## SYRIAN ARAB REPUBLIC

OFFICE OF THE PRIME MINISTER
CENTRAL BUREAU OF STATISTICS
in collaboration with
THE WORLD FERTILITY SURVEY

## SYRIA FERTILITY SURVEY 1978

Principal Report - Volume II

# SYRIA FERTILITY SURVEY 1978 

## Principal Report - Volume I

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## PREFACE

The Syria Fertility Survey was the result of a close collaborative effort between the Central Bureau of Statistics (CBS), the Office of the Prime Minister, Government of the Syrian Arab Republic and the World Fertility Survey (WFS) of the International Statistical Institute. The survey, the first of its kind in the country, has gone a long way towards providing the planners with detailed data on nuptiality, fertility, mortality and their determinants.

The principal report of the survey consists of two volumes. The first volume presents the background, methodology and main findings of the survey and the second volume contains the detailed tabulations. Further in-depth analysis will still be required and it is hoped that this report will motivate researchers and analysts to undertake such analysis.

Although vital registration in Syria is close to being complete, periodic demographic surveys are still needed to provide reliable estimates of current fertility and mortality. In carrying out the Syria Fertility Survey, the CBS has gained some very useful experience, particularly in survey design, field enumeration and supervision and data processing. The success of this survey has been made possible by the untiring efforts of the CBS staff in close collaboration with WFS staff. It is hoped that such beneficial co-operation can be repeated in the future.

M. Nader El-Hallak<br>Director-General (Acting)<br>Central Bureau of Statistics<br>Office of the Prime Minister

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The fieldwork of the Syria Fertility Survey was carried out in 1978 and the data processing completed by early 1981. The success of the whole operation was made possible by the active and dedicated participation of a large number of people; unfortunately it is not possible to acknowledge them all individually.

The survey would not have materialized without the keen interest of Dr Farid El-Boustani, the former Director-General of the Central Bureau of Statistics, and the dedicated participation of the project team at the Central Office, particularly Mr M. Kallass (in designing the survey), Mr A.W. Qat'e, Mrs M.N. Hanbali and Mr M. El-Jabi. We wish to thank also Messrs A. Junaid, A.F. Nashawati and S. Safadi for their assistance in the data processing work and Miss H. Daoud for her untiring help at every stage of the survey.

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This part is organized into two chapters. In chapter 1 the objectives of the Syria Fertility Survey (SFS) are briefly outlined and then are followed by a general description of the geography, demography and economy of Syria. The intention is to provide readers who are not familiar with Syria with sufficient background information so as to place the survey findings, presented in part II, in their proper context.

In chapter 2, a detailed description of the SFS is presented. The sample design and implementation, the content of the questionnaires used, the logistics of the fieldwork, recruitment, training and supervision of the personnel engaged in the survey and data processing stages are briefly outlined. The questionnaires used in the survey are reproduced in appendix I.

## THE BACKGROUND OF THE STUDY

### 1.1. OBJECTIVES

The World Fertility Survey (WFS) is an international research project undertaken by the International Statistical Institute (ISI) with the collaboration of the United Nations and in co-operation with the International Union for the Scientific Study of Population (IUSSP). The main objectives of the WFS programme are to assist developing countries in carrying out well-planned and scientifically designed sample surveys, in order to provide high quality data on fertility levels trends and differentials.

The Syria Fertility Survey (SFS), which was carried out as part of the World Fertility Survey programme, was designed to obtain data on human fertility, mortality and other related factors with the aim of enhancing understanding of the changing dynamics of the population in Syria. The SFS data together with the data from the 1976 Population Census and the 1976-79 follow-up Demographic Survey should provide sufficient background information for designing a suitable national population policy in Syria.

In this introductory chapter, a brief description of the country and its population is given, in order to place the findings of the SFS in their proper context.

### 1.2. GEOGRAPHY AND ECONOMY

Situated at the western end of Asia on the eastern end of the Mediterranean, Syria is surrounded by Turkey in the north, Iraq in the east, Lebanon and the Mediterranean Sea in the west, and Jordan and Palestine in the south. More than half of its total land area is composed of desert and rocky mountains. The desert is suitable for grass, and during years of sufficient rains serves as pasture. The mountain areas are suitable for year-round farming.

Physically the country can be divided into four distinct regions:

1. The coastal strip, with its fertile alluvial plains and Mediterranean climate, is intensely cultivated, mainly with citrus fruits.
2. The mountains, which border the coastal plain, spread through the country from north to south and mark the border with Lebanon. They contain forests which produce olives, grapes and apples.
3. The interior region or the plains region comprising the
plains of Damascus, Homs, Hama, Aleppo, Hasakeh and Dar'a is situated to the east of the mountainous region. The region has an abundant supply of water and is the principle wheat-growing area.
4. The desert region is an arid area situated in the southeastern part of the country on the Jordanian and Iraqi borders. It is an area populated by nomadic and seminomadic herdsmen and is suitable for sheep rearing.

Note that the regional divisions used in the survey do not coincide exactly with the geographical regions.

The climate of the Mediterranean Sea generally prevails in the country. The presence of mountains parallel to the coast makes central and eastern Syria very hot in summer and moderately cold in winter. Snow lies on the mountains from late December to April and sometimes even into May.

The country has an annual rainfall of under 10 inches. The mountainous and coastal regions are the areas of the heaviest rains, followed by the northern region (North, Aleppo, Kamishly and Malikieh). The south-eastern and the desert regions are the parts with the least amount of rainfall.

During the last ten years (1970-79), the structure of the Syrian economy has changed considerably and the country is no longer dependent on agriculture, although the agricultural sector still contributes nearly one-fifth of the gross domestic product. The major crops are wheat, barley, cotton and olives. The surplus agricultural output is exported.

The industrial sector is consumer-oriented, the main products being textiles, edible oils, cement and processed hides, etc. The main industrial towns are Damascus, Aleppo, Homs and Lattakia. Oil was discovered in north-east Syria in the mid-1950s and in 1979 the output was estimated to be around eight million tons per annum.

### 1.3. POPULATION SIZE AND GROWTH

Unlike most of the countries in Asia and the Middle East, Syria has a developed civil registration system. However, due to administrative difficulties the coverage is still not one hundred per cent complete. It is estimated that about 70 per cent of births in rural areas are registered, but the proportion rises to nearly 100 per cent in urban areas. Since the registration system is not fully implemented throughout the country, the estimation of demographic parameters mainly depends upon censuses and periodic sample surveys.

## SYRIAN ARAB REPUBLIC



Figure 1.1 Syrian Arab Republic, showing the regions used in the survey

The history of demographic data collection goes back to 1922 when civil registration was introduced. The first official figures of the total population were released by the Director of Civil Registration in 1938. Since then, four Population Censuses (1947, 1960, 1970 and 1976) have been conducted. In addition, the follow-up Demographic Survey was conducted during 1976-79 period.

According to the 1976 Census, the total enumerated population was 8.7 million, of whom nearly 90 per cent were Moslems. With a total land area of 185,000 square kilometres, the average population density is about 45 persons per square kilometre. The population distribution, however, is very uneven, and is generally concentrated in the central strip and the fertile Mediterranean coastal areas. The highest
average density, 160 persons per square kilometre, is found in the western region, and the lowest, 21 persons per square kilometre, in the central areas.

During the last two decades there has been considerable internal movement of the population resulting in rapid urbanization. In the 1960s, the rate of growth of the urban population was around 5 per cent per annum. During the 1970-76 period, this lessened somewhat, but was still at an estimated annual rate of around 4.5 per cent. The general pattern of migration has been very uneven. It varied considerably from one urban centre to another, the main thrust being towards five major cities (Damascus, Aleppo, Homs, Hama and Lattakia).

International migration has always played a very important role in the economic and social development of the Syrian population. In the 1960s, a substantial proportion of the Syrian labour force was employed in Lebanon. In recent years, particularly since the Lebanon crisis, the labour market has shifted to Jordan. Syria is also losing its skilled labour force to oil-rich Arab states, with consequent labour shortages, particularly in the semi-skilled and skilled sector of the economy.

In table 1.1, two estimates of population size and growth are summarized. The two estimates vary considerably. For 1976, the de facto figure which excludes Syrians living abroad is less than the registered population by nearly 1 million. ${ }^{1}$ Both sets of estimates show a very high rate of growth, 3.4 per cent based on census enumerations and 4.2 per cent based on the registered population for the 1970-76 period. It appears that the rate of growth has shown a gradual rise since 1960 .

### 1.4. AGE AND SEX COMPOSITION

High fertility accompanied by a much reduced mortality has resulted in a concentration of population in the younger age groups. According to the 1970 Census, 49 per cent of the population was under 15 years of age. This proportion remained the same in 1976. The median age of the population in 1970 was estimated to be 15.6 years.

The burden of dependency (the ratio of the dependent population aged $0-14$ and 65 and over to the 'working' population aged $15-64$ ), is very high. The number of dependents supported by 100 workers in 1970 was 121 . Even this figure understates the dependency burden because, due to traditional barriers against female employment, the main contributors to the labour force are males. In 1976 the labour force participation rate for males was five times that of females.

Table 1.1 Population growth in the Syrian Arab Republic, 1960-76

| Year | Enumerated <br> population | Registered <br> population |
| :--- | :--- | :--- | :--- | :---: |

Source: ${ }^{\text {a }}$ Central Bureau of Statistics (1977). Statistical Abstract 1977; and Hallak, Mohammed Nader and Alan G. Hill (1980). Levels and Trends in Fertility and Mortality in Syrian Arab Republic. Kamel Abu Jaber, Ed. In Levels and Trends of Fertility and Mortality in Selected Arab Countries of West Asia.
${ }^{\text {b }}$ Central Bureau of Statistics (1980). Statistical Abstract - 1979. Figures include all holders of Syrian Nationality inside the country and abroad.

The sex ratio of the population (males per 100 females) has remained relatively stable at around 102. In 1976 the proportion of females was 49.7 per cent.

### 1.5. MARITALSTATUS

Like most other countries of the region, the age at marriage for females has been rising in Syria. The percentage of the female population aged 15 years and over who were reported as single has risen from 44.6 per cent in the 1960 Census to 46.4 per cent in 1976. The proportion of widows has declined considerably, from 8.0 per cent in 1960 to 4.4 per cent in 1976. The incidence of divorce is quite low and has remained unchanged in recent years.

### 1.6. FERTILITY AND MORTALITY

Little information on fertility is available. The crude birth rate (CBR) was estimated to be between 45 and 50 per 1000 population in the 1960 s and early 1970s. Estimates based on the 1970 Population Census indicate that fertility in the 1960s was very high with a CBR of $49 .{ }^{2}$ The 1976-79 Demographic Survey provides more recent estimates of fertility. The results are given in table 1.2

No precise estimates of mortality were available prior to the 1976-79 Demographic Survey but it is conjectured that mortality may have fallen considerably since $1950 .^{3}$ According to the 1976-79 Survey, the crude death rate (CDR) was 8.5 and the expectation of life at birth around 64 years ( 65.4 for female and 63.0 for males). The infant mortality rate was estimated to be about 65 per 1000 live births, which is much lower than the rate of 98 obtained by Vaidyanathan using 1970 Census data. ${ }^{3}$

### 1.7. LITERACY AND EDUCATION

In 1970, 46 per cent of the population aged 10 years and over was literate, i.e. able to read and write. There was a substantial sex differential. A majority ( 73 per cent) of the females aged 10 years and over were illiterate, the corresponding figure for males being 35 per cent. This is, however, a considerable improvement since the early 1960s. In 1960

[^0]Table 1.2 Age-specific fertility rates and other selected fertility measures based on the 1976-79 follow-up Demographic Survey for 1977

| Age group of women | $15-19$ | $20-24$ | $25-29$ | $30-34$ | $35-39$ | $40-44$ | $45-49$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age-specific fertility |  | 131 | 312 | 371 | 316 | 225 | 110 |
| rates per 1000 | 7.5 |  |  |  |  |  |  |
| Total fertility rate |  | 3.7 |  |  |  |  |  |
| Gross reproduction rate | 29.7 |  |  |  |  |  |  |
| Mean age at childbearing | 45.8 |  |  |  |  |  |  |
| Crude birth rate |  |  |  |  |  |  |  |

Source: Central Bureau of Statistics (1980). Statistical Abstract -1979.
only 52 per cent of males and 17 per cent of females were reported as literate. The change is more pronounced when one looks at the quality of education. In 1960 only 3.5 per cent of the population had secondary education or above; by 1970 this had increased to 8 per cent.

### 1.8. POPULATION POLICY AND ORGANIZATION OF HEALTH SERVICES IN SYRIA

Syria has no formal population policy. However, the government is very much concerned with the overall well-being and general health of the population. In order to provide the necessary health care, an elaborate infrastructure has been developed during the last two decades. The country has nearly 230 health centres (hospitals), 12 of which are specifically designed to provide maternal and child health (MCH) services. On average, each centre serves a population of 70,000 in urban areas and 27,000 in rural areas. Family planning services are available for needy mothers in these centres, more particularly in the MCH units.

### 1.9. INSTITUTIONAL FRAMEWORK FOR THE SYRIA FERTILITY SURVEY

The agency responsible for planning, executing and publishing the results of the SFS was the Central Bureau of Statistics (CBS). Close technical collaboration between CBS and WFS was maintained throughout the various stages of the project.

The CBS was established by the Government of the Syrian Arab Republic in 1968 and its Director comes under the Office of the Prime Minister. The Bureau is responsible for conducting censuses and surveys, and supervises the activities of all the statistical bodies in the country in order to promote standard procedures, techniques, concepts and definitions and to avoid duplication of work. It assists departments in the preparation of their work plans and evaluates progress at the end of each development phase. The CBS publishes periodically data on socio-economic indicators for use by the various governmental and non-governmental agencies.

The Bureau is organized in three divisions, each of which is headed by a Deputy Director. One of the three divisions, the Centre for Population Studies and Research, was responsible for the SFS. The central office of the CBS is situated in Damascus and the regional directorates are situated in each of the 13 Mohafazat (Governorates) in the country. All national censuses and surveys conducted by the CBS are implemented or assisted by these directorates.

The SFS was funded in part by the Government of the Syrian Arab Republic and in part by the United Nations Fund for Population Activities (UNFPA) through the ISI. The UNFPA grant was utilized for training field workers, enumeration and interviewing (transport, subsistence and salaries), data processing, printing of survey documents and of the report and wages of the field staff. The Government provided office space, survey personnel, transportation, and secretarial assistance.

## METHODOLOGY OF THE STUDY

### 2.1. OUTLINE OR THE STUDY DESIGN

This chapter discusses in detail the methodological and administrative aspects of the Syria Fertility Survey. Sections 2.2 and 2.3 discuss the development and the pre-testing of the questionnaires, respectively. This is followed by a detailed description of the sample design in section 2.4. Section 2.5 discusses the organization and execution of the survey, including staffing, recruitment, training and supervision. Section 2.6 outlines procedures followed for office editing and coding, and section 2.7 the stages and procedures of data processing. Section 2.8 gives an indication of the frequency and kinds of non-response, separately for the household survey and the individual survey. Section 2.9 explains the use of the tables of sampling errors which are shown in appendix III. Finally section 2.10 shows the survey timetable.

### 2.2. DEVELOPMENT OF THE QUESTIONNAIRES

### 2.2.1. WFS Prototype Documents

The World Fertility Survey has developed materials to aid countries participating in the WFS programme in carrying out their surveys. These materials include the Household Schedule for the screening interview, the Individual Questionnaire, various Modules which can be incorporated into the individual or household questionnaires, and Manuals containing guidelines for the various stages of the survey.

The Household Schedule fulfils three purposes. First, it provides a listing of household members, which is required in order to identify ever-married women eligible for the individual interview. Secondly, by collecting data on such matters as age, sex and marital status for each household member it provides the researcher with the denominators necessary for calculating certain demographic rates. Thirdly, it provides useful contextual data on factors which may relate to fertility, such as ownership of 'modern' objects, membership of cultural or socio-economic groups and the nature of housing conditions.

The Individual Questionnaire is intended for use in interviewing ever-married women in the childbearing years, residing in households. It represents the minimum information needed to identify the factors affecting fertility, to analyse fertility differences and to elucidate fertility patterns.

In addition to the core questionnaires, there are various possibilities for expansion of the enquiry into related areas of particular interest. The WFS has devised a set of supplementary questionnaire materials known as modules. A module is a group of questions on a particular topic, constructed so as to be integrated into the household schedule and/or the individual questionnaire. Most of the modules deal with two kinds of variables: those which affect fertility directly, and those explanatory of fertility.

### 2.2.2. Preparation of the Questionnaires

The first major task addressed by the CBS and WFS was deciding on the type and contents of the questionnaires to be used in the SFS.

The aim of the survey was to collect a detailed set of data that would make possible a detailed analysis of the changing demographic conditions in Syria. To this end, the data collected should serve two purposes:

1. It should make possible the estimation of trends, differentials and levels of nuptiality, fertility, mortality and contraceptive knowledge and use, and thus to a significant extent compensate for any inadequacies in the system of vital registration.
2. It should provide information on the basic factors known to affect fertility in Syria. Demographic processes are influenced by a variety of factors of differing intensities operating with or against one another. The investigation of such factors, even with a good registration system, could only be made possible by a special type of enquiry of the nature of the present survey.

With these objectives in mind, there were three major questions which needed to be resolved:

1. Short versus Long Questionnaires. A compromise on length was struck which took account of the need for detailed data on the one hand and the danger of respondent fatigue on the other.
2. Compulsory versus Voluntary Response. The CBS has compulsory powers under legislation, but as a matter of principle has never used them in any of the surveys it has conducted. The nature of the present survey and the sensitivity of some of the questions to be asked made it appropriate to continue this policy in this case as well. How. ever, it was recognized that it would be necessary to take particular care, during the preparation of the question-
naire and the actual execution of the survey, to minimize the frequency of non-response and that questions which might be considered offensive to respondents should not be included.
3. Classical versus Dialectal Arabic. The third point to be considered was whether the questionnaires should be phrased in classical Arabic or dialectal Arabic. One of the arguments advanced was that classical Arabic might not be understood by some of the women in the sample who had little or no education, and that it could be dangerous to leave it to the interviewer to interpret the questions to the respondents in dialectal Arabic. Nevertheless, experience has shown that questions phrased in dialectal Arabic could give the respondent the impression of a lack of seriousness on the part of the interviewer, and deprive the enquiry of its scientific appeal. Further, some of the questions are sensitive, and phrasing questions on intimate matters in dialectal Arabic could be embarrassing to both interviewer and respondent. It should, however, be made clear to readers not familiar with the Arabic language that classical and dialectal Arabic are not two different languages with a common alphabet. Both represent two sides of the same coin; both share a large volume of vocabulary, and both are constantly used and intermingled by the population at large.
Thus, the questionnaires had to be so designed as to meet Syria's needs for demographic data, while at the same time minimizing the possibility of inadequate response. With these considerations in mind, CBS decided to use the following three questionnaires in the SFS:

- the Expanded Household Schedule (incorporating the WFS General Mortality Module);
- the Individual Questionnaire (incorporating the WFS Module on Factors Other Than Contraception Affecting Fertility);
- the Community-Level Questionnaire.

These questionnaires were phrased in simplified classical Arabic. An English translation of them is given in appendix I. A description of the contents of the questionnaires is given below. As will be seen, questions of considerable interest in the WFS Core were included in the Syrian questionnaires; but questions of less immediate relevance to the demographic situation in Syria were omitted. Further, some significant departures from the WFS Core were made to the design of the section dealing with the maternity history of the respondents.

### 2.2.3. The Expanded Household Schedule

This schedule, though primarily used to identify women eligible for the individual interview, was designed to be useful
for gathering data on nuptiality, fertility and mortality. This was achieved by adding questions on lifetime fertility and by incorporating into the Household Schedule the WFS General Mortality Module. This Expanded Household Schedule was administered to a sample three times the size necessary to obtain the desired number of eligible women for the individual interview.

The Expanded Household Schedule consisted of four blocks of questions:

1. Block $A$, which contained all the information on the identification of the sample household, the number of visits required to obtain the interview, details of field and administrative controls, summary data on the number of eligible respondents and the total number of persons in the household.
2. Block $B$, which included the following items:

- household members
- relationship
- residence
- sex
- age
- information on survival of parents
- educational status
- marital status
- information on survival of first spouse
- number of live births
- information on last live birth
- identification of eligible respondents for the individual - interview
- result of the individual interview.

The interviewer first listed all usual residents of the household, starting with the head (as defined by the respondent). This was followed by special probes to list children or infants, non-family members, such as servants, friends or lodgers, and temporary visitors.

The question on relationship serves, among other things, to identify the mother of each individual, which allows the application of the demographic technique known as the 'Own Children Method' to estimate levels of fertility. Information on 'relationship' can also be used to construct variables such as 'household and family types' which can be used as additional explanatory variables in the analysis.

The questions on residence serve to identify both de jure and de facto populations. As either method involves some slippage, household composition was collected on both bases in order to obtain some estimate of enumeration error.

The questions on survival of parents and whether the person is an eldest living offspring give information needed for estimating adult male and female mortality using the demographic technique known as the 'Orphanhood Method'.

The questions on literacy and educational attainment of members of the household who are seven or more years of age serve as background variables in the analysis of fertility differentials.

The marital status section had four questions. The first two questions provide an opportunity for carrying out analyses of nuptiality. This information for women is also needed for determining eligibility for the individual interview. The third and fourth questions in this section yield information needed for the application of the technique known as the 'Widowhood Method' in order to obtain another set of estimates of male and female adult mortality.

For each ever-married woman in the household, the fertility data collected were the number of live births she has had in her lifetime, and the date of birth, sex and survivorship of her most recent live birth. Data on lifetime fertility was collected along several dimensions, to try to ensure that no live births are overlooked. The last live birth was dated, in an attempt to overcome the telescoping phenomenon so often produced when women are simply asked if they have had a birth in the past 12 months. Estimates of infant and child mortality may be derived from proportions dying among children ever born. Alternative estimates may also be obtained from the question on the survival of the most recent live birth.
3. Block $C$, which included the remaining questions from the General Mortality Module. In this block were recorded deaths of household members during the preceding 24 months, by sex and age. When tabulated by months of occurrence, it is possible to extract the deaths occurring during the preceding 12 months. The advantage of asking for deaths in the last 24 months is that it facilitates the study of incidence of deaths by time periods, reflecting progressive recall lapse, and of dating errors, which may be reflected in heaping of deaths in certain months such as the 13 th. This could arise from the respondent replying 'about a year ago' in answer to the question on date of death.
4. Block $D$, which contained information on the characteristics of the dwelling and the presence in the household of modern durables. This information was collected to obtain a rough measure of the household's economic situation. Of course, this information is too limited to be readily cumulated into a measure of economic status. Nevertheless, some of the information enables a crude ranking to be made of all households from the poorest to the richest, while other questions obtain information on durables which are possessed mainly by those in the higher income brackets.

### 2.2.4. The Individual Questionnaire

The Individual Questionnaire for the SFS consisted of the

WFS Core Questionnaire and incorporated the WFS Module on Factors Other Than Contraception Affecting Fertility. This questionnaire was designed to collect detailed information from eligible women, i.e. ever-married women under age 50 who slept in the household on the night prior to the first interview visit.

It should be noted that in Syria - as in almost all Arab countries - a distinction is made between formal or legal marriage as witnessed by the marriage contract - known as 'writing the book' - and the social marriage which marks the consummation of marriage, zifaf. The period between these two dates varies and can even extend to some years. There are usually two separate ceremonies, one for each event, though quite a few marriages involve 'writing the book' and the zifaf at the same time. In the SFS, women who had been legally married but whose marriages had not been consummated were not considered eligible for the individual interview.

The Individual Questionnaire was divided into seven sections, with a cover sheet which contained information on identification of the sample household, the number of visits required to obtain the interview, the duration of the interview, and details about field and administrative controls. These sections are described below.

Section 1. Respondent's Background. Information was obtained on five major items of the respondent's background: present residence, type of place in which the woman lived in her formative years, age, literacy and education, and language spoken.

There were two questions relating to the age of the respondent. Age is, of course, the most important classificatory variable in any fertility survey. Recognizing the difficulty of obtaining accurate data on age, and to ensure that the interviewer would keep in mind this very important characteristic of the interviewee throughout the whole interview, the following procedure was used.

The respondent was first asked her month and year of birth. Whether or not this was obtained, the respondent was then asked to give her current age. The interviewer was specially trained to probe in detail where necessary (for example, by referring to other events in the respondent's life), and also to consult any documentary evidence available. Next, the interviewer plotted the respondent's birth-date on the Events Chart so that this date could subsequently be compared with dates of other events. Finally, the interviewer recorded her comments regarding age reporting: whether the age was reported without further probing; whether it was obtained from some document; whether extensive probing was necessary; and whether the reporting was believed to be an estimate.

Section 2. Marriage History. Since almost all births in Syria occur within wedlock, this section, unlike the WFS Core,
preceded the sections on maternity history and knowledge and use of contraception. This departure from the WFS Core is common to other WFS surveys, particularly in the Middle East and Asia. By obtaining dates of the stait and termination of each marriage, a precise calculation can be made of the total time spent in marital union. This information may serve as a proxy for the length of exposure to the risk of pregnancy. It should be noted that, in obtaining information on date of marriage, the interest was in the date of consummation of marriage and not the date of the registration of the marriage contract.

Again, special attention was paid to the dating of events. If the calendar year of consummation of marriage could not be obtained, the respondent was asked to give her age at the time her marriage took place. In the case of former marriages, if the year of termination of a marriage could not be obtained, the respondent was asked to give the duration (in completed years) for which she and her husband lived together in that marriage until it was dissolved (by divorce, separation or the death of her husband).

This section also included a question on the respondent's age at menarche. If this age could not be obtained, the respondent was asked whether she had her first menstrual period before or after the start of her (first) marriage, and by how many years.

Section 3. Maternity History. The data collected in this section were:

- live births, by sex and date of occurrence;
- incidence of infant and child mortality;
- incidence of pregnancy wastage;
- proportion of women currently pregnant, with duration of pregnancy.

To achieve as complete a record as possible of the respondent's maternity history, the numbers of living children (by sex and whether living at home or away) were obtained first. This was followed by the number of dead children, if any, and then a probe to confirm the total number of live births so obtained. This was followed in turn by questions on current pregnancy with duration and preference for the gender of the expected baby, and on the total number of all other pregnancies that resulted in abortion or still birth. It should be noted that the question on current pregnancy was asked only of women who were 'currently married' or 'divorced, widowed or separated for less than one year'.

This was followed by the 'Live births and other preg. nancies' table. Unlike the procedure proposed in the WFS Core document, this table was designed on the basis of the integrated pregnancy history approach, as it was believed that this approach would yield more accurate data. Thus, for each pregnancy, arranged in chronological order from the first to the most recent, questions were asked about date of termination of pregnancy, and whether each pregnancy
ended in a live birth or a still birth or abortion. If pregnancy resulted in a live birth, questions were asked on the sex, the name, and whether the child was still living. If the child was dead, it was determined for how long he/she had lived. If a pregnancy had ended in a still birth or an abortion, information was obtained on the duration of pregnancy, and, for a pregnancy lasting for seven or more months, the respondent was asked whether the baby showed any signs of life after it was born.

The primary purpose of the questions on pregnancies reported to have resulted in 'still birth or abortion' was to pick up pregnancies which may in fact have resulted in live births and been forgotten by the respondent because the child had lived for only a very short time. An ancillary object of these questions, and indeed by using the integrated pregnancy history approach, was to obtain some information on pregnancy wastage, although it was realized that the true incidence of this phenomenon cannot be estimated from these data alone because of the probability of under-reporting.
Section 4. Knowledge and Use of Contraception. No society has ever produced babies at a rate even approaching that of the biological maximum. In all societies some sort of fertility regulation is practised by women, whether consciously or not. Hence, one important aspect of a fertility survey is to examine those situations or practices which affect, or tend to affect, the number of children women actually have.

Section 4 was concerned with the levels of acquaintance with, and use of, contraceptive methods. The respondent was first asked to name the contraceptive methods she knew. For these methods, she was asked if she had ever used them. For each method that she did not mention spontaneously, a brief description was read and the respondent was asked if she had ever heard of it. If she had, she was then asked if she had ever used the method. The sequence was concluded with a question on whether the respondent had ever heard of any other method apart from those already mentioned. It should be recognized that Syria does not have a national family planning programme.

Section 5. Factors Affecting Fertility: Lactation, Contraceptive Use and Temporary Separations. The pattern and level of fertility are determined, not only by the use or nonuse of contraception, but also by a host of other 'intermediate' variables causally situated between fertility and the underlying socio-economic and cultural milieu.

This section incorporates the WFS Module on Factors Other Than Contraception Affecting Fertility, which was so designed as to supplement the data collected in other sections of the questionnaire by gathering information on variables affecting exposure to intercourse and on variables that mitigate exposure to conception. Thus information was obtained in the following related topics:

1. Breastfeeding duration and age of the child when ad ditional food was given as a supplement to breast-milk.
2. Post-partum amenorrhoea duration (i.e. duration of cessation of menstruation after a birth).
3. Post-partum abstinence duration (i.e. duration of refraining from sexual intercourse after a birth).
4. Duration of periods of temporary separation from the spouse.
5. Contraceptive use.
6. Menstruation characteristics (regularity and duration of menstrual period, and menopausal status).
7. Desired number of children.

Information on items 1 to 5 was confined to the open and the last closed pregnancy intervals. These intervals are defined as follows: ${ }^{1}$

- Open Pregnancy Interval is the interval between termination of the woman's last pregnancy and date of interview.
- Last Closed Interval is the interval between a woman's next-to-last pregnancy and her last pregnancy.
At the beginning of section 5 , the interviewer completed a table designed to determine the pregnancy interval(s) of the respondent. The design of this table is different from that recommended in the WFS module. This departure was introduced because it was thought that it would facilitate the interviewer's task. It should be pointed out that questions confined to the open pregnancy interval were restricted to currently married women. It should also be noted that one of the main factors which made CBS decide in favour of using the integrated pregnancy history approach in section 3 was that section 5 dealt with information relating to certain specified pregnancy intervals.

Section 6. Work History. The first part of the work history section obtained detailed occupational information about the respondent's current or most recent work since marriage. This information permits investigation of the association between women's work status and fertility. The second part of the work history section obtained information on the nature of the respondent's work before marriage. This information permits the study of the relationship between work, age, marriage and fertility. Total work experience, measured in years, was also obtained.

The periods for which information on work status may be analysed are:
for all women:
(i) before (first) marriage;
(ii) since that time;
for women who have had children:
(iii) between marriage and the birth of the first child;
(iv) since the birth of a child of any given order.

Section 7. Current (Last) Husband's Background. Information was collected regarding the background of the respondent's current (or last) husband in terms of age, literacy, education, type of place of residence in which he lived during his formative years, and employment.

### 2.2.5. The Community-Level Questionnaire

The reproductive behaviour of married couples may be affected both by their personal characteristics and by the social milieu in which they live or by some interaction between the individual and the group characteristics. There was, therefore, a need for collecting ecological or com-munity-level data in connection with the fertility survey in Syria. The term 'ecological' is used here to designate supraindividual data about the social environment, delimited on an areal basis. An ecological or a community-level variable is, thus, defined as any characteristic conmon to all the persons living in the community.

The Community-Level Questionnaire was used only in rural areas. Thus, data were obtained at the community level for each village which comprised one of the sampling areas of the SFS. The questionnaire consisted of five blocks of questions on location of the village; availability of public utilities and transportation; communication facilities; medical services; and education. These community data were obtained from community leaders, from published and unpublished statistics, and from simple observation of the community itself. No analysis of these data has been attempted in this report.

### 2.3. THE PRE-TEST

### 2.3.1. Objectives

Most surveys are preceded by a pilot study to test the questionnaires and the important survey documents and procedures. The SFS pre-test was designed to fulfil the following objectives:

1. To give the technical staff a chance to practise execution of the survey on a small scale.
2. To test the questionnaires. The aim here was to ensure that the questions were in logical sequence, the translation comprehensible, and the pre-coded categories adequate and meaningful.

[^1]3. To obtain information about the operating characteristics of the interview such as its average duration, the number of interviews that an interviewer can do per day, etc.
4. To obtain an indication of general receptivity or resistance to the survey in general and to the so-called sensitive questions in particular.
5. To test the suitability of the recommendation by WFS to use the team approach during the data collection stage.
6. To test the possibility of tape-recording interviews.
7. To test the practicability of the procedures suggested by WFS for the mapping and listing of sample areas.

### 2.3.2. Training and Execution

A one-week training course was held in Damascus during January 1978. The National Director and the Executive Survey Director together with an expert from WFS acted as trainers. The training was attended by six senior technical staff, who were to supervise the execution of the main survey, and nine female candidate interviewers, all of whom were recruited from CBS. The organization and methods of training for the pre-test were essentially the same as those discussed in section 2.5 below.

The pre-test proved to be a success in the sense that no urban area in the Sebky quarter in Damascus and a rural area in El Saka village near Damascus. Six days were needed for the actual fieldwork; the urban area was covered first and then the rural area. The urban area was mapped and listed, while listing only was done in the rural area. To ensure adequate feedback from the pre-test, the interviewers completed, for each pre-test interview, a pre-test information sheet.

### 2.3.3. Results of the Pre-Test

The total number of completed household schedules and individual questionnaires was 128,71 from the urban area and 57 from the rural area. These questionnaires together with the interviewer reports and the interviewer debriefing sessions were analysed.

The pre-test proved to be a success in the sense that no major modifications to the contents of the questionnaires or the phrasing of questions were required: the length and complexity of the questionnaires did not present problems; the reaction of the respondents was favourable; and no major problems with so-called sensitive questions were encountered. The degree of co-operation was marked as 'good' or 'very good' in 80 per cent of the interviews conducted. The average number of household schedules and individual questionnaires which an interviewer could complete per day was 3.4 in the urban area and 2.7 in the rural area; the overall average being three questionnaires per day.

However, none of the respondents agreed to have the interview tape-recorded. It was then decided that tape-recorders would not be used during the fieldwork. It was also found that the procedures suggested for the mapping of sample areas in large urban centres were unnecessarily complicated. As for the content of the questionnaires a question on literacy was added to the educational status section in both the household schedule and the individual questionnaire. The 'live births' and the 'other pregnancies' tables were revised and replaced with an 'integrated pregnancy history table'; the question on current pregnancy was restricted to women who were 'currently married' or 'divorced or widowed for less than 12 months'; some pre-coded boxes and extra probes were introduced in section 5; and questions relating to the open pregnancy interval in section 5 were restricted to currently married women.

The manuals were then redrafted and the necessary changes dictated by the above-mentioned modifications were made. Questionnaires, manuals and other survey documents were then finalized and printed.

### 2.4. THE SAMPLE DESIGN

The second major phase in this study was the preparation and implementation of the sample design. The sample was an equal probability sample. Basically, a one-stage sample design was followed for most rural areas; a two-stage design for large villages and small urban areas; and a three-stage design for large urban areas. This section gives an outline of the sampling design and describes sample size, sampling frame, and stratification and stages of the sample. Appendix II gives the details of the sample design, selection and implementation.

### 2.4.1. Size

The sample for the SFS was an equal probability sample covering about 1.3 per cent of all households in Syria. The target for achieved sample size was at least 15,000 completed household questionnaires and at least 4000 completed individual questionnaires.

The total population of Syria was estimated to be 8.1 million in mid-1978 and the average household size to be six persons, producing an estimated number of households of 1.35 million. The sampling fraction for the household survey was taken as 1.3 per cent, giving a sample of around 17,500 households. Assuming that the maximum rate of nonresponse and other losses would be 10 per cent, this would produce at least the target minimum figure of 15,000 completed household questionnaires.

One-third of the sample households were to be selected for the individual interview (i.e. an overall sampling fraction
of 0.433 per cent). All ever-married women aged under 50 in this subsample of households were to be interviewed using the individual questionnaire. Allowing for non-response of up to 10 per cent, and estimating the average number of eligible women per household to be 0.88 , the subsample was expected to result in about 4500 completed questionnaires.

### 2.4.2. Sampling Frame

The only complete frame available was from the 1970 Census. The 1976 Census was conducted on a sample basis, except for the capital city Damascus for which the 1976 data provided the frame.

The 1970 Census data were updated to allow for population growth and the rapid rate of urbanization. This data provided a list of all localities and their total population, arranged alphabetically within Mohafazat or Governorates. Since this alphabetical arrangement was not available within the smaller administrative units, geographical stratification, except by Mohafazat, was lost. However, it was not possible to obtain a better arranged list.

### 2.4.3. Stratification

For the selection of the primary sampling units (PSUs), the sampling frame was divided into four strata by type of place as follows:

Stratum 1: Large cities (Damascus, Aleppo, Latakkia, Homs and Hama).
Stratum 2: All other localities classified as urban in the Census.
Stratum 3: Large villages, with a population in 1970 of 5000 or over.
Stratum 4: All other rural areas.
It should be noted that the Census classifies as urban those localities which are either larger than 20,000 persons or are the administrative centres for Mantika. Hence, many 'urban' areas are smaller than large villages; they are classified as urban because of certain institutional facilities likely to be present in them.

### 2.4.4. Selection of Primary Sampling Units

The first sampling stage was the selection of 201 primary sampling units (PSUs). Before sampling, units were bracketed together if they had less than 300 census population. These were selected systematically with probability proportional to estimated population size (PPS sampling). The distribution of the selected PSUs by stratum was as follows: 51 from stratum 1; 22 from stratum $2 ; 8$ from stratum 3 ; and 120 from stratum 4. The main stratification criteria for selection of these PSUs were Governorates and type of place. These were used explicitly for stratum 4 and implicitly for strata 2 and 3.

### 2.4.5. Mapping, Listing and Selection of Households

The target cluster size was fixed to be 500 persons, corresponding to $80-90$ sample households. To meet this target, a considerable amount of office and fieldwork was required to subsample the selected PSUs in urban areas.

As previously mentioned, a one-stage sample design was followed in 98 PSUs in rural areas (stratum 4). In these areas the sampling interval for dwellings, calculated so as to yield a self-weighting sample, would have been 1 after rounding to the nearest whole number. Thus, all dwellings in these areas were enumerated for the household interview. Inevitably, this procedure produced a sample in this group which is slightly biased towards the larger villages.

A two-stage sample design was followed in 43 PSUs (13 urban from stratum 2; 8 rural from stratum 3; and 22 rural from stratum 4): a single-area stage followed by selection of dwellings in the sample area. Thus in these areas all dwellings were listed, and dwellings were then subsampled systematically to yield the required sample of households.

In the remaining 60 PSUs (all 51 in stratum 1 and 9 in stratum 2), a three-stage sample design was followed: a twoarea stage design followed by selection of dwellings. Thus, each of these PSUs was subdivided in the field into a number of segments of equal size with clearly identifiable boundaries. Two of these segments were then selected, and all dwellings within these two segments were listed. Dwellings were then subsampled systematically to yield the required sample of households.

The mappers and listers were all recruited from CBS regional statistical offices. A short manual for mappers and another for listers was prepared. Mapping was carried out during March 1978 by 25 teams, each consisting of a mapping supervisor and two mappers. The supervisors attended a training course for one week at CBS headquarters. Later on, they returned to the CBS in Damascus with their completed work which was evaluated. They were then briefed on the listing operation. Listing was carried out during April-May 1978 by 25 teams, each consisting of a listing supervisor and two listers. Dwellings which were vacant or temporarily unoccupied were included in the listing. The subsampling of dwellings in the listed PSUs was done prior to the data collection stage by the listing supervisors.

### 2.5. ORGANIZATION AND EXECUTION OF THE SURVEY

### 2.5.1. The Survey Organization

An ad hoc survey organization was formed within CBS to execute the SFS. The survey headquarters was based at the Population Studies Centre of the CBS during all stages prior to data processing.


Figure 2.1 Organizational structure of the Syria Fertility Survey

The survey organization consisted of the following three levels of personnel:

Level 1: Directing Staff. The Director-General of the executing agency, CBS, served as the overall project National Director. The day-to-day activities were supervised by the Director of the Population Studies Centre of the CBS, who served as Executive Survey Director.

Level 2: Senior Professional Staff. Two Assistant Survey Directors and two Administrative Co-ordinators were recruited from within the senior professional staff of the CBS. They assisted the directing staff in implementation of the work programme and closely supervised the office and field staff who carried out the detailed work.

Level 3: Field and Office Staff. Three levels of field staff were recruited: field supervisors, field editors, and interviewers. All supervisors and most of the field editors and interviewers were recruited from the regional offices of the CBS. Office staff responsible for editing and coding were regular CBS employees.

The Director of the CBS Computing Centre served as the Data Processing Manager for the survey. During machine editing and variable recoding, he was assisted by two senior programmers from the CBS Computing Centre.

Figure 2.1 shows the organizational structure and the line of authority of the project.

### 2.5.2. Training of Field Staff

Field staff were trained centrally in Damascus at the CBS Statistical Training Centre. The supervisors' training was of the greatest importance, as they were the backbone of the fieldwork operations. They made detailed plans for the fieldwork, distributed the work load among the interviewers, and managed interviewer teams throughout the period of fieldwork.

Fifteen (male) supervisors attended an intensive one-week training course which covered the following areas: field practice, administrative duties, preparing fieldwork plans, evaluation of interviewers' work, and control of fieldwork. This was followed by the interviewers' training course. CBS asked its regional offices to nominate predetermined numbers of married females to attend the training course. Interviewing for the trainees was done by the directors of CBS regional offices, through examination of credentials, previous experience, personal interviews, and the administration of an aptitude test to ensure the trainee's ability to follow a rigorous training course and to accept continuous fieldwork for up to eight weeks.

A total of 98 potential interviewers were trained for a period of 14 working days, with the aim of producing a field force of 85 . The intention was to choose first the best 15 trainees to become field editors and then select, from among the rest, 70 trainees to work as interviewers. The training course was also attended by the field supervisors. The training consisted of classroom lectures on the objectives and organization of the survey; explanation of the questionnaires; principles of interviewing and the art of asking questions; and demonstration interviews, role-playing interviews and practice interviews. Periodically, tests were conducted to gauge the progress of the candidates. Teaching materials consisted of the basic survey documents (i.e. questionnaires and interviewers' and supervisors' instructional manuals) and postersized blow-ups of some parts of sections 3 and 5 of the individual questionnaire which were shown by the pre-test to be the most difficult.

### 2.5.3. Publicity

During the training of the field staff and the first few days of the fieldwork, the national newspapers published press releases prepared by the CBS which described the overall objectives of the survey and asked the members of the public in general, and potential respondents in particular, for their
co-operation. These press releases were also broadcast by the national radio and teievision network.

The CBS Director-General also informed the provincial governors and the mayors of areas in which the sample clusters were located of the objectives of the survey and the field operations that would be carried out in their areas, and requested these provincial authorities to provide adequate publicity for the survey and all the necessary assistance and co-operation to the field staff.

### 2.5.4. Main Fieldwork

Fieldwork for the SFS started on 12 June 1978. The total number of teams of interviewers was 15 ; each consisted of one male supervisor, one female field editor and four or five female interviewers. Fieldwork was organized according to geographical areas - mainly governorates. Thus, the sample clusters were grouped into 15 fieldwork areas with each team working in one of these areas until its assignment of interviews was completed. As the total number of the sample households differed from one governorate to another, the duration of fieldwork for each team varied ranging between 30 and 60 days. The teams' itineraries were fixed at the outset as to dates and locations, and were followed closely by each team during the entire field operation. The household and the individual interviews were conducted, generally, during a single visit to the sample household.

The day-to-day supervision of the fieldwork was carried out by the field supervisors who were responsible for assigning the workload to each interviewer and for ensuring that enumeration had been carried out properly and accurately. Problems of unlocated households and refusals had to be solved by the supervisor as soon as possible, before the team moved to another area. The supervisors kept records of the number of household schedules and individual interviews completed using the Supervisor's Fieldwork Control Sheet; they also maintained contact with the survey headquarters.

The main duties of field editors included receiving completed questionnaires from interviewers, scrutinizing questionnaires and making sure that the interviewer conducted the interview properly, making spot-checks to ensure that interviewers had actually visited the correct households assigned to them, and checking that all eligible respondents selected were indeed eligible and that the most important questions had been correctly answered and recorded.

The procedure followed for scrutinizing questionnaires may be summarized as follows. The field editor, herself thoroughly checked and corrected any obvious slips. If there was any doubt, she consulted the interviewer. If the interviewer was unable to answer questions satisfactorily, she was asked to revisit the respondent to obtain the correct information. In order to maximize the quality of the survey, field
supervisors functioned also as field editors in the evening.
During the initial fieldwork period, each interviewer was asked to visit three households only on each day, i.e to complete three household schedules and one individual questionnaire per day. Mistakes made by interviewers were discussed with them so that they would not be repeated. The average daily assignment was then gradually increased to six household schedules and two individual questionnaires. The average duration of the individual interview was about 33 minutes.

Each interviewer assigned a household questionnaire form to each sample address she visited whether or not she successfully contacted it or found a household there; the interviewer then recorded on the cover sheet the outcome of the visit. Similarly, when the interviewer made the first attempt to obtain the individual interview, she assigned a questionnaire to the case whether or not the respondent was successfully contacted. If the interviewer did not find a respondent at home during her first visit to the household, she made up to two more visits or 'call-backs' to the household. However, 96.7 per cent of all eligible women in the sample were successfully interviewed during the first visit; the overall mean number of visits per eligible woman was 1.056 .

Throughout the fieldwork period, the directing staff and the senior professional staff made regular visits to the sample areas, checked the records which field supervisors were instructed to keep as regards quality control, re-organized staff deployment where necessary, and discussed any problems encountered during the field operations. These visits by senior staff from headquarters were essential for the efficient conduct of the fieldwork, and were of special importance for the morale of the teams.

### 2.6. OFFICE EDITING AND CODING

The editing operations began in the field when supervisors and field editors scrutinized the completed questionnaires received from the interviewers. Office editing was an independent operation complementary to editing in the field. It entailed verification of the answers to all questions and to certain combinations of questions, coding of open-ended questions and checking of all skips in the questionnaire. All parts of the household schedule and the individual questionnaire were re-edited in the office. Special attention was paid to thorough re-editing of the marriage history, the integrated pregnancy history table, and all other age and date information.

The operation of coding involved principally the mechanical transferral of numbers from the questionnaire to coding boxes. Coding also entailed the application of coding categories for open-ended or semi-open-ended questions such as occupation.

Office editing and coding started after the completion of fieldwork. The editors and coders were organized into four teams consisting of five editors, four re-editors, four coders, and three code checkers, who were recruited from among the field editors and interviewers. The editing team attended a training course for one week, and the coding team was also trained for one week. The system followed was that of having the entire questionnaire edited and then re-edited. The questionnaires were then passed for coding and finally passed to the code checkers.

### 2.7. DATAPROCESSING

The data processing of the SFS consisted of two stages. The first was to 'clean' the data by performing a series of comprehensive checks on its completeness and internal consistency, making appropriate corrections where necessary. The second stage was the production of analytical results, which involved the recording of variables into the form required for analysis as well as the production of actual statistical tabulations. The first stage of data processing was carried out at the CBS Computing Centre in Damascus, while the second stage was done at WFS headquarters in London with the participation of CBS experts.

### 2.7.1. Preparation of Clean Tapes

After the completion of office editing and coding, the questionnaires were transferred to the Computing Centre for data entry. Data entry was done with 100 per cent key-verification using a key-to-tape system.

Separate tapes, or files, for the household and individual questionnaire data were produced. These data were then checked and corrected for format and structure errors to ensure that all and only required data are present, and for out of range error and inconsistent responses. The files were also checked for completeness and consistency between the household and individual data.

The computer was used to locate errors but not to make corrections. During format structure and consistency editing, error print-outs were produced from the computer. Correct values were looked up in the original questionnaires and written onto suitable update forms along with the identification of the record to be corrected. This work was done by the office editing and coding teams.

After all obvious inconsistencies had been removed by reference to the original questionnaires, an imputation procedure was used to fill in missing data for various events. The method assumed that the year of the event was known, and that only the month was missing. When the date of an event was reported in terms of 'years ago', the calendar year of occurrence of the event was obtained on a completed-year assumption, i.e. by subtracting the reported 'years ago' from the date of interview. The imputation method was based on finding, for each event, a logical range of dates and then choosing a point randomly in this range. Table 2.1 shows the proportion of dates with missing months which had to be imputed. These month imputations were done by computer using a special program developed by WFS headquarters in London.

### 2.7.2. Variable Recoding and Tabulation

The individual questions asked in the WFS surveys do not often correspond one-for-one to the variables that are required for analysis. For analysis purposes, combining of variables, reduction of categories, etc. is required. This kind of variable construction yields a recoded file, known as the 'standard recode' file. Such a file has been created for the SFS data for the following three purposes:

1. To simplify the production of the basic tabulations.
2. To provide a general analysis file for researchers wishing to do further analysis on the data.
3. To provide a standard set of variables similar to those available for other countries participating in the WFS, thus making comparative analysis possible.

Table 2.1 Percentage of dates with missing months

| Event | Type of date reporting |  |  |  | Total | Percentage of dates with missing months |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Month and year | Year only | Years ago | Age at event |  |  |
| Respondent's date of birth | 2572 | 1915 | - | - | 4487 | 43 |
| Dates of all marriages | 3646 | 717 | 0 | 279 | 4642 | 21 |
| Dates of dissolution of marriage | 209 | 121 | 0 | 0 | 330 | 37 |
| Date of first marriage | 3548 | 667 | - | 272 | 4487 | 21 |
| Date of current marriage | 3474 | 584 | - | 254 | 4312 | 20 |
| Dates of all pregnancies | 19,351 | 3157 | 760 | - | 23,268 | 17 |
| Date of first pregnancy | 3388 | 520 | 175 | - | 4083 | 17 |
| Date of next to last pregnancy | 3161 | 387 | 112 | - | 3660 | 14 |
| Date of last pregnancy | 3888 | 172 | 24 | - | 4084 | 14 |

The resulting file was the basis for the SFS Standard Recode Tape which has been documented and archived at CBS headquarters and at WFS headquarters.

Tabulations were prepared following the tabulation plan of the SFS based on the WFS Guidelines for Country Report No. 1. For production of the tables, the package program COCENTS was used, while the parameter cards were generated with a special program, COCGEN, developed by WFS.

### 2.8. RESPONSE RATES

In any survey, voluntary or compulsory, the response is not absolutely complete, and the number of completed questionnaires is usually less than the intended number. This may be caused by non-coverage of certain sample areas, non-contact with selected households or respondents, or unavailability or unwillingness of respondents to participate in the survey.

In preceding sections, an account was given of the measures adopted to minimize the deficiency - that is, the frequency of refusals and non-contacts - in the SFS. This section examines the effectiveness of these measures separately for the household survey and the individual survey by presenting the frequency and kind of non-response.

### 2.8.1. The Household Survey

The sample design when implemented yielded a sample of 15,287 households for the household survey. This figure was about 13 per cent below the number of households expected to be selected for the household survey. This may be attributed to two factors.

In designing the sample, the total population size (extrapolated in 1978) was estimated to be 8.1 million, and the average household size to be equal to 6 persons. Hence the number of households in Syria in mid-1978 was estimated to be 1.35 million. With an overall sampling fraction of 1.3 per cent, the sample was expected to yield about 17,500 households. However, as will be shown later, the average household size derived from the results of the survey is 6.6 persons. Recently, there has been a significant increase in the average household size. For example, the average for Damascus increased from 5.3 in 1960, to 5.6 in 1970, and to 6.1 in 1976. This increasing trend appears to have been country-wide. It could be the result of changes in living conditions as well as in the demographic composition of the population. The average household size shown by the survey seems, therefore, to be a more plausible estimate than that assumed in the sample design.

But even with an average household size of 6.6 , the sample should have yielded about 16,200 households. The

Table 2.2 Summary of interview results for the household survey

|  | Number | $\%$ |
| :--- | :---: | ---: |
| Number of sample households | 15,287 | 100 |
| Result of household interview: |  |  |
| 1 Completed | 14,670 | 95.96 |
| 2 No competent respondent at home | 14 | 0.09 |
| 3 Refused | 6 | 0.04 |
| 4 Dwelling vacant | 507 | 3.32 |
| 5 Address not a dwelling | 28 | 0.18 |
| 6 Address not found or non-existent | 2 | 0.01 |
| 7 Other | 60 | 0.39 |
| Overall non-response | 617 | 4.04 |

fact that only 15,287 households were sampled may be attributed to inaccuracies in the mapping operation in urban areas.

Nevertheless, these two factors did not affect the final outcome of the sample in any significant way, mainly because the actual overall rate of non-response was much less than the maximum rate allowed for in the sample design. Table 2.2 summarizes the frequency and kinds of nonresponse for the household survey.

Household schedules were completed in 14,670 or 96 per cent of the total household sample. Most of the nonresponse for the household survey resulted from dwellings that became vacant between the listing operation, which was undertaken in May 1978, and the survey interview, which was conducted during June-August 1978. Only six cases 'refused' the household interview.

### 2.8.2. The Individual Survey

As previously mentioned, one-third of the sample households were to be subsampled for the individual survey with the aim of obtaining at least 4000 completed individual questionnaires. The number of households selected for the individual survey was 4915 . This number is slightly less than one-third of the number of the sample households, and slightly more than one-third of the number of completed household schedules. This is mainly due to variations in the rate of nonresponse between sample areas.

As may be seen from table 2.3, in the 4915 households, 4646 ever-married women under 50 years of age were identified as eligible for the individual survey (i.e. an average number of eligible women per household of 0.945 ). The number of individual questionnaires successfully completed was 4487, or 96.6 per cent.

Thus, although the number of completed household schedules was slightly less than the number intended, the number of completed individual questionnaires was well above the minimum number expected. Two factors contri-

Table 2.3 Summary of interview results for the individual survey

|  | Number | $\%$ |
| :--- | :---: | :---: |
| Number of households selected | 4915 | - |
| Number of eligible women identified | 4646 | 100 |
|  |  |  |
| Result of individual interview |  |  |
| 1 Completed | 4487 | 96.58 |
| 2 Not at home | 64 | 1.38 |
| 3 Refused | 2 | 0.04 |
| 4 Partly completed | 3 | 1.94 |
| 5 Other | 159 | 0.06 |
| Overall non-response |  | 3.42 |

buted to this outcome. First, the sample design assumed an average number of eligible women per household equal to 0.88 , that is 6.9 per cent less than the average yielded by the survey. The underestimation of this average was introduced deliberately since it could give only a slightly larger sample of eligible women than intended. Second, while the sampling design allowed for a maximum rate of non-response of 10 per cent, the actual rate of non-response for the individual survey was only 3.4 per cent.

### 2.8.3. Reliability of Data

The low frequency of non-response reflects only one aspect of the efficiency of the SFS. There are many other factors that might affect the reliability of the data collected. Reference has already been made to the quality control measures employed during and after the data collection stage to minimize non-sampling errors. In the SFS, information was collected on several aspects of the interview situation which might affect the reliability of the respondent's answers. An outline of these aspects is given below.

Degree of Co-operation. At the end of the individual interview, the interviewer recorded her observations of the overall interview situation and whether the respondent's degree of co-operation was poor, fair, good or very good. As may be seen from table 2.4, the co-operation of the respondents was ranked as very good or good in 77 per cent of the cases, as fair in 20 per cent, and as poor in only 3 per cent.

Reliability of Maternity History Data. At the end of the maternity history section of the individual questionnaire, the interviewer recorded her assessment of the reliability of the respondents' answers. If the respondent was able to answer the questions with ease and directly, and if dates (months and years) of all pregnancies were obtained without difficulty, the reliability of answers was marked as 'good'. If the interviewer had to do a moderate amount of probing or correcting of answers, the reliability of answers was marked as 'fair'. Finally, if the interviewer had to do considerable probing for determination of the dates of pregnancies, or
came to the conclusion that the respondent was not herself sure of many answers she gave, the reliability of answers was marked as 'poor'.

Table 2.4 shows that, according to the interviewers assessments, the data collected in the maternity history section were of good quality; answers were ranked as good in 74 per cent of the cases, and as poor in 3 per cent.
Privacy of Interview. Since the presence of other persons during the interview might make the respondent embarassed and influence some of her answers, the interviewers were instructed that it was very important to conduct the individual interview in private and that all the questions should be answered by the respondent herself.

In the individual interview, information was collected on the presence of other persons at the end of the marriage history section and again at the end of the maternity history section. Table 2.4 summarizes the results. As may be seen, information on the marriage and maternity histories was obtained in complete privacy in 50 per cent of the cases, in the presence of children under 10 years of age in about 16 per cent, and in the presence of the husband in only 4 per cent. 'Other females' were present in 21 per cent of the cases and 'other males' in only one per cent.

It should be pointed out that interviewer's assessments of data reliability and privacy of interview are not in any way guarantees of good quality of data.

Table 2.4 Factors affecting the reliability of the individual survey data

|  | Number |  | \% |  |
| :---: | :---: | :---: | :---: | :---: |
| Degree of co-operation |  |  |  |  |
| Poor | 12 |  | 7 |  |
| Fair | 88 |  |  |  |
| Good | 267 |  |  |  |
| Very good | 80 |  |  |  |
| Total | 448 |  |  |  |
| Reliability of answers in the maternity section |  |  |  |  |
| Poor | 12 |  | 7 |  |
| Fair | 105 |  |  |  |
| Good | 3310 |  |  |  |
| Total | 448 |  |  |  |
| Presence of other persons |  |  |  |  |
| Persons present | Marriage history |  | Maternity history |  |
|  | Number | $\%$ | Number | \% |
| No one | 2278 | 50.8 | 2241 | 49.9 |
| Children under 10 years | 747 | 16.6 | 711 | 15.8 |
| Husband | 167 | 3.7 | 178 | 4.0 |
| Other males | 45 | 1.0 | 59 | 1.3 |
| Other females | 933 | 20.8 | 959 | 21.4 |
| Various | 317 | 7.1 | 339 | 7.5 |
| Total | 4487 | 100.0 | 4487 | 100.0 |

Reliability of Fertility Intentions. Non-response to questions on ideal family size and number of additional children wanted was generally small. All respondents were asked about ideal family size; 93 per cent of them gave numerical answers while the remaining 7 per cent gave answers such as 'depends on God' or 'as many as possible'. Women with at least one live birth were asked about the number of additional children they wanted to have; 90 per cent gave numerical answers, 4 per cent gave other answers and 6 per cent declined to state.

### 2.9. STANDARD ERRORS

For certain important statistics in the text the estimated standard error is given in Appendix III or in the form of a footnote. For example, in section 5.2.1, the estimated mean number of children ever born (over the entire sample) is given as 4.74 and its associated standard error is 0.06 . Apart from non-sampling errors, the standard error in the present context measures the size of the expected deviation of the sample mean from the true population mean.

If non-sampling errors are ignored, then in two samples out of three, the true population value of the variable of interest lies within one standard error of the estimated value, and in nineteen samples out of twenty, the true population value lies within two standard errors of the estimated value. Accordingly, an interval of plus or minus two standard errors around the sample estimate nearly always contains the true population value. This interval is called a 95 per cent confidence interval, and is commonly chosen as giving a range of possible values for the estimated quantity consistent with the data. Hence, the standard error measures the size of the expected deviation of the sample estimate from the true population value of interest.

In the above example, the 95 per cent confidence interval is $4.74 \pm 2(.06)=4.62$ to 4.86 ; that is, with 95 per cent confidence it can be said that the total number of children ever born in the population lies between 4.62 and 4.86 .

Standard errors for the differences between pairs of estimates are also given in Appendix III or in the text, and these are important for determining the likelihood that the observed difference is real or merely caused by sampling variation. In section 5.4.2, the percentage of (currently married) women pregnant at the time of the survey is shown to vary with age. For example, consider comparing the percentage pregnant for the age groups $20-24,25-29$ and $30-34$. The estimated percentages were 31.48 and 25.91 for the age groups 20-24 and 25-29 respectively, giving an estimated difference of 5.57 per cent. This difference has an estimated standard error of 2.23 so that a 95 per cent confidence interval for the difference is $5.57 \pm 2(2.23)=1.11$ to 10.03 . The estimated percentages were 25.91 and 22.53 for the age
groups 25-29 and 30-34 respectively, giving an estimated difference of 3.38 per cent. This difference has an estimated standard error of 2.50 so that a 95 per cent confidence interval for the difference is $3.38 \pm 2(2.50)=-1.62$ to 8.38 .

In general, it is reasonably certain that the sample reflects a real difference in the population if the 95 per cent confidence interval for the difference does not include the value zero. In statistical terminology, the difference is then said to be statistically significant at the 5 per cent level. On the other hand, the term 'not statistically significant' is used to describe a difference with a 95 per cent confidence interval which includes the value zero; in such cases there is no significant evidence that the observed difference in the sample reflects a difference in the population.

In the above example, the 95 per cent confidence interval for the estimated percentage difference between the age groups $20-24$ and $25-29$ does not include the value zero, so there does appear to be a real difference in the percentage pregnant between the age groups $20-24$ and 25-29. The 95 per cent confidence interval for the estimated percentage difference between the age groups $25-29$ and $30-34$ does include the value zero, so the observed difference could be merely caused by sampling variation.

A more detailed presentation of sampling errors may be found in Appendix III. Sampling errors have been calculated for the major variables in the SFS, using the WFS computer program CLUSTERS. An outline of the procedures for estimating sampling errors together with the tables of sampling errors for the household survey and the individual survey are also given in Appendix III. The tables show the estimated sampling errors for means, percentages, and proportions and differences between means, percentages, and proportions for subgroups or subsamples of the population.

### 2.10. TIMETABLE

The implementation of the different activities of the project up to the end of the data collection stage did not differ significantly from the time schedule originally planned. However, due to factors beyond the control of the CBS, the time required for data processing took longer than anticipated. The actual dates of performance of the main stage of the survey are shown below.

## Activities

## Dates

1. Project preparation and February 1977-October 1977 approval
2. General preparation November 1977-January 1978 (questionnaires, sample design)
3. Pre-test and question- February 1978—March 1978 naire finalization

| 4. Mapping and listing of <br> sample areas | April 1978--May 1978 |
| :--- | :--- |
| 5. Training of field staff | May 1978-June 1978 |
| 6. Main fieldwork | June 1978-August 1978 |
| 7. Office editing and <br> coding | September 1978-April 1979 |
| 8. Preparation of clean <br> tapes | May 1979-September 1980 |

Mapping and listing of April 1978--May 1978
5. Training of field staff May 1978-June 1978
6. Main fieldwork
7. Office editing and coding
. Preparation of clean tapes
9. Variable recoding and tabulation
10. Report writing
11. Printing
12. Publication

October 1980-January 1981
February 1981-September 1981
October 1981-February 1982
March 1982

COMMENTARY ON THE MAIN FINDINGS

Detailed analysis of the data generated by the SFS is likely to take a considerable time as it involves a detailed appraisal of the quality of the data with possible adjustments for reporting biases, and application of refined statistical and demographic techniques for studying the nature of interrelationships between demo-socio-economic variables and fertility. Nevertheless, while such in-depth analyses are being completed, it is important not to delay the publication of the present report which is largely based on analysis of contingency tables. It should be mentioned, however, in the absence of more detailed analysis the results and conclusions reported here should be viewed cautiously, and in many instances the interpretation of survey results may have to be revised or modified in the light of more detailed assessment and analysis of the data.

An attempt has been made to make volume I self-contained as far as possible, but in some instances (and in the sources to the text tables) reference has been made to the set of tables contained in volume II.

The main findings of the survey are reported in chapters 3 to 9 . In chapter 3, a brief description of the demographic and background characteristics of the population enumerated in the household survey is provided and this is followed by an outline of the characteristics of the sample of ever-married women in the Individual Survey. In chapters 4 to 9 , the major topics of nuptiality, fertility, preference for size and sex of children, mortality, contraception, and some factors other than contraception affecting fertility are discussed. In chapter 10 a brief overview is made by bringing together the findings and interpretations reported in chapters 4 to 9 .

# DEMOGRAPHIC AND BACKGROUND CHARACTERISTICS OF THE HOUSEHOLD AND INDIVIDUAL SAMPLES 

### 3.1. INTRODUCTION

The major findings of the survey on nuptiality, fertility and mortality, fertility preferences, contraception and factors other than contraception affecting fertility will be described in detail in the following chapters. Some of that discussion will be concerned with differentials between parts of the sample. As pointed out earlier, the SFS consisted of two components, a household and an individual survey. Both of these enquiries included a few questions on geographic and socio-economic variables relevant to Syria.

It is generally observed that socio-economic and other subgroups in a population differ in their demographic composition. For example, the age structure in many of the developing countries differs substantially between urban and rural areas. Where subgroups show considerable variation in their composition, it is essential to control demographic variables in order to clarify the relationship between socioeconomic factors and behaviour or attitudes. In the chapters that follow, demographic controls will be employed wherever necessary. Nevertheless, it is still useful to preface the main findings by outlining these compositional variations. Further, it is likely that the background characteristics of the respondents are themselves inter-related; for instance, urban residence and educational achievement are usually associated with each other. A prior clarification of inter-relationships
between background variables facilitates interpretation and understanding of the findings.

The purpose of this chapter thus is threefold. First, it will serve as an introduction to the characteristics of SFS samples and help the reader to place the substantive findings discussed later in their proper context. Secondly, it will help in understanding the main findings by making explicit the association of the background variables with each other and to a limited extent with demographic control variables. Finally, the quality of the data, particularly the household survey data, is examined. However, this examination is very preliminary and a comprehensive evaluation will be undertaken in due course in conjunction with more refined analysis of the data.

### 3.2. COMPOSITION OF THE POPULATION ENUMERATED IN THE HOUSEHOLD SCHEDULE

For the household survey, listing of household members was done on both a de facto (slept last night) and a de jure (usual resident) basis. However, with the exception of table 3.2, all the household tables are presented for the de facto population, as the individual survey was conducted on this basis.

Table 3.1 Per cent distribution of the de facto population enumerated in the SFS household survey and in the 1970 Population Census, according to age and sex

|  | SFS |  |  |  | Census 1970 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both sexes | Male | Female | Sex ratio | Both sexes | Male | Fe:_ $\sim 1 \mathrm{l}$ | Sex ratio |
| $<1$ year | 3.8 | 3.8 | 3.9 | 1.01 | 3.7 | 3.7 | 3.6 | 1.03 |
| 1-4 | 13.7 | 13.8 | 13.5 | 1.03 | 15.2 | 15.3 | 15.1 | 1.01 |
| 5-9 | 15.8 | 15.9 | 15.7 | 1.01 | 17.1 | 17.3 | 16.8 | 1.03 |
| 10-14 | 15.3 | 15.6 | 14.9 | 1.05 | 13.3 | 13.7 | 10.0 | 1.37 |
| 15-19 | 11.8 | 11.9 | 11.5 | 1.03 | 9.6 | 9.5 | 9.6 | 0.99 |
| 20-24 | 7.7 | 7.3 | 8.2 | 0.89 | 7.3 | 7.4 | 7.2 | 1.03 |
| 25-29 | 5.8 | 5.6 | 5.9 | 0.95 | 5.6 | 5.2 | 5.6 | 0.93 |
| 30-34 | 4.7 | 4.5 | 4.9 | 0.92 | 5.1 | 4.8 | 5.4 | 0.88 |
| 35-39 | 4.1 | 3.8 | 4.5 | 0.84 | 5.0 | 4.9 | 5.2 | 0.94 |
| 40-44 | 3.9 | 3.8 | 4.0 | 0.95 | 4.2 | 4.3 | 4.1 | 1.05 |
| 45-49 | 3.6 | 3.7 | 3.6 | 1.03 | 3.2 | 3.6 | 3.1 | 1.16 |
| 50-54 | 2.9 | 3.0 | 3.1 | 0.97 | 2.4 | 2.8 | 2.4 | 1.16 |
| 55-59 | 2.1 | 2.2 | 2.0 | 1.10 | 1.9 | 1.9 | 1.8 | 1.05 |
| 60-64 | 1.5 | 1.6 | 1.4 | 1.14 | 2.0 | 2.0 | 2.1 | 0.95 |
| $65+$ | 3.2 | 3.4 | 3.0 | 1.13 | 4.3 | 4.3 | 4.5 | 0.95 |

A total of 14,670 households with a de facto population of 95,319 persons was successfully interviewed. There was a small surplus of males $(48,470)$ over females $(46,849)$. The de jure population was slightly higher at 97,310 . The average size of a household was found to be 6.6 for the country as a whole.

### 3.2.1. Age and Sex Composition

The structure of the enumerated sample suggests a very young population and conforms to the pattern observed in most of the countries of the region. The age and sex composition of the population is shown in table 3.1 and figure 3.1, along with the 1970 Population Census data.

The age-sex composition of the population in the survey is not much different from that enumerated in the 1970 Census, except that the former shows a more plausible pattern by age, due probably to a better reporting of ages.

The proportion of the population under 15 years of age both in the census and the survey is very high, close to 49 per cent. Both census and survey report more males than females under the age of 15 .

The sex ratios (i.e. number of males per 100 females) show a zigzag pattern. They are close to 100 at age under one and not 105-106 as one would expect in a perfect enumeration of a population with low infant mortality, Both census and survey report a sex ratio of 101 for the 0.9 age group. The low ratios in the range 15. -54 are mainly due to international migration of men. As mentioned in chapter 1, Syria is one of the major exporters of labour to other Middle Eastern countries. The particularly low sex ratio for ages 20-24 and 35-39 may also reflect emigration of men but it also suggests the possibility of age misstatement either for men or women.

Conspicuous differences in age and sex compositions are observed between the population of the urban and rural


Figure 3.1 Age and sex distribution of population enumerated in SFS and 1970 Population Census


Figure 3.2 Percentage distribution of de facto male and female population enumerated in urban and rural areas according to single years of age
areas particularly at young ages. Both in the survey and the census, considerably more children are enumerated in rural areas as compared to urban areas, which may reflect higher rural fertility (figure 3.1). The overall sex ratio is more masculine in urban areas. The differences are more pronounced for the economically active age range 15-64, and in rural areas the ratio falls to the mid-80s.

### 3.3. QUALITY OF AGE DATA

Errors in the reporting of age have probably been more intensively examined by demographers than any other type of error because they are readily apparent and are relatively easy to quantify. Age errors fall into two classes, heaping at certain ages because of a preference for particular terminal digits (usually 0 and 5) and a systematic tendency for age to be over- or understated. Systematic errors are more likely to distort the results because misstatement may be correlated
with marital status or fertility.
The single-year-of-age distribution obtained in the SFS household survey shows certain fluctuations (figure 3.3). Almost without exception it peaks at ages ending in 0 and shows corresponding troughs at ages ending in 9 and 1 . Somewhat less marked concentrations are found at ages ending in 5 and ages ending in even numbers such as 2 and 8. Similar patterns are observed for urban and rural areas (figure 3.2).

Under normal conditions, the figures for adjacent ages should be similar. Even though past shifts in the annual number of births, deaths, and migrants can produce fluctuations from one single age to another, the fluctuations observed in figure 3.3 are such that one suspects faulty reporting. As mentioned earlier, the tendency on the part of the respondent to report certain ages at the expense of others is called age heaping or digit preference. Various indices have been developed for measuring heaping at indi-


Figure 3.3 Percentage distribution of de facto male and female population enumerated in SFS according to single years of age
vidual ages or terminal digits. The simplest way to measure digit preference is to assume that the true figures are rectangularly distributed, i.e. that there are equal numbers at closely adjacent ages. For example, an index of heaping at age 20 can be calculated as a ratio of the enumerated population aged 20 to one-third of the population aged 19,20 and 21 (per 100) or one-fifth of those aged $18,19,20,21$ and 22. In table 3.2 the former index is presented for SFS data. It appears that both males and females exhibit a strong preference for digits ' 0 ' and ' 5 '. The resulting indices for females are consistently higher than for males. The major impact of these irregularities can be reduced by presentation of results for five-or ten-year age groups.

The presence of systematic age transference is less easy to detect. Apart from the suspiciously low sex ratios for ages $20-24$ and $35-39$, already mentioned, there are no obvious irregularities in the sizes of the five-year cohorts enumerated in the household survey. In particular there is no evidence of transference of women from ages under 50 to ages over 50; this tendency could have had serious consequences for the SFS, because eligibility for the individual survey was confined to ages below 50 .

One way of detecting age errors that are correlated with marital status or fertility is to examine the proportions ever married and mean number of children ever born by single years of age. Sudden increases in either of these two measures, particularly at the major age boundaries of 19/20, $24 / 25$ and $29 / 30$ is suggestive of age misreporting. Mean
numbers of children ever born by single years of age are shown in figure 3.4. The curve is relatively smooth, with no major irregularities suggestive of selective age misreporting. The proportions ever married in the household survey,


Figure 3.4 Number of children ever born to ever-married women aged $15-50$, by age in single years according to household survey

Table 3.2 Index of digit preferences at certain terminal digits ( 0,5 ), household surveya

|  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| :--- | :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Males | 109.3 | 97.9 | 108.7 | 111.7 | 149.2 | 134.0 | 145.2 | 134.3 | 129.9 | 129.8 | 187.3 |
| Females | 111.2 | 102.1 | 130.2 | 129.5 | 152.4 | 135.6 | 148.8 | 146.2 | 145.6 | 158.7 | 212.8 |

[^2]shown in table 4.1 in the next chapter, give a similar impression, except at the $19 / 20$ boundary where there is a particularly large increase in the proportion. This suggests the possibility of overstatement of the ages of teenage wives or conversely understatement of the ages of single women in their twenties. In conclusion, these preliminary and somewhat superficial tests for age misstatement provide little evidence of errors serious enough to distort survey findings, with the exception noted in the previous sentence.

### 3.4. DESCRIPTION OF THE EXPLANATORY VARIABLES

The main findings of the survey are presented not only for the sample as a whole but also for subgroups defined by socio-economic and geographic characteristics. The selection of these characteristics is based on a priori considerations of possible influences on fertility and related behaviour. The geographic characteristics included in the survey were childhood type of place of residence, current type of place of residence and region of residence. The socio-economic variables included were education of respondent and her spouse, occupation of her current or last husband, work experience both before and after marriage, the language spoken in the household, and ethnicity. With the exception of region of residence, language and ethnicity, all variables are standard in WFS surveys.

For the purposes of preparing the First Report, it was considered excessive to use all available variables and accordingly only five have been used in tabulations. Each of these is described in the following paragraphs.

### 3.4.1. Education and Literacy

Since the late 1960 s considerable improvements have been made to the educational system in Syria. The re-organized system has four tiers: elementary or primary, covering six years of schooling; preparatory, covering three years; secondary, covering three years; and university, which usually lasts for four years. The minimum school enrolment age has also been changed from age seven in the past to age six. Previously the primary level was completed after five years; in the present system it takes six completed years. ${ }^{1}$

Literacy and educational attainment are highly correlated and nearly all who report going to school are reported as literate. It should, however, be recognized that this is selfperceived literacy. Because of this strong association, the idea of combining educational level and literacy to form a single joint variable was discarded and instead the discussion of main findings is restricted to four educational categories no schooling, incomplete primary (less than five or six years of schooling), complete primary plus preparatory (five or six to nine years of schooling), and secondary and over, representing ten or more years at schooi.

