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# JORDAN FERTILITY & FAMILY HEALTH SURVEY 1983

REPORT OF PRINCIPAL FINDINGS

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AMMAN — JORDAN

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## SUMMARY OF MAIN FINDINGS

The Jordan Fertility and Family Health Survey was conducted by the Jordan Department of Statistics, with interviewing taking place between August 1 and the first week of October 1983. The sample was a self-weighting sample of households in the East Bank of Jordan, and all ever-married women 15-49 in these households were selected as respondents. Out of a total of 6,068 housing units visited, 5,049 households were interviewed and 3,939 individual interviews were obtained, representing a completion rate of 93 percent of all potential respondents. Principal findings are summarized below.

### Use of Maternal Child Health Services

Only 58 percent of women reported at least one prenatal visit during their last pregnancy, and most of these had seen private physicians. The percentage with prenatal visits was lower among rural and less educated women. Only 9 percent of women had been immunized against tetanus during their most recent pregnancy. Fifty-nine percent of recent deliveries had taken place in public or private hospitals, and 21 percent took place in the home, assisted by traditional midwives (dayahs). Less than half of recently born children had had a medical exam before age 1; about half of these were because of illness and half were well-baby exams.

### Immunization Coverage

Among children under 5 years of age, 68 percent had complete measles coverage, 77 percent had complete immunization for DPT, and 78 percent, polio.

### Recent Diarrhea

Only 8 percent of children were reported to have had diarrhea in the 2 weeks before interview. Most received home remedies or commercial solutions as treatment. Only 6 percent received complete oral rehydration salts.

### Cause of Death

The most likely causes of death for children born in the last 5 years who had died was determined for 78 percent of cases by a panel of physicians from the Ministry of Health using symptomatology data collected for all deceased children. The principal causes of death were found to be prematurity/birth defects, accidents, diarrhea, and respiratory diseases.

### Mortality Rates

While estimates of mortality rates from the survey are probably too low due to underreporting of deaths, the data are consistent with a continuing decline in infant and child mortality. Levels of mortality are probably consistent with a crude death rate of 11 per 1,000 and an infant mortality rate of about 60 per 1,000.

### Breast-feeding

The average length of breast-feeding appears to be the same as in 1976: 11 months. Full breast-feeding without supplementation lasts, on the average, 3 months. Most women delay 1 or 2 days after birth before initiating breast-feeding. Even in the first months, most women who are breast-feeding give supplemental milk and/or other foods.

### Fertility Levels and Trends

The survey suggests that fertility has decreased somewhat in recent years—the TFR declining from 7.7 births per woman in 1971-75 to 6.6 in 1980-83. While a decline has occurred, fertility is still quite high in Jordan. The decline is apparently due to a continuing rising age at marriage and not to increased contraceptive use. Unless contraceptive use increases, the potential for further fertility decline is probably quite limited. The survey indicates that intervals between births are quite short—just over 2 years on the average. This rapid timing can have negative effects on the health of both women and children.

### Population Growth Rate

Data from the 1983 Survey and other recent surveys in Jordan suggest that the population growth rate due to natural increase is somewhat lower than estimates based on the 1976 Jordan Fertility Survey. From the 1983 survey we estimate a crude birth rate (CBR) of 35 per 1,000, which, with a crude death rate of 11 per 1,000, implies a rate of natural increase of 2.4 percent. While this is much lower than the growth rate of 3.6 percent, which has been often quoted and is based on earlier estimates, it is still quite high by world standards and implies rapid growth, with the population doubling in 25-30 years.

### Childspacing and Family Planning

Twenty-six percent of married women reported that they were using contraceptives. The most popular methods were the IUD and pill, and most women obtained methods from private physicians or pharmacies. Public hospitals were also an important source for surgical contraception, and the Family Protection Association was the second most important source for IUD users. There was an increase in contraceptive use of only 3 percentage points from 23 to 26 percent of married women between 1976 and 1983.

Survey data indicated that 20 percent of married women were in need of family planning services: They did not wish to become pregnant and were exposed to the risk of pregnancy. However, only 5 percent of women who were not using contraception stated that they desired to use a method. This gap suggests that there is a large pool of potential users in Jordan, especially for childspacing, who may become contraceptive users as attitudes toward contraception change.

## SECTION 1

### INTRODUCTION

#### 1.1 Background

The Hashemite Kingdom of Jordan, ever since its inception in 1950, has made considerable progress towards modernizing the structure of its society. As a result of the provision of health, education, and welfare services to the bulk of its population there has been a sharp decline in mortality during recent years. Lower rates of mortality and continuing high fertility have resulted in a rate of population growth rapid enough to double Jordan's population every 25 years. In 1952, the population of the East Bank of Jordan was estimated to be 587,000 and by November 1961, it was estimated to be about 900,000. The provisional figures of the 1979 census for East Bank territory alone indicate a figure of almost 2.2 million. The population of the West Bank is estimated to be around 0.8 million making the total population of the country approximately 3 million.

Changes in Jordan's population have been documented by a series of censuses and surveys. Population and Housing Censuses have been taken in 1961 and 1979. Between these two Censuses several sample surveys have been conducted on migration, labor force participation, family budget, economic productivity, fertility and mortality. The National Fertility Survey of 1972, conducted by the Department of Statistics (DOS) with assistance from UNFPA, reported a very high fertility rate for the country as a whole. The Jordan Fertility Survey (JFS) conducted in 1976 under the World Fertility Survey Program (WFS) reported continuing high fertility rates and a decline in the infant

mortality rate (IMR), although the IMR was still at a relatively high level of 67 per 1,000 live births. The 1981 Jordan Demographic Survey (JDS) indicated slightly lower infant mortality than the 1976 JFS.

As a result of continuing high birth rates and declining death rates, more than half of the Jordanian population is under 15 years of age and almost 20 percent is less than 5 years of age. A stated goal of the government of Jordan health program is "to improve the standards of health for both mother and child." However, none of the previous surveys have included data on health services. Thus, it is important to determine the pattern on utilization of maternal and child health services, including prenatal care, and well-baby services, as well as estimating the proportion of children who have received polio, DPT and measles vaccination. Data on vaccination levels can be used to determine the number of children in need of vaccination services.

In addition, information on the relative importance of respiratory problems and accidents as a cause of death has not been collected in a national survey. Also, diarrheal disease has been identified as an important cause of illness and death in many countries. To determine national health priorities, the extent of diarrheal diseases--that is, the number of deaths due to diarrhea (mortality) and the amount of illness (morbidity)--was evaluated in this survey.

## 1.2 Objectives of the Survey

The main objectives of the 1983 Jordan Fertility and Family Health Survey were to obtain information in the following areas:

1. Fertility Determinants: The main determinants of intervals between births, including contraceptive use, breast-feeding and lactational amenorrhea, because childspacing is an important factor in maternal and child health.
2. Birth History: A complete history of respondent's live births which is necessary to identify births and deaths for a recent period of time, and to evaluate fertility trends and reporting errors through comparisons with previous surveys.
3. Mortality: Mortality levels using direct and indirect methods, and data on symptomatology associated with recent child deaths to get information related to causes of death.
4. Child Health Status:
  - a. Diarrhea incidence rates for a recent interval of time for children under 5 years of age, as well as type of treatment received.
  - b. Immunization status for children less than 5 years of age for major immunizations: Polio, measles and DPT.
5. Use of Health Services:

Use of maternal and child health care services including prenatal care, tetanus immunization for expectant mothers, place of last birth, and child medical care.

### 1.3 Institutional Framework

The survey was conducted by the Jordan Department of Statistics, (DOS). The survey made use of the sampling frame developed at the DOS in 1980-81, with assistance from POPLAB, as part of the Multipurpose Household Survey Program.<sup>1</sup> The Jordan Ministry of Health assisted in developing the modules of the questionnaire dealing with health status and health services. Technical assistance on the survey project was provided by the Division of Reproductive Health, Centers for Disease Control. USAID supported local costs for the survey.

## SECTION 2

## SURVEY DESIGN AND METHODOLOGY

2.1 Geographic Coverage and Target Population

The survey was designed to be representative of the population of Jordan, excluding residents of the occupied West Bank, nomad families living in remote areas, and residents of hotels and prisons. A limited amount of information was obtained for all residents of sample households. The main questionnaire was administered to all ever-married women 15-49 in selected households.

2.2 Questionnaire Contents

The questionnaire consisted of two parts, a household form, and an individual respondent questionnaire. The household form contained sampling information, age, sex, marital status and other characteristics of all household residents, and dwelling characteristics such as number of rooms, type of toilet and source of drinking water.

Information obtained on the respondent questionnaire is divided into eight sections:

1. Respondent's Background. Age, education, age at first marriage, and other characteristics.
2. Maternity Status. Whether respondent had ever been pregnant, total number of live births and living children.

3. Birth History. Date of birth, sex, survivorship and age at death of dead children for all births a respondent had ever had.
4. Child Health. Immunization status, prevalence of diarrhea and treatment for diarrhea for children born in the last 5 years who are living.
5. Child Mortality. Questions on cause of death and symptoms for children born in the last 5 years who had died.
6. Breast-feeding. Questions on post-partum amenorrhea and infant feeding of last birth for all women with births in the past 5 years.
7. Maternal and Child Health Services. Use of prenatal care, place of birth, and infant examination for last birth, for all women with births in the past 5 years.
8. Family Planning. Contraceptive use, source of contraception, reasons for nonuse and desire for future use.

### 2.3 Sample Design

The sampling frame developed for the Multipurpose Household Survey Program was used.<sup>1</sup> Briefly, this sampling frame consists of 21 replicates of approximately 1,000 households, each of which is a self-weighting representative sample of the East Bank area of Jordan. Five replicates were used in the 1983 survey containing about 6,000 households. All eligible respondents in selected households were interviewed. This yields a self-weighting sample of households and of ever-married women 15-49.

## 2.4 Training and Fieldwork

Thirty-six interviewers and 8 field editors all females were trained, of which, 28 interviewers and 7 field editors were selected to do the fieldwork. They were recruited locally in Amman, Balqa, and Irbid Governorates.

Interviewer training was conducted during the last 2 weeks of July 1983 in Amman for trainees from the Governorates of Amman and Balqa. In Irbid, the training started 2 days earlier.

The first 10 days of training covered sampling and how to reach the selected households, followed by explanation of all questions, definitions and concepts in the questionnaires. Then, interviewers were asked to interview their neighbors in the locality in which they resided and these questionnaires were discussed in the classroom. In the last 3 days, the interviewers were taken to the field (not in the selected areas of the sample) in urban as well as rural areas to have field training with the supervisors to assure the quality of training. Finally, a general discussion was held, where interviewers talked about what they experienced during the last few days of field training.

The fieldwork started on August 1, 1983 in Amman, Balqa, and Irbid Governorates. On September 23, 1983, three teams traveled from Amman to the south to conduct the fieldwork in Karak and Ma'an governorates. This stage

of fieldwork lasted less than 3 weeks. The field work for the survey ended in the first week of October 1983, a little more than 2 months after it began. The general procedure of the fieldwork was as follows: the supervisor located a sample block and its boundaries with the help of maps and sketches that were provided to him the day before. The supervisor divided the block into small chunks containing adjacent housing units and assigned them to interviewers who visited each selected housing unit in the assigned areas to complete the interviews.

The supervisor also visited the interviewers while conducting the interviews. It was also his/her responsibility to collect completed questionnaires that were then passed to the field editor who checked them thoroughly for missing or inconsistent information. Errors found were corrected in the field and when necessary, households with errors were revisited, either by the same interviewer, the field editor, or the female supervisor.

In those instances when no member of the household was present in the first visit, supervisors made arrangements to revisit the households with incomplete interviews to have them completed. This procedure resulted in a completed interview of almost all households visited that appeared to be occupied.

Finally, it should be noted that there was no unusual difficulties encountered during the fieldwork. Respondents were generally cooperative with the survey staff at all levels.

## 2.5 Final Interview Status

Of 6,068 housing units selected, 689 were found to be vacant, 150 had no one home and 180 were not completed for other reasons (Table 2-1). Information was obtained on 5,049 households for a completion rate of 94 percent of potential occupied households. Individual interviews were obtained of 3,939 of 3,975 eligible respondents in these households. The combined individual-household rate of completion was 93 percent.

## 2.6 Limitations of the Survey Data

The questionnaire contains questions which can in some instances cause problems for respondents, for example, retrospective questions on dates of birth of respondents' children. In the survey respondents were asked to use birth certificates and the "family book" to keep errors of this type to a minimum. Further, the questionnaire concentrates for the most part on recent events, for example, asking about current breast-feeding status, or place of birth for last births (occurring in the last 5 years). Only the birth history asks about events occurring more than 5 years before the survey. However, this data can be evaluated through tests of internal consistency, and through comparison with other data. For Jordan there are a number of data sources available for evaluating the 1983 survey.

The survey asked a number of questions about mortality and causes of death which are difficult to obtain even in developed country settings. While a definitive cause of death cannot be obtained in 100 percent of cases in a survey of this type it is felt that the descriptive data obtained can be of great value in setting health care priorities in Jordan.

## SECTION 3

### SOCIAL AND DEMOGRAPHIC CHARACTERISTICS

The Jordan Fertility and Family Health Survey collected basic information on all persons residing in sample households, as well as more detailed information on respondents. In this section characteristics of household residents and respondents are examined for internal consistency, and compared with other data as part of the overall assessment of data quality for the 1983 Jordan Fertility and Family Health Survey.

#### 3.1 Age, Sex, and Residence

Population by single years of age and sex, (Table 3-1 and Figure 3-1) indicate fairly good reporting of age, although some preference for ages ending in 0 and 5 is evident at age 20 and above. The Myers Index of digit preference (ages 10-79 on a scale from 0-180) is 12 for males and 15 for females, which compares favorably with previous surveys. The same index was 10 and 14 for the 1981 Jordan Demographic Survey and 42 and 49 for the 1976 Jordan Fertility Survey. The 5-year age distribution (Table 3-2) is generally consistent with several earlier data sources.

The distribution of ever-married women 15-49 by residence (Table 3-3) is nearly identical for the 1981 JDS and 1983 JFFHS, which used the same sampling frame. However, these two differ from the 1976 JFS in the percentage of ever-married women residing in the categories Amman, Zarka and Irbid and other urban. probably reflecting differences in the definitions used in the

sampling. For this reason, in comparisons between the 1976 and 1983 surveys in this report the categories total urban and rural are used, rather than the three residential categories.

The age distribution of all women 15-49 in the 1983 JFFHS is consistent with previous data sources (Table 3-4), although there is an apparent deficiency of women age 30-34 compared to adjacent age groups. The low percentage in this age group, which may be due to sampling variation or age misreporting, is evident in both the household and individual respondent data (Table 3-5), which have very similar age distributions for both ever-married women and women of all marital statuses.

### 3.2 Percentage Ever-Married

The percentage ever-married for women over age 40 is 97-99 percent in the 1979 census and the 3 surveys since 1976 (Table 3-6). At younger ages, the data are consistent with a trend toward older age at marriage. At age 20-24, for example, the percentage married ranges from 54 percent in the 1981 JDS to 42 percent in the 1983 survey. Whether this large difference between 1981 and 1983 represents real change, or sampling or reporting differences in the surveys is examined further in Section 7 through cohort comparisons. Change in the overall marital status distribution of childbearing age women implied by the series of estimates (Table 3-7) is substantial, with the proportion single rising from 31-34 percent to 44 percent over the period covered.

### 3.3 Number of Live Births

The number of live births for woman over age 40 averages 7-8 births per woman for several data sources shown in Table 3-8. The somewhat little lower figures for the 1979 Census may reflect underreporting. The data suggest that for women over age 40, the mean number of births declined by 0.6 births between the 1981 and 1983 surveys, although the data for 1983 still indicate very high fertility. This 1981-1983 difference is examined in Section 7 through cohort comparisons. At younger ages the data are consistent with a rising age at marriage with the mean parity for the age group 20-24 declining from 1.6 to 0.9 births per woman. Comparing the 1976 JFS with the 1983 JFFHS these trends and differences by age are evident for both urban and rural areas (Table 3-9).

### 3.4 Conclusions

The comparisons made suggest that age, sex, and residence are consistent internally and with previous data, so that in general the coverage of the survey can be considered good. Time series comparisons suggest a rise in age at marriage, and a decline of the average number of births at each age, possibly related to the rising age at marriage.

## SECTION 4

## USE OF MATERNAL-CHILD HEALTH SERVICES, IMMUNIZATION STATUS AND MORBIDITY

This section of the report evaluates the extent to which women utilize health services related to pregnancy, delivery, and the postpartum period, including well-baby care. This period is a time when the health risks to mothers and children are higher than usual. For children less than 5 years of age, information was collected on the incidence of diarrhea in the previous two weeks and vaccination status for poliomyelitis, measles and DPT.

#### 4.1 Prenatal Services

The 2,800 women who reported at least one live birth in the last five years were asked if they had a prenatal examination during their most recent pregnancy. As shown in Panel A of Table 4-1, 58.1 percent of the women replied that they had received such an examination. The percentage of women receiving such an examination was positively associated with both urban residence and education. More than 70 percent of women living in the three major urban areas (Amman, Zarka and Irbid) had a prenatal examination compared with 58 percent and 40 percent in other urban areas and rural areas, respectively. Almost three-fourths (73.5 percent) of women with at least 7 years of education reported a prenatal exam compared with 61 percent and only 44 percent of women with 1-6 years of education and no education, respectively.

