yard	2		
HD01	What is the main source of drinking water for members of your HH.	Public tap	3		HD03
		Rain water collection with connection in dwelling	4	⇒	
		Rain water collection without connection in dwelling	5		HD03
		Springs/ streams	6		
		Tanker truck	7	⇒	
		Bottled water	8	⇒	
	Other (specify)	9			
HD02	How long does it take to go there, get water and come back?	Number of minutes	<input type="text"/> <input type="text"/> <input type="text"/>		
		DK	999		
HD02A	How usually brings the water?	Private car	1		
		Public transportation	2		
		Walking	3		
		Using donkey cart	4		
		Other (specify)	5		
HD03	What is type sewage in the household?	Public sewage system	1		
		Cesspit	2		
		Other	3		
		No sewage system	4		
		DK	5		
HD04	What kind of toilette facility most does your household use?	Flush toilette	1		HD07
		Traditional toilette	2		
		Both	3		
		Other (specify)	4		
		No facility	5	⇒	
HD05	Is the facility located within your dwelling or yard?	In dwelling	1		
		Outside Dwelling	2		
HD06	Do you share this facility with other household?	For HH only	1		
		Share with other HH	2		
HD07	What happens with the stools of young children (0-3 years) when they use the latrine or toilette facility?	Children always use toilette	1		
		Thrown into toilette	2		
		Thrown outside dwelling	3		
		Buried outside dwelling	4		
		Thrown into Garbage	5		
		Other (specify)	6		
		No children age 0-3 years at HH	7		
HD08	What kind of material is the floor made from?	Earth/ sand	1		
		Wood planks	2		
		Tiled	3		
		Ceramic	4		
		Cement	5		
		Other (specify)	6		
HD09	How many rooms are there in dwelling?	Number of rooms	<input type="text"/> <input type="text"/> <input type="text"/>		
HD10	May I see the original box of the salt used to cook the main meal eaten by members of your HH last night? <i>Interviewer: Is there any indication on the box that the salt contains iodize?</i>	Yes, there is a text indicate that the salt is iodized.	1		
		Yes, there is no indication that the salt is iodized.	2		
		The box not seen.	3		
HD11	<i>We would like to check who there the salt used in your HH is iodized? Once you have examined the salt, circle number that corresponds to test out come.</i>	Not iodized, 0 PPM (no color)	1		
		Less than 15 PPM (weak color)	2		
		15 PPM or more (strong color)	3		
		No salt in home	4		
		Salt not tested	5		

Section III: Reproduction

RE01	Interviewer: Record If husband not resident with HH, record (00)	Woman Name: _____ Woman line no. from HR01 _ _ Husband line no. from HR23 _ _	
RE02	What is your marital status?	Married 1 Divorced 2 Widowed 3	
RE03	How old were you at first marriage?	Age _ _	
RE03A	How long is your marriage life in completed years?	Number of years _ _	
RE03B	What is the type of relation between you and your first husband?	Ibn Amm 1 Ibn Amma 2 Ibn Khal 3 Ibn Khala 4 Ibn Amm & Ibn Khala or Ibn Amma & Ibn Khal 5	
RE04	Have you ever had pregnancy?	Yes 1 No 2 ⇒	RE14
RE04A	How old were you at first pregnancy?	Age _ _	
RE05	Have you ever given birth even if he/she lived only few moments?	Yes 1 No 2 ⇒	RE12
RE06	When did you have your first birth? Day/ month/ year	_ _ / _ _ / _ _ _ _	
RE07	What was your age when you had your first birth?	Age _ _	
RE08	Do you have sons or daughters to whom you have given birth who are now living with you?	Yes 1 No 2 ⇒	RE10
RE09	How many sons live with you? How many daughters live with you? Interviewer: if non, record (00)	Sons _ _ Daughters _ _	
RE10	Do you have sons or daughters to whom you have given birth who are alive but don't live with you?	Yes 1 No 2 ⇒	RE12
RE11	How many sons are alive but don't live with you? How many daughters are alive but don't live with you? Interviewer: if non, record (00)	Sons _ _ Daughters _ _	
RE12	Have you ever given birth to a boy or girl who showed signs of life (like breathing, crying or movement) but he/she died later even he/she lived few minutes or hours or days?	Yes 1 No 2 ⇒	RE14
RE13	How many boys have died? How many girls have died? Interviewer: if non, record (00)	Sons _ _ Daughters _ _	
RE14	Interviewer: Sum answers of RE09, RE11 and RE13 and enter total. If non, record (00)	Total _ _	
RE15	Interviewer: check RE14, Just to make sure that I have this right: you have had in total (Total from RE14) births during your life. Is that correct? Yes 2. No, probe and correct (RE09-RE14) as necessary ↓		
RE16	Interviewer: check RE14 1. One or more births _ 2. No births _ ⇒ RE32A ↓		

**Now I would like to record the names of all your births in your marriage life, whether still alive or not, whether live with you or not, starting with first one you had.
Record names of all births in RE17. Record twins and triplets on separate lines.**

RE17	RE18	RE19	RE20	RE21	RE22	RE23	RE24	RE25	RE26	RE27
						<i>For alive births</i>		<i>For dead births</i>		
Line no.	What name was given to your (first/second) baby?	Is (name) single or twin? Single Twin	Is (name) male or female? Male Female	In what month and year was (name) born? <i>Probe: what is his/her birthday?</i> Month Year	Is (name) still alive? Yes No ⇒ RE25	How old was (name) at his/her last birthday? <i>Record age in complete years. Record (00) if age less than one year?</i>	Is name living with you? Yes No RE26 If first birth ⇒ next birth	How old was (name) when he/ she died? <i>Interviewer: If one year, probe: how many months old was (name)? Record days if less than one month; months if less than 2 years; or years.</i> Day Month Year	<i>Interviewer: subtract birth month and year of (name) from birth month and year of previous birth.</i> Is the difference 2 years or more? Yes No ⇒ next birth	Were there any other live births between (name of previous name) and (name)? Yes No
01		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□		
02		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
03		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
04		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
05		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
06		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
07		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
08		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
09		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
10		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
11		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
12		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
13		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
14		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
15		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
16		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
17		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2

RE17	RE18	RE19	RE20	RE21	RE22	RE23	RE24	RE25	RE26	RE27
						<i>For alive births</i>		<i>For dead births</i>		
Line no.	What name was given to your (first/second) baby?	Is (name) single or twin? Single Twin	Is (name) male or female? Male Female	In what month and year was (name) born? <i>Probe: what is his/her birthday?</i> <i>Month Year</i>	Is (name) still alive? Yes No o ⇒ RE25	How old was (name) at his/her last birthday? <i>Record age in complete years.</i> <i>Record (00) if age less than one year?</i>	Is name living with you? Yes No RE26 If first birth ⇒ next birth	How old was (name) when he/ she died? <i>Interviewer:</i> <i>If one year, probe: how many months old was (name)?</i> <i>Record days if less than one month; months if less than 2 years; or years.</i> <i>Day Month Year</i>	<i>Interviewer: subtract birth month and year of (name) from birth month and year of previous birth.</i> Is the difference 2 years or more? Yes No ⇒ next birth	Were there any other live births between (name of previous name) and (name)? Yes No o
18		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
19		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
20		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
21		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
22		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
23		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
24		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
25		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
26		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
27		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
28		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
29		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
30		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
31		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
32		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
33		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2
34		1 2	1 2	□□/□□□□	1 2	□□□	1 2	□□ □□ □□	1 2	1 2