The concerted efforts of the Government to improve educational coverage are reflected in table 3.3, which shows the distribution of the population 10 years and over enumerated in the household survey by educational attainment. Two facts emerge from the table. First, it is apparent

[^3]Table 3.3 Per cent distribution of population (10 years of age and over) enumerated in the household survey according to highest educational level attained in household survey data, by sex

| Age | Males |  |  |  |  | Females |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No schooling | Incomplete primary | Complete primary | Secon- <br> dary + | Total | No schooling | Incomplete primary | Complete primary | Secon- <br> dary + | Total |
| 10-14 | 5.8 | 94.2 | - | - | 100.0 | 24.4 | 75.5 | - | - | 100.0 |
| 15-19 | 8.4 | 89.0 | 2.5 | - | 100.0 | 35.6 | 62.6 | 1.7 | - | 100.0 |
| 20-24 | 11.6 | 61.7 | 25.7 | 1.0 | 100.0 | 46.5 | 41.1 | 11.7 | 0.8 | 100.0 |
| 25-29 | 16.9 | 57.3 | 19.2 | 6.4 | 100.0 | 57.9 | 31.4 | 8.4 | 2.2 | 100.0 |
| 30-34 | 21.0 | 55.7 | 14.0 | 9.3 | 100.0 | 62.0 | 31.5 | 4.5 | 1.9 | 100.0 |
| 35-39 | 29.4 | 54.5 | 7.3 | 8.5 | 100.0 | 70.6 | 24.7 | 3.0 | 1.7 | 100.0 |
| 40-44 | 42.7 | 45.6 | 4.9 | 6.7 | 100.0 | 82.9 | 15.4 | 1.2 | 0.5 | 100.0 |
| 45-49 | 51.1 | 42.0 | 2.9 | 3.8 | 100.0 | 86.3 | 12.4 | 0.8 | 0.5 | 100.0 |
| 50-54 | 61.0 | 35.5 | 1.7 | 1.6 | 100.0 | 88.9 | 10.6 | 0.3 | 0.2 | 100.0 |
| 55-59 | 60.0 | 36.4 | 1.5 | 2.0 | 100.0 | 92.4 | 6.8 | 0.4 | 0.2 | 100.0 |
| 60-64 | 73.6 | 24.7 | 1.3 | 0.4 | 100.0 | 95.4 | 4.3 | 0.3 | 0.1 | 100.0 |
| $65+$ | 80.0 | 18.4 | 0.8 | 0.7 | 100.0 | 97.4 | 2.3 | 0.1 | 0.2 | 100.0 |
| Number | 8267 | 25,328 | 2216 | 819 | 36,630 | 17,901 | 16,453 | 992 | 190 | 35,536 |
| \% | 22.6 | 69.1 | 6.0 | 2.2 | 100.0 | 50.4 | 46.3 | 2.8 | 0.5 | 100.0 |

Table 3.4 Per cent distribution of frequencies for the sample of ever-married women according to major background variables

that educational levels have improved considerably. For the younger cohorts (less than 20 years old), formal school enrolment is substantial, 93 per cent for males and 70 per cent for females. Second, it is obvious that in the past the emphasis had been on male education. Only about 6 per cent of females aged 50 years and over had any schooling compared to 35 per cent for males. However, this has changed now, and if the trend continues for the next few years sex differentials in educational attainment will disappear. Even now the differences are not pronounced for younger people in urban areas, particularly in Damascus City. The practical implication of this pattern is that a simple comparison of the fertility behaviour of the different educational categories will be misleading unless due account is taken of their differing ages and marriage duration compositions.

### 3.4.2. Place of Residence

Sample areas were classified as 'urban' or 'rural' in accordance with definitions used in the 1970 Population Census. In this classification no fixed criterion regarding the size of the locality was used. The census definition is based on a number of socio-economic characteristics, such as agriculture and non-agriculture economic activity and availability of social amenities like schools.

According to the survey, nearly 51 per cent of the country's population lives in areas classified as urban; the
capital Damascus and Aleppo City account for nearly 50 per cent of the entire urban population (table 3.4). It should be mentioned that survey estimates of the proportion urban is slightly higher than the projections based on the 1976 Sample Census survey; according to the latter, the population living in urban areas in 1978 is estimated to have been around 49 per cent.

### 3.4.3. Region of Residence

Instead of adopting the four basic strata used in designing the sample - Damascus City, Other Major Cities, Towns and Villages -, a different and more detailed grouping of the sample into six regions - Damascus City, Aleppo City, North-East, West, Centre and South - has been used for presenting the results. The advantage of this classification lies in the fact that all the statistical data in the country are produced using this classification. The locations of these cities and boundaries of the regions may be seen in figure 1.1.

Damascus is the capital and the largest city of the country. The city of Aleppo, once the second largest town of the Ottoman Empire, is the second largest city of the country. These two cities account for more than one-fourth of the country's total population. The North-East region comprising the Euphrates Valley, with its abundant water resources from the newly built irrigation dam, is gradually changing into a prosperous argicultural region, though it still largely consists
of vast, open sparsely populated desert areas. The South and the West, with their fertile lava soil, are highly developed agricultural regions producing mainly citrus fruits and cereal crops. The Centre region comprises most of the desert part of the country, has very scarce water resources and is the least developed region. The distribution of the sample population by region is given in table 3.4.

### 3.4.4. Pattern of Work

Details about employment were obtained from each respondent, both for her current or most recent work since marriage and for work done before marriage. The definition of 'work' was any occupation apart from ordinary household duties, paid in cash or in kind or unpaid, on own account or for a family member or for someone else, done at home or away from home. The information collected on timing of work has been summarized in the following four categories, two of which were further subdivided to form six groupings.

1. Those who worked before and after marriage ${ }^{2}-882$. All but 119 of these are also currently working. The tabulations are run separately for those who have worked before marriage and are currently working and those who worked before and after marriage but are not currently working. However, due to small cell frequencies, these two are combined to form one category in discussing the substantive findings.
2. Those who have worked since marriage but did not work before their first marriage-258. All but 51 of these are currently working. Here again, though the tabulations are presented separately for those currently working and and those not currently working, the two are combined when the substantive findings are discussed.
3. Those who worked before their first marriage but not since marriage-506.

## 4. Those who never worked-2941.

One major advantage of creating such detailed categories lies in the flexibility it provides to the user of the data. By combining the six categories in different ways, one can create more suitable groupings for discussion of particular results, for example, the dichotomy between those who never worked and those who ever worked. The relative sizes of these categories in Syria is such that for many purposes, a simple dichotomy or a trichotomy is more useful than a more detailed breakdown.

### 3.4.5. Husband's Occupation

For currently married women this variable relates to the current (or most recent, if retired or unemployed) occupation of the husband; for women who are not currently married, the reference is to their last husband's occupation.

Responses to the question of husband's occupation have been coded using the detailed 2-digit standard Syrian classification (an adaptation of the ISCO classification), and a single digit classification corresponding to WFS recommendations. In tabulations, only five broad categories, with a small residual category of 'never worked', have been used. These categories relate to the WFS system as follows:

| Category | WFS standard codes |
| :--- | :--- |
| Professional and technical | 0/Part 1 |
| Managerial and clerical | $2 /$ Part 1 |
| Sales and services | $3,6 / 7$ |
| Agriculture | $4 / 5$ |
| Skilled and unskilled manual | $8 / 9$ |

The reasons for this amalgamation are twofold. First, these five categories correspond to the system used by the CBS in their reports. Secondly, it makes the sample sizes adequate for detailed discussion of the results.

The professional and technical group consists predominantly of men with advanced qualifications and highly skilled and well-remunerated jobs. The buik of managerial and clerical husbands are in fact white collar workers. The sales and service and the skilled and unskilled manual workers categories are self-explanatory, though neither group is homogeneous. Finally the agricultural sector mainly comprises self-employed farmers; only one-fifth of these husbands are employees.

It should be recognized that there are inherent difficulties in any occupational classification. For example, the sales and service category covers a wide variety of situations, from street vendor to international salesmen. The activities, requirements, and rewards associated with these jobs are very different. Similarly, there is a wide range in other occupational categories. The reader is therefore cautioned to be very careful in interpreting the differentials by occupational categories.

### 3.4.6. Other Variables

In some tabulations, particularly while presenting the differentials in age at marriage and early marital fertility, three other background variables have been used. These are woman's occupation before first marriage (defined as above); her childhood place of residence (Governorate, Urban and Village) defined as her subjective impression of the place where she spent most of her childhood; and work status before marriage.

[^4]Table 3.5 Relative distribution according to current age and marriage duration by background variables

|  | Current age |  |  |  | Years since first marriage |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<25$ | 25-34 | 35-44 | $45 \pm$ | $<5$ | 5-9 | 10-14 | 15-19 | $20+$ |
| Level of education |  |  |  |  |  |  |  |  |  |
| No schooling | 0.79 | 0.97 | 1.13 | 1.30 | 0.75 | 0.93 | 1.01 | 1.04 | 1.25 |
| Incomplete primary | 1.30 | 1.03 | 0.80 | 0.62 | 1.16 | 1.11 | 1.12 | 1.05 | 0.66 |
| Complete primary | 1.60 | 1.00 | 0.70 | 0.23 | 1.67 | 1.10 | 0.91 | 0.92 | 0.42 |
| Secondary+ | 0.94 | 1.43 | 0.80 | 0.35 | 1.19 | 1.33 | 0.77 | 0.53 | 0.26 |
| Type of residence |  |  |  |  |  |  |  |  |  |
| Urban | 0.98 | 1.00 | 1.05 | 0.95 | 1.04 | 0.90 | 0.99 | 1.09 | 1.00 |
| Rural | 1.02 | 1.00 | 0.95 | 1.05 | 0.97 | 1.11 | 1.01 | 0.91 | 1.00 |
| Region of residence |  |  |  |  |  |  |  |  |  |
| Damascus City | 0.95 | 0.93 | 1.12 | 1.04 | 1.06 | 0.82 | 0.94 | 1.04 | 1.09 |
| Aleppo City | 1.04 | 1.09 | 0.84 | 0.92 | 0.99 | 1.05 | 1.09 | 1.14 | 0.83 |
| North-East | 1.28 | 1.02 | 0.92 | 1.05 | 1.01 | 1.11 | 1.17 | 0.79 | 0.92 |
| West | 0.76 | 1.11 | 1.12 | 1.00 | 0.90 | 0.88 | 0.94 | 1.23 | 1.08 |
| Centre | 0.98 | 0.99 | 0.99 | 1.13 | 0.94 | 0.99 | 0.94 | 1.03 | 1.08 |
| South | 1.18 | 0.99 | 1.02 | 0.74 | 1.08 | 1.08 | 0.87 | 0.99 | 0.96 |
| Pattern of work |  |  |  |  |  |  |  |  |  |
| Before and after marriage | 0.80 | 1.12 | 1.09 | 0.94 | 0.91 | 1.18 | 1.09 | 1.03 | 0.88 |
| After marriage only | 0.65 | 1.02 | 1.29 | 1.14 | 0.51 | 1.03 | 1.06 | 1.06 | 1.36 |
| Before marriage only | 1.22 | 1.06 | 0.81 | 0.72 | 1.31 | 1.14 | 0.98 | 0.92 | 0.66 |
| Never worked | 1.05 | 0.95 | 0.98 | 1.05 | 1.02 | 0.92 | 0.98 | 1.00 | 1.06 |
| Husband's occupation |  |  |  |  |  |  |  |  |  |
| Professional and technical | 1.18 | 1.13 | 0.77 | 0.72 | 1.26 | 1.11 | 1.05 | 0.88 | 0.72 |
| Managerial and clerical | 0.98 | 1.09 | 1.06 | 0.63 | 1.03 | 1.17 | 1.11 | 0.91 | 0.83 |
| Sales and services | 0.90 | 0.91 | 1.11 | 1.24 | 0.83 | 0.78 | 0.96 | 1.25 | 1.21 |
| Agriculture | 0.80 | 0.99 | 1.05 | 1.44 | 0.79 | 0.96 | 1.01 | 0.99 | 1.22 |
| Skilled and unskilled manual | 1.11 | 0.94 | 1.02 | 0.84 | 1.09 | 1.00 | 0.94 | 1.01 | 0.96 |
| Per cent distribution of the total sample | 28.2 | 33.7 | 26.5 | 11.6 | 23.4 | 19.9 | 16.1 | 15.4 | 25.1 |

Source: Tables 1.2.2 and 2.2.6.

### 3.5. DEMOGRAPHIC COMPOSITION OF THE BACKGROUND VARIABLES

It is commonly observed that women with different background characteristics differ in their demographic composition, for instance in terms of age and age at marriage. For example, in societies such as Syria, where in recent years there has been a general rise in educational standards, there is a much higher proportion of well-educated women at younger rather than at older ages. A common consequence of improving educational opportunities is a changing nuptiality pattern (educated women are likely to marry late), a fact of relevance in the SFS where the individual sample was restricted to ever-married women. Thus, for a critical understanding of the data, it is important to recognize these differences between categories of background variables, which are summarized in table 3.5.

The figures show the percentage at specified ages and marriage durations for each category divided by the percentage of the total sample at the same age or duration. The figures thus indicate the relative size of an age or marriage duration group within a particular socio-economic subgroup
compared to the whole sample. A figure larger than one means that the group is relatively over-represented in the socio-economic or geographic category.

For the sample as a whole, the percentages by age or marriage duration are given in the bottom row. Nearly onethird of the women are aged between 25-34 years and one in four has been married for less than five years.

Educational categories differ greatly in age distribution. Women with no education are clearly older than those who have attended school, and the contrast increases with level of education, an artifact of expanding educational facilities in the country. It should be mentioned that for the highest level-of-education category (secondary and over), women aged less than 25 are under-represented, presumably due to higher age at marriage for this group. The complete primary group is also likely to be somewhat under-represented for the same reason. Compositional differences between educational categories in terms of marital duration are also apparent. While recent marriage cohorts are under-represented in the 'no schooling' category, the reverse is true for the other categories.

Urban women are slightly older than rural women; however, the difference is very small. No systematic pattern is observed by marriage duration for the urban and rural women. Regional differences by age are very pronounced; women aged under 25 are relatively over-represented in the North-East and South and severely under-represented in the West. On the average, the two major cities show less deviation in age composition from the national average than the more rural regions. Regional variations by duration are not conspicuous, though for some reason the North-East has nearly 20 per cent less women at $15-19$ years than the country as a whole. One possible explanation lies in differences in the quality of reporting.

We turn now to the variable 'pattern of work'. Those who have worked before marriage have smaller proportions of women under age 25 than those who have worked only after marriage or who have never worked. In all probability, the women who have worked before marriage are better educated and marry later and this may account for their age structure.

There are proportionately more women in the ages below 35 and less above this age among those whose husbands are in professional and technical occupations; the reverse is true for women with husbands in agriculture where older women are over-represented. A similar pattern is found by marriage duration; women with husbands in agricultural occupations are typically married for longer durations than others, particularly the professional and technical group.

In the preceding paragraphs, it has been observed that strong associations exist between age and duration since first marriage and certain categories of the women's background characteristics. A common method of taking these differences into account is to study differentials in fertility or related topics only within specified marriage duration or age groups. These demographic controls should be sufficiently free to eliminate any effect of compositional differences on the findings. In presenting the results, wherever relevant, the sample is divided into five-or ten-year groups by current age or marriage duration. These controls should be adequate for the purpose stated above.

When the sample size does not permit a sufficiently detailed cross-classification of the data, the results can be summarized by standardizing the composition. This is done in such a way that the results are brought to the same underlying distribution for all the background variables categories. The procedure is commonly known as direct standardization and a brief description of the method is given in section 3.7.

### 3.6. ASSOCIATION BETWEEN BACKGROUND CHARACTERISTICS

One of the most intractable difficulties in the social sciences
is the problem of causation. Quite apart from all the philosophical problems of inferring causation from statistical associations in cross-sectional data, inter-relationships between background or explanatory variables complicate the situation. For instance, an association between urban residence and low fertility may simply reflect the fact that urban women tend to be better educated and to have fewer children for this reason rather than because of their urban environment. These difficulties cannot be resolved in an essentially descriptive report of this nature, but some of the more obvious pitfalls of analysis can be avoided by a preliminary examination of the associations between background variables. In order to assess the extent of associations between the five major background variables, a complete set of two-way cross-classifications of each variable against the others is given in table 3.6.

The major associations are summarized below:

1. A strong association between women's educational level and their other background characteristics, particularly type of place and region of residence and husband's occupation, may be observed. Women living in urban areas are better educated than those living in rural areas. Less than one-third of women in urban areas had no schooling as against two-thirds in rural areas. Considerable variation also exists in educational attainment within urban areas. Women living in Damascus City form the best educated group in the country, in terms of both quality and quantity. Conversely, nearly all ( 94 per cent) wives of the agriculturalists have not attended any school.
2. Apart from Damascus City and Aleppo City which are wholly urban, the proportion urban in the remaining four regions is 25 per cent in the North-East, 35 per cent in the West, 41 per cent in the Centre and 30 per cent in the South. Non-farming occupations predominate in urban areas; 92 per cent of urban women have husbands in nonfarming occupations. Surprisingly, nearly half the women with husbands involved in professional and technical activities live in rural areas.
3. A larger proportion of rural women than urban women have worked both before and after marriage ( 48 per cent against 21 per cent). Relatively higher proportions of wives of agriculturalists have worked than wives with husbands in other occupations. The North-East has the highest percentage of husbands working in agriculture and also has the highest percentage of women who have ever worked; probably, the two features are closely related.
4. Women with husbands in managerial, clerical and sales and service occupations are better educated than others, particularly than those whose husbands are working in agriculture.
5. Women who have never worked tend to be better edu-

Table 3.6 Per cent distribution of ever-married women according to background characteristics A, by background characteristics B

|  | Level of education |  |  |  | Type of residence |  | Region of residence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No schooling | Incomplete primary | Complete primary | Secondary + | Urban | Rural | Damascus City | Aleppo City | NorthEast |
| Level of education |  |  |  |  |  |  |  |  |  |
| No schooling | - | - | - | - | 35 | 65 | 7 | 9 | 32 |
| Incomplete primary | - | - | - | - | 79 | 21 | 36 | 12 | 9 |
| Complete primary | - | - | - | - | 82 | 18 | 37 | 13 | 8 |
| Secondary + | - | - | - | - | 89 | 11 | 37 | 9 | 6 |
| Type of residence |  |  |  |  |  |  |  |  |  |
| Urban | 46 | 20 | 27 | 7 | - | - | 33 | 20 | 12 |
| Rural | 87 | 6 | 6 | 1 | - | - | - | - | 37 |
| Region of residence |  |  |  |  |  |  |  |  |  |
| Damascus City | 27 | 28 | 37 | 8 | 100 | - | - | - | - |
| Aleppo City | 60 | 15 | 21 | 3 | 100 | - | - | - | - |
| North-East | 89 | 5 | 5 | 1 | 25 | 75 | - | - | - |
| West | 72 | 9 | 13 | 6 | 35 | 65 | - | - | - |
| Centre | 71 | 11 | 14 | 4 | 41 | 59 | - | - | - |
| South | 68 | 14 | 5 | 2 | 30 | 70 | - | - | - |
| Pattern of work |  |  |  |  |  |  |  |  |  |
| Now and before marriage | 81 | 4 | 4 | 11 | 20 | 80 | 7 | 3 | 51 |
| Now not before marriage | 69 | 8 | 12 | 11 | 40 | 60 | 15 | 4 | 23 |
| Since and before marriage | 79 | 8 | 7 | 7 | 23 | 77 | 7 | 2 | 28 |
| Since marriage only | 53 | 20 | 23 | 4 | 55 | 45 | 27 | 8 | 14 |
| Before marriage only | 75 | 13 | 9 | 2 | 43 | 57 | 10 | 13 | 29 |
| Never worked | 61 | 16 | 21 | 2 | 61 | 39 | 20 | 12 | 18 |
| Husband's occupation |  |  |  |  |  |  |  |  |  |
| Professional and technical | 59 | 10 | 21 | 10 | 51 | 49 | 17 | 9 | 16 |
| Managerial and clerical | 48 | 18 | 26 | 8 | 70 | 30 | 29 | 9 | 12 |
| Sales and services | 53 | 23 | 21 | 3 | 79 | 21 | 29 | 17 | 16 |
| Agriculture | 94 | 2 | 3 | 1 | 8 | 92 | 0 | 1 | 48 |
| Skilled \& unskilled manual | 63 | 17 | 18 | 1 | 65 | 35 | 18 | 17 | 18 |
| Never worked | 85 | 3 | 12 | - | 30 | 70 | 0 | 13 | 60 |

cated, to be urban residents and to have husbands in sales and service occupations.
Two main points emerge from this brief scrutiny of associations between background variables. First, interpretation of rural/urban and occupational differentials will not be easy because both variables are closely associated with education. Second, any relationships between women's labour force participation and fertility may be masked by the fact that women with work experience tend to be poorly educated and rural.

### 3.7. A NOTE ON STANDARDIZATION ${ }^{3}$

As has been observed in the preceding paragraphs, strong compositional differences exist between the various subgroups of the survey population. In order to summarize the survey findings, particularly when discussing the differentials in fertility, mortality, contraceptive use, it is necessary to minimize the impact of these compositional differentials. A commonly followed procedure is to control for the relevant
demographic and other characteristics of the subgroups being compared by presentation of results for different demographic classes. However, this procedure is not always applicable, particularly when the sample sizes of the subgroups are small and detailed cross-classification not possible. An alternative method of taking into account these compositional and structural differentials is direct standardization.

Standardization is applied to cross-classifications of a mean response by, say, a background variable (such as education) and a demographic variable (such as marital duration). In order to control for the latter, for each level of the back. ground variable a weighted average of the cell means is calculated. The weights used are proportional to the grouped distribution of the demographic variable in the population as a whole. For example, in comparing parity for different educational categories, the demographic variable 'marital

[^5]|  |  |  | Pattern of work |  |  |  |  |  | Husband's occupation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| West | Centre | South | Now and before marriage | Now not before marriage | Since and before marriage | Before marriage only | Since marriage only | Never worked | Prof. and tech. | Manag. <br> and <br> clerical | Sales and service | Agricultural | Skilled/ unskilled manual | Never worked |
| 12 | 23 | 16 | 18 | 5 | 3 | 1 | 13 | 60 | 14 | 12 | 11 | 35 | 27 | 1 |
| 7 | 18 | 17 | 5 | 3 | 1 | 2 | 11 | 78 | 12 | 21 | 25 | 5 | 36 | 0 |
| 9 | 19 | 15 | 4 | 3 | 1 | 2 | 6 | 84 | 20 | 25 | 18 | 5 | 31 | 1 |
| 18 | 20 | 10 | 44 | 14 | 5 | 1 | 6 | 30 | 41 | 33 | 13 | 3 | 9 | 0 |
| 8 | 17 | 9 | 6 | 4 | 1 | 1 | 9 | 79 | 16 | 22 | 22 | 4 | 36 | 0 |
| 14 | 26 | 23 | 24 | 6 | 4 | 1 | 13 | 52 | 16 | 10 | 6 | 47 | 20 | 1 |
| - | - | - | 6 | 4 | 1 | 2 | 7 | 79 | 16 | 28 | 25 | 1 | 31 | 0 |
| - | - | - | 4 | 2 | 1 | 1 | 14 | 78 | 14 | 13 | 24 | 3 | 45 | 1 |
| - | - | - | 31 | 4 | 3 | 1 | 13 | 48 | 10 | 8 | 10 | 49 | 21 | 2 |
| - | - | - | 10 | 5 | 1 | 0 | 7 | 76 | 22 | 28 | 8 | 19 | 22 | 1 |
| - | - | - | 11 | 5 | 1 | 0 | 7 | 75 | 15 | 12 | 11 | 33 | 29 | 0 |
| - | - | - | 13 | 6 | 8 | 3 | 19 | 51 | 23 | 15 | 13 | 21 | 27 | 1 |
| 7 | 17 | 15 | - | - | - | - | - | - | 15 | 9 | 5 | 57 | 13 | 1 |
| 13 | 23 | 22 | - | - | - | - | - | - | 16 | 16 | 9 | 40 | 18 | 0 |
| 5 | 12 | 46 | - | - | - | - | - | - | 19 | 11 | 8 | 38 | 23 | 1 |
| 4 | 4 | 43 | - | - | - | - | - | - | 25 | 10 | 23 | 12 | 27 | 2 |
| 7 | 14 | 27 | - | - | - | - | - | - | 16 | 7 | 12 | 23 | 30 | 2 |
| 13 | 25 | 12 | - | - | - | - | - | - | 16 | 18 | 17 | 17 | 32 | 1 |
| 15 | 20 | 23 | 14 | 5 | 3 | 2 | 11 | 65 | - | - | - | - | - | - |
| 19 | 16 | 15 | 8 | 5 | 2 | 1 | 12 | 72 | - | - | - | - | - | - |
| 6 | 17 | 14 | 5 | 3 | 1 | 2 | 10 | 79 | - | - | - | - | - | - |
| 8 | 28 | 14 | 34 | 7 | 4 | 1 | 10 | 44 | _ | - | - | - | - | - |
| 8 | 23 | 16 | 7 | 3 | 2 | 1 | 12 | 74 | - | - | - | - | - | - |
| 7 | 8 | 17 | 12 | 0 | 3 | 3 | 25 | 57 | - | - | - | - | - | - |

duration' is controlled by cross-classifying mean parity by education and marital duration, and then calculating for each educational level a weighted average of the mean parities of each marriage duration group, with weights proportional to the marginal distribution by marital duration for the whole sample. In this way, the same distribution by marital
duration is applied to each educational level. Except for the approximation resulting from working with grouped data, any observed differences in the 'standardized' means of each educational level are thus not the result of differences in marital duration between the categories being compared.

## NUPTIALITY

### 4.1. INTRODUCTION

Marriage, divorce and widowhood are demographic events that influence the course of population growth. They shape the marital composition of a population, which could in turn affect all aspects of population dynamics.

The age at which women marry is an important factor in population growth. In Syria, first marriage provides the primary social setting in which the biological event of childbearing occurs. While fecundity provides the biological potential for reproduction, age at first marriage and a variety of other factors interact with it to determine a woman's actual reproductive performance. Thus, following the first entry into a marital union, the effective duration spent in the married state is governed by the prevalence of marital dissolution and remarriage. Within intervals of marriage, the degree of exposure to childbearing is influenced by a variety of factors of differing intensities, such as temporary separation of spouses, coital frequency, adolescent sterility, primary and secondary sterility, post-partum amenorrhoea, and the prevalence and efficacy of contraceptive use.

Most of these factors were measured in the Syria Fertility Survey. This chapter is confined to an analysis of the nuptiality data collected in the household and the individual surveys, and is organized in three sections. In section 4.2, recent trends in the pattern and level of age at first marriage are analysed. Section 4.3 examines variations in the age at first marriage of different subgroups, and in section 4.4 some aspects of marital stability are discussed. It should be recalled that information on date of marriage refers to the date when the marriage was consummated and not the date of the registration of the marriage contract.

### 4.2. THE TEMPO AND LEVEL OF NUPTIALITY

### 4.2.1. Singulate Mean Age at Marriage

Demographic patterns, social norms and economic factors all work intricately together to shape the character of marriage in a society. The elements involved in this process are wideranging and include such factors as preferred age differences between husbands and wives, the relative availability of men and women with desired characteristics, the costs of forming a household, the acceptability of divorce and remarriage, and the availability of factors that could affect the timing of marriage such as education and employment.

By way of general introduction to the analysis of nuptiality patterns in Syria, data on the proportion ever married by single years of age from the household survey (shown in table 4.1) may be used to calculate a summary measure of the age at first marriage. This measure, introduced by Hajnal in 1953, is termed the singulate mean age at marriage (SMAM). It is defined to be the mean age at first marriage of those persons who marry by age 50 ; that is SMAM measures the mean number of years spent single among persons ultimately marrying. In this report, as is most common, it is calculated by adding the proportion currently single at successive ages as though they referred to a single real cohort of women. The

Table 4.1 Proportions ever married (per 1000 persons) for males and females, by single years of age, household survey

|  |  |  |
| :--- | :---: | :---: |
| Age | Males | Females |
| 15 | 4 | 76 |
| 16 | 9 | 151 |
| 17 | 13 | 243 |
| 18 | 35 | 331 |
| 19 | 65 | 391 |
| 20 | 97 | 526 |
| 21 | 130 | 531 |
| 22 | 201 | 604 |
| 23 | 243 | 659 |
| 24 | 397 | 739 |
| 25 | 493 | 787 |
| 26 | 533 | 810 |
| 27 | 614 | 831 |
| 28 | 714 | 834 |
| 29 | 777 | 872 |
| 30 | 817 | 886 |
| 31 | 877 | 933 |
| 32 | 874 | 931 |
| 33 | 891 | 939 |
| 34 | 911 | 950 |
| 35 | 925 | 921 |
| 36 | 946 | 948 |
| 37 | 958 | 951 |
| 38 | 973 | 958 |
| 39 | 975 | 940 |
| 40 | 976 | 959 |
| 41 | 976 | 968 |
| 42 | 985 | 972 |
| 43 | 990 | 974 |
| 44 | 975 | 974 |
| 45 | 982 | 966 |
| 46 | 993 | 993 |
| 47 | 993 | 977 |
| 48 | 988 | 988 |
| 49 | 991 | 991 |
|  |  |  |

Source: Table B1.

SMAM thus calculated summarizes the experience of all the persons enumerated in the different ages at a given point in time and does not refer to any real cohort.

The value of this singulate mean age at marriage calculated from the SFS household survey data is 26.4 years for males and 22.1 years for females. Changes in the age at first marriage for females may be quantified by using the individual survey data to find proportions of women single and ever married five years prior to the survey, if it is assumed that there has been no change in the proportion ever married at ages 45-54. The value of SMAM for females five years prior to the SFS is 21 years. This suggests that the mean age at first marriage for females has increased during the period 1973-78 by about one year.

### 4.2.2. Proportions Ever Married

Nuptiality as a demographic event may be characterized by its age pattern and by its ultimate level. Trends in these two basic characteristics of nuptiality may be examined by-linking data from the household survey with the data on
nuptiality obtained in the individual survey. Table 4.2 shows the cumulative proportions of women ever married before attaining specified ages by current age.

The table shows a relatively young age pattern of first marriage for Syria. However, there is a clear trend towards later marriage and a concomitant trend for first marriage to be spread over a wider age range, as evidenced by the sig. nificant decreases in the proportions of women ever married at young ages since the mid-1960s. The table shows that women currently aged $30-34$ had the youngest age pattern of first marriage. Thus, the percentage of women ever married before reaching age 22 has decreased from 74 for women at ages $30-34$ to 67 for women at ages $25-29$. Likewise, the percentage ever married by age 20 has decreased - but more rapidly - from 64 for the cohort aged $30-34$ to 56 for those aged 25-29 and to 50 for women aged 20-24.

The decline in teenage marriages has also been striking. For women at ages 45-49, about 44 per cent entered first marriage before reaching age 18 . This percentage declined to 35 for women at ages $20-24$. There has also been a large decline in very early marriage (under 15 years of age), from

Table 4.2 Cumulative proportion of women ever married by age (exact years)

| Age (exact years) | Current age |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |
| 11.0 | . 000 | . 001 | . 002 | . 007 | . 004 | . 005 | . 004 |
| 12.0 | . 003 | . 004 | . 011 | . 011 | . 019 | . 007 | . 019 |
| 13.0 | . 010 | . 018 | . 034 | . 036 | . 030 | . 028 | . 045 |
| 14.0 | . 037 | . 055 | . 071 | . 074 | . 064 | . 060 | . 096 |
| 15.0 | . 077 | . 120 | . 128 | . 151 | . 114 | . 134 | . 174 |
| 16.0 | . 137 | . 174 | . 215 | . 263 | . 207 | . 202 | . 281 |
| 17.0 | . 207 | . 256 | . 299 | . 366 | . 291 | . 299 | . 359 |
| 18.0 | . 292 | . 351 | . 393 | . 466 | . 389 | . 392 | . 442 |
| 19.0 | . 358 | . 428 | . 473 | . 558 | . 496 | . 485 | . 525 |
| 20.0 |  | . 498. | . 556 | . 640 | . 590 | . 566 | . 587 |
| 21.0 |  | . 555 | . 616 | . 699 | . 651 | . 673 | . 646 |
| 22.0 |  | . 618 | . 669 | . 737 | . 712 | . 720 | . 716 |
| 23.0 |  | . 669 | . 716 | . 782 | . 760 | . 780 | . 770 |
| 24.0 |  | . 703 | . 751 | . 822 | . 789 | . 812 | . 810 |
| 25.0 |  |  | . 787 | . 840 | . 814 | . 840 | . 844 |
| 26.0 |  |  | . 813 | . 852 | . 845 | . 875 | . 872 |
| 27.0 |  |  | . 831 | . 877 | . 863 | . 900 | . 884 |
| 28.0 |  |  | . 841 | . 891 | . 877 | . 905 | . 902 |
| 29.0 |  |  | . 849 | . 909 | . 905 | . 914 | . 919 |
| 30.0 |  |  |  | . 916 | . 922 | . 926 | . 931 |
| 31.0 |  |  |  | . 927 | . 934 | . 929 | . 948 |
| 32.0 |  |  |  | . 927 | . 941 | . 931 | . 950 |
| 33.0 |  |  |  | . 927 | . 941 | . 940 | . 961 |
| 34.0 |  |  |  | . 927 | . 941 | . 945 | . 965 |
| 35.0 |  |  |  |  | . 942 | . 954 | . 967 |
| 36.0 |  |  |  |  | . 945 | . 956 | . 967 |
| 37.0 |  |  |  |  | . 945 | . 958 | . 970 |
| 38.0 |  |  |  |  | . 945 | . 958 | . 972 |
| 39.0 |  |  |  |  | . 945 | . 963 | . 974 |
| 40.0 |  |  |  |  |  | . 965 | . 978 |
| 45.0 |  |  |  |  |  |  | . 982 |

Note: Figures below dotted line refer to women who have not all reached the age identified; these figures are, of course, subject to change.

17 per cent among women at ages 45-49 to only 8 per cent among those at ages 15-19.

This important transformation in the age pattern of first marriage may be understood still better by an examination of trends in the ages at which certain proportions of successive birth cohorts were married. In table 4.3, figures are given showing the ages at which $10,25,50$ and 75 per cent of women of successive birth cohorts had been married for the first time. The last column in table 4.3 shows the inter. quartile range of age at marriage; this range includes the central one-half of the marriages, with one-fourth marrying younger and one-fourth later than the interquartile range.

The table shows that the median age at first marriage, i.e. the age by which half of the women of any given cohort has entered into a first marriage, has risen from 18.4 years for women at ages $30-34$ to 20 years for women at ages 20-24. A similar upward shift amounting to about 1.5 years is also shown for each of the other quartiles. A concomitant tendency for the effective nuptial span to be expanded into a wider age range is also shown by the increase in the interquartile range; from 6 years among women at ages $40-44$ to 6.4 and 7.6 years for women at ages $30-34$ and $25-29$, respectively. Information on women in their early twenties and late teens suggests that the tendency for first marriages to be spread over a wider age range was continuing in 1978.

It may be noted that the figures in tables 4.2 and 4.3 show small irregularities which probably reflect errors in the reporting of date of first marriage. The high value of the interquartile range for the cohort aged 45-49 is suggestive memory lapse, while the indication that the cohort aged $30-34$ has a younger age pattern of first marriage than older cohorts is implausible.

In view of these slight difficulties, the safest interpretation of marriage trends is that there was little or no change in behaviour across cohorts $45-49$ to $30-34$, except for a slight reduction in very early marriage. Among younger cohorts, those aged 25 -29 and below, there has been a trend

Table 4.3 Ages by which $10,25,50$ and 75 per cent of women were ever married, by current age, and the interquartile range

| Current <br> age | Per cent ever married |  | Interquartile <br> range |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 10 | 25 | 50 | 75 |  |
| $15-19$ | 15.4 | 17.5 |  |  |  |
| $20-24$ | 14.7 | 16.9 | 20.0 |  |  |
| $25-29$ | 14,5 | 16.4 | 19.3 | 24.0 | 7.6 |
| $30-34$ | 14.3 | 15.9 | 18.4 | 22.3 | 6.4 |
| $35-39$ | 14.7 | 16.5 | 19.0 | 22.8 | 6.3 |
| $40-44$ | 14.5 | 16.5 | 19.2 | 22.5 | 6.0 |
| $45-49$ | 14.0 | 15.7 | 18.7 | 22.6 | 6.9 |

Source: Derived from table 4.2 .
towards postponement of marriage, with an increase of nearly one year in the median age at first marriage between the cohort aged 25-29 and that aged 20-24. The partial evidence from those now aged $15-19$ suggests that this trend is continuing.

### 4.3. DIFFERENTIALS IN AGE AT FIRST MARRIAGE

As previously mentioned, age at first marriage is a product of various socio-economic and demographic factors. Although cultural and other social influences may encourage and maintain a young age pattern of marriage, differentials by various social characteristics have usually been observed in different societies. Attention therefore is turned here to the question: Does the place where people live or their educational background or their occupational status make a difference in age at marriage?

The eight million Syrians are scattered: they live on farms, in villages, in smaller urban communities, and in large central cities. Mean age at first marriage, as will be indicated, does indeed vary by type of place of residence, by region, by the amount of education the wife has acquired, and by the occupation of the husband.

Data from the household survey permit the investigation of group variation in age at marriage and separately for males and for females, by three background variables, namely, type of place of residence, region of residence, and educational status. Table 4.4 - based on the household survey - shows the proportions ever married for males and for females by age according to those three background variables. The table also shows the median age at first marriage, that is the age at which 50 per cent of any given subgroup had entered first marriage.

There are significant differences in the timing of first marriage for both men and women between urban and rural communities. For men, the percentage ever married at ages $25-29$ was 56 per cent for urban areas and 71 for rural areas. For women at ages $20-24$, the percentage ever married increases from 56 in urban areas to 65 in rural areas. There are also significant differences in timing of first marriage according to region of residence, particularly among females. Thus, women living in the four regions of Aleppo, North-East, South and Centre exhibit a much younger age pattern of marriage than those living in the two regions of Damascus and West who tend to marry, on the average, about two years later. The table also shows an inverse relationship between level of education at age at first marriage, with a difference between the median age at first marriage for persons who never attended school and for those with secondary education amounting to four years amongst women and about two years amongst men.

Table 4.4 Percentages of males and females who have ever married, by age according to place of residence and educational status, household survey

| Background characteristics | Age |  |  |  |  |  |  | Median age at first marriage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| A Males |  |  |  |  |  |  |  |  |
| Level of education |  |  |  |  |  |  |  |  |
| No schooling | 6.3 | 40.0 | 76.2 | 89.8 | 96.3 | 98.3 | 99.4 | 22.58 |
| Incomplete primary | 1.9 | 24.0 | 67.2 | 92.2 | 96.7 | 98.4 | 99.2 | 24.09 |
| Complete primary | 1.4 | 6.5 | 45.9 | 76.3 | 92.5 | 100.0 | 98.0 | 24.59 |
| Secondary + | * | 18.9 | 31.2 | 71.6 | 89.7 | 95.9 | 94.0 | 24.46 |
| Type of residence |  |  |  |  |  |  |  |  |
| Urban | 1.4 | 16.0 | 55.8 | 84.1 | 94.7 | 98.0 | 98.7 | 24.31 |
| Rural | 3.3 | 28.5 | 70.8 | 92.4 | 96.9 | 98.7 | 99.6 | 23.73 |
| Region of residence |  |  |  |  |  |  |  |  |
| Damascus City | 0.2 | 13.4 | 44.2 | 77.3 | 92.1 | 97.6 | 98.8 | 24.43 |
| Aleppo City | 2.9 | 23.2 | 67.0 | 89.7 | 98.5 | 98.2 | 98.2 | 23.87 |
| North-East | 4.4 | 29.4 | 65.3 | 90.9 | 94.9 | 98.1 | 99.8 | 23.80 |
| West | 1.3 | 14.5 | 63.1 | 89.9 | 93.2 | 97.8 | 97.5 | 24.25 |
| Centre | 1.9 | 21.2 | 65.8 | 87.8 | 97.1 | 99.3 | 99.5 | 24.18 |
| South | 2.3 | 25.4 | 73.6 | 92.7 | 98.5 | 98.6 | 99.6 | 23.78 |
| B Females |  |  |  |  |  |  |  |  |
| Level of education |  |  |  |  |  |  |  |  |
| No schooling | 32.2 | 70.1 | 88.7 | 95.2 | 96.4 | 97.9 | 99.0 | 18.53 |
| Incomplete primary | 17.8 | 60.3 | 82.5 | 90.5 | 92.1 | 94.8 | 98.4 | 20.20 |
| Complete primary | 5.5 | 21.0 | 55.7 | 81.7 | 81.0 | 78.3 | * | 24.21 |
| Secondary + | * | 42.3 | 31.7 | 61.4 | 77.8 | * | * | 24.73 |
| Type of residence |  |  |  |  |  |  |  |  |
| Urban | 21.8 | 56.4 | 79.1 | 91.1 | 91.8 | 95.6 | 97.1 | 21.16 |
| Rural | 23.8 | 64.7 | 86.6 | 94.3 | 97.8 | 98.5 | 99.2 | 19.32 |
| Region of residence |  |  |  |  |  |  |  |  |
| Damascus City | 21.3 | 50.9 | 72.9 | 86.2 | 90.6 | 94.6 | 94.6 | 22.20 |
| Aleppo City | 30.9 | 68.3 | 87.6 | 91.4 | 92.7 | 96.7 | 97.5 | 19.22 |
| North-East | 26.0 | 64.0 | 87.0 | 93.8 | 97.1 | 99.1 | 99.5 | 19.32 |
| West | 10.8 | 48.5 | 79.1 | 93.2 | 92.8 | 96.6 | 98.9 | 22.11 |
| Centre | 21.4 | 60.7 | 82.8 | 95.1 | 94.9 | 96.3 | 98.8 | 19.87 |
| South | 25.4 | 68.0 | 86.9 | 94.3 | 97.2 | 98.3 | 98.8 | 19.17 |

*Fewer than 20 cases.
Source: Tables B2-B6.

The individual survey data permit the examination of differentials in age at first marriage by several other background characteristics. It should be noted, however, that the restriction of the individual survey to ever-married women will lead to a bias in favour of selecting women who marry young, i.e. will lead to underestimating the mean age at first marriage of the birth cohorts considered, thus obscuring genuine changes. This is known as the 'censoring effect'. In order to remove some of the censoring effect, a pivotal age is selected, say age 25 , and mean age at first marriage is calculated for those women who were aged 25 or over and who had first married before age 25 .

For Syria, the selection of age 25 as a pivotal age is justified; for out of the total of 4487 ever-married women, a total of 2882 is included in that subgroup, thus accounting for
over 64 per cent of the total sample. Of the remaining 1605 ever-married women, there were 1266 women under 25 years of age, and 339 women who were married at the age of 25 or more. This suggests that the effect of the exclusion of the small proportion of the marriages that take place at age 25 or over would not be very important in Syria. Much more important is the fact that exclusion of younger women from the computation of the mean prevents study of more recent differentials.

Table 4.5 shows the per cent distribution by age at first marriage for ever-married women aged 25 or over and who entered first marriage before age 25 . The same slight recent tendency towards later marriage is evident among the young cohorts, as has been mentioned above. Thus, the mean age at first marriage for women marrying before reaching age 25 has

Table 4.5 Per cent distribution of ever-married women who first married before age 25 according to age at first marriage, by current age

| Current age | Age at first marriage |  |  |  |  | Mean ${ }^{\text {a }}$ | $S E^{\text {b }}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<15$ | 15-17 | 18-19 | 20-21 | 22-24 |  |  |  |
| 25-29 | 16.1 | 33.8 | 20.8 | 14.4 | 14.9 | 18.2 | . 12 | 771 |
| 30-34 | 17.9 | 37.6 | 20.6 | 11.7 | 12.2 | 17.8 | . 13 | 636 |
| 35-39 | 14.1 | 33.8 | 24.7 | 14.9 | 12.5 | 18.2 | . 13 | 550 |
| 40-44 | 15.9 | 30.8 | 20.7 | 18.4 | 14.2 | 18.3 | . 14 | 478 |
| $45+$ | 20.6 | 31.8 | 17.2 | 15.2 | 15.2 | 18.0 | . 18 | 447 |
| Total | 16.8 | 33.8 | 20.9 | 14.9 | 13.8 | 18.1 | . 07 | 2882 |

[^6]increased from 17.8 years for women at ages $30-34$ to 18.2 for women at ages $25-29 .{ }^{1}$

The mean age at first marriage for women aged 25-49 (who married at ages under 25) is shown in table 4.6 for categories of various background variables. It is not necessary to show more detailed classification of the data by age since the pattern is more or less the same for any given age group apart from some unsystematic fluctuations.

The differences in the average age at first marriage according to type of residence, region and educational status shown by the individual survey tend to be much narrower than the differences shown by the household survey. In fact, the order of the differentials exhibited by the individual survey data is not in total agreement with that shown by the household survey. This, however, does not necessarily mean that the two sets of data yield contradictory results. The figures in tables 4.5 and 4.6 refer to women who are currently at ages $25-49$ and who had entered first marriage before age 25 . It has already been shown that the recent upward shift in the age pattern of first marriage has been produced by young cohorts, i.e. women who are currently under 25 years of age. The exclusion of these young women from the computation of the mean age at first marriage shown in table 4.5 prevents the investigation of recent differentials. Further, errors in reporting age at marriage on the part of older women in the individual survey are more likely to occur than errors in reporting current age and current marital status in the household survey. However, a thorough evaluation of the nuptiality data will be needed before any definite statement on differentials in age at marriage could be made.

[^7]Table 4.6 Mean age at first marriage for women who first married before age 25, and who are currently at ages 25-49, by background variables

| Background characteristics | Mean age at first marriage ${ }^{\mathrm{a}}$ | $S E^{\text {b }}$ | Number of women |
| :---: | :---: | :---: | :---: |
| Level of education |  |  |  |
| No schooling | 18.0 | . 07 | 2106 |
| Incomplete primary | 17.9 | . 19 | 333 |
| Complete primary | 18.3 | . 17 | 367 |
| Secondary + | 21.4 | . 37 | 76 |
| Type of residence |  |  |  |
| Urban | 18.0 | . 11 | 1464 |
| Rural | 18.2 | . 10 | 1417 |
| Region of residence |  |  |  |
| Damascus | 17.8 | . 21 | 477 |
| Aleppo | 17.9 | . 18 | 294 |
| North-East | 18.4 | . 16 | 683 |
| West | 18.3 | . 26 | 355 |
| Centre | 17.9 | . 13 | 641 |
| South | 18.3 | . 20 | 432 |
| Pattern of work |  |  |  |
| Before and after marriage | 18.7 | . 16 | 510 |
| After marriage only | 17.7 | . 26 | 193 |
| Before marriage only | 18.8 | . 19 | 285 |
| Never worked | 17.9 | . 08 | 1894 |
| Husband's occupation |  |  |  |
| Professional and technical | 18.4 | . 15 | 412 |
| Managerial and clerical | 18.5 | . 17 | 465 |
| Sales and services | 17.7 | . 18 | 444 |
| Agricultural | 18.0 | . 12 | 771 |
| Skilled and unskilled manual | 18.1 | . 11 | 773 |
| Never worked | 18.3 | - | 17 |
| Total | 18.1 |  | 2882 |

[^8]
### 4.4. MARITAL STABILITY

In Syria, just as formation of a marital union provides the social setting within which childbearing occurs, marital dissolution - either by the death of one of the spouses or by divorce or separation - directly diminishes the likelihood of childbearing, unless an individual remarries. Remarriage may depend on factors such as a woman's age, the number of children she has already had or the reason her first marriage ended. The combination of first marriage, marriage dissolution and remarriage influences fertility in complex ways. For example, dissolution of a first marriage at an early age, followed almost immediately by remarriage, has a different effect on fertiiity than divorce or widowhood at a later age with or without remarriage.

In this section, marital stability will be examined by considering the following four indicators:

- status of first marriage;
- prevalence of remarriage following dissolution of the first marriage, and number of times married;
- current marital status;
- mean proportion of the time since first marriage spent in the married state.


### 4.4.1. Status of First Marriage

Table 4.7 shows the per cent distribution of all ever-married women according to status of first marriage. The figures reflect a high level of marital stability. Overall, 92.9 per cent of the ever-married women are still in their first marriage. Of the remaining 7.1 per cent, 3.7 per cent had their first marriages dissolved by death of husband, and 3.1 per cent by divorce or separation.

The proportion of women with undissolved first marriages decreases from the youngest to the oldest marriage cohorts. The only exception to this pattern is the cohort of women with marital duration $20-24$ which shows a higher proportion of undissolved first marriages than the younger cohort with marital duration 15-19 years.

The proportion of women whose first marriages had been dissolved shows the steady rise with duration of marriage that would be expected simply on the basis of accumulated risk: from less than 2 per cent for women who entered first

Table 4.7 Per cent distribution of all ever-married women according to status of first marriage, by years since first marriage and by age at first marriage

| Age at first marriage | Years since first marriage | Status of first marriage |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Undissolved | Dissolved by death of husband | Dissolved by divorce or separation | Total dissolved |  |  |
| Under 20 | All | 92.8 | 3.8 | 3.4 | 7.2 | 100 | 3184 |
|  | <5 | 98.4 | . 3 | 1.3 | 1.6 | 100 | 696 |
|  | 5-9 | 96.3 | 1.5 | 2.3 | 3.7 | 100 | 614 |
|  | 10-14 | 94.6 | 2.1 | 3.3 | 5.4 | 100 | 516 |
|  | 15-19 | 90.2 | 4.1 | 5.6 | 9.8 | 100 | 482 |
|  | 20-24 | 91.7 | 5.3 | 3.1 | 8.3 | 100 | 361 |
|  | 25-29 | 88.1 | 6.1 | 5.8 | 11.9 | 100 | 293 |
|  | $30+$ | 75.2 | 18.5 | 6.3 | 24.8 | 100 | 222 |
| 20 and over | All | 93.2 | 3.5 | 3.3 | 6.8 | 100 | 1303 |
|  | $<5$ | 97.8 | . 0 | 2.3 | 2.2 | 100 | 356 |
|  | 5-9 | 95.3 | 2.5 | 2.2 | 4.7 | 100 | 279 |
|  | 10-14 | 92.8 | 2.9 | 4.3 | 7.2 | 100 | 207 |
|  | 15-19 | 88.6 | 6.7 | 4.8 | 11.4 | 100 | 210 |
|  | 20-24 | 90.0 a | 6.1 | 3.9 | 10.0 | 100 | 180 |
|  | 25-29 | 85.9 | 9.9 | 4.2 | 14.1 | 100 | 71 |
|  | $30+$ | 85 | 9. | . 2 | . |  | - |
| Total | All | 92.9 | 3.7 | 3.4 | 7.1 | 100 | 4487 |
|  | $<5$ | 98.2 | . 2 | 1.6 | 1.8 | 100 | 1052 |
|  | 5-9 | 96.0 | 1.8 | 2.2 | 4.0 | 100 | 893 |
|  | 10-14 | 94.1 | 2.4 | 3.6 | 5.9 | 100 | 723 |
|  | 15-19 | 89.7 | 4.9 | 5.3 | 10.3 | 100 | 692 |
|  | 20-24 | 91.1 | 5.5 | 3.3 | 8.9 | 100 | 541 |
|  | 25-29 | 87.6 | 6.9 | 5.4 | 12.4 | 100 | 364 |
|  | $30+$ | 75.2 | 18.5 | 6.3 | 24.8 | 100 | 222 |

Source: Table 1.2.1.

Table 4.8 Characteristics of remarriage

| Years since first marriage | Percentage married |  |  | Of women whose first marriage was dissolved, percentage who remarried |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \% | Number of women |
|  | Once | Twice | Total |  |  |
| $<5$ | 99.8 | . 2 | 100 | 10.5 | 19 |
| 5-9 | 98.4 | 1.6 | 100 | 38.9 | 36 |
| 10-14 | 97.0 | 3.0 | 100 | 51.2 | 43 |
| 15-19 | 93.6 | 6.4 | 100 | 62.0 | 71 |
| 20-24 | 95.6 | 4.4 | 100 | 50.0 | 48 |
| 25-29 | 94.0 | 6.0 | 100 | 48.9 | 45 |
| $30+$ | 89.2 | 10.8 | 100 | 43.6 | 55 |
| Total | 96.6 | 3.4 | 100 | 47.9 | 317 |

Source: Tables 1.3.1 and 1.3.2.
marriage less than five years ago to 25 per cent for those who first married 30 or more years ago. As table 4.7 shows, divorce is a more important cause of dissolution of marriage in the early years of marriage, but for women who first married 15 or more years ago the leading cause of dissolution is death of husband, this being true for those who first married both before and after the age of 20 .

### 4.4.2. Remarriage and Number of Times Married

Since a high proportion of first marriages are still intact, the number marrying more than once is quite low. This may be seen from table 4.8 which gives a summary picture of the overall pattern of remarriage.

The first point to note is that most women ( 96.6 per cent) married only once; only 3.4 per cent married twice. Of the 7 per cent of women whose first marriage was dissolved, about half have remarried. The table also shows that the proportion remarried increases from 11 per cent for women who first married less than five years ago to 51 and 62 per cent for those whose first marriage was $10-14$ and 15-19 years ago, respectively. Thereafter, the proportion remarried decreases to 44 per cent for those whose first marriage was 30 or more years ago.

Detailed tabulations on remarriage also suggest that age at first marriage is negatively related to the incidence of remarriage; among women with a dissolved first marriage, 50 per cent of those who first married under age 20 had remarried, but only 41 per cent of those who first married at age 20 or more had remarried. This may be a direct effect of

Table 4.9 The percentage of ever-married women whose first marriage was dissolved and the percentage who remarried, by background variables

| Background characteristics | Percentage of women whose first marriage was dissolved | Number of women whose first marriage was dissolved | $\%$ remarried |
| :---: | :---: | :---: | :---: |
| Level of education |  |  |  |
| No schooling | 8.1 | 243 | 49.8 |
| Incomplete primary | 6.6 | 39 | 43.6 |
| Complete primary | 3.8 | 28 | 35.7 |
| Secondary + | 4.1 | 7 | 57.1 |
| Type of residence |  |  |  |
| Urban | 6.7 | 152 | 45.4 |
| Rural | 7.5 | 165 | 50.3 |
| Region of residence |  |  |  |
| Damascus City | 7.9 | 59 | 55.9 |
| Aleppo City | 7.5 | 35 | 42.9 |
| North-East | 6.5 | 71 | 26.8 |
| West | 5.7 | 28 | 28.6 |
| Centre | 6.6 | 65 | 52.3 |
| South | 8.4 | 59 | 72.9 |
| Pattern of work |  |  |  |
| Before and after marriage | 8.8 | 69 | 46.4 |
| After marriage only | 15.1 | 39 | 43.6 |
| Before marriage only | 7.1 | 36 | 72.2 |
| Never worked | 5.9 | 173 | 44.5 |
| Husband's occupation |  |  |  |
| Professional and technical | 5.9 | 42 | 54.8 |
| Managerial and clerical | 6.1 | 44 | 52.3 |
| Sales and services | 7.9 | 51 | 58.8 |
| Agriculture | 8.9 | 100 | 41.0 |
| Skilled and unskilled manual | 5.9 | 74 | 45.9 |
| Never worked | 15.0 | 6 | 16.7 |
| Total | 7.1 | 317 | 47.9 |

[^9]Table 4.10 Per cent distribution of all ever-married women according to current marital status, by years since first marriage

| Years since first marriage | Currently married | Currently not married |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Widowed | Divorced | Separated | Total |  |  |
| $<5$ | 98.4 | 0.2 | 1.0 | 0.5 | 1.6 | 100 | 1052 |
| 5-9 | 97.5 | 1.3 | 0.8 | 0.3 | 2.5 | 100 | 893 |
| 10-14 | 97.1 | 1.8 | 0.6 | 0.6 | 2.9 | 100 | 723 |
| 15-19 | 96.0 | 3.2 | 0.7 | 0.1 | 4.0 | 100 | 692 |
| 20-24 | 95.2 | 4.3 | 0.4 | 0.2 | 4.8 | 100 | 541 |
| 25-29 | 93.1 | 4.9 | 1.4 | 0.5 | 6.9 | 100 | 364 |
| $30+$ | 83.8 | 14.9 | 0.5 | 0.9 | 16.2 | 100 | 222 |
| Total | 96.1 | 2.7 | 0.8 | 0.4 | 3.9 | 100 | 4487 |

Source: Table 1.5.1.
age at dissolution of marriage, i.e. those who married younger may have had their marriage dissolved when they still were relatively young, thus making their prospects for remarriage higher.

Differentials by certain background variables in the proportion of women with dissolved first marriages and in the percentage who remarried are shown in table 4.9. It should be noted, however, that the very small number of cases involved makes interpretation somewhat limited. As may be seen, the proportion remarried is higher in rural than in urban areas; and is also higher in the South, Centre and Damascus than in the North-East or the West regions. The proportion remarried among non-educated women is higher than that among women with primary or preparatory education. This may be a reflection of the young age-at-marriage pattern for the non-educated women.

### 4.4.3. Current Marital Status

The net effect of the three factors: first marriage, dissolution of marriage and remarriage on the current marital status is shown in table 4.10. The term 'marital status' as used here classifies ever-married women into three categories: currently married, widowed, and divorced or separated.

As may be seen from table $4.10,96$ per cent of all women in the sample were married at the time of the interview. About 2.7 per cent were widowed and only 1.2 per cent were reported as divorced or separated. The proportion currently married decreases from 98.4 per cent for those with a marriage duration less than 5 years to 83.8 per cent for those with 30 or more years of marital duration, mainly due to the higher incidence of widowhood at longer marital durations.

### 4.4.4. Proportion of Time Spent in the Married State

It has been observed that marriage in Syria is highly stable and that the proportion of women who have remained in the married state since they were first married is noticeably high. Therefore, it would be expected that the proportion
of time spent in the married state since first marriage for all ever-married women is also high. This proportion is shown in table 4.11 , by current age and by age at first marriage. For any particular current age/age at marriage combination, the proportion of time spent in the married state since first marriage consists of the sum of durations of all marriages divided by the total duration since first marriage; the result is expressed as a percentage.

The table indicates that proportions of time spent in the married state are uniformly high and do not vary significantly or substantially with either current age or age at first marriage. The average percentage of time spent in the married state for all ever-married women is 98 per cent, and this declines from over 99 per cent for women under 20 years of age to 96 per cent for women at ages 4549. This suggests that marital dissolution is unlikely to have a significant depressing effect on the overall level of marital fertility in Syria.

### 4.5. SUMMARY

The evidence from the SFS suggests that female age at first marriage has risen slightly in the recent past from a median

Table 4.11 Average percentage of time since first marriage which has been spent in the married state by all ever-married women, by age at first marriage and by current age

| Current <br> age | Age at first marriage |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $<15$ | $15-19$ | $20-24$ | $25-29$ | $30+$ | All |
| $<20$ | 99.4 | 99.4 | - | - | - | 99.4 |
| $20-24$ | 98.9 | 99.4 | 98.4 | - | - | 99.2 |
| $25-29$ | 99.0 | 98.8 | 98.0 | 100.0 | - | 98.7 |
| $30-34$ | 95.8 | 98.0 | 98.6 | 98.2 | 100.0 | 97.6 |
| $35-39$ | 96.3 | 99.0 | 99.3 | 97.8 | 100.0 | 98.6 |
| $40-44$ | 97.7 | 98.6 | 98.1 | 94.6 | 97.9 | 98.1 |
| $45+$ | 95.4 | 95.9 | 98.3 | 90.3 | 87.5 | 95.8 |
| Total | 97.0 | 98.1 | 98.5 | 94.5 | 92.5 | 97.7 |

[^10]age of about 19 to one of about 20. Data for women now aged 15-19 indicate that this rise may continue. Age at marriage is strongly related to educational attainment for women (but the association is less pronounced for men). Women with no schooling have a median age of $181 / 2$ years compared to over 24 years for those with completed primary schooling or above. It may be inferred that rising educational standards among Syrian women is largely or totally res-
ponsible for the upward trend in age at marriage.
Marriage is a highly stable institution in all sectors of Syrian society. Only seven per cent of all ever-married women reported dissolution of their first marriage and, of these, nearly half had already remarried by the time of the survey.

## CHAPTER 5

## FERTILITY

### 5.1. INTRODUCTION

Human fertility can be measured broadly along two dimensions. The number of live births the woman has had in her lifetime expresses the quantity dimension, and the rate at which she bears children measures the tempo of fertility. While the first dimension (number of children ever born) has been widely used as an index of fertility, the study of the tempo of fertility has received relatively little attention. In this chapter, attempts have been made to study both dimensions. In order to structure the analysis, the women are identified either through their birth cohort (current age) or through their marriage cohort (years since first marriage).

As the estimation of levels, trends and differentials in fertility was one of the main objectives of SFS, special care was taken to devise and administer a set of carefully worded questions and interviewing procedures in order to obtain as accurate and reliable data as possible. A complete pregnancy history for each woman was elicited in two steps. Women were first asked a sequence of questions to ascertain the numbers of sons and daughters present and not present in the household, and the number of children who have died. The object of such a breakdown was to minimize omission of live births. A complete pregnancy history then followed, wherein information pertaining to dates of all pregnancies, their outcome, their sex and survival status was obtained. The date was asked in the form of calendar year and month of pregnancy termination, but, if this could not be answered, the respondent was asked how many years ago the pregnancy ended. For all non-live births the duration of pregnancy was asked and, in cases where it lasted seven or more months, an additional question was put as to whether the infant cried or showed any signs of life after the termination. Only a few additional live births were uncovered by this means. In this chapter the focus will be exclusively on live births. In addition to the data from the individual survey, fertility data were also obtained in the household survey. The household survey covered a sample of 15,287 households which yielded 14,670 completed household schedules, nearly three times the sample size of the individual survey. Data on the number of children ever born were collected for all ever-married women, together with information on the date of the most recent birth, sex and survivorship status. These two data sources provide the basis for the computation of various retrospective and current fertility measures which are presented in this chapter.

One of the main measures of fertility analysis is current
parity, that is, the mean number of children ever born to women at the time of the survey. Current parity by age, marriage duration and age at first marriage are discussed in section 5.2. Section 5.3 is concerned with early marital fertility, while the next two sections provide brief accounts of fertility levels and trends. In a final section, we examine socio-economic and geographical differentials in fertility.

It should be made clear at this stage that we have not attempted any systematic evaluation of the quality of the data and, accordingly, the results presented here should be considered as preliminary.

### 5.2. NUMBER OF CHILDREN EVER BORN

Number of children ever born, or the current parity, is a retrospective measure of fertility and makes no reference to the tempo of fertility. It simply represents the accumulation of the number of live births that each woman has had up to the date of interview.

Table 5.1 provides an overview by showing the distribution from the individual survey of ever-married women according to the number of children ever born, classified by current age. For the sample as a whole, the mean parity is 4.7. ${ }^{1}$ The means gradually rise by age, from nearly 1 child for women under 20 to 7.8 for women aged 45-49. The data clearly bring out the fact that fertility in Syria over recent decades has been very high. Among the age group $25-29$, over one-third ( 35 per cent) have already borne five or more children, while the corresponding figure for those aged 35-39 is 78 per cent. At ages of 40 and over, about 40 per cent of women have experienced nine or more live births.

Nearly 10 per cent of women were childless at the time of the survey, but the majority of these were under age 20. After age 30 the incidence of childlessness remains nearly constant at around 4 per cent, a level of primary infertility to be expected in a healthy population.

In order to improve understanding of the fertility behaviour of Syrian women, the completed fertility for women aged 45-49 is examined in detail in table 5.2. This cohort is of special interest because nearly all of these women have completed their reproduction. The results are

[^11]Table 5.1 Per cent distribution of ever-married women according to number of children ever born, by current age

| Children ever born | Current age |  |  |  |  |  |  | All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <20 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| 0 | 42 | 13 | 7 | 5 | 3 | 4 | 4 | 10 |
| 1-2 | 52 | 48 | 22 | 9 | 4 | 4 | 3 | 21 |
| 3-4 | 6 | 33 | 36 | 24 | 15 | 8 | 10 | 21 |
| 5-6 | $\sim$ | 5 | 28 | 33 | 25 | 21 | 15 | 19 |
| 7-8 | - | 1 | 6 | 20 | 27 | 25 | 24 | 14 |
| $9+$ | - | - | 1 | 9 | 26 | 38 | 44 | 15 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Mean | . 9 | 2.2 | 3.7 | 5.2 | 6.6 | 7.5 | 7.8 | 4.7 |

Source: Table 2.2.1B.
given both for ever-married and currently married women for whom the mean parities are 7.8 and 8.0 respectively. The closeness of the two sets of figures indicates that marital dissolution is unlikely to have any significant effect on fertility. This is consistent with the observation made in chapter 4 that marriages in Syria are very stable and the major cause of marriage dissolution is widowhood, rather than divorce or separation.

One way of describing the completed fertility of women is in terms of parity progression ratios (PPR), the proportion of women who move from one parity to a higher parity. The parity progression ration of 96 for parity 0 in table 5.2 means that 96 per cent of women have moved from parity zero to parity 1 . There is no parity at which the ratio shows an abrupt decline, which suggests the absence of widespread family limitation among this cohort. Rather, the decline is gradual and, even for those who have reached parity 8 , nearly 76 per cent will have at least one more birth.

Data on the mean number of children ever born by age at first marriage, controlling for current age and for duration since first marriage, are presented in table 5.3. Late marriage for a woman means less years of exposure to childbearing and consequently fewer births, in a society where deliberate birth control is not widely practised. Considering first Panel A, it may be noted that for younger women (under 30) there is a pronounced effect of age at marriage on the parity of a
given birth cohort. For example, among women aged 20-24, those who married at ages under 15 have a mean parity of 3.5 births as against 1.5 for those who married at ages $18-19$. For the age group $30-34$, contrasts in fertility by age at marriage are still very pronounced, with a difference of over 2 births between women marrying before the age of 18 and those who postponed marriage until their early twenties.

Among the oldest women in the sample, those aged 40-49, the differences associated with age at marriage are less striking, except at the extremes. This convergence may be the result of a catching-up effect of later marrying women, or it may reflect a tendency among younger marrying women to forget births. Somewhat erratic fluctuations for the cohort 45-49, which may reflect small cell sizes, complicate the picture. However, we may conclude tentatively that women marrying before the age of 15 have a completed fertility of about nine births; this figure falls by about 0.5 birth for women marrying at ages $15-19$, and by nearly 1.5 births for those who married at ages 20-24. Finally, the small minority of women who first married after the age of 24 experienced a much lower level of completed fertility, averaging only 4.5 births.

The number of children ever born for different marriage cohorts may be seen in the bottom row of Panel B in table

Table 5.2 For women aged 45-49, (A) per cent distribution according to number of children ever born, and (B) parity progression ratios (PPR), by current marital status

|  | Mean number of children ever born |  |  |  |  |  |  |  |  |  |  |  | Mean |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $11+$ |  |
| Ever-married women |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A \% Distribution | 4 | 1 | 2 | 5 | 5 | 6 | 9 | 10 | 14 | 12 | 9 | 22.7 | 7.8 |
| B PPR | 96 | 99 | 98 | 95 | 94 | 93 | 90 | 86 | 76 | 73 | 70 |  |  |
| Currently married women |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A \% Distribution | 3 | 1 | 2 | 4 | 5 | 6 | 8 | 10 | 14 | 13 | 10 | 24.0 | 8.0 |
| B PPR | 97 | 99 | 98 | 96 | 94 | 93 | 90 | 86 | 77 | 72 | 71 |  |  |

Source: Tables 2.2.1A and 2.2.1B.

Table 5.3 Mean number of children ever born to ever-married women, by age at first marriage and (A) current age, (B) years since first marriage

| Age at marriage | A Current age |  |  |  |  |  |  | B Years since first marriage |  |  |  |  |  | All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<20$ | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | $<5$ | 5-9 | 10-14 | 15-19 | 20-24 | $25+$ |  |
| $<15$ | 1.4 | 3.5 | 5.5 | 6.5 | 7.9 | 9.1 | 8.7 | 1.1 | 3.1 | 5.0 | 6.3 | 7.7 | 8.9 | 5.4 |
| 15-17 | . 7 | 2.5 | 4.5 | 6.2 | 7.9 | 8.5 | 8.5 | 1.0 | 3.2 | 5.1 | 6.8 | 8.3 | 8.7 | 4.9 |
| 18-19 | (.2) | 1.5 | 3.7 | 5.4 | 6.9 | 8.2 | 8.7 | 1.1 | 3.4 | 5.1 | 6.8 | 7.8 | 9.1 | 4.8 |
| 20-21 | - | . 0 | 2.7 | 4.1 | 6.3 | 7.6 | 7.6 | 1.1 | 3.1 | 4.6 | 6.7 | 7.7 | (7.6) | 4.5 |
| 22-24 | - | (.4) | 1.8 | 3.9 | 5.5 | 6.1 | 7.8 | 1.3 | 3.5 | 5.2 | 6.2 | 7.4 | (7.9) | 4.3 |
| 25+ | - | - | (.9) | 2.0 | 3.6 | 4.2 | 4.6 | 1.0 | 3.1 | 4.5 | 5.1 | 7.0 | - | 3.4 |
| All | . 9 | 2.2 | 3.7 | 5.2 | 6.6 | 7.5 | 7.8 | 1.1 | 3.2 | 4.9 | 6.4 | 7.8 | 8.6 | 4.7 |

Source: Tables 2.2.3A and 2.2.4B.
5.3, where again the high fertility of Syrian women is clearly evident. Parity rises from an average of 3.2 births for those married for 5-9 years to 5.0 and 6.5 births for those married for $10-14$ and 15-19 years, respectively. These figures suggest an average rate of childbearing in the first 20 years of marriage of nearly one birth every two and a half years. Panel B of table 5.3 also shows the relationship between age at marriage and fertility, controlling for marital duration. The major point of interest is the absence of any strong relationship between age at marriage and fertility up until duration 15-19 years. In other words, the large differences associated with varying ages at marriage in Panel A may be attributed almost entirely to differences in marital exposure. Once this latter factor is taken into account, by substituting marital duration for age as the control, the contrasts in the fertility of early and late marrying women disappear, except among the earliest marriage cohorts.

A comparison of individual survey data on parity with estimates obtained from the household survey and 1970 Population Census is provided in table 5.4. Up to age 30 the three estimates are identical. At the older ages the census estimates are close to those obtained from the household survey while the individual survey figures are slightly but consistently lower. This is contrary to the expectation that the individual survey would yield higher estimates because of the intensive questioning designed to minimize omission of live births. At this stage, it is difficult to ascertain the reason for this discrepancy but it is hoped that a thorough evaluation of the SFS data will throw some light on the matter.

### 5.3. EARLY MARITAL FERTILITY

The examination of early fertility in this section is confined to women who first married at least five years ago. Recently married women (those who first married during the five years prior to the survey) are excluded to avoid the biases caused by incomplete exposure. Two indicators the timing of first birth (i.e. the interval between maniage and first birth) and the mean number of children born in the first five years of marriage - are considered.

Analysis of the first birth interval is complicated by the fact that the calendar month was not reported for 17 per cent of first births and had to be randomly imputed. ${ }^{2}$ Further, in another 21 per cent of cases, the calendar year of the marriage was not reported and had to be indirectly ascertained from answers to a question on age at marriage. This lack of precise information reduces the analytical power of this measure and readers are cautioned to be careful in interpreting these results.

Table 5.5 gives the distribution of respondents according to the length of the interval, the mean length of interval for those who had a first birth in the five years following marriage, and the percentage still childless after five years. The absence of any pre-marital births is due to the strict data correction procedures adopted at both manual and

[^12]Table 5.4 Mean number of children ever born to ever-married women in the 1970 Population Census and 1978 fertility survey, by age

| Age group |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $<20$ | $20-24$ | $25-29$ | $30-34$ | $35-39$ | $40-44$ | $45-49$ |
| Individual survey, 1978 | .9 | 2.2 | 3.7 | 5.2 | 6.6 | 7.5 | 7.8 |
| Household survey, 1978 | .8 | 2.1 | 3.7 | 5.4 | 6.9 | 7.7 | 8.1 |
| Census; $1970^{\mathrm{a}}$ | .8 | 2.1 | 3.8 | 5.4 | 6.8 | 7.6 | 8.0 |

${ }^{a}$ Source: Vaidyahathan, K.E. Estimation of Fertility in Syria from the 1970 Census Data on Past Live Births. Syria Population Statistics, Series No. 1. Table 2.

Table 5.5 Per cent distribution of women who first married at least five years ago according to interval between first marriage and first bitth, by (A) age at first marriage, and (B) years since first marriage

|  | Length of interval in months |  |  |  |  |  | \% With no births in first 5 years | Total | Mean interval length | No. of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-7 | 8-11 | 12-23 | 24-35 | 36-47 | 48-59 |  |  |  |  |
| A Age at first marriage |  |  |  |  |  |  |  |  |  |  |
| $<15$ | . 3 | 12.0 | 36.0 | 20.1 | 10.1 | 5.7 | 15.9 | 100 | 23.6 | 686 |
| 15-17 | . 7 | 17.4 | 45.2 | 17.9 | 6.9 | 4.3 | 7.5 | 100 | 20.5 | 1170 |
| 18-19 | . 5 | 20.6 | 49.7 | 13.9 | 5.2 | 2.7 | 7.4 | 100 | 18.6 | 632 |
| 20-21 | . 3 | 19.7 | 49.2 | 15.7 | 5.3 | 2.0 | 7.8 | 100 | 19.0 | 396 |
| 22-24 | . 7 | 25.3 | 44.7 | 16.8 | 4.3 | 3.6 | 4.6 | 100 | 18.7 | 304 |
| 25-29 | . 5 | 23.2 | 49.0 | 13.9 | 3.1 | 2.1 | 8.2 | 100 | 17.7 | 194 |
| $30+$ | . 0 | 22.6 | 39.6 | 13.2 | 3.8 | . 0 | 20.8 | 100 | 17.0 | 53 |
| B Years since first marriage |  |  |  |  |  |  |  |  |  |  |
| 5-9 | . 7 | 20.6 | 47.9 | 15.6 | 5.9 | 3.4 | 5.9 | 100 | 19.4 | 893 |
| 10-19 | . 4 | 19.8 | 44.8 | 17.5 | 5.5 | 3.0 | 9.1 | 100 | 19.5 | 1415 |
| $20+$ | . 5 | 14.6 | 42.1 | 17.5 | 8.3 | 5.1 | 11.9 | 100 | 21.7 | 1127 |
| All | . 5 | 18.3 | 44.7 | 17.0 | 6.6 | 3.8 | 9.2 | 100 | 20.2 | 3435 |

Source: Table 2:1.1.
computer editing stages of data processing. However, the negligible percentage of pre-marital conceptions (i.e. births in the period $0-7$ months after marriage) indicates that there were few, if any, pre-marital births.