The source of prenatal care was primarily private physicians--42.6 percent of the 1,626 women with prenatal care (Panel B of Table 4-1). In addition, another 2.5 percent reported private hospitals. About half of women in the three major urban areas and with most education went to private physicians and another 2 to 4 percent reported private hospitals. The other principal source of prenatal care was government facilities including MCH centers (25.2 percent), public hospitals (15.1 percent) and village clinics (2.6 percent)--a total of 42.9 percent. Women in other urban areas made greatest use of government facilities with over half going to MCH Health centers or public hospitals. In rural areas, most women went to government facilities but 39 percent reported going to private physicians compared with 23 percent going to MCH centers. This may indicate a lack of access to MCH centers in some rural areas. As may be expected, a greater proportion of women with more than primary education went to private physicians. The distribution of prenatal care for women with either no education or primary education is similar.

With the exception of women in other urban areas, at least half of women had their first prenatal exam during the first trimester of pregnancy (Panel C-Table 4-1).

In order to measure the degree of tetanus prevention during pregnancy, women were asked if they received a tetanus vaccination during their most recent pregnancy. It should be pointed out that the answers to this question may be sometimes unreliable since some women cannot differentiate between an injection against tetanus and any other. In any case, use of tetanus toxoid during pregnancy is very low: only 9.3 percent reported having been vaccinated (Panel D of Table 4-1).

Tetanus vaccinations during pregnancy can prevent tetanus in newborn infants, which usually arises from the umbilical cord having been cut with unsterilized instruments. Neonatal tetanus has the potential to be an important cause of death among newborns. Reduction of tetanus in Jordan is sought through implementation of the Expanded Program of Immunization. However, it should be noted here that very few women received tetanus vaccinations during pregnancy regardless of residence or education status.

#### 4.2 Deliveries

Almost 60 percent (59.4 percent) of most recent deliveries in the past 5 years took place in hospitals—41.6 percent in public hospitals and 17.8 percent in private hospitals (Table 4-2). The majority of births in private hospitals took place in the three major urban areas and births in private hospitals are positively associated with educational status of the woman. Seventy-three percent of the deliveries to current residents of the three major urban areas were in hospitals compared with only 50 percent and 47 percent of deliveries to women residing in other urban areas and rural areas, respectively.

One fifth of all deliveries and more than one-half of home deliveries were assisted by Dayahs. They were most active in rural areas and with women with less education.

A WHO evaluation of the Traditional Birth Attendants (TBA's) in Jordan concluded that most of the practicing TBA's are trained and licensed.<sup>2/</sup> In 1980, as part of the MCH/FP project, an organized program of retraining

was initiated. Registered midwives in the MCH Centers conduct the training. Although the curriculum was quite complete in content coverage, the WHO consultant recommended that the training include three more topics--immunizations, ORS and spacing of pregnancies. Of the 38 midwives interviewed in the WHO study, 37 wanted to learn more about the spacing of pregnancies because "many mothers ask us questions."

TBA's in the UNRWA camps deliver up to 25 babies a month whereas those working in the community are generally self-employed and report that they deliver two to five babies a month. The midwife in charge of the MCH center is on call when the TBA is faced with a complicated labor or delivery. Some midwives conduct home deliveries and others do not.

Seven percent of pregnancies were reported to have ended before 6 months. This is obviously a low figure due to the underreporting of pregnancy wastage. With this qualification, those women reporting at least one incomplete pregnancy are shown in Table 4-3 by age group by residence and education. For the total there is little variation by age group. Fewer incomplete pregnancies are reported by women with at least 7 years of education. However, these women had fewer pregnancies than other women and a lower parity distribution and would thus have had less exposure to the possibility of spontaneous abortions. For all categories, the percentage of women with at least one pregnancy that ended before 6 months increases with age as women increase their exposure to the possibility with each additional pregnancy. Fifty-six percent of these women reported receiving medical treatment following their pregnancy termination and 33 percent were hospitalized at least overnight (Table 4-4). There was very little variation by either residence or education.

### 4.3 Postnatal Services

The medical followup of the newborn in the first months of life is very important for the child's health and possibly survival. We attempted to find out the proportion of mothers whose children had a medical examination before the child's first birthday. These examinations can be done as a simple postnatal follow-up or they can be related to an illness.

Less than one-half (42.8 percent) of (the last-born) children born during the last five years had an examination before their first birthday. This figure ranged from 52.2 percent in the three major urban areas to only 29.7 percent in rural areas (Table 4-5). Postnatal visits were also positively associated with education of the mother.

However, as shown in panel B of Table 4-5 only one-half of infants were taken to a health facility for the first time for well-baby care; the others were sick at the time of their first visit. The first postnatal exam was for well-baby care in the majority of cases only in the three major urban areas. The place of the exam was almost evenly divided between private physicians and other sources of care.

Mothers were asked if any of their living children less than 5 years of age had had diarrhea in the past 2 weeks. The WHO definition of three or more loose watery, and/or bloody stools in a 24-hour period was used. As shown in Table 4-6, 7.7 percent of the 5,659 children in the sample were reported to have had diarrhea. Results were highest for children less than 2 years of age

with rates in the range of 12-14 percent. The rate dropped to 6.8 percent for 2-year old and to less than 4 percent for 3-4 year olds. The rate was 40 percent higher in rural areas (9.5 percent) compared with urban areas (6.8 percent). Diarrhea was reported more frequently by younger mothers, in smaller families and by mothers with higher education. These three factors are probably all related to younger children for whom highest diarrhea rates were reported.

Differences in rates are shown by household characteristics in Table 4-7. Highest rates were reported for children in larger houses, when the source of drinking water was either a well or river, and for households with no private latrine, no refrigerator and/or no electricity.

Most children received some treatment; only 12.2 percent of mothers of children with diarrhea reported no treatment (Table 4-8). Treatment consisted of special commercially-available solutions or home remedies in most cases without any clear relationship to either the mother's residence or education. Treatment with complete oral rehydration salts was higher in major urban areas. The ORS program started in 1980 with USAID funds for a treatment clinic at Al Baskir Hospital in Amman. In 1982, ORS began to be distributed to all health centers, village clinics, hospitals and UNRWA clinics but is not available at MCH Centers<sup>3/</sup>.

#### 4.4 Vaccination Coverage

The Expanded Program of Immunization (EPI) was established in 1979 to offer DPT and/or polio vaccine (OPV) vaccination to the entire population. Measles immunization was added to the program in 1980. The eligible groups for immunization are children under 1 year of age, school entrants and pregnant women attending prenatal clinics. In the first year of the program, the target age was children under 5 years of age to eliminate the "backlog". In addition to health centers and MCH centers, there are 21 mobile teams that cover 705 villages. Immunizations are recorded on a blue immunization card and is kept by the family because it is important for school entry.

Eighty percent of children had vaccination certificates (Table 4-9). Of the 20 percent with no certificate, the mother reported no vaccinations for 16.9 percent. Thus, Table 4-10 includes data for 97 percent of the children less than 5 years old--those children with vaccination certificates and those with no certificate and no reported vaccinations.

Vaccination levels are quite good ranging from 68 percent for measles to 77 and 78 percent for DPT and polio, respectively. Children in the three major urban areas and with better educated mothers tend to have somewhat higher vaccination levels but differences are not great. However, most children complete their required number of vaccinations only after 1 year of age as shown in Table 4-11. This is essentially true for all residence and mother's education categories. However, measles vaccination is not recommended until 9 months of age so that only about 25 percent of children less than 1-year of age would have been eligible for vaccination. Thus, the levels shown for

children less than one year of age (18 to 25 percent) by residence are actually quite good when an adjusted denominator is considered. Also, one would not expect children to complete their full series of polio and DPT vaccinations until 6 months of age so that the overall levels of 42 percent and 39.9 percent for polio and DPT vaccinations, respectively, represent about 80 percent of children eligible for complete vaccination. On the other hand about 47 percent have not received any vaccinations whereas about 67 percent of children less than one year of age should have reached 4 months of age--when they should have initiated their series of vaccinations. The percentage of children less than 1 year of age with no vaccination increases from major urban areas to other urban areas and rural areas and is inversely associated with mother's education.

A WHO assisted EPI evaluation in 1982 that found about 77 percent of children with a vaccination card compares well with the 80 percent found in this survey<sup>4/</sup>. The WHO survey also found better DPT and OPV coverage than measles coverage although this survey shows that measles coverage has improved. Both surveys show a significant number of children that did not complete their immunization within the first year and a very low coverage of prenatal tetanus toxoid.

In comparing results for children over 1 year of age, the WHO survey in 1982 included children 12-24 months of age whereas the data for the 1983 JFFHS is for children 1-4 years of age. However, most of the children had received their vaccinations by 2 years of age. In 1982, 86 and 74 percent of children in Amman and the rest of Jordan, respectively, were reported to have received a full series of DPT and polio vaccines. In 1983, coverage improved to 89 and 85 percent, respectively. The biggest improvement was seen for measles vaccine--from about 50 percent to 80 percent, according to this comparison.

## SECTION 5

## INFANT AND CHILD MORTALITY

5.1 Direct Estimates

Estimates of infant and child mortality rates from the 1983 survey were considerably below other recent estimates, suggesting that infant and child deaths were seriously underreported in the survey. The direct estimate of the infant mortality rate of 26 per 1,000 compares with 66 per 1,000 in the 1976 JFS (Table 5-1). The 1983 direct estimate is roughly comparable to that found in the 1981 JDS which estimated an age-specific mortality rate of 29.8 per 1,000 for age 0. The JDS estimate is also believed to be too low.

The 1983 survey estimates are lower than those for the 1976 JFS for the same time periods (Table 5-2). Both surveys, however, are consistent with a trend toward lower mortality. The 1983 estimates are also consistent with the common pattern by age of mother. The highest rates are in the youngest and oldest age groups (Table 5-3).

5.2 Sex Ratios

Sex ratios at birth are in the expected range for the recent 5 year period (104), but increase with longer periods before interview (Table 5-4). If underreporting of dead children is different by sex, sex ratios can be used to detect errors. However, as Table 5-4 shows, for most time periods considered, sex ratios of children who died were closer to 100 than those for surviving children. Underreporting of deaths does not appear to be selective of one sex or the other.

### 5.3 Age at Death

The reported ages at death of children under age 5 are highly concentrated in the first year (Table 5-5). Of 174 children born in the 5 years before interview who had died, 64 died at age 0 months and 86 percent of deaths were reported to be in the first year of life. This age pattern is consistent with model life tables with very low mortality levels (Table 5-6). This suggests that while deaths before age 1 are clearly underreported (as evidenced by the low direct infant mortality estimate) deaths at age 1-4 may be even more underreported, since deaths above age one appear too low relative to those below age 1.

### 5.4 Indirect Estimates

The 1983 survey estimates of child mortality based on the Brass method using Trussell multipliers are also substantially lower than those from previous surveys (Table 5-7). For example, the probability of dying before age 2 was .047 for the 1983 survey, compared with .085 for the 1976 JFS and .073 for the 1981 JDS. Why should the 1983 survey have had substantially lower reporting of mortality? One possible explanation is the questions on numbers of live births and living children. The 1983 survey asked each respondent the number of live births she had had, adding a reminder to include those who lived elsewhere and those who had died. A second question was asked about the total number currently living, with a reminder to include those living elsewhere. The 1976 JFS and 1983 JDS used a different approach: separate questions were asked on number of children living with the woman, those living elsewhere and those who had died. This more explicit approach in these two surveys apparently resulted in a much higher reporting of children who had died.

### 5.5 Causes of Infant and Child Deaths

For each child born in the past 5 years who had died, information on causes of death was obtained. In addition to reported cause, respondents were asked about symptoms during the terminal illness and shortly before death. While a definitive cause of death can be difficult to obtain even in developed countries, the data collected has some descriptive value for program policy. Questionnaires for each child that died were reviewed by Ministry of Health physicians in Jordan to give a most probable diagnosis. The cause of death or related final diagnosis is based on the reported cause plus symptoms which were used in a simple algorithm to assign cases to four major categories (tetanus, diarrhea, pertussis, and measles). Those which were still undetermined were assigned causes based on the physicians' review of the forms.

The percentage distribution of causes of death for both the reported cause and the most probable diagnosis assigned in this way are shown in Table 5-8. Most of the cases classified under "other" causes of death reported by respondents were reclassified into three main causes of death--prematurity/birth defects, diarrhea/gastroenteritis and respiratory disease/pneumonia. The principal cause of death, about one-fifth of all childhood deaths, was attributed to problems of prematurity and/or birth defects. With the exception of accidents (19.5 percent of all deaths) only diarrheal and respiratory diseases each contributed more than 10 percent of deaths.

The 21.9 percent of deaths that were not classified were not prorated, because there is reason to believe that the distribution of causes of death among the unknowns are not the same as among those with attributed causes of death. For example, conspicuous by its near-absence are deaths due to tetanus (3.4 percent).

This would be consistent with the theory that those deaths occurring very shortly after birth are the most likely ones to be omitted by women. Thus, tetanus mortality in infancy may be higher than the reported in the survey. Mortality due to other diseases for which immunizations are available did not contribute greatly to childhood mortality according to the data. However, it is possible that some of the diarrhea and respiratory problems which caused death were related to complications of measles which had occurred in prior months. The age distribution of deaths discussed earlier suggested that deaths over age 1 were underreported at a greater rate than those under age 1, so that cases of measles which occur at older ages may have been omitted.

#### 5.6 Symptoms Before Death

Possibly a more objective way of examining child deaths than ascribed cause of death alone, and one which can help tell more about useful directions for health policy, is simply to describe the symptoms present among children before they died rather than trying to make a best guess as to underlying causes of death. Table 5-9 shows the proportions of children dying, excluding those who died in accidents, who were reported to have exhibited several of the symptoms related to the most common causes of death. During illness high fever was the most common symptom reported followed by inability to open their mouth and suck normally, emaciation and diarrhea. Although less than one percent of deaths were attributable to malnutrition, 21 percent were reported to be emaciated or wasting away and almost 6 percent were reported to have had swollen feet.

Based on comparisons with other data, estimates of mortality from the 1983 survey are clearly too low. It is probably best to assume for Jordan mortality levels derived from other sources: a crude death rate of about 11 and an infant mortality rate of around 60. The survey mortality data are internally consistent, and consistent with the continued decline in mortality which is no doubt occurring.

Information on causes of death indicates that accidents, prematurity/birth defects, respiratory diseases and diarrheal diseases were the main causes of death among children under age 5. Vaccine-preventable diseases were not found to be important causes according to this analysis, but given the difficulty in assigning cause of death they could be. For example, some of the respiratory disease cases were consistent with pertussis. Some diarrheal deaths could have been associated with measles. If many children dying soon after birth went unreported, some tetanus cases could have been missed, and some measles cases could have been missed since the evidence suggests deaths after age 1 were underreported.

## SECTION 6

## BREAST-FEEDING

6.1 Duration of Breast-feeding and Post-partum Amenorrhea

Data from the survey indicate that breastfeeding averages about 11 months (Table 6-1). Average duration of breastfeeding was 2 months shorter in urban areas. Comparisons with similar estimates for the 1976 JFS suggest little change over the 7 year period between surveys. The estimates imply a slight increase in urban areas and no change in rural areas. The mean duration of post-partum amenorrhea of 6 months is close to that found in other data for populations with similar durations of breastfeeding.<sup>5/</sup>

6.2 Breast-feeding Differentials

Ninety-three percent of children, were breastfed according to the survey data (Table 6-2). While the percentage is higher among some women, such as older or rural women, in general there is not much variation in the proportion initiating breastfeeding, with over 90 percent in almost every category.

Similarly, the duration of breastfeeding is longer in some categories, but usually the differences are 2 to 3 months at the most. The differences are in the direction found in other surveys, with rural, older and less educated women breastfeeding longer.

### 6.3 Day of Initiating Breast-feeding

The belief is apparently widespread in Jordan that initiation of breast-feeding should be delayed until the second or third day after birth. This is despite medical evidence that the colostrum, the milk secreted soon after birth, contains many maternal antibodies which can be of benefit to the child. Nevertheless, survey data indicate that only 31 percent initiate breast-feeding on the day of the birth, with 45 percent waiting till the following day, and 22 percent not starting until the third day (Table 6-3).

### 6.4 Infant Feeding

While breast-feeding lasts 11 months on average most women introduce other foods including non-maternal milk in the first few months after birth (Table 6-4). Even at 1-3 months of age less than half of women were breast-feeding exclusively, and only 21 percent 4-6 months after birth. The average duration of full breast-feeding is 3 months.

### 6.5 Reasons for Stopping Breast-feeding

The most frequent response given for reason the respondent stopped breast-feeding was that milk had dried up or had become insufficient (Table 6-5). Of those who had a birth in the past 2 years and stopped, 22 percent had stopped because they had become pregnant again.