RE28	What was the birthday of last birth you had? Day/ Month/ Year	_ _ / _ _ / _ _ _ _	
RE29	<i>Interviewer: Subtract the month and year of last birth from the month and year of interview date? Is the difference two years or more?</i>	Yes 1 No 2 ⇒	RE31
RE30	Have you had any live births since the birth of (name of last birth)?	Yes 1 No 2	
RE31	Interviewer: compare total in RE14 with number of births in history above and mark: 1. Numbers are same _ 2. Numbers are different _ ⇒ probe and reconcile ↓ Check: For each birth: year of birth is recorded _ For each living child: current age is recorded _ For each dead child: age at dead is recorded _ For age at death was less than 12 months: probe to determine exact number of months _		
RE32	Interviewer: check RE21 and record number of births since April/ 1995	_ _	
RE32A	Interviewer: 1. woman age less than 50 years and currently married or divorced/ widowed since 100 days and less _ ↓ 2. woman age 50 years and more and currently married or divorced/ widowed since more than 100 days _ ⇒ RE37		
RE33	Are you pregnant now?	Yes 1 No 2 ⇒ Not sure 3 ⇒	RE37 RE37
RE34	How many months pregnant are you? <i>Interviewer: record number of complete months</i>	Number of months _ _ DK 98	
RE35	When did your menstrual period start? (Date if given / /)	Months ago _ _ _ _ Years ago _ _ _ _ Never menstruated _ _ _ _ 99	
RE36	At the time you became pregnant, Have you the desire to become pregnant, or you have the desire to become pregnant later or haven't the desire to be pregnant at all?	Desired now 1 Later, Desire, Later 2 Not at all 3 Didn't deiced 8	
RE37	Have you ever had any other pregnancies which didn't result in a live birth either by abortion or still birth?	Yes 1 No 2 ⇒	RE39
RE38	How many times did you have abortion or still births in your marital life?	Number of abortions _ _ Number of still births _ _	
RE38A	How many times did you have abortion or still births in the last three years?	Number of abortions _ _ Number of still births _ _	
RE39	<i>Interviewer: Add answers in (RE14, RE38) and record total, if woman is currently pregnant as indicated from RE33, then add to the total (1). If there are no pregnancies, record (00).</i>	Total _ _	
RE40	<i>Interviewer: check RE39 and ask: Just to make sure that I am right: You have had (total in RE39) pregnancies in your life including this pregnancy (if woman is pregnant). Is that correct? 1. Yes 2. No, probe and correct (RE14, RE33, RE38, RE39)</i>		

Section IV: Contraception

FP01	<i>Interviewer: Record If husband not resident with HH, record (00)</i>	<i>Interviewed Name: _____ Woman line no. from HR01 _ _ Husband line no. from HR23 _ _ </i>			
<i>Now I would like to talk about family planning – different methods that couples can use to delay or avoid pregnancy. Interviewer: Circle code (1) in FP02 for each method mentioned spontaneously. Then proceed down column FP03, reading the name and description of each method not mentioned spontaneously. Circle code (2) if method is recognized and circle code (3) if not recognized. Then for each method with code (1) in FP02 or code (2) in FP03, ask FP04.</i>					
	FP02 Which ways or methods have you heard about?	FP03 Have you ever heard of (method name)? {for methods not mentioned spontaneously}	FP04 Have you ever used (method) at any time?		
	1. Spontaneously	2. After probe	3. No	1. Yes 2. No	
1	Pill Woman can take a pill every day.	1	2	3 ↓	1 2
2	IUD Woman can have a loop or coil fixed inside uterus by a doctor or nurse.	1	2	3 ↓	1 2
3	Injection Muscular injection used to prevent pregnancy for several months.	1	2	3 ↓	1 2
4	Foam/ Jelly/ Diaphragm methods used before sexual intercourse.	1	2	3 ↓	1 2
5	Condom A rubber sac preservative used by man before sexual intercourse.	1	2	3 ↓	1 2
6	Female sterilization Female surgical an operation to block reproductive tubals for stop having any more children.	1	2	3 ↓	Did you had an sterilization operation to avoid having more children? 1 2
7	Male sterilization Male surgical operation to stop having any more children.	1	2	3 ↓	Did your husband had an sterilization operation to avoid having more children? 1 2
8	Rhythm or periodic abstinence Every month that a woman is sexually active can avoid pregnancy by not having sexual intercourse on certain days of month she is most likely to get pregnant.	1	2	3 ↓	1 2
9	Withdrawal Ejaculating outside vagina during intercourse before climax.	1	2	3 ↓	1 2
10	Breast feeding Breast feeding child continuously (day & night) to avoid pregnancy during breast feeding.	1	2	3 ↓	1 2
11	Have you heard any other ways or methods that women or man can use to avoid pregnancy.	1		3 ↓	1 2
		specify _____			
FP05	Where from did you hear about this method(s)? <i>Interviewer: for women have ever heard of at least on method of contraception . Record all mentioned</i>	Ahysician		1	
		Pharmacists		2	
		Nurse/ Midwife		3	
		Daya		4	
		Health worker		5	
		Mass media		6	
		Friends and relatives		7	
		Other (specify)		8	

FP06	Do you know a place you can obtain a method of family planning?	Yes No	1 2	⇒	FP08
FP07	Where is that? <i>Interviewer: Record all mentioned Record place name _____</i>	Govt. center/ hospital NGO's center/ hospital UNRWA center/ hospital Private clinic/H.center/ hospital Pharmacy Other (specify) _____	1 2 3 4 5 6		
FP08	<i>Interviewer: check FP04</i> 1. Not a single "yes" (never used) <input type="checkbox"/> ↓ 2. At least one "yes" (ever used) <input type="checkbox"/> ⇒ FP11				
FP09	Have you ever used or currently using any contraceptive method?	Yes, currently using Yes, ever used but stopped now No, never used	1 2 3	⇒	FP14
FP10	What are the methods that you have used? <i>Interviewer: correct FP03, FP04 and FP08 if necessary.</i>	_____			
FP11	What was the first main method you have ever used to delay or avoid pregnancy?	Pill IUD Injections Foam/ jelly Condom Female sterilization/tubal ligation Male sterilization Periodic abstinence Withdrawal Breast feeding Other (specify)	01 02 03 04 05 06 07 08 09 10 11		
FP12	How many living children, did you have at first use of family planning method? <i>Interviewer: record (00) if no child at first use</i>	A. Number of male children B. Number of female children C. Total	<input type="text"/> <input type="text"/> <input type="text"/>		
FP13	<i>Interviewer: check RE02</i> 1. Currently married <input type="checkbox"/> ↓ 2. Divorced or widowed <input type="checkbox"/> ⇒ FP23				
FP14	<i>Interviewer: check RE33</i> 1. Not pregnant or not sure <input type="checkbox"/> ↓ 2. Pregnant or ammenheorea <input type="checkbox"/> ⇒ FP23				
FP15	<i>Interviewer: check FP04 (06)</i> 1. Women not sterilized <input type="checkbox"/> ↓ 2. Woman sterilized <input type="checkbox"/> ⇒ FP17A				
FP16	Are you currently or using any method to delay or avoid getting pregnant?	Yes No	1 2	⇒	FP22
FP17	What is the currently used family planing method? <i>Interviewer: Circle (6) for female sterilization.</i>	Pill IUD Injections Foam/ jelly Condom Female sterilization/tubal ligation Male sterilization Periodic abstinence Withdrawal Breast feeding Other (specify)	01 02 03 04 05 06 07 08 09 10 11	→	FP21
FP18	Where did you obtain (method)? <i>Interviewer: Record place name _____</i>	Govt. center/ hospital NGO's center/ hospital UNRWA center/ hospital Private clinic/ center/ hospital Pharmacy Other (specify) _____	1 2 3 4 5 6		