By the end of the fifth year, the majority ( 91 per cent) had at least one birth and the mean interval between marriage and first birth was about 20 months. Nearly half of the women who had their first birth in this five year period had it between 12 and 23 months after the date of marriage. Of those who had a birth, 88 per cent had delivered by the end of the third year.

When classified by age at marriage, a distinct pattern emerges. Childlessness in the first five years is nearly twice as prevalent for those who marry under 15 years and nearly three times so for those who marry very late ( 30 and over), compared to those who marry between the ages of 15 and 29. These results are not surprising, because the women who marry very early suffer from adolescent subfecundity in the first years of marriage while those who marry very late suffer from the decline in fecundity associated with increasing age.

Apart from these two extreme groups, childlessness remains constant for all other age-at-marriage categories, at about 7.5 per cent. This is somewhat higher than one would expect in a population where the mean completed parity is around 8 births. It is interesting to note that the percentage childless after five years of marriage increases monotonically from 5.9 for women married 5-9 years prior to the survey to 11.9 for those who married for 20 years or more.

The mean first birth interval length declines steadily as age at marriage rises, from 23.6 months for women marrying before age 15 to 17.0 months for those marrying at ages 30 or over. There is also a slight tendency for the mean length to increase across marriage cohorts, from the most recent to the earliest cohort. An apparent increase in early marital fertility is also evident in table 5.6 which gives the mean number of births in the first five years of marriage, classified by marriage cohort and age at marriage. Women who married 20 or more years prior to the survey report 1.9 births, compared to 2.2 births for the cohort who married 5-9 years prior to the survey, an increase of 16 per cent. The difference persists within age-at-marriage categories and therefore can-

Table 5.6 Mean number of children born within the first five years of marriage, by age at first marriage and by years since first marriage

| Years since first marriage | Age at first marriage |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<15$ | 15-17 | 18-19 | 20-21 | 22-24 | 25-29 | $30+$ | All |
| 5-9 | 1.7 | 2.1 | 2.3 | 2.2 | 2.3 | 2.4 | 1.7 | 2.2 |
| 10-19 | 1.7 | 2.0 | 2.1 | 2.2 | 2.2 | 2.0 | 1.9 | 2.0 |
| $20+$ | 1.5 | 1.9 | 1.9 | 2.0 | 2.1 | 2.0 | - | 1.9 |
| All | 1.7 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 1.8 | 2.0 |
| SE ${ }^{\text {a }}$ | . 04 | . 03 | . 04 | . 05 | . 06 | . 08 | . 17 | . 02 |

[^13]Source: Table 2.1.2.
not be attributed to a declining proportion who marry at very young ages. Possibly the tempo of early marital fertility has genuinely increased in response to a decline in length of lactation or for other reasons. Alternatively, misreporting of dates of marriage and early births by earlier cohorts may be responsible.

### 5.4. RECENT AND CURRENT FERTLLTTY

Recent fertility levels have a practical importance and relevance since they largely determine the rate of population growth. Reliable estimates of current fertility are urgently needed by the Government of the Syrian Arab Republic for planning and policy purposes. In this section, three measures of recent and current period fertility are considered. These are: (1) the mean number of children born in the last five years; (2) the proportion of women currently pregnant; and (3) age-specific and duration-specific fertility rates.

### 5.4.1. Births in Past Five Years

As a measure of fertility, births in the past five years is analogous to early marital fertility, except that the five-year interval is dated backward from the date of interview, rather than forward from the date of the first marriage. Due to the spread of the fieldwork over three months (from June to August), the calendar time interval varies slightly from one respondent to another. It is worth pointing out that misplacement or omission of births in this measure is less likely than for births in the first five years of married life, because it refers to the recent past. The presentation of data is confined to women who had been married continuously for the past five years. An advantage of this approach lies in the ease of computation, but its major disadvantage stems from the systematic exclusion among younger age groups of women who did not marry young.

Table 5.7 gives the mean number of births in the past five years to women who are continuously married in that interval, classified by their current age and by years since first marriage. The overall mean number of births is 1.6 , corresponding to about 320 births annually per 1000 married women in past five years. The mean value of 2.3 for the age group less than 20 is the same as was observed for this group in the first five years of marriage. The level remains more or less the same up to age 29 , but then declines monotonically and, for the oldest group, 45-49, the mean is 0.4 births.

The second panel of the table gives the mean number of births by marriage duration. As expected, the means decline by duration from 2.3 for the 5-9 years group to 0.3 for women who have been married for 30 or more years. If the figures are summed across durations, a synthetic measure of

Table 5.7 The mean number of live births in the past five years to women continuously married during this period, by (A) current age, and (B) years since first marriage

| A Current age | B Years since first marriage |  |  |
| :--- | :--- | :--- | :--- |
| Current age | Mean births in <br> past five years | Years since <br> first marriage | Mean births in <br> past five years |
| $<20$ | 2.3 | $0-4$ | - |
| $20-24$ | 2.4 | $5-9$ | 2.3 |
| $25-29$ | 2.2 | $10-14$ | 1.9 |
| $30-34$ | 1.8 | $15-19$ | 1.5 |
| $35-39$ | 1.6 | $20-24$ | 1.2 |
| $40-44$ | 1.1 | $25-29$ | .7 |
| $45-49$ | .4 | $30+$ | .3 |
| All | 1.6 | All | 1.6 |

Source: Tables 2.4.1 and 2.4.3B.
marital fertility, analogous to the Total Fertility Rate, is obtained. When summed, the figures in Panel B suggest that, if recent levels of marital fertility persist, a Syrian woman will experience $6.9(2.3+1.9+1.5+1.2)$ births between her fifth and twenty-fifth year of marriage, provided that she remains continuously married over this period.

### 5.4.2. Current Pregnancies

Another indicator of current fertility is the proportion of women who reported that they were pregnant at the time of the survey. The implied level of current fertility depends upon the completeness of the reporting and it is generally observed that these data suffer from errors due to uncertainty or embarrassment, especially during the first three months of pregnancy. Nevertheless, in view of the fact that no dating errors can occur it can be a valid index of the age pattern of current fertility, provided the reporting biases are not related to the age of women. The percentage of reported pregnancies that will terminate as non-live births is small and is unlikely to distort the pattern.

Percentage of currently married women reporting a current pregnancy - by age

| Age | $<20$ | $20-24$ | $25-29$ | $30-34$ |
| :--- | :--- | :--- | :--- | :--- |
| Percentage pregnant | 31.3 | 31.5 | 25.9 | 22.5 |
|  |  |  |  |  |
| Age | $35-39$ | $40-44$ | $45-49$ | All |
| Percentage pregnant | 14.1 | 7.6 | 2.2 | 20.6 |

Of all currently married women in the sample, 889 - that is 20.6 per cent - were pregnant at the time of the survey. Nearly one in every three women below the age of 25 was reported pregnant. After age 25 , the percentage pregnant declines and only 2.2 per cent aged 45-49 are pregnant. ${ }^{3}$ The reported pregnancy level of 20.6 is one of the highest observed in any of the WFS surveys and implies a very high current fertility level. In order to check the accuracy of the reporting, there is summarized below the per cent distribution by month of gestation:

| Duration of pregnancy in months |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8-9 | All |
| \% | 4.4 | 17.0 | 17.9 | 11.6 | 11.7 | 9.9 | 10.1 | 18.4 | 100 |

Per cent distribution
Contrary to generally observed patterns, where few pregnancies are reported for the first trimester, in Syria a substantial number of pregnancies, more than 21 per cent, are reported to be of one to three months duration. The very low value for the first month is expected, given the fact that pregnancies of the first few weeks are often not recognizable. The distribution, with a peak at two and three months, suggests some misreporting of gestation durations. Assuming that the reporting is complete after the first month, the implied total fertility rate is estimated to be around 7.4. ${ }^{4}$ This figure cannot be taken very seriously, though its high value implies that reporting of current pregnancies is surprisingly complete.

### 5.4.3. Age-Specific and Duration-Specific Fertility Rates

In this section, we briefly discuss the pattern and level of current fertility. Three measures of fertility are employed: age-specific fertility rates, age-specific marital fertility rates, and duration-specific marital fertility rates.

The age-specific fertility rate (ASFR) is the ratio of births to women at a particular age in a specified period, generally 12 months, to the total number of woman-years spent at that age in that specified interval of time. The denominator is not dependent on the woman's marital status. The sum of these ratios is the total fertility rate (TFR) and is interpreted as the number of births that a hypothetical woman would have if she survived the entire reproductive span and experienced the same age-specific fertility rates as prevailed at the time of the estimate. Age-specific marital fertility rates (ASMFRs) are similar to ASFRs, except that only births within marriage are included and the denominator is confined to woman-years spent in the married state.

Duration-specific marital fertility rates (DSMFRs) are similar to ASMFRs, except that the rates are cross-classified by duration since first marriage instead of age. In countries like Syria where childbearing is restricted to marriage, the
durationspecific fertility measure has a considerable analytic advantage over the age-specific measure, particularly for subgroup comparisons, as the latter measure at young ages may be based on the small atypical minority of women who marry early.

Though DSMFRs cannot be computed from the household survey because of lack of information on date of first marriage, the estimation of ASFRs and ASMFRs from the household survey is relatively straightforward. Both the numerator (the number of births in the last 12 months crossclassified by current age of mother) and the denominator (the total number of women, and the number currently married, enumerated in the household by five-year age groups) are available for the household survey. However, the calculation of ASFRs from the individual survey poses some problem. The numerators can be derived using similar procedures as applied to household data ${ }^{5}$ but the denominators have to be calculated by inflating the number of ever-married women enumerated in the individual survey by the reciprocal of the proportion ever married (taken from the household survey) for each current age group.

The ASFRs from the household and individual survey data are shown in table 5.8. The two sets of rates do not agree with each other, either in terms of pattern or total level. The TFR is 7.5 births from the individual survey and 6.9 from the household survey. This is surprising, as one would expect a close agreement between the two. Pending a thorough evaluation of survey data, it is difficult to say with certainty which of the two sets is correct, though on balance it seems that the household data are defective. The individual survey data are more consistent with the 1970 Census rates and the examination of trends (see below) reveals no obvious distortions in the birth history data. Close agreement between the single year and the five-year period estimates for the individual survey data gives further weight to the conclusion that the dating of the most recent birth in the household survey has suffered from reference-period error by which most recent births tended to be displaced backwards in time.

[^14]Table 5.8 Age-specific fertility rates per 1000 women based on the household and individual surveys

| Source | Age |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
|  | $15-19$ | $20-24$ | $25-29$ | $30-34$ | $35-39$ | $40-44$ | $45-49$ | TFR |
| Household survey (12 months) | 75 | 255 | 319 | 303 | 236 | 141 | 41 | 6.9 |
| Birth history (12 months) | 112 | 298 | 337 | 298 | 257 | 156 | 37 | 7.5 |
| Birth history (5 years average) | 124 | 302 | 341 | 312 | 246 | 135 | 42 | 7.5 |

The major difference in the age pattern of fertility is the much higher rates at ages 15-19 and 20-24 in the individual than in the household survey. Again, no immediate explanation is apparent for the discrepancy and it is clear from the similarity in the number of children ever born between the two surveys that total omission of children by young women in the household phase is not responsible. One plausible explanation is a greater tendency in the household than in the individual survey for the ages of young mothers to be exaggerated, thus depressing fertility rates at young ages, but this possibility cannot be thoroughly investigated until both data files have been matched and information on individual women compared.

In an attempt to obtain a preliminary assessment as to the relative validity of the two age patterns of fertility, the household and individual data have been compared in figure 5.1 to the age pattern of current pregnancies. All three sets of figures have been scaled to sum to one, to eliminate differences in the overall level of fertility. The striking feature of figure 5.1 is that the pregnancy rates from the individual survey are even higher at young ages than the fertility rates. This lends support to the view that referenceperiod error in the individual survey is less likely to be the cause of the difference in age pattern than error in the household survey.


Figure 5.1 Age-specific fertility rates for last 12 months and current pregnancy rates, scaled to sum to one

The ASMFRs and DSMFRs, averaged for the last five years, are presented in table 5.9. The peak marital fertility is observed for the age group 20-24 and for duration 0-4. years. Then it declines monotonically. However, unlike the general South-West Asian pattern, marital fertility remains high even after age 35 . This probably helps to explain why Syrian women usually produce about one child more than women in most other countries in the region. Summing these rates provides measures of total marital fertility analogous to the total fertility rate. These summed rates imply that, if fertility remains at the level of the five years prior to the survey, a woman marrying at age 20 and remaining married until age 50 will bear a total of 8.3 children. Similarly, the duration-specific rates imply that 8.3 births will be achieved in the 25 years following marriage and a total of 8.7 births in a 30 -year span of marriage.

### 5.5. FERTILITY TRENDS

Fertility trends are analysed using the data obtained through the maternity history of the individual survey. As has been discussed earlier, a detailed pregnancy history was collected for each respondent starting with the first pregnancy. From this information, birth rates have been computed classified by age of mother at the time of birth and five-year periods (age-period) and also classified by current age of respondents and age at time of birth (cohort-age). The overall impression from the age-period rates in table 5.10 is that period fertility has not changed greatly in recent years. At ages under 30, rates are more or less constant over the period of observation, with the exception of the period $10-14$ years prior to the survey when fertility appears to be particularly high. This phenomenon is probably an artefact of misdating of births. At higher ages, slight declines over the last 15 years are apparent. If the truncated cells in table 5.10 are filled in by assigning the corresponding value from the adjacent period, the estimated TFRs are $8.0,8.3,7.8$, and 7.5 for the periods $15-19,10-14,5-9$, and $0-4$ years prior to the survey, respectively. Pending a more thorough evaluation and analysis, the most reasonable preliminary interpretation of these data is that total fertility has dropped slightly since

Table 5.9 Age-specific and duration-specific marital fertility rates per 1000 women based on individual data averaged for the last five years

| Age at birth | ASMFRs | Duration at birth | DSMFRs |
| :--- | :--- | :---: | :--- |
| $15-19$ | 449 | $0-4$ | 453 |
| $20-24$ | 459 | $5-9$ | 406 |
| $25-29$ | 402 | $10-14$ | 330 |
| $30-34$ | 341 | $15-19$ | 275 |
| $35-39$ | 262 | $20-24$ | 186 |
| $40-44$ | 148 | $25-29$ | 83 |
| $45-49$ | 51 | $30-34$ | 31 |

the 1960s from a level of slightly over 8 births to about 7.5 births, a fall of some 7 per cent. Furthermore, the age patterns suggest that a fall in marital fertility at older ages is a more important factor in the overall decline than rising age at marriage.

The cohort-age-specific rates in table 5.11 also give an impression of stability rather than appreciable change, though the figures are consistent with a slight decline in the last 10 years affecting all cohorts.

The age-specific marital fertility rates are presented in table 5.12 for five-year periods of time. Though the rates fluctuate, an impression of stable marital fertility in the past energes. The somewhat lower rates for the most recent period at ages of 30 or over probably indicate a modest decline while the recent increase at ages $15-19$ reflects rising age at marriage which has the effect of concentrating exposure in the more fecund upper part of this age range.

The duration-specific fertility rates for the same five-year periods (table 5.13) show a change in fertility in first five years of marriage. It has gradually increased during the last 20 years. Again, this trend probably reflects rising age at marriage. At duration 5-9 years, the rates show no change, but at durations $10-14$ years and over, a declining trend is observed during the last 15 years, again suggesting a slight fall in the level of childbearing in later marriage.

### 5.6. FERTILITY DIFFERENTIALS

In the preceding sections we have discussed fertility levels and trends for the country as a whole. In this section we present differences in fertility between regional, residential and socio-economic groupings. An inherent drawback of cross-sectional data from a single enquiry is that analysis can only be carried out in terms of socio-economic characteristics at the time of the survey. Even in countries where socio-economic change is slow, this problem of analysing past behaviour by reference to current characteristics still exists. However, the magnitude of this inherent drawback varies for

Table 5.10 Age-specific fertility rates per 1000 women for five-year periods based on individual data

| Age at birth | Period prior to survey in years |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 |
| 15-19 | 124 | 126 | 151 | 136 | 127 | 134 | $96^{\dagger}$ |
| 20-24 | 302 | 312 | 338 | 311 | 289 | $262^{\dagger}$ |  |
| 25-29 | 341 | 353 | 372 | 357 | $356{ }^{\dagger}$ |  |  |
| 30-34 | 312 | 324 | 356 | $332 \dagger$ |  |  |  |
| 35-39 | 246 | 261 | $283 \dagger$ |  |  |  |  |
| 40-44 | 135 | $150{ }^{\dagger}$ |  |  |  |  |  |
| 45-49 | $42^{\dagger}$ |  |  |  |  |  |  |

[^15]Table 5.11 Cohort-age-specific fertility rates per 1000 women based on individual data

| Age at <br> survey | Age at time of birth |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | $15-19$ | $20-24$ | $25-29$ | $30-34$ | $35-39$ | $40-44$ | $45-49$ |  |  |  |  |  |  |
| $15-19$ | $84 \dagger$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $20-24$ | 133 | $284 \dagger$ |  |  |  |  |  |  |  |  |  |  |  |
| $25-29$ | 142 | 309 | $353 \dagger$ |  |  |  |  |  |  |  |  |  |  |
| $30-34$ | 159 | 331 | 342 | $312 \dagger$ |  |  |  |  |  |  |  |  |  |
| $35-39$ | 128 | 323 | 359 | 316 | $278^{\dagger}$ |  |  |  |  |  |  |  |  |
| $40-44$ | 132 | 304 | 365 | 334 | 241 | $174^{\dagger}$ |  |  |  |  |  |  |  |
| $45-49$ | 135 | 282 | 355 | 351 | 265 | 125 | $42 \dagger$ |  |  |  |  |  |  |

$\dagger$ Truncated exposure.
different background characteristics. For example, in Syria very few girls continue their educational pursuits after marriage and thus the temporal sequence of educational status and childbearing is unambiguous. With such variables as place of residence, husband's occupation and woman's work history, the sequence is less clear, for changes can and do occur at any stage in adult life.

This section is organized in four subsections. In subsections 5.6 .1 and 5.6.2, there are discussed differentials in completed fertility and current parity. Subsection 5.6 .3 is concerned with early marital fertility, while the final subsection 5.6.4 deals with differentials in recent fertility levels.

### 5.6.1. Differentials in Completed Fertility

To examine differentials in completed fertility, we have chosen the age group 45-49, as this group of women have essentially completed their fertility. As pointed out in chapter 4 , completed fertility does not depend exclusively on age at marriage and the proportion who remain unmarried. It is also affected by the incidence of divorce, separation and death of the spouse, and by the extent to which divorcees and widows remarry. However, this group aged 45-49 has spent nearly 96 per cent of the time since first marriage in the married state and thus considerations of marital disruption are relatively unimportant in this instance.

Table 5.12 Age-specific marital fertility rates per 1000 women for five-year periods based on individual data

| Age at <br> birth | Period prior to survey in years |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $0-4$ | $5-9$ | $10-14$ | $15-19$ | $20-24$ | $25-29$ | $30-34$ |  |
| $15-19$ | 449 | 396 | 396 | 357 | 381 | 357 | $310^{\dagger}$ |  |
| $20-24$ | 459 | 443 | 458 | 428 | 395 | $389 \dagger$ |  |  |
| $25-29$ | 402 | 406 | 425 | 401 | $420^{\dagger}$ |  |  |  |
| $30-34$ | 340 | 345 | 378 | $367^{\dagger}$ |  |  |  |  |
| $35-39$ | 262 | 275 | $306^{\dagger}$ |  |  |  |  |  |
| $40-44$ | 148 | $171^{\dagger}$ |  |  |  |  |  |  |
| $45-49$ | $51^{\dagger}$ |  |  |  |  |  |  |  |

[^16]Table 5.13 Duration-specific marital fertility rates per 1000 women for five-year periods of time based on individual data

| Duration <br> at birth | Period prior to survey in years |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0-4$ | $5-9$ | $10-14$ | $15-19$ | $20-24$ | $25-29$ | $30-34$ |  |
| $0-4$ | 453 | 404 | 419 | 386 | 384 | 344 | $247^{\dagger}$ |  |
| $5-9$ | 406 | 414 | 425 | 404 | 394 | $366^{\dagger}$ |  |  |
| $10-14$ | 330 | 352 | 393 | 379 | $396^{\dagger}$ |  |  |  |
| $15-19$ | 275 | 294 | 344 | $316^{\dagger}$ |  |  |  |  |
| $20-24$ | 186 | 222 | $244^{\dagger}$ |  |  |  |  |  |
| $25-29$ | 83 | $139 \dagger$ |  |  |  |  |  |  |
| $30-34$ | $31^{\dagger}$ |  |  |  |  |  |  |  |

$\dagger$ Truncated exposure.
The average parity of these women is 7.8 . Table 5.14 shows differentials in completed fertility by background variables. In order to examine the effect of differences in age at marriage between various subgroups, mean parities are presented for each group, both standardized for age at marriage and unstandardized.

There is no difference between rural and urban fertility. It should be mentioned that although the overall urban-rural fertility is the same, some variations exist between urban

Table 5.14 Mean number of children ever born to evermarried women aged 45-49, by background variables

| Background characteristics | Unstandard- <br> ized mean | Standard- <br> ized mean |  |
| :--- | :--- | :--- | :---: |
|  | Number <br> of <br> women |  |  |
| Level of education |  |  |  |
| No schooling |  |  |  |
| Some schooling | 8.0 | 8.0 | 451 |
| Type of residence | 6.6 | 7.2 | 69 |
| Urban |  |  |  |
| Rural | 7.9 | 7.9 | 251 |
|  | 7.8 | 7.8 | 269 |
| Region of residence |  |  |  |
| Damascus City | 7.3 | 7.3 | 91 |
| Aleppo City | 7.6 | 7.7 | 50 |
| North-East | 7.7 | 7.8 | 133 |
| West | 7.6 | 7.7 | 57 |
| Centre | 8.3 | 8.2 | 127 |
| South | 8.4 | 8.1 | 62 |
|  |  |  |  |
| Pattern of work | 7.4 | 7.5 | 89 |
| Before and after marriage | 7.4 | 7.5 | 34 |
| After marriage only | 7.8 | 7.6 | 42 |
| Before marriage only | 8.0 | 8.0 | 359 |
| Never worked |  |  |  |
| Husband's occupation |  | 7.6 | 59 |
| Professional and technical | 7.8 | 8.0 | 53 |
| Managerial and clerical | 7.5 | 8.1 | 93 |
| Sales and services | 8.4 | 7.9 | 187 |
| Agricultural | 7.9 | 123 |  |
| Skilled and unskilled manual | 7.7 | 5.7 | 50 |
| Total | 7.8 | - |  |

[^17]areas. The observed mean parity for Damascus is 7.3 against 7.6 for Aleppo and 8.0 for other urbañ areas. Completed fertility is also higher in the Centre and South regions than in the North-East or West.

The parity for women with some schooling ${ }^{6}$ is 6.6 , compared to 8.0 for women with no schooling. The minority of women who have worked since marriage also record lower fertility (7.4) than those who have never worked or worked only before marriage. Differences according to husband's occupation are minor, with the single exception of the wives of sales and service workers, who have experienced higher fertility than other groups.

Differences in age at marriage between various subgroups are minor and, as a result, the standardized means are not much different from the unstandardized. The only exception is for the 'some schooling' category, where the two differ by 0.6 child ( 7.2 standardized and 6.6 unstandardized). Thus, nearly half the difference in completed fertility between those with no schooling and those with some schooling can be attributed to a higher age at first marriage among the latter group.

### 5.6.2. Differentials in Cumulative Fertility

Data from both the household and the individual surveys permit us to examine differences in the mean number of chil-

[^18]dren ever born by various background variables. These differentials are discussed in the following paragraphs.

## Based on household survey data

Table 5.15 shows the mean number of children ever born by current age of the women according to selected background variables. The overall mean number of children ever born to ever-married women aged $15-49$ is 5.2 . This, as pointed out earlier, is nearly half a child more than observed from the individual survey data.

As may be seen, women in urban areas tend to have lower fertility than women in rural areas. The differences are substantial for the age groups $30-39$ and, in contrast to the individual survey findings reported in the previous section, are also apparent for women aged 40 or over. Damascus City has the lowest fertility. The differences, as expected, increase by age and, among the older age groups, residents of Damascus City have one child less on average than the country as a whole. No uniform pattern of variation can be detected for the North-East, West, Centre or South regions, but residents of Aleppo City record slightly lower than average fertility for age groups 40-44 and 45-49.

The most striking differences in fertility are shown by educational categories. The number of children ever born is inversely related to level of education. This pattern persists for each age group and the gap widens with age. It should be mentioned that most of the primary and secondary-and-over categories are based on small numbers of cases and consequently the estimates are subject to high sampling variability. However, the differences are so striking and persistent that

Table 5.15 Mean number of children ever born to ever-married women reported in the household survey, by age and background variables

| Background characteristics | Age |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |
| Level of education |  |  |  |  |  |  |  |
| No schooling | 0.9 | 2.3 | 3.9 | 5.9 | 7.4 | 8.0 | 8.4 |
| Incomplete primary | 0.7 | 1.9 | 3.5 | 4.9 | 6.1 | 6.4 | 6.4 |
| Complete primary | 0.2 | 0.9 | 1.8 | 3.1 | 3.7 | (3.9) | (3.5) |
| Secondary + | - | (0.7) | (1.0) | 2.1 | 3.0 | (4.0) | (3.7) |
| Type of residence |  |  |  |  |  |  |  |
| Urban | . 7 | 2.0 | 3.5 | 5.1 | 6.6 | 7.5 | 8.0 |
| Rural | . 9 | 2.2 | 3.8 | 5.8 | 7.3 | 7.9 | 8.3 |
| Region of residence |  |  |  |  |  |  |  |
| Damascus City | 0.7 | 1.8 | 3.1 | 4.5 | 6.0 | 6.8 | 7.5 |
| Aleppo City | 0.8 | 2.2 | 3.9 | 5.3 | 6.9 | 7.3 | 7.7 |
| North-East | 0.8 | 2.1 | 3.5 | 5.4 | 6.7 | 7.9 | 8.2 |
| West | 0.9 | 2.0 | 3.8 | 5.5 | 7.4 | 8.0 | 8.1 |
| Centre | 0.9 | 2.2 | 3.9 | 5.7 | 7.2 | 7.9 | 8.5 |
| South | 0.8 | 2.2 | 3.9 | 5.9 | 7.4 | 8.1 | 8.2 |
| Total | 0.8 | 2.1 | 3.7 | 5.4 | 6.9 | 7.7 | 8.1 |

Note: Figures in parentheses are based on fewer than 20 cases.

Table 5.16 Mean number of children ever born to ever-married women reported in the individual survey, by (A) current age, and (B) by years since first marriage and by background variables

| Background characteristics | A Current age |  |  |  | B Years since first marriage |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<25$ | 25-34 | 35-44 | 45-49 | $<5$ | 5-9 | 10-14 | 15-19 | 20-24 | $25+$ | Total |
| Level of education |  |  |  |  |  |  |  |  |  |  |  |
| No schooling | 1.9 | 4.7 | 7.5 | 8.0 | 1.2 | 3.2 | 5.1 | 6.8 | 8.1 | 8.7 | 5.4 |
| Incomplete primary | 1.8 | 4.7 | 6.3 | 7.7 | 1.1 | 3.3 | 4.9 | 6.2 | 6.6 | 8.3 | 4.2 |
| Complete primary | 1.4 | 3.9 | 5.8 | 5.5 | 1.0 | 3.1 | 4.3 | 5.3 | 6.7 | 7.4 | 3.2 |
| Secondary ${ }^{+}$ | 1.0 | 2.1 | 3.6 | 3.7 | 0.9 | 3.0 | 3.7 | (3.6) | (4.0) | - | 2.2 |
| Place of residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 1.6 | 4.2 | 6.8 | 7.9 | 1.0 | 3.1 | 4.8 | 6.2 | 7.5 | 8.6 | 4.6 |
| Rural | 1.8 | 4.6 | 7.3 | 7.8 | 1.2 | 3.3 | 5.1 | 6.8 | 8.0 | 8.5 | 4.8 |
| Region of residence |  |  |  |  |  |  |  |  |  |  |  |
| Damascus City | 1.5 | 4.1 | 6.2 | 7.3 | 1.0 | 3.0 | 4.4 | 5.9 | 6.9 | 7.9 | 4.4 |
| Aleppo City | 1.7 | 4.5 | 6.8 | 7.6 | 1.1 | 3.1 | 5.2 | 6.0 | 7.1 | 8.7 | 4.5 |
| North-East | 1.7 | 4.2 | 7.0 | 7.7 | 1.0 | 3.2 | 5.0 | 6.5 | 7.9 | 8.5 | 4.6 |
| West | 1.7 | 4.4 | 7.6 | 7.6 | 1.2 | 3.5 | 5.0 | 6.5 | 8.2 | 8.7 | 5.2 |
| Centre | 1.9 | 4.6 | 7.1 | 8.3 | 1.2 | 3.3 | 4.9 | 6.5 | 8.1 | 8.9 | 5.0 |
| South | 1.8 | 4.8 | 7.7 | 8.4 | 1.2 | 3.3 | 5.4 | 7.1 | 8.0 | 8.9 | 4.9 |
| Pattern of work |  |  |  |  |  |  |  |  |  |  |  |
| Before and after marriage | 1.7 | 3.9 | 6.7 | 7.4 | 1.1 | 3.2 | 4.8 | 6.4 | 7.6 | 8.5 | 4.6 |
| After marriage only | 2.1 | 4.5 | 6.7 | 7.4 | 1.2 | 2.9 | 4.7 | 6.5 | 7.3 | 8.1 | 5.2 |
| Before marriage only | 1.7 | 4.0 | 7.1 | 7.8 | 1.1 | 3.1 | 4.9 | 6.9 | 8.0 | 8.7 | 4.2 |
| Never worked | 1.7 | 4.6 | 7.2 | 7.8 | 1.1 | 3.2 | 4.9 | 6.4 | 7.8 | 8.6 | 4.7 |
| Husband's occupation |  |  |  |  |  |  |  |  |  |  |  |
| Professional and technical | 1.6 | 4.2 | 6.6 | 7.7 | 1.0 | 3.2 | 4.8 | 6.6 | 6.8 | 8.8 | 4.1 |
| Managerial and clerical | 1.7 | 4.0 | 7.0 | 7.5 | 1.1 | 3.1 | 4.8 | 6.3 | 7.7 | 8.9 | 4.5 |
| Sales and service | 1.9 | 4.7 | 6.7 | 8.4 | 1.2 | 3.1 | 4.9 | 6.0 | 7.6 | 8.6 | 5.1 |
| Agriculture | 1.8 | 4.5 | 7.2 | 7.9 | 1.1 | 3.2 | 4.9 | 6.5 | 8.1 | 8.6 | 5.2 |
| Skilled and unskilled manual | 1.8 | 4.6 | 7.2 | 7.7 | 1.1 | 3.3 | 5.2 | 6.6 | 8.0 | 8.3 | 4.7 |
| All | 1.7 | 4.4 | 7.0 | 7.8 | 1.1 | 3.2 | 4.9 | 6.4 | 7.8 | 8.6 | 4.7 |

Note: Figures in parentheses are based on fewer than 20 cases.
Source: Tables 2.2.5 and 2.2.6.
the approximate direction and magnitude of the relationship are in no doubt.

## Based on individual survey data

The inverse relationship shown by household survey data between education and the number of children ever born is further confirmed by figures in table 5.16 based on individual survey data. Panel B of the table shows the mean number of children ever born, by years since first marriage rather than by age. It is interesting to observe that when this control is introduced, the relationship between education and fertility weakens somewhat. The differences practically disappear for women still in their first 10 years of marriage. This strongly suggests that the wide divergence between educational categories at ages $15-19$ and 2024 are entirely attributable to differences in age at marriage rather than differences in early marital fertility. At longer durations, particularly 15 years and more, the difference in achieved parities between the no schooling and completed primary categories is nearly 1.3 births.

After education, the most conspicuous differentials are observed for region of residence. Damascus City shows
consistently lower fertility within both each age and each marriage duration category. This is consistent with the observation that residents of the capital report the highest level of ever-use and current use of contraception (see chapter 8). As with the household survey findings, there are no discernible differences between the other regions, with the exception of Aleppo City where there is evidence of lower fertility amongst older women and early marriage cohorts.

Finally, no clear-cut pattern of differentiation according to husband's occupation exists, but women who have worked since marriage have lower fertility than those who have not worked. The latter difference, however, is confined to women aged 35 or more and those who have been married 20 years or more.

### 5.6.3. Differentials in Early Fertility

To simplify the discussion of differentials in early marital fertility (births in the first five years of marriage), results are presented only for the broad cohort of women who first married $10-19$ years ago. On the average, they are about

15 years into their marriage, are in the age group 25-44 and represent the broad age-at-marriage categories observed in Syria. Furthermore, the average length of marital exposure is generally similar for different subgroups of the population and therefore a finer control by marriage duration is not needed. The results are summarized in Table 5.17. On the average, the women who first married $10-19$ years ago have given birth to 5.7 children. Of these, 2 children were born in the first five years of married life and 1.7 during the past five years.

Differentials are most conspicuous for education, which seems to have a curvilinear relationship with early marital fertility. Women with an intermediate level of schooling (incomplete primary and complete primary) have the highest fertility. The mean number of children in the first five years to this group of women are $2.0,2.2,2.2$ and 1.8 , for no education, incomplete primary, complete primary, and secondary or above, respectively. Furthermore, the shape of the relationship persists when age at marriage is controlled, except for women who first married at age 20 or over for

Table 5.17 Mean number of births in the first five years of marriage for women first married 10-19 years ago, by age at marriage and background variables

| Background characteristics | Age at first marriage |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<15$ | 15-17 | 18-19 | $20+$ | Total |
| Level of education |  |  |  |  |  |
| No schooling | 1.7 | 1.9 | 2.1 | 2.2 | 2.0 |
| Incomplete primary | 2.0 | 2.3 | 2.3 | 2.2 | 2.2 |
| Complete primary | 2.0 | 2.2 | 2.2 | 2.2 | 2.2 |
| Secondary+ | (1.5) | (1.8) | (1.4) | 2.0 | 1.8 |
| Type of residence |  |  |  |  |  |
| Urban | 1.8 | 2.1 | 2.2 | 2.2 | 2.1 |
| Rural | 1.7 | 1.9 | 2.1 | 2.0 | 1.9 |
| Region of residence |  |  |  |  |  |
| Damascus City | 1.8 | 2.2 | 2.3 | 2.2 | 2.2 |
| Aleppo City | 1.7 | 2.3 | 1.9 | 2.1 | 2.0 |
| North-East | 1.8 | 1.8 | 2.1 | 2.0 | 1.9 |
| West | 1.9 | 2.0 | 2.2 | 2.0 | 2.0 |
| Centre | 1.7 | 2.0 | 2.0 | 2.1 | 1.9 |
| South | 1.7 | 2.1 | 2.4 | 1.9 | 2.2 |
| Pattern of work |  |  |  |  |  |
| Before and after marriage | 1.6 | 1.8 | 2.0 | 2.3 | 2.0 |
| After marriage only | 1.8 | 2.2 | (2.3) | 1.8 | 2.1 |
| Before marriage only | 1.6 | 1.8 | 2.0 | 2.2 | 2.1 |
| Never worked | 1.8 | 2.1 | 2.2 | 2.1 | 2.0 |
| Husband's occupation |  |  |  |  |  |
| Professional and technical | 1.7 | 1.9 | 2.3 | 2.2 | 2.2 |
| Managerial and clerical | 1.9 | 2.2 | 2.5 | 2.2 | 2.2 |
| Sales and service | 1.6 | 2.1 | 2.0 | 2.1 | 2.0 |
| Agriculture | 1.7 | 1.9 | 2.0 | 1.9 | 1.9 |
| Skilled and unskilled manual | 1.7 | 2.1 | 2.0 | 2.2 | 2.1 |
| All | 1.7 | 2.0 | 2.1 | 2.1 | 2.0 |

Note: Figures in parentheses are based on fewer than 20 cases.
Source: Table 2.1.2.
whom the difference between the no schooling and primary categories disappears. One possible explanation for this curvilinear pattern is that the tempo of early fertility is restrained by prolonged lactation for women with no education and by contraception for the minority of women with secondary-level education, whereas the fertility of the intermediate groups is less affected by either of these two factors.

Early fertility in urban areas is slightly higher than in rural areas; this probably reflects higher fertility in Damascus, which accounts for nearly half of the total urban population. In other respects, regional differences are not apparent.

Women's pattern of work does not appear to be related to early fertility. As little information about the precise timing of work (apart from the broad distinction between before and after marriage) was collected, this negative result is to be expected. Occupational differentials are small, the only noteworthy feature being the higher fertility of wives of managerial and clerical workers.

### 5.6.4. Differentials in Current Fertility

When discussing current fertility levels in section 5.4, three sets of rates, ASFRs, ASMFRs and DSMFRs, were used, based on birth history data of the individual survey and on information on births in the last 12 months derived from the household survey. The indications from that analysis were that there may be some displacement of dates of most recent births in the household survey. Thus, in this section we have restricted our discussion of differentials in current fertility to birth history data, using rates averaged for the five years prior to the survey as our measure.

Differentials in ASFRs and TFRs are presented in table 5.18 and figure 5.2. Education seems to exert the strongest influence on current fertility. Women with no schooling have a TFR which is twice as high as women with some schooling, 8.6 births as against 4.3 for the incomplete primary group and 3.2 for women with completed primary or more education. The age pattern of the three groups is also very different. For women with no education, peak fertility is observed at ages $25-29$, while for women with incomplete primary education the peak occurs at ages $20-24$; the unreasonably low rate for age $30-34$ for the intermediate educational category may reflect reporting error or the chance effect of sampling fluctuation. The third group (completed primary and over) is very small and the observed pattern should be interpreted with caution. Still the differentials by age are so consistent and large that one may conclude that female education has a strong negative influence on total fertility, both because of its influence on age at marriage (which depresses the rates at younger ages) and its influence on control of fertility within marriage (which affects rates at higher ages).

Table 5.18 Age-specific fertility rates per 1000 women averaged for the last five years based on individual data

| Background characteristics | Age at birth |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | TFR $\dagger$ |
| Level of education |  |  |  |  |  |  |  |  |
| No schooling | 175 | 357 | 384 | 366 | 283 | 150 | 51 | 8.6 |
| Incomplete primary | 109 | 310 | 136 | 99 | 142 | (59) | (9) | 4.3 |
| Complete primary + | 27 | 99 | 179 | 166 | 98 | (61) | * | 3.2 |
| Type of residence |  |  |  |  |  |  |  |  |
| Urban | 109 | 256 | 292 | 261 | 186 | 97 | 24 | 6.0 |
| Rural | 140 | 343 | 392 | 378 | 315 | 175 | 64 | 8.7 |
| Region of residence 204 |  |  |  |  |  |  |  |  |
| Damascus City | 91 | 204 | 251 | 213 | 121 | 54 | (11) | 4.7 |
| Aleppo City | 153 | 323 | 318 | 268 | 216 | (105) | (22) | 6.9 |
| North-East | 142 | 322 | 364 | 350 | 304 | 199 | 78 | 8.4 |
| West | 74 | 282 | 342 | 307 | 265 | 118 | (8) | 6.9 |
| Centre | 143 | 295 | 345 | 351 | 269 | 152 | 54 | 7.8 |
| South | 128 | 361 | 408 | 351 | 294 | 144 | (56) | 8.4 |
| All | 124 | 302 | 341 | 312 | 246 | 135 | 42 | 7.3 |

Note: Figures in parentheses are based on fewer than 250 woman-years of exposure.
*Rate omitted as fewer than 50 woman-years of exposure.
$\dagger$ TFRs are calculated by summing ASFRs for ages 15-44.

Residential differentials are also very conspicuous. Women living in Damascus City report a TFR of 4.7, as against 6.0 for the urban population as a whole and 8.7 for women living in rural areas. Thus the main factor responsible for low urban fertility is the contribution of Damascus City. The TFR for Aleppo City is 6.9 , intermediate between Damascus City and rural. Other regional differences are also apparent. TFRs are higher in the North-East and South regions (8.4) and in the Centre region (7.8) than in the West region (6.9). As parallel differences in cumulative fertility were not observed, we may conclude tentatively that the divergencies are recent in origin.

We turn now to differentials in recent levels of marital fertility, shown in tables 5.19 and 5.20, and figure 5.3. The age-specific rates in the first of these two tables indicate very large differences at higher ages between urban and rural fertility and between educational groups. For instance, at ages 35-39, the fertility rate of women with no formal schooling is twice as high as that for women with some schooling. At the same ages, rural fertility is over 50 per cent higher than urban. At younger ages, however, differences are much less marked and sometimes reversed. Thus at ages 1519, urban marital fertility is higher than rural, while the rate of childbearing among the three educational categories is almost identical. These rates for younger women are not easy to interpret because of different marriage patterns whereby much smaller proportions of better educated urban women are married at ages $15-19$ and $20-24$ than their less educated rural counterparts.

In many ways, a clearer understanding of recent marital fertility differentials may be gained from table 5.20 which
provides duration-specific rates, averaged over the five years preceding the survey. The sum of these rates up to the duration of 20 years gives a measure of total marital fertility which may be defined as the number of births that a hypothetical woman would have in the first 20 years of marriage if she experienced the duration-specific rates of the last five years (figure 5.4). Pronounced educational and rural-urban differences in this measure may be observed. Recent marital rates imply that women with complete primary or higher education will bear nearly two and a half children less in 20 years of marriage than women with no education, while urban women will bear one and a half children less than rural women.

As expected, differences only emerge in the second quinquennium of married life and progressively widen as duration since marriage increases. It is interesting to note that regional variations are minor, with the exception of Damascus and Aleppo which have lower levels of marital fertility. The implication of this result is that the appreciably lower levels of total fertility observed in the West region than in the North-East, Centre and South regions (see table 5.18) reflect a later age at marriage in this region rather than lower marital fertility.


Figure 5.2 Age-specific fertility rate per 1000 women averaged for the last five years, based on the individual data


Figure 5.3 Age-specific marital fertility rates according to (a) level of education, (b) place of residence, and (c) region of residence

Table 5.19 Age-specific marital fertility rates per 1000 women averaged for the last five years based on individual data

| Background characteristics | Age at birth |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |
| Level of education 30158 |  |  |  |  |  |  |  |
| No schooling | 448 | 474 | 432 | 390 | 301 | 163 | 58 |
| Completed primary | 445 | 459 | 385 | 270 | 155 | (66) | (11) |
| Primary + | 452 | 419 | 323 | 223 | 147 | (63) |  |
|  |  |  |  |  |  |  |  |
| Uiban | 458 | 433 | 357 | 292 | 203 |  | 27 |
| Rural | 441 | 481 | 451 | 401 | 332 | 189 | 75 |
| Region of residence 306136460 (12) |  |  |  |  |  |  |  |
| Damascus City | 459 | 386 | 326 | 244 | 136 | (119) | (29) |
| Aleppo City | 422 | 438 | 377 | 296 | 324 | (119) | (101) |
| North-East | 429 | 458 | 418 | 376 334 | 324 284 | 128 | (9) |
| West | 472 | 491 | 424 | 334 375 | 284 | 163 | (54) |
| Centre | 513 | 451 | 401 | 375 384 | 287 | 163 | (60) |
| South | 410 | 518 | 462 | 384 | 305 | 149 | (60) |
| All | 449 | 459 | 402 | 341 | 262 | 148 | 51 |

Note: Figures in parentheses are based on fewer than 250 woman-years of exposure.
*Rate omitted as fewer than 50 woman-years of exposure.


Figure 5.4 Births in the first twenty years of marriage by (a) level of education, (b) place of residence, and (c) region of residence

Table 5.20 Duration-specific marital fertility rates per 1000 women averaged for the last five years based on individual data

| Background characteristics | Duration at birth |  |  |  |  |  |  | Birth in first 20 years of marriage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 |  |
| Level of education |  |  |  |  |  |  |  |  |
| No schooling | 454 | 434 | 378 | 314 | 218 | 84 | 35 | 7.9 |
| Incomplete primary | 467 | 388 | 289 | 169 | (60) | (66) | - | 6.6 |
| Complete primary | 443 | 327 | 180 | 148 | (72) | - | - | 5.5 |
| Place of residence |  |  |  |  |  |  |  |  |
| Urban | 441 | 364 | 281 | 226 | 144 | 63 | (32) | 6.6 |
| Rural | 464 | 443 | 384 | 332 | 231 | 102 | (29) | 8.1 |
| Region of residence |  |  |  |  |  |  |  |  |
| Damascus City | 431 | 299 | 226 | 187 | 77 | 52 | * | 5.7 |
| Aleppo City | 437 | 392 | 301 | 225 | (129) | (109) | * | 6.8 |
| North-East | 429 | 427 | 366 | 321 | 242 | 86 | (80) | 7.7 |
| West | 480 | 454 | 327 | 273 | 193 | (38) | * | 7.7 |
| Centre | 473 | 408 | 356 | 289 | 216 | 90 | (42) | 7.6 |
| South | 479 | 445 | 371 | 329 | 210 | (118) | * | 8.1 |
| All | 453 | 406 | 330 | 275 | 186 | 83 | 31 | 7.3 |

Note: Figures in parentheses are based on fewer than 250 women years of exposure.
*Rates omitted as fewer than 50 women years of exposure.

### 5.7. SUMMARY

The foregoing analysis indicates that fertility in Syria is very high, around 8 children by age 50 , though there are some indications that in the last 10 years it has declined slightly. The most important factor contributing towards this decline is female education. Women with completed primary education show low fertility ( $\mathrm{TFR}=3.2$ ). Even those women with incomplete primary schooling bear an average of only 4.3 children. Expanding educational levels should bring
about a considerable change in the country's fertility levels over the next 10 to 15 years.

Except for the relatively low level of fertility in Damascus City and, to a lesser extent, in Aleppo City, regional differentials in fertility are not pronounced. Other socio-economic variables such as husband's occupation, and female work experience appear to exert relatively little influence on reproductive behaviour, though women who have worked since marriage report slightly fewer births than women who have not worked.

## CHAPTER 6

## MORTALITY

### 6.1. INTRODUCTION

This chapter analyses the mortality levels prevailing among the survey population. It is well known that mortality and fertility are closely inter-related, although the nature of the relationship is complex. The improved health conditions associated with a fall in mortality can give rise to an increase in fertility. At the same time, when a substantial fall in fertility does take place it is generally preceded and accompanied by a reduction in mortality. It has been established that fertility in Syria is high with evidence of only a slight decline. Here we look at the decline in mortality that has taken place in the recent past and hence at the extent to which this precondition for a fall in fertility is present.

The SFS collected information which can be used to estimate levels and trends in both child and adult mortality. In the individual and household surveys, the numbers of living children, the numbers of children who had died and hence the numbers of children ever born were ascertained for all ever-married women. From these, indirect estimates of childhood mortality can be derived. In addition, child mortality can be estimated directly from the birth histories of the individual survey, which included the date of each live birth as well as the survival status and the age at death if the child had died. Questions relating to adult mortality were included in the household survey. These took the form of survivorship questions and questions on deaths of household members. The former asked of all household members, 'Is your father alive?' and 'Is your mother alive?' and, for those who had been married more than once, 'Is your first husband (wife) alive?'. Indirect estimates of adult mortality can be derived from the recorded proportions orphaned and ever widowed. The questions on deaths of household members asked for the sex and age of all those household members who had died in the previous 24 months. In theory, the resulting figures divided by the population at risk should give death rates by age and sex. In practice, deaths are seldom completely reported and an adjustment is needed to bring them up to a realistic level.

The sections that follow are a preliminary analysis of the levels and trends in mortality revealed by the SFS and do not go into the full detail that the data allows. Section 6.2 is a general overview of the actual experience and prevalence of child loss among the survey women. Levels and trends in infant and child mortality are examined in section 6.3 and differentials in these in section 6.4. Levels and trends in adult mortality and their relationship to child mortality are exam-
ined in section 6.5. Finally the results are summarized in section 6.6.

### 6.2. PREVALENCE OF CHILD LOSS

The impact of child mortality is studied in two ways. First, the section examines the differences between fertility, the average number of live births per woman, and family size, defined by the average number of children living at the time of the survey. Secondly, the section looks at the concentration of the experience of losing a child through death. This shows the extent to which the death of a child is a common feature of the family-building process.

The mean numbers of children ever born and living and the percentage of children who have died are shown for both the household and individual surveys in table 6.1. The high fertility of the survey population is translated into large family size. Women in the household survey aged 45-49 years averaged 8 live births of whom 6.6 were still living. In the individual survey, the figures are 7.7 live births and 6.6 surviving children. The percentages of children lost through death rise with age, in the household survey from 8 per cent for women aged $15-19$ years to 17 per cent for

Table 6.1 Mean number of children ever born and children living and the percentage of children who have died, by age group of women in the household survey and the individual survey

| Age group <br> of women | Children ever <br> born per <br> woman | Living <br> children <br> per woman | Percentage of <br> children ever born <br> who have died |
| :--- | :--- | :--- | :---: |
| A Household survey |  |  |  |
| $15-19$ | 0.184 | 0.170 | 7.73 |
| $20-24$ | 1.256 | 1.152 | 8.33 |
| $25-29$ | 3.024 | 2.765 | 8.55 |
| $30-34$ | 5.018 | 4.508 | 10.17 |
| $35-39$ | 6.529 | 5.790 | 11.24 |
| $40-44$ | 7.495 | 6.454 | 13.88 |
| $45-49$ | 7.970 | 6.631 | 16.80 |
|  |  |  |  |
| B Individual survey |  |  |  |
| $15-19$ | 0.201 | 0.185 | 7.93 |
| $20-24$ | 1.300 | 1.195 | 8.09 |
| $25-29$ | 3.057 | 2.804 | 8.28 |
| $30-34$ | 4.820 | 4.366 | 9.43 |
| $35-39$ | 6.261 | 5.601 | 10.54 |
| $40-44$ | 7.278 | 6.332 | 13.00 |
| $45-49$ | 7.688 | 6.584 | 14.37 |

[^19]those aged 45-49 and similarly in the individual survey from 8 to 14 per cent. The lower percentages of children who have died for women over 20 years of age in the individual survey as compared with the household survey implies that the excess fertility recorded in the household survey and noted in the previous chapter is not as pronounced when the numbers of living children are compared. The differences in reported fertility and mortality between the household and individual surveys will be explored in subsequent analysis.

For both surveys, the percentages of all children lost through death are moderately high and leave considerable room for improvement when compared with low mortality countries. However, the level of mortality is not sufficient to lower family size appreciably. Syria is a society characterized not only by a high fertility but also by a large family size and consequently a high rate of population growth.

The child survivorship data are presented by parity in table 6.2 for those women in the individual survey with up to eight live births. Women with more than eight live births comprise 5 per cent of all those aged 25-34 years, 32 per cent of those aged 35-44 and 44 per cent of all women of 45 years of age and over. In so far as child mortality increases with parity, the mortality implied by table 6.2 must be seen as an understatement of the overall mortality experience. Panel A of table 6.2 shows that 25 per cent of women with eight live births or less have lost at least one child through death. The percentages increase with age and parity, from 16 per cent of women aged under 20 to 34 per cent of those in the oldest age group and from 6 per cent of those with only one live birth to just under 50 per cent of women with eight live births. The relation between age and the loss of a child through death is less clearly defined within panel A. This is no doubt due to the unrepresentativeness of younger women of higher parities in relation both to their own age group and to all women with high parities.

The percentages of children who have died by parity and by mother's age are shown in panel B. They show some increase with parity and age although it is not so pronounced as that observed in panel A. Panel C gives the distribution of the number of children who have died. Most of the women who have lost a child through death have lost only one child. This is the case for all of those with two live births who have lost a child, for 88 per cent of those with three live births and for 53 per cent of those with eight live births.

Table 6.2 illustrates that child mortality is by no means concentrated. While eight per cent of children born to women in the individual survey with eight live births or less have died, 25 per cent of these women have experienced the loss of a child through death. For women with eight live births, 11 per cent of children have died and 49 per cent of women have lost a child through death. The picture that emerges from the table is one of a society with levels of child
mortality which are quite low but still a significant feature of the family-building process. Over one-quarter of all ever-married women had experienced the loss of a child through death by the time of the survey, and over one-third and probably close to one-half had done so by the end of their reproductive years.

### 6.3. INFANT AND CHHLD MORTALITY

The level of mortality in infancy and childhood is an important indicator of the health status of the population and in the context of persisting high fertility it is a crucial factor in determining the rate at which the population is growing. The SFS permits the estimation of infant and child mortality indirectly from the household and individual surveys and directly from the birth history of the individual survey. The indirect and direct estimates of child mortality are first com-

Table 6.2A Percentage of ever-married women who have lost at least one child, by age and parity

| Current <br> age | Parity |  |  |  |  |  |  | All <br> (Parity 1-8) |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
| $<25$ | 5 | 10 | 21 | 35 | 52 | 73 | 75 | 100 | 16 |
| $25-34$ | 9 | 13 | 14 | 19 | 23 | 40 | 49 | 56 | 26 |
| $35-44$ | 5 | 19 | 20 | 22 | 30 | 34 | 41 | 45 | 34 |
| $45+$ | - | 13 | 27 | 28 | 31 | 47 | 48 | 34 |  |
| Total | 6 | 11 | 18 | 24 | 28 | 38 | 46 | 49 | 25 |

Table 6.2B Percentage of children ever born who have died, by mother's age and parity

| Current <br> age | Parity |  |  |  |  |  | All <br> (Parity 1-8) |  |  |
| :--- | :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: | :--- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
| $<25$ | 5 | 5 | 8 | 10 | 13 | 18 | 21 | 13 | 8 |
| $25-34$ | 9 | 7 | 5 | 6 | 6 | 9 | 13 | 13 | 8 |
| $35-44$ | 5 | 10 | 8 | 7 | 8 | 8 | 10 | 9 | 9 |
| $45+$ | - | - | 4 | 13 | 7 | 8 | 11 | 11 | 10 |
| Total | 6 | 6 | 6 | 7 | 7 | 9 | 11 | 11 | 8 |

Table 6.2C Per cent distribution of women, by number of deceased children and parity

| Number of <br> dead <br> children | 1 | Parity |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |  |
| 0 | 94 | 89 | 82 | 77 | 73 | 62 | 55 | 51 |  |  |  |
| 1 | 6 | 11 | 16 | 18 | 21 | 28 | 23 | 26 |  |  |  |
| 2 | - | - | 2 | 5 | 5 | 7 | 13 | 13 |  |  |  |
| $3+$ | - | - | - | - | 1 | 3 | 9 | 10 |  |  |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |  |  |  |

pared and then assessed in the light of the evidence from sources other than the SFS.

The proportions of children who have died by age can be converted into probabilities of dying or surviving from birth to selected ages using a technique originally devised by Brass. ${ }^{1}$ His technique assumes that fertility and mortality, each of which is represented by a one-parameter schedule, have been fairly constant in the recent past. The proportions of children dead are converted into probabilities of dying through multiplication by a set of factors which depend on the woman's age and on the fertility pattern in the population. In the Trussell version of the Brass technique, fertility is represented by the Coale-Trussell fertility models and mortality by the Coale-Demeny regional model life table system. ${ }^{2}$ The multiplying factors are derived from sets of regression equations available for each of the four regional mortality patterns. The South mortality is believed to be the most appropriate for Middle Eastern countries. It is characterized by high child mortality relative to adult mortality when compared with an average or general pattern (represented in the Coale-Demeny system by the West family). However, since most less developed countries have undergone quite substantial reductions in mortality in recent decades, the assumption of constant mortality is clearly violated. Recent work in the field has led to the dating of estimates derived in the usual way. The method was originally devised by Feeney for the Brass estimates. ${ }^{3}$ It assumes that infant mortality has been declining linearly and that the decline is a period one. The estimated probabilities of dying can be dated irrespective of the rate of mortality decline. The method has since been applied to the dating of the Trussell mortality estimates.

The estimated $q(x)$ 's, or the probabilities of dying between birth and age $x$, along with the time to which they refer measured in years before the survey, are shown for the household survey in table 6.3. They were derived from the proportions of children dead using the South version of the Trussell technique. For the individual survey, the probabilities of dying were derived from the proportions of children who had died by duration of marriage as well as by age. They are given in table 6.4. The tables also include the value of $l(1)$ or the probability of surviving to age one year which matches each $q(x)$ in the South model life table system. In table 6.3, the equivalent values of $l(5)$, the probability of surviving from birth to age five years, are also shown, in order to demonstrate implied levels of childhood as well as infant mortality. The $q(x)$ 's derived from data on women

[^20]by age indicate that mortality was falling steadily until about four years before the survey. The suggested increase in recent years is a result of data bias and not of any real increase in mortality. It is commonly observed with this type of data that the $q(x)$ estimates derived from women aged 15-19 years and to a lesser extent those derived from women aged 20-24 years deviate from the trend established by the results for older women. It can largely be attributed to the preponderance of women who marry early and of first births in these age groups. Consequently, they experience a higher than average mortality.

Infant and childhood mortality from the birth histories of the individual survey are given in table 6.5. They refer to intervals of five years prior to the survey and are assumed to be located at the midpoint of the five-year interval. The estimates of child mortality derived from the birth histories cannot be assumed to represent levels of mortality prevailing in the population as a whole. Based as they are on women aged 15-49 years in 1978, they become increasingly weighted by the younger age groups and lower order births the further they go back in time. Nevertheless, the steady and consistent decline in the estimated probabilities of dying between birth and ages 1,2 and 5 years confirm a substantial fall in mortality.

The trends in $l(1)$ and $l(5)$ implied by the indirect estimates of mortality from the individual and household surveys and the direct estimates from the individual survey are shown in figure 6.1. The duration-based estimates from the individual survey were the least satisfactory and are not included in the figure. It can be seen that the three sets of mortality estimates, while not widely divergent, have a clear ranking. The indirect estimates from the household survey suggest the highest mortality, followed by the indirect estimates from the individual survey. The lowest estimate of all is that derived directly from the birth histories of the individual survey. Despite this, the closeness of the estimates is quite encouraging. Those derived from the individual

Table 6.3 Estimates of child mortality derived from data on children ever born and surviving, by current age of women, household survey

| Age group <br> of women | $x$ | $q(x)$ | Years <br> before <br> survey | South MLT <br> equivalent |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  | $l(1)$ | $l(5)$ |
| $15-19$ | 1 | 0.0775 | 1.1 | 0.9225 | .8970 |
| $20-24$ | 2 | 0.0890 | 2.2 | 0.9238 | .8992 |
| $25-29$ | 3 | 0.0889 | 3.9 | 0.9279 | .9061 |
| $30-34$ | 5 | 0.1060 | 5.9 | 0.9207 | .8940 |
| $35-39$ | 10 | 0.1190 | 8.2 | 0.9166 | .8869 |
| $40-44$ | 15 | 0.1440 | 10.9 | 0.9070 | .8685 |
| $45-49$ | 20 | 0.1717 | 14.0 | 0.8989 | .8521 |

[^21]Table 6.4 Estimates of child mortality derived from data on children ever born and surviving, by (A) current age of women, and (B) duration of marriage, individual survey

| $x$ | A Age group of women |  |  | B Duration of marriage |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $q(x)$ | Years before survey | Equivalent $l(1)$ <br> South MLT | $q(x)$ | Years before survey | $\begin{aligned} & \text { Equivalent } l(1) \\ & \text { South MLT } \end{aligned}$ |
| 1 | 0.0782 | 1.1 | 0.9218 | - | - | - |
| 2 | 0.0858 | 2.3 | 0.9261 | 0.0826 | 1.3 | 0.9285 |
| 3 | 0.0858 | 3.9 | 0.9300 | 0.0908 | 3.2 | 0.9267 |
| 5 | 0.0981 | 6.0 | 0.9254 | 0.0814 | 5.6 | 0.9358 |
| 10 | 0.1115 | 8.3 | 0.9206 | 0.1093 | 8.3 | 0.9218 |
| 15 | 0.1345 | 10.9 | 0.9112 | 0.1223 | 11.3 | 0.9170 |
| 20 | 0.1466 | 14.0 | 0.9089 | 0.1436 | 14.4 | 0.9102 |

Note: $q(x)$ and years before survey estimated using the South variant of the Trussell regression piocedure.

Table 6.5 Probabilities of dying by ages 1,2 and 5 , by sex of child derived from data collected in the birth history, individual survey

| Period before survey (years) | Male births |  |  | Female births |  |  | Both sexes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $q(1)$ | $q(2)$ | $q(5)$ | $q(1)$ | $q(2)$ | $q(5)$ | $q(1)$ | q(2) | $q(5)$ |
| 0-4 | 0.0590 | 0.0706 | 0.0794 | 0.0716 | 0.0832 | 0.0950 | 0.0651 | 0.0767 | 0.0870 |
| 5-9 | 0.0702 | 0.0809 | 0.0895 | 0.0672 | 0.0766 | 0.0932 | 0.0687 | 0.0788 | 0.0913 |
| 10-14 | 0.0770 | 0.0930 | 0.1132 | 0.0805 | 0.1002 | 0.1194 | 0.0788 | 0.0966 | 0.1163 |
| 15-19 | 0.0810 | 0.1011 | 0.1232 | 0.0890 | 0.1105 | 0.1504 | 0.0848 | 0.1056 | 0.1363 |
| 20-24 | 0.0880 | 0.1301 | 0.1587 | 0.1183 | 0.1664 | 0.1984 | 0.1027 | 0.1476 | 0.1777 |



Figure 6.1 Trends in $l(1)$ and $l(5)$ implied by the indirect estimates of child mortality derived from the household and individual surveys and the direct estimates from the individual survey
survey have the advantage of being based on information obtained from the women themselves, while the household survey has the advantage of a much larger number of women. The reliability of the respective estimates is a matter for further investigation. For the present chapter, the estimates derived from the household survey will be used. They suggest that out of every 1000 births occurring 10 years before the survey, there would be about 910 survivors to age one year and 874 to age five years. In the 10 years following, they show that the chances of surviving improved to about 930 out of every 1000 births surviving to age one year and 909 to age five years.

The SFS estimates of child mortality can be compared with similar estimates derived from the 1970 Population Census and the 1976 Sample Population Census. In each, information was collected on the numbers of children ever born and surviving. The $q(x)$ 's, their time reference and the equivalent values of $l(1)$ derived using the Trussell technique for a South mortality, are shown in table 6.6. Figure 6.2 compares the probabilities of surviving to age one year derived from the 1970 Census, the 1976 Sample Census and the SFS household survey. The 1970 and 1976 results are in quite close agreement. However, the implied survivorship to age one year derived from the SFS is consistently higher, although it does converge nearer the date of the survey. The 1970 and 1976 results suggest that only about 895 out of

Table 6.6 Estimates of child mortality derived from data on children ever born and surviving, 1970 and 1976

| $x$ | 1970 Population Census |  |  | 1976 Sample Census |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $q(x)$ | Years before census | $l(1)$ | $q(x)$ | Years before census | $l(1)$ |
| 1 | 0.1127 | 1.0 | 0.8873 | 0.0776 | 1,1 | 0.9224 |
| 2 | 0.1351 | 2.2 | 0.8933 | 0.0956 | 2.2 | 0.9190 |
| 3 | 0.1519 | 4.0 | 0.8914 | 0.1088 | 3.9 | 0.9153 |
| 5 | 0.1770 | 6.2 | 0.8846 | 0.1279 | 5.8 | 0.9087 |
| 10 | 0.2112 | 8.7 | 0.8751 | 0.1664 | 8.0 | 0.8948 |
| 15 | 0.2447 | 11.5 | 0.8646 | 0.1949 | 10.6 | 0.8854 |
| 20 | 0.2780 | 14.7 | 0.8569 | 0.2209 | 13.7 | 0.8793 |

every 1000 births occurring 10 years before the survey survived to age one year, and about 92510 years later.

By comparison with other sources, it seems that, while the household survey produced the highest estimates of mortality from the SFS, even they slightly underestimate the level of child mortality in Syria. All the estimates of mortality from the SFS show a substantial decline in child mortality during the 15 years preceding the survey. Compared with the other sources, they seem to underestimate the extent of the decline. Taking all the evidence into account, the infant mortality rate in Syria seems to have fallen from between 90 and 105 deaths per 1000 live births


Figure 6.2 Trends in $l(1)$ implied by the indirect estimates on child mortality derived from the 1970 Population Census, the 1976 Sample Census and the SFS household survey
in 1968 to between 70 and 75 per 1000 in 1978. This is still a relatively high level of infant mortality.

### 6.4. DIFFERENTTALS IN INFANT AND CHILD MORTALITY

There is a considerable variation in the levels of infant and child mortality in Syria. Approximately one in five women under 35 years of age has experienced the loss of a child through death and about one in two of those towards the end of her reproductive years. In this section, we consider the factors that might be associated with these variations. The first group of factors might be described as child-based or intra-familial, such as the sex of the child, the mother's age at birth and the birth order. The second group are the more family-based background characteristics: mother's education; urban versus rural residence; and region of residence. While most of these factors are clearly not independent, the present analysis confines itself to considering the relation of each with child mortality in turn and no attempt is made to identify joint effects.

### 6.4.1. Sex of Child

Indirect estimates of child mortality were derived for each sex separately from the household and individual surveys and are given in table 6.7. The implied trends in survivorship to age one year are illustrated in figure 6.3. In general, mortality in infancy and childhood is higher for boys than girls. In Syria, levels of mortality are about the same with, if anything, an excess mortality among girls. In a
society with a preference for male children (see Chapter 7) it is possible that this could translate into a reversal of the usual sex differential in mortality. It is equally possible that this preference could lead to reporting errors that give only the appearance of excess mortality among females. In the latter case, females would have been under-represented in the surviving children and/or over-represented in the reported number of children who have died. There is no suggestion that the total live births were under-reported in either survey and hence by implication that female births were being omitted. The sex ratios for children ever born and living are given in table 6.7. The sex ratios of children ever born in the household survey seem quite reasonable for women under 40 years of age and too high for older women. All but two of the sex ratios for living children exceed those for children ever born. The excess female mortality observed in the household survey could arise from women reporting sons who had died to be daughters and daughters who were still living to be sons. For the individual survey, the differences between the sex ratios for children ever born and living children are smaller than in the household survey, but the sex ratios at birth are also more erratic, fluctuating between extremes.

Direct estimates of mortality were derived for each sex separately from the birth histories of the individual survey and are shown in table 6.5. They also suggest excess female mortality. This is most noticeable for deaths of children at two to four years of age and to a lesser extent for deaths at age one year. The direct estimates are likely to be even more biased by reporting errors than are the indirect ones, relying as they do on the reporting of age at death as well as the total numbers of children ever born and surviving. Nevertheless, it does seem plausible that, if the societal

Table 6.7 Child mortality, by sex of child, derived from data on children ever born and surviving, houshold and individual surveys

| $x$ | Male births |  |  | Female births |  |  | Sex ratio for |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $q(x)$ | Years before survey | $l(1)$ | $q(x)$ | Years before survey | $l(1)$ | Children ever born | Living children |
| A Household survey |  |  |  |  |  |  |  |  |
| 1 | 0.0666 | 1.1 | 0.9334 | 0.0891 | 1.1 | 0.9109 | $\cdot 1.049$ | 1.074 |
| 2 | 0.0910 | 2.2 | 0.9212 | 0.0868 | 2.2 | 0.9266 | 1.045 | 1.041 |
| 3 | 0.0912 | 3.9 | 0.9251 | 0.0864 | 3.9 | 0.9309 | 1.066 | 1.061 |
| 5 | 0.1032 | 5.9 | 0.9208 | 0.1089 | 6.0 | 0.9209 | 1.041 | 1.048 |
| 10 | 0.1163 | 8.1 | 0.9164 | 0.1225 | 8.3 | 0.9168 | 1.046 | 1.053 |
| 15 | 0.1373 | 10.8 | 0.9082 | 0.1510 | 11.0 | 0.9064 | 1.087 | 1.104 |
| 20 | 0.1671 | 13.9 | 0.8985 | 0.1767 | 14.1 | 0.8998 | 1.089 | 1.102 |
| B Individual survey |  |  |  |  |  |  |  |  |
| 1 | 0.0783 | 1.0 | 0.9217 | 0.0778 | 1.2 | 0.9222 | 1.005 | 1.011 |
| 2 | 0.0859 | 2.2 | 0.9250 | 0.0857 | 2.3 | 0.9274 | 1.117 | 1.116 |
| 3 | 0.0707 | 4.0 | 0.9396 | 0.1017 | 3.9 | 0.9212 | 1.041 | 1.074 |
| 5 | 0.0973 | 6.2 | 0.9245 | 0.0990 | 5.8 | 0.9265 | 1.024 | 1.025 |
| 10 | 0.1073 | 8.6 | 0.9214 | 0.1159 | 7.9 | 0.9201 | 1.043 | 1.051 |
| 15 | 0.1270 | 11.4 | 0.9130 | 0.1427 | 10.5 | 0.9098 | 1.081 | 1.098 |
| 20 | 0.1437 | 14.5 | 0.9085 | 0.1498 | 13.6 | 0.9098 | 1.082 | 1.087 |

[^22]

Figure 6.3 Trends in $l(1)$ implied by the indirect estimates of child mortality derived for each sex from the household and individual surveys
preference for male children were to be translated into a higher mortality among girls, this would have greatest impact at weaning and beyond when the child is most susceptible to the effects of disease, malnutrition and adverse environmental conditions. All that can be said is that the SFS data does not support the hypothesis of higher mortality among boys than girls, while the evidence for the opposite hypothesis remains inconclusive.

### 6.4.2. Mother's Age and Birth Order

In section 6.3 it was noted that the estimates of child mortality derived from the individual survey birth histories are based on diminishing age groups of women the further they
go back in time and that they increasingly represent younger women and lower order births. The nature of the bias that this introduces can be seen in table 6.8 which gives infant mortality rates by mother's age at birth and birth order. Children born to women under 20 years of age have an appreciably lower chance of surviving to their first birthday than do those born to older women. Out of every 1000 births, about twenty fewer survive to age one year when compared with children born to women aged 20-29. Similarly, first births were exposed to a consistently higher mortality regime than were second to sixth order births. Higher mortality is also indicated for births of seventh order or more, although these increasingly over-represent younger women of higher parity and are hence subject to an upward

Table 6.8 Infant mortality rates per 1000 live births, by age of mother at the birth and birth order, derived from the birth history, individual survey

| Years before survey in which births occurred | Age of mother at biith |  |  |  | Birth order |  |  |  | All <br> births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-19 | 20-29 | 30-39 | $40+$ | 1 | 2-3 | 4-6 | $7+$ |  |
| 0-4 | 86.8 | 62.5 | 59.8 | (55.1) | 78.7 | 61.6 | 56.8 | 70.1 | 65.1 |
| 5-9 | 88.1 | 65.8 | 63.7 | (76.1) | 85.9 | 57.5 | 62.5 | 80.2 | 68.7 |
| 10-14 | 90.9 | 80.2 | 69.3 | - | 83.3 | 74.2 | 75.2 | 89.9 | 78.8 |
| 15-19 | (100.8) | 85.5 | (52.9) | - | 104.1 | 84.5 | 73.5 | (76.0) | 84.8 |
| 20-24 | (118.6) | 96.7 | - | - | (102.5) | 91.9 | (110.5) | (245.1) | 102.7 |

Note: Rates in parentheses based on less than 500 births.
bias. The striking age differential in mortality is probably due more to the preponderance of first births and the overrepresentation of women from the lower socio-economic status groups among mothers under 20 years of age than to any biological explanation.

### 6.4.3. Women's Education

Just as there is a strong inverse relation between women's education and fertility there is an equally strong inverse relation between education and child mortality, as demonstrated in table 6.9 and figure 6.4 in which indirect estimates of child mortality by mother's education from the household survey are presented. Since only six per cent of women aged $15-49$ had completed primary education, the analysis is restricted to a comparison of women who have no schooling and those with an incomplete primary education. In the 10 years prior to the survey, out of every 1000 live births 21 more survive to age one year for women with incomplete primary education than for women with no schooling (933 as against 912 ). Figure 6.4 suggests that, while there has been a steady increase in the probability of surviving to age one year for women with no schooling, only a very gradual increase has
taken place for women with an incomplete primary education. This is a nice example of the potentially misleading results that can arise when comparing differentials over time with a factor whose distribution is itself changing. Women in the household survey with incomplete primary education comprise 63 per cent of those aged 15-19 compared with only 12 per cent of those aged 45-49. The women in the older group who received any education at all were almost certainly drawn from the high socio-economic status groups. For these women, the relatively low mortality of their children must be attributed to their high socio-economic status as well as to the possession of an education. Similarly the level of child mortality experienced by the younger women with no schooling becomes increasingly confounded with their membership of a disadvantaged socio-economic status group. Without controlling further for socio-economic status, the direct effects of women's education cannot be ascertained.

The higher fertility for women with no schooling combines with higher mortality, so that there is a smaller education differential in family size. Women aged 45-49 years with no schooling have 8.3 live births and 6.9 living children compared with 6.0 live births and 5.4 living children for

Table 6.9 Child mortality, by mother's education, derived from data on children ever born and surviving reported in the household survey

## Level of education

| $x$ | No schooling |  |  | Incomplete primary |  |  | Complete primary and above |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $q(x)$ | Years before survey | $l(1)$ | $q(x)$ | Years before survey | $l(1)$ | $q(x)$ | Years before şurvey | $l(1)$ |
| 1 | 0.0873 | 1.2 | 0.9127 | 0.0634 | 0.9 | 0.9366 | - | - | - |
| 2 | 0.1025 | 2.4 | 0.9143 | 0.0668 | 2.0 | 0.9406 | 0.0353 | 1.6 | * |
| 3 | 0.0982 | 4.2 | 0.9219 | 0.0682 | 3.7 | 0.9423 | 0.0533 | 2.8 | 0.9533 |
| 5 | 0.1176 | 6.4 | 0.9142 | 0.0769 | 5.8 | 0.9387 | 0.0727 | 4.4 | 0.9415 |
| 10 | 0.1278 | 8.7 | 0.9123 | 0.0889 | 8.2 | 0.9334 | 0.0486 | 6.2 | 0.9593 |
| 15 | 0.1508 | 11.5 | 0.9041 | 0.0876 | 10.9 | 0.9357 | (0.0905) | 8.6 | 0.9341 |
| 20 | 0.1786 | 14.6 | 0.8961 | 0.0964 | 14.1 | 0.9331 | (0.0294) | 11.8 | * |

*Equivalent $l(1)$ greater than the highest tabulated value of 0.9656 .
Notes: Figures in parentheses refer to estimates based on less than 50 women.
$q(x)$ and years before survey estimated using the South variant of the Trussell regression procedure.