### 6.6 Frequency of Breast-feeding

Among women who are still breast-feeding the number of feedings per day is fairly constant by age of child (Table 6-6). On the average children under 2 years of age get about 7-8 feedings per day. This probably reflects the fact that even the youngest children are getting supplementary milk and other foods.

### 6.7 Type of Milk Used

The large majority, 96 percent, of women who had given non-maternal milk had used powdered milk (Table 6-7). Two thirds of the women who used non-maternal milk (either instead of breast milk or to supplement it) stated they did so because their own milk was weak or insufficient. Virtually all women who used powdered milk--98 percent--stated that they always boiled the water used to prepare it.

### 6.8 Reasons for Never Breast-feeding

For women who had never breast-fed, again the majority gave insufficient milk as the reason for not breast-feeding (Table 6-8). Only fourteen percent stated that they never initiated breast-feeding because the child died.

### 6.9 Conclusion

Breast-feeding appears to be nearly universal in Jordan, but is not prolonged. The average child is breast-fed 11 months. Differences in breast-feeding are similar to those found elsewhere, but are not great. Use of non-maternal milk is common, even in the first months of life among women who are breast-feeding, with powdered milk being used by almost all women. Despite the fact that most women should be able to produce an adequate amount of milk, most women stated that their reason for stopping breast-feeding or using non-maternal milk was that their breast milk was insufficient or weak.

Finally, most women in Jordan apparently do not begin breast-feeding until the second day after birth, or later.

## SECTION 7

## FERTILITY LEVELS AND TRENDS

7.1 Cumulative Fertility

Data on the number of live births each respondent has had indicate high levels of fertility in Jordan (Table 7-1). Women over age 40, or married 20 years or more, reported an average of eight children born alive. The number of births that older women have had is lower in urban areas, but the differences are not great; there is less than one birth difference, for example, between women over 40 in Amman, Zarka, and Irbid and in rural areas. There are greater differences between extreme educational categories, 2-3 births for older women.

7.2 Current Fertility

Age-specific fertility rates estimated for the 3 year period before the survey, indicate a total fertility rate of 6.6 births per woman, and a crude birth rate of 35 births per 1,000 population (Table 7-2). Urban fertility is considerably less than rural, with a TFR of 6.1 compared to 7.9. Table 7-2 indicates that the 1983 survey TFR estimate is somewhat lower than that of the 1981 JDS, 6.6 births per woman compared with 7.1, and most of this difference is due to urban areas.

Fertility rates from a number of sources (Table 7-3) indicate a downward trend in age specific fertility, concentrated below age 35. Estimates for the 1981 JDS and 1983 JFFHS indicate a decline of 7.1 to 6.6 for TFR, or 7 percent, between the two periods covered, which overlap. A separate estimate from the 1982 Jordan Manpower Survey based on births occurring in the year before the survey supports the 1983 survey results.

### 7.3 Cohort Comparisons, 1981 JDS and 1983 JFFHS

The 1983 Survey found lower fertility, than the 1981 JDS both for recent fertility rates, and for cumulative fertility rates shown in Table 3-8. While this suggests a trend toward lower fertility, differences are fairly substantial and the interval between surveys, 2 years, is not great. Reporting or coverage differences between the two surveys could be responsible for the results rather than a genuine trend.

In Table 7-4, characteristics of women in the same birth cohorts are compared for the two surveys (The age groups in the 1983 survey have been shifted 2 years to represent women in standard age groups in 1981, even though the interval between the surveys was not quite 2 years). If measurement is accurate, the mean number of births per woman and the proportion married should only increase over time for women in a given cohort. This is largely the case in Table 7-4 indicating general agreement in the two surveys. For the cohort age 40-44 in 1981 (and for women 35-39 in urban areas as well) there is a slightly lower number of children born alive in 1983 than in 1981. This suggests some underreporting in 1983 of the number of live births for older women. It should be noted that the questions on parity were different on the two surveys. The 1981 JDS asked separate questions on the number of children a woman had who were living with her, those not living with her, and those who had died. The 1983 JFFHS asked a single question on number of live births, adding a probe to include those who have moved and those who had died. The surveys differed in another regard: The 1981 JDS was a household survey in which another household member could have answered the questions, while in the 1983 JFFHS the woman herself answered the question. In any case, the comparisons suggest a possible underreporting of the number of live births

by the oldest women surveyed in 1983, but otherwise consistent results. Proportions married in Table 7-4 do not indicate any decrease within cohort, but in the cohort 25-29 in 1981 the proportion ever-married is the same 2 years later.

#### 7.4 Birth History Analysis: Cohort-Period Fertility Rates

An analysis of birth histories obtained in the survey (Table 7-5) suggests recent declines in birth rates in the decade before the survey. However, the patterns observed are similar to those found elsewhere<sup>6/</sup> including the 1976 JFS<sup>7/</sup>. There is an apparent shifting of births in the more remote past toward the survey. This combined with some omission of births in the earliest period results in a peaking of fertility rates in the period 10-14 years before the survey, and an exaggeration of recent downward trends. This is evidenced by ratios of cumulative cohort to period fertility (or P/F ratios) of greater than one for the most recent period (consistent with declining period fertility) and ratios of less than one in the period 10-14 before survey (indicating excess period fertility).

A similar analysis using marriage duration cohorts instead of age cohorts (Table 7-6) also indicates a peaking of fertility 10-14 years before interview. The rising fertility at 0-4 years since marriage in earlier periods may reflect rising age at marriage so that the effect of adolescent subfecundity was diminished. P/F ratios for the most recent period are just below one, in contrast to those for age cohorts, indicating that recent fertility decline is mainly due to increased age at marriage, and rates after marriage are not affected.

Table 7-7 presents cohort-period fertility analysis by duration since first birth. These rates are less likely to be affected by changes in fertility. P/F ratios range from 1.01 to 1.02 for the most recent period suggesting that recent births are accurately dated.

Estimates of cohort-period fertility rates were made for the 1976 JFS and the 1983 JFFHS for the same age cohorts and periods were used to examine trends in fertility and possible reporting errors (Table 7-8).<sup>7/</sup> Since the surveys took place at the same time of year (July-September 1976 and August-September 1983), standard age groups in 1983 were used to define cohorts, and 7 years were subtracted from age-group boundaries to form the same cohorts in the 1976 survey. When this is done the first cohort comparisons can be made for the period 1969-73, approximately 10-14 years before the 1983 survey.

The comparisons in Table 7-8 indicate that period fertility rates, whether age-specific or cumulative, were higher in the 1976 JFS before 1968, and higher for the 1983 JFFHS in the period 1969-73. This pattern is found in both urban and rural areas as shown in Table 7-9.

These differences in the two surveys apparently result from the fact mentioned earlier that both surveys have a peak of reported period fertility 10-14 years prior to interview (See Figure 7-1). The existence of the same pattern in both surveys supports the fact that it is due to reporting errors and not to real upward and downward trends.

The period 1969-73 in Tables 7-8 and 7-9 represents the peak for the 1983 JFFHS, and results in higher estimates for that survey. In the next earlier period, the 1976 survey peak would be juxtaposed with the period of underreported fertility for the 1983 survey, thus exaggerating differences in the surveys in both directions.

The following might be suggested to explain the pattern observed:

- (1) In the remotest period from the surveys omission of births occurred;
- (2) Some births may be displaced from the more remote periods to the 10-14 year period, resulting in even fewer births reported in the remoter periods;
- (3) Genuine recent trends toward lower fertility could be occurring.

The apparent problems in the history do not necessarily reflect on recent fertility estimates which are in line with data from other sources. There is no evidence for displacement of births in the last 10 years (Table 7-10) which have fairly even distribution by year.

### 7.5 Sex Ratios at Birth

Sex ratios at birth (Table 7-11) are close to expected values (104) in the period 0-4 years before the survey, (and 5-9 years in urban areas). For earlier periods values increase suggesting selective omission of female births

before the recent period. (This pattern is similar to the one found in the 1976 JFS.) Like the earlier results this suggests that estimates of fertility for earlier periods may be too low, but does not provide any evidence of problems in recent birth rates.

The results in mortality estimation discussed earlier suggested that some children who had died were not being reported resulting in an underestimate of the infant mortality rate. If one assumed that about half of infants who died were not reported, either as a birth or death, then about 3 percent of births were missed. Inflating the TFR of 6.6 by 3 percent would result in a TFR of 6.8 births per woman.

#### 7.6 Proximate Determinants of Fertility

Table 7-12 presents the results of an analysis using the proximate determinants of fertility method of Bongaarts <sup>9/</sup>. The analysis shows that changes in age at marriage are responsible for the decline observed between the 1976 and 1983 surveys. In the method the factors range from 0 to 1.0. The greater the departure from 1.0, the greater the fertility inhibiting effect of the factor. Change in contraceptive use and post-partum infecundity were minor between the two surveys. Data from the two surveys are consistent with high rates of total fecundity--16.7 and 16.8 births per woman--but the rates are within the expected range proposed by Bongaarts.

#### 7.7 Intervals Between Births

Intervals between births were on the average 27 months, according to data on the 5 years before interview shown in Table 7-13. The data in the table are for all intervals starting with a birth, analyzed using lifetable methods.

According to the analysis 25 percent of women had a birth within 18 months of the previous birth. This represents very rapid spacing of birth, and a large number of quite short birth intervals which have been found to be associated with higher rates of infant mortality.<sup>10/</sup>

### 7.8 Conclusions

While analysis of the birth histories suggests some problems in the earlier periods, recent estimates, which are somewhat lower than estimates from other sources, appear to reflect a real decline in fertility. For the most part this decline appears to be related to a rising age at marriage. The estimated TFR for 1980-83 of 6.6 is still quite high. The pattern of short intervals between births could have serious negative effects on the health of young children in Jordan.

## CHILDSPACING AND FAMILY PLANNING

In the 1983 survey women were asked a number of questions on their attitudes toward childbearing and contraceptive use. While the responses given are sometimes difficult to interpret, and can even be contradictory for individual women, the findings taken together can be used to describe the level of birth planning and need for family planning services in Jordan.

### 8.1 Planning Status of Last Pregnancy

Respondents were asked two questions to determine their attitudes toward their most recent pregnancy. They were asked whether they desired to become pregnant at the time they became pregnant, and if no, whether they wanted no more children ever, or just wanted to wait for a while before the next pregnancy. Using these questions pregnancies were classified into those that were planned, mistimed (wanted, but later) and unwanted (occurred when the woman wanted no more births). Two-thirds of pregnancies were planned by this definition (Table 8-1), 14 percent mistimed and 17 unwanted. Younger women, were more likely to have planned pregnancies, as were women with fewer children, the better educated and those who worked. However, those living in Amman, Zarka and Irbid reported a lower percentage of planned pregnancies--63 percent compared with 71-72 percent in other areas. The percentage unwanted increases with age and number of children, as may be expected, and is inversely related to the educational status of the woman.

Another question related to birth spacing was whether the respondent desired to get pregnant at the present time. In total, 19 percent desired to become pregnant, 59 percent did not, while another 19 percent were already pregnant (Table 8-2). Rural women were more likely to desire pregnancy at the time of interview than other women, especially those living in the three largest cities. The highest percentages currently pregnant were among women in their 20's and those with 2-3 children. Over one-half of women with no children or only one child desired a pregnancy--many of them teenagers or in their young 20's recently married.

### 8.3 Contraceptive Use by Method

Twenty-six percent of currently married women 15-49 reported that they were using an effective method of contraception at the time of interview (Table 8-3). IUD and pill were the leading methods with around 8 percent using each, and 3.8 percent were using contraceptive sterilization. Rhythm and withdrawal together accounted for 5.3 percent--about one-fifth of users.

Contraceptive use was found to be strongly related to residence; 37 percent were using in the three largest cities, 22 percent in other urban areas and 12 percent in rural areas. Contraceptive use was most prevalent among women between the ages of 30 and 44. Differences by education were quite wide, ranging from 17 percent among those with no education to 35 percent among those with 7 years or more (Table 8-4). Contraceptive use also increased with the number of children a woman had. These relationships with overall use are generally maintained when residence or education is controlled (Tables 8-5 and 8-6).

#### 8.4 Trends in Contraceptive Use

According to Table 8-7, which compares proportion of currently married women currently using contraception there is a relatively small increase in the 7 year interval between the two surveys. The over all use level was 22.8 percent in 1976 and 26.0 percent in 1983. However, there is a clear increase in rural areas, where the proportion increased from only 7 percent in 1976 to over 12 percent in 1983 representing a 75 percent increase during the intersurvey period.

There is also an apparent shift in methods, with a decrease in pill use (from 12 to 8 percent) and an increase in IUD use (from 2 to 8 percent) and sterilization (2 to 4 percent). There is also a compensating increase in rhythm and decrease in withdrawal.

#### 8.5 Source of Contraception

Current users of contraceptive methods were asked where the method had been obtained. Private physicians and pharmacies, and to some extent public hospitals, provide the majority of methods (Table 8-8). Twenty-one percent of women used rhythm or withdrawal which required no source. The Family Protection Association accounted for 5.8 percent of all users. The source of method varied according to method (Table 8-9): pharmacies were most important for pill users (68 percent), private doctors for IUD users (73 percent). Forty-nine percent of female sterilizations had been performed in public hospitals.

The Ministry of Health started to offer family planning services through its MCH Centers in 1979. Pills are available in most centers and IUD's in a few (there were 69 MCH Centers in 1981). Family planning services, however, are

not promoted in the MCH centers and are provided only at the client's request. This is reflected in Table 8-9 that shows that only about 2.5 percent of current users of pills or IUD's got their supplies at MCH centers.

#### 8.6 Reason Not Using

Women who were not currently using contraception were asked if they thought they could get pregnant. If no, they were asked why, and if yes they were asked their reason for not using. As Tables 8-10 and 8-11 show, over half of non-users could not get pregnant either because they were already pregnant, were sterile or subfecund or not sexually active. Another 18 percent desired to become pregnant. The others gave a variety of reasons for not using including fear of side effects (8 percent), no knowledge of contraception (2 percent), and other vague answers (10 percent). Among non-users, those in rural areas were somewhat more likely to be exposed to pregnancy (49.6 percent) than in other urban areas, or the three largest cities (44 and 42 percent, respectively). However, rural women were more likely to desire pregnancy (23 percent versus 19 and 14 percent, respectively).

#### 8.7 Desire to Use Contraception

Among non-users a relatively low percentage--5 percent--stated that they desired to use contraception (Table 8-12). As shown in the last two tables, over half of non-users are not exposed to the risk of pregnancy. The percentages who desire to use vary as expected--for example the percentage is higher in Amman, Zarka and Irbid and among higher parity women--but the differences are not great, and in no category is the percentage greater than 8 percent.

Those who desired to use were asked what method they preferred, and where they would obtain it. The methods preferred resemble those currently used--IUD and pill are the most popular (Table 8-13). Pill is the most frequently mentioned method in rural areas and among the less educated; IUD was preferred most often in the urban areas and among more educated women. Rhythm is the third most frequent response followed by sterilization.

Of those who named a method 29 percent could not name a source. Private physician was the most often named source (41 percent), followed by pharmacy (17 percent). Two percent named the Family Protection Association as the source of their preferred method.

#### 8.8 Need for Family Planning Services

As in other maternal and child health surveys, an estimated percentage in need of family planning has been estimated by combining the responses to several of the questions already discussed. A woman is defined as in need if she is not currently pregnant, does not desire to become pregnant, is not using an effective contraceptive method, and is exposed to the risk of pregnancy. By this definition 19.5 percent of women who were interviewed were in need (Table 8-14). In Table 8-12, it was noted that 5.1 percent of non-users (equivalent to 3.8 percent of all currently married women) desired to use a method. The gap between 3.8 desiring to use and 19.5 percent represents women who are exposed to the risk of pregnancy and do not desire to use contraception, but do not wish to become pregnant.

*In Need*

The percentage at risk differs widely by residence in Table 8-14, ranging from 16 percent in the three largest cities to 21 percent in other urban areas to 24 percent in rural areas. The need for services is high among the highest parity women. It is also higher among those with less education, those who are not employed and those who have never used contraception.

Table 8-15 presents the percent distribution of those in need--the numerators of the rates shown in Table 8-14. This distribution indicates the characteristics of those who need to be served. About half of the women who need to be served, for example are without education. Thirty-four percent live in Amman, Zarka and Irbid, 26 percent in other urban areas and 40 percent are rural. Forty-two percent of women needing services have six or more children and 83 percent have never used contraceptives.

### 8.9 Conclusions

Data from the 1983 survey indicate a relatively low level of contraceptive use, and a very small increase in use in the 7 years before the survey. Very few non-users--only 5 percent--stated they desired to use a method. However, the survey does suggest a potential demand for contraception among those not using. Many recent pregnancies were unplanned. Of those non-users who did not desire to use a method, many also stated they did not desire to become pregnant, yet were exposed to the risk of pregnancy. There is a large pool of potential users who can be considered in need of contraception--19.5 percent of all currently married childbearing age women as defined here, 24 percent in rural areas.

