Jordan
Population and Family Health Survey
1997

Preliminary Report

Department of Statistics
Amman, Jordan

Macro International Inc.
Calverton, Maryland

January 1998

A

Contents

B

List of Tables

List of Figures

Preface

The 1997 Jordan Population and Family Health Survey (JPFHS) was conducted approximately seven years after the first JPFHS which was carried out in October through December 1990 As in 1990, the survey was carried out by the Department of Statistics (DOS) The main objective of the survey is to fill the need for comprehensive data on fertility and mortality, family planning, and maternal and child health as a tool to evaluate existing policies and programs

The sample is nationally representative and has been designed to produce estimates at the national level, three groups of governorates, and each of the three major governorates, namely Amman, Irbid and Zarqa Close to 8,000 households and 5,800 ever-married women age 15 to 49 were interviewed from July through November 1997

The 1997 JPFHS received financial assistance from the United States Agency for International Development (USAID) Mission in Amman Technical assistance was provided by Macro International Inc through the worldwide Demographic and Health Surveys (DHS) program

We hope that the 1997 JPFHS data will meet its objective of facilitating important government policies and programs in promoting maternal and child health Further, the survey will also be useful to those interested in the field of population, family planning, and health

This report provides some preliminary results of the 1997 JPFHS Detailed findings will be presented in the main survey report to be released later this year

Sincere thanks are due to those whose dedication has resulted in the implementation of the survey The timely and high quality data are the result of the hard work of all the field staff The cooperation of all households interviewed during the survey for their time and willingness to provide the required information is highly appreciated Acknowledgment also goes to the members of the Technical Committee, especially representatives of the Ministry of Health and the Jordan Family Planning and Protection Association Thanks are also due to the USAID Mission in Amman for their financial support, and to the Macro team Dr Mohamed Ayad, DHS Regional Coordinator for Francophone Africa and the Middle East, Miss Sri Poedjastoeti, DHS Country Monitor, who assisted at all stages of the survey, Dr Alfredo Aliaga for his recommendations on the sampling design, and Mr Noureddine Abderrahim for his valuable assistance in data processing

Dr Abdulhadi Alawin
Director General
Department of Statistics

I. INTRODUCTION

A Background

The 1997 JPFHS is the second survey conducted in Jordan under the auspices of the worldwide Demographic and Health Surveys (DHS) program funded by the United States Agency for International Development (USAID) The first survey was carried out in 1990 The program provides support and technical assistance in the implementation of population and health surveys in developing countries Macro International Inc based in Calverton, Maryland furnished technical assistance

This preliminary publication presents the first findings of the 1997 JPFHS survey The preliminary data were produced as soon as possible in order to facilitate their use in family planning and health intervention programs The final report on the survey is expected to be published in mid-1998 and will include a more comprehensive analysis of the survey results The final figures are not expected to differ significantly from the findings presented in this report, but the results presented here are provisional and may be subject to modification

B Objectives of the Survey

As in the previous DHS survey in Jordan, the primary objective of the survey is to provide reliable estimates of demographic parameters such as fertility and mortality, and data on family planning, fertility preferences, and maternal and child health that can be used by program managers and policy makers to evaluate and improve existing programs In addition, the JPFHS data will be useful to researchers and scholars interested in analyzing trends in demographic parameters in Jordan as well as those conducting comparative, regional or cross-national studies

The content of the 1997 JPFHS is significantly expanded from the 1990 survey to include several questions on family planning IEC and two new modules in the women's questionnaire, namely awareness of AIDS and maternal mortality

II. METHODOLOGY

A Survey Instruments

The 1997 JPFHS used two questionnaires namely, the Household Questionnaire and the Individual Questionnaire The Household Questionnaire was used to list all usual members of the sampled households and to obtain information on each member's age, sex, educational attainment, relationship to the head of household, and marital status In addition, questions were included on the socio-economic characteristics of the household, such as source of water, sanitation facilities, and the availability of durable goods The Household Questionnaire was used to identify women who are eligible for the individual interview—ever-married women age 15-49 who were usual residents of the household

The household and women's questionnaires were based on the DHS Model "A" Questionnaire which is designed for use in countries with high contraceptive prevalence Additions and modifications to the model questionnaire were made in order to provide detailed information specific to Jordan For each ever-married woman age 15 to 49, information on the following topics was ascertained

1 Respondent's background
2 Birth history
3 Knowledge and practice of family planning
4 Maternal care and breastfeeding
5 Immunization and health of children under 5 years of age
6 Marriage
7 Fertility preferences
8 Husband's background and respondent's employment
9 Knowledge of AIDS
10 Maternal mortality
11 Anthropometric measurements of children under 5 and their mother

Information on births and pregnancies, contraceptive use and discontinuation and marriage during the five years prior to the survey was collected using a monthly calendar Two topics were added to the 1997 JPFHS They are knowledge of AIDS and maternal mortality The latter section collects the necessary information on the respondent's siblings to provide the basis for the estimation of maternal mortality rates

B Sample Design and Implementation

The 1997 JPFHS sample was designed to produce reliable estimates of major survey variables for the country as a whole, urban and rural areas, and each of the 3 regions which are comprised of a group of governorates, and for each of the three major governorates, namely Amman, Irbid and Zarqa The grouping of the governorates are as follows the North region consists of Irbid, Jarash, Ajlun and Mafraq, the Central region consists of Amman, Madaba, Balqa and Zarqa, and the South region consists of Karak, Tafielah, Ma'an and Aqaba

The 1997 JPFHS sample is a subsample of the master sample which was designed using the frame of the 1994 Census of Population and Housing A two-stage sampling procedure was employed First, primary sampling units (PSU) were selected with probability proportional to the number of housing units in the PSU A total of 300 PSUs were selected at this stage In the second stage, in each selected PSU, occupied housing units were selected with a probability inversely proportional to the number of housing units in the PSU This design maintains a self-weighted sampling probability at the national level

Table 1 Results of household and individual interviews

Percent distribution of households and eligible women by results of the interviews, and response rates Jordan, 1997