Figure 6.4 Trends in $l(1)$ implied by the indirect estimates of child mortality derived by background variable from the household survey

Table 6.10 Child mortality, by place of residence, derived from data on children ever born and surviving, household survey

| $x$ | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $q(x)$ | Years before survey | Equivalent $l(1)$ South MLT | $q(x)$ | Years before survey | Equivalent <br> $l(1)$ <br> South MLT |
| 1 | 0.0617 | 1.1 | 0.9383 | 0.0922 | 1.1 | 0.9078 |
| 2 | 0.0740 | 2.2 | 0.9350 | 0.1032 | 2.2 | 0.9139 |
| 3 | 0.0747 | 3.8 | 0.9376 | 0.1012 | 3.9 | 0.9199 |
| 5 | 0.0930 | 5.9 | 0.9285 | 0.1195 | 6.0 | 0.9132 |
| 10 | 0.1057 | 8.1 | 0.9238 | 0.1322 | 8.3 | 0.9101 |
| 15 | 0.1254 | 10.8 | 0.9155 | 0.1618 | 11.1 | 0.8994 |
| 20 | 0.1513 | 13.9 | 0.9070 | 0.1898 | 14.2 | 0.8917 |

Note: $q(x)$ and years before survey estimated using the South variant of the Trussell regression procedure.
those with an incomplete primary education. Standardizing for age with the age distribution of all ever-married women, ever-married women aged 15-49 with no schooling have had an average of 5.3 live births, of whom 4.6 are still living, compared with 4.3 live births and 4.0 still living for women with an incomplete primary education.

### 6.4.4. Urban/Rural Residence

The effect of place of residence on child mortality in the household survey can be seen in table 6.10 and figure 6.4. Child mortality in urban areas is consistently lower than that in rural areas. The indirect estimates of child mortality
suggest that there are roughly 15 or more survivors to age one year out of every 1000 live births to women living in urban areas than to women living in rural areas.

Once again the higher fertility in rural areas as compared to urban areas combines with higher mortality to reduce the actual difference in family size between the areas. Women aged $45-49$ years living in rural areas reported an average 8.2 live births and 6.7 living children compared with 7.7 live births and 6.6 living children for women living in urban areas. The standardized figures for all ever-married women aged 15-49 are 5.2 live births and 4.5 living children in rural areas and 4.8 live births and 4.3 living children in urban areas.

### 6.4.5. Region of Residence

While women in Damascus City clearly have the lowest fertility, differentials among the other five regions are less obvious. This is also the case when regional differentials in child mortality are considered.

Indirect estimates of child mortality by region derived from the household survey are given in table 6.11. The implied trends in the probabilities of surviving to age one year are shown for Damascus City, North-East and South regions in figure 6.4. Only three regions were shown in the figure in order that the principal differentials would not be obscured. Damascus City is clearly the region with the lowest child mortality. In the 10 years prior to the survey Damascus City had some 10 more children surviving to age one as compared with all urban areas (934 as against 924).

Table 6.11 Child mortality, by region of residence, derived from data on children ever born and surviving, household survey

| $x$ | Damascus City |  |  | Aleppo City |  |  | North-East |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $q(x)$ | Years before survey | $l(1)$ | $q(x)$ | Years before survey | $l(1)$ | $q(x)$ | Years before survey | $l(1)$ |
| 1 | 0.0438 | 1.2 | 0.9562 | 0.0656 | 1.1 | 0.9344 | 0.0767 | 1.1 | 0.9234 |
| 2 | 0.0571 | 2.3 | 0.9483 | 0.0771 | 2.3 | 0.9326 | 0.0982 | 2.3 | 0.9172 |
| 3 | 0.0560 | 3.9 | 0.9513 | 0.1003 | 4.1 | 0.9205 | 0.0905 | 4.0 | 0.9269 |
| 5 | 0.0790 | 5.7 | 0.9373 | 0.1073 | 6.3 | 0.9199 | 0.1098 | 6.1 | 0.9184 |
| 10 | 0.0875 | 7.7 | 0.9342 | 0.1428 | 8.6 | 0.9052 | 0.1129 | 8.5 | 0.9198 |
| 15 | 0.1238 | 10.2 | 0.9163 | 0.1208 | 11.4 | 0.9177 | 0.1429 | 11.2 | 0.9074 |
| 20 | 0.1299 | 13.3 | 0.9163 | 0.1843 | 14.5 | 0.8939 | 0.1632 | 14.3 | 0.9023 |
|  | West |  |  | Centre |  |  | South |  |  |
| $x$ | $q(x)$ | Years before survey | $l(1)$ <br> South | $q(x)$ | Years before survey | $l(1)$ <br> South | $q(x)$ | Years before survey | $l(1)$ <br> South |
| 1 | 0.0514 | 1.0 | 0.9486 | 0.1025 | 1.0 | 0.8975 | 0.0959 | 1.0 | 0.9041 |
| 2 | 0.1256 | 1.9 | 0.8994 | 0.0884 | 2.2 | 0.9242 | 0.0909 | 2.2 | 0.9225 |
| 3 | 0.1009 | 3.3 | 0.9201 | 0.0895 | 3.9 | 0.9275 | 0.0945 | 4.0 | 0.9243 |
| 5 | 0.1118 | 5.1 | 0.9173 | 0.1001 | 6.0 | 0.9242 | 0.1219 | 6.2 | 0.9119 |
| 10 | 0.1151 | 7.1 | 0.9186 | 0.1167 | 8.3 | 0.9178 | 0.1427 | 8.6 | 0.9053 |
| 15 | 0.1438 | 9.6 | 0.9070 | 0.1497 | 11.0 | 0.9045 | 0.1653 | 11.4 | 0.8979 |
| 20 | 0.1839 | 12.7 | 0.8940 | 0.1670 | 14.2 | 0.9007 | 0.2190 | 14.6 | 0.8801 |

[^23]Table 6.12 Standardized number of children ever born and living and the percentage of children who have died, by region of residence for ever-married women aged $15-49$ years, household survey

| Region of <br> residence | Children <br> ever born | Living <br> children | Percentage of <br> children who <br> have died |
| :--- | :--- | :--- | :---: |
| Damascus City 4.366 3.966 9.16 <br> Aleppo City 4.923 4.309 12.47 <br> North-East 4.950 4.352 12.09 <br> West 5.132 4.497 12.37 <br> Centre 5.215 4.586 12.07 <br> South <br> All ever married <br> women aged $15-49$ <br> years 5.269 4.512 14.38 | 4.985 | 4.381 | 12.13 |

The differentials for the other regions are much less marked. The children born to women aged over 25 years in the NorthEast and Centre regions seem to have lower mortality than those in West and South. Aleppo City displays a mortality that is lower overall than the other four regions, although the estimated trend in $l(1)$ fluctuates between extremes.

Differentials in fertility and family size by region are shown in Table 6.12. The standardized number of children ever born for all ever married women is highest for the South region and lowest in Damascus City. Women in Damascus City have on average 0.5 fewer live births than do those in Aleppo City. The difference in terms of family size is reduced to 0.3 between the two, however. The standardized percentages of children who have died also suggest that child mortality in the North-East and Centre regions is similar, and lower than in West and South. One effect of this is that, while the South region has the highest standardized fertility, the centre region has the largest family size, although in both cases the difference between the two is small.

### 6.5. ADULT MORTALITY

In this section, the indirect estimates of adult mortality derived from data on orphanhood and widowhood are followed by an appraisal of the mortality implied by the reported deaths of household members. Finally the levels of child and adult mortality are compared and the pattern of mortality prevailing in the Syrian population identified.

### 6.5.1. Orphanhood and Widowhood

The proportions of male and female household members with mother and father alive are shown in table 6.13. As one would expect, the proportions decline with increasing age of the member. The proportions with mother alive exceed those with father alive since male mortality is higher than female mortality and fathers are on average older than mothers at the time of birth of their children. The reported proportions with mother and father alive for male and female respondents are quite close, with a tendency for males to slightly exceed females. This is a commonly observed feature of this kind of data and is believed to be due to over statement of age on the part of males.

The technique for converting the proportions by age with mother alive into estimates of adult female mortality was originally devised by Brass. ${ }^{4}$ The proportions of the mothers surviving for children aged N years at the time of the survey is equal to the probability of surviving for N years from the age that the mothers were when the children were born. Using the same fertility and mortality schedules as in the estimation of child mortality, Brass showed that by taking a weighted average of the proportions of children in adjacent age groups with mothers alive estimates of life table survival

[^24]Table 6.13 Proportion of persons with mother/father alive, by sex and age of respondent, household survey

| Age group | Proportion with mother alive |  | Proportion with father alive |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Male respondents | Female respondents | Male respondents | Female respondents |
| 5-9 | 0.9926 | 0.9916 | 0.9734 | 0.9729 |
| 10-14 | 0.9825 | 0.9828 | 0.9464 | 0.9483 |
| 15-19 | 0.9673 | 0.9649 | 0.9119 | 0.9036 |
| 20-24 | 0.9509 | 0.9388 | 0.8536 | 0.8463 |
| 25-29 | 0.9067 | 0.8891 | 0.7596 | 0.7678 |
| 30-34 | 0.8265 | 0.8238 | 0.6193 | 0.6423 |
| 35-39 | 0.7267 | 0.7312 | 0.4913 | 0.4881 |
| 40-44 | 0.5901 | 0.5841 | 0.3740 | 0.3427 |
| 45-49 | 0.4904 | 0.4544 | 0.2578 | 0.2371 |
| 50-54 | 0.3099 | 0.3132 | 0.1432 | 0.1432 |

ratios can be obtained. The estimated survival ratios, $l(25+\mathrm{N}) / l(25)$, are the probabilities of surviving from age 25 to age $25+\mathrm{N}$, where N is the central age of the two adjacent age groups. The weights depend on the age of the children and the timing of the childbearing period. The technique has subsequently been applied to the estimation of male adult mortality from data on paternal orphanhood by Blacker and Hill, and a modification of the technique was developed by Hill for the estimation of male and female adult mortality from data oni widowhood. ${ }^{5}$ Recently a method for dating the estimated survival ratios has been devised by Brass and Bamgboye. ${ }^{6}$ This method assumes that mortality, represented by the Brass one-parameter logit lifetable system, undergoes a period decline which is linear in the logits of the probabilities of surviving from birth to age $x$ years.

The survival ratios derived from the proportions with mother and father alive and the time to which they refer measured in years before the survey are shown in table 6.14. The table also includes the probabilities of surviving from age 25 to age 60 , which match the estimated survival ratios in the logit life-table system. Female exceeds male aduit survivorship in the table. Apart from the ratios based on the oldest respondents, the probabilities of surviving from age 25 to age 60 increase over time, indicating a mortality decline.

The proportions of the ever-married population by sex and age with first spouse alive are shown in table 6.15 and the derived survival ratios, times and equivalent values of $l(60) / l(25)$ are given in Table 6.16. The proportions with first spouse alive decline with the age of the household mem. ber. Also, the proportions of men with their first wife still alive exceed those of women with first husband still alive, reflecting higher male mortality and the fact that men are on average older than women when they marry. The estimated survival ratios decline with increasing age and the trends in the probabilities of surviving from age 25 to age 60 indicate a decline in mortality.

The trends in $l(60) / l(25)$ implied by the orphanhood and widowhood estimates of male and female adult mortality are illustrated in figure 6.5. Estimates of mortality derived from data on orphanhood and widowhood are generally considered reliable only for restricted ages of the respondent. The proportions of younger respondents for whom parents are reported alive can be inflated by an 'adoption' effect and

[^25]Table 6.14 Male and female survivorship estimated from data on orphanhood, by sex and age group of respondent, household survey

| Central age <br> N | Male respondents |  |  | Female respondents |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $l(35+N)$ | Years before survey | $l(60)$ | $l(35+N)$ | Years before survey | $\underline{l(60)}$ |
|  | $l(32.5)$ |  | $l(25)$ | $l(32.5)$ |  | $l(25)$ |
| Male survivorship ${ }^{\text {a }}$ |  |  |  |  |  |  |
| 10 | 0.9598 | 4.9 | 0.8408 | 0.9605 | 4.9 | 0.8434 |
| 15 | 0.9318 | 6.7 | 0.8318 | 0.9294 | 6.7 | 0.8263 |
| 20 | 0.8881 | 8.5 | 0.8183 | 0.8802 | 8.5 | 0.8062 |
| 25 | 0.8119 | 10.1 | 0.7915 | 0.8114 | 10.1 | 0.7910 |
| 30 | 0.6772 | 11.8 | 0.7482 | 0.6941 | 11.6 | 0.7632 |
| 35 | 0.5175 | 13.3 | 0.7202 | 0.5197 | 13.3 | 0.7221 |
| 40 | 0.3621 | 14.5 | 0.7224 | 0.3279 | 15.2 | 0.6897 |
| Female survivorship ${ }^{\text {b }}$ |  |  |  |  |  |  |
| 10 | 0.9894 | 4.1 | 0.9263 | 0.9888 | 4.1 | 0.9223 |
| 15 | 0.9797 | 6.0 | 0.9131 | 0.9795 | 6.0 | 0.9125 |
| 20 | 0.9663 | 7.7 | 0.9027 | 0.9634 | 7.7 | 0.8948 |
| 25 | 0.9528 | 9.2 | 0.9041 | 0.9409 | 9.2 | 0.8814 |
| 30 | 0.9157 | 10.4 | 0.8804 | 0.8965 | 10.5 | 0.8543 |
| 35 | 0.8431 | 11.5 | 0.8431 | 0.8392 | 11.5 | 0.8392 |
| 40 | 0.7478 | . 12.3 | 0.8223 | 0.7539 | 12.3 | 0.8271 |
| 45 | 0.6014 | 13.1 | 0.7962 | 0.5987 | 13.1 | 0.7943 |
| 50 | 0.4804 | 14.0 | 0.8178 | 0.4466 | 14.0 | 0.7967 |

[^26]$\frac{l(60)}{l(25)}$ corresponds to the estimated survival ratio in the one parameter logit life-table system.

Table 6.15 Proportion of ever-married population with first spouse alive, by sex and age group of respondent, household survey

| Age group | Proportion of males <br> withfirsthusbandalive | Proportion of females <br> with first husband alive |
| :--- | :--- | :--- |
| $20-24$ | 0.9987 | 0.9925 |
| $25-29$ | 0.9947 | 0.9859 |
| $30-34$ | 0.9901 | 0.9717 |
| $35-39$ | 0.9839 | 0.9445 |
| $40-44$ | 0.9703 | 0.9289 |
| $45-49$ | 0.9446 | 0.8707 |
| $50-54$ | 0.9429 | 0.8043 |
| $55-59$ | 0.9080 | 0.7213 |
| $60-64$ | 0.8391 | 0.6143 |
| $65-69$ | 0.8090 | 0.5737 |

hence underestimate mortality. The proportions of older respondents, particularly male respondents, reporting first spouse alive can be inflated when they report on the survivorship of current rather than first spouse, and again mortality is underestimated. Overstatement of age, especially by men, also depresses the estimates. In figure 6.5 it can be seen that estimates of male mortality derived from orphanhood and widowhood data are the same for the period between eight and twelve years before the survey. Prior to this, the widowhood data suggests lower mortality, and for the eight years leading up to the survey, it is the orphanhood data which does so. There is less agreement between the indirect estimates of female mortality. The orphanhood estimates of survivorship exceed those derived from data on widowhood for the ten years prior to the survey and vice versa for the mortality estimates for the years before that. From the figure 6.5 it seems that in 1968 men had a probability of surviving from age 25 to age 60 of about 0.79 compared with 0.86 for women. In the following years, the chances of survival increase, reaching about 0.84 for men and 0.89 for women by the time of the survey.

### 6.5.2. Deaths of Household Members

The SFS sought to collect information on all deaths of household members occurring during the 24 months before the survey. The reported deaths by sex and age are shown in table 6.16. Altogether only 822 deaths were reported. Taking half of these as an estimate of annual deaths, an unbelievably low crude death rate of 4.3 deaths per 1000 population is obtained. Crude rates of 5.2 for males and 3.4 for females would suggest that female deaths were even less well reported than were male deaths.

Given the distribution of deaths together with the corresponding distribution of the living population, a method exists of estimating factors which adjust for the under-reporting of deaths. It assumes that all deaths are equally underreported by age and that the age structure of the population is stable. A series of 'partial' birth and death rates is calculated. If the assumptions were satisfied, the graph of the birth rates against the death rates would be a straight line whose slope is an adjustment factor and whose intercept is the population growth rate. ${ }^{7}$ The partial birth and death rates are given in table 6.17 and plotted in figure 6.6. The points clearly do not represent a straight line. At the young adult ages, they are distorted by the effects of migration. The points for males aged 40 years and over should be represented by a straight line as these age groups should be less affected by migration. The line fitted to the points has a slope of about 1.45 , indicating that about two-thirds of deaths of male household members were reported. It proved impossible to obtain a reasonable adjustment factor for the deaths of female household members from figure 6.6.

7 Brass, W. (1975). Methods for Estimating Fertility and Mortality from Limited and Defective Data. Chapel Hill: North Carolina.

Table 6.16 Male and female adult survivorship estimated from data on widowhood, by sex and age group of respondent, household survey

| Central age N | Female survivorship Male respondents |  |  | Male survivorship Female respondents |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{l(N-5)}{l(22.5)}$ | Years before survey | $\frac{l(60)}{l(25)}$ | $\frac{l(N+5)}{l(27.5)}$ | Years before survey | $\frac{l(60)}{l(25)}$ |
| 25 | - | - | - | 0.9906 | 0.8 | 0.7711 |
| 30 | 0.9939 | 0.8 | 0.8279 | 0.9797 | 3.4 | 0.8311 |
| 35 | 0.9881 | 3.4 | 0.8861 | 0.9595 | 5.7 | 0.8142 |
| 40 | 0.9799 | 5.6 | 0.8887 | 0.9371 | 7.9 | 0.8117 |
| 45 | 0.9630 | 7.8 | 0.8660 | 0.8988 | 9.8 | 0.7931 |
| 50 | 0.9442 | 9.7 | 0.8570 | 0.8323 | 11.5 | 0.7604 |
| 55 | 0.9329 | 11.2 | 0.8738 | 0.7519 | 12.9 | 0.7437 |
| 60 | 0.8864 | 12.5 | 0.8472 | 0.6434 | 14.1 | 0.7317 |
| 65 | 0.8290 | 13.4 | 0.8339 | 0.5812 | 14.2 | 0.7786 |

## Notes:

Singulate mean age at marriage: Males 26.4, Females 22.1
Time period mean age at marriage: Males 25.2, Females 21.7
Life-table survival ratios and years before survey calculated from survivorship of spouse for age groups $\mathrm{N}-5$ to N and N to $\mathrm{N}+5$ using the Brass/ Hill weighting procedure.
$l(60) / l(25)$ corresponds to the estimated survival ratio in the one parameter logit life table system.



Figure 6.5 Trends in $l(60) / l(25)$ implied by the indirect estimates of mortality derived from the data on orphanhood for female respondents only and on widowhood, household survey

Table 6.17 Population and deaths in the last 24 months and partial birth and death rates, by sex and age, household survey

| Age group$x \text { to } x+4$ | Males |  |  |  | Females |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population | Deaths in 24 months | Partial birth rate | Partial death rate ${ }^{\text {a }}$ | Population | Deaths in 24 months | Partial birth rate | Partial death rate ${ }^{\text {a }}$ |
| 0-4 | 8527 | 174 |  |  | 8147 | 136 |  |  |
| 5-9 | 7715 | 13 | 0.0407 | 0.0040 | 7349 | 11 | 0.0400 | 0.0023 |
| 10-14 | 7578 | 10 | 0.0475 | 0.0047 | 6978 | 7 | 0.0457 | 0.0027 |
| 15-19 | 5802 | 14 | 0.0543 | 0.0060 | 5406 | 5 | 0.0508 | 0.0033 |
| 20-24 | 3524 | 11 | 0.0495 | 0.0075 | 3861 | 12 | 0.0489 | 0.0041 |
| 25-29 | 2712 | 10 | 0.0407 | 0.0088 | 2788 | 2 | 0.0440 | 0.0047 |
| 30-34 | 2198 | 12 | 0.0389 | 0.0103 | 2317 | 0 | 0.0414 | 0.0057 |
| 35-39 | 1834 | 15 | 0.0387 | 0.0119 | 2106 | 5 | 0.0442 | 0.0070 |
| 40-44 | 1827 | 16 | 0.0427 | 0.0136 | 1856 | 4 | 0.0502 | 0.0085 |
| 45-49 | 1773 | 18 | 0.0534 | 0.0160 | 1704 | 6 | 0.0589 | 0.0108 |
| 50-54 | 1453 | 18 | 0.0649 | 0.0199 | 1310 | 9 | 0.0695 | 0.0143 |
| 55-59 | 1092 | 24 | 0.0723 | 0.0256 | 935 | 7 | 0.0742 | 0.0190 |
| 60-64 | 768 | 28 | 0.0766 | 0.0321 | 670 | 13 | 0.0768 | 0.0285 |
| 65-69 | 563 | 25 | 0.0801 | 0.0386 | 538 | 16 | 0.0850 | 0.0335 |
| 70-74 | 451 | 29 | 0.0923 | 0.0469 | 361 | 19 | 0.1018 | 0.0448 |
| $75+$ | 647 | 74 | 0.1141 | 0.0572 | 522 | 60 | 0.1126 | 0.0575 |
| Not Stated | 6 | 14 |  |  | 1 | 5 |  |  |
| Total | 48470 | 505 |  |  | 46849 | 317 |  |  |

${ }^{a}$ Based on half the deaths occurring during 24 months.

### 6.5.3. Child and Adult Mortality

The probability of surviving from birth to age one year in Syria is believed to have increased from about 0.895 in 1968 to 0.925 in 1978. In the South model life table system, the equivalent probabilities of surviving from age 25 to age 60 are 0.75 for males and 0.82 for females in 1968 rising to 0.82 for males and 0.88 for females in 1978. The indirect estimates of adult mortality suggest that the probabilities of surviving from age 25 to age 60 rose from 0.79 for males and 0.86 for females in 1968 to 0.84 for males and 0.89 for females in 1978. The two sets of estimates $l(60) / l(25)$ are quite close. They seem to confirm that mortality in Syria can be represented by the Coale-Demeny South regional pattern with the suggestion that adult mortality is even lower relative to child mortality than implied in the model. The crude death rate estimated from the life tables which were obtained by splicing together the indirect estimates of child and adult mortality is 8.2 deaths per 1000 population. Assuming a slightly higher level of adult mortality brings it up to 8.7 deaths per 1000 population. Combining the indirect estimates of childhood mortality with the reported deaths of household members aged over 10 years and adjusting by a factor of 1.45 for males and 2.0 for females gives a crude death rate of 8.2 deaths per 1000 population. It seems safe to say that the Syrian crude death rate is about 8.2 deaths per 1000 population.

### 6.6. SUMMARY

The SFS data suggest that infant and child mortality in Syria are relatively low. The highest estimates of child mortality are those derived indirectly from the household survey. They imply that infant mortality has fallen in the 10 years before the survey from 90 to 70 deaths per 1000 live births. Other sources give slightly higher estimates and show that infant mortality has fallen from about 105 to 75 deaths per 1000 live births. Despite the relatively low infant mortality rates, the SFS data show that the experience of losing a child through death remains a common feature of the family. building process for many women.

There are substantial differentials in child mortality. It is considerably lower for women with some education than for those with no schooling and for women living in urban areas than for those living in rural areas. Damascus City has by far the lowest child mortality, but the differences among the other regions are much less pronounced.

Adult mortality is low relative to child mortality, and lower for females than for males. The relation between child and adult mortality is one characterized by the South family of the Coale-Demeny regional model life table system. Combining the data on child and adult mortality gives a crude death rate of around 8.2 deaths per 1000 population.



Figure 6.6 Partial birth and death rates derived from data on deaths in the past 24 months, household survey

# PREFERENCES FOR NUMBER AND SEX OF CHILDREN 

### 7.1. INTRODUCTION

This chapter examines respondents' preferences for number and sex of children, with a view to establishing the extent to which behaviour reflects, and is consistent with, reported preferences. In chapter 5, actual fertility behaviour, both past and present, of married women in the reproductive age group was analysed. It was found that on the average Syrian women have borne between 7 and 8 children during the childbearing ages. This level of fertility may be regarded as high by both international and Asian standards. The next logical step is to examine the degree of consistency between woman's behaviour and their stated wishes.

In the individual questionnaire of the SFS, questions on preferences for children were asked of all currently married women who considered themselves physiologically capable of childbearing. The first relevant question included in the questionnaire was: 'Do you want to have another child in the future?'. If the woman answered positively, she was then asked: 'Would you prefer your next child to be a boy or a girs?' and 'How many more children do you want to have?' The questions varied slightly when the woman was childless.

If the woman was currently pregnant, the questions were also slightly modified to take into account her expectant condition. For such women, the questions addressed were: 'Do you want to have another child sometime, in addition to the one you are expecting?', and, if the woman replied positively, 'How many more children do you want to have after the one you are expecting?'.

Finally all women in the survey, regardless of marital or fecundity status were asked: 'If you could choose exactly the number of children to have in your whole life, how many would that be?'.

At the outset, it should be pointed out that the major problem in the study of fertility preferences is the predictive value of these attitudes. Data on fertility preferences collected from women in societies with very little use of modern methods of contraception may have low predictive value because responses are meaningful only when the woman is aware of the means of controlling her fertility to the desired level. In addition, women may give vague replies or replies which may change over time. Some countries participating in the WFS programme have attempted a resurvey of women designed to test the stability of
responses to questions on fertility preferences. This was not done for Syria and therefore the only possible way of evaluating the data is to check their consistency with behaviour. This will be done in chapter 8 .

### 7.2. DESIRE TO STOP CHILDBEARING

All currently married and fecund women who answered negatively to the question 'Do you want to have another child sometime in the future?' can be considered as wanting no more children. Women who had been sterilized or whose husbands had been sterilized for contraceptive purposes were also defined as wanting no more children in the future. There were in total 3785 women who were currently married and fecund at the time of the survey and considered themselves physically capable of bearing children. When questioned whether they wanted to have another child sometime, 57 per cent said 'yes', 37 per cent said 'no' and the remaining 6 per cent were undecided. The undecided women were excluded from those wanting no more children. Table 7.1 gives the proportions wanting no more children by current age, family size (i.e. number of living children) and marriage duration.

As expected, there is a direct relationship between the proportion of women desiring to stop childbearing and age, family size and marriage duration. About 5 per cent of women under 20 years of age want no more children. This proportion increases steadily by age, and among middle aged women of $30-34$ years about half wish to stop childbearing. Seven out of ten women aged over 40 years want no more children. Family size is an important variable which determines the proportion of women wishing to limit their family size. Only 1 per cent of those with no living children and 2 per cent of those with one child want to stop childbearing, which suggests that childlessness and one-child families are regarded as undesirable. For the sample as a whole, the interpolated family size at which 50 per cent of women want to stop childbearing is between four and five children (interpolated median value is 4.8 children). It may be of interest to note that, while there is a steep increase in the proportion of women wanting no more children between family size 1 and 5 , the trend is gradual from family size 5 onwards. Even among women with eight living children, about a third want to continue reproduction. Marital duration also shows a similar pattern of relationship with the

Table 7.1 Percentage of currently married fecund women who want no more children, by current age, number of living children (including any current pregnancy) and years since first marriage

${ }^{\text {a }}$ Standard error of the observed percentage.
Source: Tables 3.1.1, 3.1.2, III.3a, III.4a and III. 5 cc .
proportion of women wanting no more children, which ranges from 7 per cent at $0-4$ years duration to about 80 per cent in the longest duration of 30 years and over.

If these proportions are cross-classified by age and family size, the independent effect of both factors is evident, although the effect of family size is more pronounced. This can be seen from table 7.2 which gives the proportions wanting no more children in each family size, controlling for age. In the first two age groups, the proportion of women wanting to stop childbearing steadily increases by family size, except at family size 7 in the $15-24$ age group where the proportion decreases. In the next two age groups, 35-44 and 45 and over, the proportion varies little from family size 5 onwards. With some minor variations, the proportions generally increase by age at a given family size, which shows that age has an independent effect on the propensity to want no further children.

### 7.3. DIFFERENTIALS IN DESIRE TO STOP CHILDBEARING

Since the desire to have children in the future is affected by how many living children the women have, and to a lesser
extent their age, it is important to control for these two variables when studying differentials between groups. For the sake of illustration, the age group $25-34$ years, which is of central importance in the study of fertility intentions and use of contraception, is considered. Table 7.3 gives the percentage of currently married fecund women aged $25-34$ years wanting no more children, classified by five background variables. In the same table, the standardized proportions controlling for family size are also given for comparison. In the discussion which follows, however, only standardized percentages are referred to.

Certain background variables give rise to pronounced differentials in the proportion of women wanting to stop childbearing. Educational differentials are striking; the proportion of women wanting to stop childbearing increases with education, from 27 per cent among women with no schooling to 48 per cent among women with less than six years of schooling; it then increases to 60 per cent among women with completed primary schooling and finally to 75 per cent among women with secondary education.

The rural-urban differential suggests strongly that rural women have a much stronger desire to continue reproduction than their urban counterparts. While only one-fifth of rural women wish to stop having further children, about a half of

Table 7.2 Percentage of currently married fecund women who want no more children, by current age and number of living children

| Current age | Number of living children |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | $9+$ | All |
| 15-24 | 1.3 | 9.4 | 19.1 | 38.7 | 48.4 | 55.6 | 25.0 | - | - | 11.5 |
| 25-34 | 0.8 | 15.8 | 30.5 | 42.4 | 45.1 | 47.2 | 52.2 | 60.0 | 65.6 | 36.9 |
| 35-44 | 10.7 | 45.8 | 44.4 | 54.0 | 64.9 | 58.0 | 64.8 | 63.8 | 70.3 | 60.7 |
| $45+$ | 20.0 | 20.0 | 70.0 | 77.8 | 58.8 | 75.0 | 82.6 | 76.3 | 76.7 | 72.5 |
| All | 1.8 | 13.1 | 27.8 | 44.5 | 51.6 | 53.5 | 60.6 | 64.9 | 71.3 | 36.5 |

[^27]Table 7.3 Percentage of currently married fecund women aged 25-34 who want no more children, by background variables

|  |  |  |
| :--- | :--- | :--- |
| Background <br> characteristics | Percentage wanting no more |  |
|  | Observed | Standardized |
| Education |  |  |
| No schooling |  |  |
| Incomplete primary | 28.4 | 26.9 |
| Complete primary | 51.4 | 48.2 |
| Secondaryt | 56.7 | 59.7 |
|  | 43.2 | 75.1 |
| Type of residence |  |  |
| Urban | 51.4 | 52.6 |
| Rural | 22.0 | 21.3 |
|  |  |  |
| Region of residence | 58.9 | 62.3 |
| Damascus City | 49.7 | 49.6 |
| Aleppo City | 15.8 | 16.5 |
| North-East | 41.3 | 41.5 |
| West | 35.0 | 33.7 |
| Centre | 38.2 | 35.5 |
| South |  |  |
|  |  |  |
| Pattern of work | 18.1 | 19.0 |
| Before and after marriage | 29.6 | 30.9 |
| After marriage only | 31.2 | 33.7 |
| Before marriage only | 44.6 | 42.5 |
| Never worked |  |  |
|  | 39.3 | 41.6 |
| Occupation of husband | 51.4 | 51.6 |
| Professional and technical | 45.9 | 44.0 |
| Managerial and clerical | 17.7 | 17.7 |
| Sales and services | 40.2 | 39.2 |
| Agriculture |  |  |
| Skilled and unskilled manual |  |  |

${ }^{\text {a }}$ Standardized by number of living children. The categories considered were: $0-1,2,3,4$ and $5+$.

Source: Table 3.1.3.
urban women want to do so. It is likely that part of the urban-rural differential reflects educational differences between rural and urban areas. The standardized proportions for the various regions also show large differentials. Damascus City has the largest percentage of women ( 62 per cent) stating they desire no more children, followed by Aleppo City ( 50 per cent) and West ( 42 per cent). The Centre and South regions have nearly the same proportion (around 35 per cent) while North-East has the lowest percentage (17). These regional differentials are largely an artefact of urbanrural differentials. For example, the North-East region has the largest proportion of women living in rural areas ( 75 per cent) and this explains the observed lowest proportion of women wanting no more children in this region. Similarly, Damascus City and Aleppo City are totally urban and thus they have larger proportions of women desiring to stop childbearing. The other regions which have between 30 and 40 per cent urban population have about the same proportions of women desiring to limit their family size.

Women whose husbands are engaged in agricultural occupations have a much stronger desire to continue repro-
duction than other women. The groups with the highest percentages 'wanting no more' are the women whose husbands are clerical workers (52) and sales or service workers (44). The other two groups, 'professional and technical' and 'skilled and unskilled' have almost the same proportion, about 40 per cent, of women desiring to limit their family size. The overall pattern appears to be that there is a clearcut break between the agricultural group and other occupational groups.

The standardized percentages classified by the variable 'pattern of work' fall clearly into three groupings. There is a relatively low proportion (19 per cent) of women desiring to limit their family size among those who worked before and after marriage. Women who worked after marriage are not different from those who worked before marriage in their intention to have further children. Surprisingly, the 'never worked' group exhibits the highest percentage (43) of women wanting to stop childbearing.

In general, women with higher levels of education, women who lived in urban areas and women whose husbands are engaged in non-agricultural activities are more likely to report a desire to stop childbearing. It may be noted that there is a consistently low proportion of women not wanting any more children among the 'no schooling', 'rural', 'working before and after marriage' and 'husbands in agricultural occupations' groups. This is not surprising as the groups overlap and more in-depth analysis may uncover the existence of certain common features between these variables in their impact on fertility desires.

### 7.4. ADDITIONAL AND TOTAL NUMBER OF CHILDREN WANTED

Women who said that they wanted to have another child sometime were then asked how many additional children they would want. Women who did not want another child were assigned a value of 0 on this variable, while the undecided women were excluded in the computation of means. Of the 3785 currently married fecund women, 3404 ( 90 per cent) gave numeric answers. About 6 per cent were undecided and another 3 per cent gave non-numerical replies; 0.5 per cent represented non-response. Most of the non-numerical answers were to the effect that it was 'up to God to decide', or it was 'up to the husband to decide', or 'as many as to fill the house'. Table 7.4 provides the mean additional number of children wanted by currently married fecund women, classified by age, family size and marital duration.

As expected, there is an inverse relationship between these variables and the mean additional number of children wanted. For women of all ages, the overall mean additional number of children wanted is 2.3 . As the current age of the

Table 7.4 Mean additional number of children desired by currently married fecund women, by current age, number of living children (including current pregnancy) and years since first marriage

| Current <br> age | Mean | Number of <br> living <br> children | Mean | Years since <br> first <br> marriage | Mean |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $<20$ | 4.0 | 0 | 4.8 | $0-4$ | 3.8 |
| $20-24$ | 3.4 | 1 | 3.9 | $5-9$ | 2.8 |
| $25-29$ | 2.6 | 2 | 3.4 | $10-14$ | 1.9 |
| $30-34$ | 1.8 | 3 | 2.7 | $15-19$ | 1.3 |
| $35-39$ | 1.4 | 4 | 1.8 | $20-24$ | 1.0 |
| $40-44$ | 1.0 | 5 | 1.7 | $25-29$ | 1.0 |
| $45+$ | 0.8 | 6 | 1.5 | $30+$ | 0.6 |
|  |  | 7 | 1.1 |  |  |
|  |  | 8 | 1.1 |  |  |
| Overall mean 2.3 |  | 0.7 |  |  |  |

Note: Women who want no more children or who have been sterilized for contraceptive purposes have been assigned a value of zero and are included in the mean.

Source: Tables 3.2.3 and 3.2.4.
woman increases, the mean additional number of children wanted decreases. The same pattern is found if we consider family size or marriage duration. Family size appears to have the greatest effect: women with no living children desire on average an additional 4.8 children, the figure for women with 9 or more living children being 0.7 . With each increase in the family size, there is a progressive decline in the mean additional number of children wanted, due to large increases in the percentages of women wanting no more children with increasing family size.

Each woman, regardless of her marital or fecundity status, was asked to state how many children she would like to have in her whole life if she could choose. Of the total of 4487 ever-married women, 4160 (or 92.7 per cent) gave numerical answers and 324 (or 7.2 per cent) gave non-numerical answers. Only three women did not give any answer. As in the case of answers to questions on the additional number of

Table 7.5 Per cent distribution of ever-married women according to stated desired family size and mean desired family size, by current age

| Current <br> age | Desired family size |  |  | Total | Mean |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $0-3$ | $4-5$ | $6-7$ |  |  |  |
| $<20$ | 25.3 | 42.0 | 19.3 | 13.4 | 100 | 5.0 |
| $20-24$ | 20.6 | 43.6 | 17.6 | 18.2 | 100 | 5.5 |
| $25-29$ | 19.6 | 33.5 | 21.2 | 25.7 | 100 | 6.0 |
| $30-34$ | 15.1 | 38.3 | 19.2 | 27.4 | 100 | 6.1 |
| $35-39$ | 14.7 | 32.7 | 20.8 | 31.8 | 100 | 6.7 |
| $40-44$ | 15.8 | 26.8 | 21.2 | 36.2 | 100 | 6.7 |
| $45+$ | 14.1 | 26.5 | 22.2 | 37.2 | 100 | 6.8 |
| All | 17.8 | 35.2 | 20.2 | 26.8 | 100 | 6.1 |

[^28]children desired, commonest of the non-numerical answers were that it was 'up to God to decide' or it was 'up to the husband to decide'. Table 7.5 gives the per cent distribution of ever-married women according to stated desired family size and the mean desired family size by current age.

Of the ever-married women willing to state a desired number of children, 18 per cent stated a size preference of less than 4 children, 35 per cent 4 or 5,20 per cent 6 or 7 , and the remaining 27 per cent 8 or more children. As may be noted from table 7.5 , family size preference became larger with increasing age. Younger women prefer a relatively smaller family size than older women. The mean number of children desired increases from 5.0 for women aged under 20 years to 6.8 for the oldest age group. This increase with age may reflect in part a rationalization by women in terms of their family size and of course women who want to have a large family could generally be expected to have one.

The overall mean desired family size by women of all ages is 6.1 . This mean varies widely across the number of living children, from 4.6 for women with no living children to 8.6 for women with 9 or more living children. However, it is important to note that a closer scrutiny of the volume II tables 3.3.4A and 3.3.4B reveals that once current family size is controlled the variation in the mean values across age is generally small. This suggests that the observed association between the desired family size and current age is largely explained by the fact that current family size is itself closely related to age.

Information on whether current family size exceeds, equals or falls short of desired family size is useful in assessing the proportion of women reporting unwanted pregnancies. Of the total of 4312 currently married women, 55 per cent stated a desired family size greater than their current family size, 17 per cent reported a desired size lower than their current family size, 21 per cent reported a desired size equal to the current one, and the remaining 7 per cent gave other answers. Table 7.6 provides the distribution of currently married women according to whether or not the desired family size is surpassed by the actual family size. It may be observed that, although the proportion of women admitting unwanted births generally rises with the number of living children, it is substantial only among women having five children or more. Up to and including three living children, a majority of respondents (over 80 per cent) wish to have a larger family than they actually have. When the current family size is over three, there is an increasing proportion of women wishing to have smaller families then they actually have. For example, among women with seven living children, 41 per cent wish to have a smaller family size "than they actually have as against 8 per cent of those with seven living children. Thus, there is some evidence that among high parity women the proportion of unwanted pregnancies forms a significant component of overall fertility.

Table 7.6 Percentage distribution of currently married women according to whether current family size (CFS) exceeds, equals or falls short of desired family size (DFS)

| Desired and current family size | Number of living children |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| CFS $>$ DFS | - | 0.0 | 0.2 | 4.3 | 8.3 | 25.7 | 27.0 | 41.0 | 41.1 |
| CFS $=$ DFS | -- | 0.2 | 10.1 | 15.9 | 39.3 | 25.3 | 34.0 | 23.1 | 28.9 |
| CFS < DFS | - | 99.8 | 89.7 | 79.8 | 52.4 | 49.0 | 39.0 | 35.9 | 30.0 |
| Total | - | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Mean desired family size | 4.6 | 4.8 | 5.3 | 5.6 | 5.7 | 6.1 | 6.8 | 7.0 | 7.7 |

Source: Tables 3.3.3A and 3.3.4A.

### 7.5. COMPARISON OF DIFFERENT INDICATORS OF FERTILITY PREFERENCES

In table 7.7, some measures of fertility preferences are assembled for internal comparison. Since all currently married fecund women were asked the fertility preference questions, it is of interest to see how far the various responses are internally consistent. The figures in rows A and B of table 7.7 are comparable since they indicate the proportion of women who feel that their preferred family size has been attained. Except for family size 0 and 1 , the proportions in row A are in close agreement with those in row B, indicating a high degree of mutual consistency. The comparison of means in rows $C$ and $D$ (mean desired family size versus number of living children plus mean additional children wanted) shows a different pattern. Up to and including family size 4 , means in row C are very close to means in row D , but thereafter discrepancies start to emerge. Although these discrepancies are open to different interpretations, most of them are due to the fact that measure D , by definition, cannot be less than actual family size, whereas measure C can. In general, the data furnished in table 7.7 suggest that there is a high degree of internal consistency in the responses to the various fertility preference questions.

### 7.6. DIFFERENTIALS IN DESIRED FAMILY SIZE

In table 7.8, differentials in the mean desired family size are presented for all currently married fecund women aged 2534 , classified by background variables. In addition to the observed means, the standardized means, which adjust for the differences in the distribution of women by family size, are also provided. It may be noted that standardization does not alter the crude means very much, and the overall pattern of differentials remains the same whether for observed or standardized means.

A perusal of table 7.8 indicates that significant differentials exist between groups defined by place of residence, region of residence and education. The standardized means for the various subgroups defined by these three variables show wide departures from the overall mean value of 6.1 . Rural women aged 25-34 are more likely to desire a large family than their urban counterparts. The mean number of children wanted by rural women is 7.4 , in contrast to the 5 children desired by urban women. As expected, city women are more likely to desire a smaller family size than women living in other regions. The lowest mean desired family size is reported by women who live in Damascus

Table 7.7 Comparisons of fertility preferences for currently married fecund women, (A) Percentage who want no more children; (B) Percentage whose total desired family size is less than or equal to their current family size; (C) Mean desired family size; and (D) Number of living children plus mean additional children wanted, according to number of living children

|  | Number of living children |  |  |  |  |  |  |  |  |  | All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | $9+$ |  |
| A | 1.2 | 2.1 | 13.1 | 27.8 | 44.5 | 51.6 | 53.5 | 60.6 | 64.9 | 71.3 | 36.5 |
| B | 0.0 | 0.2 | 10.3 | 20.2 | 47.6 | 51.0 | 61.0 | 64.1 | 70.0 | 76.6 | 38.0 |
| C | 4.6 | 4.8 | 5.3 | 5.6 | 5.7 | 6.1 | 6.8 | 7.0 | 7.7 | 8.6 | 6.1 |
| D | 4.8 | 4.9 | 5.4 | 5.7 | 5.8 | 6.7 | 7.5 | 8.1 | 9.1 | 9.7 | 6.5 |

Source: Tables 3.1.1, 3.2.3 and 3.3.3A.

Table 7.8 Mean total number of children desired by currently married, fecund women aged 25-34 years, by background variables

| Background characteristics | Mean number of children desired |  |
| :---: | :---: | :---: |
|  | Observed | Standardized ${ }^{\text {a }}$ |
| Education |  |  |
| No schooling | 7.0 | 7.0 |
| Incomplete primary | 4.9 | 4.8 |
| Complete primary | 4.5 | 4.6 |
| Secondary + | 3.4 | 4.1 |
| Type of residence |  |  |
| Urban | 4.9 | 5.0 |
| Rural | 7.4 | 7.4 |
| Region of residence |  |  |
| Damascus City | 4.2 | 4.4 |
| Aleppo City | 5.3 | 5.2 |
| North-East | 7.9 | 8.0 |
| West | 5.6 | 5.7 |
| Centre | 6.3 | 6.2 |
| South | 6.0 | 5.8 |
| Pattern of work |  |  |
| Before and after marriage | 7.0 | 7.2 |
| After marriage only | 6.2 | 6.3 |
| Before marriage only | 6.3 | 6.4 |
| Never worked | 5.8 | 5.7 |
| Occupation of husband |  |  |
| Professional and technical | 5.7 | 5.9 |
| Managerial and clerical | 5.0 | 5.0 |
| Sales and services | 5.7 | 5.6 |
| Agriculture | 7.6 | 7.7 |
| Skilled and unskilled manual | 5.9 | 5.8 |

${ }^{\text {a }}$ Standardized by number of living children. The categories considered were: $0-1,2,3,4$ and $5+$.
Source: Table 3.3.7.

City (4.4) followed by Aleppo City (5.2). Women in the North-East region, which is predominantly a rural area, report the highest mean desired family size of 8 . These regional differentials in the mean desired family size largely reflect the urban-rural differential.

Education is negatively associated with desired family size. There is a significant drop in the mean desired family size from 7 children for the no education group to 4.8 children for the incomplete primary group. Further increase in educational level brings only a marginal reduction in the mean value. Those who have received secondary or higher education reported the lowest mean desired family size of 4.1 children.

Husband's occupation also exhibits some differentials. Women whose husbands are engaged in agriculture want an average of 7.7 children, compared to between 5 and 6 children wanted by women whose husbands are engaged in non-agricultural types of activities. The lowest desired family size (5.0) is reported by women whose husbands are either managers or clerical workers. The other three occu-
pational groups exhibit very little variation in the mean desired family size.

By pattern of work, women who worked before and after marriage are more likely to desire a lager family than others. The lowest mean desired family size (5.7) is reported by women who did not work at all. Women who worked since but not before mariage are not different in their aspirations about the number of children wanted from those who worked before marriage.

To summarize, it appears from table 7.8 that all the background variables exhibit differentials within their subgroupings. However, because certain variables are interrelated, straightforward interpretations of the differentials are complicated. For example, the distribution of women by education and rural/urban residence could explain a good deal of the variation found. Thus, as the figures in Volume 2 table 3.3.7 show, regional differentials in the mean desired family size could be explained as being due in part to differences in the educational attainment between regions and in part to differences in the proportion represented by urban population. Similarly, the association between the pattern of work and fertility preferences is difficult to interpret because female employment is more common in the pro-natalist rural areas than in the urban areas. Further detailed analysis may reveal an underlying pattern and identify the most significant factors.

### 7.7. SEX PREFERENCES

In many societies, the sex composition of living children is an additional important motivating factor to have further children. Broadly speaking, one or other of two types of sex preferences are commonly found in most cultures: a strong preference for sons, a trait which is more prevalent in developing than developed countries, or a preference for a balance of both boys and girls.

There are three aspects of sex preference that can be studied using the data collected in the SFS. The first concerns the possible effect that the current combination of sons and daughters may have on the desire of women to stop childbearing; here, one would perhaps expect women with a balanced family composition to be more willing to limit their childbearing. The second aspect is the stated sex preferences for the next child of those women who reported that they wanted another child. The third aspect is the possible relationship between the desired family size and current family composition.

The analysis of sex preferences is based on currently married fecund non-pregnant women. Pregnant women were excluded from the analysis since the sex of their unborn child is not known. In table 6.9, the first two aspects of sex preferences are summarized.

Table 7.9 Summary of preferences regarding sex of children

| Sex composition | 2 living children |  |  | 3 living children |  |  |  | 4 living children |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of sons | 0 | 1 | 2 | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3 | 4 |
| Number of daughters | 2 | 1 | 0 | 3 | 2 | 1 | 0 | 4 | 3 | 2 | 1 | 0 |
| Percentage of currently married, fecund non-pregnant women who want no more childien | 2.6 | 17.1 | 14.7 | 16.7 | 23.1 | 34.7 | 28.8 | 23.1 | 41.3 | 50.4 | 51.8 | 37.0 |
| Of currently married, fecund non-pregnant women who want another child, the percentage preferring a: |  |  |  |  |  |  |  |  |  |  |  |  |
| Son | 78.6 | 46.3 | 17.5 | 95.0 | 74.1 | 41.7 | 23.5 | (77.8) | 76.2 | 35.3 | 29.7 | 13.3 |
| Daughter | 0.0 | 2.2 | 49.5 | 0.0 | 1.9 | 16.7 | 58.8 | (0.0) | 0.0 | 2.0 | 18.9 | 53.3 |
| Undecided | 21.4 | 51.5 | 33.0 | 5.0 | 24.0 | 41.6 | 17.7 | 22.2 | 23.8 | 62.7 | 51.4 | 33.4 |

Note: Figures in parentheses are based on fewer than 10 cases.
Source.' Tables 3.4.3A and 3.4.3B.

Of women with two living children, 17 per cent want no more children if they have children of both sezes; if they have only girls, then 3 per cent want no more; if only boys, about 15 per cent. Willingness to stop having further children among women with two living children is much greater if there is at least one son than if there is no son. The same pattern emerges if we consider families with three or four living children. Of women with three living children, 17 per cent want to stop childbearing if they have only daughters as compared to 29 per cent if they have only sons. Among women with two sons and a daughter, 35 per cent want to cease childbearing; if a boy and two girls, about 23 per cent. Thus, regardless of which family size is taken for comparison, willingness to stop having further children is closely related to current sex composition. Women with at least one son are more likely to limit their family size than women with no living son, and those with two sons more likely than those with one son. Even among families with children of the same sex, women with all sons are more likely to stop childbearing than women with all daughters. Thus the data suggest that there is a strong preference for sons.

Next, the preference for the sex of the next child among women wanting another child is examined. It may be noted from table 7.9 that among two-child families all women with girls only wish to have a boy next time but not all with boys only wish to have a girl next time. A large proportion ( 46 per cent) of those with a boy and a girl wish to have another boy but only 2 per cent state a preference for a girl. It is equally important to note that a significantly high proportion of women are actually indifferent about the sex of the next child.

Similarly, among women with balanced families of two boys and two girls, 35 per cent wish to have another boy whereas only 2 per cent state a preference for a girl. This indicates a strong preference for male offspring amongst those who have any preferences. But a high proportion (63 per cent) of women are actually indifferent about the sex of the next child.

Next, the association between the desired family size and sex composition is examined. This is attempted in table 7.10 which gives the mean total number of children desired by women with various combinations of sons and daughters. The diagonal gives the mean total number of children desired for women with the same current family size.

If we consider the diagonal for a current family size of one child, the mean total number of children desired are 4.5 and 5.0 when there is one boy or one girl, respectively. This indicates that the desired number of children wanted is about half a child higher for women having a girl. As regards twochild families, there is no significant break in the mean desired family size which is between 5.1 and 5.3 for any combination of sons and daughters Moving further down the diagonal, women having more daughters are more likely to want more children than those having children of both sexes.

### 7.8. SUMMARY

Responses to the questions on fertility preferences obtained in section 5 of the individual questionnaire have been investigated in this chapter. Although Syrian women, in general,

Table 7.10 Mean total number of children desired by currently married non-pregnant women, by number of living sons and daughters

| Number of <br> living <br> daughters | Number of living sons |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 0 | 1 | 2 | 3 | 4 | All $^{\mathrm{a}}$ |
| 0 | 4.6 | 4.5 | 5.1 | 5.8 | 5.5 | 4.9 |
| 1 | 5.0 | 5.3 | 5.1 | 5.5 | 5.6 | 5.4 |
| 2 | 5.1 | 5.9 | 5.4 | 5.9 | 6.7 | 6.0 |
| 3 | 5.3 | 5.8 | 5.8 | 7.3 | 7.1 | 6.8 |
| 4 | 5.8 | 6.7 | 6.5 | 6.9 | 7.1 | 7.0 |
| All $^{\mathrm{a}}$ | 4.8 | 5.6 | 5.7 | 6.7 | 6.8 | 6.1 |

[^29]prefer a large family, a significant proportion of currently married fecund women ( 37 per cent) expressed their unwillingness to continue childbearing. The proportion of women wanting no more children varies greatly by age of woman, family size and duration of marriage. Substantial differentials in the proportion of women desiring to limit their family size exist by most of the background variables.

The survey indicates that Syrian women want on the average 6.1 children. About 55 per cent stated a desired family size greater than their actual family size and 17 per cent a lower one. Among higher parity women, a larger proportion wish to have a smaller family than their actual family. This suggests that, at least among higher parity women, unwanted fertility forms a significant component of the total fertility.

Besides the demographic variables (age, number of living children and marriage duration), education, rural/urban residence and husband's occupation appear to have a strong association with desired family size. In general, women with higher education, women who live in urban areas, and women whose husbands are engaged in non-agricultural occupations are more likely to desire a lower family size than others.

As regards sex preferences, the data indicate the existence of a general preference for boys and the evidence suggests that this is an important factor in explaining the generally high level of fertility preferences in Syria.

## CHAPTER 8

## KNOWLEDGE AND USE OF CONTRACEPTION

### 8.1. INTRODUCTION

The use of modern methods of contraception is of recent origin in Syria. There is no organized family planning programme in the country and the government does not have a well-defined population policy. Nevertheless, family planning facilities are being made available at maternal and child health centres throughout the country for those who want advice on contraceptive matters. In recent years, the oral pill has become a popular method of contraception for spacing and for the limitation of births. However, the overall impact of contraception on fertility may be small in view of the fact that the use of contraception is a recent phenomenon.

This chapter presents the findings on knowledge and use of contraception based on data obtained in the SFS. In sections 4 and 5 of the individual questionnaire, information on knowledge, ever-use, current use and intentions to use in the future was collected from all eligible women. These data permit a detailed study of levels and differentials of knowledge and use of contraception by various background variables. Data on contraception are also analysed in relation to fertility preferences, in order to assess the degree of consistency between reported attitudes and behaviour.

### 8.2. CONTRACEPTIVE TERMINOLOGY

In the SFS, 11 methods of contraception, which are common to most WFS surveys, plus an 'other' category, were included in section 4 of the individual questionnaire. The methods were described to respondents in the terms indicated in the footnote. ${ }^{1}$

The methods were classified into two main categories 'efficient or modern' and 'inefficient or traditional'. 'Efficient' methods are those ordinarily offered in family planning programmes, and include pill, IUD, condom, injection and other female scientific methods. Sterilization, although not usually reversible, is in all other respects similar to the other scientific methods. For the present analysis, sterilized couples are treated as current users of contraception. 'Inefficient' methods are non-programme methods which include douche, rhythm, withdrawal and abstinence.

### 8.3. KNOWLEDGE OF CONTRACEPTION

Since knowledge of contraceptive methods can be regarded as a precondition for use, it is useful to know the extent to
which Syrian women are aware of various methods of family planning. At the outset, the meaning of the term knowledge should be clear. Knowledge of a method of contraception merely signifies that the method has been heard of but does not necessarily imply either knowledge of how to use it or (when relevant) where to obtain it.

In the SFS, as most of the WFS surveys, knowledge of contraception was ascertained at two levels. The first, referred to as 'spontaneous' was obtained by asking a direct question: 'As you know, there are various ways that a couple can delay the next pregnancy or avoid pregnancy. Do you know of, or have you heard of, any of these ways or methods?' If the woman answered affirmatively, she was then asked to name the method(s) she knew of. Of all evermarried women, 68.7 per cent gave a 'yes' response.

Each method not mentioned spontaneously was then described briefly and the respondent was asked 'Have you heard of this method?'. In the present analysis, however, no distinction is made between these two levels of knowledge. A woman is classified as having heard of a method irrespective of whether she replied spontaneously or whether she answered only after some probing. It should, however, be recognized that there is a possibility of some overestimation in the level of knowledge because the interviewers' probing could itself have created an awareness of contraception among some respondents who were otherwise ignorant.

Table 8.1 gives the percentage of ever-married women who have heard of any method of contraception, classified by current age and number of living children. The overall

[^30]Table 8.1 Percentage of ever-married women who have heard of any contraceptive method, by current age and number of living children

| Age | Number of living children |  |  |  |  |  |  |  | All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | $7+$ |  |
| $<25$ | 68.4 | 79.5 | 78.5 | 77.7 | 77.6 | 81.8 | (75.0) | (66.7) | 76.1 |
| 25-34 | 70.5 | 75.5 | 80.3 | 84.0 | 80.3 | 79.6 | 81.8 | 81.4 | 80.1 |
| 35-44 | 56.4 | 87.5 | 76.7 | 83.6 | 83.2 | 81.0 | 79.8 | 80.8 | 80.3 |
| 45+ | (50.0) | (50.0) | (50.0) | 67.7 | 56.8 | 69.6 | 69.6 | 72.4 | 68.5 |
| All | 67.1 | 78.6 | 78.0 | 80.7 | 78.8 | 79.3 | 78.9 | 78.5 | 77.7 |

Note: Figures in parentheses are based on fewer than 20 cases.
Source: Table 4.2.2.
level of knowledge of family planning methods is reasonably high among Syrian women. About four-fifths (78 per cent) of the women reported that they had heard of some method of contraception. Except for women with no living children, knowledge is fairly evenly spread across family sizes, both for the sample as a whole and within particular age groups. By age, the pattern is generally an inverted U-shape, with women in middle age groups having the highest level of knowledge ( 80 per cent). Younger women under 25 are much more knowledgeable about family planning methods than older women over 45 years of age.

In table 8.2, percentages of women who have heard of specific contraceptive methods within two broad categories of number of living children (less than 4 and 4 or more) are shown. The pill is the most widely known, with about threequarters of the respondents having heard of this method. The IUD and condom are known to 40 per cent and 28 per cent of the respondents, respectively.

Among the other modern methods, female scientific methods are known to 43 per cent of the respondents. Female sterilization is better known than male sterilization. While 28 per cent of the respondents have knowledge of female sterilization, only 8 per cent have knowledge of male sterilization. The level of knowledge of the traditional methods is moderate among Syrian women. Rhythm is known to about two-fifths of the respondents and withdrawal to about one-third. Douche and abstinence are known to 23 per cent and 18 per cent of the respondents, respectively.

### 8.4. DIFFERENTIALS IN CONTRACEPTIVE KNOWLEDGE

The percentages of women who have heard of any method of contraception, analysed by background variables, are shown in table 8.3. The last column in the table gives the agestandardized percentages. Differentials are readily apparent from the table. Since the pattern of differentials show a similar pattern within each age group, the overall pattern will be discussed instead of differentials in the individual age groups.

Urban women are much more knowledgeable about family planning methods than rural women. While 92 per cent of urban women reported that they had heard of some methods of family planning, only 63 per cent in rural areas did so. Damascus City, being totally urban, has the highest level of knowledge ( 98 per cent), while the North-East region, being predominantly rural, has the lowest ( 51 per cent). The other four regions exhibit small differentials, with the proportion of women who had heard of contraception ranging from 78 per cent in Centre to about 92 per cent in West.

In terms of education, there is a clear-cut break in the level of knowledge between women with no education and those with some education. Women with no schooling are less likely to be aware of family planning methods than women with some years of schooling. All women with secondary or higher level of education claimed to be knowledgeable and only less than 4 per cent of women with primary or

Table 8.2 Percentage of ever-married women who have heard of specific contraceptive methods, by number of living children

| Living children | Modern methods |  |  |  |  |  |  | Traditional methods |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pill | IUD | Condom | Injection | Male ster. | Female ster. | Female scientific | Rhythm | Withdrawal | Douche | Abstinence | Other |
| All | 75.3 | 40.2 | 28.0 | 14.6 | 8.2 | 28.2 | 43.2 | 41.3 | 33.1 | 22.5 | 17.8 | 3.6 |
| $<4$ | 74.4 | 40.7 | 27.7 | 14.9 | 9.1 | 27.0 | 42.4 | 40.5 | 32.1 | 22.3 | 18.6 | 2.4 |
| 4+ | 76.0 | 39.7 | 28.2 | 14.3 | 7.5 | 29.1 | 43.8 | 42.0 | 33.9 | 22.6 | 17.2 | 4.5 |

Source: Table 4.2.1A.

Table 8.3 Percentage of ever-married women who have heard of any contraceptive method, including sterilization, by age and background variable

| Background characteristics | Current age |  |  |  | All | Standardized for age |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <25 | 25-34 | 35-44 | $45+$ |  |  |
| Level of education |  |  |  |  |  |  |
| No schooling | 59.0 | 70.9 | 74.2 | 64.5 | 68.3 | 67.6 |
| Incomplete primary | 94.9 | 98.5 | 97.6 | 92.9 | 96.6 | 96.6 |
| Complete primary | 95.0 | 94.4 | 98.6 | 95.0 | 95.4 | 95.8 |
| Secondary+ | 100.0 | 100.0 | 100.0 | (100.0) | 100.0 | 100.0 |
| Type of residence |  |  |  |  |  |  |
| Urban | 91.4 | 93.7 | 93.6 | 84.1 | 92.0 | 91.9 |
| Rural | 61.1 | 66.1 | 65.0 | 53.9 | 62.9 | 63.0 |
| Region of residence |  |  |  |  |  |  |
| Damascus City | 98.0 | 99.6 | 98.6 | 95.6 | 98.4 | 98.4 |
| Aleppo City | 79.6 | 86.0 | 86.0 | 76.0 | 83.0 | 83.0 |
| North-East | 45.9 | 54.3 | 55.3 | 39.1 | 50.2 | 50.5 |
| West | 94.3 | 94.0 | 90.4 | 80.7 | 91.5 | 91.6 |
| Centre | 78.6 | 81.1 | 79.1 | 67.7 | 78.1 | 78.4 |
| South | 85.1 | 85.7 | 84.2 | 75.8 | 84.2 | 84.1 |
| Pattern of work |  |  |  |  |  |  |
| Before and after marriage | 60.8 | 68.3 | 60.5 | 60.0 | 63.4 | 63.2 |
| After marriage only | 83.0 | 83.1 | 77.3 | 73.5 | 79.9 | 80.4 |
| Before marriage only | 64.4 | 77.9 | 88.1 | 64.3 | 74.3 | 75.2 |
| Never worked | 81.2 | 84.0 | 85.3 | 70.5 | 81.9 | 82.0 |
| Husband's occupation |  |  |  |  |  |  |
| Professional and technical | 74.6 | 80.2 | 82.5 | 79.7 | 78.8 | 79.2 |
| Managerial and clerical | 91.0 | 94.8 | 97.1 | 92.5 | 94.2 | 94.1 |
| Sales and services | 84.7 | 87.4 | 90.0 | 79.6 | 86.3 | 86.4 |
| Agriculture | 51.4 | 57.6 | 56.8 | 50.3 | 54.7 | 54.8 |
| Skilled and unskilled manual | 82.2 | 88.2 | 86.1 | 73.2 | 84.3 | 84.2 |
| Never worked | 70.0 | (55.6) | (33.6) | (40.0) | 57.5 | 52.0 |

Note: Figures in parentheses are based on fewer than 20 cases.
Source: Table 4.2.2.
preparatory schooling admitted an ignorance of family planning methods.

The standardized percentages classified by the variable 'husband's occupation' fall clearly into two groupings. Women whose husbands are engaged in non-agricultural occupations have a higher level of knowledge than women whose husbands are employed in agriculture. There is very little variation in the level of knowledge between the various non-agricultural occupational groups. The 'never worked' group seems to have the lowest level of knowledge of contraception ( 52 per cent), but the percentage is based on fewer than 40 women. By employment status of women, women who worked before and after marriage have the lowest level of knowledge ( 63 per cent) as compared to those in other pattern of work categories. The 'never worked' group, most of whom are the wives of professionals and clerical workers, exhibits the highest level of awareness of contraception (82 per cent).

### 8.5. EVER-USE OF CONTRACEPTION

Alongside the questions on knowledge of specific methods, the questionnaire included a sequence of questions on ever-use of contraception. For each method the respondent had ever heard of, she was asked, 'Have you ever used this method?' or some variation of this question.

Overall, 33 per cent of ever-married women reported ever-use of any method, including both 'modern' and 'traditional' methods. Thus, the levels of contraceptive use is relatively low in Syria with about two-thirds of women in the reproductive ages reporting no personal experience of contraception.

As for knowledge, the pattern of contraceptive use is an inverted U-shape which rises from a level of about 23 per cent for women under 25 years of age to 41 per cent for

Table 8.4 Percentage of ever-married women who have ever used any contraceptive method, by current age and number of living children

${ }^{2}$ Standard error of the observed percentage.
Source: Table 4.3.2, III.1, III. 2 a and III.5a.
women aged 35-44 and then declines to 28 per cent for women over 45 . The proportion of ever-use of contraception increases generally with the number of living children. There is a sharp increase in the proportion of ever users, from 6 per cent among women with no living children to 25 per cent among women with one living child, and then it increases gradually to attain the peak level of 42 per cent among women with five living children; thereafter, the proportion who have ever used declines slightly to 38 per cent among women with six living children and remains around the same level as family size increases further.

Ever-use of contraception shows wide variation as between background variables. Table 8.5 gives the proportion who had ever used contraception according to certain background variables within four broad age groups, and also for all ages. The age-standardized proportions are also shown in the last column of the table for comparison. As may be noted from the table, standardization does not significantly alter the crude proportions in most of the categories.

Type of place of residence seems to be an important variable with large differentials in the level of use of contraception. Urban women are about five times as likely to be ever-users of contraception as rural women. Regardless of which age group is taken for comparison, the proportion of ever-users is substantially higher among urban women than among rural women. Damascus City has the highest proportion of ever-users ( 72 per cent), which is followed by Aleppo City (49 per cent) and the West region (32 per cent). The lowest level of use is found in North-East ( 12 per cent) which is predominantly rural. The Centre and South regions have approximately the same level of use with about a quarter of the women having ever used contraception at some time in their lives. Thus, the level of use of contraception is associated with the level of urbanization; that is, the more a particular region is urbanized, the higher the level of contraceptive use.

Ever-use is positively associated with the level of education. Women with some education are more likely to be ever-users of contraception than women with no education. The proportions having ever used a method among those who have attended secondary school or higher level education institutions are more than four times the proportions among those who have never attended school. This pattern is found in all the four age groups. Although an increasing level of education is generally linked with an increasing level of contraceptive use, education beyond primary level of schooling produces only a slight increase in the proportion of ever-users.

The other two variables - husband's occupation and woman's pattern of work - also exhibit some differentials. Women whose husbands are engaged in non-agricultural types of occupations are some five to six times as likely to be ever-users as women whose husbands are engaged in the agricultural sector. By pattern of work, women who worked only after marriage tend to have a higher level of use than those in the other categories. The 'never worked' group exhibits the highest level of ever-use ( 34 per cent); this is presumably due to the fact that a majority of never workers are women whose husbands are engaged in whitecollar occupations.

### 8.6. CURRENT USE OF CONTRACEPTION

The proportion of women who are current users of contraception is a better indicator of the effect of contraception on fertility and also it gives an idea of the impact of family planning services. In the SFS questionnaire, all women who had reported ever-use of contraception and were currently married and non-pregnant were asked the question: 'Are you or your husband using a method to keep you from getting pregnant?' If the response was 'yes', they were asked to specify the method they were using.

Table 8.5 Percentage of ever-married women who have ever used any contraceptive method, by current age and background variable

| Background characteristics | Cument age |  |  |  | All | Age <br> standaidized |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<25$ | 25-34 | 35-44 | $45+$ |  |  |
| Level of education |  |  |  |  |  |  |
| No schooling | 8.4 | 17.4 | 27.8 | 21.1 | 19.0 | 18.0 |
| Incomplete primary | 39.4 | 69.3 | 71.8 | 71.4 | 58.9 | 61.8 |
| Complete primary | 38.6 | 70.9 | 84.8 | 80.0 | 59.1 | 66.5 |
| Secondary+ | 55.6 | 78.0 | 97.2 | 85.7 | 76.5 | 77.7 |
| Type of residence |  |  |  |  |  |  |
| Urban | 37.9 | 60.2 | 64.9 | 51.0 | 54.4 | 54.1 |
| Rural | 9.1 | 12.2 | 13.7 | 7.1 | 11.1 | 11.1 |
| Region of residence |  |  |  |  |  |  |
| Damascus City | 53.2 | 79.5 | 80.6 | 75.8 | 72.3 | 71.9 |
| Aleppo City | 31.4 | 55.8 | 61.7 | 42.0 | 48.5 | 48.9 |
| North-East | 6.0 | 13.4 | 18.4 | 7.5 | 11.8 | 12.0 |
| West | 29.5 | 34.8 | 35.6 | 19.3 | 32.1 | 31.7 |
| Centre | 17.3 | 27.3 | 29.9 | 16.5 | 23.8 | 23.9 |
| South | 20.7 | 30.8 | 34.2 | 24.2 | 27.8 | 27.2 |
| Pattern of work |  |  |  |  |  |  |
| Before and after marriage | 10.8 | 19.2 | 21.8 | 15.3 | 17.6 | 17.1 |
| After marriage only | 25.5 | 33.7 | 34.1 | 29.4 | 31.8 | 31.0 |
| Before marriage only | 12.6 | 33.7 | 35.8 | 21.4 | 25.9 | 26.9 |
| Never worked | 28.0 | 42.9 | 48.2 | 32.0 | 38.6 | 38.8 |
| Husband's occupation |  |  |  |  |  |  |
| Professional and technical | 22.5 | 39.6 | 45.5 | 40.7 | 35.1 | 36.5 |
| Managerial and clerical | 34.8 | 56.6 | 65.4 | 50.9 | 52.6 | 52.1 |
| Sales and services | 37.4 | 48.0 | 52.1 | 54.8 | 47.5 | 46.9 |
| Agriculture | 5.1 | 8.4 | 11.0 | 5.3 | 7.9 | 7.8 |
| Skilled and unskilled manual | 24.9 | 42.0 | 46.6 | 28.5 | 36.5 | 36.8 |

## Source: Table 4.3.2.

In defining the variable 'current use of contraception', all methods, including traditional methods as well as contraceptive sterilization, are considered. In order to relate the numerator (current users) to the denominator (female population), only the exposed population (that is, those who are currently exposed to the risk of conception) is taken into account, rather than by considering all ever-married women. Thus, rates of use are computed after excluding women who are currently not married or are currently pregnant or believe themselves to be not fecund (unless sterilized for contraceptive purposes). Of the total 2898 exposed women, 29.5 per cent are current users of contraception. This level of current use, representing 20 per cent of all currently married women, although low by international standards, is moderate compared with a number of Muslim countries.

As for ever-use of contraception, current use is associated with age and family size. As expected, there is a sharp increase in the proportion of current users, from 5 per cent among women with no living children to 22 per cent among women with one living child and further to 29 per cent among women with two living children; thereafter as family size increases there is only a marginal increase in the proportion of current users. By age, the pattern is an inverted

U-shape, rising from 19 per cent among women under 25 years to 38 per cent among women aged 35-44 and then declining slightly to 35 per cent in the last age group.

The particular methods currently used by women are listed in table 8.7. Among women of all ages, 18 per cent use the pill and about 4 per cent use rhythm. Two per cent use female scientific methods and about the same proportion, withdrawal. Less than 4 per cent use other methods. About

Table 8.6 Percentage of exposed women who are currently using contraception, including sterilization, by current age and number of living children

| Number of living children |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current        <br> age 0 1 2 3 4 $5+$ All <br> $<25$ 3.9 21.0 26.5 21.0 24.1 14.3 18.9 <br> $25-34$ 5.1 28.6 31.8 36.5 34.3 28.7 30.0 <br> $35-44$ 5.9 10.0 36.3 44.2 51.3 39.1 38.4 <br> $45+$ $(20.0)$ $(0.0)$ $(20.0)$ $(80.0)$ $(33.3)$ 33.3 35.1 <br> All 4.7 21.9 28.7 33.0 36.4 33.6 29.5 |  |  |  |  |  |  |  |

Note: Figures in parentheses are based on fewer than 20 cases. Source: Table 4.4.2.

Table 8.7 Per cent distribution of exposed women according to current use of specific contraceptive methods, by current age

|  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Method | Current age |  |  |  |  |  |  |  |  |
|  | $<25$ | $25-34$ | $35-44$ | $45+$ | All |  |  |  |  |
| No method | 81.1 | 70.0 | 61.6 | 64.9 | 70.5 |  |  |  |  |
| Pill | 12.4 | 19.2 | 20.6 | 18.0 | 17.5 |  |  |  |  |
| IUD | 0.6 | 1.4 | 0.6 | 0.5 | 0.9 |  |  |  |  |
| Female scientific | 1.2 | 1.5 | 2.7 | 4.1 | 1.9 |  |  |  |  |
| Douche | 0.1 | 0.1 | 0.5 | 0.5 | 0.2 |  |  |  |  |
| Condom | 0.4 | 1.0 | 1.5 | 1.5 | 1.0 |  |  |  |  |
| Rhythm | 2.6 | 3.9 | 6.3 | 3.6 | 4.2 |  |  |  |  |
| Withdrawal | 1.5 | 1.9 | 3.8 | 2.1 | 2.3 |  |  |  |  |
| Abstinence | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |  |  |  |  |
| Injection | 0.1 | 0.5 | 0.7 | 1.0 | 0.5 |  |  |  |  |
| Male sterilization | 0.0 | 0.0 | 0.1 | 1.0 | 0.1 |  |  |  |  |
| Female sterilization | 0.0 | 0.2 | 1.0 | 2.1 | 0.5 |  |  |  |  |
| Other | 0.0 | 0.3 | 0.5 | 0.5 | 0.3 |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |  |  |  |
| Inefficient methods | 4.3 | 6.2 | 11.2 | 6.7 | 7.1 |  |  |  |  |
| Efficient methods | 14.6 | 23.8 | 27.2 | 28.4 | 22.4 |  |  |  |  |

Source: Table 4.4.1.
22 per cent are using 'efficient' methods, and 7 per cent 'inefficient' methods.

Table 8.8 gives the associations between current use and selected background variables in two broad age groups, 25-34 and 35-44, and also for all ages. Since the pattern of differentials for current use is similar to the one for ever-use, it is unnecessary to provide a detailed description of differentials in current use.

In general, women living in urban areas, or with six years of schooling or more, or living in Damascus and Aleppo cities, or whose husbands are engaged in non-agricultural occupations, have relatively high levels of current use of contraception. Large differentials clearly exist in the levels of ever-use and current use of contraception by urban/rural residence, region of residence and education. Further in-depth analysis is needed to unravel the extent of true differentials after controlling the inter-relations between these variables.

### 8.7. INTENTIONS FOR FUTURE USE OF CONTRACEPTION

Currently married fecund women who had never used contraception were asked: 'Do you think you and your husband may use any method at any time in the future so that you will not become pregnant?' This question was asked to a total of 2486 women which represented about 55 per cent of the entire sample of ever-married women. 20 per cent replied that they intended to use contraception sometime in the future. This means that a significantly high proportion of never-users ( 80 per cent) expressed their unwillingness to use contraception in the future. Table 8.9 presents the percen-

Table 8.8 Percentage of exposed women who are currently using contraception, including sterilization, by background variables and current age

| Background characteristics | Current age |  | All ages (standardized for age) |
| :---: | :---: | :---: | :---: |
|  | 25-34 | 35-44 |  |
| Level of education |  |  |  |
| No schooling | 12.5 | 23.7 | 15.1 |
| Incomplete primary | 55.1 | 69.0 | 52.9 |
| Complete primary | 60.5 | 79.8 | 58.8 |
| Secondary+ | 65.0 | 79.3 | 68.4 |
| Type of residence |  |  |  |
| Urban | 51.0 | 58.2 | 47.7 |
| Rural | 8.0 | 10.1 | 8.2 |
| Region of residence |  |  |  |
| Damascus City | 65.6 | 76.0 | 63.0 |
| Aleppo City | 52.3 | 56.5 | 45.7 |
| North-East | 6.0 | 9.8 | 6.6 |
| West | 28.9 | 34.5 | 29.2 |
| Centre | 24.8 | 26.8 | 22.2 |
| South | 20.6 | 29.8 | 22.1 |
| Pattern of work |  |  |  |
| Before and after marriage | 16.4 | 19.8 | 15.5 |
| After marriage only | 25.8 | 32.1 | 24.4 |
| Before marriage only | 28.6 | 34.2 | 23.7 |
| Never worked | 34.7 | 44.5 | 34.4 |
| Husband's occupation |  |  |  |
| Professional and technical | 28.7 | 47.9 | 30.5 |
| Managerial and clerical | 49.1 | 57.9 | 45.4 |
| Sales and services | 39.6 | 52.6 | 42.0 |
| Agriculture | 7.6 | 7.8 | 6.9 |
| Skilled and unskilled manual | 34.9 | 37.6 | 30.7 |

Source: Table 4.4.5.
tage of currently married fecund women who intend to use contraception by current age, number of living children and marriage duration.