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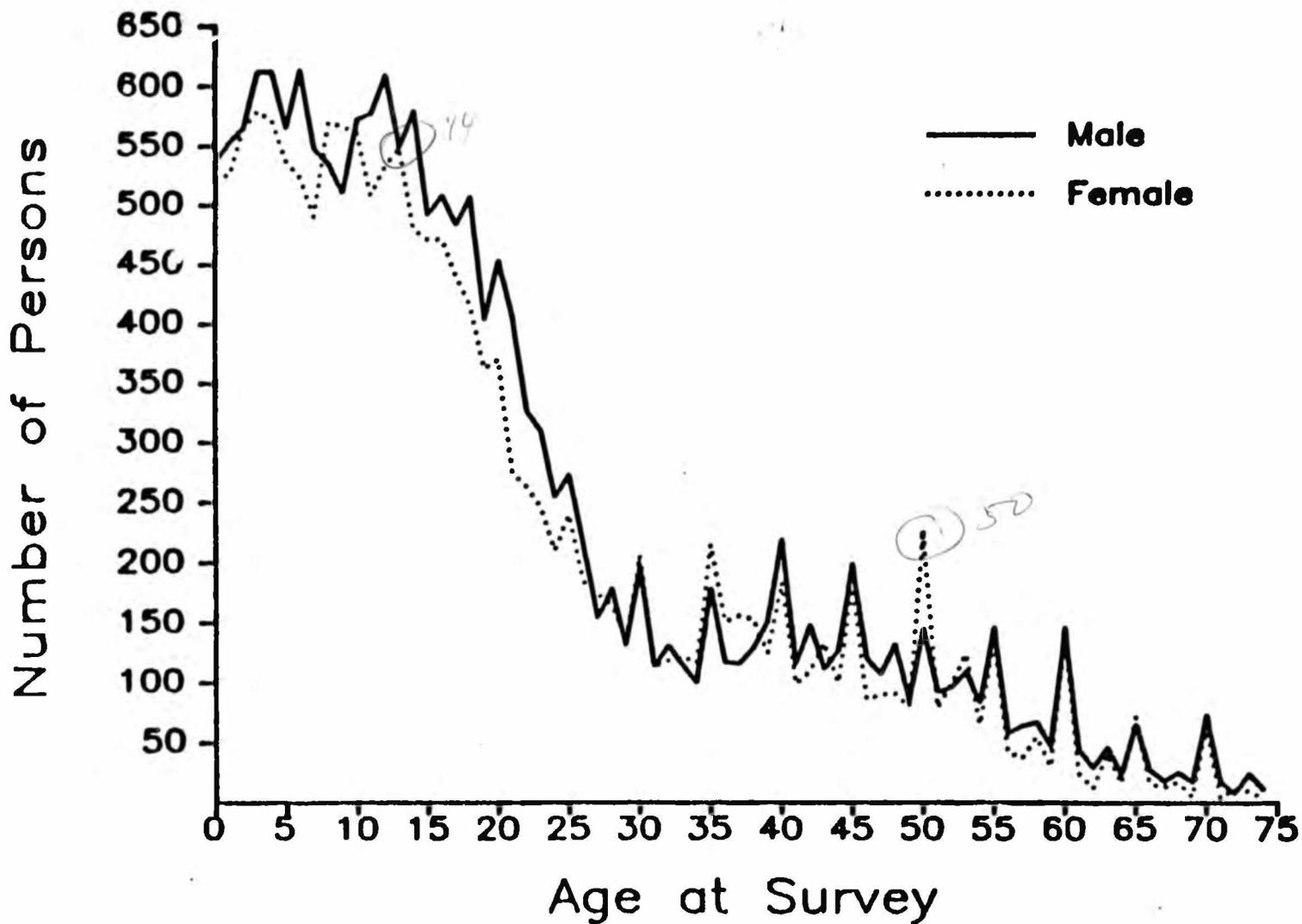


Figure 3-1: Reported Number of Persons by Single Years of Age and Sex  
Jordan Fertility and Family Health Survey

Cumulative No. of Births per Woman

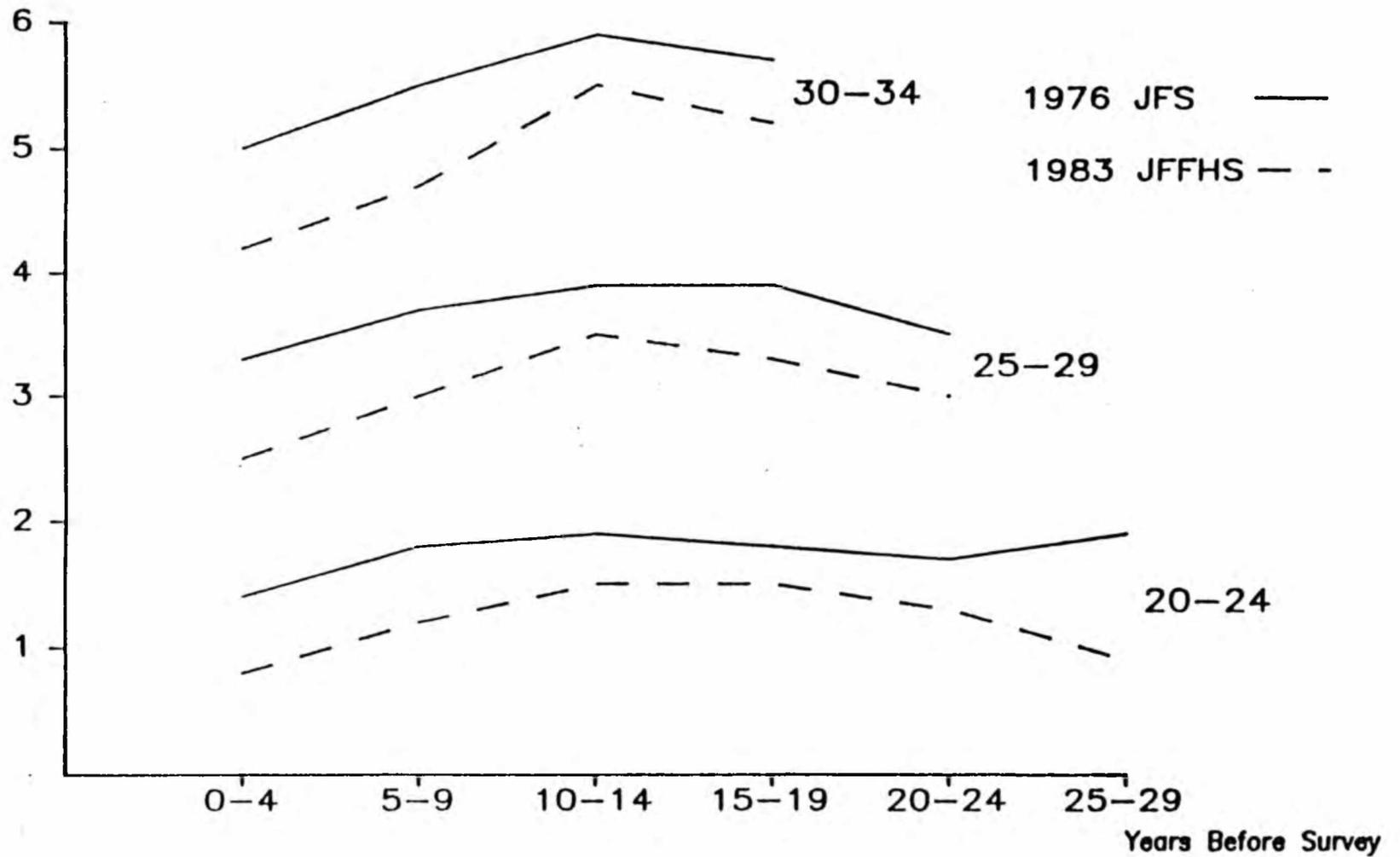


Figure 7-1 Cumulative Period Fertility (F) to Age Group 20-24, 25-29, and 30-34 by Years before Survey

1976 Jordan Fertility Survey and 1983 Jordan Fertility and Family Health Survey

TABLE 2-1

Household and Individual Completion Status  
1983 Jordan Fertility and Family Health Survey

<u>A. Households</u>	<u>Number</u>
Total selected households	6068
Vacant	689
Locked, no one home	150
Other Non-Complete	180
Households Completed	5049
Percent Complete <sup>a</sup>	94.0
<u>B. Individual Respondents</u>	
No. of eligible respondents per household: 0	1217
1	3700
2	121
3	11
Total Possible Respondents Identified	3975
Complete Individual Interviews	3939
Percent Identified Respondents <sup>b</sup> Interviewed	99.1
Combined Household-Individual Completion Rate	93.2

<sup>a</sup>(5049/(6068-689))

<sup>b</sup> 3939/3975

TABLE 3-1

Population by Single Years of Age, Sex and Residence,  
1983 Jordan Fertility and Family Health Survey

Age	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
0	1060	536	524	697	337	360	363	199	164
1	1078	553	525	714	368	346	364	185	179
2	1129	565	564	764	386	378	365	179	186
3	1191	612	579	804	416	388	387	196	191
4	1183	612	571	786	407	379	397	205	192
5	1101	564	537	756	388	368	345	176	169
6	1136	613	523	783	430	353	353	183	170
7	1037	547	490	701	361	340	330	186	150
8	1104	535	569	759	363	396	345	172	173
9	1075	509	566	759	356	403	316	153	163
10	1132	572	560	770	380	390	362	192	170
11	1085	577	508	777	403	374	308	174	134
12	1141	609	532	792	430	362	349	179	170
13	1096	548	548	781	394	387	315	154	161
14	1058	579	479	768	432	336	290	147	143
15	962	491	471	696	353	343	266	138	128
16	979	508	471	723	373	350	256	135	121
17	923	483	440	675	356	319	248	127	121
18	922	507	415	660	361	299	262	146	116
19	765	403	362	571	310	261	194	93	101
20	823	453	370	611	342	269	212	111	101
21	678	404	274	515	306	209	163	98	65
22	589	326	263	446	253	193	143	73	70
23	555	309	246	425	242	183	130	67	63
24	464	254	210	344	194	150	120	60	60
25	513	273	240	366	199	167	147	74	73
26	400	215	185	292	162	130	108	53	55
27	328	154	174	246	120	126	82	34	48
28	344	179	165	240	135	105	104	44	60
29	268	131	137	204	101	103	64	30	34
30	402	196	206	257	128	129	145	68	77
31	227	114	113	165	76	89	62	38	24
32	250	131	119	175	92	83	75	39	36
33	237	115	122	171	80	91	66	35	31
34	217	100	117	170	79	91	47	21	26
35	394	179	215	257	119	138	137	60	77
36	268	117	151	205	91	114	63	26	37
37	272	116	156	199	84	115	73	32	41
38	282	129	153	218	100	118	64	29	35
39	276	151	125	211	114	97	65	37	28
40	403	219	184	262	143	119	141	76	65
41	215	116	99	171	94	77	44	22	22
42	258	148	110	193	109	84	65	39	26

TABLE 3-1 (CONTINUED)

Population by Single Years of Age, Sex and Residence,  
1983 Jordan Fertility and Family Health Survey

Age	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
43	244	111	133	190	84	106	54	27	27
44	227	127	100	165	95	70	62	32	30
45	378	199	179	261	138	123	117	61	56
46	206	120	86	152	88	64	54	32	22
47	197	107	90	148	78	70	49	29	20
48	223	132	91	172	107	65	51	25	26
49	165	85	80	126	67	59	39	18	21
50	372	145	227	259	97	162	113	48	65
51	171	92	79	129	67	62	42	25	17
52	195	96	99	140	65	75	55	31	24
53	233	109	124	176	82	94	57	27	30
54	148	83	65	107	58	49	41	25	16
55	282	146	136	194	110	84	88	36	52
56	100	58	42	70	37	33	30	21	9
57	101	64	37	78	48	30	23	16	7
58	122	67	55	92	47	45	30	20	10
59	77	47	30	67	41	26	10	6	4
60	284	146	138	182	86	96	102	60	42
61	68	44	24	52	32	20	16	12	4
62	41	29	12	37	25	12	4	4	0
63	87	46	41	63	32	31	24	14	10
64	40	24	16	27	17	10	13	7	6
65	136	65	71	88	42	46	48	23	25
66	43	27	16	39	25	14	4	2	2
67	31	18	13	27	15	12	4	3	1
68	42	25	17	32	17	15	10	8	2
69	22	17	5	17	13	4	5	4	1
70	133	73	60	76	42	34	57	31	26
71	21	17	4	19	16	3	2	1	1
72	20	8	12	17	7	10	3	1	2
73	34	24	10	24	17	7	10	7	3
74	15	11	4	12	9	3	3	2	1
75+	<u>319</u>	<u>180</u>	<u>139</u>	<u>209</u>	<u>114</u>	<u>95</u>	<u>110</u>	<u>66</u>	<u>44</u>
Total	34597	17994	16603	24526	12785	11741	10071	5209	4862

TABLE 3-2

Jordan: Percent Distribution, 5-year Age Groups  
by Sex, Several Data Sources

Age	Total				Males				Females			
	1976 JFS	1979 Census	1981 JDS	1983 JFFHS	1976 JFS	1979 Census	1981 JDS	1983 JFFHS	1976 JFS	1979 Census	1981 JDS	1983 JFFHS
0-1	3.9	4.1	3.7	3.1	4.0	4.0	3.7	3.0	3.8	4.1	3.7	3.2
1-4	14.6	14.8	14.5	13.2	14.7	14.8	14.6	13.0	14.5	14.9	14.5	13.5
5-9	17.6	17.2	17.0	15.8	17.7	17.1	17.3	15.4	17.3	17.2	16.7	16.2
10-14	15.9	14.6	16.0	15.9	16.5	14.7	16.3	16.0	15.4	14.5	15.6	15.8
15-19	11.0	11.1	12.7	13.1	10.9	11.2	12.7	13.3	11.0	11.0	12.7	13.0
20-24	6.7	7.3	7.3	9.0	6.0	7.3	7.4	9.7	7.3	7.4	7.2	8.2
25-29	5.7	5.5	4.9	5.3	5.2	5.5	4.5	5.3	6.1	5.5	5.2	5.4
30-34	4.9	5.0	4.1	3.9	4.6	4.8	3.6	3.7	5.2	5.2	4.6	4.1
35-39	4.7	4.7	4.3	4.3	4.5	4.8	4.0	3.9	5.1	4.6	4.7	4.8
40-44	3.9	4.1	3.7	3.9	4.0	4.1	3.6	4.0	3.9	4.1	3.9	3.8
45-49	2.9	3.2	3.1	3.4	3.2	3.2	3.4	3.6	2.7	3.2	2.8	3.2
50-54	2.3	2.5	3.0	3.2	2.5	2.6	2.7	2.9	2.2	2.4	3.3	3.6
55-59	1.3	1.7	1.7	2.0	1.4	1.7	1.8	2.1	1.3	1.7	1.6	1.8
60+	4.5	4.1	4.0	3.9	4.9	4.1	4.4	4.2	4.2	4.1	3.6	3.5

TABLE 3-3

Percent Distribution of Ever-Married Women 15-49 by Residence,  
 1976 Jordan Fertility Survey, 1981 Jordan Demographic Survey, and  
 1983 Jordan Fertility and Family Health Survey

	1976	1981	1983
<u>Residence</u>	<u>JFS</u>	<u>JDS</u>	<u>JFFHS</u>
Amman, Zarka, Irbid	56	47	46
Other Urban	14	25	25
Rural	<u>30</u>	<u>28</u>	<u>29</u>
Total	100	100	100



TABLE 3-5

Percent Distribution of Women 15-49 by Age Group: Ever-Married and All Women From Individual and Household (HH) Questionnaires, 1983 Jordan Fertility and Family Health Survey

Age Group	Ever Married		All Women	
	Individual	HH	Individual <sup>a</sup>	HH
15-19	5.2	5.1	30.8	30.6
20-24	14.4	14.5	19.2	19.3
25-29	17.5	17.4	12.8	12.8
30-34	15.5	15.5	9.6	9.6
35-39	19.1	19.2	11.2	11.3
40-44	15.4	15.4	8.9	8.9
45-49	12.9	12.9	7.4	7.5
Total	100.0	100.0	100.0	100.0

<sup>a</sup>Estimated from proportion ever-married on Household Form.