	Number	Total
Households selected	7,924	100 0
Completed	7 335	92 6
Household present but no competent respondent at home	212	2 7
Household absent	97	1 2
Postponed	1	0 0
Refused	28	0 4
Dwelling vacant/no dwelling	229	2 9
Dwelling destroyed	6	0 1
Dwelling not found	16	0 2
Households occupied	7 592	100 0
Households interviewed	7,335	96 6
Households not interviewed	257	3 4
Household response rate	-	92 6
Eligible women selected	5 765	100 0
Completed	5 548	96 2
Not at home	144	2 5
Postponed	5	0 1
Refused	13	0 2
Partly completed	4	0 1
Incapacitated	6	0 1
Other	45	0 8
Eligible woman response rate	-	96 2
Overall response rate	-	93 0

Results of the sample implementation are presented in Table 1 A total of 7,924 households were selected for the survey and, of these, 7,592 were found to be occupied Of the occupied households, 7,335 or 93 percent were successfully interviewed In these households, 5,765 eligible women were identified and complete interviews were obtained with 5,548 women, or 96 percent of all eligible women The principal reason for nonresponse among these women was the failure of interviewers to find them at home despite repeated attempts

C Pretest

The household and individual questionnaires were pretested in March 1997 in three urban and one rural clusters Training for the pretest teams took place in Amman for four weeks involving class discussions and field practice The participants were grouped in four teams, each consisting of one male supervisor and three female interviewers Data for 216 households and 193 women were collected and processed Experiences gained in the pretest were used to improve the survey instruments and procedures All of the female interviewers were retained to carry out the main survey fieldwork

D Data Collection and Processing

As in previous surveys, the household and women's data were collected by interviewing teams In the beginning of fieldwork, a total of 8 field teams were formed, each consisting of one supervisor, one field editor, and 4 to 5 interviewers During fieldwork, these teams were grouped or split depending on the need Each team was provided with a vehicle and a driver Fieldwork began on June 7, 1997 in Amman governorate and was completed in October 1997 Due to the large proportion of households which were absent during the first period of the team visit, selected interviewers were retained to revisit these households to obtain a completed interview

The first stage of data editing was done by the field editors who checked the completed questionnaires for completeness and consistency Field supervisors also checked the questionnaires They were then sent to the DOS central office in Amman where they were edited again and open-ended questions were coded The data were processed using microcomputers and ISSA (Integrated System for Survey Analysis) computer package Data entry and editing were initiated almost immediately after the beginning of fieldwork Processing activities (central office editing, data entry, final editing, and verification) were completed in December 1997

III. RESULTS

A Characteristics of the Respondents

The percent distribution of women interviewed in the 1997 JPFHS by selected background characteristics is presented in Table 2 Four in ten women are under 30 years of age, and the large majority of all women (84 percent) live in the urban areas Two in three women live in the Central region of the country, 27 percent in the North region, and only 6 percent live in the South region

The overall level of education among women continues to improve, the percentage of ever-married women 15-49 who had no schooling declined from 24 percent in 1990 to 9 percent in 1997, while the percentage who have attended secondary school increased from 44 percent in 1990 to 53 percent in 1997 The largest increase in women's education is shown by the doubling of the percentage of women with higher education from 11 percent in 1990 to 22 percent in 1997

Table 2 Background characteristics of respondents

Percent distribution of ever-married women age 15 49 by background characteristics, Jordan 1997

Background characteristic	Weighted percent	Number of women	
		Weighted	Unweighted
Age			
15-19	3 7	207	206
20 24	14 3	795	798
25 29	21 4	1 185	1 195
30-34	20 3	1 126	1 145
35-39	16 8	931	923
40-44	13 2	734	724
45-49	10 3	570	557
Residence			
Urban	83 6	4 636	4 417
Rural	16 4	912	1 131
Region			
North	26 7	1 479	1 490
Central	67 2	3 729	3 303
South	6 1	340	755
Education			
No education	9 1	504	594
Primary	15 3	850	866
Secondary	53 3	2 957	2,885
Higher	22 3	1 237	1,203
Total	100 0	5 548	5 548

B Fertility

Cumulative Fertility

Table 3 and Figure 1 present the trend in cohort fertility, measured by the mean number of children ever born by the current age of the woman The 1997 JPFHS data show that women started childbearing in their twenties On average, women have had less than 1 child by their mid-twenties, 5 children by their late thirties, and more than 7 children

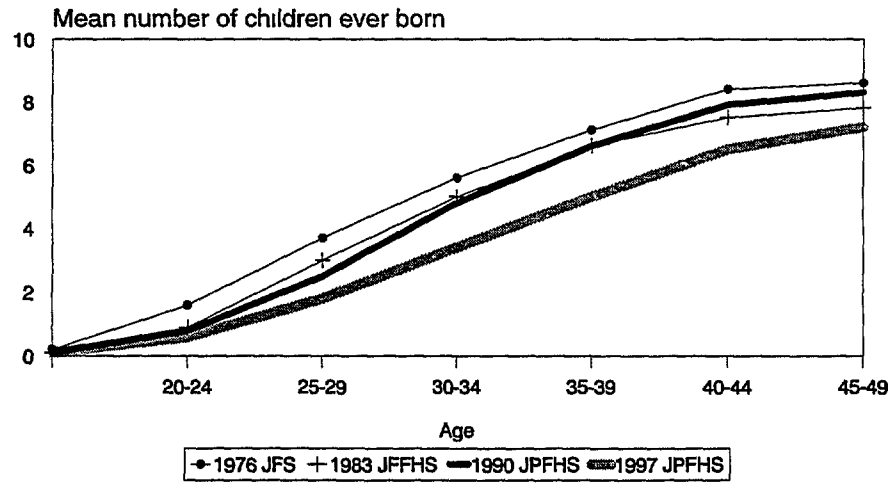
Table 3 Children ever born

Mean number of children ever born to all women by age group selected data sources, Jordan 1976-1997

Age	1976 JFS	1983 JFFHS	1990 JPFHS	1997 JPFHS
15-19	0 2	0 1	0 1	0 1
20-24	1 6	0 9	0 8	0 6
25-29	3 7	3 0	2 5	1 8
30-34	5 6	5 0	4 8	3 4
35-39	7 1	6 6	6 6	5 0
40 44	8 4	7 5	7 9	6 5
45-49	8 6	7 8	8 3	7 2
Total	3 6	3 1	2 9	2 4

by the end of the childbearing years In comparison with past trends, the most dramatic reduction is shown by younger women The 1976 JFS showed that women age 15-29 had on average almost twice as many children as women the same age twenty years later