About 28 per cent of women under 20 years of age indicated their intention to use contraception in the future. This proportion decreases gradually by age and, among women over 45 years of age, about 12 per cent are intended users. Since ever-users of contraception are not eligible for this question, a decreasing trend in the proportion of intended users across age is understandable. The proportion intending to use contraception is relatively high among women of family sizes 0 and 1 . In these categories, about one-fifth expressed their intention to use contraception in the future. With the exception of women of family sizes 0 and 1 , there is little variation in the proportion of intended users which fluctuates between 17 per cent and 20 per cent.

The relationships between current use, ever-use and future use are explored further in table 8.10. The proportions given in this table are based on all currently married fecund women.

About 13 per cent of women of all ages are intended users. The proportion of intended users is much greater among younger women than among older ones. While 19 per

Table 8.9 Of currently married fecund women who never used any method, the percentage who report an intention to use in the future, by age, number of living children and years since first marriage

| Curient <br> age | Peicentage who <br> intend to use | Number of <br> living children | Percentage who <br> intend to use | Years since first <br> marriage | Percentage who <br> intend to use |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $<20$ | 28.4 | 0 | 24.4 | $<10$ | 23.1 |
| $20-24$ | 23.1 | 1 | 24.7 | $10-19$ | 17.7 |
| $25-29$ | 17.4 | 2 | 16.7 | 16.0 |  |
| $30-34$ | 20.7 | 3 | 20.0 | 14.6 |  |
| $35-39$ | 18.0 | 4 | 18.6 |  |  |
| $40-44$ | 14.9 | 6 | 16.4 |  |  |
| $45+$ | 12.1 | $7+$ | 20.1 |  |  |

${ }^{\text {a }}$ Overall percentage 20.4 .
Source: Tables 4.5.1, 4.5.2 and 4.5.3.
cent of women under 25 are intended users, the corresponding percentage is only 8 among older women over 35 . This large difference in the proportion of intended users between younger and older women is mainly due to the fact that a relatively higher proportion of older women are either past users or current users of contraception. The proportion of women who do not want to use contraception in the future varies little across age groups, with the highest percentage (57) observed in the 15-24 age group and the lowest in the 35-44 age group (46). Although intentions are not firm indicators of action, the data do suggest that a substantial proportion of never-users of contraception will remain so in the years to come.

Next, it is of interest to examine the extent of variation in this attitude across background variables. Further, in the context of the provision of family planning services it is helpful to know how groups of the population vary in their attitude towards contraception.

Table 8.11 gives the proportion of all currently married fecund women who do not intend to use contraception in the future, within categories of background variables. These proportions are shown for women of all ages without introducing any control for age, for the reason that differentials show a similar pattern across age groups. For ease in the

Table 8.10 Percentage of currently married fecund women who report (A) ever-use, (B) intention for future use, and (C) the intention never to use contraceptives, by age

| Current <br> age | Ever <br> used | Intends <br> future <br> use | Does not <br> intend <br> future use | Total |
| :--- | :--- | :--- | :--- | :--- |
|  | (A) | (B) | (C) |  |
| $<25$ | 23.4 | 19.2 | 57.4 | 100 |
| $25-34$ | 36.5 | 11.9 | 51.5 | 100 |
| $35-44$ | 44.3 | 9.2 | 46.4 | 100 |
| $45+$ | 39.2 | 7.4 | 53.4 | 100 |
| All | 34.4 | 13.4 | 52.3 | 100 |

[^31]interpretation of results, we shall take the proportion never intending to use contraception as an indicator of resistance to family planning.

Differentials in the level of resistance exist according to various background variables. Rural/urban residence, region of residence and education are the major indicators of attitude to family planning. Ás expected, the level of resistance is much lower among urban women than among rural women. Women living in Damascus and Aleppo Cities tend to have a favourable attitude. The North-East region, being predominantly rural, has the highest level of resistance while the other three regions - West, Centre and South - have approximately the same level of resistance.

Educational differentials in the level of resistance are very substantial. The level of resistance is lowest among the secondary school educated, with about 8 per cent never intending to adopt family planning methods in the future. In contrast, about 69 per cent of women with no schooling do not intend to use contraception. In general, there exists a negative association between education and the degree of resistance to family planning.

Some further differentials in the proportions who never intend to resort to contraception are observed by occupation of the husband and pattern of work. The highest level of resistance ( 82 per cent) is found among women whose husbands are engaged in agricultural occupations and the lowest ( 30 per cent) is found among women whose husbands are either managers or clerical workers. The 'never worked' group also shows a similar level to that of the agricultural group but this percentage is based on less than 30 women. By pattern of work, the highest level of resistance is found among women who worked before and after marriage ( 72 per cent). Women in the other two pattern of work categories do not differ very much in their attitude. About 45 per cent of those who have never worked have indicated their intention not to use contraception in the future. The lower level of resistance found in this group is presumably due to the fact that a majority of them are the wives of managers and professionals.

Table 8.11 Of all currently married fecund women, the percentage who intend never to use contraception in the future, by background variables (overall percentage 52.3)

| Level of education |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | primary | primary | Seondray |  |  |
| 68.8 | 26.4 | 23.1 | 8.1 |  |  |
| Type of residence Urban | Rural |  |  |  |  |
| 29.6 | 76.1 |  |  |  |  |
| Region of residence |  |  |  |  |  |
| 17.6 | 34.2 | 80.6 | 50.0 | 61.0 | 49.1 |
| Pattern of work <br> Before and after marriage | After marriage only | Before marriage only | Never worked |  |  |
| 71.5 | 54.9 | 62.4 | 45.3 |  |  |
| Husband's occupation |  |  |  |  |  |
| Professional and technical | Managerial and clerical | Sales and services | Agriculture | Skilled and unskilled manual | Never worked |
| 47.6 | 29.6 | 38.8 | 82.0 | 45.6 | 71.4 |

Source: Table 5.3.3.

These conclusions should be regarded as tentative at this stage because of the existence of inter-relationships between the background variables. However, it appears that education and rural/urban residence are the major determinants of intentions for future use of contraception, and the observed regional and occupational differentials may be due to educational or other compositional differences. Further in-depth analysis may uncover the true pattern of differentials.

### 8.8. CONTRACEPTIVE USE IN RELATION TO FERTILITY PREFERENCES

In this section, the use of contraception as related to fertility preferences is examined. The main emphasis will be on the degree of consistency between reported attitudes and behaviour, particularly on the extent to which women who state that they want no more children protect themselves by contraception.

Table 8.12 summarizes current contraception practice by the desire for more children among currently married nonpregnant women who consider themselves capable of bearing more children. There exists a striking difference in current use between women wanting more children and those wanting no more children in the future. While only 14 per cent of the women who want more children are current users of contraception, the corresponding percentage is 52 among those wanting no more children. A comparison in the level of
use of an 'efficient' or 'modern' method of contraception between women wanting to continue childbearing and those wanting to cease childbearing brings out a further striking difference between them. Women wanting to cease childbearing are four times as likely to be current users of an efficient method of contraception as women wanting further children. This large differential persists even when family size is controlled. The small group of undecided women behave in a similar manner to those wanting no more children: 29 per cent are using an efficient method and 3 per cent are using an inefficient method.

The data furnished in table 8.12 suggest that in general there exists a strong link between reported attitudes and behaviour. However, about half of the women who state a desire to stop childbearing are not making efforts to stop having children in the future. This apparent inconsistency between reported attitudes and behaviour might be due to several reasons such as lack of knowledge of various methods of family planning, lack of access to family planning services and non-availability of modern methods of contraception. In addition, there may well be a number of social or psychological factors which prevent a woman from using contraception.

Further inconsistencies between attitudes and behaviour are examined in table 8.13 which gives the proportion of women who are using an efficient method of contraception among those who do not want a future birth. Overall, four out of every ten women wanting no more children are taking

Table 8.12 Per cent distribution of exposed women according to current contraceptive status, by desire for more children

| Desire for children | Number of living children | No method currently used | Inefficient method | Efficient method | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Future births wanted | $<3$ | 83.8 | 4.6 | 11.4 | 100 | 826 |
|  | 3 | 83.7 | 4.1 | 12.2 | 100 | 246 |
|  | 4 | 87.0 | 1.3 | 11.7 | 100 | 154 |
|  | $5+$ | 90.5 | 2.6 | 6.9 | 100 | 422 |
|  | All | 85.8 | 3.7 | 10.5 | 100 | 1648 |
| Future birth not wanted | $<3$ | 36.2 | 8.6 | 55.2 | 100 | 58 |
|  | 3 | 32.7 | 17.3 | 50.0 | 100 | 104 |
|  | 4 | 41.6 | 14.3 | 44.2 | 100 | 154 |
|  | $5+$ | 52.1 | 12.1 | 35.8 | 100 | 777 |
|  | All | 47.9 | 12.7 | 39.3 | 100 | 1093 |
| Undecided | All | 67.5 | 3.2 | 29.3 | 100 | 157 |
| All | $<3$ | 80.2 | 4.7 | 15.2 | 100 | 917 |
|  | 3 | 67.0 | 8.1 | 24.9 | 100 | 370 |
|  | 4 | 63.6 | 7.2 | 29.2 | 100 | 332 |
|  | $5+$ | $66.5$ | 8.4 | 25.1 | 100 | 1279 |
|  | All | 70.5 | 7.1 | 22.4 | 100 | 2898 |

Source: Table 5.2.1.
effective measures to prevent having further children. The remaining 60 per cent are not motivated to use an efficient method of contraception, although they expressed their unwillingness to have further children. The level of use of an efficient method of contraception varies little across age, number of living children and marriage duration groups.

It is of interest to examine the extent to which background variables are related to the level of consistency. These relationships are examined in table 8.14 which gives the percentage of women who are using an efficient method of contraception among those who are currently exposed and want no more children within categories of five background variables. In general, it is found that users of an efficient method of contraception are likely to have had six years of schooling or more, to be currently living in urban areas or in cities and to have husbands who are engaged in non-agricultural occupations. This pattern still holds even when the
women are subdivided into two broad age groups, 25-34 and 35-44.

### 8.9. CONCLUSIONS

Even in the absence of a national policy to promote family planning, contraception is fairly widely practised in Syria. Of the sample of 4487 ever-married women under 50 years of age, 33 per cent have used contraception at some time in their lives. Three out of every ten women who are currently married and capable of having more children are currently practising contraception. These user rates appear to be moderately high in relation to the overall level of knowledge of family planning methods: over 20 per cent of all ever-married women reported total ignorance of contraceptive methods.

Table 8.13 Percentage who are currently using an efficient method of contraception (including sterilization) among women who are currently exposed and want no more children, by current age, number of living children and years since first marriage

| Current age | Percentage $^{\mathbf{a}}$ | Number of <br> living children | Percentage | Years since <br> first marriage | Percentage ${ }^{\text {a }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $<20$ | $(33.3)$ | 0 | $(66.7)$ | $0-4$ | 34.5 |
| $20-24$ | 22.2 | 1 | $(40.0)$ | $5-9$ | 38.9 |
| $25-29$ | 43.0 | 2 | 56.0 | $10-14$ | 46.8 |
| $30-34$ | 45.9 | 3 | 50.0 | $15-19$ | 40.3 |
| $35-39$ | 41.9 | 4 | 44.2 | $20-24$ | 37.7 |
| $40-44$ | 35.6 | 5 | 47.5 | $25-29$ | 30.7 |
| $45+$ | 35.5 | 6 | 32.6 | $30+$ | 39.0 |
|  |  | 7 | 36.9 |  |  |
|  |  | 8 | 28.1 |  |  |

[^32]Table 8.14 Percentage of women who are currently using an efficient method of contraception among those who are currently exposed and want no more children, by background variables and current age

| Background characteristics | Current age |  | All |
| :---: | :---: | :---: | :---: |
|  | 25-34 | 35-44 |  |
| Level of education |  |  |  |
| No schooling | 26.4 | 31.0 | 28.7 |
| Incomplete primary | 55.1 | 50.7 | 49.4 |
| Complete primary | 63.5 | 51.0 | 55.1 |
| Secondary + | 66.7 | 58.3 | 62.7 |
| Type of residence |  |  |  |
| Urban | 54.7 | 48.2 | 49.8 |
| Rural | 19.8 | 16.0 | 15.6 |
| Region of residence |  |  |  |
| Damascus City | 55.8 | 56.7 | 57.2 |
| Aleppo City | 61.3 | 42.4 | 48.4 |
| North-East | 17.1 | 19.6 | 16.5 |
| West | 34.0 | 29.3 | 30.3 |
| Centre | 47.4 | 31.8 | 33.7 |
| South | 30.4 | 32.9 | 28.7 |
| Pattern of work |  |  |  |
| Before and after marriage | 42.5 | 26.3 | 30.7 |
| After marriage only | $(26.4)$ | 40.6 | 39.3 |
| Before marriage only | 42.7 | 40.9 | 34.3 |
| Never worked | 46.3 | 40.7 | 41.1 |
| Occupation of husband |  |  |  |
| Professional and technical | 38.0 | 50.8 | 43.8 |
| Managerial and technical | 59.0 | 41.9 | 45.5 |
| Sales and services | 46.7 | 50.6 | 50.5 |
| Agriculture | 22.7 | 15.1 | 15.9 |
| Skilled and unskilled manual | 46.0 | 36.9 | 38.3 |

Note: Figures in parentheses are based on fewer than 20 cases. Source: Table 5.2.4A.

SFS data reveal that a majority of never-users of contraception do not seem to have a favourable attitude to family planning. Only one-siyth of the currently married fecund women who had never tried contraception stated that they intended to use contraception in the future. Data on contraceptive use in relation to fertility preferences suggest that there exists a fair degree of consistency between attitudes and behaviour of Syrian women. Over 50 per cent of all currently married and fecund women who stated that they wanted no more children are currently using a method, and of this about 40 per cent are resorting to an efficient method.

One encouraging finding emerging from this analysis is evidence of the existence of substantial differentials in levels of knowledge and use of contraception and intentions to use it in the future. In general, it is found that women with higher levels of education, women living in urban areas particularly in cities and women whose husbands are engaged in non-agricultural occupations are more likely than others to have knowledge and to be users of contraception. The policy implication of this finding is that, with an increasing level of education and urbanization and with the creation of more modern sector jobs, a growing number of Syrian women are likely to be motivated to accept the idea of family limitation. And with the growing involvement of the government in family planning services, an increasing level of contraceptive use can be expected in the years to come.

# SOME NON-CONTRACEPTIVE FACTORS AFFECTING FERTILITY 

### 9.1. INTRODUCTION

It is well known that fertility is directly influenced by a number of socio-biological and behavioural factors which may be called 'intermediate fertility variables'. One of the important intermediate variables which has a direct bearing on fertility is contraception. In the previous chapter, we have examined in detail the levels of knowledge and use of contraception among the various subgroups of the Syrian population. It was found that about two-thirds of ever-married women had no personal experience of contraception and therefore the effect of contraception on fertility appears to be small. This chapter examines the prevalence of some non-contraceptive factors and the extent to which they account for the observed fertility level of the population.

In the SFS, in addition to the standard core questionnaire, a module on factors other than contraception affecting fertility was included, wherein a series of questions was asked on lactation, amenorrhoea, post-partum sexual abstinence, temporary separation of spouses and self-reported fecundity status of the respondents. The main purpose of this module was to identify some of the factors, other than contraception, that influence the length of the inter-pregnancy interval and to assess their probable effects on the overall fertility level.

Many of the questions included in this module were confined to the last closed pregnancy interval (i.e. the time between the last-but-one and the last pregnancy) and the open pregnancy interval (i.e. the time since the last pregnancy). Under these definitions, currently pregnant women do not have an open interval, while women with only one pregnancy do not have a closed interval. Thus the analysis of the open interval is confined to women with at least one pregnancy who are not currently pregnant, and that of the closed interval to women with at least two pregnancies, including any current pregnancy.

It should be mentioned that a number of problems exist in the analysis of birth interval data. Apart from truncation and selection biases associated with birth interval data, inaccurate date reporting often complicates the analysis. Some of these problems can be overcome by the use of mathematical models and other sophisticated techniques of analysis. No attempt is made at this preliminary stage to undertake a detailed analytical study, as this is beyond the scope of the present report. It is hoped that, after the publication of this report, further in-depth analysis will be undertaken to enhance understanding of birth interval data.

Table 9.1 Percentage of all ever-married women who have never been pregnant, by current age

| Current age |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $15-19$ | $20-24$ | $25-29$ | $30-34$ | $35-39$ | $40-44$ | $45-49$ | All |
| 25.1 | 6.2 | 4.4 | 4.0 | 2.3 | 3.3 | 3.5 | 6.2 |

At the outset, it must be pointed out that factors having a direct bearing on fertility have been studied only for women who have had at least one pregnancy. About 6 per cent of all ever-married women in the age group 15-49 have never become pregnant. Among women aged over 40 years the corresponding proportion is around 3 per cent, which indicates that the level of primary sterility in Syria is moderate (table 9.1).

A total of 3321 and 3797 ever-married women had an open and closed interval, respectively (table 9.2). About 86 per cent of open intervals and about 83 per cent of closed intervals begin with a live birth. A higher proportion of births in the closed interval ( 6 per cent) than in the open interval ( 3 per cent) have since died. Table 9.2 also shows that a majority of women ( 95 per cent in open interval and 89 per cent in closed interval) have reported the calendar month and year of their pregnancies in both open and closed intervals. Though encouraging, this level of completeness of date reporting does not necessarily guarantee the accuracy of the data.

Table 9.2 Characteristics of open and closed pregnancy intervals

|  | Open |  |  |  | Closed |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | No. | $\%$ |  | No. | $\%$ |  |  |
| Interval starts with |  |  |  |  |  |  |  |
| Live birth, alive | 2869 | 86.4 | 3147 | 82.9 |  |  |  |
| Live birth, dead | 105 | 3.2 | 243 | 6.4 |  |  |  |
| Non-live birth | 347 | 10.4 | 407 | 10.7 |  |  |  |
|  |  |  |  |  |  |  |  |
| Date of start of interval stated as |  |  |  |  |  |  |  |
| Calendar month and year | 3158 | 95.1 | 3364 | 88.6 |  |  |  |
| Calendar year only | 146 | 4.4 | 349 | 9.2 |  |  |  |
| Years ago only | 17 | 0.5 | 84 | 2.2 |  |  |  |

Source: Tables 6.8.1 and 6.8.2.

Table 9.3 Per cent distribution of women according to length of full breastfeeding in the last closed pregnancy interval, confined to women whose penultimate pregnancy was a live birth that survived at least 12 months

| Not breastfed | Until child died | Duration in months |  |  |  |  |  |  |  |  |  |  |  |  | Mean |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0 | 1 | 2 | 3 | 4-5 | 6 | $7 \cdots 8$ | 9-11 | 12 | 13-17 | 18 | 19-23 | 24 |  |
| 5.3 | 0.4 | 0.2 | 5.6 | 7.6 | 7.0 | 19.6 | 9.6 | 12.1 | 8.2 | 10.7 | 4.6 | 4.4 | 0.9 | 3.6 | 7.4 |

Source: Table 6.1.2A.

### 9.2. BREASTFEEDING

The study of breastfeeding is important from more than one point of view. Evidence suggests that intensity and duration of breastfeeding both have a direct effect on the length of the birth interval and hence on the speed of reproduction. Since breastfeeding is an important component of nutrition of the child and health of the mother, its study is justified in its own right.

Two aspects of breastfeeding are discussed here: first, the duration of full breastfeeding, defined as the period of time up to age at which the child was given supplementary food; second, the duration of breastfeeding, defined as the period of time up to age at which the child was finally weaned.

It is important to mention that there are two problems which arise in the analysis of data on breastfeeding. First, there is the problem of the involuntary cessation of breastfeeding due to death of the child, specially in the first 12 months after birth. This will be overcome to a certain extent by restricting the analysis to women whose penultimate child survived at least 12 months. Second, there is the problem of circular causality in the breastfeeding/fertility relationship because the length of breastfeeding is itself affected by the intervention of the next pregnancy, the hormonal effect of which is to stop the flow of milk. Though it is possible to overcome this difficulty by restricting the analysis to women who did not become pregnant again for (say) 24 months, this approach is likely to introduce a new bias into the estimate and therefore has not been attempted in this report.

### 9.2.1. Full Breastfeeding

The relevant data on full breastfeeding are given in table 9.3. The average duration of full breastfeeding is 7.4 months. About 10 per cent of the mothers reported a duration of exactly 6 months and about the same proportion a duration of exactly 12 months, while 14 per cent reported that they had not given the child any supplementary food until the child was over one year old. Clearly, these data are implausible and it appears that the relevant question has been widely misunderstood.

Though differentials in full breastfeeding may be found in Volume 2, tables 6.1.3A-E, they should not be taken at face value because of this problem of unreliability.

Table 9.4 Distribution of women according to duration of breastfeeding in the last closed pregnancy interval, confined to women whose penultimate pregnancy was a live birth that survived at least 12 months

| Duration | Number | Percentage | Per cent <br> still breastfeeding |
| :--- | ---: | ---: | :--- |
| Not breastfed | 168 |  |  |
| 0 | 3 | 5.3 | 100.0 |
| 1 | 56 | 0.1 | 94.7 |
| 2 | 107 | 1.8 | 94.6 |
| 3 | 98 | 3.4 | 92.8 |
| 4 | 102 | 3.1 | 89.4 |
| 5 | 61 | 3.2 | 86.3 |
| 6 | 105 | 1.9 | 83.1 |
| 7 | 84 | 3.3 | 81.2 |
| 8 | 101 | 2.6 | 77.9 |
| 9 | 88 | 3.2 | 75.3 |
| 10 | 68 | 2.8 | 72.1 |
| 11 | 26 | 2.1 | 69.3 |
| 12 | 469 | 0.8 | 67.2 |
| 13 | 48 | 14.8 | 66.4 |
| 14 | 153 | 1.5 | 51.6 |
| 15 | 137 | 4.8 | 50.1 |
| 16 | 97 | 4.3 | 45.3 |
| 17 | 64 | 3.0 | 41.0 |
| 18 | 485 | 2.0 | 38.0 |
| 19 | 29 | 15.3 | 36.0 |
| 20 | 57 | 0.9 | 20.7 |
| 21 | 13 | 1.8 | 19.8 |
| 22 | 9 | 0.4 | 18.0 |
| 23 | 5 | 0.3 | 17.6 |
| 24 | 415 | 0.2 | 17.3 |
| 25 | 12 | 13.1 | 17.1 |
| 26 | 22 | 0.4 | 4.0 |
| 27 | 7 | 0.7 | 3.6 |
| 28 | 2 | 0.2 | 2.9 |
| 29 | 0.5 | 2.7 |  |
| 30 | 0.1 | 2.2 |  |
| $31+$ | 0.9 | 2.1 |  |
| Total | 15 | 100.0 | 1.2 |
| Mean |  |  |  |
|  |  |  |  |

Note: The total excludes 17 responses of 'until child died'. Source: Table 6.2.2A.

### 9.2.2. Durations of Breastfeeding

The percentage distribution of women by duration of breastfeeding in the closed interval is given in table 9.4. The data indicate that the practice of breastfeeding is common among the majority of Syrian women. Four out of every five women reported breastfeeding the child for at least 6 months and about two-thirds reported a duration of at least 12 months. About one-eighth reported weaning the child at two years of age and only a minority of 4 per cent breastfed for longer than two years.

There is a tendency on the part of the respondents to report durations in multiples of 6 months, i.e. $6,12,18$ and 24 months. Heaping at 12,18 and 24 months duration is particularly pronounced. A preference for durations in multiples of 2 months, i.e. $2,4,6$ and 8 months is also noted, although heaping at these durations is less pronounced. This pattern (with heaping at particular digits) is a characteristic of
retrospective data of this nature in most developing country surveys. It is indicative of preference errors, but it may also reflect the influence of cultural norms in the society in relation to breastfeeding practices. For example, in some countries there is a cultural norm to breasifeed until the child's first birthday or until the onset of the next pregnancy. Therefore, in the absence of clear knowledge about these norms it is unsafe to conclude that the observed pattern of heaping is solely a consequence of reporting errors (see table 9.4 and figure 9.1).

For women of all ages, the overall mean duration of breastfeeding in the closed interval is 13.6 months (table 9.5). This duration increases with age, from 10.7 months for women under 20 years to 16.9 months for women over 45 years. The data given in table 9.5 suggest that a higher proportion of older women breastfed for a longer period ( 24 months or more) than younger women under 30 years of age. This large age difference probably reflects a true trend


Figure 9.1 Per cent distribution of women according to duration of breastfeeding and amenorrhoea in last closed interval

Table 9.5 Per cent distribution of women according to duration of breastfeeding in the last closed pregnancy interval, confined to women whose penultimate pregnancy was a live birth that survived at least 12 months

| Current age | Duration of breastfeeding in months |  |  |  |  |  |  | Number of women | Mean duration | Percentage reporting duration in round figures |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<6$ | 6-11 | 12 | 13-17 | 18 | 19-23 | 24+ |  |  |  |
| $<20$ | 26 | 27 | 9 | 16 | 9 | 5 | 8 | 135 | 10.7 | 31 |
| 20-24 | 27 | 21 | 12 | 16 | 12 | 3 | 9 | 534 | 11.2 | 36 |
| 25-29 | 19 | 17 | 17 | 16 | 15 | 5 | 11 | 618 | 12.5 | 44 |
| 30-34 | 22 | 13 | 17 | 16 | 12 | 4 | 16 | 562 | 13.0 | 45 |
| 35-39 | 15 | 13 | 14 | 17 | 19 | 4 | 18 | 517 | 14.4 | 50 |
| 40-44 | 15 | 11 | 13 | 15 | 17 | 3 | 26 | 424 | 15.6 | 51 |
| $45+$ | 10 | 7 | 16 | 14 | 20 | 3 | 30 | 403 | 16.9 | 61 |
| All | 19 | 15 | 15 | 16 | 15 | 3 | 17 | 3193 | 13.6 | 46 |

Source: Table 6.2.2B.
towards earlier weaning. The preference for round figures ( $6,12,18$ and 24 months) in reported durations generally increases with woman's age. The proportion of women reporting one of these durations rises from 31 per cent under 20 years of age to 45 per cent around 30 years and then to 60 per cent in the oldest age group. For women of all ages, 46 per cent reported durations in round figures (table 9.5).

Table 9.6 gives the distribution of women according to duration of breastfeeding in the open interval. Of the total number of women, about 42 per cent are still breastfeeding their last child and about 2 per cent breastfed 'until the child's death'. For about 10 per cent of the women, the last pregnancy did not terminate in a live birth and another 5 per cent did not provide information on breastfeeding in the open interval. Excluding these women (i.e. 'still breastfeeding', 'until child's death', 'non-live births' and 'not available' cases), the distribution of women according to duration of breastfeeding in the open interval, shown in table 9.6 , brings out the similar pattern of heaping at durations $6,12,18$ and 24 months.

A comparison has been made of the distributions of women still breastfeeding as revealed by different types of data. The respective distributions are given in table 9.7. The second column gives the cumulative percentage of women still breastfeeding at each duration in the last closed interval. The proportions of most recently born children (open interval) still breastfeeding at the time of the survey at each duration are given in column 3, and the final column provides the proportions of all children born in the last three years who are still breastfeeding.

A strict comparability between these three distributions is limited because of various biases inherent in birth interval data. First, while the last closed birth over-represents short intervals, the open interval suffers from a selection of long intervals because of the exclusion of all currently pregnant women. Second, since the closed interval is defined for women with at least two births and the open interval is defined for women with at least one live birth, subpopulation
differences make comparison somewhat difficult. However, bearing these methodological problems in mind, a comparison of these distributions indicates that a close agreement exists for the first 6 months between the distribution

Table 9.6 Distribution of women according to duration of breastfeeding last child (i.e. in the open interval)

|  |  |  |
| :--- | ---: | :---: |
| Duration in months | Number | Percentage |
| Did not breastfeed | 130 | 9.5 |
| 0 | 5 | 0.4 |
| 1 | 51 | 3.7 |
| 2 | 75 | 5.5 |
| 3 | 56 | 4.1 |
| 4 | 42 | 3.1 |
| 5 | 27 | 2.0 |
| 6 | 37 | 2.7 |
| 7 | 23 | 1.7 |
| 8 | 28 | 2.0 |
| 9 | 21 | 1.5 |
| 10 | 10 | 0.7 |
| 11 | 16 | 1.2 |
| 12 | 194 | 14.2 |
| 13 | 18 | 1.3 |
| 14 | 45 | 3.3 |
| 15 | 45 | 3.3 |
| 16 | 31 | 2.2 |
| 17 | 12 | 0.9 |
| 18 | 177 | 13.0 |
| 19 | 16 | 1.2 |
| 20 | 14 | 1.0 |
| 21 | 2 | 0.2 |
| 22 | 6 | 0.4 |
| 23 | 2 | 0.2 |
| 24 | 205 | 15.0 |
| 25 | 5 | 0.4 |
| 26 | 10 | 0.7 |
| 27 | 1 | 0.1 |
| 28 | 4 | 0.3 |
| 29 | 2 | 0.2 |
| 30 | 26 | 1.9 |
| $31+$ | 2.2 | 100.0 |
| Total | 1366 |  |
| Non-live births |  |  |
| Breastfed until child died |  |  |
| Still breastfeeding |  |  |
| Not available |  |  |
|  |  |  |

Table 9.7 Comparison of percentage of women breastfeeding from different sources

| Time duration | Cumulative percentage of women who breastifed at each duration in the last closed interval | Percentage of most recently boñ children (i.e. open inter val) still breastfeeding at the time of the survey by months elapsed since the birth (Current status) | Percentage of children born in the last 3 years still breastfeeding at time of the survey by months elapsed since the birth (Current status) |
| :---: | :---: | :---: | :---: |
| 0 | 95 | 100 | 100 |
| 1 | 95 | 94 | 94 |
| 2 | 93 | 88 | 88 |
| 3 | 89 | 90 | 87 |
| 4 | 86 | 89 | 86 |
| 5 | 83 | 81 | 73 |
| 6 | 81 | 84 | 75 |
| 7 | 78 | 71 | 53 |
| 8 | 75 | 71 | 51 |
| 9 | 72 | 76 | 55 |
| 10 | 69 | 65 | 41 |
| 11 | 67 | 64 | 47 |
| 12 | 66 | 69 | 39 |
| 13 | 52 | 65 | 40 |
| 14 | 50 | 59 | 41 |
| 15 | 45 | 70 | 40 |
| 16 | 41 | 49 | 31 |
| 17 | 38 | 57 | 25 |
| 18 | 36 | 47 | 23 |
| 19 | 21 | 53 | 18 |
| 20 | 20 | 33 | 13 |
| 21 | 18 | 11 | 3 |
| 22 | 18 | 10 | 3 |
| 23 | 17 | 19 |  |
| 24 | 17 | 25 | 7 |
| 25 | 4 | 21 | 6 |
| 26 | 4 | 21 | 7 |
| 27 | 3 | 9 | 3 |
| 28 | 3 | 22 | 5 |
| 29 | 2 | 14 | 4 |
| 30 | 2 | 16 | 3 |

Source: Tables 6.2.2A and 6.2.4.
based on penultimate births and that based on recent births (columns 2 and 3 ), but thereafter a divergent pattern emerges with higher proportions of most recent births still nursing than penultimate births. The estimates based on all births in the last three years are consistently lower than the other two sets of estimates after 6 months duration, and the discrepancy increases at higher durations (see also figure 9.2). The median duration of breastfeeding suggested by the closed interval data is about 14 months, compared to only about 9 months estimated from the current status of all recent births. In general, the observed divergent pattern between the closed interval data and current status data is partly due to the nature of non-comparability of these two types of data as mentioned above and also partly due to errors introduced in reporting durations of breastfeeding.

Next, an attempt has been made to study differentials in the length of lactation by various background variables. In table 9.8, the mean duration of breastfeeding in the closed interval is given for various subgroups of the population classified in two broad age groups, less than 30 years and 30 years and over. Of all the background variables, education
seems to have the strongest association with the length of breastfeeding. The mean length of breastfeeding decreases as educational level increases. For women of all ages the mean duration is substantially shorter ( 7.5 months) for women with secondary education than for women with no schooling ( 15.0 months). The same pattern is found in both the age groups less than 30 and 30 and over. It is also interesting to note that at all educational levels except the highest younger women breastfeed for shorter periods than older women. This finding strengthens the suggestion made earlier that there is a general trend towards earlier weaning in Syria. The urban-rural differential suggests that rural women on the average breastfeed for about 3 months longer than their urban counterparts. Regional differentials in breastfeeding are also noticeable. Women living in Damascus City have the shortest mean duration of breastfeeding ( 10.8 months) while women living in the North-East region have the longest mean duration ( 15.8 months). The other four regions exhibit minor variations in the length of breastfeeding. By husband's occupation, women whose husbands are engaged in agricultural types of occupations have some 2 to 3 months longer duration of breastfeeding than those


Figure 9.2 Cumulative percentage of women still breastfeeding from different sources
whose husbands are engaged in non-agricultural occupations. Differentials observed by employment status of women are difficult to interpret, but the shorter durations of breastfeeding found among women who did not work may be due to the fact that a majority of those who have never worked are the wives of either professionals or white-collar workers.

### 9.3. POST-PARTUM AMENORRHOEA AND ABSTINENCE

### 9.3.1. Amenorrhoea

Amenorrhoea is defined as the interval between the occurrence of birth and resumption of menstruation, during which conception does not usually occur. Table 9.9 gives the distribution of amenorrhoea in the last closed pregnancy interval, confined to women with at least two pregnancies including any current pregnancy. For about half of the women, the amenorrhoea period is shorter than 3 months and for about two-thirds it is less than 6 months. A perusal of the cumulative distribution given in table 9.9 indicates that the percentage of women still amenorrhoeic changes rapidly in the first few months. There is a sudden fall in the proportion of women still amenorrhoeic between the second and third month and also between the twelfth and thirteenth
month. Like the duration of breastfeeding, the data on amenorrhoea show a similar pattern of heaping at durations which are multiples of 6 months, but in this case the heaping is less pronounced. Note also that for about 23 per cent of the women, the resumption of menstruation occurs at the end of the second month.

The mean duration of amenorrhoea is 5.8 months for women of all ages, increasing from 3.6 months for women under 25 years to 8.9 months for women over 45 years (table 9.10 ). A relatively large proportion of older women over 35 years have durations of over 12 months as compared with younger women under 25 years. As compared with many developing countries, Syrian women report on the average a shorter duration of amenorrhoea.

The relationship between the length of breastfeeding, current age and amenorrhoea is shown in table 9.11. Up to and including 11 months duration, breastfeeding appears to have very little effect on the length of amenorrhoea. The mean length of the amenorrhoea period varies between 2 and 3 months when the length of breastfeeding varies from $0-2$ months to $7-8$ months. Thereafter, as the duration of breastfeeding increases, the mean amenorrhoea period also increases steadily with some minor variations. For women who breastfeed for over two years, the mean length of amenorrhoea is considerably higher ( 13.4 months).

Table 9.8 Mean duration of breastfeeding in the last closed pregnancy interval, by current age and background variables, confined to women with at least two pregnancies whose penultimate pregnancy was a live birth that survived at least 12 months

| Background characteristics | Current age |  | All ages |
| :---: | :---: | :---: | :---: |
|  | $<30$ | $30+$ |  |
| Level of education |  |  |  |
| No schooling | 13.3 | 15.9 | 15.0 |
| Incomplete primary | 10.0 | 13.7 | 11.9 |
| Complete primary | 8.8 | 10.7 | 9.6 |
| Secondary+ | 7.8 | 7.3 | 7.5 |
| Type of residence |  |  |  |
| Urban | 10.1 | 13.5 | 12.2 |
| Rural | 13.3 | 16.1 | 14.9 |
| Region of residence |  |  |  |
| Damascus City | 8.5 | 12.0 | 10.8 |
| Aleppo City | 11.7 | 14.2 | 13.1 |
| North-East | 14.4 | 16.8 | 15.8 |
| West | 9.6 | 12.9 | 11.6 |
| Centre | 12.5 | 14.8 | 13.9 |
| South | 11.0 | 16.2 | 13.9 |
| Pattern of work |  |  |  |
| Before and after marriage | 14.5 | 16.3 | 15.7 |
| After marriage only | 13.4 | 15.1 | 14.5 |
| Before marriage only | 12.0 | 14.9 | 13.5 |
| Never worked | 10.9 | 14.3 | 12.9 |
| Husband's occupation |  |  |  |
| Professional and technical | 12.0 | 14.1 | 13.1 |
| Managerial and clerical | 10.5 | 13.2 | 12.1 |
| Sales and services | 9.9 | 13.3 | 12.0 |
| Agriculture | 14.6 | 16.8 | 16.1 |
| Skilled and unskilled manual | 11.0 | 14.4 | 13.0 |
| All | 11.8 | 14.7 | 13.5 |

Source: Tables 6.2.3A-6.2.3E.

It appears from the SFS data that breastfeeding increases the amenorrhoea period only when breastfeeding is practised for longer than 12 months duration, but it should be remembered that these closed interval data are possibly subject to large measurement errors.

Table 9.9 Distribution of women according to length of amenorrhoea in the last closed pregnancy interval, confined to women with at least two pregnancies (including any current pregnancy)

| Duration (months) | Number | Percentage | Per cent still breastfeeding |
| :---: | :---: | :---: | :---: |
| 0 | 699 | 18.4 | 100.0 |
| 1 | 318 | 8.4 | 81.6 |
| 2 | 876 | 23.1 | 73.2 |
| 3 | 269 | 7.1 | 50.1 |
| 4 | 193 | 5.1 | 43.0 |
| 5 | 110 | 2.9 | 37.9 |
| 6 | 130 | 3.4 | 35.0 |
| 7 | 109 | 2.9 | 31.6 |
| 8 | 87 | 2.3 | 28.7 |
| 9 | 71 | 1.9 | 26.4 |
| 10 | 47 | 1.2 | 24.5 |
| 11 | 29 | 0.8 | 23.3 |
| 12 | 332 | 8.8 | 22.5 |
| 13 | 33 | 0.9 | 13.7 |
| 14 | 37 | 1.0 | 12.8 |
| 15 | 50 | 1.3 | 11.8 |
| 16 | 34 | 0.9 | 10.5 |
| 17 | 21 | 0.5 | 9.6 |
| 18 | 136 | 3.6 | 9.1 |
| 19 | 15 | 0.4 | 5.5 |
| 20 | 15 | 0.4 | 5.1 |
| 21 | 10 | 0.3 | 4.7 |
| 22 | 4 | 0.1 | 4.4 |
| 23 | 5 | 0.1 | 4.3 |
| 24 | 101 | 2.7 | 4.2 |
| 25 | 13 | 0.3 | 1.5 |
| 26 | 7 | 0.2 | 1.2 |
| 27 | 5 | 0.1 | 1.0 |
| 28 | 6 | 0.1 | 0.9 |
| 29 | 3 | 0.1 | 0.8 |
| 30 | 15 | 0.4 | 0.7 |
| $30+$ | 11 | 0.3 | 0.3 |
| Total | 3791 |  |  |

Source: Table 6.3.1A.

### 9.3.2. Post-Partum Abstinence

Post-partum abstinence - abstinence for a certain duration after the birth of the child - is another potentially important intermediate variable which has a direct bearing on fertility.

Table 9.10 Per cent distribution of women according to duration of amenorrhoea in the last closed pregnancy interval, by current age

| Current <br> age | Duration in months |  |  |  | Total | Number <br> of <br> women | Mean <br> duration |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $<4$ | $4-6$ | $7-11$ | 12 | $13+$ |  |  |  |
| $<25$ | 70 | 11 | 8 | 6 | 5 | 100 | 782 | 3.6 |
| $25-34$ | 60 | 12 | 9 | 7 | 12 | 100 | 1371 | 5.1 |
| $35-44$ | 51 | 11 | 9 | 12 | 17 | 100 | 1144 | 6.9 |
| $45+$ | 41 | 12 | 10 | 12 | 25 | 100 | 494 | 8.9 |
| All | 57 | 11 | 9 | 9 | 14 | 100 | 3791 | 5.8 |

[^33]While the practice of abstinence from sexual intercourse following a birth obviously helps to space children and reduce the tempo of fertility, such practice is not usually intended to reduce the fertility level. Adherence to such taboos on sexual relations is largely governed by cultural factors prevailing in the society.

SFS data reveal that post-partum sexual abstinence is very infrequently practised among the majonity of Syrian women. The mean duration of abstinence in the last closed interval is exceedingly small (less than one month duration). About 92 per cent abstained from intercourse for less than 2 months, with about 40 per cent reported a period of exactly 40 days (see Volume 2, table 6.4.1A). Such a high proportion of women reporting a duration of exactly 40 days may simply reflect the cultural norm prevailing in the society regarding the adherence of sexual taboos after the child's birth. Thus, this variable - post-partum abstinence - seems to be of little importance in regulating the fertility of Syrian women.

### 9.4. MARITAL STABILITY AND TEMPORARY SEPARATION OF SPOUSES

Both marital disruption and temporary separation of spouses can lengthen the inter-pregnancy interval. In Syria, it is found that most marriages are stable; about 99 per cent of all ever-married women experienced no dissolution and were continuously married in the last closed interval. Among younger women nearly all were continuously married in the last closed interval. Thus the very low level of marital disruption could explain to a certain extent the relatively short

Table 9.11 Mean duration of amenorrhoea in closed interval by duration of breastfeeding and current age, confined to women with at least two pregnancies

| Duration of <br> breastfeeding <br> (months) | Current age |  |  |  |
| :--- | :--- | ---: | ---: | :--- |
|  | $<30$ | $30+$ | All | Number of <br> women |
| Not breastfed/ |  |  |  |  |
| Non-live birth | 2.0 | 2.9 | 2.6 | 632 |
| $0-2$ | 2.0 | 3.8 | 2.9 | 237 |
| 3 | 1.8 | 3.0 | 2.4 | 116 |
| $4-5$ | 2.0 | 2.8 | 2.4 | 178 |
| 6 | 2.7 | 4.2 | 3.4 | 113 |
| $7-8$ | 2.4 | 4.0 | 3.1 | 199 |
| $9-11$ | 3.6 | 4.3 | 3.9 | 186 |
| 12 | 4.7 | 6.0 | 5.5 | 479 |
| $13-17$ | 5.2 | 7.4 | 6.5 | 505 |
| 18 | 7.2 | 9.7 | 8.8 | 487 |
| $19-23$ | 4.7 | 9.5 | 7.4 | 114 |
| 24 | 9.3 | 11.4 | 10.9 | 414 |
| $25+$ | 9.8 | 14.6 | 13.4 | 128 |
| All | 4.2 | 6.8 | 5.8 | 3788 |

Source: Table 6.3.1B.

Table 9.12 Percentage of women who were continuously married throughout the last closed pregnancy interval, confined to women with at least two pregnancies

| Age |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| group | $<20$ | $20-24$ | $25-29$ | $30-34$ | $35-39$ | $40-44$ | $45+$ | All |
| $\mathscr{\%}$ | 99.4 | 99.5 | 99.3 | 98.2 | 99.0 | 99.1 | 98.0 | 98.9 |

lengths of birth intervals observed among Syrian women (table 9.12).

The other factor, temporary separation of spouses, is also found to be of minor importance. Only 2 per cent of women reported an absence of 3 or more months and the overall mean length of separation is 0.2 months in the last closed interval with practically no variation observed according to most background variables (see Volume 2, tables 6.5.3A6.5.3F).

### 9.5. LENGTH OF EXPOSURE AND INTERPREGNANCY INTERVALS

The length of an inter-pregnancy interval is the sum of the following three components: the gestation period associated with the pregnancy; period of non-exposure due to amenorrhoea, abstinence and temporary separation; and period of exposure which is the total length of the interval between the beginning of the last closed interval and the date of conception, less the period of non-exposure.

Table 9.13 presents the mean length of exposure and nonexposure in the last closed pregnancy interval classified by age of woman. The means are based on 3258 women who have stated month and year of beginning and end of the interval. For these 3258 women, the mean length of exposure is 14.4 months, increasing from 7.9 months for women under 20 years to 18.9 months for women over 45 years. In view of the moderate level of contraceptive use in Syria, the observed lengths of exposure are reasonable for younger women. A longer length of exposure observed for older women is presumably due to the fact that fecundability decreases after age 30 and reaches its minimum value for women over 45.

The overall mean length of non-exposure is only 6 months; this mean increases gradually from 2.9 months for women under 20 years of age to 9 months for women over 45. Since abstinence and temporary separation are almost negligible in the case of Syria, the length of non-exposure is mainly due to amenorrhoea. Comparing the lengths of exposure and non-exposure, it is found that the mean length of exposure is consistently higher than the corresponding length of non-exposure and this differential increases over age.

Table 9.13 Mean length of exposure and non-exposure in the last closed pregnancy interval, confined to women who stated month and year of beginning and end of interval with at least two pregnancies, by current age

| Current age | Mean lengths (Months) |  |  | Total interval |
| :---: | :---: | :---: | :---: | :---: |
|  | Nonexposure <br> (a) | Exposure <br> (b) | Interval to conception $(a+b)$ |  |
| <20 | 2.9 | 7.9 | 10.8 | 19.4 |
| 20-24 | 3.9 | 9.9 | 13.8 | 22.2 |
| 25-29 | 5.1 | 11.5 | 16.6 | 25.1 |
| 30-34 | 5.4 | 15.8 | 21.2 | 29.6 |
| 35-39 | 6.8 | 17.2 | 24.0 | 31.8 |
| 40-44 | 7.4 | 17.3 | 24.7 | 32.8 |
| 45+ | 9.0 | 18.9 | 27.9 | 35.9 |
| All | 6.0 | 14.4 | 20.4 | 28.6 |

Source: Tables 6.6.1, 6.6.2 and 6.6.5.
In the same table, the mean length of interval to conception and total inter-pregnancy interval are also shown in the last two columns. The overall mean length of interval to conception (i.e. the period of exposure plus that of nonexposure) is about 20 months, but this varies considerably across age groups, from about 11 months for women under 20 years to about 28 months for women over 45 years of age. The overall mean inter-pregnancy interval is 29 months, increasing from 19 months for women under 20 years to about 3 years for women over 45 . It will be noted that, on the average, about 20 per cent of the average pregnancy interval is spent in the unexposed period, about 50 per cent in the exposed period, and the residue of 30 per cent in the period of gestation.

The relationship between contraceptive use and length of exposure is shown in table 9.14. It is of interest to find that

Table 9.14 Mean length of exposure in the last closed pregnancy interval, by current age and contraceptive use

| Current <br> age | Contraceptive use |  |  |
| :--- | :--- | :---: | :---: |
|  | Used | Not used | Total |
| $<20$ | 10.0 | 7.4 | 7.9 |
| $20-24$ | 14.1 | 8.9 | 9.9 |
| $25-29$ | 18.2 | 9.2 | 11.5 |
| $30-34$ | 27.3 | 10.5 | 15.8 |
| $35-39$ | 26.8 | 12.4 | 17.2 |
| $40-44$ | 25.0 | 14.5 | 17.3 |
| $45+$ | 28.0 | 16.5 | 18.9 |
| All | 23.0 | 11.4 | 14.4 |

Source: Table 6.6.3A,
use of contraception has a major effect in lengthening the exposure period. Contraceptors have a substantially longer period of exposure than non-contraceptors. The overall mean length of exposure is 23 for users of contraception as compared with 11 months for non-users. This differential persists in all the age groups. We may conclude that the effectiveness of contraceptive use in Syria in spacing births is considerable.

### 9.6. SELF-REPORTED FECUNDITY AND EXPOSURE STATUS, AND AGE AT MENARCHE

In the SFS, information was obtained on several non-contraceptive factors affecting fertility which are not specifically related to inter-pregnancy intervals. These are: age at menarche, age of menopause, self-reported fecundity status (i.e. whether the respondent considered herself able to bear further children) and terminal sexual abstinence.

Table 9.15 Per cent distribution of all currently married women according to selfreported fecundity status, by current age

| Age | Fecund | Infecund, <br> not <br> menopausal | Infecund <br> menopausal | Sterilized | Total | Number of <br> Women |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $15-19$ | 99.8 | 0.2 | 0.0 | 0.0 | 100.0 | 432 |
| $20-24$ | 98.6 | 1.4 | 0.0 | 0.0 | 100.0 | 810 |
| $25-29$ | 97.7 | 2.1 | 0.0 | 0.1 | 100.0 | 795 |
| $30-34$ | 92.5 | 7.2 | 0.1 | 0.1 | 100.0 | 678 |
| $35-39$ | 88.0 | 9.9 | 1.1 | 1.0 | 100.0 | 615 |
| 40 | 80.3 | 17.1 | 1.3 | 1.3 | 100.0 | 152 |
| 41 | 76.0 | 20.8 | 3.1 | 0.0 | 100.0 | 96 |
| 42 | 68.4 | 22.1 | 9.5 | 0.0 | 100.0 | 95 |
| 43 | 74.4 | 17.4 | 8.1 | 0.0 | 100.0 | 86 |
| 44 | 75.0 | 15.2 | 8.7 | 1.1 | 100.0 | 92 |
| 45 | 53.2 | 30.3 | 13.8 | 2.8 | 100.0 | 109 |
| 46 | 52.6 | 21.1 | 26.3 | 0.0 | 100.0 | 95 |
| 47 | 46.4 | 28.6 | 22.6 | 2.4 | 100.0 | 84 |
| 48 | 36.6 | 32.7 | 30.7 | 0.0 | 100.0 | 101 |
| 49 | 25.0 | 25.0 | 48.2 | 1.8 | 100.0 | 56 |
| All | 87.7 | 8.4 | 3.6 | 0.4 | 100.0 | 4296 |

[^34]Table 9.16 Per cent distribution of all ever-married women according to exposure status at time of survey, by current age

| Current <br> age | Pregnant | Widowed, <br> separated | Sterilized | Other <br> impairment | Reported <br> fecund | Number of <br> women |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |
| $<25$ | 31.0 | 1.6 | 0.0 | 1.0 | 66.4 | 1266 |
| $25-34$ | 23.8 | 2.3 | 0.1 | 4.5 | 69.2 | 1510 |
| $35-44$ | 10.7 | 4.3 | 0.8 | 16.5 | 67.8 | 1191 |
| $45+$ | 1.9 | 12.9 | 1.2 | 47.9 | 36.2 | 520 |
| All | 19.8 | 3.9 | 0.4 | 11.7 | 64.2 | 4487 |

Source: Table 1.6.3.

Table 9.17 Distribution of women aged 15-49 according to age at menarche

|  | 10 | 11 | 12 | 13 | 14 | 15 | 61 | 71 | 18 | 19 | 20 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age at menarche | 0.5 | 4.6 | 17.4 | 32.2 | 28.1 | 12.6 | 3.2 | 1.0 | 0.3 | 0.0 | 0.1 |
| Percentage | 100 | 99.5 | 94.9 | 77.5 | 45.3 | 17.2 | 4.6 | 1.4 | 0.4 | 0.1 | 0.1 |
| Cumulative percentages |  |  |  |  |  |  |  |  |  |  |  |

Source: Table 6.7.1.

Table 9.18 Mean age at menarche, by current age of woman

| Current age | Mean | Number of women |
| :--- | :--- | :--- |
| $15-19$ | 13.2 | 435 |
| $20-24$ | 13.4 | 804 |
| $25-29$ | 13.4 | 785 |
| $30-34$ | 13.4 | 679 |
| $35-39$ | 13.5 | 612 |
| $40-44$ | 13.5 | 535 |
| $45-49$ | 13.5 | 510 |

Source: Table 6.7.1.

The data on the self-reported fecundity status of all currently married women are summarised in table 9.15. The proportion of women reporting themselves menopausal or infecund for other reasons forms less than 13 per cent. The proportion reporting infecundity gradually increases by age, but even among women aged 45 years more than half considered themselves fecund. The level of infecundity as reported by the respondents is lower than would be expected in a normal population. However, one should bear in mind the probable unreliability of respondents' self-perceptions which limits the usefulness of these data.

Table 9.16 summarises the status of all ever-married women in terms of exposure to risk of conception at the time of survey. A high proportion of women ( 20 per cent) were reported to be currently pregnant. Of the other unexposed women, 4 per cent were either widowed or divorced, less than 1 per cent were sterilized and about 12 per cent reported themselves to be infecund and therefore may be considered not exposed to risk. The residue of 64 per cent were exposed to the risk of conception at the time of survey.

Finally, the data on age at menarche, which marks the beginning of menstruation, are shown in tables 9.17 and 9.18. Over 90 per cent report menarche as occurring between the ages of 12 and 15 , and only less than 5 per cent report an age of over 15. The overall mean age at menarche is 13.4 years and this remains constant across different age cohorts which suggests that there has been no change in age at menarche of Syrian women in the last three decades.

### 9.7. SUMMARY

This chapter examines the role of some non-contraceptive factors in determining the level of fertility in Syria. Of all the factors examined, it seems that breastfeeding is the most important determinant of the length of the interpregnancy interval. The data indicate that breastfeeding is a common practice among the majority of Syrian women. Four out of every five women reported feeding the child for at least 6 months and about two-thirds reported a duration of at least 12 months. The mean duration of breastfeeding in the last closed pregnancy interval is 14 months, though estimates
based on the proportions of children still nursing at the time of the survey indicate a much shorter period of lactation. Breastfeeding is associated with a relatively short amenorrhoea period of 5.8 months. Post-partum abstinence and temporary separation of spouses are of short duration and therefore do not play any significant role in determining the level of fertility.

More detailed analysis is needed to understand the nature of the inter-relationships among these factors and to disentangle the independent effect of each of these factors on fertility. It is equally important that the quality and accuracy of the data collected on maternity history should be investigated first before in-depth analysis is undertaken, in order to increase understanding of the data and their limitations.

# SUMMARY OF FINDINGS AND CONCLUSIONS 

The Syria Fertility Survey was carried out in 1978 by the Central Bureau of Statistics. In the preceding chapters, the findings from the survey have been discussed in detail, and in this chapter the salient findings of the survey are summarized.

### 10.1. AGE AT MARRIAGE

Marriage is nearly universal and less than two per cent of women were reported single by age 50 (table 10.1). Due to the scarcity of comparable data from past surveys, it is difficult to draw any firm conclusions regarding the past trends in age at marriage. However, the SFS data suggests that it has risen in the recent past. The singulate mean age at marriage, the mean age at first marriage of those persons who marry by age 50 , calculated from the household data, is 22.1 years for females and 26.4 for males.

There are marked educational differentials in the timing of marriage, but not in propensity to marry. Educated women (with primary and more education) are characterized by a relatively late median age at marriage, over 24 years as against less than 20 years for uneducated women. Somewhat less marked but still very significant rural-urban and regional differentials in age at marriage are apparent.

Marital stability is very high; only one in every 15 marriages in Syria is reported to be dissolved. The main cause of dissolution of marriages in the past has been the death of the husband. The chance of an uneducated woman experiencing a marriage dissolution is twice that of an educated woman, a difference which reflects the young age-at-marriage pattern for uneducated women. Nearly half of all women whose first marriage was dissolved had remarried by the time of the survey. This proportion is more or less constant for various educational categories and urban and rural sectors. However, a wide variation is observed by region of residence. The probability of remarriage in the South is nearly three times as high as the probability for women living in the North-East.

### 10.2. FERTILITY AND MORTALITY

### 10.2.1. Children Ever Born

In Syria, the mean number of children ever born to all women aged $15-49$ is around 4.7. As one would expect, the
mean rises by age and by age group 45-49 reaches 7.8 births. This is a very high level of fertility by international standards.

The main differentials in completed fertility (fertility of women aged 45-49) are observed between women with some schooling and no schooling ( 6.6 against 8.0 ). The minority of women who have worked since marriage also report lower fertility than those who have never worked or worked only before marriage. Although the overall level of urban-rural fertility is the same, some variations exist between urban areas, with Damascus City being considerably lower than other urban centres. Completed fertility is higher in Centre and South regions than in the North-East and West, though these differences may simply reflect regional variations in the educational background of couples.

### 10.2.2. Early Marital Fertility

On average, Syrian women experience two births in the first five years of marriage. Women marrying after age 18 have nearly half a child more than those marrying at less than 15 years of age. The very late marrying group, those marrying at age 30 or over, behave more like those marrying early. This is not surprising, because the women who marry very early suffer from adolescent subfecundity in the first five years of marriage, while those who marry very late suffer from the decline in fecundity associated with increasing age. Comparison in early marital fertility between different marriage cohorts suggests an increase in fertility, from 1.9 births to those who married 20 and more years prior to the survey to 2.2 births for those married 5-9 years ago. The differences, which cannot be attributed to the declining proportions who marry early, suggest a rise in early marital fertility, perhaps in response to decreases in the length of breastfeeding. One other possible explanation is misreporting of dates of marriage and early births by older women.

### 10.2.3. Current fertility

Nearly 21 per cent of currently married women are reported pregnant at the time of the survey. On the assumption that all pregnancies will result in a live birth, and, taking into account the probable under-reporting of early pregnancies, this corresponds to a total fertility rate of around 7.4 , which is in agreement with that calculated from birth history data for the year prior to the survey (7.5).

The age-specific fertility rates for the year prior to the survey (see below) indicate peak fertility at ages 25-29 and
high rates up to age 40 . The latter feature contrasts strongly with the predominant west and south west Asian pattern, where fertility declines more steeply with age, and accounts to some extent for the particularly high fertility level in Synia. Also shown below are the fertility rates for married women. When summed from ages 20 to 49 , the marital rates imply that a woman marrying at age 20 and remaining married until age 50 will bear a total 8.3 children.

| Age at birth <br>  $15-19$ |  |  |  |  |  |  | $20-24$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 15 | $25-29$ | $30-34$ | $35-39$ | $40-44$ | $45-49$ |  |  |
| All | 112 | 298 | 337 | 298 | 257 | 156 | 37 |
| Married | 433 | 471 | 393 | 326 | 269 | 165 | 42 |

A comparison between the total fertility rate of 7.5 births and the completed fertility of women aged 45-49 (7.8 births) suggests a slight decline in the level of Syrian fertility.

Confirmation that the fertility level in Syria has begun to change and will continue to do so in the future is given by the very large differences in the total fertility rates (averaged for the five years preceding the survey) between women of varying educational attainments. While those with no schooling have a rate of 8.6 children, those with incomplete primary and those with completed primary schooling or above have rates of 4.3 and 3.2 , respectively (table 10.1). Though much of these very large differences is caused by postponment of marriage among better educated women, differences in marital fertility are also apparent. The duration-specific fertility rates cumulated to duration 20 suggest that uneducated women will bear 7.9 children in the first 20 years of marriage if recent levels persist, compared to 6.6 and 5.5 children for women with incomplete primary and completed primary or above schooling. This strong association between the extent of formal education and recent fertility imply that major reductions in fertility can be expected in response to the rising educational standards in Syria.

Rural-urban and regional differences in recent fertility levels are also apparent. The total fertility rate in Damascus City is 4.7 , compared to 6.10 for the urban population as a whole and to 8.7 for the rural population. The level of total fertility is also higher in the North-East and South than in other regions. As no such large differences in completed fertility were observed, it may be concluded that these divergencies in behaviour are of relatively recent origin.

### 10.2.4. Infant and Child Mortality

The level of mortality in infancy and in childhood is an important indicator of the health and nutrition status of the population and is a crucial factor in determining the rate at which the population is growing. Retrospective data
from birth histories suggests that during the past ten years (1968-78), the infant mortality rate has fallen from about 100 to 75 deaths per 1000 births.

As one would expect, mortality in infancy and childhood is higher for boys than girls. There is a strong inverse relationship between mother's education and infant mortality. Women with no schooling experience a considerably greater loss than women with some schooling. Residence also plays an important role in child survivorship; women living in Damascus City experience the lowest loss ( 44 deaths per 1000 births), as compared to women living in rural residents ( 92 deaths per 1000 births).

### 10.3. FAMILY SIZE PREFERENCES

### 10.3.1. Desire to Stop Childbearing

Of 3785 women who were currently married and considered themselves to be physiologically capable of future childbearing, 57 per cent expressed a wish for more children, 37 per cent wanted no more and 6 per cent were undecided or gave ambiguous answers. The findings indicate a strongly pro-natalist culture. Even among wives who have six living children, only about half ( 53.5 per cent) reported that they wanted no more. This proportion reaches nearly threefourths among older women with 6 children.

In view of the pronounced differentials in recent fertility behaviour, it is not surprising that certain background characteristics are also related to the desire to cease childbearing. The results are presented for all currently married fecund women aged $25-34$ years in table 10.1. The proportion of women wanting to stop childbearing increases with education, from 27 per cent among women with no schooling to 75 per cent with at least secondary education. The findings suggest a much stronger desire on the part of urban wives to cease childbearing than their rural counterparts (53 per cent as against 21 per cent). In Damascus City nearly two-thirds of the women want to have no more children as against only 17 per cent in North-East region. In general, wives with a higher level of education, living in urban areas and whose husbands are engaged in non-agricultural activities are more likely to report a desire to cease childbearing.

### 10.3.2. Total Desired Family Size

All women in the sample were asked the question: 'If you could choose the number of children to have in you whole life, how many children would that be?' Nearly 93 per cent of the women gave a numerical answer to this question. Of these, 18 per cent wanted less than 4 children, 35 per cent 4 or 5,20 per cent 6 or 7 and the remaining 27 per cent 8

Table 10.1 Main findings of Syrian Arab Republic Fertility Survey, 1978

${ }^{\text {a Confined }}$ to women who first married 10-19 years prior to survey.
${ }^{\mathrm{b}}$ Estimated by cumulating duration-specific marital fertility rates for the period $0-4$ years prior to the survey.
CTFRs are calculated by summing ASFRs for ages 15-44
${ }^{\text {d }}$ Derived from data on children ever born and surviving, household survey.
${ }^{\mathrm{e}}$ Confined to women aged 25-34.
or more children. The overall mean desired family was 6.1 children; the mean rises from 5.0 for the youngest age group to 6.8 for the oldest. This increase with age largely reflects rationalization by women in terms of their existing family size, which can be clearly seen in the row of figures below; the mean desired size rises in step with the number of living children, implying that relatively few women are willing to state a desired size less than their achieved size.

Number of

| living children | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Mean desired | 4.6 | 4.8 | 5.3 | 5.6 | 5.7 | 6.1 | 6.8 | 7.0 |

### 10.3.3. Sex Preferences

In many societies of south and west Asia, a marked preference for boys is observed. This is also found in Syria. Among currently married, fecund, non-pregnant (exposed) women wanting another child, the majority would prefer their next child to be a boy. There is also evidence that the balance of boys and girls in a family influences willingness to limit family size; for instance, among women with three children, only 17 per cent of those with no sons stated that they wanted no more children. This figure rises to 23 and 35 per cent among those with one and two sons, respectively.

### 10.4. CONTRACEPTIVE KNOWLEDGE AND USE

Syria has no organized family planning programme. Nevertheless, in recent years, family planning facilities are available at MCH Centres for mothers throughout the country, especially in major urban centres.

### 10.4.1. Knowledge and Ever-Use

Nearly three out of four women in the sample had heard of at least one of a list of contraceptive methods read out to them by the interviewer. Most had heard of a modern method (i.e. IUD, pill, condom, sterilization, injection, foam or jellies, diaphragm). This knowledge is fairly evenly spread across various age groups though younger women are more knowledgeable about family planning methods than older women. The pill is the most widely known method, followed by IUD and condom. The level of knowledge of traditional methods is relatively low.

Substantial differentials in reported knowledge are observed between the various subgroups of the population. Urban women are much more knowledgeable about family planning methods than rural women ( 91 per cent in urban as against 62 per cent in rural areas). Damascus City has the highest level of knowledge among the regions, while the North-East region has the lowest. Women with no schooling are less aware of family planning methods than women with
some education. All women with secondary and more education are reported to be knowledgeable of a contraceptive method.

Actual use of contraception shows a similar pattern across age groups as observed for contraceptive knowledge, but at a much lower level. Nearly one-third of all women had ever tried any method; and the majority ( 29 per cent) had used a modern method. The pill is the most commonly tried method followed by the condom. It appears that there is wider experience of modern than traditional methods.

### 10.4.2. Current Use of Contraception

One-fifth of all currently married women reported current use of a modern or a traditional method. In the absence of an official family planning programme, this level of use may be considered high. Current use is particularly low among women with no children (about 5 per cent) but rises to 22 per cent for those with one living child and to 29 per cent with two children; thereafter the level remains more or less unchanged. The pill is by far the most commonly used method, 18 per cent of women use it, followed by rhythm (about 4 per cent).

Large differentials clearly exist in the level of current use by urban/rural residence, region of residence and education. The level of use in rural areas is negligible ( 5 per cent) compared to urban areas ( 34 per cent), and differences according to the educational attainment of the wife are almost as striking.

### 10.4.3. Intention for Future Use of Contraception

Currently married fecund women who had never used a contraceptive method were asked their future intention to use contraception. Of 2486 who answered, representing 55 per cent of the sample, only 20 per cent reported that they intend to use sometime in the future. Young women (under 20 years of age) were most likely to express an intention to use ( 29 per cent); the proportion decreases gradually with age, until at age 45 only 12 per cent reported affirmatively. Other variations in professed intentions parallel those found for current use. That is, educated, urban women appear to be more inclined to future use than uneducated, rural women.

### 10.4.4. Contraceptive Use in Relation to Fertility Preference

In general the analysis suggests that there exists a strong link between reported attitudes and behaviour. Only 14 per cent of those wanting another child are currently using, compared to 52 per cent of those wanting no more. Nevertheless these figures show that about half of the women who state a desire to stop childbearing are not taking the necessary pre-
cautions to achieve their aim. This apparent inconsistency between reported attitude and behaviour can be attributed to many socio-psychological barriers, such as lack of access to family planning services, non-co-operation of the spouse or religious beliefs, etc.

### 10.5. NON-CONTRACEPTTVE FACTORS AFPECTING FERTILITY

Two precisely defined periods of time, the open and the closed pregnancy intervals, were used in the analysis of non-contraceptive factors affecting fertility. The open interval refers to the time since the last pregnancy; thus women with no pregnancies or those currently pregnant have no open interval. The closed interval refers to the period between the last two pregnancies.

### 10.5.1. Breastfeeding

The average duration of breastfeeding in the closed interval is 13.6 months, rising from about 10.7 months for young women to nearly 17 months for older women. The data suggest a trend towards earlier weaning. Breastfeeding was also studied by examining the proportion of all children born in the last three years who were still being nursed at the time of the interview according to their age in months. This approach indicates that 75 per cent of children are breastfed for at least 6 months and about two-fifths for at least the first year. The median duration is about 9 months as against the median of 14 months obtained by analysing closed interval data. This pattern suggests that the estimates of length of lactation from the closed interval may be too high, perhaps because women tended to round up their answers.

Despite the possible shortcomings of breastfeeding data for the last closed interval, the study of differentials is based on this source. Of the background characteristics examined, education seems to have the strongest association with the length of breastfeeding; the duration is twice as long for mothers with secondary level schooling than for uneducated women ( 7.5 versus 14 months). Major contrasts are also observed by urban-rural residence and region. Rural women on the average breastfeed for about three months longer than their urban counterparts. Women living in Damascus City have the shortest duration of breastfeeding (10.8 months), while women living in the North-East region the longest ( 15.8 months).

### 10.5.2. Post-Partum Amenorrhoea

Post-partum amenorrhoea refers to the period of time elapsing between a birth (either live or non-live) and the return of menstruation. The mean reported length of amenorrhoea in the closed interval is 5.8 months; it rises with
age from 3.6 months for women under 25 years of age to 8.9 months for women over 45 years. Compared to many developing countries, Syrian women on the average report a short duration of post-partum amenorrhoea. As expected, a strong relationship between lactation and amenorrhoea is apparent. It appears from the SFS data that breastfeeding increases the amenorrhoeic period only when breastfeeding is practised for longer than 12 months duration.

### 10.5.3. Post-Partum Sexual Abstinence and Temporary Separation of Spouses

Post-partum abstinence and temporary separation of spouses are factors which can have an important direct effect on the level of fertility. This is not the case in Syria, however, because post-partum sexual abstinence is very short. Less than 10 per cent abstain from intercourse for more than two months following a birth. About 40 per cent reported a period of exactly 40 days, probably more a reflection of cultural norms than of any reporting biases. Thus abstinence seems to be of little importance in regulating fertility in Syrian women.

The possible impact of temporary separation between husband and wife because of work or for other reasons on the length of pregnancy intervals was measured in the SFS by recording all separations in the closed and open intervals which had lasted continuously for a period of three months or more. Most women ( 98 per cent) reported no such separations and the overall mean length of abstinence for the closed interval is only 0.2 months. This factor, then, can also have little role to play in the aetiology of fertility.

### 10.5.4. Length of Exposure and Inter-Pregnancy Intervals

The total time between the beginning of the last closed interval and the date of the next conception, less the duration of amenorrhoea, abstinence and temporary separations ${ }^{1}$ should indicate the number of months in which the woman was exposed to risk of conception during the interval. The reliability of this estimate depends on the accuracy of reported dates of pregnancies and durations, and assumes regular sexual exposure without contraception, once the period of post-partum abstinence is over. Some of these problems have been partially overcome by confining attention to women continuously married throughout the interval, who did not use contraception, and who stated a precise calendar date of the beginning and end of the interval.

For those women, the mean length of exposure is 11.4 months, increasing from 7.4 months for women under 20 to 16.5 months for women over 45 yerrs. For women who

[^35]used contraception the corresponding period of 'expsure' is 23 months, an increase that testifies to the effectiveness of contraception in delaying births.

### 10.6. CONCLUSIONS

By far the most important finding of the SFS is the extremely high level of fertility evident both from the completed fertility of women aged 45-49, which approaches an average of 8 births per woman, and the current total fertility rate which, if sustained in the future, implies an average of about 7.5 births per woman. However, the data indicate that there has possibly been a slight fall in fertility in the recent past. The very large differences in recent fertility between women of varying educational background and between rural and urban sectors suggest the likelihood of further declines in the national level of fertility as the Syrian population becomes more educated and urbanized.

Some of the reasons for continued high fertility clearly emerge from the analysis of the SFS. Age at first marriage and age at first birth, though increasing in the recent past due to improved educational opportunities for women, are still young. Marriages are relatively stable and remarriage is common for the minority experiencing dissolution.

Delay in resumption of sexual activity after childbirth and temporary absence of spouses appear to be of minimal importance in restraining fertility. Breastfeeding does appear to be universally practised and this has an effect of postponing the return of menstruation and thus acts as the major restraint on fertility. However, the length of breastfeeding appears to be declining among younger, more educated and urbanized women.

The moderately high levels of contraceptive use appear at first sight to be incompatible with continued high level of fertility. This apparent contradiction is probably explained by a reduction in length of breastfeeding which has offset to a large extent the effect of contraception. In those sectors of the population where contraception is high, breastfeeding tends to be short. The major contribution of contraception so far may have been to stop the potential increase in marital fertility among urban, educated women, which would have resulted from the trend towards earlier weaning of children.

The high fertility levels combined with the low levels of mortality estimated from the survey and other sources imply a growth rate of about 3.6 per cent per annum. At this rate the population of Syria will double every 19 years.

APPENDIXI
QUESTIONNAIRES
Household Schedule ..... 117
Individual Questionnaire ..... 121
Community-Level Questionnaire ..... 163

## Note

The Household Schedule originally consisted of a four-page form which opened up, with part II a double-page spread. For the purposes of reproduction in this report, part II of the form has been split and appears on pp. 118-19, and readers are reminded that the interviewers did not suffer the inconvenience of this split.
I. IDENTIFICATION

| 1. Mohafaza |  | 5. Card Type No. |
| :--- | :--- | :--- |
| 2. City or Village |  | 6. Cluster No. |
| 3. Street Name |  | 7. Dwelling No. |
| 4. Dwelling No. or Name |  | 8. Household No. Within |
| of Building's Owner |  | Dwelling |
|  |  | 9. Line Number |


| 1411 |
| :--- |
| 3 |


| INTERVIEWER CALLS | 1 |  |  | 3 |
| :--- | :--- | :--- | :--- | :--- |
| 10. Date of Visit |  |  |  |  |
| 11. Interviewer's Name |  |  |  |  |
| 12. Result* |  |  |  |  |



* TO INTERVIEWER: Wmite down in Item 12, one of the following:

1. Completed
2. No eligible member at home
3. Deferred
4. Rejused
5. Duezling Vacant
6. Address not a duelling
7. Address not found or inaccessible
8. Other (Specify)

| 17171771 | FIELD SCRUTINIZED | RE-INTERVIEWED OR SPOT-CHECKED | OFFICE EDITING | CODING | THIS INFORMATION IS CONFIDEMTIAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name |  |  |  |  |  |
| Date of Editing |  |  |  |  |  |
| or Coding |  |  |  |  |  |
| Signature |  |  |  |  |  |

ii. INFORMATION ON HOUSEHOLD MENEERS



* Questrons 23 and 24, abridged here, originally read "Has she ever giver birth to a child who later died?
If 'yes': How many sons and how many daughters ?"

| 13. Was this househcld selected for Individual Questionnaire? | 14. Number of Women Eligible for Individual Interview | 15. Household size | Males $\square$ | Females $\square$ | Total $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: |

III. INFORMATION ON HOUSING


SYRIAN ARAB REPUBLIC OFFICE OF THE PRIME MINISTER CENTRAL BUREAU OF STATISTICS
with the collaboration of
INTERNATIONAL STATISTICAL INSTITUTE WORLD FERTILITY SURVEY

# THE SYRIAN FERTILITY SURVEY 1978 <br> INDIVIDUAL QUESTIONNAIRE 

SYRIAN ARAB REPUBLIC OFFICE OF THE PRIME MINISTER CENTRAL BUREAU OF STATISTICS

With the Colaboration of
INTERNATIONAL STATISTICAL INSTITUTE
WORLD FERTILITY SURVEY
Syrian Fertility Survey 1978
Individual Questionnaire

| IDENTIFICATION |  |
| :--- | :--- | :--- |
| 1. GOVERNORATE | 3. CLUSTER NUMBER |
| 2. CITY/VILLAGE | 4. DWELLING UNIT NO. |
| 5. | HOUSEHOLD NO. WITHIN DWELLING UNIT |
| 6. LINE NUMBER OF WOMAN |  |


| INTERVIEWER CALLS | 1 | 2 |  | 3 |
| :--- | :--- | :--- | :--- | :--- |
| DATE (DAY, MONTH) |  |  |  |  |
| INTERVIEWER'S NAME |  |  |  |  |
| TIME STARTED |  |  | $\square$ |  |
| TIME ENDED |  |  | $\square$ |  |
| DURATION |  |  | $\square$ |  |
| RESULT * |  |  |  |  |
| NEXT VISIT: DATE |  |  |  |  |

*RESULT CODES: 1. COMPLETED
5. PARTLY COMPLETED
2. R. NOT AT HOME
3. DEFERRED
4. REFUSED
6. DOES NOT SPEAK ARABIC

BUT $\qquad$
7. OTHER (SPECIFY) $\qquad$

|  | FIELD EDIT. | RE-INTERVIEWED <br> OR <br> SPOT CHECKED | EDITED | CODED |
| :--- | :--- | :--- | :--- | :--- |
| NAME |  |  |  |  |
| DATE OF EDIT./COD. |  |  |  |  |
| SIGNATURE |  |  |  |  |

## SECTION 1: RESPONDENT'S BACKGROUND

LOCATION OF INTERVIEW (place name) $\qquad$
101. Do you live in this house?