TABLE 3-6

Jordan: Percent of Women 15-49 Ever-Married  
by Age Group, Several Data Sources

Age Group	1976 JFS			1979 Census	1981 JDS			1983 JFFHS		
	Total	Urban	Rural	Total	Total	Urban	Rural	Total	Urban	Rural
15-19	19.5	16.2	29.0	20.5	12.9	11.7	16.4	9.4	8.6	11.4
20-24	64.1	58.1	77.7	64.4	53.8	52.1	59.1	42.0	40.6	45.7
25-29	87.4	84.6	94.0	86.7	82.7	81.8	85.0	76.3	74.0	81.5
30-34	95.3	94.2	97.2	93.7	93.1	93.2	92.9	90.1	88.6	93.8
35-39	92.4	96.4	99.6	96.2	96.4	96.2	96.7	94.9	94.5	95.9
40-44	98.0	97.7	98.6	97.4	97.1	96.6	98.4	96.8	97.2	95.9
45-49	98.3	98.1	99.1	97.6	97.3	97.0	98.2	97.1	96.1	100.0
<b>Total</b>										
15-49	65.7	63.9	70.4	68.8	61.2	60.0	64.2	56.0	54.7	59.2

TABLE 3-7

Jordan: Percent Distribution of Women 15-49 by Marital Status, Several Recent Data Sources

<u>Marital Status</u>	1976	1979	1981	1983 JFFHS	
	<u>JFS</u>	<u>Census</u>	<u>JDS</u>	<u>Indiv</u>	<u>HH</u>
Never Married	34.3	31.2	38.8	43.9	43.9
Married	62.9	65.6	58.8	53.2	53.6
Separated/Divorced	0.9	2.3	0.6	1.0	0.4
Widowed	1.9	0.9	1.7	1.9	1.9
Unknown	-	-	-	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0

TABLE 3-8

Jordan: Mean Number of Children Born Alive Per  
Woman by Age, Several Recent Data Sources

Age Group	1976 <u>JFS</u>	1979 <u>Census</u>	1981 <u>JDS</u>	1982 <u>JMS</u>	1983 <u>JFFHS</u>
15-19	0.2	0.2	0.1	0.1	0.1
20-24	1.6	1.3	1.2	1.1	0.9
25-29	3.7	3.3	3.3	3.3	3.0
30-34	5.6	5.3	5.4	5.2	5.0
35-39	7.1	6.8	7.0	6.9	6.6
40-44	8.4	7.7	8.1	7.9	7.5
45-49	<u>8.6</u>	<u>8.0</u>	<u>8.4</u>	<u>8.1</u>	<u>7.8</u>
15-49	3.6	3.4	3.4	3.4	3.1

Mean Number of Children Born Alive Per Woman by Age and Residence,  
 1976 Jordan Fertility Survey and  
 1983 Jordan Fertility and Family Health Survey

Age Group	1976 JFS			1983 JFFHS		
	Total	Urban	Rural	Total	Urban	Rural
15-19	0.2	0.1	0.2	0.1	0.1	0.1
20-24	1.6	1.3	2.1	0.9	0.8	1.2
25-29	3.7	3.5	4.2	3.0	2.8	3.4
30-34	5.6	5.4	6.1	5.0	4.9	5.3
35-39	7.1	6.9	7.5	6.6	6.4	6.9
40-44	8.4	8.3	8.5	7.5	7.4	7.9
45-49	8.6	8.4	9.3	7.8	7.6	8.3

Indicators of Prenatal Care During Pregnancy Before Last  
Birth, by Residence and Education: Women with a Birth  
in the 5 Years Before Interview  
1983 Jordan Fertility and Family Health Survey

A.	<u>Prenatal Care</u>	<u>Total</u>	<u>Residence</u>			<u>Education</u>		
			<u>Amman</u>	<u>Other</u>	<u>Rural</u>	<u>1-6</u>		
			<u>Zarka</u>			<u>Urban</u>	<u>None</u>	<u>years</u>
	Yes	58.1	70.8	57.8	40.3	43.8	60.9	73.5
	No	41.9	29.1	42.2	59.7	56.1	39.1	26.5
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	No. of Cases (Panel A)	2800	1227	711	862	1144	726	930
B.	<u>Source of Prenatal Care</u>							
	Private physician	42.6	51.8	26.0	39.2	37.0	37.3	50.1
	MCH/health center	25.2	21.0	36.0	23.1	28.8	27.8	20.9
	Public hospital	15.1	11.9	15.6	22.8	17.0	18.1	11.8
	UNWRA	5.7	3.5	12.9	2.6	8.0	7.5	2.8
	Village clinic	2.6	0.6	4.4	5.5	4.4	1.6	1.9
	Private hospital	2.5	2.5	1.0	4.0	1.4	1.6	3.8
	University Hospital	1.5	1.8	1.7	0.6	0.4	0.9	2.8
	Other	4.6	6.8	2.2	2.0	3.0	4.7	5.7
	Unknown	0.2	0.1	0.2	0.3	0.0	0.5	0.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
C.	<u>Month of First Exam</u>							
	1-3	57.8	63.5	46.9	57.3	50.7	54.0	65.1
	4-6	35.9	31.7	47.5	32.9	40.9	38.9	30.3
	7+	6.3	4.8	6.6	9.8	8.4	6.6	4.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
D.	<u>Number of Tetanus Injections</u>							
	None	90.8	91.4	89.7	90.4	88.9	92.3	91.1
	1	4.6	3.6	6.2	5.2	5.4	4.1	4.3
	2	4.0	4.3	3.9	3.5	4.4	3.2	4.3
	3+	0.7	0.7	0.3	0.9	1.2	0.5	0.3
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	No. of Cases (Panels B-D)	1626	660	411	347	400	442	684

Place of Last Birth by Residence And Education: Women with a  
 Birth During the 5 Years Preceding the Survey  
 1983 Jordan Fertility and Family Health Survey

Place of Last Birth	Total	Residence			Education		
		Amman Zarka Irbid	Other Urban	Rural	None	1-6 Years	7+Years
<u>Hospital Deliveries</u>							
Public hospital	41.6	42.5	41.6	40.4	38.7	42.8	44.3
Private hospital	17.8	30.6	8.9	7.0	7.4	15.8	32.0
<u>Home Deliveries</u>							
Home--Dayah	21.5	13.5	24.9	29.9	29.7	23.1	10.0
Home--midwife	15.6	11.9	22.4	15.4	17.8	16.0	12.7
Home--no assistance	2.2	0.7	1.4	5.1	4.5	0.8	0.4
Home--physician	0.4	0.6	0.4	0.2	0.2	0.8	0.4
Home--unknown/other	<u>0.8</u>	<u>0.2</u>	<u>0.4</u>	<u>2.0</u>	<u>1.6</u>	<u>0.5</u>	<u>0.1</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	2800	1227	711	862	1144	726	930

TABLE 4-3

Percent of Ever-Married Women 15-49 Who Reported at Least One  
Pregnancy Ended Before 6 Months, by Residence and Education by Age Group,  
1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	Amman		<u>Rural</u>	Education		
		<u>Zarka</u> <u>Irbid</u>	<u>Other</u> <u>Urban</u>		<u>None</u>	<u>1-6</u>	<u>7+</u>
Total	20.4	19.1	21.0	22.0	23.3	22.3	15.0
<u>Age</u> <u>Group</u>							
15-19	2.9	4.9	1.8	1.5	0.0	3.5	3.3
20-24	10.6	10.8	10.6	10.2	15.6	16.2	7.1
25-29	15.9	15.7	16.2	16.1	12.5	20.0	15.1
30-34	22.1	17.8	29.5	23.4	19.1	25.6	22.5
35-39	24.4	22.4	24.3	27.8	25.4	23.1	23.4
40-44	27.2	25.7	27.7	29.3	25.1	34.5	27.9
45-49	28.5	26.7	23.9	35.7	29.4	25.9	23.5

TABLE 4-4

Percent of Ever-Married Women Aged 15-49 Reporting One or More Pregnancy Ended Before 6 Months Who Received Medical Treatment and Were Hospitalized by Residence and Education, 1983 Jordan Fertility and Family Health Survey

	<u>Percent Receiving Medical Treatment</u>	<u>Percent Hospitalized</u>	<u>n</u>
Total	56.0	33.0	804
<u>Residence</u>			
Amman, Zarka, Irbid	57.4	33.1	347
Other Urban	56.9	34.8	204
Rural	53.4	31.2	253
<u>Education</u>			
None	54.8	29.4	398
1-6	58.7	39.0	218
7+	55.3	33.5	188

TABLE 4-5

Indicators of Post Natal Care for Last-Born Child by Residence and Education: Women with a Birth During the Last the 5 Years Before Interview, 1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Residence</u>			<u>Education</u>		
		<u>Amman Zarka Irbid</u>	<u>Other Urban</u>	<u>Rural</u>	<u>None</u>	<u>1-6 Years</u>	<u>7+Years</u>
<b>A. Exam Before 1st birthday</b>							
Yes	42.8	52.2	42.3	29.7	32.0	44.3	54.8
No	57.1	47.5	57.7	70.3	67.9	55.5	45.1
Don't Know	0.1	0.2	0.0	0.0	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases (Panel A)	2800	1227	711	862	1144	726	930
<b>B. Sick or Well Baby Exam</b>							
Sick	50.3	41.2	55.2	67.5	61.4	51.9	41.3
Well baby	49.7	58.8	44.8	32.5	38.6	48.1	58.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>C. Age at First Exam</b>							
<1 month	6.4	7.6	5.3	4.7	4.9	6.5	7.5
1-3 months	68.5	68.6	67.8	69.1	66.7	69.3	69.4
4-6 months	18.4	17.6	18.9	19.9	21.0	18.9	16.3
7-12 months	6.7	6.1	8.0	6.3	7.4	5.3	6.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>D. Place of First Infant Exam</b>							
Private physician	47.7	53.8	37.1	44.7	40.8	47.3	52.8
Public hospital	18.7	14.7	22.7	23.9	23.3	18.4	15.6
MCH/health center	14.9	11.6	21.1	15.7	17.0	16.8	12.1
UNWRA	4.9	4.7	7.7	2.0	6.9	5.6	3.0
Village clinic	3.4	0.5	4.7	9.4	6.3	2.8	1.8
University Hospital	1.6	2.0	1.3	0.8	0.0	1.7	2.8
Other	8.8	12.5	5.3	3.5	5.5	7.5	12.1
Don't remember	0.1	0.2	0.0	0.0	0.3	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases (Panels B-D)	1193	641	297	255	365	321	507

TABLE 4-6  
 Percentage of Children Less Than 5 Years Old With  
 Diarrhea in the Past 2 Weeks, by Age and Characteristics of Mother  
 1983 Jordan Fertility and Family Health Survey

	<u>Percent with Diarrhea</u>	<u>Total No. of Children</u>
Total	7.7	5659
<u>Child's Age</u>		
<1	13.6	1140
1	12.3	1059
2	6.8	1131
3	3.5	1156
4	2.9	1173
<u>Residence</u>		
Amman, Zarka, Irbid	6.8	2355
Other urban	6.8	1432
Rural	9.5	1872
<u>Mother's Age</u>		
15-24	10.8	1110
25-34	7.5	2585
35+	6.3	1964
<u>Mothers Education</u>		
None	7.1	2303
1-6 years	7.6	1534
7+ years	8.6	1822
<u>Mother's Number of Living Children</u>		
1-3	10.3	1505
4-5	7.2	1389
6+	6.3	2752
<u>Mother's Place of Last Birth</u>		
Public hospital/ clinic	8.5	2239
Private hospital	8.3	922
Home	6.7	2383

TABLE 4-7

Percentage of Children Less Than 5 Years  
Old with Diarrhea in the Past 2 Weeks, by Household Characteristics  
1983 Jordan Fertility and Family Health Survey

	<u>Percent with Diarrhea</u>	<u>Total No. of Children</u>
<u>No. of Rooms in House</u>		
1-4	7.4	5099
5+	10.2	537
<u>Source of Drinking Water</u>		
Private tap	7.6	4509
Common tap	5.4	222
Tankers	4.8	393
Well	11.0	446
River, spring	22.7	44
<u>Type of Toilet</u>		
Private septic latrine	7.5	5273
Public septic latrine	10.1	207
None	11.0	173
<u>Refrigerator</u>		
Yes	7.2	4213
No	9.3	1439
<u>Electricity</u>		
Yes	7.5	4992
No	9.0	667

TABLE 4-8

Children Under 5 Years Old with Diarrhea in the  
Past 2 Weeks, by Type of Treatment, Residence, and Mother's Education,  
1983 Jordan Fertility and Family Health Survey

<u>Treatment</u>	<u>Total</u>	<u>Percent Distribution</u>					
		<u>Residence</u>			<u>Mother's Education</u>		
		<u>Amman, Zarka, Irbid</u>	<u>Other Urban</u>	<u>Rural</u>	<u>None</u>	<u>1-6 Years</u>	<u>7+ Years</u>
None	12.2	11.2	9.2	14.7	14.1	11.1	10.9
Home remedies (soup, tea, etc.)	20.2	18.0	18.4	23.2	20.3	21.4	19.2
Commercial salt/sugar solution	55.5	55.3	64.3	50.8	48.5	60.7	59.0
Complete oral rehydration salts	6.2	8.7	4.1	5.1	9.2	3.4	5.1
Intravenous therapy	0.2	0.6	0.0	0.0	0.0	0.9	0.0
Other	5.5	6.2	4.1	5.7	7.4	2.6	5.8
Don't Know	0.2	0.0	0.0	0.6	0.6	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	436	161	98	177	163	117	156

TABLE 4-9

Percent of Children Less Than 5 Years Old with Vaccination Certificate and Number of Injections for Those Without Certificates, by Residence and Education of Mother, 1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Residence</u>			<u>Education</u>		
		<u>Amman</u> <u>Zarka</u> <u>Irbid</u>	<u>Other</u> <u>Urban</u>	<u>Rural</u>	<u>None</u>	<u>1-6</u> <u>Years</u>	<u>7+ Years</u>
Has Certificate	79.9	81.9	77.8	79.0	75.5	78.9	86.4
No Certificate	20.1	18.1	22.2	21.0	24.5	21.1	13.6
No. of Injections							
0	16.9	14.4	18.2	19.0	20.8	17.1	11.7
1	0.7	0.8	0.3	0.8	1.0	0.7	0.3
2	0.5	0.7	0.4	0.3	0.6	0.5	0.3
3	0.9	0.8	1.6	0.4	1.1	0.9	0.7
4+	1.1	1.2	1.5	0.5	1.0	1.8	0.5
Unknown	0.1	0.1	0.1	0.0	0.0	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	5659	2355	1432	1872	2303	1534	1822

TABLE 4-10

Percent of Children Less Than 5 Years Old With Complete Vaccination Coverage for Polio, DPT and Measles, by Residence and Education of Mother  
1983 Jordan Fertility and Family Health Survey

Vaccine	Total	Residence			Education of Women		
		Amman, Zarka, Irbid	Other Urban	Rural	None	1-6 Years	7+ Years
Polio	78.0	81.0	76.5	75.5	73.6	77.7	83.8
DPT	77.3	80.6	75.8	74.3	72.9	77.1	83.0
Measles	68.3	70.1	68.4	66.1	65.6	66.7	73.0
No. of Cases	5478	2269	1374	1835	2218	1473	1787

NOTE: Includes those with no vaccination certificates and no injections.  
Excludes 181 with no certificate and one or more injections.

TABLE 4-11

Percent Distribution of Number of Doses of Polio, DPT, and Measles Vaccine: Children Less Than 5 Years Old by Age, by Residence and Education of Mother  
1983 Jordan Fertility and Family Health Survey

Immunization	Age (Years)	Doses	Total	Residence			Education (Years)		
				Amman Zarka Irbid	Other Urban	Rural	None	1-6 Years	7+
Polio	<1 yr.	0	46.5	41.8	45.5	52.8	58.1	43.8	37.5
		1	5.6	5.8	6.5	4.7	4.7	4.6	7.3
		2	6.3	6.0	6.5	6.3	7.1	7.1	4.8
		3+	41.6	46.3	41.5	36.1	30.1	44.4	50.4
		Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	1-4 yrs.	0	10.3	8.7	12.2	10.9	14.1	10.8	4.8
		1	0.9	0.7	0.6	1.2	1.0	0.7	0.9
		2	1.7	1.1	1.8	2.2	2.2	1.5	1.0
		3+	87.2	89.5	85.3	85.7	82.7	87.0	93.3
		Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DPT	<1 yr.	0	48.2	42.3	48.0	55.4	60.7	44.4	39.3
		1	5.0	5.6	6.1	3.4	3.1	4.3	7.3
		2	6.4	6.3	6.1	6.9	6.5	7.4	5.5
		3+	39.9	45.2	39.3	34.0	29.1	43.5	47.4
		Unk.	0.5	0.7	0.4	0.3	0.5	0.3	0.5
		Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	1-4 yrs.	0	10.5	8.7	12.2	11.3	14.5	10.9	4.7
		1	1.1	0.9	0.7	1.4	1.4	0.8	0.9
		2	1.8	1.1	2.0	2.3	2.1	1.8	1.2
		3+	86.7	89.2	85.1	84.8	82.0	86.5	93.2
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Measles	<1 yr.	0	74.3	69.6	75.5	79.2	80.6	71.0	71.0
		1	21.6	25.1	20.6	18.2	16.5	23.5	24.9
		2+	0.7	0.7	1.4	0.3	0.5	0.9	0.8
		Unk.	3.3	4.7	2.5	2.4	2.4	4.6	3.3
		Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	1-4 yrs.	0	19.4	18.1	19.3	21.2	23.7	20.5	12.8
		1	78.8	80.3	76.9	78.2	74.8	77.6	85.0
		2+	1.1	0.6	3.2	0.2	0.9	1.0	1.5
		Unk.	0.7	1.0	0.5	0.3	0.5	0.9	0.7
		Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	<1 year		1103	447	277	379	382	324	397
	1-4 years		4375	1822	1097	1456	1836	1149	1390

TABLE 5-1

Jordan: Rates of Infant and Child Mortality  
by Residence, 1976 Jordan Fertility Survey and  
1983 Jordan Fertility and Family Health Survey