Figure 1
Mean Number of Children Ever Born
Jordan, 1976-1997



Current Fertility

All women who were interviewed in the 1997 JPFHS were asked to report the total number of sons and daughters they had given birth to during their lifetime To encourage complete reporting, women were asked separately about children living at home, those living elsewhere, and children who had died A complete birth history was obtained from each respondent including information on the sex, date of birth, and survival status of each child Age-specific and total fertility rates for the 1997 JPFHS were calculated directly from the birth history data

The trend in fertility obtained from previous surveys is shown in Table 4 and Figure 2 Data for 1976 are for the two years prior to the survey, while for 1983, 1990 and 1997 the

Table 4 Age specific fertility rates (per 1,000 women) and total fertility rates from selected data sources, Jordan, 1976-1997

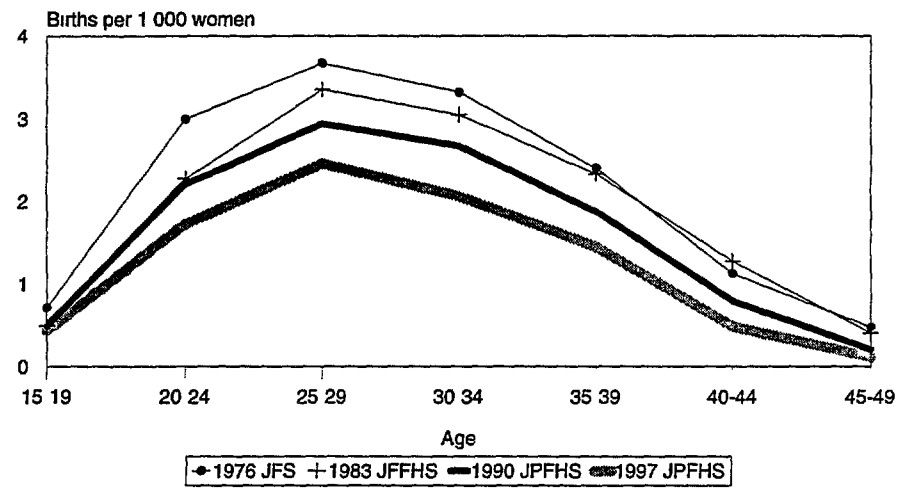
Age	JFS 1976[a] (1975-76)	JFFHS 1983[b] (1981-83)	JPFHS 1990[b] (1988-90)	JPFHS 1997[b] (1995 97)
15-19	71	49	49	43
20-24	300	228	221	172
25 29	367	335	294	246
30-34	332	305	267	206
35-39	240	233	187	144
40-44	112	127	79	48
45-49	47	40	20	11
Total 15-49	7 4	6 6	5 6	4 4
Total 15-45	7 1	6 4	5 5	4 3

[a] Based on two-year period preceding the survey
[b] Based on three-year period preceding the survey

data are for the three years prior to the survey Data in Table 4 and Figure 2 show that the total fertility rate (TFR) for Jordan has declined steadily from mid-1970s The overall decline between 1975 and 1997 is 41 percent (from 7 4 to 4 4 births per woman), and the decline seems to have occurred at a faster pace in recent years The rate of decline is 11 percent between 1975 and 1983, and 21 percent (from 5 6 to 4 4 births per woman) between 1990 and 1997

The decline occurred at all ages However, the most significant decline is observed among women in their teens—from 71 to 43 births per 1000 women between 1975 and 1997

Figure 2
Age-specific Fertility Rates
Jordan, 1976-1997



C Family Planning

Since most of the women (96 percent) in the sample are currently married, and the patterns of knowledge, ever use, and current use of family planning among ever-married women and currently married women are identical, only those of currently married women are presented in this section

Knowledge of Family Planning

In the 1997 JPFHS, a series of questions was asked about family planning knowledge, ever use, and current use Respondents were first asked to name all contraceptive methods that they had heard of For methods they did not mention, a description of the method was read and then they were asked if they had ever heard of the method For each method they had heard of, women were asked if they had ever used the method and if they knew of a place to obtain the method

The level of knowledge of family planning is almost universal in Jordan Data in Table 5 show that all women regardless of marital status report that they have heard of at least one method of family planning Also, all of these women know of a modern contraceptive method As found in the 1990 survey, the most popular methods are the pill, IUD and female sterilization It is worth noting that knowledge of family planning injectables appears to have increased significantly since 1990 when only 51 percent of married women had heard of the method, compared with 92 percent in 1997

Table 5 Knowledge, ever use, and current use of contraceptive methods

Percentage of currently married women who know a contraceptive method who have ever used a method, and who are currently using a method Jordan 1997

Contraceptive method	Knows method	Ever used method	Currently using method
Any method	100 0	78 7	52 6
Any modern method	100 0	65 9	37 7
Pill	99 8	40 8	6 5
IUD	99 9	45 9	23 1
Injectables	91 9	2 7	0 7
Norplant	31 8	0 1	0 1
Diaph /Foam/Jelly	71 5	7 9	0 5
Condom	84 4	15 6	2 4
Female sterilization	96 2	4 2	4 2
Male sterilization	30 9	0 0	0 0
Any traditional method	99 3	49 5	14 9
Periodic Abstinence	90 7	25 5	4 9
Withdrawal	90 2	30 5	7 6
Prolonged breastfeeding	97 5	15 3	2 3
Other method	5 3	1 0	0 1
Number of women	5 337	5,337	5 337

Ever Use of Family Planning

Table 5 also shows that four in five married women have used a method of family planning at some time, and most have used a modern method The modern methods most likely to have been used by married women are the IUD (46 percent), the pill (41 percent), and condoms (16 percent) Half of married women have used traditional methods such as withdrawal (31 percent) and periodic abstinence (26 percent)

Current Use of Family Planning

Table 5 shows that 53 percent of currently married women in Jordan are using a method of family planning 38 percent are using modern contraceptive methods and 15 percent use traditional methods, including 2 percent of women who reported using prolonged breastfeeding Figure 3 shows that the most popular method is the IUD, used by 23 percent of married women, an increase of 8 percentage points from the level observed in 1990 Use of the pill increased from 5 percent in 1990 to 7 percent in 1997 It is interesting to note that use of condoms has more than doubled from less than 1 percent in 1990 to more than 2 percent in 1997 In 1997, 4 percent of married women reported having been sterilized This was less than the proportion reported in 1990 (6 percent)