FP19	How long does it take you to go there to get the method?	No. of minutes	□□□□	
FP19A	How did you go to the men place mentioned?	1. Private car 2. Public transportation 3. Walking 4. Using cart 5. Other (specify) _____	1 2 3 4 5	
FP20	Is one of the following reasons encouraged you to go to the mentioned place? <i>Interviewer: Probe for other reasons</i>	A. Near by dwelling/ work B. Transportation C. Availability D. Female service provider E. Service quality F. Low cost/cheeper G. Other (specify) _____	Yes 1 1 1 1 1 1 1 No 2 2 2 2 2 2 2	
FP21	What is the main reason for using this method?	Doctor advice Husband didn't oppose it Friends advice Convenient to use Low cost Other (specify) _____	1 2 3 4 5 6	FP23
FP22	What is the main reason behind not current use any family planning method?	Desire have children Oppose family planning Husband disapproval Relatives oppose Side effect Doesn't know that of FP methods are available Difficulty to get the method High cost Method is inconvenient Menopause Husband is not currently living with HH Sterilization Conadict religious believes Other (specify) _____ DK	01 02 03 04 05 06 07 08 09 10 11 12 13 14 98	
FP23	Did you hear about family planning? During the last 6 months	Yes No	1 2 ⇒	FP26
FP24	Where did you hear about family planning? <i>Interviewer: record all mentioned</i>	Radio TV Newspapers/ magazine Brochures/ posters Lectures Husband/ relatives/ friends Health center Other (specify) _____	1 2 3 4 5 6 7 8	
FP25	If you want to get more information about family planning; where from you did get any extra information about FP? <i>Interviewer: record all mentioned.</i>	Govt. center/ hospital NGO's center/ hospital UNRWA center/ hospital Private clinic/ center/ hospital Mass media Relatives/ friends Brochures / publications Other (specify) _____	1 2 3 4 5 6 7 8	
FP26	<i>Interviewer: Don't ask this question if woman is divorced or widowed.</i> In your household : who decide the use of family planning methods?	Husband Wife Both couples Mother in law Others	1 2 3 4 5	

Section V: Pregnancy and Breast Feeding

AN01	Interviewer: Record If husband is not resident with Household, record (00)	Interviewed Woman Name: _____ Interviewed Woman line no. from HR01 <input type="text"/> <input type="text"/> Husband line no. from HR23 <input type="text"/> <input type="text"/>	
AN02	Interviewer: Check RE22 Have you ever had one or more live births since April 1997	1. Yes 2. No ⇒ next section ↓ <input type="checkbox"/>	
Interviewer: In this section ask about the last two pregnancies resulted with live births during the last 3 years. Enter line number and name for each birth since April 1997 from history table, even the birth no more alive. Ask the questions about all these births beginning with last one. Now I would like to ask you some questions about the last two pregnancies ended with live births during the last 3 years the preceding the survey, we will talk about each separately.			
		Last pregnancy	Pre-last pregnancy
AN03	Line number from RE17	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
AN04	Birthdate (day/ month/ year)	/ /	/ /
	Birth's name from RE18	Names	Name
AN05	At time you become pregnant with (Name). Have you the desire to, didn't have the desire or desire to wait?	Desire to become pregnant Desire to wait Don't have desire to become pregnant	1 ⇒ AN06A 2 3 ⇒ AN06A
AN06	How much longer would you like desire to wait till next pregnancy?	Number of months DK	<input type="text"/> <input type="text"/> 98
AN06A	Did you see any one for antenatal care during pregnancy with (name)?	Yes No	1 2 ⇒ AN12
AN07	Who have did you consult? <i>Interviewer: record all persons seen</i>	Doctor Nurse/ midwife Daya No one Other (specify)	1 2 3 4 5
AN08	Where did you receive antenatal care (the place you mostly visited)?	Govt. hospital Private hospital UNRWA centers Govt. health center MCH Private clinic NGO's clinic/ center Other (specify)	1 2 3 4 5 6 7 8
AN09	Why did you choose this place for antenatal care? <i>Interviewer: record all mentioned</i>	Service is available Accessibility to service Quality of service Female service provider Availability of health insurance Low cost Other (specify)	1 2 3 4 5 6 7
AN10	How many months were you been pregnant when you have received antenatal care visit?	Months Don't Know	<input type="text"/> <input type="text"/> 98
AN11	What was the number of visits for antenatal care during pregnancy?	Number of times DK	<input type="text"/> <input type="text"/> 98 <i>Record answer then skip to AN13</i>
AN12	What was the main reason for not receiving antenatal care?	Had no complaints Previous experience Service not available Cost too much Service is not satisfactory Other (specify)	1 2 3 4 5 6