109. Have you ever attended school?

| YES $\square$ | NO 2 |
| :--- | :---: |
| $\downarrow$ | (SKIP TO 113) |

110. What was the highest certificate you obtained, primary, preparatory, secondary, higher institute or university?

| NO CERTIFICATE | 1 | PRIMARY |
| :--- | :--- | :--- |
| PREPARATORY | 3 |  |
| HIGHER INSTITUTE <br> OR UNIVERSITY | 5 | SECONDARY |
| 4 <br> OR |  |  |

112. INTERVIEWER: TICK APPROPRIATE BOX
LESS THAN 6 YEARS
6 OR MORE YEARS SCHOOLING
(SKIP TO 114)

113. Can you read and write? Can you read, say, a newspaper or a magazine; can you write, say, a letter?
READ AND WRITE
$\qquad$ READ ONLY 2 NEITHER READ
NOR WRITE 3

## 

114. What language do you usually speak at home?

ARABIC 1 OTHER (SPECIFY) $\qquad$

## SECTION 2: MARRIAGE HISTORY

201. Now I have some questions about your married life? Are you now married, widowed, divorced or separated?

202. Were you married only once or more than once?

ONCE 1
(SKIP TO TABLE, MORE THAN ONCE 2 ASK 209-212)
(SKIP TO 208)

203. In what month and year were you and your husband married?

204. Does your husband ordinarily live in your household?


NO 2
205. Is he away only for the time being or have you separated?

AWAY FOR $\qquad$
$\qquad$ SEPARATED TIME BEING 1
(SKIP TO 207)
206. In what month and year did you stop living together?

| $\frac{19}{\text { (MONTH) }}, \frac{19}{\text { (SKIP TO 207) }}$ | D.K. $\square$ |
| :--- | :--- |



206A. How long did this marriage last?

207. Have you been married more than once?

208. How many times have you been married altogether?
(NUMBER OF TIMES)

INTERVIEWER: FOR EACH PAST MARRIAGE ASK 209-212, THAN SKIP TO 213. IF CURRENTLY MARRIED, THE NUMBER OF ENTRIES WILL BE ONE LESS THAN THE ANSWER TO 208.

FORMER MARRIAGE

\begin{tabular}{|c|c|c|c|c|}
\hline \& \begin{tabular}{l}
209. \\
In what month and year did you start liv= ing together with your (first, second, etc.) husband. If dates are unknown ask: How old were you at that time?
\end{tabular} \& \begin{tabular}{l}
210. \\
How did the marriage end? \\
Death, \\
Divorce, or Separation
\end{tabular} \& \begin{tabular}{l}
211. \\
IF DIVORCE OR SEPARATION: In what month and year did you stop living together? IF D.K. ask: For how long did you live together?
\end{tabular} \& \begin{tabular}{l}
212. \\
IF DEATH: \\
In what month and year did he died? IF D.K. ask: For how many years did you live together?
\end{tabular} \\
\hline \multirow{3}{*}{1} \& 19 \& \multirow[t]{3}{*}{} \& \& \(\longrightarrow\) \\
\hline \& \multirow[t]{2}{*}{\[
\begin{array}{ll}
\hline \text { (MTH) } \& , \overline{(Y E A R)} \\
\text { AGE } \& \\
\hline \text { (YEARS) }
\end{array}
\]} \& \& (MTH) (YEAR) \& \[
\frac{}{(M T H)}, \frac{19}{(\mathrm{YEAR})}
\] \\
\hline \& \& \& (DURATION IN YEARS) \& (DURATION IN YEARS) \\
\hline \multirow{4}{*}{2} \& \multirow[t]{4}{*}{\[
\begin{array}{ll}
\frac{19}{(M T H)} \& \frac{19}{(Y E A R)} \\
\text { AGE } \& \\
\hline \text { (YEARS) }
\end{array}
\]} \& \multirow[t]{4}{*}{\[
\begin{array}{ll}
\text { DEATH } \& 1 \\
\text { DIVORCE } \& 2 \\
\text { SEPAR- } \& 3 \\
\text { ATION } \& 3
\end{array}
\]} \& \& \(\rightarrow\) \\
\hline \& \& \& \multirow[t]{2}{*}{\[
\overline{(M T H)}, \frac{19}{(Y E A R)}
\]} \& _-_, 19 \\
\hline \& \& \& \& (MTH) (YEAR) \\
\hline \& \& \& \[
\begin{aligned}
\& \text { (DURATION IN } \\
\& \text { YEARS) }
\end{aligned}
\] \& (DURATION IN YEARS) \\
\hline \multirow{4}{*}{3} \& \multirow[t]{4}{*}{\[
\begin{array}{ll} 
\\
\frac{\text { (MTH) }}{} \& \frac{19}{(\text { YEAR })} \\
\text { AGE } \& \\
\hline \text { (YEARS) }
\end{array}
\]} \& \multirow[t]{4}{*}{\[
\begin{array}{ll}
\text { DEATH } \& 1 \\
\text { DIVORCE } \& 2 \\
\text { SEPAR- } \& 3 \\
\text { ATION } \&
\end{array}
\]} \& \& \(\rightarrow\) \\
\hline \& \& \& —_, 19 \& -, 19 \\
\hline \& \& \& (MTH) (YEAR) \& (MTH) (YEAR) \\
\hline \& \& \& (DURATION IN YEARS) \& (DURATION IN YEARS) \\
\hline \multirow{4}{*}{4} \& \multirow[t]{4}{*}{(MTH)
AGE \(\frac{19}{\text { (YEAR) }}\)

(YEARS)} \& \multirow[t]{4}{*}{| DEATH | 1 |
| :--- | :--- |
| DIVORCE | 2 |
| SEPAR- |  |
| ATION | 3 |} \& \& \multirow[t]{3}{*}{\[

\overrightarrow{(M T H)}^{\rightarrow}, \frac{19}{(\mathrm{YEAR})}
\]} <br>

\hline \& \& \& \multirow[t]{2}{*}{$$
\frac{}{(M T H)}, \frac{19}{(\mathrm{YEAR})}
$$} \& <br>

\hline \& \& \& \& <br>

\hline \& \& \& $$
\begin{aligned}
& \text { (DURATION IN } \\
& \text { YEARS) }
\end{aligned}
$$ \& (DURATION IN YEARS) <br>

\hline
\end{tabular}


213. How old were you when you had your first menstrual period?


## SECTION 3: MATERNITY HISTORY

301. Now I would like to talk about a different subject. Have you ever given birth to any children?

YES 1
(SKIP TO 303)
NO 2
302. Have you ever given birth to any boy or girl who later died, even if the child lived for only a short time?

YES 1
NO 2
(SKIP TO 312)
(SKIP TO 313 AND RECORD ZERO FOR TOTAL)
303. We would like to get a complete record of all the babies you have given birth to, in all your life.
Do you have any sons you have given birth to who are now living with you?

304. How many live with you? $\qquad$
305. Do you have any sons you have given birth to who do not live with you?


NO 2
(SKIP TO 307)
306. How many do not live with you? $\qquad$
(SKIP TO 309)
308. How many live with you?
309. Do you have any daughters you have given birth to who do not live with you?

YES


NO 2
(SKIP TO 311)


310. How many do not live with you? $\qquad$
311. Have you ever given birth to any boy or girl who later died, even if the child lived for only a short time?

312. How many of your children have died? $\qquad$
313. INTERVIEWER: SUM ANSWERS TO 304, 306, 308, 310, 312. ENTER TOTAL HERE: $\qquad$ (SUM)
NOW ASK:
Just to make sure I have this right, you have given birth to $\qquad$ (SUM) children. Is this correct?

YES

$$
\begin{gathered}
\text { NO } \\
\text { (PROBE AND }{ }^{\downarrow} \text { CORRECT } \\
\text { RESPONSES AS NECESSARY) }
\end{gathered}
$$

314. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 201, 206, 211, 212)

| CURRENTLY |  | WIDOWED/DIVORCED/ | DIVORCED/WIDOWED |
| :---: | :---: | :---: | :---: |
| MARRIED | 7 | SEPARATED FOR 2 | SEPARATED FOR 3 |
|  |  | LESS THAN ONE YEAR | ONE YEAR OR MORE (SKIP TO 318) |

315. Are you pregnant now?
YES 7
NO 2
(SKIP TO 318)
D.K. 3
(SKIP TO 318)
316. For how many months have you been pregnant?
$\qquad$ (MONTHS)
317. Would you prefer to have a boy or a girl?

BOY 1
GIRL 2
EITHER 3 OTHER
(SPECIFY)

29
318. INTERVIENER: CIRCLE APPROPRTATE BOX (SEE 313, 315)

321. In addition to the time(s) you have told, have there been any other times you were pregnant? IF NO PROBE: I mean have you ever had a pregnancy that lasted for just a few weeks or a few months?

YES 1
NO 2
(SKIP TO 322 AND RECORD ZERO)
322. How many such pregnancies have you had?
323. INTERVIEWER: SUM ANSWERS TO 313 AND 322 AND ENTER TOTAL HERE (SUM)
IF NO PREGNANCY : SKIP TO 334
IF ONE PREGNANCY : SKIP TO 324
OTHERWISE, SAY : NOW I WANT TO ASK YOU SOME QUESTIONS ABOUT EACH OF YOUR PREGNANCIES STARTING WITH THE FIRST ONE.
ASK 324 - 331 FOR EACH PREGNANCY.
IF TWINS USE ONE LINE FOR EACH AND CONNECT WITH A BRACKET AT THE RIGHT. PROBE CAREFULLY FOR PREGNANCIES THAT ENDED WITH NON-LIVE BIRTHS OR ABORTIONS IN EACH INTERVAL (BETWEEN MARRIAGE AND FIRST LIVE BIRTH, BETWEEN EACH TWO LIVE BIRTHS AND AFTER THE LAST LIVE BIRTH.

LIVE BIRTH AND OTHER PREGNANCY TABLE


LIVE BIRTH AND OTHER PREGNANCY TABLE


LIVE BIRTH AND OTHER PREGNANCY TABLE


LIVE BIRTH AND OTHER PREGNANCY TABLE

332. INTERVIEWER: PROBE FOR THE TOTAL NUMBER OF PREGNANCIES THE RESPONDENT HAS HAD AND RECORD RESULT HERE:
(TOTAL NUMBER OF PREGNANCIES)
333. INTERVIEWER: PROBE FOR THE NUMBER OF PREGNANCIES THAT RESULTED IN TWINS AND RECORD RESULT HERE:

MAKE SURE THAT THE TOTAL NUMBER OF PREGNANCIES YOU HAVE RECORDED IN 332 IS EQUAL TO THE NUMBER RECORDED IN 323 MINUS THE NUMBER RECORDED IN 333.

INTERVIEWER: CIRCLE APPROPRIATE BOX(s) IN 334 AND 334.
334. RELIABILITY OF ANSWERS IN SECTION 3 GOOD 7

FAIR 2
POOR 3
335. PRESENCE OF OTHERS AT THIS POINT (CIRCLE WHICH APPLY)

NO OTHERS 0

CHILDREN 1 UNDER 10

OTHER MALES 4

519
1

$\square$


## $\square$



## SECTION 4: CONTRACEPTIVE KNOWLLEDGE AND USE

401. Now I want to talk about a somewhat different topic. As you may know, there are various ways that a couple can delay the next pregnancy or avoid pregnancy. Do you know of, or have heard of, any of these ways or methods?

YES 1
NO 2
(SKIP TO INSTRUCTION ABOVE 404)
402. Which methods do you know of?

PROBE: Do you know of any others? $\qquad$


INTERVIEWER: ${ }^{\downarrow}$ RECORD ANSWER, AND THEN PROCEED TO TICK BOX(ES) IN COL. 1 CORRESPONDING TO THE METHOD (S) MENTIONED. FOR EACH METHOD SO TICKED, EXCEPT STERILIZATION, ASK:
403. Have you ever used (METHOD)?
(REFER TO METHOD IN SAME WORDS USED BY R IN 402. TICK RESPONSE IN COL. 3 CORRESPONDING TO THE PARTICULAR METHOD) .

NOW ASK 404-419, IN TURN, SKIPPING THOSE METHODS TICKED IN COL. 1. PREFACE THE QUESTIONNING WITH:

There are some other methods which you have not mentioned, and I would like to find out if you might have heard of them.

| COL. 1 | FOR THOSE WHO SAID "MOO" TO 401, PREFACE Q. 404 WITH: <br> Just to make sure, let me describe some methods to see if you have heard of them. | COL. 2 | COL. 3 |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FROM } \\ & 402 \end{aligned}$ |  | EVER HEARD OF | EVER USED |
| 0 PILL | 404. One way a woman can delay the next pregnancy, or avoid getting pregnant, is to take a pill every day. Have you ever heard of this method? (TICK RESPONSE IN COL. 2). IF NO, SKIP TO NEXT UNTICKED METHOD. IF YES: have you ever used this method? (TICK RESPONSE IN COL. 3) | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ |
| 0 IUD | 405. A woman may have a loop or coil of plastic or metal, the intrauterine device (IUD), inserted in her womb by a doctor and left there. Have you ever heard of this method? (AS ABOVE). IF YES: Have you ever used this method? (AS ABOVE). | $\begin{array}{ll} \text { YES } 1 \\ \text { NO } & 2 \end{array}$ | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \\ \hline \end{array}$ |


| COL. 1 |  | COL. 2 | COL. 3 |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FROM } \\ & 402 \end{aligned}$ |  | EVER HEARD OF | EVER USED |
|  | 406. Women may also use other methods to avoid getting pregnant, such as placing a diaphragm or tampon or sponge in themselves before sex, or using foam tablets, or jelly or cream. Have you ever heard of any of these methods? IF YES: Have you ever used any of these methods? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ |
|  | 407. Some women wash themselves immediately after sex, with water or perhaps some other liquid. Have you ever heard of this method to avoid getting pregnant? IF YES: Have you ever used this method? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ |  |
|  | 408. There are also some methods men use so that their wives will not get pregnant. Some men wear a condom (e.g. Durex, rubber, safe, or prophylactic) during sex. Have you ever heard of this method? IF YES: Did you and your husband ever use this method? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ |  |
| RHYTHM | 409. Some couples avoid having sex on particular days of the month when the woman is most able to become pregnant. This is called the safe period or rhythm method. Have you ever heard of this method? IF YES: Did you and your husband ever do this? | $\begin{array}{ll} \text { YES } 1 \\ \text { NO } & 2 \end{array}$ | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ |
| 0 <br> WITH <br> DRAWAL | 410. Some men nractise withdrawal, that is, they are careful and null out before climax. Have you ever heard of this method? IF YES: Did you and your husband ever use this method? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ |






419A. INTERVIEWER: RECORD NUMBER OF OTHER METHODS
SPECIFIED $\qquad$ (NUMBER)
420. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 414, 418)

421. I want to make sure I have the correct information. Have you ever done anything or tried in any way to delay or avoid getting pregnant?

YES


N0 2
(SKIP TO 501)
422. What method was that? $\qquad$

SECTION 5: LACTATION, CONTRACEPTIVE USE AND TEMPORARY ABSENCE


Last Pregnancy (See Live Births and Other Pregnancies Table)
505. INTERVIEWER: RECORD DATE OF BIRTH OF LAST CHILD (OR PREGNANCY TERMINATION) PROBE AGAIN IF MONTH AND YEAR NOT STATED
$\qquad$
(MONTH),$\overline{\text { (YEAR) }}$ or
$\qquad$
YEARS AGO (if available)
506. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 325, 328)


## OPEN INTERVAL

FOR CURRENTLY MARRIED WOMEN WITH AT LEAST ONE PREGNANCY WHO ARE NOT CURRENTLY PREGNANT (EXCLUDING THOSE WHO OR WHOSE HUSBANDS ARE STERILIZED)
507. Now I would like to ask you about the period since the birth of (Name of last child, or "Your most recent child who Tater died"). Did you breast-feed (Name of last child, or "Your most recent chitd"?

YES
NO 2
(SKIP TO 511)
508. For how many months altogether did you breast-feed him/her? PROBE: How many months old was he/she when you completely stopped breast-feeding him/her?

509. After months had you completely stopped breastfeeding your child even once a day?

YES 1
NO 2
(Correct 508 as necessary then proceed to 510)
510. How many months old was the child when you began giving him/her additional food along with breast-feeding?

511. For how many months after the birth of this child did you go without sexual relations?

PROBE: How many months old was the child when you resumed sexual relations?

|  |  | $\begin{array}{ll\|l\|} \text { NOT STARTED } \\ \text { YET } & 8 & \\ \hline \end{array}$ | 40 DAYS | 88 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (DAYS) | (MONTHS) |  |  |  |  |
| (SKIP | (0 573) | (SKIP T0 513) |  |  |  |

512. Try to remember whether the interval without sexual relations was exactly forty days or less or more?
(DAYS (MONTHS) elations was exactly forty days or less or more?
(FROBE well and record interval)

## OPEN INTERVAL (CONT.)

513. How many months after the birth of this child did your period come back?

|  | PERIOD NOT 8 <br> (MONTHS $)$ <br> BACK YET |
| :---: | :--- |
| (SKIP TO 517) | (SKIP TO 517) |

514. Now I would like to ask you about the period since the last time you were pregnant. For how many months after the end of this pregnancy did you go without sexual relations?

|  |  | NOT 8 8 6 | 40 DAYS 8 | 7 |
| :---: | :---: | :---: | :---: | :---: |
| (DAYS) | (MONTHS) | STARTED YET |  |  |
| (SKIP T | 516) | (SKIP T0 516) |  |  |

515. Try to remember whether the interval without sexual relations was exactly forty days or less or more?
$\qquad$
(MONTHS)
(PROBE WELL AND RECORD INTERVAL)
516. How many months after the end of the pregnancy did your period come back?
```
PERIOD NOT \begin{tabular}{|l|l|}
\hline 8 & 6 \\
\hline
\end{tabular} BACK YET
```

(MONTHS)

| 517. INTERVIEWER: | CIRCLE APPRO | (SEE 511, 514) |
| :---: | :---: | :---: |
|  | SEXUAL RELATIONS $\square$ RESUMED | $\begin{aligned} & \text { SEXUAL } \\ & \text { RELATIONS } \\ & \text { NOT RESUMED YET } \end{aligned}$ |
|  | $\downarrow$ | (SKIP TO 530) |

518. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 420a, 421)

HAS USED A CONTRACEPTIVE

HAS NEVER USED
A CONTRACEPTIVE METHOD
(SKIP TO 523)
519. Are you or your husband currently using a method to keep you from getting pregnant?

520. What method are you using?
$\qquad$ (METHOD)

## OPEN INTERVAL (CONT:)

521. Have you or your husband used a contraceptive method since the birth of $\qquad$ ( name of last child, or your last pregnancy).


NO 2
(SKIP T0 523)
522. What was the last method you or your husband used?
$\qquad$ (METHOD)
523. Since the birth of $\qquad$ (name of last child, or since your last pregnancy) have there been any times when you and your husband were apart from each other for three months or more?


523a. How many times ? $\qquad$ (TIMES)
524. When were you temporarily apart for the first time for three months or more?

$$
\frac{}{(\text { MONTHS ) }} \frac{19}{\text { (YEAR) }}
$$

or

525. Was that date before or after the birth of (name of last child (or the end of your last pregnancy))?


INTERVIEWER: RECORD INFORMATION ON EACH SEPARATION STARTING WIT'H THE FIRST ONE:

| 526. <br> How many months were you apart for (the first, second, ....... etc.) time? | 527. <br> During that time you were continuously apart without seeing each other, is that right? | 528. <br> Since your last pregnancy were there any other times when you were temporarily apart for three months or more? |
| :---: | :---: | :---: |
| (Months) | $\begin{aligned} & \text { YES } \square \\ & \text { NO } \square \end{aligned}$ $\qquad$ (Probe and correct) | $\begin{aligned} & \text {-YES } \square \text { (Repeat 526-528) } \\ & \text { NO } 2 \text { (Go to 529) } \end{aligned}$ |
| (Months) |  | $\left[\begin{array}{l} \text { YES } \square \text { (Repeat 526-528) } \\ \text { NO } 2 \text { (Go to 529) } \end{array}\right.$ |
| (Months) |  | $\begin{aligned} & \rightarrow \text { YES } \square \text { (Repeat 526-528) } \\ & \text { NO } 2 \text { (Go to } 529 \text { ) } \end{aligned}$ |
| (Months) |  | $\rightarrow$ YES 1 (Repeat 526-528) NO 2 (Go to 529) |




529. Have you returned to live together after this absence? YES 1

NO 2
( Proceed to 530 )

## LAST CLOSED INTERVAL

FOR EVER-MARRIED WOMEN NOT CURRENTLY PREGNANT, WITH TWO OR MORE PREGNANCIES, AND CURRENTLY PREGNANT WOMEN WITH ONE OR MORE PREVIOUS PREGNANCIES.
530. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE LIVE BIRTHS AND OTHER PREGNANCIES TABLE)

(SKIP TO 571)

Next to last Pregnancy (See Live Births and Other Pregnancies Table)
531. INTERVIEWER: RECORD DATE OF BIRTH OR PREGNANCY TERMINATION
(PROBE AGAIN IF MONTH AND YEAR NOT STATED)


Name: $\qquad$ (If available)
532. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 325, 328)
$\left.\begin{array}{lll}\text { LIVE BIPTH } 1 & \begin{array}{l}\text { LIVE BIRTH } 2\end{array} & \begin{array}{l}\text { NON-LIVE } 3 \\ \text { CHILD ALIVE }\end{array} \\ \text { CHILD DEAD }\end{array} \quad \begin{array}{lll}\text { BIRTH, } \\ \text { ABORTION }\end{array}\right)$
533. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 315, 332)




## LAST CLOSED INTERVAL (CONT,)

536. Now I would like to ask you about the period after the birth of (name of last child or "your
last birth"), did you breast-feed $\qquad$ (name, or your last child)?
YES $\square$
(SKIP TO 538)
NO 2
(SKIP TO 541)
537. Now I would like to ask you about the period after the birth of $\qquad$ (name of next-to-last child, or "your next-to-last child"). Did you breast-feed (name, or "your child born before your ast child")?

538. For how many months altogether did you breast-feed him/her?

PROBE: How many months old was he/she when you completely stopped breast-feeding him/her?

|  | STILL <br> BREAST- <br> FEEDING | 8 | UNTIL HE/SHE DIED |  | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (MONTHS) |  |  |  |  |  |
|  | (SKIP TO |  | (SKIP |  | 540 |

539. After $\qquad$ months had you completely stopped breast-feeding your child even once a day?


NO 2
(Correct 538 as necessary then proceed to 540)
540. How many months was the child when you began giving him/her additional food along with breast-feeding?

541. For how long after the birth of this child did you go without sexual relations?

PROBE: How many months old was the child when you resumed sexual relations?

| (DAYS) |
| :--- |
| (SKIP TO 54.3) |

(MONTHS) 40 DAYS


## LAST CLOSED INTERVAL (CONT,)

542. Try to remember whether the interval without sexual relations was exactly forty days or less or more?
$\overline{\text { (DAYS) }} \overline{\text { (MONTHS) }}$
INTERVIEWER: PROBE WELL AND RECORD INTERVAL
543. How many months after the birth of this child did your period come back?

|  | PERIOD NEVER | 8\|7 |
| :---: | :---: | :---: |
| (MONTHS) | CAME BACK, BECAME PREGNANT |  |
| (SKIP TO 547) | AGAIN |  |
|  | (SKIP TO 547) |  |

544. Now I would like to ask you about the time since the termination of your (next-to-last pregnancy or pregnancy before the current one). For how many months did you go without sexual relations?

545. Try to remember whether the interval without sexual relations was exactly forty days or less or more?

> (DAYS) (MONTHS)
(PROBE well and record)
546. How many months after the end of (that, your next-to-1ast) pregnancy did your period come back?

$$
\overline{\text { (MONTHS) }}
$$

PERIOD NEVER


CAME BACK,
BECAME PREGNANT AGAIN
547. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 420a, 421) HAS USED A
CONTRACEPTIVE
METHOD

HAS NEVER USED 2 A CONTRACEPTIVE METHOD
(SKIP TO 550)

LAST CLOSED INTERVAL (CONT,)
548. Was there any time in the interval between your last two pregnancies when you or your husband were using a method to keep you from getting pregnant?
YES 1
NO 2
(SKIP TO 550)

550. During the time between your (last and current, last two) pregnancies. were there any times when you and your husband were apart from each other for three months or more?


550ã. How many times? $\qquad$ (TIMES)
551. During this interval when were you temporarily apart for the first time for three months or more?

$$
\frac{}{\text { (MONTHS) }} \frac{19}{\text { (YEAR) }}
$$

or
(YEARS AGO)
552. Did that absence start before or after the birth of (name of next-to-last child) or (the end of your next-to-1ast pregnancy)?

BEFORE $\frac{\square}{\square}$
AFTER $\frac{2}{4}$
INTERVIEWER: RECORD INFORMATION ON EACH SEPARATION STARTING WITH THE FIRST ONE.

## LAST CLOSED INTERVAL (CONT,)

| 553. <br> How many months were you apart for (the first, second, ....... time? | 554. <br> During that time you were continuously apart with out seeing each other, is that right? | 555. <br> Were you already pregnant when that absence began? | 556. <br> Were there any other times during the interval between your (last two, last and current) pregnancies when you were temporarily apart for 3 months or more? |
| :---: | :---: | :---: | :---: |
| (MONTHS) | $\begin{aligned} & \text { YES } \square \\ & \text { NO } \square \text { (Probe and } \\ & \text { correct) } \end{aligned}$ | YES $\square$ (SKIP TO 571) <br> NO $\square$ $\qquad$ | $\begin{aligned} & \text { YES } \square \text { (Repeat } 553-556 \text { ) } \\ & \text { NO } 2 \text { (SKIP TO } 571 \text { ) } \end{aligned}$ |
| (MONTHS) | YES $\square$ $\longrightarrow$ <br> NO (Probe and correct) | $\left.\begin{array}{\|cc\|} \text { YES } & \square \\ \text { (SKIP TO } \\ 571) \end{array}\right]$ | $\begin{array}{ll} \text { YES } & \boxed{1} \text { (Repeat 553-556) } \\ \rightarrow \text { NO } & 2 \text { (SKIP TO 571) } \end{array}$ |
| (MONTHS) | YES $\square$ <br> N0 (Probe and | $\begin{array}{lll} \text { HES } & \square & \begin{array}{c} \text { (SKIP TO } \\ 571) \end{array} \\ \text { NO } & \square & \\ \hline \end{array}$ | $\begin{aligned} & \text { YES } 1 \text { (Repeat 553-556) } \\ & \text { NO } 2 \text { (SKIP TO 571) } \end{aligned}$ |
| (MONTHS) | YES $\square$ $\longrightarrow$ <br> NO $\square$ (Probe and | $\text { FYES } \begin{array}{ll} \text { (SKIP TO } \\ \text { NO } & \square 71) \end{array}$ | $\begin{cases}\text { YES } & \square \text { (Repeat 553-556) } \\ \text { NO } & 2(\text { SKIP TO } 571)\end{cases}$ |

OPEN AND CLOSED INTERVALS
FOR EVER MARRIED WOMEN WHO HAVE NEVER HAD A PREGNANCY OR ARE CURRENTLY PREGNANT FOR THE FIRST TIME
557. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 201, 205)

561. Are you or your husband currently using a method to keep you from getting pregnant?

562. What method are you using? $\qquad$ (METHOD)
(SKIP TO 564)
563. What was the last contraceptive method you used? $\qquad$ (METHOD)
564. Thinking over your marriage, were there any times when you and your husband were apart from each other for three months or more?


NO 2
(SKIP TO 571)
564a. How many times? $\qquad$


##  <br> 16



17

565. When were you temporarily apart for the first time for three months or more?


INTERVIEWER: CHECK THAT THE DATE GIVEN IS AETER THE DATE IN 203.

| 566. <br> How many months were you apart for the (first, second, ....... time? | 567. <br> During that time you were continuously apart without seeing each other, is that right? | 568. <br> If currently pregnant, ask: Were you already pregnant. when that absence began? | 569. <br> Were there any other times whell you were temporarily apart for 3 months or more? |
| :---: | :---: | :---: | :---: |
| (MONTHS) | YES $\square$ <br> NO $\square$ <br> 2 (Probe and correct) | $\begin{aligned} & \text { YES } \quad 0 \text { (SKIP TO } \\ & \text { NO } \square \square \end{aligned}$ | ```YES }7\mathrm{ (Repeat 566-569) NO 2(SKIP TO 570)``` |
| (MONTHS) | ```YES T1 NO 2 (Probe and correct)``` | $\begin{aligned} & \text { YES } \square \text { (SKIP TO } \\ & \text { NO } \square \square \end{aligned}$ | $\begin{aligned} & \text { YES } \square \text { (Repeat } 566-569 \text { ) } \\ & \text { NO } \quad 2 \text { (SKIP TO 570) } \end{aligned}$ |
| (MONTHS) | YES $\square$ <br> NO $\square$ (Probe and correct) | $\begin{aligned} & \text { YES } \square \text { (SKIP TO } \\ & \text { NO } \square \end{aligned}$ | $\begin{aligned} & \text { YES } 1 \text { (Repeat } 566-569 \text { ) } \\ & \text { NO } \quad 2 \text { (SKIP TO } 570 \text { ) } \end{aligned}$ |
| (MONTHS) | YES $\square$ <br> NO $\square$ (Probe and correct) | $\begin{aligned} & \text { YES } 0 \text { (SKIP T0 } \\ & \text { NO } \square \square \end{aligned}$ | $\begin{array}{ll} \text { YES } & 1 \text { (Repeat } 566-569) \\ \text { NO } & 2 \text { (SKIP TO } 570) \end{array}$ |

570. Have you and your husband returned to live together after this absence?

## YES 1

NO 2
571. Now I want to ask about your menstrual periods. Do your periods usually come at regular intervals?

572. Is the time between your periods usually about a month, or more than a month?
ABOUT ONE 1
MONTH

MORE THAN ONE MONTH

573. For how many days do your periods usually last? $\qquad$ DAYS)

574. INTERVIEWER: CHECK APPROPRIATE BOX (SEE 315, 414, 418)

576. As far as you know, is it physically possible for you and your husband to have a child supposing you wanted one?
YES 1
(SKIP TO 578)

577. Do you think you are in the menopause?
YES 1
NO 2
D.K. 3
(ALL SKIP T0 588)
578. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 313)

$$
\begin{aligned}
& \text { NO LIVE } \square \\
& \text { BIRTH } \\
& \text { (SKIP TO 581) }
\end{aligned}
$$

ONE OR MORE 2
LIVE BIRTH
(SKIP TO 583)
579. Do you want to have another child sometime, in addition to the one you are expecting?

580. How many more children do you want to have after the one you are expecting? $\qquad$ (NUMBER)
(SKIP TO 586)
581. Do you want to have any children?


## $\square$

## $\square$

## $\square$

## $\square$

46


47

582. Would you prefer your first child to be a boy or a girl?

BOY 1 GIRL 2 EITHER 3
Other answer (SPECIFY): $\qquad$
(SKIP T0 536)
583. Do you want to have another child in the future?

584. Would you prefer your next child to be a boy or a girl?
BOY 1 GIRL $2 \quad$ EITHER 3
Other answer (SPECIFY):
585. How many more children do you want to have? $\qquad$
$\qquad$ (NUMBER)
586. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 420a, 421)

| HAS USED A | 1 |
| :--- | :--- |
| CONTRACEPTIVE | HAS NEVER USED |
| METHOD | A CONTRACEPTIVE |
| (SKIP TO 588) |  |
| METHOD |  |

587. Do you think you and your husband may use any method at any time in the future so that you will not become pregnant?

588. If you could choose exactly the number of children to have in your whole life, how many children would that be?
$\qquad$ OTHER ANSWER $\qquad$
(NUMBER)
(SPECIFY)

## $\square$



## SECTION 6: WORK HISTORY

601. As you know, many women work. I mean apart from doing their own housework, some take up jobs for which they are paid in cash or in kind; others sell things, or have a small business, or work on the family farm. Are you doing any such work at the present time?
YES 1
NO 2
602. Have you ever worked since the day when you were first married?

603. In what year did you last work?

19 $\qquad$ (YEAR)

604. I would like to ask some questions about (your present work, the last work you did). What (is, was) your occupation, that is what kind of work (do, did) you do?
$\qquad$
605. INTERVIEWER: CIRCLE APPROPRIATE BOX

606. (Is, was) that your family farm?

(SKIP T0 609)
(SKIP TO 609)
607. (Do, did) you work mostly at home or (do, did) you work mostly away from home in that job?

HOME 1 AWAY 2
608. (Are, were) you employed by some member of your family, or by someone else, or (are, were) you self-employed?


SELFEMPLOYED
(SKIP TO 610)
609. (Do, did) you get paid mostly in cash or mostly in kind? CASH 1 KIND 2 UNPAID 3
610. About how many years in all have you worked since you first were married?
$\qquad$ (YEARS)
611. INTERVIEWER: CIRCLE APPROPRIATE BOX

| NON-SEASONAL $1 \quad$NON-SEASONAL <br> FULL-TIME <br> PART-TIME SEASONAL 3 |
| :--- |

INTERVIEWER: PROBE AS NECESSARY
612. INTERVIEWER: CIRCLE APPROPRIATE BOX (SEE 313)

614. Now let us go back to the time before you were first married. Did you do any work at any time before you were first married?


NO 2
(SKIP TO 701)
615. What kind of work did you do mainly, before you were first married?
616. INTERVIEWER: CIRCLE APPROPRIATE BOX

NON-SEASONAL 1 NON-SEASONAL 2 SEASONAL 3 PART-TIME
FULL-TIME
INTERVIEWER: PROBE AS NECESSARY
617. For how many years altogether did you work before you were first married? $\qquad$ (YEARS)
618. Were you employed by some member of your family, or by someone else, or were you self-employed?
FAMILY

MEMBER $\quad$\begin{tabular}{l}
SOMEONE 2

$\quad$

SELF- <br>
<br>
<br>
ELSE <br>
\end{tabular}

619. Did you get paid mostly in cash or mostly in kind?
CASH 1
KIND 2
UNPAID 3

## SECTION 7: CURRENT (LAST) HUSBAND'S BACKGROUND

701. INTERVIEVER: CIRCLE APPROPRTATE BOX (SEE 201, 205)

702. How old is your husband now?

INTERVIEWER: IF DATE CANDOT BE OBTAINED, ASK FOR AGE, AND IF AGE IS NOT GIVEN, PROBE AND RECORD BEST ESTIMATE.
704. Did your (present, last) husband ever attend school?

$$
\begin{array}{cc}
\operatorname{VES}[1 & \text { NO } 2 \\
\text { (SKIP T0 708) }
\end{array}
$$

705. What was the highest certificate he obtained?

NO CERTIFICATE
PREPARATORY


HIGHER INSTITUTE 5 OR UNIVERSITY
706. What was the highest grade he completed successfully after this certificate?
$\qquad$
707. INTERVIEWER: CIRCLE APPROPRIATE BOX
$\left.\begin{array}{l}\begin{array}{l}\text { LESS THAN } 6 \text { YEARS } \\ \text { SCHOOLING }\end{array} \\ \\ \hline\end{array} \begin{array}{l}6 \text { OR MORE YEARS } 2 \\ \text { SCHOOLING } \\ \text { (SKIP TO 709) }\end{array}\right]$
$\square$ 4


708. (Can, could) he read and write - say, a newspaper or a magazine; or read and write, say a letter? READ AND 1 READ ONLY 2 NEITHER READ 3
WRITE
NOR WRITE
709. In what kind of area did your (present, last) husband live mostly when he was growing up, say to age 12? Was it in a Governorate capital, in a town or in a village.
GOVERNORATE 1 TOWN 2 VILLAGE 3
CAPITAL
710. Now I have some questions about your (present, Tast) husband's work experience. What (is, was) his occupation, that is, what kind of work (does, did) he do?
(IF UNEMPLOYED OR RETIRED, ASK LASTEST OCCUPATION)
$\qquad$
(IF NEVER WORKED END INTERVIEW)
711. (Is, was) he employed by some member of his family, or by someone else, or (is, was) he self-employed?

712. (Does, did) he get paid mostly in cash or mostly in kind?
$\begin{array}{ccc}\text { CASH } \square & \text { KIND } 2 & \text { UNPAID } 3 \\ \text { (END INTERVIEW) } \\ \text { (END INTERVIEW) }\end{array}$
713. (Does, did) he have any regular paid employees in his business?

YES
NO 2
(END INTERVIEW)
714. How many regular paid employees (does, did) he have?
$\qquad$ (NUMBER)

(END INTERVIEW)

INTERVIEWER'S OBSERVATIONS
(TO BE FILLED IN AFTER COMPLETING INTERVIEW)

| DEGREE OF COOPERATION: | BAD | 1 |
| :--- | :--- | ---: |
|  | AVERAGE | 2 |
|  | GOOD | 3 |
|  | VERY GOOD | 4 |

INTERVIEWER'S COMMENTS

Person Interviewed: $\qquad$

Specific Questions: $\qquad$
$\qquad$
$\qquad$
Other Aspects: $\qquad$
$\qquad$
$\qquad$
Name of Inter $\forall i e w e r:$ $\qquad$ Date $\qquad$
$\qquad$

SUPERVISOR'S OBSERVATIONS: $\qquad$
$\qquad$
$\qquad$
$\qquad$

EDITOR'S OBSERVATIONS: $\qquad$
$\qquad$
$\qquad$
$\qquad$ $\longrightarrow$ _

SYRIAN ARAB REPUBLIC
OFFICE OF THE PRIME MINISTER
CENTRAL BUREAU OF STATISTICS
with the collaboration of
INTERNATIONAL STATISTICAL INSTITTUTE WORLD FERTILITY SURVEY


THE SYRIAN FERTILITY SURVEY
1978
COMMUNITY-LEVEL QUESTIONNAİRE

1. Governorate $\qquad$ 2. District $\qquad$
2. Nahiya $\qquad$ 4. Village $\qquad$
3. How far is the village from the capital of the Nahiya? $\qquad$ k.
4. How far is the village from the capital of the District? $\qquad$ km.
5. How far is the village from the capital of the Governorate? $\qquad$ km.

## 11. Public Utilities and Transportation

8. Is the village supplied with electricity? Yes $\square$ No 2
9. If YES to Q.8: what is the source of electricity: public network or private generator? Public $\square$ Private 2
10. Is the village supplied with purified water connected to dwellings?

Yes 1 No 2
11. Does the village have a public sewerage system?

Yes 11 No 2
12. What are the transportation facilities connecting the village with the capital or Nahiya?
a. Hard surfaced road
[1]
2
b. Loose surfaced road
[] 2
c. Railway
[1] 2
d. Unpaved road
[]
2
13. If village is not connected via hard surfaced road ASK: What is the distance between the village and the nearest asphalt road?
$\qquad$ km .
14. What are the transportation facilities used to get to the village?

| a. Bus or Microbus | Yes (1) | No 2 |
| :---: | :---: | :---: |
| b. Taxi | Yes $]$ | No 2 |
| c. Train | Yes 11 | No 2 |
| d. Lorry | Yes 7 | No 2 |
| e. Other | Yes 7 | No 2 |

15. If the village does not have means 1-3 in Q.14, ASK: What is the distance between the village and the nearest of these means of transportation? $\qquad$ km .

## 111. Information on Mass Media and Communication

16. Does the village have a centre for distributing newspapers and magazines regularly?

$$
\text { Yes } 1 \text { No } 2
$$

17. If $N O^{-*}$ to Q.16: ASK:

What is the distance between the village and the nearest centre distributing newspapers? $\qquad$ km .
18. If there a cinema in the village? Yes $\square$ No 2
nearest cinema? $\qquad$ km.
20. Are there any TV sets in the village? Yes 7 No 2
21. If YES to Q .20 : How many approximately? $\qquad$ (sets)
22. Are there any radios in the village? Yes [1] No 2 ]
23. If YES to Q.22: How many approximately? $\qquad$ (radios)
24. Is there a hospital of clinic in the village? Yes 1 No 2
25. If N0 to Q.24: What is the distance between the village and the nearest health clinic? $\qquad$ km.
26. Is there a pharmacy in the village? Ves $\square$ No 2
27. If NO to Q.26; What is the distance between the village and the nearest pharmacy? $\qquad$ km.
28. Is there any MCCC in the village? Yes $\square$ No 2
29. If NO to Q.28; What is the distance between the village and the nearest MCCC? $\qquad$ km.

## V. Information on Availability of Educational Services

30. Is there a primary school in the village? Yes 7 No 2
31. If NO to Q.30: What is the distance between the village and the nearest primary school? $\qquad$ km .
32. Is there a preparatory school in the village? Yes $\square$ No 2
33. If NO to Q.31: What is the distance between the village and the nearest preparatory school? $\qquad$ km .
34. Is there a secondary school in the village? Yes $\square$ No 2
35. If NO to Q.34: What is the distance between the village and the nearest secondary school? $\qquad$ km.
36. Does the village have:

| a. Village Council | Yes $\square$ | No 2 |
| :--- | :--- | :--- |
| b. Rural Couricil | Yes $\square$ | No 2 . |
| c. Elected Assembly | Yes $\square$ | No 2 |

\(\left.$$
\begin{array}{|l}\text { Supervisor's name } \\
\text { Informant's name }\end{array}
$$ \begin{array}{c}Date ___ His occupation <br>

in the village\end{array}\right]\)| 37. |
| :--- |



65

Cluster Number


* If more than one village is included in the cluster, identify them by coding 1, $2 \ldots . .9$ in Col.74.

APPENDIX II
SAMPLE DESIGN, SELECTION AND IMPLEMENTATION

## OBJECTIVE

The objective was to obtain an equal probability sample of households over which the expanded Household Schedule incorporating questions on general mortality would be applied. Since a sample of 14,000 to 15,000 households is generally considered to be the minimum sample size required for the study of general fertility and mortality through a 'long' household schedule, the target for achieved sample size was at least 15,000 completed household questionnaires. Allowing for non-response and other losses, the overall sampling fraction to achieve this sample size has been estimated as $1 / 77$. For the detailed interview of ever-married women in the childbearing ages, the target for achieved sample size was at least 4000 completed individual questionnaires. The sampling fraction for the individual questionnaires was almost exactly one-third of that for the household schedule so that the exact value of one-third was used for convenience. Therefore, 1 in 3 of the households were subsampled with a view of obtaining approximately 4000 eligible women, on the basis that all eligible women would be interviewed in each selected household. Within households so selected, eligibility conditions for the individual interview were: ever-married women under 50 who slept in the household the night before the first visit for the household interview, i.e. on a de facto basis.

The first stage of the sample consisted of the selection of around 200 primary sampling units (PSUs), selected with probability proportional to population size (PPS sampling). The next stage consisted of mapping, where required, to divide PSUs into lower stage area units followed by PPS sampling of those areas, and then listing of dwellings. Finally, listed dwellings were subsampled systematically to yield a sample of households.

## SAMPLING FRAME

The only 'complete' frame available was from the 1970 Census. The 1976 Census was conducted on a sample basis with the exception of the capital city of Damascus for which the 1976 data provided the frame.

The following data were available from the 1970 Census:

1. A list of all localities (including urban areas), giving population figures. The lists have been arranged alphabetically within Mohafazat (singular: Mohafaza) or Governorates. Unfortunately this alphabetical arrangement was not used within smaller administrative units (Mantika and Nahiya) so that all geographical stratification (except by Mohafazat) was lost. It was not possible to obtain more meaningfully arranged lists.
2. A classification of localities as rural or urban. The Census classifies as urban localities which are either larger than

20,000 persons or are the administrative centres for Mantika. Note that many 'urban' areas are smaller than larger villages. These 'urban' areas were classified as such because of certain institutional facilities likely to be present in them.
3. A division of the larger cities into 'quarters' for which the population figures were available. However, major problems in sample selection existed, since (1) not all cities had been divided into quarters, and (2) the quarters usually were rather large area units. On the average, the quarters consisted of 10,000 or more individuals so that a complete listing of dwellings to select the sample was not practicable in most cases. Unfortunately, no smaller geographic units with adequate supplementary information for sample selection were available. It was not possible to divide the quarters into enumerator areas on the basis of census returns, since the enumerators' work was organized by 'street' and it was not possible in general to associate uniquely an area with each enumerator's returns.

The following data were available from the 1976 Census:

1. A list of all quarters in Damascus giving the number of households. Since some areas of Damascus are populated, in the main, by an institutional rather than a household population, the number of households rather than population size was used as the measure of size for PPS sampling as the household figures exclude the institutional population by definition.

## STRATIFICATION

For the selection of the primary sampling units, the frame was divided into four major strata by type of place as follows:

Stratum 1: Large cities (Damascus, Aleppo, Latakkia, Homs and Hama).
Stratum 2: All other localities classified as urban in the Census.
Stratum 3: Large villages, with 1970 population of 5000 or over.
Stratum 4: All other rural areas.
In stratum 1, the 145 quarters in Damascus were grouped into 10 'sectors' and a sample selected independently within each sector. Hence, explicit geographical stratification was introduced for Damascus. The other four main cities formed explicit strata. Localities in stratum 2 and in stratum 3 were selected systematically from lists arranged by Governorate, thus giving implicit stratification by Governorate (though not by any lower stage administrative units). Stratum 4 was explicitly stratified by Governorate.

## SELECTION OF PRIMARY SAMPLING UNITS

The first sampling stage was the selection of 201 primary sampling units (PSUs). In each of the four major strata, areas (quarters, whole cities, towns or villages) were selected systematically with probability proportional to size (PPS). Before sampling, units were combined if they had less than 300 census population. Measures of size for PPS sampling were slightly adjusted to avoid variations in selection probabilities due to rounding, and also to ensure that, for simplicity, the subsampling fraction for obtaining a self-weighting (equal probability) sample of households has only integral values.

Due to the relatively rapid growth of population and high rate of urbanization, it was desirable to update the 1970 population figures. Since the city of Damascus was completely enumerated in 1976, the more recent data were used. In all other areas, the 1976 Census consisted of only a sample enumeration: in the larger cities one-third of the blocks were listed, while one-third of other localities were completely listed (within listed areas, one in ten households were selected for enumeration). Unfortunately certain aspects of the sample for the Census made it not entirely satisfactory for drawing a subsample for the SFS. In any case, the problem of not having suitably small enumeration areas was not solved. Apart from the case of Damascus mentioned above, the more recent data were used only in a few cases where they indicated a significant increase in the quarter's population since 1970. In such cases the 1976 data were projected backwards to 1970, assuming average growth rates to make these data compatible with the other figures.

## CLUSTERING AND STAGES OF THE SAMPLE

To keep the work for mapping, listing and field travel within manageable limits, it was decided that preferably the number of sample areas should not exceed 200. This number of 'clusters' would result in 80-90 sample households for the household schedule and around 25 individual interviews per sample area. Henceforth the term 'cluster size' will be used to indicate the average number of household interviews per PSU. The target cluster size was fixed at 500 persons in terms of the population figures of 1970 (this corresponds to just over 100 households in 1978). This target was applied to the urban areas as well as to villages which were large enough to yield this sample size. If these target cluster sizes were achieved, the sample would have consisted of $160-170$ clusters. However, since many villages are smaller than the target size, the actual number of areas selected slightly exceeds 200.

It should be noted that much of the rural population in Syria is, relatively speaking, quite scattered. Given the large number of small villages in the population, it was neces-
sarily the case that a relatively large number would be selected once the sampling rate had been fixed. One solution could have been to introduce a higher sampling stage, say Nahiya, within which sample villages would have been clustered. However, this potential solution was not available since the given census lists provide villages arranged alphabetically only within Mohafazat, so that the lists were not ordered by Nahiya and it was not feasible to re-arrange manually over 10,000 localities. Nevertheless, in spite of this difficulty, an adequate grouping of small villages by Nahiya was achieved in a vast majority of cases by using the following scheme.

Since the arrangement of villages within Governorates is essentially at random, pages of the census book do not imply significant clustering of units. Hence, by cumulating the population total for each of the 600 -odd pages, it was possible to select pages with PPS. Then for the selected pages, areas were re-arranged so that small villages belonging to Nahiya were grouped together (explicit ordering by size was introduced where feasible). Small villages belonging to Nahiya were then sampled as if they formed a single unit.

The second sampling stage consists of selection of dwellings within sample PSUs. The procedure used applied to every stratum in the sample. At the second sampling stage, each area was subsampled using the fraction ' $f$ ', the inverse of which is equivalent to the sampling interval. Listing of dwellings rather than of households was used, as this has been the practice in previous surveys in Syria. To illustrate the general scheme used, the following example is given. Decision on how exactly to proceed depends upon the second-stage sampling fraction $f$ involved:

1. If $1 / f$ is less than or equal to 1 : The area is to be enumerated completely so that no separate listing operation is required.
2. If $1 / f$ is greater than one but less than or equal to 6: Use listing for the entire area and subsample dwellings systematically applying the appropriate sampling interval.
3. If $1 / f$ is greater than 6 but less than or equal to 16: Here an additional operation, namely mapping, is involved. Mapping means dividing an area into a number of subareas, of approximately known size if possible, and selection of one or more subareas which can then be listed as usual. Since the areas requiring subdivision will be quite large (over 600-700 households on the average), it is preferable to obtain good distribution of the sample by selecting more than one, say two, subareas within each sample PSU. Proceed by dividing the area into $1 / \mathrm{f}$ subeareas of reasonably (i.e. as far as possible) equal size. Rank these areas by size and pair the largest with the smallest, the next-to-largest with the next-to-smallest, etc. Select one pair. List it and select one in two of the listed dwellings. (If $1 / \mathrm{f}$ is odd, this procedure will require slight modification.)
4. For larger values of $1 / f$ : Use the same procedure with the modification that the number of area units created is proportionately reduced, and the sampling interval for subsampling is appropriately increased. For example, if $1 / \mathrm{f}=32$, one may divide the PSU into 16 parts, select and list two parts and then subsample dwellings from the
lists with the interval one in four. For extremely large values of $1 / \mathrm{f}$, it was necessary to introduce two area stages within PSUs. The largest and, of course, quite exceptional value of $1 / \mathrm{f}$ encountered in the present sample was 76.

Section III. 1 introduces certain basic ideas about sampling errors; readers already familiar with them may skip to section III.2. Section III. 3 presents procedures for approximating sampling errors when sampling errors are not given and the computational formulae used in the sampling error calculations.

## III.1. INTRODUCTION

## Interpretation of Sampling Errors

The particular sample obtained in the survey is one of a large number of all possible probability samples which could have been selected using the given sample design. The estimates derived from different samples would differ from each other. However, apart from non-sampling errors and bias, all estimates considered in this study are approximately unbiased, meaning that the true population value of interest is approximated by an average of the estimates from the various possible samples. This average from different samples is called the 'expected value'. The sampling error or standard error of an estimate is a measure of the difference between the observed sample estimate and the expected value of the estimate. Apart from non-sampling errors, the standard error in the present context measures the size of the expected deviation of the sample estimate from the true population value of interest.

A common and convenient criterion asserts that the true value lies within a range of twice the standard error on either side of the sample value. The range (sample value) $\pm 2$ (standard error) is called the ' 95 per cent confidence interval', and one can say that the odds are only one in twenty that the true value lies outside this range. If, for example, the observed sample mean for a variable is 3.5 and if the standard error (to an appropriate sample base) has been estimated as 0.2 , then the ' 95 per cent confidence interval' is $3.5 \pm 2(0.2)$, i.e. 3.1 to 3.9 , and for practical purposes, i.e. with 95 per cent confidence, one asserts that (apart from non-sampling errors) the true population value of interest lies in the range 3.1 to 3.9 .

## Computation of Sampling Errors

One of the advantages of a probability sample such as the present one is that the sampling errors can be estimated from the results of the one sample which is actually available.

The computational procedure must take into account the actual structure of the sample and in particular the fact that the sample is a stratified clustered sample. The results given in this appendix have been computed by using the WFS package program clusters. An outline of the procedure for estimating sampling errors is given in section III. 3 below.

## Sampling Errors for Subclasses and Subclass Differences

To be useful in the interpretation of the substantive results presented in the form of detailed cross-tabulations, sampling errors for each of the important variables have to be computed over various subclasses of the sample. By subclass is meant a subset of the sample cases defined in terms of characteristics such as individual age or marriage duration groups, or groups by socio-economic background, etc. Due to the smaller sample bases involved, sampling errors for individual subclasses obviously tend to be larger than the error in an estimate based on the entire sample.

The computational formulae given in section III. 3 below apply also for estimates computed over a particular subclass of the sample. Individuals or PSUs not belonging to the subclass are simply ignored in the computation. Interpretation of the standard error in terms of the ' 95 per cent confidence interval' given above applies equally to the whole sample as well as to any particular sample subclass.

Sampling errors for differences between subclass means can be particularly relevant in the interpretation of fertility and other differentials observed from the survey results. These determine the likelihood that an observed difference is real and not caused merely by sampling variation. Even for a relatively 'efficient' sample such as the present one, many observed differentials may not be statistically significant once the sample has been subdivided by the introduction of necessary control variables.

For differences between subclass means, we may regard an observed difference to be 'statistically significant' if the magnitude of the difference is not smaller than twice its standard error. 'Statistically significant', of course, does not necessarily mean substantively significant or meaningful; it implies rather that the observed difference is real in the sense that it is unlikely to be caused merely by sampling variation. If the magnitude of the observed difference is smaller than twice its standard error, we may take it to be statistically (and hence substantively) 'not significant', implying that it cannot be asserted that the observed difference is not caused merely by sampling variation.

If, for example, for two sample subclasses being compared, the observed subclass means for a variable are 3.0 and 3.5 respectively, and if for the difference of the two means (3.5-3.0 $=0.5$ ), the standard error has been computed to be 0.1 , then the ' 95 per cent confidence interval' for the difference is $0.5 \pm 2(0.1)$, that is, 0.3 to 0.7 . In this example, one may assert that the true difference lies in the range 0.3 to 0.7 . The observed difference is 'statistically significant' (the observed magnitude of the difference, 0.5 , is greater than twice the standard error). ${ }^{1}$ Now, if in the above example the

[^36]standard error for the difference was 0.4 , the ' 95 per cent confidence interval' for the difference would be $0.5 \pm 2(0.4)$, that is, -0.3 to 1.3 . In this second case, it cannot be asserted that the observed difference is real, and not caused merely by sampling variation. Note that in the second example, the observed difference (0.5) is smaller than twice its standard error ( 0.8 ), which is the same as the observation that the ' 95 per cent confidence interval' includes the value zero.

## Effect of Clustering of the Sample

In the present sample, the individuals interviewed are clustered into a number of sample areas. Compared to a sample of individuals selected entirely at random, clustering tends to reduce efficiency of the sample (i.e. increase associated sampling errors, for a given sample size). This is because individuals from within a cluster tend to be more uniform compared to individuals in the sample (or the population) as a whole. In a sense, less new information is obtained by interviewing a number of individuals from the same sample area as compared to that obtained from an entirely random sample of the same size.

A measure comparing the standard error of an estimate from the actual clustered sample with what the error would have been had the sample been selected entirely at random is called the 'Design Effect' or DEFT.

$$
\begin{equation*}
\mathrm{DEFT}=\mathrm{SE} / \mathrm{SR} \tag{1}
\end{equation*}
$$

where SE is the standard error for the clustered sample (computed from equation (2) given in section III.3), and SR is the standard error computed as if the sample had been selected entirely at random (equation (3) in section III.3).

For a particular sample design, cluster size, and variable, DEFT is a measure of the loss of sampling precision due to clustering of the sample. The two main factors on which its magnitude depends are the average cluster size and the relative homogeneity (corresponding to a particular variable) within these clusters. For samples (or subclasses thereof) with very small clusters, or for variables with little withincluster homogeneity, DEFT can be expected to approach unity, which implies that no sampling precision has been lost through clustering.

The last point mentioned above is of particular relevance in the present context where sampling errors for sample subclasses or subclass differences, rather than for the sample as a whole, are the main concern. The effective cluster sizes for sample subclasses, and especially for their differences, can be much smaller than the cluster sizes for the total sample, making DEFT smaller (nearer unity), that is, making the loss in sampling efficiency due to clustering generally
less significant than would be the case if estimates based on the total sample were the main objective of the survey.

## IH.2. DISCUSSION OF ThE MAIN RESULTS

The WFS package program CLUSTERS has been used to compute sampling errors for variables of substantive interest. For each variable, sampling errors were computed over the whole sample, as well as for various subclasses and differences for pairs of subclasses. Then this entire set was repeated for the urban and rural areas separately.

## Definition of the Variables

Sampling errors have been computed for the following variables based on the individual questionnaire.

1. Age at first marriage - Mean age at first marriage for ever-married women aged $15-49 .{ }^{2}$
2. Age at first marriage $(<25)-$ Mean age at first marriage for women aged 25-49 who married before age $25 .^{2}$
3. First marriage dissolved - Per cent of ever-married women whose first marriage was dissolved.
4. Time spent in union - Per cent of time spent in union since first marriage.
5. Currently married - Per cent of women who are currently married.
6. Births in first five years - Mean number of births before or during the first five years of first marriage, for women married at least five years ago.
7. Births in past five years - Mean number of births during the past five years, for women who have been continuously married in the past five years.
8. Currently pregnant - Per cent of currently married women who are currently pregnant.
9. Children ever born - Mean number of children ever born to women.
10. Living children - Mean number of living children born to women.
11. Breastfed in closed interval - Per cent of women with at least two live births or one live birth and a current pregnancy who breastfed in the last closed interval.
12. Wants no more children - Per cent of currently married fecund women who want no more children.
13. Additional number wanted - Mean additional number of children wanted by currently married fecund women. (Undecided women are coded as wanting zero additional children.)
14. Desired family size - Mean total of children desired by currently married women.

[^37]15. Knows effective contraceptives - Per cent of women who have heard of at least one effective method of contraception.
16. Ever used contraceptives - Per cent of women who have ever used any method of contraception.
17. Ever used effective methods - Per cent of women who have ever used any effective method of contraception.
18. Currently using (exposed) - Per cent of currently married fecund or contraceptively sterilized women who are currently using any method of contraception.
19. Using effective (exposed) - Per cent of currently married fecund or contraceptively sterilized women who are currently using any effective method of contraception.
20. Wants no more children and using effective methods (exposed) - Of currently married fecund or contraceptively sterilized women who want no more children, the per cent who are currently using any effective method of contraception.
21. Never used contraception - Per cent of currently married women who have never used contraception.
22. Used contraception in past - Per cent of currently married women who have used contraception in the past.
23. Currently using contraception - Per cent of currently married women who are currently using contraception.

Sampling errors have been computed for the following variables on the household questionnaire.

1. Children ever born (ever-married) - Mean number of children ever born to ever-married women.
2. Children ever born (all) - Mean number of children ever born to all women.
3. Children dead (ever-married) - Per cent of children who have died for ever-married women.
4. Age-specific fertility rate - Proportion of women giving birth in the last 12 months classified by age at interview.
5. Ever-married - Per cent ever-married.
6. Currently married - Per cent currently married.
7. Women with father alive - Per cent of women with father alive.
8. Eldest daughters with father alive - Per cent of eldest daughters with father alive.
9. Women with mother alive - Per cent of women with mother alive.
10. Eldest daughters with mother alive - Per cent of eldest daughters with mother alive.
11. Women with husband alive - Per cent of ever-married women with first husband alive. (Note that the 'question' whether first spouse is alive was not asked to all ever-married couples. Excluded were those who had been married only once and were currently divorced. In the text tables the proportions have been adjusted to account for this omission. No such correction was made in the estimates output from CLUSTERS, hence the slight discrepancies in the two sets of figures.)

## Estimates over the Total Sample

Table III. 1 shows sampling errors computed over the total sample for the variables based on the individual questionnaire. For each variable the following quantities are shown.
$i \quad=$ The ratio, mean, proportion or percentage estimated for the whole sample. Note that estimates given as proportions may be changed to percentages by shifting the decimal point two places to the right. In such cases, the standard errors given for the proportions must be multiplied by 100 to correspond to percentages. Similarly, estimates given as percentages may be changed to proportions by shifting the decimal point two places to the left. In such cases, the standard errors given for the percentages must be divided by 100 to correspond to proportions.
SE = Standard error for the actual clustered sample (defined by equation (2) given below).
$95 \%$ CON. INT.
$=$ The '95 per cent confidence interval' defined earlier is $\mathrm{r} \pm 2 \mathrm{SE}$.
$\mathrm{n} \quad=$ The appropriate unweighted sample base. The sample for Syria consists of 4487 completed individual interviews. However, only a minority of the variables are defined for the entire sample of 4487 women. Many of the variables are relevant only for subpopulations satisfying certain criteria; for example, the variable 'births in past 5 years' has been defined only for the 3252 women who have continuously married for the past five years.
$\mathrm{s} \quad=$ Standard deviation, defined as $\mathrm{s}=\mathrm{SR} \sqrt{ } \mathrm{n}$, where SR is the standard error computed on the assumption that the sample of individuals was selected entirely at random. Though $s$ is estimated from the sample results, it is a characteristic of the study population, not of a particular sample design or sample size.

DEFT $=$ The Design Effect, DEFT $=$ SE/SR, (see equation (1) above). It measures the sampling efficiency lost due to clustering of the sample. DEFT values near unity imply that little has been lost by clustering of respondents into sample areas.
$\mathrm{b} \quad=$ The average 'cluster size', i.e. the (unweighted) average number of interviews per PSU. For the sample as whole $b=4487 / 201=22.32$. The value is smaller if a variable is not applicable to all individuals in the sample.

For the total sample, sampling errors for variables taken from the individual questionnaire are relatively small - under

6 per cent of the mean. ${ }^{3}$ However, the DEFT values encountered are relatively large. The overall average DEFT is around 1.46 , implying that the variance (the square of the standard error) is more than twice as large as it would have been for a sample of the same size selected entirely at random. DEFT for the variables concerning contraception tends to be somewhat larger than the average for the other groups of variables.

## III.3. SOME TECHNICAL CONSIDERATIONS

## Computational Formulae

In outline, the procedure used for estimating sampling errors for a stratified clustered sample is as follows.

Consider a ratio statistic $r=y / x$, where $y$ and $x$ are two variables the ratio of which is being estimated. (The procedure also applies to estimates like means, proportions or percentages which can be regarded as special cases of ratios.) Let the suffix ' $j$ ' represent an individual, suffix ' $i$ ' the PSU to which the individual belongs, and suffix ' $h$ ' the stratum in which the PSU lies. Hence,
$y_{h i j}=$ value of variable $y$ for the individual $j$, in PSU i and stratum h ,
$W_{h i j}=$ sample weight for the individual,
$y_{h i}=\sum_{j} W_{h i j} \cdot y_{h i j}$, the weighted sum of $y$ 's for all individuals in the PSU,
$y_{h}=\sum_{i} y_{h i}$, the sum of $y_{h i}$ for all PSUs in the stratum, and

$$
y=\Sigma_{h} y_{h}, \text { the sum of } y_{h} \text { for all strata in the sample. }
$$

Similar expressions can be defined for variable x .
The variance ( $=\mathrm{SE}^{2}$, square of the standard error) of the ratio estimate $r=y / x$ is estimated as

$$
\begin{equation*}
S^{2}=\operatorname{var}(r)=\frac{1-f}{x^{2}} \sum_{h=1}^{H}\left[\frac{m_{h}}{m_{h}-1}\left(\sum_{i=1}^{m_{h}} z_{h i}^{2}-\frac{z_{h}^{2}}{m_{h}}\right)\right] \tag{2}
\end{equation*}
$$

where
$\mathrm{f}=$ overall sampling fraction, here negligible,
$m_{h}=$ number of PSUs in stratum $h$,
$\mathrm{H}=$ number of strata in the sample,

[^38]$r=$ ratio of the two sample aggregates $y$ and $x$.
\[

$$
\begin{aligned}
& z_{h i}=y_{h i}-r \cdot x_{h i}, \text { and } \\
& z_{h}=\sum_{i} z_{h i}=y_{h}-r \cdot x_{h}
\end{aligned}
$$
\]

Equation (2) applies also for estimates computed over a particular subclass of the sample. Individuals or PSUs or strata not belonging to the subclass are simply ignored in the computation. The summations (' $\Sigma$ ') are taken over only the units belonging to the subclass being considered.

SR, the standard error of a ratio estimate $r$ corresponding to an equivalent sample selected entirely at random, is required to estimate $\mathrm{DEFT}=\mathrm{SE} / \mathrm{SR}$, and is given by

$$
\begin{equation*}
\mathrm{SR}^{2}=\frac{1-\mathrm{f}}{\mathrm{n}-1}\left(\Sigma \mathrm{w}_{\mathrm{hij}} \mathrm{z}_{\mathrm{hij}}^{2} / \Sigma \mathrm{w}_{\mathrm{hij}}\right) \tag{3}
\end{equation*}
$$

where $z_{h i j}=y_{h i j}-r . x_{h i j}$,
and $r$ is the ratio estimate,

$$
r=y / x=\Sigma w_{h i j} y_{h i j} / \Sigma w_{h i j} x_{h i \mathbf{j}}
$$

n is the total sample size, and ' $\Sigma$ ' is the sum for all individuals over the sample. As before, means, proportions, or percentages are merely special cases of ratios.

The variance of the difference of two subclass means for a stratified clustered sample is given by the following formulae. Denoting the second subclass in the pair by a prime ( ${ }^{\prime}$ ),

$$
\begin{equation*}
\mathrm{SE}_{\mathrm{r}-\mathrm{r}^{\prime}}^{2}=\operatorname{var}\left(\mathrm{r}-\mathrm{r}^{\prime}\right)=\operatorname{var}(\mathrm{r})+\operatorname{var}\left(\mathrm{r}^{\prime}\right)-2 \operatorname{cov}\left(\mathrm{r}, \mathrm{r}^{\prime}\right) \tag{4}
\end{equation*}
$$

where $\operatorname{var}(\mathrm{r})$ and $\operatorname{var}\left(r^{\prime}\right)$ are given by equation (2) and the covariance is given by

$$
\begin{equation*}
\operatorname{cov}\left(r, r^{\prime}\right)=\frac{1-\mathrm{f}}{\mathrm{xx}^{\prime}} \sum_{\mathrm{h}=1}^{\mathrm{H}}\left[\frac{m_{\mathrm{h}}}{\mathrm{~m}_{\mathrm{h}}-1}\left(\sum_{\mathrm{i}=1}^{\mathrm{m}_{\mathrm{h}}} z_{\mathrm{hi}} \cdot z_{\mathrm{hi}}^{\prime}-\frac{\mathrm{z}_{\mathrm{h}} \mathrm{z}_{\mathrm{h}}^{\prime}}{m_{\mathrm{h}}}\right)\right] \tag{5}
\end{equation*}
$$

Usually $\operatorname{cov}\left(\mathrm{r}, \mathrm{r}^{\prime}\right)$ is positive due to positive correlation between individuals in the two subclasses who belong to the same cluster in the sample.

The household sampling error tables also include rates of homogeneity ( ROH ), which indicate to what extent responses for a particular variable are more homogeneous within PSUs than in the sample as a whole. ROH is calculated as:

$$
\begin{equation*}
\mathrm{ROH}=\frac{\mathrm{DEFT}^{2}-1}{\mathrm{~b}-1} \tag{6}
\end{equation*}
$$

where $b$ is the mean PSU size. (To find ROH values for the individual questionnaire responses, the mean PSU size $=4487 / 201=22.32$.)

## Strata Needed for the Sampling Errors Computations

Before selection of a sample, the population is usually divided into a number of parts called strata which are expec. ted to be homogeneous in some way, and PSUs are then selected from each stratum independently. The aim of stratification is to reduce sampling errors, or sometimes to permit a change in sample design or sampling rate between strata. It should be noted that the strata used for computation of sampling errors are not necessarily identical to the original explicit strata used in sample selection. The difference between the two may arise for two main reasons:

1. Whenever PSUs are selected by systematic sampling from an ordered list, i.e. selection at a fixed interval from a list starting from a randomly determined point, neighbouring selected PSUs should be grouped, two at a time if possible, three if not, within explicit strata to form new smaller 'implicit' strata which are used for sampling error computations. In the case of an explicit stratum in which an odd number of PSUs (greater than three) have been selected by systematic sampling, there will be a choice to be made as to where in the ordered list to make the grouping of three. A simple rule for this is as follows: look for the smallest sized PSU. (i) If this is at the beginning (end) of the list in that explicit stratum, make the group of three the first (last) three members of the list. (ii) Otherwise, make the group of three around the smallest PSU and the smaller of its two neighbours, bearing in mind that the first member of any group (whether of two or of three) must be odd-numbered as counted from the beginning of the list in that explicit stratum.
2. Sampling error computations require that there be at least two PSUs per stratum. Any strata from each of which only one PSU has been selected must be 'collapsed' together to form pairs (or other groups) of PSUs. Such grouping is done on the basis of characteristics of the whole strata population (pairing most similar strata), and not on the characteristics of selected PSUs. Collapsing of strata in this way tends to lead to slight overestimation of the sampling error.

For CLUSTERS the strata to be defined are obviously those which are to be used for sampling error computations and these strata are identified on the WFS standard recode tapes. The original explicit strata, if they differ from the above, are of no interest.

## Approximating Standard Errors when Standard Errors are Not Given

## Approximating standard errors for sample subclasses

Under the assumption that only the size of a subclass, not its nature, affects the sampling error, the standard error for a subclass of any size is well approximated from the results computed over the total sample as follows. We use the suffix ' $t$ ' to refer to the total sample (of size $n_{t}$ ) and the suffix ' $s$ '
to refer to any subclass (of size $n_{s}$ ). The approximate relationship (empirically valid añ an approximate sense)

$$
\begin{equation*}
\mathrm{SE}_{\mathrm{s}}=\mathrm{f}_{\mathrm{s}} \cdot \mathrm{SE}_{\mathrm{q}} \tag{7}
\end{equation*}
$$

where $f_{s}$ is a factor determined semi-empirically as

$$
\begin{equation*}
f_{s}=\left[\frac{n_{t}}{n_{s}}+\left(\frac{\bar{n}_{t}}{n_{s}}\right)^{2 / 3} \cdot\left(\mathrm{DEFT}_{t}^{2}-1\right)\right]^{1 / 2} / \mathrm{DEFT}_{t} \tag{8}
\end{equation*}
$$

can be used to approximate the standard error for a sample subclass. Note that $f_{s}$ depends only on the results for the total sample and the proportion of the sample belonging to the subclass.

Note that the above equations are applied separately to each of the substantive variables of interest. For certain variables, e.g. the mean number of children ever born, these equations were found inadequate for predicting SEs for certain subclasses and the values determined from the above equations required some adjustment to make them better correspond to the results actually computed. Those variables strongly related to the life cycle, i.e. to age or marriage duration, have a standard error which is obviously related to the mean or proportion being estimated, which in turn varies considerably from one subclass to another. Nevertheless we find that in these particular cases, the exceptional subclasses (with, say, an exceptionally low value of the mean or proportion for the variable) can be dealt with by multiplying SEs by a simple adjustment factor such as 0.5.

## Approximating standard errors for subclass differences

The standard error for subclass differences can be approximated by assuming that the standard error for the difference is 'mid-way' between two limits: the higher limit assuming there is no covariance term in equation (4) (actually the covariance is generally positive), and the lower limit assuming that there is no effect at all of clustering of the sample. The procedure is based on the assumption that equations (7) and (8) are valid also for the standard error of the difference of two subclass means if $n_{s}$ in (8) is replaced by $n_{d}$, half the harmonic mean of the two subclass sizes, i.e.

$$
\begin{equation*}
\mathrm{n}_{\mathrm{d}}=\frac{\mathrm{n}_{1} \cdot \mathrm{n}_{2}}{\mathrm{n}_{1}+\mathrm{n}_{2}} \tag{9}
\end{equation*}
$$

Note that the upper and lower limits are usually not widely apart in practice, since $n_{d}$ tends to be much smaller than $n_{s}$.

## Variation of DEFT with subclass size

Under the assumption that only the size of a subclass, not its nature, affects the sampling error, equations (7) and (8) are equivalent to

$$
\begin{equation*}
\frac{\mathrm{DEFT}_{\mathrm{s}}^{2}-1}{\mathrm{DEFT}_{\mathrm{t}}^{2}-1}=\left(\mathrm{n}_{\mathrm{s}} / \mathrm{n}_{\mathrm{t}}\right)^{1 / 3} \tag{10}
\end{equation*}
$$

Equation (10) implies that for small subclasses, i.e. subclasses with size $n_{s}$ much smaller than $n_{t}$, DEFT for the subclass tends to one. In other words, loss in sampling precision due to clustering of the sample tends to become smaller for smaller subclasses. In the present context, this means that where survey estimates for relatively small subclasses such as five-year age of marriage cohorts are of major interest, the effect of clustering of the sample tends to be relatively less important. For example, for a subclass with $n_{s} / n_{t}=0.1$ and $\mathrm{DEFT}_{\mathrm{t}}=2.0$, the corresponding $\mathrm{DEFT}_{\mathrm{s}}$ is around 1.5.