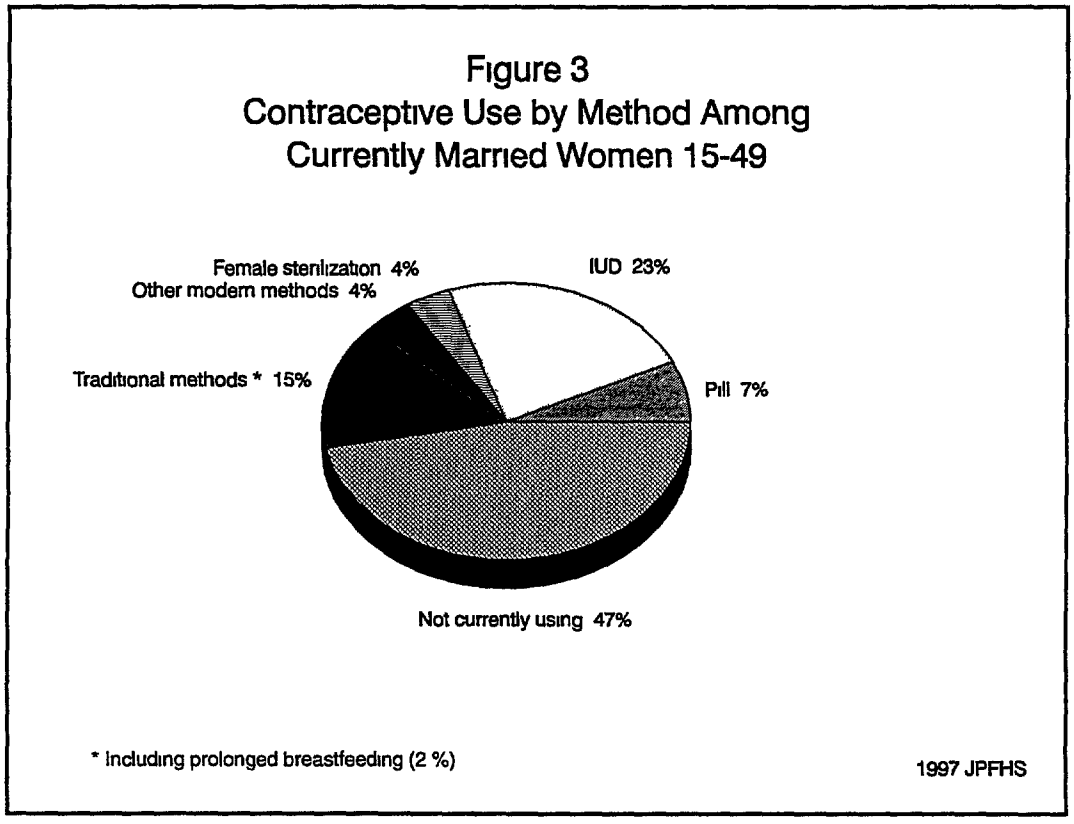
Differentials in contraceptive use according to background characteristics are shown in Table 6 In general, women age 30-44, those with more than secondary education, and women who have larger numbers of children are more likely to use family planning than other women Contraceptive use varies little by place of residence

Except among women in the youngest age groups, the IUD is the most popular method This method is used by at least 16 percent of women age 20-44 In fact, 13 percent of women age 45-49 are still using IUD The next most popular methods are the pill and female sterilization, each being used by 7 percent and 4 percent of currently married women, respectively The use of female sterilization is positively associated with the woman's age, older women are more likely to use this method to terminate childbearing Fourteen percent of women in the oldest age groups have been sterilized

Table 6 Current use of contraception by background characteristics

Percent distribution of currently married women by contraceptive method currently used according to background characteristics Jordan 1997

Background characteristic	Any method	Any modern method	Modern contraceptive method							Traditional method					Not currently using	Total	Number of women
			Pill	IUD	Injec tables	Nor Plant	Diaph Foam/ Jelly	Con dom	Female sterlız	Any tradı method	Periodic absti- nence	With drawal	Prolonged breast- feedıng	Other methods			
Age																	
15 19	19 1	12 4	6 0	5 2	0 6	0 0	0 0	0 5	0 0	6 7	0 5	5 3	0 8	0 0	81 0	100 0	202
20 24	36 6	23 7	4 9	15 7	0 1	0 1	0 4	2 4	0 0	12 9	2 2	7 6	3 0	0 1	63 4	100 0	776
25 29	51 9	34 9	7 6	23 1	0 7	0 0	0 6	2 6	0 4	17 0	3 9	9 3	3 6	0 1	48 1	100 0	1 168
30 34	57 9	43 2	8 1	27 8	1 2	0 4	0 3	3 3	2 1	14 7	4 8	7 0	2 9	0 0	42 1	100 0	1 099
35 39	62 6	47 0	7 4	29 2	0 9	0 0	0 5	2 7	6 3	15 7	6 8	6 9	1 8	0 2	37 4	100 0	879
40 44	63 6	48 3	5 5	29 1	1 0	0 2	0 9	1 9	9 7	15 3	7 4	7 0	0 7	0 2	36 5	100 0	690
45 49	48 4	33 2	3 5	13 4	0 2	0 0	0 7	1 4	14 0	15 2	6 9	7 5	0 4	0 4	51 6	100 0	520
Residence																	
Urban	54 0	39 0	6 4	24 6	0 6	0 1	0 5	2 6	4 2	15 0	5 2	7 6	2 0	0 1	46 0	100 0	4 468
Rural	45 3	30 7	7 1	15 9	1 2	0 0	0 5	1 7	4 2	14 6	3 5	7 4	3 5	0 2	54 7	100 0	868
Regıon																	
North	49 5	33 6	5 3	20 1	0 8	0 0	0 6	2 3	4 5	15 9	4 1	8 5	3 3	0 1	50 5	100 0	1 428
Central	54 6	39 9	7 1	24 9	0 6	0 2	0 5	2 6	4 0	14 7	5 5	7 3	1 8	0 1	45 4	100 0	3 582
South	43 4	31 1	5 6	17 1	1 8	0 0	0 3	1 4	4 9	12 4	2 8	6 3	3 0	0 3	56 6	100 0	327
Educatıon																	
No educatıon	37 0	26 2	4 2	12 2	1 6	0 0	0 6	1 0	6 7	10 8	1 9	5 5	2 9	0 6	63 0	100 0	466
Prımary	49 1	36 9	5 9	19 3	0 5	0 3	1 1	1 0	8 9	12 1	2 7	8 0	1 2	0 2	51 0	100 0	803
Secondary	53 7	39 1	7 1	24 7	0 7	0 1	0 4	2 5	3 5	14 6	4 6	7 5	2 5	0 0	46 3	100 0	2 866
Hıgher	58 3	39 2	6 5	26 2	0 6	0 1	0 4	3 7	1 6	19 1	8 4	8 3	2 3	0 1	41 7	100 0	1 200
No of chıldren																	
None	1 3	0 6	0 0	0 1	0 0	0 0	0 3	0 0	0 3	0 7	0 0	0 7	0 0	0 0	98 7	100 0	478
1	26 6	10 4	4 3	3 5	0 5	0 0	0 0	2 1	0 0	16 3	4 1	9 5	2 7	0 0	73 4	100 0	538
2	51 6	36 2	9 0	23 3	0 3	0 1	0 6	2 9	0 0	15 4	3 3	9 7	2 2	0 2	48 4	100 0	777
3	62 2	44 9	8 8	30 9	0 7	0 0	0 5	3 4	0 6	17 4	6 8	7 3	3 3	0 0	37 8	100 0	749
4+	64 1	47 8	6 8	28 7	1 0	0 2	0 7	2 5	7 8	16 3	5 9	7 9	2 3	0 2	35 9	100 0	2 793
Total	52 6	37 7	6 6	23 1	0 7	0 1	0 5	2 4	4 2	14 9	4 9	7 6	2 3	0 1	47 4	100 0	5 337