		Last pregnancy			Next-to-last pregnancy			
Birth's name from RE18								
AN13	During this pregnancy (Name), did you suffer from the following?	A. Eclampsia B. Diabetes C. Prematurity D. High blood pressure E. Vaginal Hemorrhage F. U.T.I	<u>Yes</u> 1 1 1 1 1 1	<u>No</u> 2 2 2 2 2 2	<u>DK</u> 8 8 8 8 8 8	<u>Yes</u> 1 1 1 1 1 1	<u>No</u> 2 2 2 2 2 2	<u>DK</u> 8 8 8 8 8 8
AN14	<i>Interviewer: Ask this question if there is at least one "yes" in AN13.</i> What did you do?	I went to hospital I do consulted a private doctor I do consulted a nurse/ midwife I do consulted daya Other (specify)	1 2 3 4 5			1 2 3 4 5		
AN15	<i>Interviewer: Ask this question if there is at least one "yes" in AN13.</i> Have you been refer to ...?	High risk pregnancy clinic Hospital Private doctor clinic Referred but I didn't go Not referred		1 2 3 4 5		1 2 3 4 5		
AN16	During this pregnancy, did you take iron tablets or folic acid tablets...?	A. Iron tablets B. Folic acid tablets	<u>Yes</u> 1 1	<u>No</u> 2 2	<u>DK</u> 8 8	<u>Yes</u> 1 1	<u>No</u> 2 2	<u>DK</u> 8 8
AN16A	<i>Interviewer: Ask this question if there is at least one "yes" in AN16.</i> Where did you get the iron or the folic acid tablet?	Govt. hospital/ center Private hospital/ center UNRWA hospital/ center NGO's hospital/ clinic Private clinic Pharmacy Other (specify)	1 2 3 4 5 6 7			1 2 3 4 5 6 7		
AN17	Where did you give birth to (name)?	Govt. hospital/ center Private hospital/ center UNRWA hospital/ center NGO's hospital/ clinic Private clinic At home Other (specify) _____	1 2 3 4 5 6 7			1 2 3 4 5 6 7		
AN18	How long did you stay at hospital?	A. Hours B. Days		<input type="text"/> <input type="text"/>		<input type="text"/> <input type="text"/>		
AN19	<i>Interviewer: For whom staged at hospital less than 24 hours.</i> What is the main reason before leaving the hospital before 24 hours?	Family commitments Cost too much Service is inconvenient No need to stay more		1 2 3 4		1 2 3 4		
AN20	Did you receive health education in one of the following subjects before leaving the hospital?	A. Breast feeding B. Nutrition C. Family planning D. Vaccination E. Importance of medical F. Follow up	<u>Yes</u> 1 1 1 1 1	<u>No</u> 2 2 2 2 2		<u>Yes</u> 1 1 1 1 1	<u>No</u> 2 2 2 2 2	
AN21	Who assisted with the delivery of (name)?	Doctor Nurse/ midwife Daya Relative/ friend Other (specify) _____ No one	1 2 3 4 5 6			1 2 3 4 5 6		

If answer is 5 through 7 skip to AN21

If answer is 5 through 7 skip to AN21

			Last pregnancy	Next-to-last pregnancy
AN22	What is the main reason for choosing this place?	Quality of service Difficult to access another place Sudden delivery Having health insurance/ low cost My private doctor is working there Existence of medical risks No other place available Other (place) _____	1 2 3 4 5 6 7 8 _____	1 2 3 4 5 6 7 8 _____
AN23	After 6 weeks of this delivery (name), did you suffer from one the following:	A. Bad Smell excretions B. Server heamorrhage C. Fever D. Convulsions E. Breast infection	<u>Yes</u> <u>No</u> 1 2 1 2 1 2 1 2 1 2	<u>Yes</u> <u>No</u> 1 2 1 2 1 2 1 2 1 2
AN24	<i>Interviewer: Ask this question if there is at least one "yes" in AN23.</i> Did you receive treatment?	Yes No	1 2 ⇒ AN26	1 2 ⇒ AN26
AN25	Where did you receive this treatment?	Govt. hospital Private hospital UNRWA hospital Govt. health center NGO's clinic/ center Private clinic Pharmacy Other (specify) _____	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
AN26	Was (Name) delivered:	Normal Forceps Suction Episeotomy caesarian	1 2 3 4 5	1 2 3 4 5
AN27	During the first 6 weeks of delivery (puerperium period), whom did you see for post natal care?	General practionnaire Specialist Nurse/ midwife Daya No one Other (specify) _____	1 2 3 4 5 6	1 2 3 4 5 6
AN28	After (name) was born, did a health professional or a daya visited you during puerperium period (6 weeks after birth)?	Yes No	1 2 ⇒ AN30	1 2 ⇒ AN30
AN29	Did she talk to you about any of the following subjects?	A. Family planning B. Breast feeding C. Personal health D. Nutrition E. Resume sexual intercourse F. Other (specify) _____	<u>Yes</u> <u>No</u> 1 2 1 2 1 2 1 2 1 2 1 2	<u>Yes</u> <u>No</u> 1 2 1 2 1 2 1 2 1 2 1 2
AN30	When (name) was born, was he/ she : very large, larger than average, average, smaller than average or very small?	Very big Bigger than normal normal Smaller than normal Very small DK	1 2 3 4 5 8	1 2 3 4 5 8
AN31	Was (name) weighed at birth?	Yes No	1 2 ⇒ AN33	1 2 ⇒ AN33
AN32	How much did (name) weigh? <i>Interviewer: record weight from health card if available.</i>	Grams from card Grams from recall DK	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2 9998	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2 9998
			<i>Go back to AN03 in next column, if no more births skip to AN33</i>	<i>Continue to next question</i>

		Last pregnancy	Next-to-last pregnancy
Birth's name from RE18			
Interviewer: check RE21			
Did woman had deliveries within the past 3 years?		1. Yes ↓	2. No ⇒ next section <input type="checkbox"/>
		Last birth	Next to last birth
AN33	Birth line number from RE17	<input type="text"/>	<input type="text"/>
AN33a	Birth name from RE18	<input type="text"/>	<input type="text"/>
AN34	Did you ever breast feed (Name)?	Yes No	1 2 ⇒ AN36
AN35	How long after birth did you first put (name) to the breast? <i>Interviewer: If less than 1 hour or immediately, record (00) at (1)</i>	Immediately Hours Days	<input type="text"/> 1 <input type="text"/> 2 <input type="text"/> 3
AN36	Are you still breast-feeding (name)?	Yes No Child died	1 ⇒ AN40 2 3
AN37	How many months did you breast feed (name)?	Months Child still breast feeding	<input type="text"/> 98
AN38	For now many months did you breast feed (name) exclusively?	Months DK	<input type="text"/> 98
AN39	Why did you stop breast feeding (name)?	Sickness/ weakness of mother Sickness/ weakness of child Child died Problem in breast/ nipple Breast milk is not enough Mother works Child refused breast feeding Weaning age Became pregnant Start using contraceptive Other (specify)	01 02 03 04 05 06 07 08 09 10 11
AN40	Since this time yesterday, did he/she receive, any of the following?	A. Vitamins B. mineral water /Plain C. Sugar & water D. Fruit juice E. Tea/ herbal tea F. ORS G. Powdered milk H. Fresh milk I. Other liquids J. Solid food	<u>Yes</u> <u>No</u> <u>DK</u> 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8 1 2 8
AN41	Since this time yesterday, has (name) been given any liquids to drink from a bottle or by any other way?	Yes No DK	1 2 8
AN42	Did you feed (name) with any other milk except your breast?	Yes No DK	1 2 ⇒ AN45 8 ⇒ AN45
AN43	How old was (name) when you started giving him other milks except that from your breast?	Month DK	<input type="text"/> 98

			Last pregnancy	Next-to-last pregnancy
	Birth's name from RE18			
AN44	Why did you give (name) any other milk except that from your breast?	Sickness/ weakness of mother Sickness/ weakness of child Doctor advice Nurse advice Problem in breast/ nipple Breast milk not enough Mother works Child refused mother breast feeding Weaning age Became pregnant Started using contraceptive Other (specify) _____	01 02 03 04 05 06 07 08 09 10 11 12 _____	01 02 03 04 05 06 07 08 09 10 11 12 _____
AN45	How old was (name) when you started giving him additional liquids?	Month Not given any liquids yet DK	_____ 95 98	_____ 95 98
AN46	How old was (name) when you started giving him food?	Month Not given any liquids yet DK	_____ 95 98	_____ 95 98
AN47	Has (name) received vitamin A+D drops even over one time?	Yes No DK	1 2 ⇒ next birth 3 ⇒ next birth	1 2 ⇒ next birth 3 ⇒ next birth <i>if no next birth, skip to next section</i>
AN48	How old was (name) when he/ she received vitamin A+D drops last time?	Number of months DK	_____ 98	_____ 98
AN49	For how long of time did (name) continue receiving vitamin A+D drops?	Number of months Child still receiving vitamin A+D DK	_____ 95 98	_____ 95 98
AN50	Where did (name) get the last dose?	On routine visit to health center Sick child visit to health center Pharmacy Other (specify) _____ DK	1 2 3 4 _____ 8	1 2 3 4 _____ 8
			<i>Go back to AN43 in next column, if no more births, go to next section</i>	<i>Go back to AN43 in next column, if no more births, go to next section</i>