Mortality Rates	Total		Urban		Rural	
	1976	1983	1976	1983	1976	1983
	JFS	JFFHS	JFS	JFFHS	JFS	JFFHS
190	.066	.026	.061	.022	.078	.035
491	.025	.013	.020	.016	.035	.013
590	.089	.039	.080	.038	.110	.042

NOTE: 190 for children born 1-4 years before survey;  
590 for children born 5-9 years before survey;

$$491 = (590 - 190) / (1 - 190)$$

TABLE 5-2

Jordan: Rates of Infant and Child Mortality by Year of Birth,  
 Children Whose Mothers Were Under Age 35 at Birth,  
 1976 Jordan Fertility Survey and  
 1983 Jordan Fertility and Family Health Survey

<u>Rate</u>	<u>Survey</u>	<u>1951- 1955</u>	<u>1956- 1960</u>	<u>1961- 1965</u>	<u>1966- 1970</u>	<u>1971- 1975</u>	<u>1976- 1980</u>
190	1976 JFS	.126	.112	.083	.070	.067	-
	1983 JFFHS	-	.104	.065	.052	.038	.033
491	1976 JFS	.102	.059	.039	.013	-	-
	1983 JFFHS	-	.032	.025	.015	.005	-
590	1976 JFS	.215	.164	.119	.082	-	-
	1983 JFFHS	-	.133	.088	.066	.043	-

TABLE 5-3

Direct Estimates of Infant Mortality Rate by Age, of Mother, Births  
1-4 Years Before Interview, 1983 Jordan Fertility and Health Survey

<u>Age Group</u>	<u>190</u>
15-19	.049
20-24	.031
25-29	.020
30-34	.019
35-39	.018
40-44	.031
45-49	.054
Total	.026

TABLE 5-4

Sex Ratios of Births By Period of Birth and Survival Status  
at Interview, 1983 Jordan Fertility and Family Health Survey

Period: Years Before <u>Interview</u>	<u>Males per 100 Females</u>		
	<u>All Births</u>	<u>Surviving Births</u>	<u>Non-Surviving Births</u>
0-4	104	105	97
5-9	108	107	120
10-14	110	111	106
15-19	112	112	107
20-24	122	124	103
25-29	136	132	152

TABLE 5-5

Age at Death in Months, Children  
Born in the 5 Years Before Interview Who Had Died,  
1983 Jordan Fertility and Family Health

<u>Age at Death (Months)</u>	<u>Frequency</u>
0	64
1	20
2	17
3	7
4	7
5	9
6	5
7	4
8	6
9	10
10	0
11	1
12-23	16
24-35	5
36-47	2
48-59	1
Total	174

TABLE 5-6

Comparison of Survey Age Distribution  
of Child Deaths with Model Life Table Distributions,  
1983 Jordan Fertility and Family Health Survey

	Percent of Deaths Under Age 1 <sup>a</sup>	<u>190</u>	<u>e0</u>
1983 JFFHS	86.2	26	-
<u>Model Life Table Region and Level</u>			
West, 23	86.4	19	73.1
North, 24	85.3	15	75.9
East, 22	87.5	35	70.1
South, 23	88.0	44	73.0

<sup>a</sup>Percent 0-1 of those 0-5.

TABLE 5-7

Probability of Dying Before Age 2, 3, and 5 Based  
On Indirect Estimates, 1983 Jordan Fertility and Family Health Survey,  
1976 Jordan Fertility Survey and 1981 Jordan Demographic Survey

<u>Total</u>	<u>Probability of Lying Before Age:</u>		
	<u>2</u>	<u>3</u>	<u>5</u>
1976 JFS	.085	.088	.096
1981 JDS	.073	.077	.083
1983 JFFHS	.047	.040	.047
<u>1983 JFFHS by Sex, Residence,</u>			
<u>and Education of Mother</u>			
<u>Sex</u>			
Male	.035	.037	.050
Female	.058	.044	.044
<u>Residence</u>			
Urban	.031	.037	.049
Rural	.076	.046	.043
<u>Education</u>			
None	.045	.041	.057
1-6 Years	.053	.048	.039
7+ Years	.039	.030	.038

TABLE 5-8

Percent Distribution of Dead Children Who Were  
Born During the 5 Years Preceding the Survey  
by Reported and Diagnosed Cause of Death  
1983 Jordan Fertility and Family Health Survey

<u>Cause of Death</u>	<u>Reported</u>	<u>Symptoms Plus Panel Diagnosis</u>
Accident	19.0	19.5
Tetanus	1.1	3.4
Diarrhea/gastroenteritis	6.9	10.9
Measles	1.1	4.0
Pneumonia/pertussis/ other respiratory diseases	10.9	18.4
Premature/birth defects	7.5	19.5
Other	37.9	1.7
Malnutrition	0.0	0.6
Don't know/unclassified	<u>15.5</u>	<u>21.9</u>
Total	100.0	100.0
No. of Cases	174	174

TABLE 5-9

Percentage of Dead Children Who Were Born in the Last 5 Years  
Preceding the Survey with Symptoms Experienced Before Death  
1983 Jordan Fertility and Family Health Survey

	<u>Total</u>
A. <u>Symptoms During Illness</u>	
High fever	37.8
Unable to open mouth/suck normally	22.2
Emaciated/wasting away	20.7
3 or more loose stools per day	19.3
Cough	17.8
Whooping cough	17.8
Prolonged cough followed by vomiting	16.3
Unable to open mouth to cry	12.6
Red, tearing eyes	11.9
Rash	6.7
Swollen feet	5.2
Red hair	1.5
B. <u>Symptoms Soon Before Death</u>	
3 or more loose stools per day	17.0
Body stiff	11.9
Muscle spasms/convulsion	7.5
Mucus or bloody stool	3.7
Paralysis of one or both legs	2.2
No. of Cases	133

NOTE: Excludes 41 cases where death due to accident.

TABLE 6-1

Estimates of Mean Duration of Breast-feeding and  
Post Partum Amenorrhea by Residence, 1976 Jordan Fertility  
Survey and 1983 Jordan Fertility Family Health Survey

A. Mean Duration of <u>Breast-feeding (Months)</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
1976 JFS	10.9	9.9	12.7
1983 JFFHS	11.4	10.7	12.7
B. Mean Duration of Post- <u>Partum Amenorrhea (Months)</u>			
1983 JFFHS	6.2	5.9	6.9

NOTE: All estimates based on the 1-24 month prevalence/  
incidence method.

TABLE 6-2

Measures of Extent and Duration  
of Breast-feeding, by Selected Characteristics  
1983 Jordan Fertility and Family Health Survey

	Percent Ever Breast-feeding <sup>a</sup>	Mean Duration of Breast-feeding (Months)	Numbers of Cases	
			Women <sup>b</sup>	Births <sup>c</sup>
<b>Total</b>	92.6	11.4	1926	2219
<b>Residence</b>				
Amman, Zarka, Irbid	91.1	10.0	793	909
Other urban	93.8	11.7	486	560
Rural	93.5	12.7	647	750
<b>Education</b>				
None	92.2	13.1	742	836
1-6 years	94.3	10.9	525	615
7+ years	91.7	9.9	659	768
<b>Age</b>				
15-24	91.9	10.3	471	564
25-34	92.4	10.5	842	981
35-44	93.3	13.7	613	674
<b>No. of Living Children</b>				
0-3	90.5	9.5	642	741
4-5	94.1	10.8	437	509
6+	93.4	13.1	847	961
<b>Employment Status</b>				
Not employed	92.5	11.5	1847	2130
Employed	93.7	9.8	79	88
<b>Place of Last Birth</b>				
Public hospital/ clinic	92.6	11.4	767	894
Private hospital	85.2	9.3	324	372
Home	95.5	12.4	793	904
<b>Contraceptive Use</b>				
Current user	88.2	7.8	415	470
Past user	93.7	11.1	382	438
Never user	93.4	12.8	1129	1311

<sup>a</sup>Last births, women with a birth 1-24 months before interview.

<sup>b</sup>Women with one or more births 1-24 months before interview.

<sup>c</sup>Total births 1-24 months before interview.

- NOTE: 1. Percent ever breast-feeding based on women with a birth 1-24 months before interview; mean duration based on 1-24 month prevalence/incidence method.
2. Where number of cases do not add to total, cases with unknown values are excluded.

TABLE 6-3

Day of Initiating Breast-feeding, Women  
 With a Birth in the Past 2 Years Who Breast-fed  
 1983 Jordan Fertility and Family Health Survey

<u>Day Begun</u>	<u>Percentage Distribution</u>
Day of Birth	30.9
Next Day	45.0
Third Day	21.9
Fourth Day or Later	1.9
Don't Know	0.3
Total	100.0
No. of Women	1,783

TABLE 6-4

Percentage of Women by Duration Since Last Birth and  
Current Infant Feeding Status,  
1983 Jordan Fertility and Family Health Survey

Months Since Birth	Not Breast- feeding	Breast-feeding			Breast-feeding Only	No. of Cases
		Have Given Other Milk	Have Given Other Food	Have Given Both		
1-3	19.1	17.9	11.4	4.7	46.9	341
4-6	23.6	11.0	27.0	17.5	20.9	263
7-9	37.7	2.6	36.6	14.5	8.6	268
10-12	51.1	0.4	31.6	14.7	2.2	231
13-15	67.2	0.4	23.7	6.7	2.0	253
16-18	71.6	0.0	19.9	6.1	2.4	296
19-21	81.6	0.0	13.8	3.3	1.3	152
22-24	85.3	0.0	12.3	1.6	0.8	122
						1926

TABLE 6-5

Percent Distribution of Women with a Birth in the Past 24 Months Preceding the Survey Who Had Breast-fed, by Reason for Stopping Breast-feeding  
1983 Jordan Fertility and Family Health Survey

<u>Reason Stopped Breast-feeding</u>	<u>Percent Distribution</u>
No more/insufficient milk	28.0
Child old enough	24.1
Mother pregnant	22.2
Child refused	10.0
Weakness of mother/mother's blood	8.3
Child ill	2.4
Mother doesn't want	1.9
Mother works/separated from child	1.3
Other	<u>1.8</u>
Total	100.0
No. of Cases	783

TABLE 6-6

Percentage Breast-feeding and Average Current Frequency of  
Breast-feeding by Duration Since Last Birth for Women with Last  
Birth 1-24 Months Before Interview,  
1983 Jordan Fertility and Family Health Survey

<u>Duration Since Birth(Months)</u>	<u>Percentage Breast-feeding</u>	<u>Mean No. of Feedings Per Day</u>	<u>No. of Women</u>	
			<u>Total</u>	<u>Breast-feeding</u>
1-3	80.9	7.9	341	276
4-6	76.4	7.7	263	201
7-9	62.3	8.7	268	167
10-12	48.9	7.6	231	113
13-15	32.8	8.4	253	83
16-18	28.4	7.7	296	84
19-21	18.4	7.3	152	28
22-24	14.7	6.9*	122	18

\*Less than 25 women

TABLE 6-7

Percent Distribution of Women with a Birth in the Past 24 Months Who Had Given Nonmaternal Milk, by Type of Milk Given and Reason for Giving, 1983 Jordan Fertility and Family Health Survey

A. <u>Type of Milk Given</u>	<u>Percent of Women</u>
Powdered	96.3
Fresh cow, goat or sheep	2.1
Other	<u>1.6</u>
Total	100.0
 B. <u>Reason For Giving Other Milk</u>	
No more/insufficient milk	65.9
Mother pregnant	7.7
Child refused breast	6.3
Weakness of mother/mother's blood	5.9
Child old enough	4.8
 Mother works/separated from child	1.7
Child ill	1.1
Mother doesn't want	0.8
Other	2.8
Unknown	<u>3.0</u>
Total	100.0
 No. of Cases	915

TABLE 6-8

Percent Distribution of Women Who Had Births in the Past  
24 Months and Never Breast-fed the Last Child  
by Reason Never Breast-fed  
1983 Jordan Fertility and Family Health Survey

<u>Reason Never Breastfed</u>	<u>Percent Distribution</u>
Insufficient/no milk	58.0
Child died	14.0
Mother sick/weak	9.1
Child refused	6.3
Child sick	2.1
Mother works/separted	1.4
Mother doesn't want	1.4
Other	4.2
Unknown	<u>3.5</u>
Total	100.0
No. of Cases	143

Mean Number of Children Born Alive Per Woman by Age and  
Marriage Duration, By Residence and Education,  
1983 Jordan Fertility and Family Health Survey

	Age Group	Total	Residence			Years of Education		
			Amman Irbid Zarka	Other Urban	Rural	None	1-6 yrs	7+ yrs
A.	<u>All Women</u>							
	15-19	0.1	0.1	0.1	0.1	0.2	0.2	0.0
	20-24	0.9	0.7	0.9	1.2	1.4	1.6	0.7
	25-29	3.0	2.6	3.3	3.4	3.6	3.9	2.3
	30-34	5.0	4.7	5.4	5.3	5.6	5.7	4.1
	35-39	6.6	6.3	6.8	6.9	7.1	6.8	5.0
	40-44	7.5	7.2	7.6	7.9	8.0	7.2	5.1
	45-49	7.8	7.4	8.1	8.3	8.3	7.1	5.7
B.	<u>Ever Married Women</u>							
	15-19	0.8	0.7	0.9	0.7	0.9	1.0	0.6
	20-24	2.1	1.8	2.2	2.5	2.5	2.6	1.9
	25-29	3.9	3.6	4.2	4.2	4.1	4.5	3.4
	30-34	5.6	5.4	5.9	5.2	6.0	6.1	4.7
	35-39	6.9	6.7	7.1	7.2	7.4	7.2	5.4
	40-44	7.8	7.5	7.8	8.2	8.2	7.5	5.4
	45-49	8.0	7.6	8.4	8.3	8.3	7.4	6.1
C.	<u>Marriage Duration (Years)</u>							
	0-4	1.1	1.1	1.2	1.1	1.2	1.1	1.1
	5-9	3.3	3.2	3.4	3.4	3.2	3.6	3.3
	10-14	5.3	5.1	5.4	5.4	5.4	5.5	5.0
	15-19	6.8	6.7	7.2	6.7	7.1	7.1	5.7
	20+	8.3	8.0	8.5	8.6	8.6	7.9	6.6

Age-Specific Fertility Rates, Total Fertility Rates,  
General Fertility Rates, and Crude Birth Rates, by Residence,  
1983 Jordan Fertility and Family Health Survey

<u>Age</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
15-19	49	47	55
20-24	228	215	265
25-29	335	312	392
30-34	305	288	350
35-39	233	217	277
40-44	127	103	192
45-49	40	35	52
GFR	172	159	207
CBR	35	33	40
TFR	6.6	6.1	7.9
1981 JDS			
TFR	7.1	6.8	8.0

NOTE: Based on 3 year period before survey.

Age Specific Fertility Rates and Total Fertility Rates  
Several Recent Surveys, Jordan

Age	1976 JFS (1971-75) <sup>a</sup>	1981 JDS (1979-81)	1982 JMS (1981-82)	1983 JFFHS (1980-83)
15-19	133	87	40	49
20-24	344	252	219	228
25-29	358	340	332	335
30-34	336	316	321	305
35-39	245	239	245	233
40-44	104	134	117	127
45-49	11	49	45	40
TFR	7.7	7.1	6.6	6.6

NOTE: JFS Jordan Fertility Survey  
 JDS Jordan Demographic Survey  
 JMS Jordan Manpower Survey  
 JFFHS Jordan Fertility and Family Health Survey

<sup>a</sup>Period covered in estimate

TABLE 7-4

Cohort Comparisons of Births Per Woman, Births  
Per Ever-Married Woman and Proportion Ever-Married,  
For Cohorts Defined by Age in 1981, 1981 Jordan Demographic  
Survey and 1983 Jordan Fertility and Family Health Survey

Age of Cohort in 1981	Total		Urban		Rural	
	1981	1983	1981	1983	1981	1983
	<u>JDS</u>	<u>JFFHS<sup>a</sup></u>	<u>JDS</u>	<u>JFFHS</u>	<u>JDS</u>	<u>JFFHS</u>
<b>A. Mean Number of Births Per Woman</b>						
15-19	0.1	0.3	0.1	0.2	0.1	0.3
20-24	1.2	1.7	1.1	1.5	1.4	2.1
25-29	3.3	3.9	3.2	3.7	3.6	4.2
30-34	5.4	5.9	5.3	5.7	5.7	6.4
35-39	7.0	7.0	7.0	6.9	7.1	7.2
40-44	8.1	7.7	7.9	7.6	8.5	8.1
<b>B. Mean Number of Births Per Ever-Married Woman</b>						
15-19	0.8	1.3	0.8	1.2	0.8	1.5
20-24	2.2	2.8	2.1	2.7	2.3	3.2
25-29	4.0	4.6	3.9	4.5	4.2	4.9
30-34	5.8	6.3	5.7	6.3	6.1	6.6
35-39	7.3	7.3	7.4	7.1	7.3	7.7
40-44	8.3	8.0	8.4	7.9	8.6	8.2
<b>C. Proportion Ever-Married</b>						
15-19	.13	.20	.12	.19	.16	.23
20-24	.54	.59	.52	.56	.59	.66
25-29	.83	.83	.82	.82	.85	.86
30-34	.93	.93	.93	.90	.93	.98
35-39	.96	.96	.96	.97	.97	.93
40-44	.97	.97	.97	.96	.98	.98

<sup>a</sup>For JFFHS age at interview 17-21, 22-26, 27-31, 32-36, 37-41, 42-46.