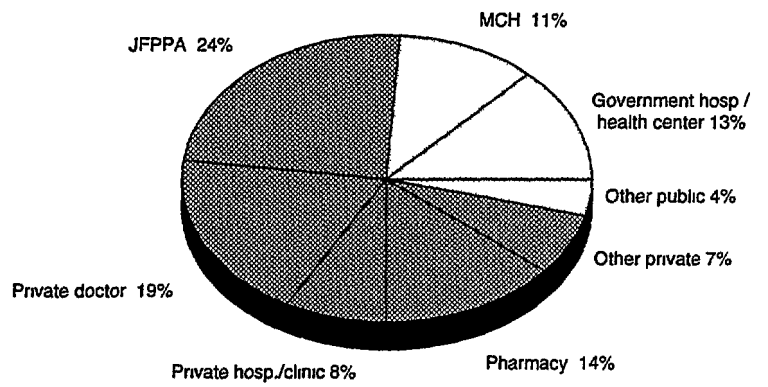
In general, urban women are more likely to use family planning than rural women Urban women are also more likely to use the IUD than rural women The proportion of married women using contraception rises steadily with increasing education However, there is a sharp distinction between women who did not go to school and those who have formal education While 37 percent of women with no education use some method of family planning, the percentage among women with primary education is 49 percent, and 54 percent or higher for women who have attended secondary or higher education At least 27 percent of women with one or more living child are using family planning The prevalence rate is highest among those with two or more children, and is expectedly low (1 percent) among childless women More than half of women with two or more children are using a method of contraception, about half of these women are using the IUD

Source of Family Planning

Women who were using a modern method of contraception at the time of the survey were asked where they obtained the method the last time As shown in Table 7 and Figure 4, fewer than three in ten modern contraceptive users obtain their method from a government source 11 percent from a maternal and child health center and 7 percent each from a government hospital and government health center The most important providers among the private sources are the Jordan Family Planning and Protection Association (JFPPA) (24 percent), a private doctor (19 percent) and the pharmacy (14 percent)

The source of family planning methods varies according to the method being used For example, more than half (52 percent) of pill and condom users and six in ten users of vaginal methods obtained the method from a pharmacy, while eight in ten users of implant obtained the service from a government hospital For female sterilization, women are almost as likely to go to a government hospital (40 percent) as to a private hospital (35 percent) The Royal Medical Services provide female sterilization to 17 percent of women who are using this method

Figure 4
Source of Family Planning Supply Among Current Users of Modern Methods



JFPPA = Jordan Family Planning and Protection Association

1997 JPFHS

Table 7 Source of supply for specific modern contraceptive methods

Percent distribution of current users of modern contraceptive methods by source of method according to specific method Jordan, 1997

Source of method	Pill	IUD	Injec-tables	Diaph/ Foam/ Jelly	Con-dom	Female sterili-zation	All modern methods	Number of women
Public sector	21 2	24 3	(29 5)	(6 3)	29 1	58 4	27 9	562
Government hospital	0 7	2 7	(7 0)	(0 0)	1 0	40 1	6 7	134
Government health center	8 7	7 1	(2 8)	(3 9)	10 9	0 0	6 7	135
MCH center	10 9	12 9	(9 3)	(2 4)	17 2	0 0	11 1	224
University hospital	0 4	0 3	(3 3)	(0 0)	0 0	1 5	0 5	9
Royal medical service	0 5	1 3	(7 1)	(0 0)	0 0	16 9	3 0	59
Private medical	78 4	75 6	(70 5)	(93 7)	70 9	41 6	71 9	1 447
Private hosp /clinic	2 2	5 5	(0 0)	(0 0)	0 0	35 4	7 7	155
Private doctor	12 1	26 2	(20 0)	(20 4)	0 0	0 0	18 8	379
Pharmacy	51 9	1 1	(16 7)	(58 6)	51 5	0 0	14 2	285
JFPPA	5 4	35 7	(31 1)	(10 7)	7 5	0 0	24 1	484
UNHCR	5 6	3 3	(0 0)	(3 9)	11 2	0 0	3 8	76
Other NGOs	0 4	2 5	(2 7)	(0 0)	0 0	0 0	1 7	33
Other private	0 8	1 4	(0 0)	(0 0)	0 8	6 1	1 7	35
Other source	0 4	0 1	(0 0)	(0 0)	0 0	0 0	0 1	3
Friends, relatives	0 4	0 1	(0 0)	(0 0)	0 0	0 0	0 1	3
Total	100 0	100 0	100 0	100 0	100 0	100 0	100 0	
Number of women[a]	349	1,235	39	28	130	224	2 011	2 011