Section VII: Fertility Preference

PR01	<i>Interviewer: If husband not resident with HH, record (00)</i>	<i>Woman name: _____</i> <i>Woman line number from HR01 : <input type="text"/> <input type="text"/></i> <i>Husband line number from HR23: <input type="text"/> <input type="text"/></i>																												
TT02	<i>Interviewer: check FP04</i> <i>Check RE21: Is woman has a live birth in last year (since April 1999)?</i> <i>1. Neither sterilized <input type="checkbox"/></i> <i>2. He or she sterilized or woman age 50 years or over or woman divorced / widowed ⇒ PR11 <input type="checkbox"/></i>																													
PR03	<i>Check RE33:</i> <i>Woman not pregnant or not sure <input type="checkbox"/></i> <i>2. Woman pregnant <input type="checkbox"/> ⇒ PR06</i>																													
PR04	Would you like to have more children or would you prefer not to have any more children?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Have more children</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>No more children</td> <td style="text-align: center;">2</td> <td style="text-align: center;">⇒</td> <td>PR10</td> </tr> <tr> <td>Says she can't get pregnant</td> <td style="text-align: center;">3</td> <td style="text-align: center;">⇒</td> <td>PR11</td> </tr> <tr> <td>Not her decision</td> <td style="text-align: center;">4</td> <td></td> <td></td> </tr> <tr> <td>Undecided/ DK</td> <td style="text-align: center;">8</td> <td></td> <td></td> </tr> </table>	Have more children	1			No more children	2	⇒	PR10	Says she can't get pregnant	3	⇒	PR11	Not her decision	4			Undecided/ DK	8										
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PR05	How long would you like to wait from now before the birth of next child?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Months</td> <td style="width: 10%; text-align: center;"><input type="text"/> <input type="text"/> <input type="text"/> 1 <input type="text"/></td> <td rowspan="6" style="width: 10%; text-align: center; vertical-align: middle;">} → PR08</td> </tr> <tr> <td>Years</td> <td style="text-align: center;"><input type="text"/> <input type="text"/> <input type="text"/> 2 <input type="text"/></td> </tr> <tr> <td>Soon/ now</td> <td style="text-align: center;">993</td> </tr> <tr> <td>Says she can't be pregnant</td> <td style="text-align: center;">994</td> </tr> <tr> <td>Says this is GOD well</td> <td style="text-align: center;">995</td> </tr> <tr> <td>DK</td> <td style="text-align: center;">996</td> </tr> <tr> <td>Other (specify)</td> <td style="text-align: center;">998</td> <td></td> </tr> </table>	Months	<input type="text"/> <input type="text"/> <input type="text"/> 1 <input type="text"/>	} → PR08	Years	<input type="text"/> <input type="text"/> <input type="text"/> 2 <input type="text"/>	Soon/ now	993	Says she can't be pregnant	994	Says this is GOD well	995	DK	996	Other (specify)	998													
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DK	996																													
Other (specify)	998																													
PR06	After delivery of child you expecting now, would you like to have more children or would you prefer not to have any more children?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Have more children</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>No more children</td> <td style="text-align: center;">2</td> <td style="text-align: center;">⇒</td> <td>PR10</td> </tr> <tr> <td>Not her decision</td> <td style="text-align: center;">3</td> <td></td> <td></td> </tr> <tr> <td>Undecided/ DK</td> <td style="text-align: center;">4</td> <td></td> <td></td> </tr> </table>	Have more children	1			No more children	2	⇒	PR10	Not her decision	3			Undecided/ DK	4														
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PR07	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Months</td> <td style="width: 10%; text-align: center;"><input type="text"/> <input type="text"/> <input type="text"/> 1 <input type="text"/></td> <td></td> </tr> <tr> <td>Years</td> <td style="text-align: center;"><input type="text"/> <input type="text"/> <input type="text"/> 2 <input type="text"/></td> <td></td> </tr> <tr> <td>Soon/ now</td> <td style="text-align: center;">993</td> <td></td> </tr> <tr> <td>Says she can't be pregnant</td> <td style="text-align: center;">994</td> <td></td> </tr> <tr> <td>Says this is GOD well</td> <td style="text-align: center;">995</td> <td></td> </tr> <tr> <td>DK</td> <td style="text-align: center;">996</td> <td></td> </tr> <tr> <td>Other (specify)</td> <td style="text-align: center;">998</td> <td></td> </tr> </table>	Months	<input type="text"/> <input type="text"/> <input type="text"/> 1 <input type="text"/>		Years	<input type="text"/> <input type="text"/> <input type="text"/> 2 <input type="text"/>		Soon/ now	993		Says she can't be pregnant	994		Says this is GOD well	995		DK	996		Other (specify)	998								
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PR08	How many male sons you want to have in the future in addition to the number you have?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Number of males</td> <td style="width: 10%; text-align: center;"><input type="text"/> <input type="text"/></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>The most possible number</td> <td style="text-align: center;">94</td> <td></td> <td></td> </tr> <tr> <td>This is a GOD well</td> <td style="text-align: center;">95</td> <td></td> <td></td> </tr> <tr> <td>DK</td> <td style="text-align: center;">96</td> <td></td> <td></td> </tr> <tr> <td>Other (specify)</td> <td style="text-align: center;">98</td> <td></td> <td></td> </tr> </table>	Number of males	<input type="text"/> <input type="text"/>			The most possible number	94			This is a GOD well	95			DK	96			Other (specify)	98										
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PR09	How many female sons you want to have in the future in addition to the number you have?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Number of females</td> <td style="width: 10%; text-align: center;"><input type="text"/> <input type="text"/></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>The most possible number</td> <td style="text-align: center;">94</td> <td></td> <td></td> </tr> <tr> <td>This is a GOD well</td> <td style="text-align: center;">95</td> <td></td> <td></td> </tr> <tr> <td>DK</td> <td style="text-align: center;">96</td> <td></td> <td></td> </tr> <tr> <td>Other (specify)</td> <td style="text-align: center;">98</td> <td></td> <td></td> </tr> </table>	Number of females	<input type="text"/> <input type="text"/>			The most possible number	94			This is a GOD well	95			DK	96			Other (specify)	98										
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PR10	Who decide the number of children in your household?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Husband</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>Wife</td> <td style="text-align: center;">2</td> <td></td> <td></td> </tr> <tr> <td>Both</td> <td style="text-align: center;">3</td> <td></td> <td></td> </tr> <tr> <td>Mother in law</td> <td style="text-align: center;">4</td> <td></td> <td></td> </tr> <tr> <td>Others</td> <td style="text-align: center;">5</td> <td></td> <td></td> </tr> <tr> <td>Other than that (specify)</td> <td style="text-align: center;">6</td> <td></td> <td></td> </tr> <tr> <td>DK</td> <td style="text-align: center;">8</td> <td></td> <td></td> </tr> </table>	Husband	1			Wife	2			Both	3			Mother in law	4			Others	5			Other than that (specify)	6			DK	8		
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Others	5																													
Other than that (specify)	6																													
DK	8																													