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Table III.I - Sampling errors over the total sample

| Variable name | Mean or per cent | Mean or per cent SE -2SE |  | Mean or per cen $+2 S E$ | n | $s$ | DEFT | b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age at first marriage | 18.04 | . 08 | 17.88 | 18.20 | 4481 | 4.18 | 1.30 | 22.3 |
| Age at first marriage (<25) | 17.60 | . 07 | 17.45 | 17.75 | 2881 | 3.18 | 1.24 | 14.3 |
| First marriage dissolved | 7.06 | . 42 | 6.23 | 7.90 | 4487 | 25.63 | 1.09 | 22.3 |
| Time spent in union | 97.71 | . 16 | 97.38 | 98.04 | 4487 | 11.50 | . 95 | 22.3 |
| Currently married | 96.10 | . 33 | 95.45 | 96.75 | 4487 | 19.36 | 1.13 | 22.3 |
| Births in first 5 years | 2.01 | . 02 | 1.97 | 2.05 | 3440 | 1.02 | 1.10 | 17.1 |
| Births in past 5 years | 1.59 | . 03 | 1.53 | 1.64 | 3252 | 1.18 | 1.41 | 16.2 |
| Currently pregnant | 20.57 | . 74 | 19.09 | 22.05 | 4312 | 40.43 | 1.20 | 21.5 |
| Children ever born | 4.74 | . 06 | 4.62 | 4.86 | 4487 | 3.36 | 1.19 | 22.3 |
| Living children | 4.22 | . 05 | 4.12 | 4.32 | 4487 | 2.93 | 1.15 | 22.3 |
| Breastfed in closed interval | 84.06 | . 70 | 82.66 | 85.45 | 3738 | 36.61 | 1.16 | 18.6 |
| Wants no more children | 36.49 | 1.16 | 34.16 | 38.81 | 3785 | 48.15 | 1.48 | 18.8 |
| Additional number wanted | 2.19 | . 08 | 2.04 | 2.34 | 3640 | 2.91 | 1.58 | 18.3 |
| Desired family size | 6.12 | . 10 | 5.93 | 6.31 | 4006 | 3.35 | 1.82 | 19.9 |
| Knows effective contraceptives | 76.82 | 1.28 | 74.27 | 79.38 | 4487 | 42.20 | 2.03 | 22.3 |
| Ever used contraceptives | 33.10 | 1.43 | 30.23 | 35.96 | 4487 | 47.06 | 2.04 | 22.3 |
| Ever used effective methods | 29.08 | 1.24 | 26.61 | 31.56 | 4487 | 45.42 | 1.83 | 22.3 |
| Currently using (exposed) | 29.47 | 1.56 | 26.36 | 32.58 | 2898 | 45.60 | 1.84 | 14.4 |
| Using effective (exposed) | 22.39 | 1.21 | 19.98 | 24.81 | 2898 | 41.70 | 1.56 | 14.4 |
| Wants no more \& using eff. (exp.) | 39.34 | 1.80 | 35.74 | 42.94 | 1093 | 48.87 | 1.22 | 5.7 |
| Never used contraception | 66.42 | 1.45 | 63.52 | 69.32 | 4312 | 47.23 | 2.02 | 21.5 |
| Used contraception in past | 13.78 | . 79 | 12.19 | 15.36 | 4312 | 34.47 | 1.51 | 21.5 |
| Currently using oontraception | 19.81 | 1.11 | 17.59 | 22.02 | 4312 | 39.86 | 1.82 | 21.5 |

Table III.2a - Sampling errors by current age

|  | Variable name | $<20$ |  |  |  | 20-24 |  |  |  | 25-29 |  |  |  | 30-34 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFFT |
|  | Age at first marriage | 15.22 | . 10 | 436 | 1.21 | 16.96 | . 09 | 824 | . 97 | 18.10 | . 13 | 810 | 1.05 | 18.22 | . 17 | 700 | 1.07 |
|  | Age at first marriage (<25) | . 00 | . 00 | 0 | . 00 | . 00 | . 00 | 0 | . 00 | 17.71 | . 12 | 771 | 1.07 | 17.33 | . 13 | 637 | 1.04 |
|  | First marriage dissolved | 1.81 | . 64 | 442 | 1.01 | 2.91 | . 58 | 824 | . 99 | 3.83 | . 72 | 810 | 1.07 | 7.86 | . 97 | 700 | . 95 |
|  | Time spent in union | 99.46 | . 26 | 442 | 1.02 | 99.18 | . 18 | 824 | . 86 | 98.71 | . 31 | 810 | 1.04 | 97.62 | . 36 | 700 | . 94 |
|  | CurrentJy married | 98.42 | . 60 | 442 | 1.01 | 98.30 | . 39 | 824 | . 86 | 98.15 | . 56 | 810 | 1.18 | 97.00 | . 69 | 700 | 1.07 |
|  | Births in first 5 years | 2.03 | . 15 | 38 | 1.06 | 2.10 | . 05 | 391 | 1.01 | 2.09 | . 04 | 652 | . 95 | 2.03 | . 05 | 662 | 1.18 |
|  | Births in past 5 years | 2.28 | . 16 | 36 | 1.02 | 2.41 | . 05 | 382 | 1.08 | 2.14 | . 04 | 632 | 1.00 | 1.77 | . 05 | 631 | 1.28 |
| $\bigcirc$ | Currently pregnant | 31.26 | 2.41 | 435 | 1.08 | 31.48 | 1.60 | 810 | . 98 | 25.91 | 1.77 | 795 | 1.14 | 22.53 | 1.84 | 679 | 1.15 |
|  | Children ever born | . 88 | . 04 | 442 | . 97 | 2.16 | . 06 | 824 | 1.10 | 3.70 | . 08 | 810 | 1.08 | 5.21 | . 10 | 700 | 1.06 |
|  | Living children | . 81 | . 04 | 442 | . 99 | 1.99 | . 05 | 824 | 1.10 | 3.39 | . 07 | 810 | 1.09 | 4.72 | . 09 | 700 | 1.05 |
|  | Breastfed in closed interval | 88.44 | 2.41 | 147 | . 91 | 86.31 | 1.35 | 599 | . 96 | 87.55 | 1.26 | 707 | 1.02 | 83.82 | 1.53 | 655 | 1.06 |
|  | Wants no more children | 4.85 | . 96 | 433 | . 92 | 15.14 | 1.50 | 799 | 1.18 | 28.92 | 1.62 | 778 | 1.00 | 46.82 | 2.26 | 628 | 1.14 |
|  | Additional number wanted | 3.83 | . 13 | 401 | . 96 | 3.16 | . 13 | 759 | 1.16 | 2.41 | . 12 | 748 | 1.06 | 1.69 | . 14 | 607 | 1.27 |
|  | Desired family size | 5.03 | . 13 | 409 | 1.03 | 5.49 | . 14 | 756 | 1.25 | 6.01 | . 13 | 746 | 1.04 | 6.18 | . 16 | 625 | 1.21 |
|  | Knows effective contraceptives | 71.95 | 2.83 | 442 | 1.32 | 77.43 | 1.98 | 824 | 1.36 | 78.27 | 1.70 | 810 | 1.17 | 80.43 | 1.56 | 700 | 1.04 |
|  | Ever used contraceptives | 16.29 | 1.83 | 442 | 1.04 | 27.18 | 2.07 | 824 | 1.33 | 33.09 | 1.98 | 810 | 1.19 | 40.71 | 2.50 | 700 | 1.35 |
|  | Ever used effective methods | 13.12 | 1.78 | 442 | 1.11 | 22.82 | 1.82 | 824 | 1.24 | 29.14 | 1.77 | 810 | 1.11 | 37.57 | 2.32 | 700 | 1.27 |
|  | Currently using (exposed) | 12.46 | 2.23 | 297 | 1.16 | 22.43 | 1.92 | 544 | 1.07 | 26.22 | 2.14 | 572 | 1.16 | 34.53 | 3.01 | 475 | 1.38 |
|  | Using effective (exposed) | 9.43 | 1.84 | 297 | 1.08 | 17.46 | 1.67 | 544 | 1.02 | 20.63 | 2.02 | 572 | 1.19 | 27.58 | 2.67 | 475 | 1.30 |
|  | Wants no more \& using eff. (exp.) | 33.33 | 19.25 | 6 | . 91 | 22.22 | 4.64 | 72 | . 94 | 42.95 | 4.38 | 149 | 1.08 | 45.95 | 3.92 | 222 | 1.17 |
|  | Never used contraception | 83.68 | 1.84 | 435 | 1.04 | 72.84 | 2.10 | 810 | 1.34 | 66.67 | 1.97 | 795 | 1.18 | 58.91 | 2.58 | 679 | 1.37 |
|  | Used contraception in past | 7.82 | 1.21 | 435 | . 94 | 12.10 | 1.33 | 810 | 1.16 | 14.47 | 1.36 | 795 | 1.09 | 16.94 | 1.87 | 679 | 1.30 |
|  | Currently using contraception | 8.51 | 1.59 | 435 | 1.18 | 15.06 | 1.35 | 810 | 1.07 | 18.87 | 1.54 | 795 | 1.11 | 24.15 | 2.36 | 679 | 1.43 |



| Variable name | $<25$ |  |  |  | 25-34 |  |  |  | 35-44 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFFT |
| Age at first marriage | 16.36 | . 07 | 1260 | 1.06 | 18.16 | . 12 | 1510 | 1.16 | 19.20 | .17 | 1191 | 3.20 |
| Age at first marriage (<25) | . 00 | . 00 | 0 | . 00 | 17.54 | . 10 | 1408 | 1.19 | 17.74 | . 11 | 1026 | 1.11 |
| First marriage dissolved | 2.53 | . 46 | 1266 | 1.04 | 5.70 | . 62 | 1510 | 1.03 | 8.65 | . 93 | 1191 | 1.14 |
| Time spent in union | 99.23 | . 15 | 1266 | . 87 | 98.08 | . 26 | 1510 | 1.01 | 98.30 | . 23 | 1191 | 1.11 |
| Currently married | 98.34 | . 34 | 1266 | . 95 | 97.62 | . 43 | 1510 | 1.10 | 95.72 | . 68 | 1191 | 1.17 |
| Births in first 5 years | 2.09 | . 04 | 429 | . 99 | 2.06 | . 03 | 1314 | 1.13 | 2.00 | . 03 | 1179 | 1.11 |
| Births in past 5 years | 2.39 | . 05 | 418 | 1.04 | 1.96 | . 04 | 1263 | 1.27 | 1.34 | . 04 | 1122 | 1.16 |
| Currently pregnant | 31.41 | 1.31 | 1245 | 1.00 | 24.36 | 1.30 | 1474 | 1.16 | 11.14 | . 88 | 1140 | . 94 |
| Chijdren ever born | 1.71 | . 05 | 1266 | 1.11 | 4.40 | . 07 | 1510 | 1.13 | 7.03 | . 13 | 1191 | 1.46 |
| Living children | 1.58 | . 04 | 1266 | 1.14 | 4.01 | . 07 | 1510 | 1.19 | 6.20 | . 11 | 1191 | 1.38 |
| Breastfed in closed interval | 86.73 | 1.22 | 746 | . 98 | 85.76 | 1.00 | 1362 | 1.05 | 81.07 | 1.33 | 1136 | 1.14 |
| Wants no more children | 11.53 | 1.06 | 1232 | 1.17 | 36.91 | 1.52 | 1406 | 1.18 | 60.66 | 1.92 | 943 | 1.21 |
| Additional number wanted | 3.40 | . 11 | 1160 | 1.22 | 2.09 | . 08 | 1355 | 1.00 | 1.14 | . 11 | 926 | 1.40. |
| Desired family size | 5.33 | . 11 | 1165 | 1.28 | 6.09 | . 10 | 1371 | 1.16 | 6.71 | . 17 | 1061 | 1.53 |
| Knows effective contraceptives | 75.51 | 1.81 | 1266 | 1.50 | 79.27 | 1.21 | 1510 | 1.16 | 79.18 | 1.53 | 1191 | 1.30 |
| Ever used contraceptives | 23.38 | 1.62 | 1266 | 1.36 | 36.62 | 1.87 | 1510 | 1.51 | 41.06 | 1.84 | 1191 | 1.29 |
| Ever used effective methods | 19.43 | 1.40 | 1266 | 1.26 | 33.05 | 1.70 | 1510 | 1.41 | 36.27 | 1.74 | 1191 | 1.25 |
| Currently using (exposed) | 18.91 | 1.53 | 841 | 1.14 | 29.99 | 2.01 | 1047 | 1.42 | 38.36 | 2.11 | 816 | 1.24 |
| Using effective (exposed) | 14.63 | 1.29 | 841 | 1.06 | 23.78 | 1.76 | 1047 | 1.34 | 27.21 | 1.70 | 816 | 1.09 |
| Wants no more \& using eff. (exp.) | 23.08 | 4.49 | 78 | . 94 | 44.74 | 3.19 | 371 | 1.23 | 38.97 | 2.04 | 503 | . 93 |
| Never used contraception | 76.63 | 1.62 | 1245 | 1.35 | 63.09 | 1.89 | 1474 | 1.51 | 57.89 | 1.87 | 1140 | 1.28 |
| Used contraception in past | 10.60 | 1.01 | 1245 | 1.16 | 15.60 | 1.24 | 1474 | 1.31 | 14.65 | 1.13 | 1140 | 1.08 |
| Currently using contraception | 12.77 | 1.08 | 1245 | 1.14 | 21.30 | 1.51 | 1474 | 1.42 | 27.46 | 1.69 | 1140 | 1.28 |

Table III.2b - Sampling errors for differences between current age subclasses

| Variable name | ( <20) - (20-24) |  |  | (20-24) - (25-29) |  |  | (25-29) - (30-34) |  |  | $(30-34)-(35-39)$ |  |  | $(35-39)-(40-44)$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | m | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | ก |
| Age at first marriage | -1.75 | . 12 | 570 | -1.14 | . 14 | 817 | -. 12 | . 19 | 751 | -. 87 | . 25 | 668 | -. 25 | . 26 | 592 |
| Age at first marriage (<25) | . 00 | . 00 | 0 | -17.71 | . 12 | 0 | . 38 | . 15 | 698 | -. 35 | . 18 | 589 | -. 13 | . 17 | 511 |
| First marriage dissolved | -1.10 | . 82 | 575 | -. 91 | . 95 | 817 | -4.03 | 1.16 | 751 | . 03 | 1.58 | 668 | -1.78 | 1.78 | 592 |
| Time spent in union | . 28 | . 32 | 575 | . 47 | . 35 | 817 | 1.09 | . 45 | 751 | -. 93 | . 45 | 668 | . 46 | . 43 | 592 |
| Currently married | . 12 | . 69 | 575 | . 15 | . 69 | 817 | 1.15 | . 90 | 751 | . 76 | 1.14 | 668 | 1.14 | 2. 19 | 592 |
| Births in first 5 years | -. 07 | . 16 | 69 | . 01 | . 06 | 489 | . 05 | . 06 | 657 | -. 02 | . 06 | 647 | . 12 | . 07 | 586 |
| Births in past 5 years | -. 13 | . 17 | 66 | . 26 | . 06 | 476 | . 37 | . 06 | 631 | . 19 | . 07 | 618 | . 53 | . 07 | 558 |
| Currently pregnant | -. 22 | 2.96 | 566 | 5.57 | 2.23 | 802 | 3.38 | 2.49 | 732 | 8.39 | 2.29 | 645 | 6.53 | 1.79 | 566 |
| Children ever born | -1.28 | . 07 | 575 | -1.54 | . 09 | 817 | -1.52 | . 11 | 751 | -1.41 | . 16 | 668 | -. 88 | .17 | 592 |
| Living children | -1.17 | . 07 | 575 | -1.40 | . 08 | 817 | -1.33 | . 10 | 751 | -1. 20 | . 14 | 668 | -. 60 | . 15 | 592 |
| Breastfed in closed interval | 2.12 | 2.66 | 236 | -1. 24 | 1.90 | 649 | 3.74 | 1.95 | 680 | 1.27 | 2.20 | 633 | 3.19 | 2.15 | 564 |
| Wants no more children | -10.29 | 1.73 | 562 | -13.78 | 2.07 | 788 | -17.89 | 2.55 | 695 | -10.41 | 3.03 | 585 | -8.18 | 3.11 | 459 |
| Additional "number wanted | . 67 | . 16 | 525 | . 75 | . 19 | 753 | . 73 | . 20 | 670 | . 41 | . 16 | 570 | . 32 | . 15 | 451 |
| Desired family size | -. 46 | . 17 | 531 | -. 52 | . 17 | 751 | -. 17 | . 19 | 680 | -. 51 | . 23 | 601 | -. 05 | . 22 | 526 |
| Knows effective contraceptives | -5.48 | 3.05 | 575 | -. 84 | 2.19 | 817 | -2.16 | 2.21 | 751 | -. 79 | 2.07 | 668 | 4.41 | 2.32 | 592 |
| Ever used contraceptives | -10.89 | 2.47 | 575 | -5.90 | 2.28 | 817 | -7.63 | 2.48 | 751 | -3.42 | 2.88 | 668 | 6.63 | 2.80 | 592 |
| Ever used effective methods | -9.69 | 2.42 | 575 | -6.32 | 2.02 | 817 | -8.44 | 2.31 | 751 | --1.87 | 2.80 | 668 | 6.83 | 2.80 | 592 |
| Currently using (exposed) | -9.97 | 2.84 | 384 | -3.80 | 2.34 | 558 | -8.30 | 3.30 | 519 | -6.34 | 3.55 | 467 | 5.76 | 3.31 | 401 |
| Using effective (exposed) | -8.04 | 2.42 | 384 | -3.17 | 2.31 | 558 | -6.95 | 3.16 | 519 | -2.20 | 3.34 | 467 | 5.91 | 3.27 | 401 |
| Wants no more \& using eff. (exp.) | 11.11 | 20.20 | 11 | -20.73 | 6.75 | 97 | -2.99 | 5.32 | 178 | 4.09 | 4.57 | 24.4 | 6.23 | 4.58 | 250 |
| Never used contraception | 10.84 | 2.53 | 566 | 6.17 | 2.27 | 802 | 7.76 | 2.54 | 732 | 4.28 | 3.01 | 645 | -7.08 | 2.79 | 566 |
| Used contraception in past | -4.28 | 1.66 | 566 | -2.37 | 1.70 | 802 | -2.47 | 2.07 | 732 | 2.14 | 2.09 | 645 | . 32 | 2.02 | 566 |
| Currently using contraception | -6. 56 | 2.01 | 566 | -3.81 | 1.73 | 802 | -5.29 | 2.53 | 732 | -6. 42 | 2.84 | 645 | 6.76 | 2.55 | 566 |


|  | $(40-44)-(45-49)$ |  |  | ( <25 ) - (25-34) |  |  | (25-34) - (35-44) |  |  | $(35-44)-(45-49)$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable name | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | ก | Mean or per cent | SE | ก |
| Age at first marriage | . 23 | . 34 | 536 | -1.80 | . 13 | 1374 | -1.05 | . 20 | 1332 | . 10 | . 29 | 724 |
| Age at first marriage (<25) | . 34 | . 23 | 462 | -17.54 | . 10 | 0 | -. 20 | . 14 | 1187 | . 28 | . 20 | 623 |
| First marriage dissolved | -8.86 | 2.23 | 536 | -3.17 | . 80 | 1377 | -2.95 | 1.06 | 1332 | -9.81 | 1.98 | 724 |
| Time spent in union | 2.30 | . 64 | 536 | 1.15 | . 30 | 1377 | -. 22 | . 33 | 1332 | 2.52 | . 57 | 724 |
| Currently married | 7.99 | 1.72 | 536 | . 73 | . 56 | 1377 | 1.90 | . 81 | 1332 | 8.60 | 1.57 | 724 |
| Births in first 5 years | . 12 | . 07 | 532 | . 03 | . 06 | 647 | . 06 | . 04 | 1243 | . 18 | . 06 | 720 |
| Births in past 5 years | . 64 | . 06 | 481 | . 44 | . 06 | 628 | . 62 | . 05 | 1188 | . 93 | . 04 | 641 |
| Currently pregnant | 5.41 | 1.19 | 486 | 7.05 | 1.70 | 1350 | 13.22 | 1.58 | 1286 | 8.93 | . 93 | 648 |
| Children ever born | -. 33 | . 21 | 536 | -2.68 | . 08 | 1377 | -2.63 | . 13 | 1332 | -. 80 | . 19 | 724 |
| Living children | -. 18 | . 19 | 536 | -2.43 | . 08 | 1377 | -2.20 | . 12 | 1332 | -. 50 | . 17 | 724 |
| Breastfed in closed interval | -2.84 | 2.62 | 508 | . 97 | 1.54 | 964 | 4.68 | 1.63 | 1239 | -1.11 | 2.39 | 689 |
| Wants no more children | -7.14 | 4.05 | 269 | -25.39 | 1.65 | 1313 | -23.74 | 2.17 | 1129 | -11.89 | 3.51 | 335 |
| Additional number wanted | . 24 | . 15 | 263 | 1.31 | . 12 | 1250 | . 95 | . 10 | 1100 | . 42 | . 15 | 328 |
| Desired family size | -. 20 | . 21 | 443 | -. 76 | . 11 | 1260 | -. 62 | . 15 | 1196 | -. 23 | . 19 | 590 |
| Krows effective contraceptives | 9.31 | 3.14 | 536 | -3.76 | 1.50 | 1377 | . 09 | 1.45 | 1332 | 11.68 | 2.67 | 724 |
| Ever used contraceptives | 9.23 | 2.86 | 536 | -13.24 | 1.82 | 1377 | -4.44 | 1.85 | 1332 | 12.79 | 2.64 | 724 |
| Ever used effective methods | 7.99 | 2.99 | 536 | -13.62 | 1.65 | 1377 | -3.23 | 1.84 | 1332 | 11.66 | 2.76 | 724 |
| Currently using (exposed) | . 06 | 4.69 | 251 | -11.08 | 1.86 | 933 | -8.37 | 2.21 | 917 | 3.31 | 4.11 | 313 |
| Using effective (exposed) | -4.47 | 4.19 | 251 | -9.16 | 1.76 | 933 | -3.42 | 1.95 | 917 | -1.14 | 3.76 | 313 |
| Wants no more \& using eff. (exp.) | . 16 | 5.17 | 176 | -21.67 | 5.55 | 129 | 5.78 | 3.33 | 427 | 3.51 | 4.55 | 220 |
| Never used contraception | -8.93 | 2.85 | 486 | 13.53 | 1.85 | 1350 | 5.20 | 1.90 | 1286 | -12.75 | 2.65 | 648 |
| Used contraception in past | . 13 | 2.54 | 486 | -5.00 | 1.46 | 1350 | . 95 | 1.51 | 1286 | . 30 | 2.03 | 648 |
| Currently using contraception | 8.80 | 2.82 | 486 | -8.53 | 1.45 | 1350 | -6.15 | 1.83 | 1286 | 12.45 | 2.37 | 648 |

Table III. 3a - Sampling errors by age at first marriage

|  | $<15$ |  |  |  | 15-17 |  |  |  | 18-19 |  |  |  | 20-21 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable name | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFTT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 13.16 | . 04 | 806 | 1.01 | 16.03 | . 02 | 1546 | 1.01 | 18.48 | . 02 | 837 | 1.12 | 20.45 | . 02 | 520 | . 97 |
| Age at first marriage (<25) | 13.05 | . 05 | 494 | . 99 | 16.02 | . 03 | 975 | 1.04 | 18.50 | . 02 | 602 | 1.15 | 20.45 | . 03 | 411 | 1.05 |
| First marriage dissolved | 10.71 | 1.13 | 812 | 1.04 | 6.21 | . 61 | 1546 | 1.00 | 5.97 | . 86 | 837 | 1.05 | 5.58 | . 99 | 520 | . 98 |
| Time spent in union | 97.08 | . 34 | 812 | . 84 | 98.01 | . 25 | 1546 | . 89 | 98.11 | . 39 | 837 | 1.06 | 98.73 | . 31 | 520 | . 98 |
| Currently married | 95.94 | . 70 | 812 | 1.01 | 96.44 | . 44 | 1546 | . 93 | 95.82 | . 74 | 837 | 1.07 | 96.54 | . 83 | 520 | 1.04 |
| Births in first 5 years | 1.74 | . 04 | 696 | . 99 | 2.03 | . 03 | 1172 | . 87 | 2.11 | . 04 | 632 | 1.10 | 2.12 | . 05 | 384 | 1.00 |
| Births in past 5 years | 1.64 | . 05 | 656 | 1.12 | 1.63 | . 04 | 1118 | 1.25 | 1.66 | . 05 | 595 | 1.09 | 1.40 | . 07 | 368 | 1.10 |
| Currently pregnant | 20.15 | 1.41 | 779 | . 98 | 20.93 | 1.10 | 1491 | 1.04 | 19.58 | 1.36 | 802 | . 97 | 23.71 | 2.23 | 502 | 1.18 |
| Children ever born | 5.42 | . 13 | 812 | 1.10 | 4.87 | . 10 | 1546 | 1.08 | 4.77 | . 12 | 837 | 1.07 | 4.52 | . 16 | 520 | 1.09 |
| Living children | 4.73 | . 11 | 812 | 1.07 | 4.32 | . 08 | 1546 | 1.05 | 4.28 | . 11 | 837 | 1.09 | 4.04 | . 13 | 520 | 1.07 |
| Breastfed in closed interval | 84.70 | 1.41 | 719 | 1.05 | 83.39 | . 99 | 1282 | . 95 | 83.76 | 1.54 | 696 | 1.10 | 84.58 | 1.60 | 428 | . 92 |
| Wants no more children | 37.98 | 2.04 | 674 | 1.09 | 35.56 | 1.47 | 1330 | 1.12 | 37.78 | 2.07 | 712 | 1.14 | 37.87 | 2.46 | 441 | 1.06 |
| Additional number wanted | 2.19 | . 15 | 645 | 1.24 | 2.28 | . 10 | 1272 | 1.20 | 2.08 | . 10 | 689 | . 97 | 2.05 | . 14 | 430 | 1.00 |
| Desired family size | 6.52 | . 17 | 719 | 1.29 | 6.26 | . 12 | 1380 | 1.30 | 6.02 | . 13 | 744 | 1.07 | 5.80 | . 16 | 474 | 1.17 |
| Knows effective contraceptives | 74.63 | 2.07 | 812 | 1.35 | 77.62 | 1.56 | 1546 | 1.47 | 78.02 | 1.64 | 837 | 1.14 | 78.08 | 2.17 | 520 | 1.20 |
| Ever used contraceptives | 32.51 | 2.31 | 812 | 1.40 | 32.99 | 1.69 | 1546 | 1.41 | 32.62 | 2.07 | 837 | 1.28 | 34.23 | 2.31 | 520 | 1.11 |
| Ever used effective methods | 29.19 | 2.19 | 812 | 1.37 | 29.95 | 1.54 | 1546 | 1.32 | 27.96 | 1.89 | 837 | 1.22 | 28.65 | 2.03 | 520 | 1.02 |
| Currently using (exposed) | 25.15 | 2.18 | 517 | 1.14 | 28.39 | 1.86 | 1018 | 1.31 | 31.89 | 2.29 | 555 | 1.16 | 33.23 | 3.12 | 322 | 1.19 |
| Using effective (exposed) | 19.92 | 2.00 | 517 | 1.14 | 22.40 | 1.57 | 1018 | 1.20 | 23.06 | 1.82 | 555 | 1.02 | 23.60 | 2.61 | 322 | 1.10 |
| Wants no more \& using eff. (exp.) | 33.67 | 3.35 | 199 | 1.00 | 40.53 | 2.91 | 375 | 1.15 | 36.09 | 2.84 | 230 | . 89 | 41.53 | 5.03 | 118 | 1.10 |
| Never used contraception | 66.62 | 2.31 | 779 | 1.37 | 67.07 | 1.70 | 1491 | 1.39 | 66.71 | 2.10 | 802 | 1.26 | 65.14 | 2.33 | 502 | 1.09 |
| Used contraception in past | 16.69 | 1.61 | 779 | 1.21 | 13.55 | . 98 | 1491 | 1.10 | 11.22 | 1.27 | 802 | 1.13 | 13.55 | 1.81 | 502 | 1.18 |
| Currently using contraception | 16.69 | 1.49 | 779 | 1.12 | 19.38 | 1.31 | 1491 | 1.28 | 22.07 | 1.69 | 802 | 1.15 | 21.31 | 2.31 | 502 | 1.26 |


| Variable name | 22-24 |  |  |  | 25-29 |  |  |  | $30+$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 22.76 | . 04 | 432 | . 96 | 26.54 | . 08 | 265 | ,93 | 33.12 | . 42 | 75 | 1.03 |
| Age at first marriage (<25) | 22.80 | . 04 | 399 | 1.00 | . 00 | . 00 | 0 | -00 | . 00 | . 00 | 0 | . 00 |
| First marriage dissolved | 3.94 | . 90 | 432 | . 96 | 10.94 | 2.00 | 265 | 1.04 | 12.00 | 3.64 | 75 | . 96 |
| Time spent in union | 98.39 | . 48 | 432 | . 99 | 94.54 | 1.25 | 265 | -99 | 92.24 | 2.79 | 75 | . 92 |
| Currently married | 98.15 | . 65 | 432 | 1.00 | 93.21 | 1.54 | 265 | . 99 | 89.33 | 3.46 | 75 | . 96 |
| Births in first 5 years | 2.19 | . 06 | 307 | 1.16 | 2.10 | . 08 | 195 | 1.04 | 1.80 | . 17 | 54 | 1.02 |
| Births in past 5 years | 1.45 | . 07 | 295 | 1.07 | 1.53 | . 10 | 174 | 1.13 | 1.43 | . 21 | 46 | 1.03 |
| Currently pregnant | 20.99 | 1.98 | 424 | 1.00 | 19.03 | 2.78 | 247 | 1.11 | 8.96 | 3.41 | 67 | . 97 |
| Children ever born | 4.28 | . 18 | 432 | 1.23 | 3.64 | . 15 | 265 | . 94 | 2.33 | . 23 | 75 | . 93 |
| Living children | 3.88 | . 15 | 432 | 1.17 | 3.35 | . 13 | 265 | . 89 | 2.13 | . 21 | 75 | . 88 |
| Breastfed in closed interval | 84.14 | 1.63 | 353 | . 84 | 86.32 | 2.44 | 212 | 1.03 | 81.25 | 6.59 | 48 | 1.16 |
| Wants no more children | 34.79 | 2.73 | 365 | 1.09 | 36.32 | 3.68 | 212 | 1.11 | 23.53 | 6.15 | 51 | 1.03 |
| Additional number wanted | 2.29 | . 20 | 349 | 1.23 | 2.02 | . 20 | 206 | 1.00 | 2.53 | . 40 | 49 | 1.01 |
| Desired family size | 6.08 | . 20 | 395 | 1.12 | 5.44 | . 23 | 234 | 1.09 | 4.73 | . 31 | 60 | . 94 |
| Knows effective contraceptives | 78.24 | 2.51 | 432 | 1.26 | 74.34 | 2.98 | 265 | 1.11 | 62.67 | 6.02 | 75 | 1.07 |
| Ever used contraceptives | 33.10 | 2.76 | 432 | 1.22 | 38.11 | 3.12 | 265 | 1.04 | 21.33 | 3.67 | 75 | . 77 |
| Ever used effective methods | 28.24 | 2.50 | 432 | 1.15 | 32.45 | 2.98 | 265 | 1.03 | 18.67 | 3.69 | 75 | . 81 |
| Currently using (exposed) | 31.16 | 3.30 | 276 | 1.18 | 34.55 | 3.78 | 165 | 1.02 | 17.78 | 5.28 | 45 | . 92 |
| Using effective (exposed) | 22.83 | 2.93 | 276 | 1.16 | 26.67 | 3.99 | 165 | 1.16 | 15.56 | 4.97 | 45 | . 91 |
| Wants no more \& using eff. (exp.) | 46.88 | 4.86 | 96 | . 95 | 46.15 | 6.21 | 65 | 1.00 | 40.00 | 15.49 | 10 | . 95 |
| Never used contraception | 66.51 | 2.80 | 424 | 1.22 | 60.32 | 3.20 | 247 | 1.03 | 77.61 | 4.14 | 67 | . 81 |
| Used contraception in past | 13.21 | 1.92 | 424 | 1.17 | 16.60 | 2.49 | 247 | 1.05 | 10.45 | 3.23 | 67 | . 86 |
| Currently using contraception | 20.28 | 2.37 | 424 | 1.21 | 23.08 | 2.77 | 247 | 1.03 | 11.94 | 3.70 | 67 | . 93 |

Table III. 3b - Sampling errors for differences between age at first marriage subclasses

| Variable name | ( <15 ) - (15-17) |  |  | (15-17) - (18-19) |  |  | (18-19) - (20-21) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or Percent | SE | n | Mean or Percent | SE | n | Meary or Percent | SE | n |
| Age at first marriage | -2.87 | . 04 | 1060 | -2.45 | . 03 | 1086 | -1.97 | . 03 | 641 |
| Age at first marriage (<25) | -2.96 | . 06 | 656 | -2.48 | . 03 | 744 | -1.95 | . 03 | 488 |
| First marriage dissolved | 4.50 | 1.24 | 1065 | . 24 | 1.06 | 1086 | . 40 | 1.37 | 641 |
| Time spent in union | -. 94 | . 41 | 1065 | -. 10 | . 47 | 1086 | -. 61 | . 48 | 641 |
| Currently married | -. 51 | . 83 | 1065 | . 62 | . 84 | 1086 | -. 72 | 1.12 | 641 |
| Births in first 5 years | -. 29 | . 05 | 873 | -. 08 | . 05 | 821 | -. 01 | . 06 | 478 |
| Births in past 5 years | . 01 | . 06 | 827 | -. 04 | . 07 | 777 | . 26 | . 09 | 455 |
| Currently pregnant | -. 77 | 1.73 | 1023 | 1.35 | 1.72 | 1043 | -4.13 | 2.36 | 617 |
| Children ever born | . 55 | . 16 | 1065 | . 10 | . 15 | 1086 | . 24 | . 19 | 641 |
| Living children | . 42 | . 14 | 1065 | . 04 | . 13 | 1086 | . 23 | . 17 | 641 |
| Breastfed in closed interval | 1.32 | 1.60 | 921 | -. 38 | 1.70 | 902 | -. 82 | 2.09 | 530 |
| Wants no more children | 2.42 | 2.28 | 895 | -2.22 | 2.26 | 927 | -. 09 | 3.15 | 545 |
| Additional number wanted | -. 09 | . 16 | 856 | . 20 | . 13 | 894 | . 03 | . 15 | 530 |
| Desired family size | . 27 | . 16 | 945 | . 23 | . 15 | 967 | . 22 | . 18 | 579 |
| Knows effective contraceptives | -2.99 | 1.91 | 1065 | -. 40 | 1.94 | 1086 | -. 06 | 2.44 | 641 |
| Ever used contraceptives | -. 48 | 2.42 | 1065 | . 37 | 2.11 | 1086 | -1.61 | 2.43 | 641 |
| Ever used effective methods | -. 76 | 2.21 | 1065 | 1.99 | 1.99 | 1086 | -. 70 | 2.47 | 641 |
| Currently using (exposed) | -3.24 | 2.42 | 686 | -3.50 | 2.52 | 718 | -1.34 | 3.41 | 408 |
| Using effective (exposed) | -2.47 | 2.12 | 686 | -. 67 | 2.24 | 718 | -. 54 | 3.00 | 408 |
| Wants no more \& using eff. (exp.) | -6.86 | 4.13 | 260 | 4.45 | 3.99 | 285 | -5.44 | 5.74 | 156 |
| Never used contraception | -. 45 | 2.39 | 1023 | . 36 | 2.14 | 1043 | 1.57 | 2.47 | 617 |
| used contraception in past | 3.14 | 1.67 | 1023 | 2.33 | 1.48 | 1043 | -2.32 | 1.87 | 617 |
| Currently using contraception | -2.69 | 1.75 | 1023 | -2.69 | 1.79 | 1043 | . 76 | 2.42 | 617 |



Table III. 4 a - Sampling errors by years since first marriage

| Variable name | $<5$ |  |  |  | 5-9 |  |  |  | 10-14 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 18.76 | . 15 | 1041 | 1.11 | 18.35 | . 18 | 894 | 1.16 | 18.35 | . 18 | 732 | 1.10 |
| Age at first marriage (<25) | 22.50 | . 12 | 119 | 1.01 | 19.45 | . 13 | 408 | 1.10 | 17.39 | . 12 | 621 | 1.05 |
| First marriage dissolved | 1.81 | . 43 | 1047 | 1.04 | 4.14 | . 72 | 894 | 1.08 | 5.74 | . 92 | 732 | 1.07 |
| Time spent in union | 99.14 | . 27 | 1047 | . 98 | 98.77 | . 27 | 894 | 1.07 | 98.14 | . 40 | 732 | 1.08 |
| Currently married | 98.38 | . 42 | 1047 | 1.06 | 97.54 | . 61 | 894 | 1.18 | 97.13 | . 65 | 732 | 1.06 |
| Births in first 5 years | . 00 | . 00 | 0 | . 00 | 2.17 | . 03 | 894 | . 90 | 2.08 | . 04 | 732 | . 95 |
| Births in past 5 years | . 00 | . 00 | 0 | . 00 | 2.29 | . 03 | 861 | 1.01 | 1.86 | . 05 | 703 | 1.14 |
| Currently pregnant | 32.04 | 1.45 | 1030 | 1.00 | 27.18 | 1.64 | 872 | 1.08 | 21.94 | 1.66 | 711 | 1.07 |
| Children ever born | 1.09 | . 03 | 1047 | 1.06 | 3.20 | . 05 | 894 | 1.09 | 4.92 | . 07 | 732 | 1.03 |
| Living children | 1.02 | . 03 | 1047 | 3.05 | 2.92 | . 04 | 894 | . 97 | 4.52 | . 07 | 732 | 1.05 |
| Breastfed in closed interval | 88.40 | 1.34 | 457 | . 90 | 87.07 | 1.30 | 835 | 1.12 | 83.29 | 1.61 | 694 | 1.13 |
| Wants no more children | 6.87 | . 85 | 1019 | 1.08 | 26.62 | 1.82 | 849 | 1.20 | 41.80 | 2.08 | 665 | 1.09 |
| Additional number wanted | 3.61 | . 11 | 959 | 1.14 | 2.63 | . 12 | 811 | 1.05 | 1.77 | . 13 | 644 | 1.16 |
| Desired family size | 5.01 | . 10 | 971 | 1.12 | 5.88 | . 15 | 811 | 1.31 | 6.21 | . 14 | 659 | 1.16 |
| Knows effective contraceptives | 75.36 | 1.96 | 1047 | 1.47 | 76.96 | 1.77 | 894 | 1.25 | 77.19 | 1.93 | 732 | 1.24 |
| Ever used contraceptives | 21.49 | 1.68 | 1047 | 1.33 | 31.43 | 1.99 | 894 | 1.28 | 38.11 | 2.23 | 732 | 1.24 |
| Ever used effective methods | 16.81 | 1.53 | 1047 | 1.32 | 27.96 | 1.93 | 894 | 1.29 | 35.38 | 2.15 | 732 | 1.21 |
| Currently using (exposed) | 19.30 | 1.69 | 689 | 1.13 | 23.53 | 2.08 | 612 | 1.21 | 33.60 | 2.36 | 509 | 1.13 |
| Using effective (exposed) | 14.22 | 1.51 | 689 | 1.13 | 19.28 | 1.83 | 612 | 1.14 | 26.13 | 2.21 | 509 | 1.13 |
| Wants no more \& using eff. (exp.) | 34.48 | 9.54 | 29 | 1.06 | 38.51 | 4.03 | 148 | 1.00 | 47.09 | 4.17 | 206 | 1.20 |
| Never used contraception | 78.45 | 1.68 | 1030 | 1.31 | 68.23 | 2.05 | 872 | 1.30 | 61.46 | 2.24 | 711 | 1.23 |
| Used contraception in past | 8.64 | . 98 | 1030 | 1.12 | 15.25 | 1.27 | 872 | 1.05 | 14.49 | 1.55 | 711 | 1.17 |
| Currently using contraception | 12.91 | 1.21 | 1030 | 1.16 | 16.51 | 1.50 | 872 | 1.19 | 24.05 | 1.75 | 711 | 1.09 |


| Variable name | 15-19 |  |  |  | 20-24 |  |  |  | $25+$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFPT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFFT |
| Age at first marriage | 18.01 | . 14 | 691 | . 90 | 18.07 | . 16 | 537 | 1.03 | 15.90 | . 11 | 586 | . 96 |
| Age at first marriage (<25) | 17.24 | . 12 | 638 | . 96 | 17.63 | . 15 | 509 | 1.06 | 15.90 | . 11 | 586 | . 96 |
| First marriage dissolved | 10.71 | 1.09 | 691 | . 92 | 8.38 | 1.14 | 537 | . 95 | 17.06 | 1.64 | 586 | 1.06 |
| Time spent in union | 97.41 | . 35 | 691 | . 95 | 98.36 | . 32 | 537 | . 97 | 96.62 | . 39 | 586 | . 91 |
| Currently married | 95.95 | . 81 | 691 | 1.08 | 95.16 | . 89 | 537 | . 96 | 89.59 | 1.39 | 586 | 1.10 |
| Births in first 5 years | 1.97 | . 04 | 691 | . 98 | 1.99 | . 04 | 537 | 1.00 | 1.75 | . 05 | 586 | 1.07 |
| Births in past 5 years | 1.52 | . 05 | 654 | 1.27 | 1.20 | . 05 | 509 | 1.04 | . 52 | . 04 | 525 | 1.10 |
| Currently pregnant | 14.63 | 1.31 | 663 | . 96 | 10.76 | 1.26 | 511 | . 92 | 2.29 | .76 | 525 | 1.16 |
| Children ever born | 6.45 | . 11 | 691 | 1.22 | 7.78 | . 15 | 537 | 1.22 | 8.56 | . 16 | 586 | 1.27 |
| Living children | 5.79 | . 10 | 691 | 1.22 | 6.84 | . 12 | 537 | 1.11 | 7.27 | . 13 | 586 | 1.23 |
| Breastfed in closed interval | 82.48 | 1.41 | 662 | . 96 | 81.73 | 1.52 | 520 | . 90 | 81.05 | 1.89 | 570 | 1.15 |
| Wants no more children | 59.20 | 2.28 | 576 | 1.11 | 65.09 | 2.51 | 401 | 1.05 | 74.55 | 2.55 | 275 | . 97 |
| Additional number wanted | 1.15 | . 10 | 565 | 1.06 | . 93 | . 12 | 391 | 1.12 | . 82 | . 15 | 270 | 1.04 |
| Desired family size | 6.60 | . 17 | 619 | 1.19 | 6.90 | . 20 | 473 | 1.21 | 7.25 | . 20 | 473 | 1.16 |
| Knows effective contraceptives | 81.62 | 1.69 | 691 | 1.15 | 77.65 | 2.07 | 537 | 1.15 | 72.35 | 2.49 | 586 | 1.35 |
| Ever used contraceptives | 44.72 | 2.37 | 691 | 1.25 | 38.18 | 2.42 | 537 | 1.15 | 31.74 | 2.17 | 586 | 1.13 |
| Ever used effective methods | 39.36 | 2.27 | 691 | 1.22 | 34.64 | 2.24 | 537 | 1.09 | 27.65 | 2.03 | 586 | 1.10 |
| Currently using (exposed) | 38.62 | 2.86 | 479 | 1.29 | 37.57 | 2.69 | 346 | 1.03 | 34.60 | 2.96 | 263 | 1.01 |
| Using effective (exposed) | 28.81 | 2.38 | 479 | 1.15 | 27.46 | 2.51 | 346 | 1.04 | 25.48 | 2.37 | 263 | . 88 |
| Wants no more \& using eff. (exp.) | 41.05 | 3.44 | 285 | 1.18 | 36.68 | 3.11 | 229 | . 97 | 33.16 | 2.94 | 196 | . 87 |
| Never used contraception | 54.30 | 2.39 | 663 | 1.23 | 61.06 | 2.51 | 511 | 1.16 | 67.05 | 2.27 | 525 | 1.10 |
| Used contraception in past | 17.80 | 1.59 | 663 | 1.07 | 13.50 | 1.71 | 511 | 1.13 | 15.62 | 1.67 | 525 | 1.05 |
| Currently using contraception | 27.90 | 2.27 | 663 | 1.30 | 2.5 .44 | 1.87 | 511 | . 97 | 17.33 | 1.85 | 525 | 1.12 |

Table III. 4 b - Sampling errors for differences between years since first marriage subclasses

| Variable name | $(<5)-(5-9)$ |  |  | ( 5-9 ) - (10-14) |  |  | (10-14) - (15-19) |  |  | (15-19) - (20-24) |  |  | $(20-24)-(25+)$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | ก |
| Age at first marriage | . 41 | . 22 | 962 | -. 00 | . 24 | 805 | . 34 | . 23 | 711 | -. 06 | . 18 | 604 | 2.17 | . 19 | 560 |
| Age at first marriage (<25) | 3.05 | . 16 | 184 | 2.07 | . 16 | 492 | . 15 | . 15 | 629 | -. 39 | . 17 | 566 | 1.73 | . 18 | 545 |
| First marriage dissolved | -2.32 | . 85 | 964 | -1.60 | 1.24 | 805 | -4.97 | 1.28 | 711 | 2.33 | 1.48 | 604 | -8.68 | 2.08 | 560 |
| Time spent in union | . 37 | . 40 | 964 | . 64 | . 51 | 805 | . 72 | . 50 | 711 | -. 95 | . 47 | 604 | 1.75 | . 50 | 560 |
| Currently married | . 84 | . 76 | 964 | . 41 | . 92 | 805 | 1.18 | . 93 | 711 | . 79 | 1.20 | 604 | 5.57 | 1.76 | 560 |
| Births in first 5 years | -2.17 | . 03 | 0 | . 09 | . 04 | 805 | . 11 | . 05 | 711 | -. 03 | . 06 | 604 | . 25 | . 06 | 560 |
| Births in past 5 years | -2.29 | . 03 | 0 | . 42 | . 06 | 774 | . 34 | . 06 | 678 | . 33 | . 07 | 572 | . 68 | . 06 | 517 |
| Currently pregnant | 4.86 | 2.06 | 944 | 5.24 | 2.14 | 783 | 7.31 | 2.12 | 686 | 3.87 | 1.80 | 577 | 8.48 | 1.45 | 518 |
| Children ever born | -2.11 | . 06 | 964 | -1.72 | . 09 | 805 | -1.54 | . 12 | 711 | -1.32 | . 16 | 604 | -. 78 | . 18 | 560 |
| Living children | -1.91 | . 05 | 964 | -1.60 | . 08 | 805 | -1.27 | . 11 | 711 | -1.06 | . 14 | 604 | -. 43 | . 16 | 560 |
| Breastfed in closed interval | 1.34 | 1.92 | 591 | 3.78 | 2.08 | 758 | . 81 | 2.19 | 678 | . 75 | 2.18 | 582 | . 68 | 2.37 | 544 |
| Wants no more children | -19.75 | 1.79 | 926 | -15.18 | 2.33 | 746 | -17.40 | 3.03 | 617 | -5.89 | 3.28 | 473 | -9.46 | 3.37 | 3.26 |
| Additional number wanted | . 98 | . 13 | 879 | . 86 | . 14 | 718 | . 63 | . 16 | 602 | . 21 | . 14 | 462 | . 11 | . 16 | 319 |
| Desired family size | -. 87 | . 16 | 884 | -. 32 | . 17 | 727 | -. 39 | . 20 | 638 | -. 31 | . 21 | 536 | -. 34 | . 23 | 473 |
| Knows effective contraceptives | -1.60 | 2.16 | 964 | -. 23 | 2.09 | 805 | -4. 44 | 2.37 | 711 | 3.97 | 2.56 | 604 | 5.30 | 2.56 | 560 |
| Ever used contraceptives | -9.94 | 2.19 | 964 | $-6.68$ | 2.13 | 805 | -6. 60 | 2.67 | 711 | 6.54 | 2.77 | 604 | 6.43 | 2.65 | 560 |
| Ever used effective methods | -11.15 | 2.21 | 964 | -7.42 | 2.26 | 805 | -3.98 | 2.62 | 711 | 4.73 | 2.75 | 604 | 6.99 | 2.52 | 560 |
| Currently using (exposed) | -4.23 | 2.26 | 648 | -10.07 | 2.38 | 556 | -5.03 | 2.91 | 494 | 1.05 | 3.45 | 402 | 2.97 | 3.58 | 299 |
| Using effective (exposed) | -5.06 | 2.05 | 648 | -6.85 | 2.51 | 556 | -2.68 | 2.40 | 494 | 1.35 | 3.23 | 40.2 | 1.98 | 3.38 | 299 |
| Wants no more \& using eff. (exp.) | -4.03 | 9.74 | 48 | -8.57 | 6.15 | 172 | 6.03 | 4.07 | 239 | 4.37 | 4.67 | 254 | 3.52 | 4.34 | 211 |
| Never used contraception | 10.21 | 2.23 | 944 | 6.77 | 2.21 | 783 | 7.16 | 2.63 | 686 | -6.76 | 2.90 | 577 | -5.99 | 2.82 | 518 |
| Used contraception in past | -6.61 | 1.48 | 944 | . 77 | 1.77 | 783 | -3.31 | 2.16 | 686 | 4.29 | 1.88 | 577 | -2.12 | 2.36 | 518 |
| Currently using contraception | -3.60 | 1.64 | 944 | -7.54 | 1.80 | 783 | -3.85 | 2.27 | 686 | 2.46 | 2.54 | 577 | 8.11 | 2.36 | 518 |

Table III.5a - Sampling errors by number of living children

| Variable name | 0 |  |  |  | 1 |  |  |  | 2 |  |  |  | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | ก | DEFFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 19.25 | . 27 | 460 | 1.08 | 18.28 | . 19 | 481 | 1.11 | 18.48 | . 20 | 542 | 1.03 | 18.43 | . 23 | 534 | 1.16 |
| Age at first marriage (<25) | 18.81 | . 43 | 91 | 1.18 | 19.81 | . 35 | 95 | . 98 | 19.48 | . 24 | 183 | 1.05 | 18.54 | . 20 | 284 | 1.13 |
| First marriage dissolved | 5.59 | 1.02 | 465 | . 96 | 8.09 | 1.25 | 482 | 1.00 | 6.83 | 1.05 | 542 | . 97 | 4.49 | . 81 | 534 | . 90 |
| Time spent in union | 93.06 | 1.83 | 465 | 1.00 | 92.39 | 1.57 | 482 | . 93 | 95.27 | . 89 | 542 | . 98 | 97.63 | . 68 | 534 | 1.07 |
| Currently married | 96.13 | . 83 | 465 | . 93 | 95.44 | . 91 | 482 | . 96 | 96.31 | . 81 | 542 | 1.00 | 97.19 | . 65 | 534 | . 91 |
| Births in first 5 years | . 04 | . 02 | 106 | 1.06 | 1.01 | . 07 | 107 | 1.05 | 1.66 | . 04 | 288 | . 82 | 2.07 | . 04 | 479 | 1.00 |
| Births in past 5 years | . 04 | . 03 | 91 | 1.05 | . 79 | . 08 | 82 | . 96 | 1.57 | . 07 | 264 | 1.08 | 1.93 | . 06 | 463 | 1.22 |
| Currently pregnant | 32.21 | 2.26 | 447 | 1.02 | 34.78 | 2.21 | 460 | 1.00 | 23.37 | 1.70 | 522 | . 91 | 22.16 | 2.07 | 519 | 1.14 |
| Children ever born | . 07 | . 01 | 465 | . 98 | 1.15 | . 02 | 482 | . 98 | 2.28 | . 03 | 542 | 1. 1.08 | 3.37 | . 04 | 534 | 1.02 |
| Living children | . 00 | . 00 | 465 | . 00 | 1.00 | . 00 | 482 | . 00 | 2.00 | . 00 | 542 | . 00 | 3.00 | . 00 | 534 | . 00 |
| Breastfed in closed interval | 72.73 | 11.63 | 11 | . 83 | 80.31 | 2.70 | 193 | . 94 | 86.38 | 1.52 | 536 | 1.03 | 85.77 | 1.49 | 534 | . 98 |
| Wants no more children | 1.74 | . 65 | 402 | 1.00 | 5.64 | 1.19 | 443 | 1.08 | 16.67 | 2.00 | 498 | 1.20 | 30.72 | 2.29 | 485 | 1.09 |
| Additional number wanted | 4.35 | . 15 | 373 | 1.07 | 3.63 | . 16 | 417 | 1.16 | 2.90 | . 16 | 471 | 1.15 | 2.42 | . 14 | 472 | . 98 |
| Desired family size . | 4.74 | . 12 | 409 | 1.02 | 5.06 | . 16 | 440 | 1.15 | 5.31 | . 13 | 484 | . 93 | 5.66 | . 16 | 490 | 1.06 |
| Knows effective contraceptives | 66.24 | 2.35 | 465 | 1.07 | 78.22 | 2.97 | 482 | 1.58 | 76.94 | 2.20 | 542 | 1.21 | 80.52 | 2.07 | 534 | 1.21 |
| Ever used contraceptives | 5.59 | 1.15 | 465 | 1.08 | 24.48 | 2.50 | 482 | 1.28 | 34.13 | 2.59 | 542 | 1.27 | 37.27 | 2.81 | 534 | 1.34 |
| Ever used effective methods | 4.30 | 1.04 | 465 | 1.11 | 18.05 | 2.36 | 482 | 1.35 | 30.63 | 2.37 | 542 | 1.20 | 32.40 | 2.29 | 534 | 1.13 |
| Currently using (exposed) | 4.65 | 1.45 | 258 | 1.10 | 21.91 | 2.30 | 283 | . 94 | 28.72 | 2.79 | 376 | 1.20 | 32.97 | 3.12 | 370 | 1.28 |
| Using effective (exposed) | 2.71 | 1.18 | 258 | 1.16 | 14.49 | 2.17 | 283 | 1.04 | 24.20 | 2.47 | 376 | 1.12 | 24.86 | 2.47 | 370 | 1.10 |
| Wants no more \& using eff. (exp.) | 66.67 | 27.22 | 3 | . 82 | 40.00 | 21.91 | 5 | . 89 | 56.00 | 7.58 | 50 | 1.07 | 50.00 | 4.95 | 104 | 1.00 |
| Never used contraception | 94.41 | 1.20 | 447 | 1.11 | 75.43 | 2.54 | 460 | 1.26 | 64.75 | 2.66 | 522 | 1.27 | 62.43 | 2.75 | 519 | 1.29 |
| Used contraception in past | 2.91 | . 81 | 447 | 1.02 | 11.09 | 1.64 | 460 | 1.12 | 14.56 | 1.63 | 522 | 1.05 | 14.07 | 1.95 | 519 | 1.27 |
| Currently using contraception | 2.68 | . 83 | 447 | 1.08 | 13.48 | 1.55 | 460 | . 97 | 20.69 | 1.90 | 522 | 1.07 | 23.51 | 2.45 | 519 | 1.32 |

4 5
5

| Variable name | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | ก | DEFT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age at first marriage | 18.31 | . 23 | 500 | 1.16 | 17.88 | . 17 | 511 | . 99 | 17.70 | . 19 | 417 | 1.09 | 17.09 | . 20 | 334 | 1.02 |
| Age at first marriage (<25) | 17.92 | . 19 | 378 | 1.19 | 17.40 | . 14 | 455 | 1.02 | 17.35 | . 17 | 396 | 1.10 | 16.81 | . 19 | 320 | 1.07 |
| First marriage dissolved | 8.40 | 1.33 | 500 | 1.07 | 7.83 | 1.33 | 511 | 1.11 | 7.19 | 1.27 | 417 | 1.00 | 10.78 | 1.84 | 334 | 1.08 |
| Time spent in union | 96.87 | . 62 | 500 | . 98 | 97.96 | . 44 | 511 | 1.05 | 98.44 | . 37 | 417 | 1.03 | 97.88 | . 40 | 334 | 1.01 |
| Currently married | 96.60 | . 80 | 500 | . 98 | 96.09 | . 78 | 511 | . 91 | 96.64 | . 91 | 417 | 1.03 | 92.81 | 1.54 | 334 | 1.09 |
| Births in first 5 years | 2.15 | . 04 | 496 | . 97 | 2.16 | . 04 | 511 | . 96 | 2.08 | . 05 | 417 | . 99 | 2.19 | . 06 | 334 | 1.07 |
| Births in past 5 years | 1.78 | . 07 | 475 | 1.20 | 1.66 | . 05 | 489 | 1.01 | 1.60 | . 06 | 402 | . 95 | 1.41 | . 08 | 310 | 1.24 |
| Currently pregnant | 21.53 | 2.04 | 483 | 1.09 | 16.09 | 1.40 | 491 | . 85 | 16.13 | 1.88 | 403 | 1.03 | 11.94 | 1.98 | 310 | 1.07 |
| Children ever born | 4.56 | . 04 | 500 | . 90 | 5.71 | . 05 | 511 | . L .06 | 6.73 | . 07 | 417 | 1.07 | 7.95 | . 08 | 334 | 1.03 |
| Living children | 4.00 | . 00 | 500 | . 00 | 5.00 | . 00 | 511 | . 00 | 6.00 | . 00 | 417 | . 00 | 7.00 | . 00 | 334 | . 00 |
| Breastfed in closed interval | 82.00 | 1.72 | 500 | 1.00 | 84.54 | 1.37 | 511 | . 85 | 85.85 | 1.73 | 417 | 1.01 | 82.04 | 2.11 | 334 | 1.00 |
| Wants no more children | 47.25 | 2.78 | 436 | 1.16 | 51.63 | 2.57 | 430 | 1.06 | 53.05 | 3.08 | 328 | 1.12 | 63.39 | 3.34 | 254 | 1.10 |
| Additional number wanted | 1.58 | . 13 | 422 | 1.05 | 1.47 | . 14 | 417 | 1.10 | 1.21 | . 15 | 321 | 1.18 | 1.03 | . 14 | 247 | 1.00 |
| Desired family size | 5.73 | . 15 | 455 | 1.11 | 6.12 | . 16 | 454 | - 1.16 | 6.86 | . 20 | 368 | 1.13 | 7.13 | . 17 | 290 | . 92 |
| Knows effective contraceptives | 77.40 | 2.34 | 500 | 1.25 | 78.08 | 2.00 | 511 | 1. 09 | 78.18 | 2.31 | 417 | 1.14 | 77.84 | 2.68 | 334 | 1.18 |
| Ever used contraceptives | 39.40 | 2.66 | 500 | 1.22 | 42.07 | 2.39 | 511 | 1.09 | 37.89 | 2.72 | 417 | 1.14 | 34.43 | 3.14 | 334 | 1.20 |
| Ever used effective methods | 34.60 | 2.65 | 500 | 1.24 | 38.16 | 2.24 | 511 | 1.04 | 35.25 | 2.72 | 417 | 1.16 | 33.23 | 3.09 | 334. | 1.20 |
| Currently using (exposed) | 36.45 | 3.27 | 332 | 1.24 | 38.46 | 2.52 | 351 | . 97 | 32.70 | 3.36 | 263 | 1.15 | 35.48 | 3.57 | 217 | 1.10 |
| Using effective (exposed) | 29.22 | 3.01 | 332 | 1.20 | 29.91 | 2.35 | 351 | . 96 | 21.29 | 3.08 | 263 | 1.22 | 26.73 | 3.30 | 217 | 1.10 |
| Wants no more \& using eff. (exp.) | 44.16 | 4.81 | 154 | 1.20 | 47.54 | 3.40 | 183 | . 92 | 32.64 | 4.78 | 144 | 1.22 | 36.88 | 4.27 | 141 | 1.05 |
| Never used contraception | 60.46 | 2.71 | 483 | 1.22 | 57.23 | 2.39 | 491 | 1.07 | 61.79 | 2.79 | 403 | 1.15 | 64.19 | 3.23 | 310 | 1.19 |
| Used contraception in past | 14.49 | 1.81 | 483 | 1.13 | 15.27 | 1.52 | 491 | . 94 | 16.87 | 2.07 | 403 | 1.11 | 10.97 | 1.95 | 310 | 1.09 |
| Currently using contraception | 25.05 | 2.44 | 483 | 1.24 | 27.49 | 1.94 | 491 | . 96 | 21.34 | 2.53 | 403 | 1.24 | 24.84 | 2.67 | 310 | 1.09 |

8

| Variable name | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFFT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age at first marriage | 17.42 | . 19 | 314 | 1.00 | 16.71 | . 17 | 388 | 1.03 |
| Age at first marriage (<25) | 17.05 | . 15 | 302 | . 91 | 16.44 | . 15 | 377 | 1.02 |
| First marriage dissolved | 6.05 | 1.43 | 314 | 1.06 | 6.19 | 1.23 | 388 | 1.00 |
| Time spent in union | 99.34 | . 21 | 314 | . 99 | 99.27 | . 19 | 388 | . 94 |
| Currently married | 96.82 | . 99 | 314 | . 99 | 96.13 | 1.16 | 388 | 1.18 |
| Births in first 5 years | 2.16 | . 06 | 314 | 1.18 | 2.27 | . 05 | 388 | 1.09 |
| Births in past 5 years | 1.49 | . 07 | 303 | 1.05 | 1.59 | . 07 | 373 | 1.13 |
| Currently pregnant | 9.87 | 1.62 | 304 | . 95 | 8.31 | 1.30 | 373 | . 91 |
| Children ever born | 8.87 | . 06 | 314 | 1.00 | 10.81 | . 10 | 388 | 1.20 |
| Living children | 8.00 | . 00 | 314 | . 00 | 9.91 | . 06 | 388 | 1.14 |
| Breastfed in closed interval | 80.57 | 2.10 | 314 | . 94 | 85.31 | 1.80 | 388 | 1.00 |
| Wants no more children | 66.81 | 2.95 | 232 | . 95 | 71.84 | 2.62 | 277 | . 97 |
| Additional number wanted | . 99 | . 16 | 227 | 1.01 | . 65 | . 10 | 273 | . 98 |
| Desired family size | 7.68 | . 25 | 280 | 1.13 | 8.57 | . 27 | 336 | 1.26 |
| Knows effective contraceptives | 78.34 | 2.72 | 314 | 1.17 | 76.55 | 2.30 | 388 | 1.07 |
| Ever used contraceptives | 40.13 | 3.09 | 314 | 1.12 | 37.63 | 2.61 | 388 | 1.06 |
| Ever used effective methods | 32.80 | 2.85 | 314 | 1.08 | 33.51 | 2.56 | 388 | 1.07 |
| Currently using (exposed) | 30.20 | 3.26 | 202 | 1.01 | 28.46 | 3.10 | 246 | 1.07 |
| Using effective (exposed) | 21.78 | 2.55 | 202 | . 88 | 23.58 | 2.91 | 246 | 1.07 |
| Wants no more \& using eff. (exp.) | 28.15 | 3.37 | 135 | . 87 | 31.03 | 3.65 | 174 | 1.04 |
| Never used contraception | 59.87 | 3.18 | 304 | 1.13 | 61.66 | 2.71 | 373 | 1.07 |
| Used contraception in past | 20.07 | 2.36 | 304 | 1.03 | 19.57 | 2.40 | 373 | 1.17 |
| Currently using contraception | 20.07 | 2.17 | 304 | . 94 | 18.77 | 2.18 | 373 | 1.08 |

Table III.5aa - Sampling errors by number of livina children - arouped

| Variable name | 0 |  |  |  | 1-2. |  |  |  | 3-4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | $n$ | DEFT | Mean or per cent | SE: | n | DEFT |
| Age at first marriage | 19.25 | . 27 | 460 | 1.08 | 18.38 | . 15 | 1023 | 1.11 | 18.37 | . 16 | 1034 | 1.18 |
| Age at first marriage (<25) | 18.81 | . 43 | 91 | 1.18 | 19.59 | . 21 | 278 | 1.10 | 18.18 | . 14 | 662 | 1.20 |
| First marriage dissolved | 5.59 | 1.02 | 465 | . 96 | 7.42 | . 85 | 1.024 | 1.04 | 6.38 | . 79 | 1034 | 1.04 |
| Time spent in union | 93.06 | 1.83 | 465 | 1.00 | 94.22 | . 81 | 1024 | . 96 | 97.21 | . 44 | 1034 | . 97 |
| Currently married | 96.13 | . 83 | 465 | . 93 | 95.90 | . 61 | 1024 | . 99 | 96.91 | . 49 | 1034 | . 91 |
| Births in first 5 years | . 04 | . 02 | 106 | 1.06 | 1.49 | . 04 | 395 | . 87 | 2.11 | . 03 | 975 | 1.08 |
| Births in past 5 years | . 04 | . 03 | 91 | 1.05 | 1.38 | . 05 | 346 | 1.01 | 1.85 | . 05 | 938 | 1.40 |
| Currently pregnant | 32.21 | 2.26 | 447 | 1.02 | 28.72 | 1.53 | 982 | 1.06 | 21.86 | 1.49 | 1002 | 1.14 |
| Children ever born | . 07 | . 01 | 465 | . 98 | 1.75 | . 03 | 1024 | 1.07 | 3.94 | . 04 | 1034 | 1.06 |
| Living children | . 00 | . 00 | 465 | . 00 | 1.53 | . 02 | 1024 | 1.08 | 3.48 | . 02 | 1034 | 1.06 |
| Breastfed in closed interval | 72.73 | 11.63 | 11 | . 83 | 84.77 | 1.23 | 729 | . 92 | 83.95 | 1.23 | 1034 | 1.08 |
| Wants no more children | 1.74 | . 65 | 402 | 1.00 | 11.48 | 1.26 | 941 | 1.21 | 38.55 | 2.07 | 921 | 1.29 |
| Additional number wanted | 4.35 | . 15 | 373 | 1.07 | 3.25 | . 12 | 888 | 1.24 | 2.02 | . 11 | 894 | 1.11 |
| Desired family size | 4.74 | . 12 | 409 | 1.02 | 5.19 | . 12 | 924 | 1.17 | 5.69 | . 12 | 945 | 1.24 |
| Knows effective contraceptives | 66.24 | 2.35 | 465 | 1.07 | 77.54 | 2.17 | 1024 | 1.66 | 79.01 | 1.62 | 1034 | 1.28 |
| Ever used contraceptives | 5.59 | 1.15 | 465 | 1.08 | 29.59 | 2.14 | 1024 | 1.50 | 38.30 | 2.24 | 1034 | 1.48 |
| Ever used effective methods | 4.30 | 1.04 | 465 | 1.11 | 24.71. | 1.98 | 1024 | 1.47 | 33.46 | 1.95 | 1034 | 1.33 |
| Cur rently using (exposed) | 4.65 | 1.45 | 258 | 1.10 | 25.80 | 2.05 | 659 | 1.20 | 34.62 | 2.72 | 702 | 1.51 |
| Using effective (exposed) | 2.71 | 1.18 | 258 | 1.16 | 20.03 | 1.77 | 659 | 1.13 | 26.92 | 2.11 | 702 | 1.26 |
| Wants no more \& using eff. (exp.) | 66.67 | 27.22 | 3 | . 82 | 54.55 | 6.98 | 55 | 1.03 | 46.51 | 3.63 | 258 | 1.17 |
| Never used contraception | 94.41 | 1.20 | 447 | 1.11 | 69.76 | 2.18 | 982 | 1.49 | 61.48 | 2.25 | 1002 | 1.46 |
| Used contraception in past | 2.91 | . 81 | 447 | 1.02 | 12.93 | 1.25 | 982. | 1.17 | 1.4 .27 | 1.45 | 1002 | 1.31 |
| Currently using contraception | 2.68 | . 83 | 447 | 1.08 | 17.31 | 1.42 | 982 | 1.17 | 24.25 | 2.06 | 1002 | 1.52 |



Table III. 5 b - Sampling errors for differences between number of living chiJdren subclasses

| Variable name | (0) - (1) |  |  | (1) - (2) |  |  | (2)-(3) |  |  | (3)-(4) |  |  | (4)-(5) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | n |
| Age at first marriage | . 97 | . 33 | 470 | -. 20 | . 26 | 510 | . 05 | . 26 | 538 | . 11 | . 31 | 516 | . 43 | . 26 | 505 |
| Age at first marriage (<25) | -1.00 | . 56 | 93 | . 34 | . 39 | 125 | . 94 | . 30 | 223 | . 61 | . 27 | 324 | . 52 | . 25 | 413 |
| First marriage dissolved | -2.50 | 1.58 | 473 | 1.26 | 1.54 | 510 | 2.33 | 1.30 | 538 | -3.91 | 1.55 | 516 | . 57 | 1.83 | 505 |
| Time spent in union | . 67 | 2.35 | 473 | -2.88 | 1.80 | 510 | -2.36 | 1.06 | 538 | . 76 | . 97 | 516 | -1.09 | . 77 | 505 |
| Currently married | . 69 | 1.28 | 473 | -. 87 | 1.21 | 510 | -. 88 | . 99 | 538 | . 59 | 1.07 | 516 | . 51 | 1.04 | 505 |
| Births in first 5 years | -. 97 | . 08 | 106 | -. 65 | . 09 | 156 | -. 40 | . 06 | 360 | -. 08 | . 05 | 487 | -. 01 | . 06 | 503 |
| Births in past 5 years | -. 75 | . 09 | 86 | -. 78 | . 11 | 125 | -. 36 | . 07 | 336 | . 15 | . 07 | 469 | . 12 | . 07 | 482 |
| Currently pregnant | -2. 57 | 3.12 | 453 | 11.41 | 2.63 | 489 | 1.21 | 2.53 | 520 | . 63 | 2.84 | 500 | 5.44 | 2.25 | 487 |
| Children ever born | -1.08 | . 02 | 473 | -1.13 | . 03 | 510 | -1.09 | . 05 | 538 | -1.19 | . 05 | 516 | -1.16 | . 07 | 505 |
| Living children | -1.00 | . 00 | 473 | -1.00 | . 00 | 510 | -1.00 | . 00 | 538 | -1.00 | . 00 | 516 | -1.00 | . 00 | 505 |
| Breastfed in closed interval | -7.58 | 11.86 | 21 | -6.07 | 3.25 | 284 | . 61 | 2.11 | 535 | 3.77 | 2.07 | 516 | -2.54 | 2.11 | 505 |
| Wants no more children | -3.90 | 1.41 | 422 | -11.02 | 2.21 | 469 | -14.05 | 2.33 | 491 | -16.53 | 3.00 | 459 | -4.38 | 3.18 | 433 |
| Additional number wanted | . 72 | . 21 | 394 | . 73 | . 21 | 442 | . 49 | . 20 | 471 | . 84 | . 17 | 446 | . 11 | . 15 | 419 |
| Desired family size | -. 32 | . 18 | 424 | -. 25 | . 17 | 461 | -. 35 | . 17 | 487 | -. 07 | . 18 | 472 | -. 39 | . 18 | 454 |
| Knows effective contraceptives | -11.98 | 3.61 | 473 | 1.28 | 2.81 | 510 | -3.59 | 2.67 | 538 | 3.12 | 2.99 | 516 | -. 68 | 2.49 | 505 |
| Ever used contraceptives | -18.89 | 2.73 | 473 | -9.65 | 2.84 | 510 | -3.13 | 3.06 | 538 | -2.13 | 3.15 | 516 | -2.67 | 2.72 | 505 |
| Ever used effective methods | -13.75 | 2.48 | 473 | -12.58 | 2.71 | 510 | -1. 77 | 2.43 | 538 | -2.20 | 3.04 | 516 | -3.56 | 2.88 | 505 |
| Currently using (exposed) | -17.26 | 2.70 | 270 | -6.82 | 3.18 | 323 | -4.25 | 2.97 | 373 | -3.47 | 3.35 | 350 | -2.02 | 3.26 | 341 |
| Using effective (exposed) | -11.77 | 2.44 | 270 | -9.71 | 3.09 | 323 | -. 66 | 2.73 | 373 | -4. 35 | 3.51 | 350 | -. 70 | 3.57 | 341 |
| Wants no more \& using eff. (exp.) | 26.67 | 34.94 | 4 | -16.00 | 23.86 | 9 | 6.00 | 8.90 | 68 | 5.84 | 6.64 | 124 | -3.39 | 5.09 | 167 |
| Never used contraception | 18.97 | 2.85 | 453 | 10.68 | 2.90 | 489 | 2.32 | 2.97 | 520 | 1.97 | 3.10 | 500 | 3.23 | 2.67 | 487 |
| Used contraception in past | -8.18 | 1.83 | 453 | -3.47 | 2.12 | 489 | . 49 | 2.48 | 520 | -. 43 | 2.41 | 500 | -. 78 | 1.99 | 487 |
| Currently using contraception | -10.79 | 1.73 | 453 | -7.21 | 2.08 | 489 | -2.82 | 2.21 | 520 | -1.55 | 2.65 | 500 | -2.4.4 | 2.43 | 487 |


| Variable name | (5)-(6) |  |  | (6)-(7) |  |  | (7)-(8) |  |  | (8) - (9+) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | n | Mean or per cent | SE | n |
| Age at first marriage | . 18 | . 23 | 459 | . 61 | . 29 | 371 | -. 33 | . 28 | 324 | . 71 | . 23 | 347 |
| Age at first marriage (<25) | . 04 | . 21 | 423 | . 55 | . 26 | 354 | -. 24 | . 23 | 311 | . 61 | . 19 | 335 |
| First marriage dissolved | . 63 | 1.90 | 459 | -3.58 | 2.24 | 371 | 4.73 | 2.30 | 324 | -. 13 | 2.03 | 347 |
| Time spent in union | -. 48 | . 61 | 459 | . 57 | . 54 | 371 | -1.47 | . 43 | 324 | . 07 | . 29 | 347 |
| Currently married | -. 56 | 1.08 | 459 | 3.83 | 1.67 | 371 | -4.00 | 1.71 | 324 | . 68 | 1.63 | 347 |
| Births in first 5 years | . 07 | . 06 | 459 | -. 11 | . 08 | 371 | . 03 | . 08 | 324 | -. 11 | . 08 | 347 |
| Births in past 5 years | . 06 | . 07 | 441 | . 19 | . 09 | 350 | -. 08 | . 11 | 306 | -. 10 | . 10 | 334 |
| Currently pregnant | -. 04 | 2.15 | 443 | 4.19 | 2.76 | 350 | 2.07 | 2.53 | 307 | 1.56 | 1.99 | 335 |
| Children ever born | -1.02 | . 08 | 459 | -1.22 | . 10 | 371 | -. 91 | . 10 | 324 | -1.94 | . 10 | 347 |
| Living children | -1.00 | . 00 | 459 | -1.00 | . 00 | 371 | -1.00 | . 00 | 324 | -1.91 | . 06 | 347 |
| Breastfed in closed interval | -1.31 | 2.17 | 459 | 3.82 | 2.81 | 371 | 1.46 | 2.97 | 324 | -4.74 | 2.78 | 347 |
| Wants no more children | -1.42 | 3.38 | 372 | -10.34 | 4.38 | 286 | -3.42 | 4.09 | 243 | -5.03 | 4.05 | 253 |
| Additional number wanted | . 26 | . 19 | 363 | . 18 | . 20 | 279 | . 04 | . 19 | 237 | . 34 | . 18 | 248 |
| Desired family size | -. 74 | . 23 | 407 | -. 27 | . 24 | 324 | -. 55 | . 27 | 285 | -. 88 | . 32 | 305 |
| Knows effective contraceptives | -. 10 | 2.61 | 459 | . 33 | 3.34 | 371 | -. 50 | 3.54 | 324 | 1.80 | 3.11 | 34.7 |
| Ever used contraceptives | 4.18 | 3.18 | 459 | 3.46 | 3.92 | 371 | -5.70 | 3.46 | 324 | 2.50 | 3.62 | 347 |
| Ever used effective methods | 2.91 | 3.21 | 459 | 2.02 | 3.86 | 371 | . 43 | 3.82 | 324 | -. 70 | 3.69 | 347 |
| Currently using (exposed) | 5.76 | 3.62 | 301 | -2.78 | 5.12 | 238 | 5.29 | 4.10 | 209 | 1.74 | 4.43 | 222 |
| Using effective (exposed) | 8.62 | 3.71 | 301 | -5.44 | 4.73 | 238 | 4.95 | 3.97 | 209 | -1.80 | 3.84 | 222 |
| Wants no more \& using eff. (exp.) | 14.90 | 6.10 | 161 | -4.24 | 6.84 | 142 | 8.73 | 5.22 | 138 | -2.89 | 4.99 | 152 |
| Never used contraception | -4.56 | 3.28 | 443 | -2.41 | 4.08 | 350 | 4.33 | 3.62 | 307 | -1.79 | 3.76 | 335 |
| Used contraception in past | -1.60 | 2.43 | 443 | 5.91 | 2.62 | 350 | -9.10 | 2.59 | 307 | . 49 | 3.22 | 335 |
| Currently using contraception | 6.15 | 2.68 | 443 | -3.50 | 3.79 | 350 | 4.77 | 2.89 | 307 | 1.30 | 2.95 | 335 |