Note Figures in parentheses are based on 25 to 49 women
JFPPA=Jordan Family Planning and Protection Association UNHCR=United Nations High Commission on Refugees
[a] Includes 6 women who use Norplant

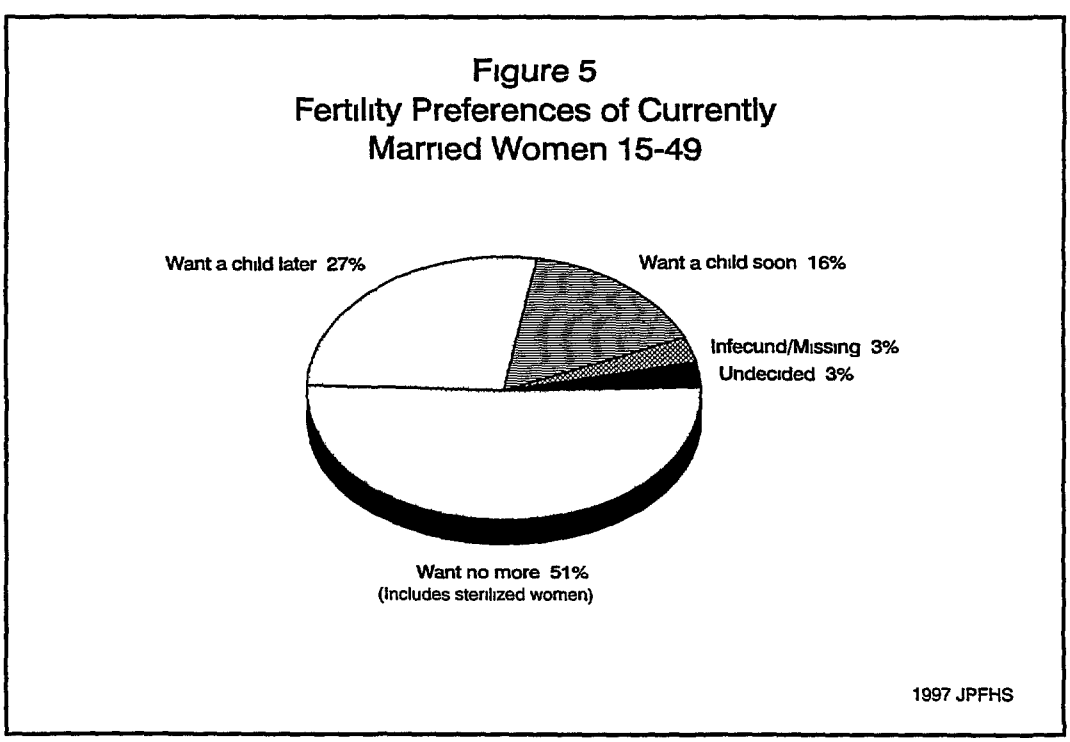
D Fertility Preferences

The 1997 JPFHS inquired about the respondent's fertility preferences, including her desire for additional children, spacing preferences, and ideal family size The survey findings are presented in Table 8 and Figure 5 Overall, more than half (51 percent) of married women in Jordan do not want to have any more children at any time in the future, including 4 percent who have been sterilized, and 27 percent want to delay having another child for at least two years Thus, 79 percent of married women in Jordan may be considered to have a potential need for family planning services for either limiting or spacing births

Table 8 Reproductive preferences by age

Percent distribution of currently married women by desire for more children according to age Jordan 1997

Desire for more children	Age							Total
	15-19	20 24	25-29	30 34	35-39	40 44	45-49	
Want another								
Want within 2 years	37 2	25 0	18 8	17 0	14 3	7 1	4 5	16 4
Want after 2 years	51 8	57 0	46 4	25 8	7 8	2 0	0 7	27 4
Want unsure timing	2 3	0 8	1 1	1 0	1 3	1 0	1 0	1 1
Undecided	0 5	0 7	2 2	2 0	2 2	0 9	0 0	1 5
Want no more	8 1	16 1	30 6	51 1	66 5	75 3	66 4	47 0
Sterilized	0 0	0 0	0 4	2 1	6 3	9 7	14 0	4 2
Declared infecund	0 0	0 5	0 4	0 9	1 6	4 0	13 4	2 4
Total	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0
Number of women	203	777	1 168	1,099	880	690	520	5,337



Fertility preferences vary by women's age As expected, older women are more likely to want to limit their childbearing, while younger women tend to want to delay their next birth For example, 91 percent of women age 15-19 want to continue childbearing compared with 10 percent or less among women age 40 or older While less than 10 percent of women 15-19 want to stop childbearing, the percentage for women 30-34 is 53 percent, and for women age 40 and over, 85 percent or more

E Maternal Care, Breastfeeding Practices, and Supplementary Feeding

The 1997 JPFHS questionnaire contained a number of questions on maternal health care for women who had given birth to at least one child in the five years prior to the survey For each birth in that period, women were asked whether they had received a tetanus toxoid injection while pregnant and, if so, how many times, from whom they had obtained antenatal care during pregnancy, the number of antenatal visits, whether they were given an antenatal card, and the person who assisted at delivery of the child

Antenatal Care

Table 9 presents information on the coverage of tetanus toxoid injections and antenatal cards among births occurring in the five years prior to the survey In Jordan, antenatal care is widespread Data in Table 9 show that 40 percent of children born in the five years preceding the survey had mothers who received at least one tetanus toxoid injection, and virtually all children were born to mothers who received antenatal care 90 percent from a doctor and 5 percent from a nurse or midwife Medical assistance during delivery was received by almost all children born in the 5 years preceding the survey Among these births, 65 percent were assisted by a doctor, and 32 percent by a nurse or a midwife

Antenatal coverage varies little by mother's characteristics However, children born to young mothers, those living in urban areas, low-order births, and those born to better educated mothers are more likely than other births to have received tetanus toxoid and antenatal care from a doctor or a midwife/nurse