PR11 Interviewer: check RE22 1. Woman has living children <input type="checkbox"/> 2. Woman don't have living children <input type="checkbox"/> ⇒ PR13 <div style="text-align: center;">⇓</div>					
PR12	If you could back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? <i>Interviewer: probe for a numeric response and skip to next section</i>	Number of males	<input type="text"/>		
		Number of females	<input type="text"/>		
		Total	<input type="text"/>		
		The most possible number	94		
		This a GOD well	95		
		DK	96		
PR13	If you could choose exactly the number of children to have in your whole life, how many would that be?	Number of males	<input type="text"/>		
		Number of females	<input type="text"/>		
		Total	<input type="text"/>		
		The most possible number	94		
		This a GOD well	95		
		DK	96		
	Other (specify)	97			

PH06	Interviewer: for whom heard about at least one of the Reproductive health items. Where did you get the information about reproductive health component (s)	Govt. center/ hospital UNRWA center/ hospital NGO's center/ Hospital Private sector Media Health worker Nurse/ midwife/ daya Lectures/ seminars Husband/ friends/ relatives At work Other (specify)	1 2 3 4 5 6 7 8 9 10 11	
PH6A	Interviewer: check RE05 1. Woman has previous delivery <input type="checkbox"/> 2. Woman never had delivery <input type="checkbox"/> ⇒ PH12 ↓			
PH07	Did you receive any information or advice about these items during pregnancy?	A. Pregnancy complications B. Importance of iron tablets C. High risk pregnancy D. Family planning E. Breast feeding F. Tetanus toxoid G. Nutrition H. Public health	Yes 1 1 1 1 1 1 1 1 No 2 2 2 2 2 2 2 2	
PH08	Do you know any thing about antenatal care such as: number of visits, when to start, and where to receive antenatal care?	A. Number of medical visits B. When to start visits C. Where to receive antenatal care	Yes 1 1 1 No 2 2 2	
PH09	Interviewer: for whom answered at least one "yes" in PH08. Where did you hear about that? Record all mentioned.	Govt. center/ hospital UNRWA center/ hospital NGO's center/ Hospital Private sector Media Health worker Nurse/ midwife/ daya Lectures/ seminars Husband/ friends/ relatives At work Other (specify)	1 2 3 4 5 6 7 8 9 10 11	
PH10	Did you hear about exclusive breast feeding?	Yes No	1 2 ⇒	PH12
PH11	Where did you hear about that? Record all mentioned	Govt. center/ hospital UNRWA center/ hospital NGO's center/ Hospital Private sector Media Health worker Nurse/ midwife/ daya Lectures/ seminars Husband/ friends/ relatives At work Other (specify)	1 2 3 4 5 6 7 8 9 10 11	

PH12	<i>Interviewer: Ask this question for mother or caretaker of the child.</i> What types of symptoms would cause you to take your child to a health facility right away?		Yes	No
		A. Child not able to eat or breast feeding or drink	1	2
		B. Child become lazy	1	2
		C. Child develops a fever	1	2
		D. Child has fast breathing	1	2
		E. Child has difficulty in breathing	1	2
		F. Child has blood in stool	1	2
		G. Frequent vomiting	1	2
		H. Diarrhea	1	2
		I. Dehydration	1	2
		J. Convulsion	1	2
		K. Other (specify) _____	1	2
PH13	At your opinion, what is the main reason for using family planning methods?	Medical necessity	1	
		Child spacing	2	
		Has fewer children	3	
		Participation in work and public life	4	
		Other (specify) _____	5	
		Oppose to use it	6	

Section IX: Awareness of AIDS

A00	<i>Interviewer: If husband not resident with HH, record (00)</i>	<i>Woman name: _____</i>		
		<i>Woman line number from HR01 : </i>		
		<i>Husband line number from HR23: </i>		
A01	Have you ever heard of disease called AIDS?	Yes 1		
		No 2	⇒	Next section
A02	Where did you hear about AIDS?	Radio 1		
		TV 2		
		Newspapers/ magazines 3		
		Brochures/ posters 4		
		Health workers 5		
		Lectures 6		
		Religious places 7		
		Schools/ teachers 8		
		Public meetings 9		
		Friends/ relatives 10		
		At work 11		
		Other (specify) 12		
A03	Is there any thing a person can do to avoid getting AIDS?	Yes 1		
		No 2	⇒	A05
		DK 8	⇒	A05
A04	Which one of the following items can people avoid themselves from getting infected with AIDS?		Yes	No
	A. Using condom		1	2
	B. Having sex with husband only		1	2
	C. Avoid blood transfer		1	2
	D. Avoid the infected injections		1	2
	E. Avoid kisses		1	2
	F. Not having sex at all		1	2
	G. Avoid check hands		1	2
	H. Avoid mosquito bites		1	2
	I. Seeking for care at tradition medicine		1	2
	J. Not talking with infected peoples		1	2
	K. Avoid tooting		1	2
	L. Avoid perforation of ear/ nose		1	2
	M. Avoid treatment at dentist		1	2
	N. Avoid circumcision		1	2
	O. Other (specify)		1	2
				8
A05	Is it possible for a healthy looking persons to have the AIDS virus?	Yes 1		
		No 2		
		DK 8		
A06	Do you think that infected persons with AIDS Don't die, sometimes die or always die because of this disease?	Not die because of this disease 1		
		Sometimes die 2		
		Always die 3		
		DK 8		
A07	Do you think that the chances that you get AIDS are small, medium, high or there are no risks at all?	Small 1		
		Medium 2		
		High 3		
		No risks 4		
		DK 8		
A08	Can AIDS disease be transmitted through a mother to child?	Yes 1		
		No 2	⇒	A10
		DK 3	⇒	A10

		Yes	No	DK
A09	Can AIDS virus be transmitted through a mother to a child:			
	A. Through pregnancy	1	2	8
	B. Delivery	1	2	8
	C. Breast feeding	1	2	8
	D. Can not be transmitted	1	2	8
	E. Other (specify)	1	2	8
A10	If a teacher has AIDS virus but is not sick, should he/ she be allowed to continue teaching in school?	Yes No DK	1 2 8	
A11	If you know that a shopkeeper food seller has AIDS or the virus that cause it, would you buy food from him/ her?	Yes No DK	1 2 8	
A12	At this time, do you know a place where you can go to get such test to see if you have the AIDS virus?	Yes No DK	1 2 8	

Section X: Birth Registration of Children Under Five Years

This questionnaire is to be administrated to all women/ mothers who care for a child under the age of 5 years (see HR05A of HH listing to know number of children under 5 years).