TABLE 7-5

**Cohort Period Fertility Rates, Cumulative Cohort and  
Period Fertility Rates and P/F Ratios by Age at Interview  
1983 Jordan Fertility and Family Health Survey**

Age Group of Cohort at End of Period	No. of Women Ever-Married in Cohort	Years Before the Survey						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34
<b>A. Cohort Period Fertility Rates</b>								
15-19	204	13.7	28.3	48.9	43.7	43.5	28.8	22.6
20-24	567	148.6	218.1	259.9	245.1	213.2	150.6	
25-29	690	328.0	354.7	390.0	362.1	341.1		
30-34	611	341.0	345.5	395.0	387.1			
35-39	751	287.9	306.2	336.1				
40-44	607	198.9	225.0					
45-49	509	93.5						
<b>B. Cumulative Fertility of Cohorts at End of Period (P)</b>								
15-19		.07	.15	.26	.23	.25	.14	.11
20-24		.89	1.35	1.53	1.47	1.21	.87	
25-29		2.99	3.30	3.42	3.02	2.57		
30-34		5.00	5.15	5.00	4.51			
35-39		6.59	6.53	6.19				
40-44		7.52	7.31					
45-49		7.78						
<b>C. Cumulative Fertility of Cohorts within Periods (F)</b>								
15-19		.07	.14	.25	.23	.22	.17	.04
20-24		.81	1.23	1.55	1.46	1.29	.92	
25-29		2.45	3.01	3.50	3.27	3.00		
30-34		4.16	4.73	5.48	5.20			
35-39		5.60	6.27	7.16				
40-44		6.59	7.39					
45-49		7.06						
<b>D. P/F Ratios</b>								
20-24		1.10	1.10	.99	1.01	.94	.95	
25-29		1.22	1.10	.98	.92	.86		
30-34		1.20	1.09	.91	.87			
35-39		1.18	1.04	.86				
40-44		1.14	.99					
		1.10						

TABLE 7-6

Cohort Period Fertility Rates by Marriage Duration,  
Cumulative Cohort and Period Fertility Rates and  
P/F Ratios, 1983 Jordan Fertility and Family Health Survey

Marriage Duration at End of Period	No. of Ever-Married Women in Cohort	Years Before the Survey						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34
<b>A. Cohort Period Fertility Rates</b>								
0-4	646	447.6	424.4	428.1	382.3	335.3	252.8	140.1
5-9	710	458.6	451.4	468.0	419.4	374.7	262.3	
10-14	666	386.9	380.8	429.1	424.7	389.4		
15-19	653	313.7	330.1	382.6	402.7			
20-24	368	240.7	269.6	355.0				
25-29	480	142.1	213.2					
30-34	151	78.1						
<b>B. Cumulative Fertility of Cohorts at End of Period (P)</b>								
0-4		2.24	2.12	2.14	1.91	1.68	1.26	.70
5-9		4.42	4.40	4.25	3.77	3.14	2.01	
10-14		6.33	6.16	5.92	5.26	3.96		
15-19		7.72	7.57	7.17	5.97			
20-24		8.77	8.52	7.75				
25-29		9.23	8.81					
30-34		9.20						
<b>C. Cumulative Fertility of Cohorts Within Periods (F)</b>								
0-4		2.24	2.12	2.14	1.91	1.68	1.26	.70
5-9		4.53	4.38	4.48	4.01	3.55	2.58	
10-14		6.47	6.28	6.63	6.13	5.5		
15-19		8.03	7.93	8.54	8.15			
20-24		9.24	9.28	10.31				
25-29		9.95	10.35					
30-34		10.34						
<b>D. P/F Ratios</b>								
5-9		.98	1.00	.95	.94	.88	.75	
10-14		.98	.98	.89	.86	.72		
15-19		.96	.95	.84	.73			
20-24		.95	.92	.75				

TABLE 7-7

Cohort Period Fertility Rates by Duration Since First Birth,  
Cumulative Cohort and Period Fertility Rates and P/F Ratios, 1983 Jordan Fertility  
and Family Health Survey

Years Since First Birth	No. of Women in Cohort	Years Before the Survey						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34
<b>A. Cohort Period Fertility Rates</b>								
0-4	668	752.5	779.3	767.5	753.3	749.8	820.8	996.4
5-9	675	442.7	436.6	469.2	440.1	435.2	412.4	
10-14	695	367.0	372.1	406.7	432.2	412.9		
15-19	709	296.0	304.6	359.6	400.0			
20-24	599	182.7	216.5	322.6				
25-29	267	90.6	161.3					
30-34	31	12.9						
<b>B. Cumulative Fertility of Cohorts at End of Period (P)</b>								
0-4		3.76	3.90	3.84	3.77	3.75	4.10	4.98
5-9		6.11	6.02	6.11	5.95	6.28	7.04	
10-14		7.86	7.97	7.98	8.44	9.11		
15-19		9.45	9.51	10.24	11.11			
20-24		10.42	11.32	12.72				
25-29		11.77	13.53					
30-34		13.59						
<b>C. Cumulative Fertility of Cohorts Within Periods (F)</b>								
0-4		3.76	3.90	3.84	3.77	3.75	4.10	4.98
5-9		5.98	6.08	6.18	5.97	5.93	6.17	
10-14		7.81	7.94	8.22	8.13	7.99		
15-19		9.29	9.46	10.02	10.13			
20-24		10.20	10.55	11.63				
25-29		10.66	11.35					
30-34		10.72						
<b>D. P/F Ratios</b>								
5-9		1.02	.99	.99	1.00	1.06	1.14	
10-14		1.01	1.00	.97	1.04	1.14		
15-19		1.02	1.01	1.02	1.10			
20-24		1.02	1.07	1.09				



TABLE 7-8 (CONTINUED)

Cohort Period Fertility Rates and Cumulative Cohort  
and Period Fertility, 1976 Jordan Fertility Survey and  
1983 Jordan Fertility and Family Health Survey

## C. Cumulative Period Fertility

Central Age	Survey	Period in Calendar Years							Age Group of Cohort at End of Period <sup>a</sup>
		1949 -53	1954 -58	1959 -63	1964 -68	1969 -73	1974 -78	1979 -83	
15	76	.53	.57	.52	.38	-	-	-	15-19
	83	-	.19	.25	.27	.27	.17	.07	
20	76		2.06	2.07	1.86	1.26	-	-	20-24
	83		.98	1.37	1.58	1.63	1.33	.84	
25	76			4.14	3.81	3.12	-	-	25-29
	83			3.13	3.43	3.58	3.12	2.52	
30	76				5.75	4.83	-	-	30-34
	83				5.35	5.54	4.83	4.25	
35	76					6.36	-	-	35-39
	83					7.22	6.34	5.70	
40	76						-	-	40-44
	83						7.43	6.70	
45	76							-	45-49
	83							7.16	
47	76								45-49
	83								

<sup>a</sup>Cohorts defined by age at interview 18-22, 23-27, 28-32, 43-47 in July-September 1976 and 15-19, 20-24...45-49 in August-September 1983.

TABLE 7-9

Cumulative Period Fertility Rates by  
Residence, 1976 Jordan Fertility Survey  
and 1983 Jordan Fertility and Family Health Survey

	Age at End of Period	Survey	Period					
			1959	1964	1969	1974	1979	
			63	68	73	78	83	
Total	25-29	76	4.14	3.81	3.12	-	-	
		83	3.13	3.43	3.58	3.12	2.52	
	30-34	76		5.75	4.83	-	-	
		83		5.35	5.54	4.83	4.25	
	35-39	76			6.36	-	-	
		83			7.22	6.34	5.70	
	Urban	25-29	76	4.12	3.60	2.89	-	-
			83	3.24	3.49	3.53	3.03	2.35
		30-34	76		5.55	4.51	-	-
83				5.39	5.42	4.68	4.00	
35-39		76			5.95	-	-	
		83			7.01	6.14	5.35	
Rural		25-29	76	4.19	4.33	3.69	-	-
			83	2.86	3.26	3.73	3.35	2.98
		30-34	76		6.24	5.63	-	-
	83			5.24	5.85	5.25	4.90	
	35-39	76			7.42	-	-	
		83			7.75	6.89	6.62	

Number of Births By Year of Occurrence for Single  
Years Before Interview, 1983 Jordan Fertility and Family Health Survey

<u>Single Years Before Interview</u>	<u>Number of Births</u>
1	1158
2	1129
3	1183
4	1232
5	1239
6	1082
7	1170
8	1047
9	1091
10	1025

Sex Ratios at Birth (Males Per 100 Females)  
by Duration Since Birth at Survey and Residence  
1983 Jordan Fertility and Family Health Survey

<u>Years Before Survey</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>
<b>A. Sex Ratios</b>			
0-4	104	104	104
5-9	108	106	112
10-14	110	111	108
15-19	112	111	114
20-24	122	129	103
25-29	136	144	117
<b>B. No. of Births</b>			
0-4	5790	3854	1936
5-9	5301	3676	1625
10-14	4776	3354	1422
15-19	3281	2402	879
20-24	1739	1306	433
25-29	493	356	137

Proximate Determinants of Fertility,  
 1976 Jordan Fertility Survey and  
 1983 Jordan Fertility and Family Health Survey

		<u>TFR</u>	<u>Cm</u> Index of Marriage	<u>Cc</u> Index of Contraception	<u>Ci</u> Indexed Post-Partum Infecundability	<u>TF</u> Total Fecundity Rate
JFS	1976	7.7	.720	.802	.800	16.7
JFFHS	1983	6.6	.595	.803	.820	16.8

Intervals Between Live Births (Months) by Age at Interview,  
and Residence, all Intervals Started in the 5 Years  
Before Interview, 1983 Jordan Fertility and Family Health Survey

	Quartiles (Months)			Average (Trimean)	No. of Intervals
	T25	T50	T75		
<u>Total</u>	18.1	24.9	38.9	26.7	5755
<u>Age</u>					
15-19	15.3	22.4	25.3	21.4	144
20-24	15.5	21.7	27.5	21.6	1003
25-29	16.2	23.7	32.3	24.0	1467
30-34	18.5	24.4	36.3	25.9	1154
35-39	21.8	29.1	45.5	31.3	1129
40-49	23.9	36.2	-	39.7*	858
<u>Residence</u>					
Urban	18.1	25.8	43.7	28.4	3839
Rural	18.2	24.2	34.1	25.2	1916

\*Based on fewer than 25 cases

Planning Status of Most Recent Pregnancy, Women with Births  
in the Past 5 Years, by Selected Characteristics,  
1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Planning Status</u>			<u>Unknown</u>	<u>No. of Cases</u>
		<u>Planned</u>	<u>Mistimed</u>	<u>Unwanted</u>		
Total	100.0	67.3	13.6	17.4	1.7	2370
<u>Residence</u>						
Amman, Zarka, Irbid	100.0	63.1	15.1	19.9	2.0	1167
Other Urban	100.0	72.4	10.4	15.9	1.2	566
Rural	100.0	70.5	13.7	14.3	1.6	637
<u>Age Group</u>						
15-19	100.0	89.6	7.3	1.0	2.1	96
20-24	100.0	81.1	16.5	2.0	0.5	407
25-29	100.0	69.1	19.7	9.0	2.2	553
30-34	100.0	65.6	15.0	17.4	2.0	454
35-39	100.0	58.7	10.3	28.8	2.1	465
40-44	100.0	59.0	6.4	33.2	1.4	283
45-49	100.0	52.7	4.5	42.0	0.9	112
<u>Number of Living Children</u>						
0-1	100.0	92.3	5.7	0.0	2.0	247
2	100.0	79.5	16.7	3.4	0.4	264
3	100.0	73.0	17.8	7.0	2.3	259
4	100.0	74.1	16.3	8.5	1.0	294
5	100.0	70.6	15.6	13.9	0.0	231
6+	100.0	54.6	12.5	30.6	2.3	1075
<u>Education</u>						
None	100.0	64.6	9.4	23.9	2.1	838
1-6 Years	100.0	67.7	12.5	18.5	1.4	650
7+	100.0	69.6	18.4	10.5	1.5	882
<u>Employment Status</u>						
Doesn't Work	100.0	67.2	13.4	17.8	1.6	2266
Works	100.0	70.2	17.3	8.7	3.8	104

Pregnancy Intention of Currently Married  
Women 15-49 by Selected Characteristics,  
1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Currently Pregnant</u>	<u>Currently Desire Pregnancy</u>	<u>Do not Desire Pregnancy</u>	<u>Don't Know</u>	<u>Unknown</u>	<u>No. of Cases</u>
<u>Total</u>	100.0	19.0	18.7	58.7	1.4	2.2	3735
<u>Residence</u>							
Amman Zarka, Irbid	100.0	15.3	16.0	64.9	0.9	2.9	1721
Other Urban	100.0	20.5	19.1	56.6	1.9	1.8	921
Rural	100.0	23.4	22.6	50.8	1.7	1.5	1093
<u>Age Group</u>							
15-19	100.0	20.4	44.3	22.4	0.5	12.4	201
20-24	100.0	26.8	27.9	38.3	1.1	6.0	553
25-29	100.0	28.8	19.0	48.8	1.8	1.6	674
30-34	100.0	23.0	16.4	57.7	2.2	0.7	586
35-39	100.0	17.2	16.1	64.7	1.4	0.6	708
40-44	100.0	10.2	13.6	74.8	1.3	0.2	559
45-49	100.0	2.6	9.3	86.3	0.7	1.1	454
<u>Number of Living Children</u>							
0-1	100.0	18.1	51.4	17.6	0.4	12.5	558
2	100.0	26.9	23.2	47.4	2.1	0.3	327
3	100.0	24.2	18.9	54.3	2.2	0.3	359
4	100.0	22.8	16.3	59.1	1.2	0.5	416
5	100.0	21.1	14.5	63.6	0.8	0.0	365
6+	100.0	15.3	8.6	74.0	1.6	0.5	1710
<u>Education</u>							
None	100.0	17.9	18.5	61.5	1.5	0.7	1590
1-6 yea	100.0	20.9	18.2	57.7	1.6	1.6	933
7+ year	100.0	19.0	19.4	55.8	1.2	4.7	1212
<u>Employment Status</u>							
Doesn't	100.0	19.2	18.6	58.6	1.4	2.1	3550
Works	100.0	14.1	21.1	60.0	0.5	4.3	185

TABLE 8-3

Currently Married Women 15-49 Currently Using Contraception  
by Residence, Age, and Method,  
1983 Jordan Fertility and Family Health Survey

	Total	Residence			Age						
		Amman Zarka Irbid	Other Urban	Rural	15-19	20-24	25-29	30-34	35-39	40-44	45-49
<u>Currently Using</u>	<u>26.0</u>	<u>36.8</u>	<u>22.0</u>	<u>12.3</u>	<u>4.0</u>	<u>16.8</u>	<u>25.1</u>	<u>32.9</u>	<u>30.4</u>	<u>31.7</u>	<u>25.5</u>
Pill	7.8	10.8	6.1	4.4	1.0	6.9	8.6	11.1	8.6	6.6	6.4
IUD	8.3	12.8	7.2	2.1	3.0	5.2	11.3	12.6	7.6	8.4	5.3
Sterilization <sup>a</sup>	3.8	4.8	3.2	2.7	0.0	0.0	0.6	2.1	6.9	9.0	5.7
Rhythm	2.9	4.2	2.1	1.6	0.0	2.9	2.8	2.9	3.6	3.2	2.6
Withdrawal	2.4	3.1	2.3	1.4	0.0	1.3	0.9	3.1	2.8	3.4	4.4
Condom	0.6	0.8	0.6	0.2	0.0	0.5	0.7	1.0	0.6	0.5	0.2
Injection	0.2	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.9
Other Female <sup>b</sup>	0.1	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.0	0.0
<u>Not Using</u>	<u>74.0</u>	<u>63.2</u>	<u>78.0</u>	<u>87.7</u>	<u>96.0</u>	<u>83.2</u>	<u>74.9</u>	<u>67.1</u>	<u>69.6</u>	<u>68.3</u>	<u>74.5</u>
No. of Cases	3735	1721	921	1093	201	553	674	586	708	559	454

<sup>a</sup>Includes male sterilizations (1 case)