Breastfeeding and Supplementary Feeding

Infant feeding affects both the mother and the child The 1997 JPFHS collected data on infant feeding for each of the children born since January 1992 As shown in Table 10, almost all children in Jordan are breastfed, although supplementation with other liquids and foods begins early In the 1997 JPFHS, 95 percent of infants age 0-3 months were being breastfed but only 15 percent were being exclusively breastfed (receiving only breast milk), about 12 percent were also receiving plain water, 58 percent were receiving other liquids (tea, juice, honey, sugar water) and 10 percent of these children were receiving solid or mushy food By age 10-12 months, the pattern of infant feeding has changed, of the 58 percent of infants being breastfed, none is exclusively breastfed, and 55 percent are being breastfed and receiving some solid or mushy food

At the time of the survey, 22 percent of infants were being bottle-fed The proportion declines with age at age 0-3 months, 40 percent of children are being fed from a bottle while at age 10-12 months, the proportion has dropped to 12 percent

Table 9 Tetanus toxoid vaccination, antenatal care, and assistance at delivery

Percentage of births in the five years preceding the survey for which mothers received at least one tetanus toxoid injection antenatal care from a doctor or trained nurse/midwife and assistance at delivery from a doctor or trained nurse/midwife by background characteristics, Jordan 1997

Background characteristic	Tetanus toxoid	Antenatal care		Assistance at delivery		Number of births
		Doctor	Nurse/ midwife	Doctor	Nurse/ midwife	
Maternal age at birth						
<20	50 2	89 8	7 3	67 1	31 4	510
20-34	39 3	91 1	5 0	64 3	32 5	5 001
35+	37 3	87 1	4 8	67 3	27 4	852
Residence						
Urban	40 7	92 1	4 5	69 3	28 4	5 156
Rural	36 6	83 3	8 2	46 2	46 0	1 208
Region						
North	42 8	87 0	7 8	46 8	49 0	1 867
Central	38 6	92 1	4 1	74 4	23 0	4,070
South	39 7	89 2	4 4	53 3	40 0	427
Education						
No education	32 8	75 8	7 8	42 3	39 9	416
Primary	43 3	85 0	7 5	61 3	34 1	771
Secondary	42 0	90 9	5 7	63 2	34 2	3 666
Higher	35 0	96 2	2 1	77 1	22 4	1,511
Birth order						
1	58 2	93 3	5 1	75 1	24 2	1 260
2-3	36 4	91 3	5 0	64 3	32 9	2 257
4-5	33 7	90 6	5 1	61 9	34 7	1 398
6+	35 4	86 5	5 6	59 8	33 6	1 449
Total	39 9	90 4	5 2	64 9	31 7	6 364

Table 10 Breastfeeding and supplementation

Percent distribution of living children 0-12 months by breastfeeding status food supplementation and use of a bottle with a nipple according to age Jordan 1997

Age in months	Not breastfed	Breast milk only	Breastfed children who received supplements			Total	Bottle fed	Number of children
			Plain water	Other liquids	Solid/ mushy food			
0-3	4 8	15 0	11 6	58 2	10 3	100 0	39 9	307
4-6	14 6	3 2	6 5	12 2	63 4	100 0	24 5	283
7-9	30 6	0 0	2 9	4 6	62 0	100 0	15 1	351
10-12	42 4	0 0	1 3	1 1	55 2	100 0	12 1	339
Total	24 0	4 3	5 4	18 2	48 1	100 0	22 3	1,281

F. Immunization and Child Health

Immunization of Children

In the JPFHS, information on vaccinations was collected for all children born in the five years before the survey For each of these children, mothers were asked whether they had a health card for the child, and if so, whether the interviewer could see it When a mother was able to show the health card to the interviewer, the dates of vaccinations received were copied from the card to the questionnaire If a child never received a health card or if the mother was unable to show the card to the interviewer, the mother was asked specific questions about whether the child had received each vaccine The information presented below on vaccination coverage is based on both the information taken from the health cards and the information obtained from the mothers' reports

Table 11 and Figure 6 present vaccination information for children age 12-23 months, the age by which they should have received all vaccinations The table reveals that mothers were able to show the interviewer a health card for 81 percent of children This coverage varies little by background characteristics

According to the health cards and the mothers' reports, almost all of children age 12-23 months have received all of the recommended vaccinations, except BCG, which is given at the age 5 or at entry to formal school Coverage of DPT 1-3, polio 1-3, and measles is also comprehensive The dropout rate for DPT and polio between the first and third doses is about 4 percentage points Table 11 shows that excluding BCG, 86 percent of children 12-23 months have received the following vaccinations, DPT 1-3, polio 1-3, and measles If BCG is also considered, the vaccination coverage is only 21 percent

Diarrheal Disease

Dehydration brought on by diarrheal disease is a major contributing factor to infant and child mortality in developing countries Oral rehydration therapy (ORT), either using a solution prepared with commercially produced packets or a homemade solution, is recommended to prevent dehydration in children with diarrhea In the JPFHS, mothers were asked about recent episodes of diarrhea among all (living) children born in the last five years For children who had recently had diarrhea, mothers were also asked whether the child had been given ORT

Table 12 shows that 18 percent of children were reported to have had diarrhea in the last two weeks The prevalence of diarrhea varies considerably by age of the child It is highest among children 6 to 36 months Differentials in vaccination coverage between subgroups of children are very small

Approximately 24 percent of children with diarrhea in the past two weeks were treated with oral rehydration salts (ORS packets), 8 percent were given a homemade solution and 29 percent were given either ORS or a homemade solution These proportions are much lower than those recorded in 1990 when the diarrhea prevalence was only half the rate in 1997 (9 percent), and the percentage of children who received ORS during diarrhea was 42 percent, while 64 percent were given homemade solutions

Table 11 Vaccinations by background characteristics

Among children age 12 23 months, the percentage with health cards seen by the interviewer and the percentage who have received specific vaccines (according to health card or the mother's report) by background characteristics Jordan 1997