An additional separate questionnaire should be used if there are more than 3 children under 5 years in HH.

			Last child	Next to last child	Second child next to last
RG01	Child's line number		_ _ _	_ _ _	_ _ _
RG02	Child's name		_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _
RG03	Mother/ caretaker line from HH listing		_ _ _	_ _ _	_ _ _
RG04	Birth date <i>Interviewer: if day is unknown, record 99 for day</i>	Day Month Year	_ _ _ _ _ _ _ _		
RG05	Child's age		_ _ _	_ _ _	_ _ _
RG06	Does (name) have a birth certificate; may I see it? <i>Interviewer: check birth date from certificate if seen, otherwise check that from other official documents (as health card)</i>	Yes, seen Yes, not seen No DK	1 2 3 8 ⇒ RG9A	1 2 3 8 ⇒ RG9A	1 2 3 8 ⇒ RG9A
RG07	If no birth certificate is shown, ask: Has (name's) birth been registered?	Yes No DK	1 ⇒ RG9A 2 8 ⇒ RG09	1 ⇒ RG9A 2 8 ⇒ RG09	1 ⇒ RG9A 2 8 ⇒ RG09
RG08	Why does (name's) birth was not registered?	Costs too much Must travel too far Didn't know it should be registered Late, and didn't want to pay fine Does not know where to register Other (specify) DK	1 2 3 4 5 6 _____ 8	1 2 3 4 5 6 _____ 8	1 2 3 4 5 6 _____ 8
RG09	Did (name) has a birth announcement certificate?	Yes No DK	1 2 8	1 2 8	1 2 8
RG09A	Is (name) registered in any or both parent's ID card?	Yes, in father's ID card Yes, in mother's ID card Yes, in both parent's ID card Not registered DK	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
RG10	Do you know how to register your child's birth?	Yes No DK	1 2 8	1 2 8	1 2 8
RG11	<i>Interviewer: check RG05</i> <i>1. Child's age is from 3 to 4 years</i> <input type="checkbox"/> <i>2. Child has less than 3 years old</i> <input type="checkbox"/> ⇒ next section ↓				
RG11A	Does (name) attend any organized learning or early childhood education program?	Yes No DK	1 2 ⇒ next section 8 ⇒ next section	1 2 ⇒ next section 8 ⇒ next section	1 2 ⇒ next section 8 ⇒ next section
RG12	Within the last 7 days, about how many hours did (name) attend?	Number of hours	_ _	_ _	_ _

IM06	Has (name) received any vaccinations that are not recorded in this card, including vaccinations received in a national immunization campaign? <i>Interviewer: record 'yes' only if respondent mentioned (BCG), Polio (1-6), DPT (1-4), Measles or HB (1-3)</i>	Yes <i>(probe for vaccinations and write '66' in the corresponding day column)</i> NO DK	1 2 ⇒ IM17 8 ⇒ IM17	1 2 ⇒ IM17 8 ⇒ IM17	1 2 ⇒ IM17 8 ⇒ IM17
	Interviewer: questions from IM07-IM16 are asked for whom they have not cards or they have but not seen. Please tell me if (name) received any of the following vaccinations?				
IM07	BCG vaccination against tuberculosis, that is an injection in the arm or shoulder that usually causes a scar?	Yes No DK	1 2 8	1 2 8	1 2 8
IM08	OPV vaccine, that is, drops in mouth?	Yes No DK	1 2 ⇒ IM10 8 ⇒ IM10	1 2 ⇒ IM10 8 ⇒ IM10	1 2 ⇒ IM10 8 ⇒ IM10
IM09	How many times?				
IM10	IPV, an injection given in the thigh or buttocks?	Yes No DK	1 2 ⇒ IM12 8 ⇒ IM12	1 2 ⇒ IM12 8 ⇒ IM12	1 2 ⇒ IM12 8 ⇒ IM12
IM11	How many times?				
IM12	When was the first HB vaccine received, just after birth or later?	1. Just after birth 2. Later 3. DK	1 2 3	1 2 3	1 2 3
IM13	DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as Polio drops?	Yes No DK	1 2 ⇒ IM15 8 ⇒ IM15	1 2 ⇒ IM15 8 ⇒ IM15	1 2 ⇒ IM15 8 ⇒ IM15
IM14	How many times?				
IM15	An injection to prevent Measles?	Yes No DK	1 2 8	1 2 8	1 2 8
IM16	An injection to prevent MMR?	Yes No DK	1 2 8	1 2 8	1 2 8
IM17	Did (name) received any other vaccination to protect him or her from diseases?	Yes No DK	1 2 ⇒ IM18 8 ⇒ IM18	1 2 ⇒ IM18 8 ⇒ IM18	1 2 ⇒ IM18 8 ⇒ IM18
IM17A	What are these vaccinations?	Influenza Meningitis Both Other (specify)	1 2 3 4	1 2 3 4	1 2 3 4
IM18	Has (name) been ill with a fever at any time in the last 2 weeks?	Yes No DK	1 2 8	1 2 8	1 2 8
IM19	Has (name) had Measles?	Yes No DK	1 2 ⇒ IM21 8 ⇒ IM21	1 2 ⇒ IM21 8 ⇒ IM21	1 2 ⇒ IM21 8 ⇒ IM21

IM20	How old was he/ she at time of infection with measles? <i>Interviewer: Record (00) if child's age was less than 1 year at time of infection.</i>	Age in complete years DK	<input type="text"/> 98	<input type="text"/> 98	<input type="text"/> 98
IM21	Has (name) had an illness with a cough at any time in the last two weeks?	Yes No DK	1 2 ⇒ IM28 8 ⇒ IM28	1 2 ⇒ IM28 8 ⇒ IM28	1 2 ⇒ IM28 8 ⇒ IM28
IM22	Where did you seek advice or treatment? Any where else <i>Record all mentioned.</i>	Govt. hospital MCH Govt. center UNRWA centers Private clinic/ hospital NGO's centers Pharmacy Private doctor Traditional treatment Health worker Friends/Neighbours/relatives Other (specify) _____	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12
IM23	When (name) had illness with cough, did he/ she breathe faster than usual and/or difficult breaths?	Yes No DK	1 2 ⇒ IM28 8 ⇒ IM28	1 2 ⇒ IM28 8 ⇒ IM28	1 2 ⇒ IM28 8 ⇒ IM28
IM24	Were the symptoms due to a problem in chest or blocked nose?	Blocked nose Problem in chest Both Other (specify) DK	1 2 3 4 _____ 8	1 2 3 4 _____ 8	1 2 3 4 _____ 8
IM25	Does (name) had a treatment or advice from anyone outside home about this illness with cough and this symptoms?	Yes No	1 2 ⇒ IM28	1 2 ⇒ IM28	1 2 ⇒ IM28
IM26	Where did you seek advice or treatment?	Govt. hospital MCH NGO's centers UNRWA centers Private clinic/ hospital Pharmacy Private doctor Other (specify)	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
IM27	What is the main reason for choosing this place you just mentioned for treatment?	Service is available Easy to get service Trust in medical team Availability of health insurance Low cost Other (specify)	1 2 3 4 5 6 _____	1 2 3 4 5 6 _____	1 2 3 4 5 6 _____
IM28	Has (name) had diarrhea in the last 2 weeks?	Yes No DK	1 2 ⇒ IM40 8 ⇒ IM40	1 2 ⇒ IM40 8 ⇒ IM40	1 2 ⇒ IM40 8 ⇒ IM40
IM28A	During the last episode of diarrhea, did (name) drink any of the following?	Breast milk Gruel Other acceptable home Fluids like yogurt ORS packet Other milk Water with food	<u>Yes</u> <u>No</u> 1 2 1 2 1 2 1 2 1 2 1 2 1 2	<u>Yes</u> <u>No</u> 1 2 1 2 1 2 1 2 1 2 1 2 1 2	<u>Yes</u> <u>No</u> 1 2 1 2 1 2 1 2 1 2 1 2 1 2