<sup>b</sup>Includes diaphragm, foam, jelly, tablets

TABLE 8-4

Currently Married Women 15-49 Currently Using Contraception,  
by Education, Number of Living Children, and Method  
1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Education</u>			<u>Number of Living Children</u>					
		<u>None</u>	<u>1-6</u>	<u>7+</u>	<u>0-1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6+</u>
<u>Currently Using</u>	<u>26.0</u>	<u>16.7</u>	<u>29.5</u>	<u>35.5</u>	<u>7.7</u>	<u>24.5</u>	<u>31.2</u>	<u>30.3</u>	<u>33.4</u>	<u>28.5</u>
Pill	7.8	4.8	10.2	9.7	3.4	7.7	9.2	10.8	10.1	7.7
IUD	8.3	3.7	8.3	14.4	1.8	10.4	10.6	11.3	12.6	7.9
Sterilization	3.8	4.1	5.1	2.3	0.0	1.2	1.7	1.9	3.8	6.4
Rhythm	2.9	1.6	2.3	5.1	1.8	3.1	5.3	2.9	2.7	2.7
Withdrawal	2.4	2.0	2.8	2.6	0.7	1.5	3.1	1.9	3.0	3.0
Condom	0.6	0.1	0.8	1.1	0.0	0.6	1.1	1.0	1.1	0.5
Injection	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Other Female	0.1	0.0	0.0	0.2	0.0	0.0	0.3	0.4	0.0	0.0
<u>Not Using</u>	<u>74.0</u>	<u>83.3</u>	<u>70.5</u>	<u>64.5</u>	<u>92.3</u>	<u>75.5</u>	<u>68.8</u>	<u>69.7</u>	<u>66.6</u>	<u>71.5</u>
No. of Cases	3735	1590	933	1212	558	327	359	416	365	1710

TABLE 8-5

Percentage of Currently Married Women 15-49 Currently Using  
Contraception by Residence and Selected Characteristics  
1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Amman Zarka Irbid</u>	<u>Other Urban</u>	<u>Rural</u>
<u>Total</u>	26.0	36.8	22.0	12.4
<u>Age Group</u>				
15-19	4.0	3.7	7.3	1.5
20-24	16.8	23.4	13.3	8.8
25-29	25.1	37.0	22.4	11.1
30-34	32.9	46.1	26.9	16.1
35-39	30.4	42.9	23.0	15.5
40-44	31.7	42.4	28.7	16.2
45-49	25.5	36.8	23.0	10.2
<u>Education</u>				
None	16.7	27.8	15.4	8.7
1-6	29.5	38.9	24.8	14.9
7+	35.5	41.9	29.8	20.8
<u>No. of Living Children</u>				
0-1	7.7	12.6	4.4	2.0
2	24.5	34.1	18.2	9.1
3	31.2	40.5	24.7	18.8
4	30.3	44.7	23.5	12.9
5	33.4	50.0	28.6	16.4
6+	28.5	40.4	25.9	13.6
<u>Employment Status</u>				
Not Working	25.5	36.7	21.7	11.7
Working	34.6	38.0	29.3	30.6

TABLE 8-6

Currently Married Women 15-49 Currently Using  
Contraception, by Education and Selected Characteristics,  
1963 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Education (years)</u>		
		<u>None</u>	<u>1-6</u>	<u>7+</u>
<u>Total</u>	26.0	16.7	29.5	35.5
<u>Age Group</u>				
15-19	4.0	0.0	1.8	5.8
20-24	16.8	11.1	14.6	19.7
25-29	25.1	5.5	21.4	38.0
30-34	32.9	13.2	37.8	48.9
35-39	30.4	18.3	34.4	57.0
40-44	31.7	22.0	52.7	54.8
45-49	25.5	19.6	38.0	64.5
<u>Residence</u>				
Amman, Zarka, Irbid	36.8	27.8	38.9	41.9
Other Urban	22.0	15.4	24.8	29.8
Rural	12.4	8.7	14.9	20.8
<u>No. of Living Children</u>				
0-1	7.7	5.2	4.1	10.0
2	24.5	9.2	11.0	34.9
3	31.2	9.6	21.1	45.7
4	30.3	13.9	25.2	43.9
5	33.4	15.5	34.6	54.3
6+	28.5	19.5	41.3	47.7
<u>Employment Status</u>				
Not Working	25.5	16.8	29.3	35.2
Working	34.6	15.4	*	37.8

\*Less than 25 cases

TABLE 8-7

Currently Married Women 15-49 Currently  
Using Contraception by Method and Residence,  
1976 Jordan Fertility Survey and 1983 Jordan Fertility  
and Family Health Survey

	<u>Total</u>		<u>Urban</u>		<u>Rural</u>	
	<u>1976</u>	<u>1983</u>	<u>1976</u>	<u>1983</u>	<u>1976</u>	<u>1983</u>
	<u>JFS</u>	<u>JFFHS</u>	<u>JFS</u>	<u>JFFHS</u>	<u>JFS</u>	<u>JFFHS</u>
<u>Currently Using</u>	<u>22.8</u>	<u>26.0</u>	<u>29.5</u>	<u>31.7</u>	<u>7.0</u>	<u>12.3</u>
Pill	11.9	7.8	15.4	9.2	3.8	4.4
IUD	2.0	8.3	2.7	10.9	0.3	2.1
Sterilization	1.9	3.8	2.2	4.2	1.2	2.7
Rhythm	2.1	2.9	2.8	3.4	0.5	1.6
Withdrawal	3.3	2.4	4.3	2.8	1.0	1.4
Condom	1.4	0.6	1.9	0.8	0.2	0.2
Injection	-	0.2	-	0.3	-	0.0
Other Female	0.1	0.1	0.2	0.1	0.0	0.0
<u>Not Using</u>	<u>77.2</u>	<u>74.0</u>	<u>70.5</u>	<u>68.4</u>	<u>93.0</u>	<u>87.7</u>
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>No. of Cases</u>	<u>3455</u>	<u>3735</u>	<u>2207</u>	<u>2642</u>	<u>1248</u>	<u>1093</u>

TABLE 8-8

Currently Married Women 15-49 Who Are Currently Using  
Contraceptives: Percent Distribution of Source of Contraception  
by Residence, 1983 Jordan Fertility and Family Health Survey

<u>Source of Contraception</u>	<u>Total</u>	<u>Amman Zarka Irbid</u>	<u>Other Urban</u>	<u>Rural</u>
Private Physician	34.7	35.5	36.9	27.4
Pharmacy	23.1	23.9	21.7	21.5
Private hospital	2.0	1.6	2.0	3.7
Public hospital	10.9	9.0	12.8	17.0
MCH center/clinic	1.7	1.4	2.5	1.5
Family Protection Association	5.8	7.4	3.0	2.2
University Hospital	0.2	0.2	0.0	0.7
UNWRA	0.2	0.0	0.5	0.7
Not applicable*	20.8	20.2	19.7	25.2
Other	0.6	0.8	0.5	0.0
Don't know	0.1	0.0	0.5	0.0
Total	100.0	100.0	100.0	100.0
No. of Cases	971	633	203	135

\*Includes couples using rhythm and withdrawal

TABLE 8-9

Currently Married Women 15-49 Who Are Currently Using Pill,  
IUD or Sterilization: Percent Distribution of Source by Method  
1983 Jordan Fertility and Family Health Survey

<u>Source of Contraception</u>	<u>Pill</u>	<u>IUD</u>	<u>Female Sterilization</u>
Private physician	18.6	73.5	33.6
Pharmacy	68.3	1.9	0.0
Private hospital	0.0	0.3	12.1
Public hospital	5.2	6.8	49.3
MCH center/clinic	2.4	2.6	0.0
Family Protection Association	4.8	13.5	0.0
University Hospital	0.0	0.3	0.7
UNWRA	0.3	0.0	0.7
Other	<u>0.3</u>	<u>1.0</u>	<u>3.5</u>
Total	100.0	100.0	100.0
No. of Cases	290	310	140

TABLE 8-10

Percent Distribution of Currently Married Women Aged 15-49  
Who Are Not Using Contraception by Reason Not Using  
Contraception by Residence  
1983 Jordan Fertility and Family Health Survey

<u>Reasons for Non-use</u>	<u>Total</u>	<u>Residence</u>		
		<u>Amman Zarka Irbid</u>	<u>Other Urban</u>	<u>Rural</u>
<u>Reasons Related to pregnancy, fecundity, sexual activity</u>				
<u>Total</u>	<u>54.7</u>	<u>58.0</u>	<u>55.6</u>	<u>50.5</u>
Currently pregnant	28.6	28.4	29.1	28.3
Menopause/subfecund/ operation	17.3	19.0	18.0	14.8
Birth last 3 months	4.7	5.1	4.6	4.5
Not sexually active	4.1	5.5	3.9	2.9
<u>Other Reasons</u>				
<u>Total</u>	<u>45.2</u>	<u>42.1</u>	<u>44.4</u>	<u>49.6</u>
Wants to get pregnant	18.3	14.1	18.5	23.0
Husband wants children	3.5	3.7	2.7	3.9
Recent birth >3 months	3.3	5.5	1.9	1.9
Fear of side effects	8.1	8.1	7.1	8.9
No Knowledge of Contraception	2.2	2.7	1.8	1.9
Other/don't know	9.8	8.0	12.4	10.0
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
No. of Cases (Non-users)	2764	1088	718	958

TABLE 8-11

Percent Distribution of Currently Married Women Aged 15-49  
Who Are Not Using Contraception by Reason Not Using  
Contraception by Education  
1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Education</u>		
		<u>None</u>	<u>1-6 yrs</u>	<u>7+yrs</u>
<u>Reasons for Non-use</u>				
Reasons related to pregnancy, fecundity, sexual activity				
<u>Total</u>	54.7	56.5	51.9	54.2
Currently pregnant	28.6	22.4	31.9	36.2
Menopause/subfecund/operation	17.3	25.8	12.9	6.5
Birth last 3 months	4.7	3.7	4.6	6.7
Not sexually active	4.1	4.6	2.5	4.8
<u>Other Reasons</u>				
<u>Total</u>	45.2	43.5	48.0	45.9
Wants to get pregnant	18.3	15.6	19.1	22.3
Husband wants children	3.5	3.5	3.3	3.6
Recent birth >3 months	3.3	1.9	4.3	5.0
Fear of side effects	8.1	10.1	8.4	4.6
No knowledge of contraception	2.2	1.7	2.7	2.4
Other/don't know	9.8	10.7	10.2	8.0
<u>Total</u>	100.0	100.0	100.0	100.0
No. of Cases (Non-Users)	2764	1324	658	782

TABLE 8-12

Percent Distribution of Currently Married Women 15-49 Who are Not Using Contraception by Desire to Use Contraception, Exposure Status and Selected Characteristics, 1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Exposed To Pregnancy</u>		<u>Not Exposed to Pregnancy<sup>a</sup></u>	<u>Unknown</u>	<u>No. of Cases</u>
		<u>Desire To Use</u>	<u>Don't Desire To Use</u>			
<u>Total</u>	100.0	5.1	38.1	54.7	2.0	2764
<u>Residence</u>						
Amman, Zarka, Irbid	100.0	6.4	33.0	57.9	2.7	1088
Other Urban	100.0	4.6	38.0	55.6	1.8	718
Rural	100.0	4.0	40.0	50.5	1.5	958
<u>Age Group</u>						
15-19	100.0	2.1	52.3	45.1	0.5	193
20-24	100.0	5.7	40.9	52.2	1.3	460
25-29	100.0	6.9	38.4	53.3	1.4	505
30-34	100.0	6.4	37.9	52.7	3.1	393
35-39	100.0	5.5	43.0	49.3	2.2	493
40-44	100.0	5.2	37.4	54.7	2.6	382
45-49	100.0	1.2	19.8	76.3	2.7	338
<u>Education</u>						
None	100.0	3.4	38.4	56.5	1.7	1324
1-6 Years	100.0	5.5	40.0	52.0	2.6	658
7+	100.0	7.7	36.2	54.1	2.1	782
<u>No. of Living Children</u>						
0-1	100.0	1.4	44.5	53.4	0.8	515
2	100.0	4.1	37.7	57.5	0.8	247
3	100.0	5.3	38.5	54.7	1.6	247
4	100.0	6.5	34.5	56.9	2.1	290
5	100.0	4.9	37.0	56.4	1.7	243
6+	100.0	6.6	36.6	53.9	2.9	1222
<u>Employment Status</u>						
Not Working	100.0	5.1	38.7	54.2	2.0	2643
Working	100.0	5.0	26.5	66.1	2.5	121
<u>Previous Contraceptive Use</u>						
Yes	100.0	7.5	24.8	63.9	3.8	733
No	100.0	4.2	42.9	51.5	1.4	2031

NOTE: <sup>a</sup>Not exposed includes women who are currently pregnant, had a birth in the past 3 months, are menopausal, subfecund, or noncontraceptively sterile, are not sexually active, or have an absent husband.

TABLE 8-13

Currently Married Non-users (Women 15-49) Who Desire to Use  
Contraception, by Preferred Method and Source,  
by Residence and Education,  
1983 Jordan Fertility and Family Health Survey  
(Percent Distribution)

A. Preferred Method	Total	Residence			Education		
		Amman	Other		None	1-6yrs	7+
		Zarka Irbid	Urban	Rural			
IUD	36.6	40.9	40.0	25.0	27.4	41.7	40.7
Pills	32.5	31.6	28.9	37.5	37.1	29.2	30.9
Rhythm	10.5	10.2	4.4	16.7	9.7	6.2	13.6
Sterilization	7.8	7.1	8.9	8.3	12.9	12.5	1.2
Condom	1.1	2.0	0.0	0.0	1.6	2.1	0.0
Any method	1.1	1.0	2.2	0.0	0.0	0.0	2.5
Other	2.6	2.0	2.2	4.2	1.6	2.1	3.7
Don't know	7.8	5.1	13.3	8.3	9.7	6.3	7.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
B. Source of Preferred Method							
Private physician	40.8	45.9	40.0	31.3	24.2	54.2	45.7
Pharmacy	16.7	18.4	17.8	12.5	17.7	12.5	18.5
Public hospital	9.9	6.1	15.6	12.5	14.5	12.5	4.9
MCH/health center	1.6	3.1	0.0	0.0	3.2	0.0	1.2
Family Protection Association	2.1	1.0	4.4	2.1	4.8	2.1	0.0
Don't know	28.8	25.5	22.2	41.7	35.5	18.7	29.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Cases	191	98	45	48	62	48	81

TABLE 8-14

Percentage of Currently Married Women 15-49 Who Are in  
Need of Family Planning Services<sup>a</sup>, by Residence  
and Selected Characteristics,  
1983 Jordan Fertility and Family Health Survey

	<u>Total</u>	<u>Amman Zarka Irbid</u>	<u>Other Urban</u>	<u>Rural</u>
<u>Total</u>	19.5	16.0	20.6	24.3
<u>Age Group</u>				
15-19	12.4	15.0	14.5	7.6
20-24	18.1	15.5	18.7	21.9
25-29	20.0	16.1	24.2	22.1
30-34	19.6	14.2	23.9	25.3
35-39	23.6	20.2	20.2	32.5
40-44	22.4	16.0	25.2	30.5
45-49	13.9	12.3	12.3	18.0
<u>Education</u>				
None	22.5	18.7	20.5	26.7
1-6 Years	20.4	17.4	23.6	23.0
7+	15.1	13.1	18.1	18.1
<u>No. of Living Children</u>				
0-1	7.5	7.4	10.3	5.2
2	15.6	15.0	15.6	16.7
3	16.7	13.0	16.4	23.8
4	18.5	17.6	21.2	18.2
5	18.6	10.5	24.2	24.6
6+	25.3	20.7	24.4	32.7
<u>Employment Status</u>				
Not Working	20.0	16.5	21.1	24.4
Working	10.3	7.4	9.8	19.4
<u>Previous Contraceptive Use</u>				
Yes	17.5	15.6	17.4	23.6
No	20.5	16.3	21.7	24.4

<sup>a</sup>In need defined as not currently pregnant, not desiring pregnancy and not using contraceptive, with the reason not using not related to pregnancy, subfecundity, or lack of sexual activity.

TABLE 8-15

Percent Distribution of Currently Married Women 15-49 Who Are  
in Need of Family Planning Services<sup>a</sup>, by Residence  
and Selected Characteristics,  
1983 Jordan Fertility Family and Health Survey

	Total	Amman Zarka Irbid	Other Urban	Rural
Total	100.0	38.8	25.9	35.3
<u>Age Group</u>				
15-19	2.9	1.4	0.9	0.6
20-24	12.5	5.0	3.1	4.3
25-29	16.4	5.8	4.7	5.8
30-34	14.4	4.6	4.0	5.8
35-39	23.1	9.5	5.1	8.5
40-44	18.4	7.2	5.0	6.2
45-49	12.4	5.3	3.0	4.1
<u>Education</u>				
None	50.5	14.2	12.0	24.3
1-6 Years	25.2	11.5	7.5	6.3
7+	24.3	13.2	6.3	4.8
<u>No. of Living Children</u>				
0-1	6.1	2.7	1.9	1.4
2	7.5	3.7	1.9	1.9
3	8.6	3.4	1.7	3.4
4	10.8	4.5	2.7	3.6
5	10.2	3.3	3.0	3.9
6+	56.9	21.2	14.5	21.2
<u>Employment Status</u>				
Not Working	95.7	36.6	24.7	34.3
Working	4.3	-	-	-
<u>Previous Contraceptive Use</u>				
Yes	28.6	16.0	5.8	6.8
No	71.4	22.8	20.0	28.6

<sup>a</sup>In need defined as not currently pregnant, not desiring pregnancy and not using contraceptive, with the reason not using not related to pregnancy, subfecundity, or lack of sexual activity.