Background characteristic	Percentage of children with health card	Percentage of children who received								All except BCG	All[1]	No vaccinations	Number of children
			DPT			Polio							
		BCG	1	2	3	1	2	3	Measles				
Sex of child													
Male	81 2	23 8	99 2	98 3	95 7	100 0	98 9	96 0	90 0	85 5	20 3	0 0	672
Female	81 3	24 4	99 1	98 5	96 2	99 3	98 7	95 5	89 7	86 1	20 8	0 5	603
Residence													
Urban	80 9	27 6	99 1	98 5	96 1	99 6	98 8	95 9	89 9	85 8	23 6	0 3	1 038
Rural	82 7	9 0	99 3	98 0	95 1	100 0	99 1	95 2	89 7	85 6	7 0	0 0	237
Region													
North	84 5	18 2	100 0	100 0	98 7	100 0	99 7	98 1	92 1	90 2	16 3	0 0	395
Central	80 3	28 9	98 7	97 6	94 9	99 5	98 4	95 0	89 3	84 2	24 3	0 3	801
South	74 5	4 6	98 9	98 3	92 2	99 5	98 3	91 7	84 7	79 0	3 0	0 5	79
Education													
No education	80 0	18 5	97 9	97 3	94 0	100 0	98 8	95 5	85 8	80 4	15 5	0 0	82
Primary	77 5	26 2	99 0	98 1	92 9	99 0	96 1	90 5	90 8	82 7	21 2	1 0	132
Secondary	82 0	24 4	99 1	98 1	96 0	99 7	98 8	96 1	89 0	85 2	20 8	0 2	741
Higher	81 3	24 0	99 5	99 5	97 5	99 9	99 9	97 2	92 6	89 5	21 0	0 1	321
Total	81 2	24 1	99 1	98 4	95 9	99 7	98 8	95 7	89 9	85 7	20 5	0 2	1 275

[1] BCG measles and 3 doses of DPT and polio vaccines

Figure 6
Percentage of Children Age 12-23 Months Who Have Received All Vaccinations (except BCG)

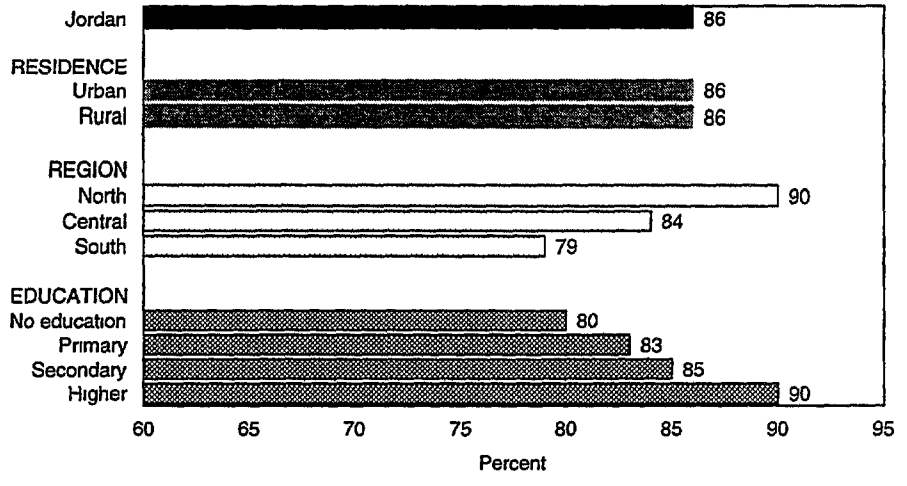


Table 12 Prevalence of diarrhea and use of oral rehydration therapy (ORT)

Among children under 5 years of age, the percentage reported by the mother to have had diarrhea in the past two weeks and of those the percentage who received oral rehydration therapy (either ORS packets or home solution) by background characteristics Jordan 1997

Background characteristic	Percentage of children with diarrhea	Percentage of children with diarrhea who received ORT			Number of children under 5 years
		ORS packets	Home solution	Either ORT or home sol	
Age of child					
< 6 months	19 9	21 8	5 7	25 3	495
6-11 months	35 2	29 4	9 6	34 2	676
12-23 months	30 8	24 8	9 5	30 9	1 275
24-35 months	15 6	19 3	6 4	24 0	1 252
36-47 months	8 3	25 9	3 5	28 4	1 274
48-59 months	6 7	15 1	4 1	19 1	1 192
Sex of child					
Male	18 2	23 3	7 5	28 1	3 166
Female	17 8	24 7	7 8	29 6	2 999
Residence					
Urban	17 7	22 2	8 1	27 5	5 004
Rural	19 4	30 9	6 1	34 0	1 161
Region					
North	18 9	26 0	5 3	29 8	1 821
Central	17 8	23 1	8 4	28 1	3 938
South	15 9	23 2	12 5	31 7	407
Education					
No education	17 3	32 6	5 1	36 7	385
Primary	20 8	27 4	10 5	32 0	736
Secondary	18 5	24 1	7 1	28 9	3 573
Higher	15 7	18 8	8 1	24 1	1 470
Total	18 0	24 0	7 7	28 8	6 165

Demographic and Health Surveys Preliminary Reports

DHS-III

Kenya	September	1993	(English)
Philippines	October	1993	(English)
Turkey	January	1994	(English)
Ghana	April	1994	(English)
Bolivia	July	1994	(Spanish)
Bangladesh	July	1994	(English)
Zimbabwe	January	1995	(English)
Indonesia	January	1995	(English)
Tanzania	January	1995	(English)
Haiti	April	1995	(French)
Côte d'Ivoire	April	1995	(French)
Central African Republic	April	1995	(French)
Colombia	August	1995	(Spanish)
Morocco (Panel)	August	1995	(French)
Kazakstan	September	1995	(English/Russian)
Uganda	November	1995	(English)
Guatemala	March	1996	(Spanish)
Eritrea	March	1996	(English)
Egypt	March	1996	(English)
Mali	June	1996	(French)
Nepal	September	1996	(English)
Brazil	September	1996	(Portuguese)
Benin	September	1996	(French)
Comoros	October	1996	(French)
Malawi (KAP)	January	1997	(English)
Uzbekistan	February	1997	(English/Russian)
Zambia	February	1997	(English)
Dominican Republic	February	1997	(Spanish)
Peru	February	1997	(Spanish)
Tanzania	March	1997	(English)
Senegal	May	1997	(French)
Bangladesh	June	1997	(English)
Mozambique	October	1997	(Portuguese)
Kyrgyz Republic	December	1997	(English/Russian)
Jordan	January	1998	(English)

DHS Preliminary Reports are distributed to a limited number of recipients needing early access to survey findings and are not available for general distribution The national implementing agency is responsible for in-country distribution, DHS is responsible for external distribution Publication of DHS final survey reports, meant for general distribution, is expected 9 to 12 months following the preliminary report