		Water only	1 2	1 2	1 2
		Unacceptable fluids like gaseous drinks	1 2	1 2	1 2
		Other (specify)	1 2	1 2	1 2
IM29	Was there blood in stool?	Yes	1	1	1
		No	2	2	2
		DK	8	8	8
IM30	In the worst day of having diarrhea, about how many times did (name) had fluid stools?	Number of times	□□□	□□□	□□□
		DK	98	98	98
IM31	When (name) had diarrhea, was he/ she offered the same amount to drink, less than usual or more than usual amount to drink?	Same amount	1	1	1
		More	2	2	2
		Less	3	3	3
		DK	8	8	8
IM32	<i>Interviewer: check AN36</i> Does birth still breast feeding?	Yes	1	1	1
		No	2 ⇒ IM34	2 ⇒ IM34	2 ⇒ IM34
IM33	When (name) had diarrhea, was he/ she offered the same, more or less amount of milk than usual?	More	1	1	1
		Less	2	2	2
		Stopped having milk	3	3	3
		Same amount	4	4	4
IM34	When (name) had diarrhea, was he/ she offered the same, more or less amount of food than usual?	Same	1	1	1
		More	2	2	2
		Less	3	3	3
		Never gave food	4	4	4
		DK	8	8	8
IM35	While (name) having diarrhea, did he/ she take any of the following liquids at home?		Yes NO DK	Yes NO DK	Yes NO DK
		Breast feeding	1 2 8	1 2 8	1 2 8
		ORS	1 2 8	1 2 8	1 2 8
		Water of boiled rise	1 2 8	1 2 8	1 2 8
		Soup	1 2 8	1 2 8	1 2 8
		Home made solution	1 2 8	1 2 8	1 2 8
		Powder or fresh milk	1 2 8	1 2 8	1 2 8
		Yogurt	1 2 8	1 2 8	1 2 8
		Water	1 2 8	1 2 8	1 2 8
		Herbal Teas	1 2 8	1 2 8	1 2 8
			1 2 8	1 2 8	1 2 8
IM36	Did you seek advice or treatment for the diarrhea?	Yes	1	1	1
		No	2 ⇒ IM39	2 ⇒ IM39	2 ⇒ IM39
		DK	8 ⇒ IM39	8 ⇒ IM39	8 ⇒ IM39
IM37	Where did you get advice or treatment?	Govt. hospital	1	1	1
		MCH center	2	2	2
		Govt. health center	3	3	3
	Any where else?	UNRWA centers	4	4	4
		Private clinic/ hospital	5	5	5
		NGO's centers	6	6	6
		Pharmacy	7	7	7
		Private doctor	8	8	8
		Traditional treatment	9	9	9
		Health worker	10	10	10
		Other (specify)	11	11	11
IM38	What was given to treat diarrhea?		Yes No	Yes No	Yes No
		A. Pill or syrup	1 2	2 2	3 2
		B. Injection	1 2	2 2	3 2
		C. (I.V) intravenous	1 2	2 2	3 2
		D. Other (specify)	1 2	1 2	1 2
IM39	Why you didn't seek advice?	1. Not sever illness	1	1	1
		2. Treated at home and improved	1	1	1
		3. Mother was busy	3	3	3

		4. No qualified persons to get advice	4		4		4	
		5. Clinic not available	5		5		5	
		6. Other (specify)	6		6		6	
IM40	Did (name) infected and treated of one of the following disease during last month?		<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
		A. Ear infection	1	2	1	2	1	2
		B. Eye infection	1	2	1	2	1	2
		C. Respiratory infections	1	2	1	2	1	2
		D. Allergic diseases	1	2	1	2	1	2
IM41	Did (name) had Polio vaccine in the latest National immunization campaign?	Yes	1		1		1	
		No	2		2		2	

Section XIV: Children Ophthalmic Health

This questionnaire is eligible for mothers/ caretakers of children of age under 5 years.

Check HR05A to know the number of children under 5 years old.

Use additional separate questionnaire if there are more than 3 children under 5 years in HH.

			Last birth	Next to last birth	Second birth next to last
EYE1	Child line number		_ _ _	_ _ _	_ _ _
EYE2	Child name		_____	_____	_____
EYE3	Line number of mother/ caretaker (from HR21)		_ _ _	_ _ _	_ _ _
EYE4	Did (name) visit an ophthalmologist since his/her delivery until now for making eyes test?	Yes No	1 2 ⇒ EYE6	1 2 ⇒ EYE6	1 2 ⇒ EYE6
EYE5	What is the reason for eyes test for (name)?	Routine test Problem/ illness in eyes	1 2	1 2	1 2
EYE6	Is (name) using medical glasses?	Yes No	1 2	1 2	1 2
EYE7	Did (name) make surgical operation in eye?	Yes, cataract Yes, glaucoma Yes, squint No	1 2 3 4	1 2 3 4	1 2 3 4

Section XV: Anthropometry

M01	<i>Interviewer: check</i> 1. one birth or more since April/ 1995 <input type="checkbox"/>	2. No births since April 1995 <input type="checkbox"/> ⇒ end of interview ↓
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**Interviewer: Measurement of high and weight is taken for all children under 5 years old.
Use additional questionnaire if there were more than 3 children.**

			Last birth	Next to last birth	Second birth next to last
M02	Child line number from HR01		_ _ _	_ _ _	_ _ _
M03	Child name from HR02		_ _ _ _ _ _ _	_ _ _ _ _ _ _	_ _ _ _ _ _ _
M04	Child birthdate from HR05	Day Month Year	_ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _
M05	Child's length or height		_ _ _ _ _ _ _	_ _ _ _ _ _ _	_ _ _ _ _ _ _
M06	Is child height is measured lying down/ standing up?	Lying down Standing up	1 2	1 2	1 2
M07	Child's weight in kilograms		_ _ _ _ _ _ _	_ _ _ _ _ _ _	_ _ _ _ _ _ _
M08	Result: Weight and height is measured Weight is measured only Height is measured only Child not present Child refused Mother/ caretaker refused Other (specify)		1 2 3 4 5 6 8	1 2 3 4 5 6 8	1 2 3 4 5 6 8
M09	Name and ID number of person who measured the child		Name and ID number of assistant		