Table III. 5 bb - Sampling errors for differences between number of living children (grouped) subclasses

| Variable name | $(0)-(1-2)$ |  |  | $(1-2)-(3-4)$ |  |  | $(3-4)-(5-6)$ |  |  | $(5-6)-(7-8)$ |  |  | $(7-8)-(9+)$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | Mean or per cent | SE | n | Mearı or per cent | SE | ก | Mean or per cent | SE | $n$ | Mean or per cent | SE | n |
| Age at first marriage | . 87 | . 32 | 635 | . 01 | . 18 | 1028 | . 57 | . 19 | 978 | . 55 | . 20 | 763 | . 54 | . 21 | 485 |
| Age at first marriage (<25) | -. 78 | . 49 | 137 | 1.41 | . 25 | 392 | . 81 | . 19 | 745 | . 45 | . 17 | 719 | . 49 | . 20 | 469 |
| First marriage dissolved | -1.83 | 1.26 | 640 | 1.04 | 1.18 | 1029 | -1.16 | 1.08 | 978 | -. 94 | 1.52 | 763 | 2.30 | 1.83 | 485 |
| Time spent in union | -1.16 | 1.98 | 640 | -2.98 | . 89 | 1029 | -. 99 | . 52 | 978 | -. 41 | . 36 | 763 | -. 66 | . 30 | 485 |
| Currently married | . 23 | 1.04 | 640 | -1.01 | . 72 | 1029 | . 57 | . 79 | 978 | 1.58 | 1.13 | 763 | -1.38 | 1.56 | 485 |
| Births in first 5 years | -1.45 | . 04 | 167 | -. 62 | . 05 | 562. | -. 01 | . 05 | 951 | -. 05 | . 05 | 763 | -. 09 | . 06 | 485 |
| Births in past 5 years | -1.34 | . 06 | 144 | -. 47 | . 06 | 506 | . 22 | . 06 | 914 | . 18 | . 06 | 726 | -. 14 | . 09 | 464 |
| Currently pregnant | 3.50 | 2.73 | 614 | 6.86 | 1.99 | 992 | 5.75 | 1.76 | 945 | 5.20 | 1.81 | 728 | 2.60 | 1.84 | 464 |
| Children ever born | -1.68 | . 03 | 640 | -2.20 | . 05 | 1029 | -2.23 | . 06 | 978 | -2.22 | . 07 | 763 | -2.41 | . 11 | 485 |
| Living children | -1.53 | . 02 | 640 | -1.95 | . 03 | 1029 | -1.97 | . 02 | 978 | -2.04 | . 02 | 763 | -2.43 | . 07 | 485 |
| Breastfed in closed interval | -12.05 | 11.68 | 22 | . 83 | 1.63 | 855 | -1.18 | 1.67 | 978 | 3.80 | 1.61 | 763 | -3.98 | 2.28 | 485 |
| Wants no more children | -9.74 | 1.48 | 563 | -27.07 | 1.87 | 931 | -13.70 | 2.73 | 832 | -12.78 | 2.78 | 592 | -6.82 | 3.60 | 353 |
| Additional number wanted | 1.11 | . 18 | 525 | 1.23 | . 14 | 891 | . 66 | . 13 | 809 | . 35 | . 13 | 577 | . 36 | . 15 | 346 |
| Desired family size | -. 45 | . 14 | 567 | -. 50 | . 14 | 934 | -. 76 | . 15 | 879 | -. 95 | . 18 | 673 | -1.17 | . 29 | 423 |
| Knows effective contraceptives | -11.30 | 3.13 | 640 | -1.47 | 2.08 | 1029 | . 89 | 1.71 | 978 | . 04 | 2.35 | 763 | 1.54 | 2.28 | 485 |
| Ever used contraceptives | -24.00 | 2.38 | 640 | -8.71 | 2.35 | 1029 | -1.90 | 2.16 | 978 | 3.00 | 2.86 | 763 | -. 44 | 3.12 | 485 |
| Ever used effective methods | -20.41 | 2.16 | 640 | -8.76 | 2.10 | 1029 | -3.39 | 2.18 | 978 | 3.83 | 2.65 | 763 | -. 48 | 3.00 | 485 |
| Currently using (exposed) | -21.15 | 2.29 | 371 | -8.82 | 2.39 | 680 | -1.38 | 2.60 | 655 | 3.06 | 3.31 | 498 | 4.48 | 4.03 | 310 |
| Using effective (exposed) | -17.32 | 1.97 | 371 | -6.89 | 2.26 | 680 | . 70 | 2.41 | 655 | 1.88 | 2.71 | 498 | . 77 | 3.27 | 310 |
| Wants no more \& using eff. (exp.) | 12.12 | 28.42 | 6 | 8.03 | 8.24 | 91 | 5.53 | 3.85 | 288 | 8.37 | 3.87 | 299 | 1.57 | 4.43 | 213 |
| Never used contraception | 24.65 | 2.47 | 614 | 8.28 | 2.35 | 992 | 2.19 | 2.17 | 945 | -2.77 | 2.88 | 728 | . 39 | 3.26 | 464 |
| Used contraception in past | -10.02 | 1.54 | 614 | -1.34 | 1.79 | 992 | -1.72 | 1. 66 | 945 | . 52 | 1.87 | 728 | -4.10 | 2.95 | 464 |
| Currently using contraception | -14.63 | 1.51 | $6] .4$ | -6.94 | 1.81 | 992 | -. 47 | 2.00 | 945 | 2.24 | 2.42 | 728 | 3.71 | 2.86 | 464 |

Table III.5c - Sampling errors by number of living children (including current pregnancy)

| Variable name | 0 |  |  |  | 1 |  |  |  | 2 |  |  |  | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | ก | DEFT | Mean or per cent | SE | n | DEFT' |
| Age at first marriage | 19.52 | . 37 | 315 | 1.13 | 18.36 | . 21 | 466 | 1.10 | 18.57 | . 19 | 579 | 1.06 | 18.40 | . 24 | 542 | 1.28 |
| Age at first marriage (<25) | 18.34 | . 44 | 82 | 1.18 | 19.93 | . 41 | 75 | .94 | 19.59 | . 24 | 174 | 1.05 | 18.62 | . 22 | 263 | 1.17 |
| First marriage dissolved | 7.81 | 1.43 | 320 | . 95 | 7.49 | 1.19 | 467 | . 98 | 6.56 | 1.10 | 579 | 1.07 | 4.98 | . 93 | 542 | . 99 |
| Time spent in union | 92.29 | 2.06 | 320 | 1.01 | 91.51 | 1.89 | 467 | . 94 | 94.92 | . 94 | 579 | . 99 | 97.55 | . 74 | 542 | 1.14 |
| Currently married | 94.69 | 1.15 | 320 | . 92 | 95.07 | . 97 | 467 | . 97 | 96.72 | . 75 | 579 | 1.01 | 97.05 | . 72 | 542 | . 99 |
| Births in first 5 years | . 04 | . 03 | 101 | 1.06 | . 87 | . 08 | 79 | 1.05 | 1.53 | . 05 | 250 | . 96 | 1.99 | . 04 | 447 | 1.04 |
| Births in past 5 years | . 03 | . 03 | 86 | 1.05 | . 55 | . 10 | 58 | 1.00 | 1.43 | . 07 | 226 | 1.05 | 1.83 | . 07 | 427 | 1.24 |
| Currently pregnant | . 00 | . 00 | 303 | . 00 | 32.43 | 2.25 | 444 | 1.01 | 28.57 | 2.26 | 560 | 1.18 | 23.19 | 1.57 | 526 | . 85 |
| Children ever born | . 06 | . 02 | 320 | 1.00 | . 80 | . 03 | 467 | 1.05 | 1.98 | . 04 | 579 | 1.15 | 3.10 | . 04 | 542 | 1.02 |
| Living children | . 00 | . 00 | 320 | . 00 | . 69 | . 02 | 467 | 1.00 | 1.72 | . 02 | 579 | 1.19 | 2.77 | . 01 | 542 | . 83 |
| Breastfed in closed interval | 100.00 | . 04 | 1 | . 00 | 67.44 | 6.61 | 43 | . 91 | 84.47 | 1.46 | 573 | . 96 | 87.27 | 1.44 | 542 | 1.01 |
| Wants no more children | 1.16 | . 66 | 258 | . 99 | 2.11 | . 66 | 427 | . 95 | 13.06 | 1.81 | 536 | 1.24 | 27.85 | 2.40 | 492 | 1.19 |
| Additional number wanted | 4.54 | . 17 | 234 | . 94 | 3.75 | . 14 | 403 | 1.10 | 3.24 | . 16 | 509 | 1.17 | 2.48 | . 15 | 476 | 1.02 |
| Desired family size | 4.57 | . 14 | 272 | . 91 | 4.84 | . 14 | 426 | 1.09 | 5.33 | . 15 | 522 | 1.07 | 5.56 | . 15 | 499 | 1.03 |
| Knows effective contraceptives | 63.13 | 2.73 | 320 | 1.01 | 77.30 | 2.41 | 467 | 1.24 | 77.20 | 2.33 | 579 | 1.34 | 79.15 | 1.99 | 542 | 1.14 |
| Ever used contraceptives | 5.00 | 1.27 | 320 | 1.04 | 21.84 | 2.19 | 467 | 1.15 | 30.40 | 2.46 | 579 | 1.29 | 38.19 | 2.85 | 542 | 1.37 |
| Ever used effective methods | 4.38 | 1.19 | 320 | 1.04 | 15.85 | 2.11 | 467 | 1.25 | 26.94 | 2.35 | 579 | 1.27 | 32.84 | 2.48 | 542 | 1.23 |
| Currently using (exposed) | 4.65 | 1.45 | 258 | 1.10 | 21.91 | 2.30 | 283 | . 94 | 28.72 | 2.79 | 376 | 1.20 | 32.97 | 3.12 | 370 | 1.28 |
| Using effective (exposed) | 2.71 | 1.18 | 258 | 1.16 | 14.49 | 2.17 | 283 | 1.04 | 24.20 | 2.47 | 376 | 1.12 | 24.86 | 2.47 | 370 | 1.10 |
| Wants no more \& using eff. (exp.) | 66.67 | 27.22 | 3 | . 82 | 40.00 | 21.91 | 5 | . 89 | 56.00 | 7.58 | 50 | 1.07 | 50.00 | 4.95 | 104 | 1.00 |
| Never used contraception | 95.05 | 1.28 | 303 | 1.03 | 78.15 | 2.20 | 444 | 1.12 | 68.75 | 2.53 | 560 | 1.29 | 61.41 | 2.81 | 526 | 1.32 |
| Ulsed contraception in past | . 99 | . 56 | 303 | . 98 | 7.88 | 1.37 | 444 | 1.07 | 11.96 | 1.54 | 560 | 1.12 | 15.40 | 1.69 | 526 | 1.07 |
| Currently using contraception | 3.96 | 1.23 | 303 | 1.10 | 13.96 | 1.53 | 444 | . 93 | 19.29 | 1.91 | 560 | 1.14 | 23.19 | 2.31 | 526 | 1.26 |


| Variable name | 4 |  |  |  | 5 |  |  |  | 6 |  |  |  | 7 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 18.31 | . 20 | 511 | 1.02 | 18.08 | . 17 | 536 | 1.01 | 17.57 | . 20 | 431 | 1.18 | 17.12 | . 21 | 362 | 1.06 |
| Age at first marriage (<25) | 18.05 | . 20 | 355 | 1.15 | 17.63 | . 14 | 467 | 1.02 | 17.28 | . 17 | 405 | 1.16 | 16.79 | . 20 | 344 | 1.14 |
| First marriage dissolved | 7.24 | 1.29 | 511 | 1.12 | 8.21 | 1.31 | 536 | 1.10 | 6.96 | 1.20 | 431 | . 98 | 10.22 | 1.70 | 362 | 1.07 |
| Time spent in union | 96.90 | . 67 | 511 | 1.02 | 97.83 | . 44 | 536 | 1.06 | 98.46 | . 37 | 431 | 1.02 | 97.91 | . 39 | 362 | 1.02 |
| Currently married | 96.67 | . 81 | 511 | 1.02 | 96.27 | . 76 | 536 | . 92 | 96.75 | . 87 | 431 | 1.02 | 93.37 | 1.42 | 362 | 1.08 |
| Births in first 5 years | 2.16 | . 04 | 495 | . 89 | 2.16 | . 04 | 536 | . 93 | 2.08 | . 05 | 431 | . 95 | 2.22 | . 05 | 362 | . 96 |
| Births in past 5 years | 1.85 | . 07 | 476 | 1.20 | 1.66 | . 05 | 512 | 1.06 | 1.59 | . 06 | 416 | 1.04 | 1.51 | . 08 | 338 | 1.26 |
| Currently pregnant | 23.28 | 2.13 | 494 | 1.12 | 20.16 | 2.07 | 5.6 | 1.17 | 18.94 | 1.74 | 417 | . 91 | 19.23 | 2.21 | 338 | 1.03 |
| Children ever born | 4.33 | . 05 | 511 | . 94 | 5.46 | . 05 | 536 | . 99 | 6.54 | . 06 | 431 | 1.06 | 7.76 | . 07 | 362 | . 94 |
| Living children | 3.77 | . 02 | 511 | 1.14 | 4.81 | . 02 | 536 | 1.18 | 5.82 | . 02 | 431 | . 88 | 6.82 | . 02 | 362 | 1.04 |
| Breastfed in closed interval. | 81.80 | 1.83 | 511 | 1.07 | 84.14 | 1.43 | 536 | . 90 | 86.54 | 1.73 | 431 | 1.05 | 82.32 | 1.98 | 362 | . 99 |
| Wants no more children | 44.52 | 2.74 | 447 | 1.16 | 51.65 | 2.64 | 455 | 1.13 | 53.51 | 3.41 | 342 | 1.26 | 60.64 | 3.04 | 282 | 1.04 |
| Additional number wanted | 1.68 | . 13 | 433 | 1.04 | 1.52 | . 13 | 440 | . 99 | 1.33 | . 17 | 334 | 1.21 | 1.00 | . 13 | 276 | 1.02 |
| Desired family size | 5.68 | . 15 | 463 | 1.13 | 6.07 | . 14 | 480 | 1.08 | 6.81 | . 22 | 379 | 1.22 | 6.98 | . 18 | 319 | 1.02 |
| Knows effective contraceptives | 78.47 | 2.08 | 511 | 1.15 | 77.80 | 2.00 | 536 | 1.12 | 77.49 | 2.37 | 431 | 1.18 | 79.83 | 2.18 | 362 | 1.03 |
| Ever used contraceptives | 37.38 | 2.54 | 511 | 1.19 | 41.42 | 2.22 | 536 | 1.04 | 38.98 | 2.74 | 431 | 1.17 | 34.53 | 2.91 | 362 | 1.16 |
| Ever used effective methods | 32.68 | 2.46 | 511 | 1.18 | 37.50 | 2.17 | 536 | 1.03 | 36.19 | 2.63 | 431 | 1.14 | 33.43 | 2.95 | 362 | 1.19 |
| Currently using (exposed) | 36.45 | 3.27 | 332 | 1.24 | 38.46 | 2.52 | 351 | . 97 | 32.70 | 3.36 | 263 | 1.16 | 35.48 | 3.57 | 217 | 1.10 |
| Using effective (exposed) | 29.22 | 3.01 | 332 | 1.20 | 29.91 | 2.35 | 351 | . 96 | 21.29 | 3.08 | 263 | 1.22 | 26.73 | 3.30 | 217 | 1.10 |
| Wants no more \& using eff. (exp.) | 44.16 | 4.81 | 154 | 1.20 | 47.54 | 3.40 | 183 | . 92 | 32.64 | 4.78 | 144 | 1.22 | 36.88 | 4.27 | 141 | 1.05 |
| Never used contraception | 62.55 | 2.62 | 494 | 1.20 | 57.95 | 2.23 | 516 | 1.03 | 60.67 | 2.80 | 417 | 1.17 | 64.20 | 2.98 | 338 | 1.14 |
| Used contraception in past | 12.96 | 1.89 | 494 | 1.25 | 15.89 | 1.64 | 516 | 1.02 | 18.71 | 2.20 | 417 | 1.15 | 13.02 | 1.72 | 338 | . 94 |
| Currently using contraception | 24.49 | 2.43 | 494 | 1.25 | 26.16 | 1.84 | 516 | . 95 | 20.62 | 2.40 | 417 | 1.21 | 22.78 | 2.43 | 338 | 1.06 |


|  | 8 |  |  |  | 9+ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable name | Mean or per cent | SE | n | DEFPT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 17.36 | . 18 | 321 | 1.00 | 16.80 | . 17 | 418 | 1.05 |
| Age at first marriage (<25) | 17.06 | . 15 | 311 | . 93 | 16.50 | . 15 | 405 | 1.05 |
| First marriage dissolved | 5.92 | 1.38 | 321 | 1.04 | 5.98 | 1.16 | 418 | 1.00 |
| Time spent in union | 99.35 | . 21 | 321 | . 99 | 99.31 | . 18 | 418 | . 94 |
| Currently married | 96.88 | . 96 | 321 | . 99 | 96.41 | 1.08 | 418 | 1.18 |
| Births in first 5 years | 2.13 | . 06 | 321 | 1.18 | 2.28 | . 05 | 418 | 1.10 |
| Births in past 5 years | 1.49 | . 07 | 310 | 1.00 | 1.61 | . 07 | 403 | 1.11 |
| Currently pregnant | 11.90 | 1.96 | 311 | 1.07 | 15.14 | 1.68 | 403 | . 94 |
| Children ever born | 8.73 | . 07 | 321 | 1.07 | 10.68 | . 10 | 418 | 1.18 |
| Living children | 7.88 | . 02 | 321 | 1.07 | 9.78 | . 06 | 418 | 1.12 |
| Breastfed in closed interval | 81.00 | 2.29 | 321 | 1.04 | 84.93 | 1.73 | 418 | . 99 |
| Wants no more children | 64.85 | 3.07 | 239 | . 99 | 71.34 | 2.53 | 307 | . 98 |
| Additional number wanted | 1.07 | . 17 | 232 | 1.04 | . 65 | . 10 | 303 | . 98 |
| Desired family size | 7.72 | . 24 | 283 | 1.10 | 8.56 | . 26 | 363 | 1.26 |
| Knows effective contraceptives | 76.95 | 2.54 | 321 | 1.08 | 76.56 | 2.23 | 418 | 1.08 |
| Ever used contraceptives | 37.69 | 2.92 | 321 | 1.08 | 37.56 | 2.50 | 418 | 1.05 |
| Ever used effective methods | 30.53 | 2.68 | 321 | 1.04 | 33.49 | 2.40 | 418 | 1.04 |
| Currently using (exposed) | 30.20 | 3.26 | 202 | 1.01 | 28.46 | 3.10 | 246 | 1.07 |
| Using effective (exposed) | 21.78 | 2.55 | 202 | . 88 | 23.58 | 2.91 | 246 | 1.07 |
| Wants no more \& using eff. (exp.) | 28.15 | 3.37 | 135 | . 87 | 31.03 | 3.65 | 174 | 1.04 |
| Never used contraception | 62.38 | 2.98 | 311 | 1.08 | 61.79 | 2.60 | 403 | 1.07 |
| Used contraception in past | 18.01 | 2.24 | 311 | 1.03 | 20.84 | 2.30 | 403 | 1.14 |
| Currently using contraception | 19.61 | 2.15 | 311 | . 95 | 17.37 | 2.03 | 403 | 1.07 |

Table III.5cc - Sampling errors by number of living children - arouped, including current pregnancy

| Variable name | 0 |  |  |  | 1-2 |  |  |  | 3-4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | ก | DEFT |
| Age at first marriage | 19.52 | . 37 | 315 | 1.13 | 18.47 | . 14 | 1045 | 1.09 | 18.36 | . 16 | 1053 | 1.19 |
| Age at first marriage (<25) | 18.34 | . 44 | 82 | 1.18 | 19.69 | . 22 | 249 | 1.06 | 18.29 | . 14 | 618 | 1.14 |
| First marriage dissolved | 7.81 | 1.43 | 320 | . 95 | 6.98 | . 83 | 1046 | 1.05 | 6.08 | .76 | 1053 | 1.03 |
| Time spent in union | 92.29 | 2.06 | 320 | 1.01 | 93.81. | . 88 | 1046 | . 96 | 97.18 | . 47 | 1053 | 1.01 |
| Currently married | 94.69 | 1.15 | 320 | . 92 | 95.98 | .61 | 1046 | 1.00 | 96.87 | . 52 | 1053 | . 97 |
| Births in first 5 years | . 04 | . 03 | 101 | 1.06 | 1.37 | . 04 | 329 | . 92 | 2.08 | . 03 | 942 | 1.03 |
| Births in past 5 years | . 03 | . 03 | 86 | 1.05 | 1.25 | . 06 | 284 | 1.02 | 1.84 | . 05 | 903 | 1.42 |
| Currently preanant | . 00 | . 00 | 303 | . 00 | 30.28 | 1.61 | 1004 | 1.11 | 23.24 | 1.40 | 1020 | 1.06 |
| Children ever born | . 06 | . 02 | 320 | 1.00 | 1.46 | . 03 | 1046 | 1.14 | 3.70 | . 04 | 1053 | 1.04 |
| Living children | . 00 | . 00 | 320 | . 00 | 1.26 | . 02 | 1046 | 1.06 | 3.26 | . 02 | 1053 | . 96 |
| Breastfed in closed interval | 100.00 | . 04 | 1 | . 00 | 83.28 | 1.36 | 616 | . 90 | 84.62 | 1.23 | 1053 | 1.11 |
| Wants no more children | 1.16 | . 66 | 258 | . 99 | 8.20 | 1.07 | 963 | 1.21 | 35.78 | 2.02 | 939 | 1.29 |
| Additional number wanted | 4.54 | . 17 | 234 | . 94 | 3.47 | . 11 | 912 | 1.20 | 2.10 | . 11 | 909 | 1.10 |
| Desired family size | 4.57 | . 14 | 272 | . 91 | 5.11 | . 11 | 948 | 1.18 | 5.62 | . 12 | 962 | 1.22 |
| Knows effective contraceptives | 63.13 | 2.73 | 320 | 1.01 | 77.25 | 2.00 | 1046 | 1.54 | 78.82 | 1.54 | 1053 | 1.22 |
| Ever used contraceptives | 5.00 | 1.27 | 320 | 1.04 | 26.58 | 1.89 | 1046 | 1.38 | 37.80 | 2.20 | 1053 | 1.47 |
| Ever used effective methods | 4.38 | 1.19 | 320 | 1.04 | 21.99 | 1.79 | 1046 | J. 40 | 32.76 | 1.92 | 1053 | ]. 33 |
| Currently using (exposed) | 4.65 | 1.45 | 258 | 1.10 | 25.80 | 2.05 | 659 | 1.20 | 34.62 | 2.72 | 702 | 1.5] |
| Using effective (exposeत) | 2.71 | 1.18 | 258 | 1.16 | 20.03 | 1.77 | 659 | 1.13 | 26.92 | 2.11 | 702 | 1.26 |
| Wants no more \& using eff. (exp.) | 66.67 | 27.22 | 3 | . 82 | 54.55 | 6.98 | 55 | 1. 03 | 46.51 | 3.63 | 258 | 1.17 |
| 年ever used contraception | 95.05 | 1.28 | 303 | 1.03 | 72.91 | 1.94 | 1004 | 1.38 | 61.96 | 2.22 | 1.020 | 1.46 |
| Used contraception in past | . 99 | . 56 | 303 | . 98 | 10.16 | ]. 08 | 1004 | 1.13 | 14.22 | 1.37 | 1020 | 1.26 |
| Currently using oontraception | 3.96 | 1.23 | 303 | 1.10 | 16.93 | 1.41 | 1004 | 1.19 | 23.82 | 2.02 | 1020 | 1.51 |


| Variable name | 5-6 |  |  |  | 7-8 |  |  |  | $9+$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SF, | n | DEFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 17.85 | . 13 | 967 | 1.09 | 17.23 | . 14 | 683 | 1.04 | 16.80 | . 17 | 418 | 1.05 |
| Age at first marriage (<25) | 17.47 | . 11 | 872 | 1.07 | 16.92 | . 13 | 655 | 1.12 | 16.50 | . 15 | 405 | 1.05 |
| First marriage dissolved | 7.65 | . 93 | 967 | 1.09 | 8.20 | 1.13 | 683 | 1.07 | 5.98 | 1.16 | 418 | 1.00 |
| Time spent in union | 98.14 | . 28 | 967 | 1.01 | 98.62 | . 24 | 683 | 1,06 | 99.31 | . 18 | 418 | . 94 |
| Current]y married. | 96.48 | . 63 | 967 | 1.06 | 95.02 | . 93 | 683 | 1.11 | 96.41 | 1.08 | 418 | 1.18 |
| Births in first 5 years | 2.12 | . 03 | 967 | . 97 | 2.18 | . 04 | 683 | 1.04 | 2.28 | . 05 | 418 | 1.10 |
| Births in past 5 years | 1.63 | . 04 | 92.8 | 1.18 | 1.50 | . 05 | 648 | 1.10 | 1.61 | . 07 | 403 | 1.11 |
| Currently pregnant | 19.61 | 1.32 | 933 | 1.01 | 15.72 | ]. 52 | 649 | 1.06 | 15.14 | 1.68 | 403 | . 94 |
| Children ever born | 5.94 | . 05 | 967 | 1.11 | 8.21 | . 06 | 683 | 1.02 | 10.68 | . 10 | 418 | 1. 18 |
| Living children | 5.26 | . 02 | 967 | . 99 | 7.32 | . 02 | 683 | . 99 | 9.78 | . 06 | 418 | 1.12 |
| Breastfed in closed interval | 85.21 | 1.05 | 967 | . 92 | 81.70 | 1.50 | 683 | 1.01 | 84.93 | 1.73 | 418 | . 99 |
| Wants no more children | 52.45 | 2.33 | 797 | 1.31 | 62.57 | 2.38 | 521 | 1.12 | 71.34 | 2.53 | 307 | . 98 |
| Additional number wanted | 1.44 | . 12 | 774 | 1.21 | 1.03 | . 11 | 508 | 1.06 | . 65 | . 10 | 303 | . 98 |
| Desired family size | 6.40 | . 14 | 859 | 1.27 | 7.33 | . 16 | 602 | 1.14 | 8.56 | . 26 | 363 | 1.26 |
| Knows effective contraceptives | 77.66 | 1.78 | 967 | 1.33 | 78.48 | 1.87 | 683 | 1.19 | 76.56 | 2.23 | 418 | 1.08 |
| Ever used contraceptives | 40.33 | 1.99 | 967 | 1.26 | 36.02 | 2.48 | 683 | 1.35 | 37.56 | 2.50 | 418 | 1.05 |
| Ever used effective methods | 36.92 | 1.88 | 967 | 1.21 | 32.06 | 2.20 | 683 | 1.23 | 33.49 | 2.40 | 418 | 1.04 |
| Currently using (exposed) | 35.99 | 2.28 | 61.4 | 1.18 | 32.94 | 2.73 | 419 | 1.19 | 28.46 | 3.10 | 246 | 1.07 |
| Using effective (exposed) | 26.22 | 1.96 | 614 | 1.10 | 24.34 | 2.19 | 419 | 1.04 | 23.58 | 2.91 | 246 | 1.07 |
| Wants no more \& using eff. (exp.) | 40.98 | 2.76 | 327 | 1.01 | 32.61 | 2.82 | 276 | 1.00 | 31.03 | 3.65 | 174 | 1.04 |
| Never used contraception | 59.16 | 1.98 | 933 | 1.23 | 63.33 | 2.51 | 649 | 1.33 | 61.79 | 2.60 | 403 | 1.07 |
| Used contraception in past | 17.15 | 1.44 | 933 | 1.17 | 15.41 | 1.57 | 649 | 1.11 | 20.84 | 2.30 | 403 | 1.14 |
| Currently using contraception | 23.69 | 1.69 | 933 | 1.22 | 21.26 | 1.86 | 649 | 1.15 | 17.37 | 2.03 | 403 | 1.07 |

Table III.6a - Sampling errors by wife"s education

| Variable name | No schooling |  |  |  | Incomplete primary |  |  |  | Complete primary |  |  |  | Secondary and over |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | ก | DEFT |
| Age at first marriage | 17.90 | . 10 | 2980 | 1.25 | 17.57 | . 18 | 585 | 1.08 | 18.00 | . 13 | 746 | .96 | 22.30 | . 29 | 170 | 1.02 |
| Age at first marriage (<25) | 17.47 | . 07 | 2105 | 1.06 | 17.43 | . 19 | 333 | 1.15 | 17.82 | . 17 | 367 | 1.12 | 20.87 | . 37 | 76 | 1.12 |
| First marriage dissolved | 8.14 | . 54 | 2984 | 1.07 | 6.64 | . 90 | 587 | . 88 | 3.75 | . 65 | 746 | . 94 | 4.12 | 1.48 | 170 | . 97 |
| Time spent in union | 97.50 | . 20 | 2984 | . 94 | 98.29 | . 35 | 587 | . 97 | 98.60 | . 38 | 746 | 1.05 | 97.03 | 1.26 | 170 | 1.07 |
| Currently married | 95.58 | . 44 | 2984 | 1.16 | 96.25 | . 71 | 587 | . 90 | 97.59 | . 50 | 746 | . 89 | 98.24 | . 99 | 170 | . 98 |
| Births in first 5 years | 1.95 | . 02 | 2466 | . 99 | 2.21 | . 04 | 428 | . 96 | 2.15 | . 05 | 455 | 1.17 | 2.03 | . 11 | 91 | 1.03 |
| Births in past 5 years | 1.66 | . 03 | 2325 | 1.27 | 1.49 | . 06 | 403 | 1.01 | 1.37 | . 07 | 437 | 1.31 | 1.28 | . 13 | 87 | 1.22 |
| Currently pregnant | 20.62 | . 83 | 2852 | 1.09 | 19.12 | 1.73 | 565 | 1.05 | 21.02 | 1.64 | 728 | 1.09 | 22.75 | 3.20 | 167 | . 98 |
| Children ever born | 5.39 | . 08 | 2984 | 1.31 | 4.16 | . 12 | 587 | . 99 | 3.16 | . 12 | 746 | 1.24 | 2.19 | . 16 | 170 | 1.28 |
| Living children | 4.73 | . 07 | 2984 | 1.22 | 3.81 | . 11 | 587 | 1.02 | 2.96 | . 10 | 746 | 1.18 | 2.06 | . 15 | 170 | 1.28 |
| Breastfed in closed interval | 85.77 | . 75 | 2608 | 1.10 | 82.74 | 1.49 | 481 | . 86 | 78.60 | 1.62 | 542 | . 92 | 75.70 | 4.59 | 107 | 1.10 |
| Wants no more children | 32.68 | 1.30 | 2433 | 1.36 | 45.80 | 2.56 | 500 | 1.15 | 41.18 | 2.49 | 692 | 1.33 | 45.00 | 4.09 | 160 | 1.04 |
| Additional number wanted | 2.65 | . 09 | 2306 | 1.35 | 1.36 | . 10 | 491 | 1.11 | 1.47 | . 11 | 683 | 1.45 | 1.19 | . 10 | 160 | . 89 |
| Desired family size | 7.11 | . 11 | 2577 | $1.54{ }^{\text { }}$ | 4.64 | . 10 | 546 | 1.07 | 4.27 | . 10 | 716 | 1.36 | 3.53 | . 09 | 167 | . 89 |
| Knows effective contraceptives | 67.02 | 1.62 | 2984 | 1.88 | 96.25 | . 83 | 587 | 1.05 | 95.44 | . 73 | 746 | . 96 | 100.00 | . 00 | 170 | . 00 |
| Ever used contraceptives | 19.03 | 1.16 | 2984 | 1.61 | 58.94 | 2.38 | 587 | 1.17 | 59.12 | 2.55 | 74.6 | 1.42 | 76.47 | 3.29 | 170 | 1.01 |
| Ever used effective methods | 16.29 | 1.06 | 2984 | 1.56 | 53.83 | 2.24 | 587 | 1.09 | 52.68 | 2.71 | 746 | 1.48 | 64.71 | 3.54 | 170 | . 96 |
| Currently using (exposed) | 16.15 | 1.26 | 1845 | 1.47 | 48.72 | 3.22 | 392 | 1.27 | 52.50 | 2.74 | 539 | 1.27 | 67.21 | 3.73 | 122 | . 87 |
| Using effective (exposed) | 12.68 | . 97 | 1845 | 1.25 | 37.50 | 3.22 | 392 | 1.32 | 38.96 | 2.51 | 539 | 1.20 | 47.54 | 4.27 | 122 | . 94 |
| Wants no more \& using eff. (exp.) | 28.66 | 2.05 | 628 | 1.14 | 49.44 | 3.95 | 180 | 1.06 | 55.13 | 3.22 | 234 | . 99 | 62.75 | 5.47 | 51 | . 80 |
| Never used contraception | 80.65 | 1.21 | 2852 | 1.63 | 40.71 | 2.44 | 565 | 1.18 | 40.52 | 2.55 | 728 | 1.40 | 23.35 | 3.28 | 167 | 1.00 |
| Used contraception in past | 8.91 | . 72 | 2852 | 1.35 | 25.49 | 1.97 | 565 | 1.07 | 20.60 | 1.84 | 728 | 1.23 | 27.54 | 3.81 | 167 | 1.10 |
| Currently using contraception | 10.45 | . 83 | 2852 | 1.45 | 33.81 | 2.34 | 565 | 1.18 | 38.87 | 2.31 | 728 | 1.28 | 49.10 | 3.86 | 167 | .99 |

Table III. 6b - Sampling errors for differences between wife's education subclasses

| Variable name | (No schooling) (Incomplete primary) |  |  | $\begin{aligned} & \text { (Incomplete primary) - } \\ & \text { (Complete primary) } \end{aligned}$ |  |  | (Complete primary) (Secondary and over) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or Percent | SE | n | Mean or Percent | SE | n | Mean or Percent | SE | n |
| Age at first marriage | . 33 | . 20 | 978 | -. 43 | . 22 | 656 | -4.30 | . 28 | 277 |
| Age at first marriage (<25) | . 04 | . 20 | 575 | -. 39 | . 23 | 349 | -3.05 | . 38 | 126 |
| First marriage dissolved | 1.50 | 1.04 | 981 | 2.89 | 1.11 | 657 | -. 36 | 1.32 | 277 |
| Time spent in union | -. 79 | . 41 | 981 | -. 31 | . 49 | 657 | 1.57 | 1.24 | 277 |
| Currently marriea | -. 68 | . 81 | 981 | -1.33 | . 96 | 657 | -. 65 | . 99 | 277 |
| Births in first 5 years | -. 27 | . 05 | 729 | . 06 | . 06 | 441 | . 12 | . 12 | 152 |
| Births in past 5 years | . 16 | . 06 | 687 | . 13 | . 08 | 419 | . 09 | . 14 | 145 |
| Currently pregnant | 1.50 | 1.83 | 943 | -1.90 | 2.28 | 636 | -1.74 | 3.65 | 272 |
| Children ever born | 1.23 | . 13 | 981 | 1.00 | . 14 | 657 | . 96 | . 21 | 277 |
| Living children | . 92 | . 11 | 981 | . 85 | . 13 | 657 | . 90 | . 20 | 277 |
| Breastfed in closed interval. | 3.03 | 1.58 | 812 | 4.15 | 2.02 | 510 | 2.90 | 4.52 | 179 |
| Wants no more children | -13.12 | 2.61 | 830 | 4.62 | 3.24 | 581 | -3.82 | 4.96 | 260 |
| Additional number wanted | 1.29 | . 13 | 810 | -. 11 | . 13 | 571 | . 28 | . 16 | 259 |
| Desired family size | 2.48 | . 14 | 901 | . 37 | . 14 | 620 | . 73 | . 13 | 271 |
| Knows effective contraceptives | -29.23 | 1.82 | 981 | . 81 | . 94 | 657 | -4.56 | . 73 | 277 |
| Ever used contraceptives | -39.91 | 2.46 | 981 | -. 17 | 2.75 | 657 | -17.36 | 4.10 | 277 |
| Ever used effective methods | -37.55 | 2.38 | 981 | 1.15 | 2.86 | 657 | -12.02 | 4.42 | 277 |
| Currently using (exposed) | -32.57 | 3.26 | 647 | -3.78 | 3.58 | 454 | -14.71 | 4.27 | 199 |
| Using effective (exposed) | -24.82 | 3.34 | 647 | -1.46 | 3.63 | 454 | -8.58 | 4.78 | 199 |
| Wants no more \& using eff. (exp.) | -20.78 | 4.59 | 280 | -5.68 | 5.03 | 203 | -7.62 | 5.94 | 84 |
| Never used contraception | 39.94 | 2.57 | 943 | . 19 | 2.73 | 636 | 17.17 | 4.06 | 272 |
| Used contraception in past | -16.58 | 1.99 | 943 | 4.88 | 2.44 | 636 | -6.94 | 4.40 | 272 |
| Currently using contraception | -23.36 | 2.33 | 943 | -5.07 | 2.68 | 636 | -10.23 | 4.32 | 272 |

Table III. 7a - Sampling errors by pattern of work

|  | Variable name | Before and after marriage |  |  |  | After marriage only |  |  |  | Before marriage only |  |  |  | Never worked |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | ก | DEFT |
|  | Age at first marriage | 18.99 | . 20 | 782 | 1.21 | 17.59 | . 28 | 258 | 1.07 | 18.57 | . 17 | 504 | . 85 | 17.74 | . 09 | 2937 | 1.21 |
|  | Age at first marriage (<25) | 18.23 | . 16 | 510 | 1.11 | 17.17 | . 26 | 193 | 1.16 | 18.32 | . 19 | 285 | . 98 | 17.37 | . 08 | 1893 | 1.13 |
|  | First marriage dissolved | 8.82 | 1.08 | 782 | 1.06 | 15.12 | 2.68 | 258 | 1.20 | 7.11 | 1.11 | 506 | . 97 | 5.88 | . 39 | 2941 | . 30 |
|  | Time spent in union | 97.00 | . 49 | 782 | 1.06 | 96.38 | . 73 | 258 | 1.09 | 97.40 | . 49 | 506 | . 92 | 98.07 | . 18 | 2941 | . 87 |
|  | Currently married | 94.76 | . 95 | 782 | 1.19 | 90.31 | 2.04 | 258 | 1.10 | 97.83 | . 65 | 506 | 1.00 | 96.67 | . 32 | 2941 | .96 |
|  | Births in first 5 years | 1.91 | . 04 | 618 | . 88 | 1.93 | . 07 | 227 | . 96 | 2.03 | . 06 | 352 | 1.11 | 2.02 | . 02 | 2243 | 1.18 |
|  | Births in past 5 years | 1.74 | . 05 | 572 | 1.14 | 1.47 | . 09 | 201 | 1.12 | 1.85 | . 06 | 336 | . 99 | 1.51 | . 04 | 2143 | 1. 49 |
|  | Currently pregnant | 23.35 | 1.53 | 741 | . 98 | 19.74 | 2.60 | 233 | 1.00 | 23.64 | 2.22 | 495 | 1.16 | 19.38 | . 90 | 2843 | 1.22 |
| $\cdots$ | Children ever born | 4.60 | . 14 | 782 | 1.20 | 5.20 | . 23 | 258 | 1.15 | 4.19 | . 18 | 506 | 1.22 | 4.83 | . 07 | 2941 | 1. 12 |
| N | Living children | 4.01 | . 11 | 782 | 1.18 | 4.55 | . 20 | 258 | 1.12 | 3.73 | . 16 | 506 | 1.25 | 4.33 | . 06 | 2941 | 1.14 |
|  | Breastfed in closed interval. | 85.82 | 1.43 | 656 | 1.05 | 83.55 | 2.73 | 231 | 1.12 | 84.88 | 1.70 | 410 | . 96 | 83.49 | . 80 | 2441 | 1.07 |
|  | Wants no more children | 23.46 | 2.02 | 648 | 1.21 | 37.62 | 3.78 | 202 | 1.11 | 28.64 | 2.73 | 447 | 1.27 | 41.20 | 1.38 | 2488 | 1. 40 |
|  | Additional number wanted | 3.20 | . 19 | 592 | 1.38 | 2.21 | . 24 | 200 | 1.09 | 2.86 | . 20 | 419 | 1.21 | 1.82 | . 09 | 2429 | 1.77 |
|  | Desired family size | 7.03 | . 18 | 642 | 1.24 | 6.40 | . 28 | 216 | 1.11 | 6.23 | . 20 | 448 | 1.26 | 5.86 | . 12 | 2700 | 1.90 |
|  | Knows effective contraceptives | 62.15 | 2.05 | 782 | 1.18 | 79.07 | 2.68 | 258 | 1.06 | 73.91 | 3.00 | 506 | 1.54 | 81.03 | 1.60 | 2941 | 2.21 |
|  | Ever used contraceptives | 17.65 | 1.75 | 782 | 1.28 | 31.78 | 3.76 | 258 | 1.29 | 25.89 | 2.59 | 506 | 1.33 | 38.56 | 1.72 | 2941 | 1.91 |
|  | Ever used effective methods | 14.19 | 1.49 | 782 | 1.20 | 27.91 | 3.39 | 258 | 1.21 | 22.92 | 2.45 | 506 | 1.31 | 34.21 | 1.49 | 2941 | 1.71 |
|  | Currently using (exposed) | 16.00 | 2.04 | 475 | 1.21 | 26.92 | 4.23 | 156 | 1.19 | 22.42 | 2.43 | 330 | 1.06 | 34.18 | 1.88 | 1937 | 1.74 |
|  | Using effective (exposed) | 10.74 | 1.87 | 475 | 1.31 | 23.08 | 4.11 | 156 | 1.21 | 16.67 | 2.19 | 330 | 1.07 | 26.17 | 1.39 | 1937 | 1.39 |
|  | Wants no more \& using eff. (exp.) | 30.70 | 4.90 | 114 | 1.13 | 39.29 | 7.49 | 56 | 1.14 | 34.34 | 4.34 | 99 | . 90 | 41.14 | 1.91 | 824 | 1.11 |
|  | Never used contraception | 82.05 | 1.83 | 741 | 1.30 | 67.38 | 4.07 | 233 | 1.32 | 73.74 | 2.58 | 495 | 1.30 | 60.99 | 1.74 | 2843 | 1.90 |
|  | Used contraception in past | 7.69 | 1.17 | 741 | 1.19 | 14.59 | 3.05 | 233 | 1.32 | 11.31 | 1.40 | 495 | . 98 | 15.72 | . 93 | 2843 | 1.36 |
|  | Currently using contraception | 10.26 | 1.35 | 741 | 1.21 | 18.03 | 3.15 | 233 | 1.25 | 14.95 | 1.72 | 495 | 1.07 | 23.29 | 1.37 | 2843 | 1.73 |

Table III.8a - Sampling errors by husband's occupation

| Variable name | Professional and technical |  |  |  | Managerial and clerical. |  |  |  | Sales and services |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 18.22 | . 16 | 705 | 1.06 | 18.43 | . 18 | 726 | 1.21 | 17.59 | . 15 | 642 | . 96 |
| Age at first marriage (<25) | 17.88 | . 15 | 411 | . 95 | 17.94 | . 17 | 465 | 1.18 | 17.13 | . 18 | 444 | 1.18 |
| First marriage dissolved | 5.95 | . 97 | 706 | 1.08 | 6.06 | . 98 | 726 | 1.10 | 7.92 | 1.05 | 644 | . 98 |
| Time spent in union | 97.85 | . 38 | 706 | . 97 | 98.23 | . 35 | 726 | 1.01 | 98.33 | . 37 | 644 | 1.11 |
| Currently married | 97.17 | . 67 | 706 | 1.07 | 96.83 | . 74 | 726 | 1.13 | 96.74 | . 63 | 644 | . 90 |
| Births in first 5 years | 1.95 | . 05 | 499 | 1.13 | 2.14 | . 05 | 551 | 1.10 | 2.02 | . 05 | 519 | 1.13 |
| Births in past 5 years | 1.72 | . 07 | 481 | 1.34 | 1.46 | . 05 | 528 | . 94 | 1.33 | . 07 | 494 | 1.24 |
| Currently pregnant | 23.32 | 1.69 | 686 | 1.05 | 20.34 | 1.82 | 703 | 1.20 | 16.21 | 1.70 | 623 | 1.15 |
| Children ever born | 4.11 | . 13 | 706 | 1.11 | 4.45 | . 16 | 726 | 1.29 | 5.09 | . 14 | 644 | 1.04 |
| Living children | 3.67 | . 11 | 706 | 1.07 | 4.06 | . 14 | 726 | 1.30 | 4.56 | . 13 | 644 | 1.05 |
| Breastfed in closed interval | 83.27 | 1.53 | 556 | . 97 | 81.08 | 1.43 | 592 | . 89 | 79.49 | 1.82 | 546 | 1.05 |
| Wants no more children | 34.41 | 2.19 | 622 | 1.15 | 47.75 | 2.42 | 622 | 1.21 | 43.67 | 2.23 | 529 | 1.03 |
| Additional number wanted | 2.19 | . 12 | 608 | 1.09 | 1.42 | . 11 | 612 | 1.18 | 1.72 | . 15 | 512 | 1.24 |
| Desired family size | 5.80 | . 15 | 640 | 1.16 | 5.21 | . 14 | 666 | 1. 22 | 5.64 | . 21 | 591 | 1.63 |
| Knows effective contraceptives | 78.05 | 2.25 | 706 | 1.44 | 93.80 | 1.10 | 726 | 1.23 | 85.87 | 2.14 | 644 | 1.56 |
| Ever used contraceptives | 35.13 | 2.68 | 706 | 1.49 | 52.62 | 2.41 | 726 | 1.30 | 47.52 | 2.95 | 644 | 1.50 |
| Ever used effective methods | 29.46 | 2.35 | 706 | 1.37 | 45.04 | 2.30 | 726 | 1.25 | 42.39 | 2.69 | 644 | 1.38 |
| Currently using (exposed) | 31.39 | 2.94 | 462 | 1.36 | 45.51 | 2.74 | 479 | 1. 20 | 42.99 | 3.09 | 428 | 1.29 |
| Using effective (exposed) | 24.46 | 2.48 | 462 | 1.24 | 31.32 | 2.27 | 479 | 1.07 | 32.71 | 2.72 | 428 | 1.20 |
| Wants no more \& using eff. (exp.) | 43.75 | 4.25 | 160 | 1.08 | 45.53 | 3.36 | 235 | 1.03 | 50.53 | 3.84 | 190 | 1.06 |
| Never used contraception | 65.01 | 2.66 | 686 | 1.46 | 46.94 | 2.46 | 703 | 1.30 | 52.17 | 3.00 | 623 | 1.50 |
| Used contraception in past | 13.85 | 1.60 | 686 | 1.21 | 22.05 | 1.87 | 703 | 1. 20 | 18.30 | 1.61 | 623 | 1.04 |
| Currently using contraception | 21.14 | 2.16 | 686 | 1.38 | 31.01 | 2.23 | 703 | 1.28 | 29.53 | 2.49 | 623 | 1.36 |

## Agriculture

per cent SE $n$ DEFT

Skilled and unskilled manual

## Variable name

| Age at first marriage | 18.08 | .15 | 1120 | 1.10 | 17.91 | .13 | 1249 | 1.13 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age at first marriage (<25) | 17.54 | .12 | 771 | 1.05 | 17.58 | .11 | 773 | .99 |
| First marriage dissolved | 8.93 | 1.08 | 1120 | 1.27 | 5.92 | .58 | 1251 | .87 |
| Time spent in union | 97.00 | .39 | 1120 | .99 | 97.88 | .26 | 1251 | .78 |
| Currently married | 94.11 | .88 | 1120 | 1.25 | 96.80 | .47 | 1251 | .94 |
| Births in first 5 years | 1.90 | .03 | 915 | .93 | 2.07 | .03 | 935 | .92 |
| Births in past 5 years | 1.69 | .04 | 841 | 1.05 | 1.63 | .05 | 891 | 1.15 |
| Currently pregnant | 22.30 | 1.34 | 1054 | 1.04 | 19.57 | 1.26 | 1211 | 1.10 |
| Children ever born | 5.20 | .13 | 1120 | 1.28 | 4.70 | .10 | 1251 | 1.07 |
| Living children | 4.55 | .10 | 1120 | 1.18 | 4.18 | .09 | 1251 | 1.08 |
| Breastfed in closed interval | 89.71 | .96 | 972 | .98 | 83.27 | 1.01 | 1046 | .87 |
| Wants no more children | 23.01 | 1.86 | 891 | 1.32 | 39.47 | 2.02 | 1092 | 1.37 |
| Additional number wanted | 3.25 | .14 | 831 | 1.23 | 1.99 | .14 | 1050 | 1.63 |
| Desired family size | 7.59 | .13 | 944 | 1.16 | 5.83 | .16 | 1133 | 1.62 |
| Knows effective contraceptives | 53.48 | 2.48 | 1120 | 1.66 | 83.13 | 1.75 | 1251 | 1.65 |
| Ever used contraceptives | 7.86 | 1.10 | 1120 | 1.37 | 36.53 | 2.00 | 1251 | 1.47 |
| Ever used effective methods | 6.61 | .98 | 1120 | 1.32 | 33.49 | 1.90 | 1251 | 1.43 |
| Currently using (exposed) | 7.01 | 1.26 | 656 | 1.27 | 30.53 | 2.36 | 855 | 1.50 |
| Using effective (exposed) | 5.95 | 1.16 | 656 | 1.26 | 24.21 | 1.87 | 855 | 1.28 |
| Wants no more \& using eff. (exp.) | 15.85 | 3.21 | 164 | 1.12 | 38.30 | 2.80 | 342 | 1.06 |
| Never used contraception | 91.75 | 1.16 | 1054 | 1.37 | 63.09 | 2.05 | 1211 | 1.48 |
| Used contraception in past | 3.89 | .69 | 1054 | 1.15 | 15.36 | 1.13 | 1211 | 1.09 |

per cent SE $n$ DEFT

Table III.9a - Sampling errors by type of place of residence


Table III.9b-Sampling errors for differences between type of place of residence subclasses
$\qquad$
(Urban) - (Paral)
Variable name

Age at first marriage
Age at first marriage (<25)
First marriage dissolved
Time spent in union
Currently married
Births in first 5 years
Births in past 5 years Currently pregnant
Children ever born
Living children
Breastfed in closed interval
Wants no more children
Additional number wanted
Desired family size
Knows effective contraceptives
Ever used contraceptives
Ever used effective methods
Currently using (exposed)
Currently using (exposed)
Wants no more \& using eff. (exp.)
Nants no more \& using eff.
Used contraception in past
Used contraception in past

Mean or
ean or

| .-18 | .16 | 2240 |
| ---: | ---: | ---: |
| -.15 | .15 | 1440 |
| -.82 | .83 | 2243 |
| .37 | .32 | 2243 |
| .45 | .65 | 2243 |
| .13 | .04 | 1720 |
| -.44 | .06 | 1626 |
| -5.40 | 1.51 | 2155 |
| -.21 | .12 | 2243 |
| -.04 | .10 | 2243 |
| -8.33 | 1.38 | 1869 |
| 23.95 | 2.20 | 1891 |
| -1.65 | .14 | 1817 |
| -2.13 | .18 | 1998 |
| 29.60 | 2.30 | 2243 |
| 43.32 | 2.53 | 2243 |
| 40.60 | 2.14 | 2243 |
| 40.03 | 2.74 | 1443 |
| 31.33 | 2.05 | 1443 |
| 34.23 | 3.27 | 464 |
| -43.70 | 2.59 | 2155 |
| 15.05 | 1.44 | 2155 |
| 28.65 | 2.11 | 2155 |

Table III.10a - Sampling errors by region

| Variable name | Damascus |  |  |  | Aleppo |  |  |  | North-East |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 18.17 | . 16 | 747 | 1.00 | 17.69 | . 27 | 466 | 1.38 | 18.16 | . 17 | 1086 | 1.32 |
| Age at first marriage (<25) | 17.33 | . 21 | 477 | 1.45 | 17.33 | . 18 | 294 | . 97 | 17.90 | . 16 | 580 | 1.24 |
| First marriage dissolved | 7.89 | 1.19 | 748 | 1.21 | 7.51 | 1.19 | 466 | . 98 | 6.52 | . 99 | 1089 | 1.32 |
| Time spent in union | 97.90 | . 37 | 748 | 1.05 | 97.56 | . 58 | 466 | 1.06 | 97.50 | . 40 | 1089 | 1.07 |
| Currently married | 96.52 | . 72 | 748 | 1.07 | 95.49 | 1.12 | 466 | 1.16 | 95.04 | . 90 | 1089 | 1.37 |
| Births in first 5 years | 2.10 | . 03 | 562 | . 84 | 2.01 | . 07 | 358 | 1.24 | 1.92 | . 04 | 834 | 1.21 |
| Births in past 5 years | 1.09 | . 06 | 533 | 1.25 | 1.53 | . 14 | 335 | 2.01 | 1.78 | . 03 | 777 | . 80 |
| Currently pregnant | 16.20 | 1.72 | 722 | 1.26 | 17.75 | 2.61 | 445 | 1.44 | 22.80 | 1.70 | 1035 | 1.30 |
| Children ever born | 4.39 | . 16 | 748 | 1.37 | 4.52 | . 09 | 466 | . 61 | 4.58 | . 13 | 1089 | 1.29 |
| Living children | 3.99 | . 15 | 748 | 1.47 | 4.06 | . 09 | 466 | .70 | 4.09 | . 09 | 1089 | 1.05 |
| Breastfed in closed interval | 75.75 | 2.02 | 598 | 1.15 | 79.43 | 1.94 | 389 | . 94 | 89.84 | 1.31 | 896 | 1.30 |
| Wants no more children | 54.91 | 2.91 | 632 | 1.47 | 46.06 | 5.28 | 406 | 2.13 | 16.42 | 1.97 | 877 | 1.57 |
| Additional number wanted | . 94 | . 07 | 626 | 1.03 | 1.83 | . 37 | 390 | 2.31 | 3.94 | . 17 | 778 | 1.33 |
| Desired family size | 4.26 | . 10 | 698 | 1.24 | 5.63 | . 37 | 420 | 2.21 | 7.93 | . 22 | 871 | 1.69 |
| Knows effective contraceptives | 98.26 | . 65 | 748 | 1.35 | 82.40 | 2.51 | 466 | 1.42 | 48.58 | 4.17 | 1089 | 2.75 |
| Ever used contraceptives | 72.33 | 3.68 | 748 | 2.25 | 48.50 | 5.77 | 466 | 2,49 | 11.75 | 2.68 | 1089 | 2.74 |
| Ever used effective methods | 66.04 | 3.37 | 748 | 1.94 | 43.99 | 5.15 | 466 | 2.24 | 9.83 | 2.25 | 1089 | 2.49 |
| Currently using (exposed) | 64.27 | 4.03 | 515 | 1.91 | 45.57 | 7.23 | 327 | 2. 62 | 6.24 | 1.56 | 641 | 1.63 |
| Using effective (exposed) | 49.13 | 3.56 | 515 | 1.62 | 33.94 | 5.13 | 327 | 1.96 | 5.15 | 1.21 | 641 | 1.38 |
| Wants no more \& using eff. (exp.) | 57.19 | 3.00 | 292 | 1.03 | 48.43 | 4.64 | 159 | 1.17 | 16.50 | 3.66 | 103 | 1.00 |
| Never used contraception | 27.01 | 3.97 | 722 | 2.40 | 51.01 | 5.90 | 445 | 2.49 | 87.73 | 2.79 | 1035 | 2.73 |
| Used contraception in past | 27.15 | 2.21 | 722 | 1.33 | 15.51 | 1.76 | 445 | 1.03 | 8.41 | 2.20 | 1035 | 2.55 |
| Currently using contraception | 45.84 | 3.78 | 722 | 2.04 | 33.48 | 5.62 | 445 | 2، 51 | 3.86 | . 91 | 1035 | 1.52 |


|  | West |  |  |  | Centre |  |  |  | South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable name | Mean or per cent | SE | n | DEFFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 18.23 | . 32 | 492 | 1.80 | 18.04 | . 16 | 968 | 1.18 | 17.82 | . 19 | 722 | 1.36 |
| Age at first marriage (<25) | 17.77 | . 26 | 356 | 1.60 | 17.41 | . 13 | 627 | . 98 | 17.74 | . 20 | 447 | 1.34 |
| First marriage dissolved | 5.69 | . 96 | 492 | . 92 | 6.40 | . 81 | 969 | 1.03 | 8.58 | . 72 | 723 | . 69 |
| Time spent in union | 97.94 | . 37 | 492 | . 67 | 97.98 | . 36 | 969 | 1.07 | 97.34 | . 30 | 723 | . 62 |
| Currently married | 95.93 | . 54 | 492 | . 60 | 96.59 | . 55 | 969 | . 95 | 97.10 | . 46 | 723 | . 73 |
| Births in first 5 years | 2.09 | . 06 | 388 | 1.15 | 1.97 | . 04 | 756 | 1.02 | 2.05 | . 05 | 542 | 1.18 |
| Births in past 5 years | 1.58 | . 09 | 368 | 1.41 | 1.63 | . 07 | 723 | 1.59 | 1.78 | . 07 | 516 | 1.44 |
| Currently pregnant | 19.49 | 1.80 | 472 | . 99 | 22.76 | 1.71 | 936 | 1.25 | 21.37 | 1.37 | 702 | . 89 |
| Children ever born | 5.16 | . 23 | 492 | 1.50 | 4.97 | . 12 | 969 | 1.09 | 4.88 | . 13 | 723 | 1.00 |
| Living children | 4.57 | . 19 | 492 | 1.41 | 4.41 | . 10 | 969 | 1.05 | 4.24 | . 11 | 723 | 1.04 |
| Breastfed in closed interval | 83.69 | 1.81 | 423 | 1.01 | 85.70 | 1.42 | 825 | 1.17 | 84.68 | 1.83 | 607 | 1.25 |
| Wants no more children | 42.31 | 3.43 | 390 | 1.37 | 37.35 | 2.40 | 838 | 1.44 | 35.05 | 2.59 | 642 | 1.37 |
| Additional number wanted | 1.68 | . 19 | 384 | 1.70 | 2.03 | . 13 | 832 | 1.47 | 2.02 | . 11 | 630 | 1.06 |
| Desired family size | 6.10 | . 26 | 448 | 1.61 | 6.35 | . 16 | 930 | 1.63 | 5.69 | . 19 | 639 | 1.66 |
| Knows effective contraceptives | 90.04 | 1.64 | 492 | 1.21 | 77.40 | 2.08 | 969 | 1.54 | 83.82 | 1.93 | 723 | 1.41 |
| Ever used contraceptives | 32.11 | 3.87 | 492 | 1.84 | 23.84 | 2.32 | 969 | 1.70 | 27.80 | 3.62 | 723 | 2.17 |
| Ever used effective methods | 23.58 | 3.05 | 492 | 1.59 | 22.29 | 2.19 | 969 | 1.64 | 23.10 | 2.95 | 723 | 1.88 |
| Currently using (exposed) | 29.87 | 4.41 | 298 | 1.66 | 22.72 | 2.62 | 625 | 1.56 | 20.93 | 3.26 | 492 | 1.78 |
| Using effective (exposed) | 17.79 | 2.91 | 298 | 1.31 | 19.52 | 2.13 | 625 | 1.35 | 15.65 | 2.49 | 492 | 1.52 |
| Wants no more \& using eff. (exp.) | 30.25 | 6.47 | 119 | 1.53 | 33.73 | 3.76 | 249 | 1.25 | 28.65 | 5.28 | 171 | 1.52 |
| Never used contraception | 66.95 | 3.97 | 472 | 1.83 | 76.18 | 2.45 | 936 | 1.76 | 71.94 | 3.59 | 702 | 2.11 |
| Used contraception in past | 14.19 | 2.32 | 472 | 1.44 | 8.65 | 1.04 | 936 | 1.13 | 13.39 | 1.62 | 702 | 1.26 |
| Currently using contraception | 18.86 | 2.88 | 472 | 1.60 | 15.17 | 1.91 | 936 | 1.63 | 14.67 | 2.24 | 702 | 1.67 |

Table III.lla - Sampling errors by current age for women with no education




Table III.1lb - Sampling errors by current age for women with incomplete primary education

| Variable name | $<20$ |  |  |  | 20-24 |  |  |  | 25-29 |  |  |  | 30-34 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFFT |
| Age at first marriage | 14.81 | . 21 | 79 | 1.11 | 16.68 | . 22 | 135 | 1.00 | 17.58 | . 33 | 102 | . 94 | 18.19 | . 38 | 103 | . 96 |
| Age at first marriage (<25) | . 00 | . 00 | 0 | . 00 | . 00 | . 00 | 0 | . 00 | 17.20 | . 31 | 98 | 1.00 | 17.20 | . 32 | 93 | 1.11 |
| First marriage dissolved | 1.23 | 1.20 | 81 | . 97 | 5.19 | 2.16 | 135 | 1.13 | 2.94 | 1.65 | 102 | . 98 | 6.80 | 2.66 | 103 | 1.07 |
| Time spent in union | 99.70 | . 29 | 81 | . 97 | 98.73 | . 59 | 135 | 1.01 | 99.43 | . 40 | 102 | . 99 | 97.56 | 1.16 | 103 | 1.05 |
| Currently married | 100.00 | . 01 | 81 | . 00 | 97.78 | 1.27 | 135 | . 99 | 98.04 | 1.36 | 102 | . 98 | 96.12 | 2.27 | 103 | 1.19 |
| Births in first 5 years | 2.29 | . 17 | 7 | . 93 | 2.07 | . 11 | 72 | 1.06 | 2.40 | . 11 | 88 | . 97 | 2.21 | . 09 | 96 | 1.08 |
| Births in past 5 years | 2.29 | . 26 | 7 | . 93 | 2.21 | . 11 | 68 | . 98 | 2.08 | . 10 | 86. | . 89 | 1.53 | . 12 | 92 | 1.10 |
| Currently pregnant | 30.86 | 5.07 | 81 | . 98 | 28.79 | 4.56 | 132 | 1.15 | 25.00 | 4.62 | 100 | 1.06 | 11.11 | 2.89 | 99 | . 91 |
| Children ever born | 1.02 | . 10 | 81 | 1.00 | 2.24 | . 13 | 135 | 1.02 | 4.15 | . 20 | 102 | 1.03 | 5.17 | . 20 | 103 | . 90 |
| Living children | . 94 | . 10 | 81 | 1.01 | 2.09 | . 12 | 135 | 1.02 | 3.80 | . 18 | 102 | 1.08 | 4.77 | . 18 | 103 | . 87 |
| Breastfed in closed interval | 91.18 | 4.93 | 34 | 1.00 | 80.20 | 3.75 | 101 | . 94 | 88.42 | 3.82 | 95 | 1.16 | 86.60 | 3.86 | 97 | 1.11 |
| Wants no more children | 11.11 | 3.19 | 81 | . 91 | 28.13 | 4.41 | 128 | 1.11 | 46.39 | 4.52 | 97 | . 89 | 56.98 | 5.40 | 86 | 1.01 |
| Additional number wanted | 2.87 | . 23 | 75 | . 91 | 1.99 | . 18 | 128 | . 91 | 1.05 | . 19 | 96 | . 98 | . 74 | . 16 | 84 | . 89 |
| Desired family size | 4.20 | . 18 | 75 | 1.04 | 4.39 | . 17 | 128 | . 90 | 4.77 | . 19 | 100 | 1.04 | 5.05 | . 30 | 94 | 1.02 |
| Knows effective contraceptives | 91.36 | 2.83 | 81 | . 90 | 96.30 | 1.65 | 135 | 1.01 | 98.04 | 1.39 | 102 | 1.01 | 99.03 | . 95 | 103 | . 98 |
| Ever used contraceptives | 23.46 | 4.96 | 81 | 1.05 | 48.89 | 4.94 | 135 | 1.14 | 65.69 | 5.09 | 102 | 1.08 | 72.82 | 5.08 | 103 | 1.15 |
| Ever used effective methods | 22.22 | 4.86 | 81 | 1.05 | 40.00 | 4.91 | 135 | 1.16 | 61.76 | 5.33 | 102 | 1.10 | 68.93 | 5.03 | 103 | 1.10 |
| Currently using (exposed) | 17.86 | 5.77 | 56 | 1.12 | 33.33 | 5.30 | 90 | 1.06 | 47.22 | 6.71 | 72 | 1.13 | 62.67 | 6.57 | 75 | 1.17 |
| Using effective (exposed) | 17.86 | 5.77 | 56 | 1.12 | 25.56 | 5.05 | 90 | 1.09 | 38.89 | 7.05 | 72 | 1.22 | 48.00 | 6.68 | 75 | 1.15 |
| Wants no more \& using eff. (exp.) | . 00 | . 00 | 3 | . 00 | 26.09 | 9.30 | 23 | . 99 | 53.57 | 10.19 | 28 | 1.06 | 56.10 | 7.83 | 41 | 1.00 |
| Never used contraception | 76.54 | 4.96 | 81 | 1.05 | 50.76 | 4.94 | 132 | 1.13 | 34.00 | 5.00 | 100 | 1.05 | 25.25 | 4.95 | 99 | 1.13 |
| Used contraception in past | 11.11 | 3.03 | 81 | . 86 | 26.52 | 4.57 | 132 | 1.19 | 32.00 | 5.16 | 100 | 1.10 | 27.27 | 4.65 | 99 | 1.03 |
| Currently using contraception | 12.35 | 4.12 | 81 | 1.12 | 22.73 | 4.00 | 132 | 1.09 | 34.00 | 5.23 | 100 | 1.10 | 47.47 | 5.68 | 99 | 1.13 |


| Variable name | 35-39 |  |  |  | 40-44 |  |  |  | 45-49 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | LEFPT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 19.39 | . 55 | 79 | 1.04 | 19.27 | . 69 | 45 | . 96 | 18.83 | . 64 | 42 | . 84 |
| Age at first marriage (<25) | 17.71 | . 41 | 65 | 1.08 | 17.82 | . 41 | 39 | . 83 | 17.71 | . 56 | 38 | . 95 |
| First marriage dissolved | 6.33 | 2.73 | 79 | . 99 | 13.33 | 5.27 | 45 | 1.03 | 23.81 | 6.40 | 42 | . 96 |
| Time spent in union | 98.51 | . 76 | 79 | 1.01 | 99.00 | . 49 | 45 | 1.04 | 96.88 | 1.28 | 42 | 1.06 |
| Currently married | 96.20 | 2.15 | 79 | . 99 | 95.56 | 3.30 | 45 | 1.06 | 80.95 | 6.20 | 42 | 1.01 |
| Births in first 5 years | 2.26 | . 10 | 78 | . 85 | 2.04 | . 13 | 45 | . 98 | 2.17 | . 11 | 42 | . 77 |
| Births in past 5 years | 1.19 | . 11 | 75 | . 95 | . 51 | . 11 | 41 | . 99 | . 15 | . 06 | 34 | . 90 |
| Currently pregnant | 10.53 | 3.29 | 76 | . 93 | 2.33 | 2.17 | 43 | . 93 | . 00 | . 00 | 34 | . 00 |
| Children ever born | 6.19 | . 31 | 79 | 1.05 | 6.44 | . 35 | 45 | . 79 | 7.67 | . 52 | 42 | 1.04 |
| Living children | 5.54 | . 28 | 79 | 1.07 | 5.93 | . 36 | 45 | . 88 | 7.02 | . 42 | 42 | . 94 |
| Breastfed in closed interval | 77.03 | 5.05 | 74 | 1.03 | 65.85 | 8.34 | 41 | 1.11 | 87.18 | 5.00 | 39 | . 92 |
| Wants no more children | 74.63 | 4.66 | 67 | . 87 | 96.55 | 3.41 | 29 | . 99 | 100.00 | . 01 | 12 | . 68 |
| Additional number wanted | . 49 | . 17 | 67 | . 99 | . 00 | . 00 | 29 | . 00 | . 00 | . 00 | 12 | . 00 |
| Desired family size | 4.84 | . 28 | 75 | 1.14 | 4.36 | . 29 | 42 | . 95 | 4.91 | . 53 | 32 | 1.06 |
| Knows effective contraceptives | 94.94 | 2.45 | 79 | . 99 | 100.00 | . 00 | 45 | . 00 | 92.86 | 3.97 | 42 | . 99 |
| Ever used contraceptives | 68.35 | 5.80 | 79 | 1.10 | 77.78 | 5.45 | 45 | . 87 | 71.43 | 6.42 | 42 | . 91 |
| Ever used effective methods | 63.29 | 5.97 | 79 | 1.09 | 71.11 | 6.44 | 45 | . 94 | 66.67 | 6.64 | 42 | . 90 |
| Currently using (exposed) | 62.71 | 6.44 | 59 | 1.01 | 82.14 | 7.43 | 28 | 1.01 | 83.33 | 11.70 | 12 | 1.04 |
| Using effective (exposed) | 47.46 | 7.59 | 59 | 1.16 | 50.00 | 8.56 | 28 | . 89 | 66.67 | 13.32 | 12 | . 94 |
| Wants no more \& using eff. (exp.) | 52.17 | 8.41 | 46 | 1.13 | 48.15 | 8.72 | 27 | . 89 | 66.67 | 13.32 | 12 | . 94 |
| Never used contraception | 30.26 | 5.80 | 76 | 1.09 | 23.26 | 5.59 | 43 | . 86 | 26.47 | 6.40 | 34 | . 83 |
| Used contraception in past | 21.05 | 5.06 | 76 | 1.08 | 23.26 | 5.91 | 43 | . 91 | 44.12 | 9.23 | 34 | 1.07 |
| Currently using contraception | 48.68 | 5.52 | 76 | . 96 | 53.49 | 6.77 | 43 | . 88 | 29.41 | 8.35 | 34 | 1.05 |


| Variable name | $<25$ |  |  |  | 25-34 |  |  |  | 35-84 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | $\bigcirc$ | DEFT |
| Age at first marriage | 15.99 | . 19 | 214 | 1.10 | 17.89 | . 25 | 205 | . 93 | 19.35 | . 46 | 124 | 1.08 |
| Age at first marriage (<25) | . 00 | . 00 | 0 | . 00 | 17.20 | . 23 | 191 | 1.11 | 17.75 | . 30 | 104 | 1.01 |
| First marriage dissolved | 3.70 | 1.43 | 216 | 1.11 | 4.88 | 1.62 | 205 | 1.07 | 8.87 | 2.39 | 124 | . 93 |
| Time spent in union | 98.94 | . 47 | 216 | 1.01 | 98.32 | . 73 | 205 | 1.07 | 98.72 | . 46 | 124 | . 96 |
| Currently married | 98.61 | . 81 | 216 | 1.02 | 97.07 | 1.32 | 205 | 1.12 | 95.97 | 1.81 | 124 | 1.02 |
| Births in first 5 years | 2.09 | . 10 | 79 | 1.07 | 2.30 | . 07 | 184 | 1.01 | 2.18 | . 09 | 123 | . 99 |
| Births in past 5 years | 2.21 | . 10 | 75 | . 97 | 1.80 | . 08 | 178 | 1.00 | . 95 | . 09 | 116 | . 95 |
| Currently pregnant | 29.58 | 3.41 | 213 | 1.09 | 18.09 | 2.63 | 199 | . 96 | 7.56 | 2.25 | 119 | . 93 |
| Children ever born | 1.79 | . 10 | 216 | 1.01 | 4.66 | . 15 | 205 | . 99 | 6.28 | . 24 | 124 | . 95 |
| Living children | 1.66 | . 09 | 216 | 1.04 | 4.29 | . 13 | 205 | . 97 | 5.69 | . 23 | 124 | 1.00 |
| Breastfed in closed interval | 82.96 | 3.02 | 135 | . 93 | 87.50 | 2.64 | 192 | 1.10 | 73.04 | 4.30 | 115 | 1.03 |
| Wants no more children | 21.53 | 3.20 | 209 | 1.12 | 51.37 | 3.77 | 183 | 1.02 | 81.25 | 3.56 | 96 | . 89 |
| Additional number wanted | 2.32 | . 16 | 203 | 1.02 | . 91 | . 13 | 180 | . 97 | . 34 | . 12 | 96 | . 97 |
| Desired family size | 4.32 | . 12 | 203 | . 92 | 4.91 | . 17 | 194 | 1.00 | 4.67 | . 20 | 117 | 1.03 |
| Knows effective contraceptives | 94.44 | 1.61 | 216 | 1.03 | 98.54 | . 83 | 205 | . 99 | 96.77 | 1.56 | 124 | . 98 |
| Ever used contraceptives | 39.35 | 3.86 | 216 | 1.16 | 69.27 | 3.66 | 205 | 1.13 | 71.77 | 4.29 | 124 | 1.06 |
| Ever used effective methods | 33.33 | 3.77 | 216 | 1.17 | 65.37 | 3.75 | 205 | 1.12 | 66.13 | 4.35 | 124 | 1.02 |
| Currently using (exposed) | 27.40 | 4.11 | 146 | 1.11 | 55.10 | 4.64 | 147 | 1.13 | 68.97 | 5.05 | 87 | 1.01 |
| Using effective (exposed) | 22.60 | 4.03 | 146 | 1.16 | 43.54 | 4.51 | 147 | 1.10 | 48.28 | 5.79 | 87 | 1.07 |
| Wants no more \& using eff. (exp.) | 23.08 | 8.31 | 26 | . 99 | 55.07 | 5.60 | 69 | . 93 | 50.68 | 6.27 | 73 | 1.06 |
| Never used contraception | 60.56 | 3.90 | 213 | 1.16 | 29.65 | 3.54 | 199 | 1.09 | 27.73 | 4.42 | 119 | 1.07 |
| Used contraception in past | 20.66 | 2.96 | 213 | 1.07 | 29.65 | 3.32 | 199 | 1.02 | 21.85 | 4.01 | 119 | 1.05 |
| Currently using contraception | 18.78 | 3.03 | 213 | 1.13 | 40.70 | 3.43 | 199 | . 98 | 50.42 | 4.27 | 119 | . 93 |

Table III.1lc - Sampling errors by current age for women with complete primary education


|  | 35-39 |  |  |  | 40-44 |  |  |  | 45-49 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable name | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFP | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 18.78 | . 41 | 91 | . 99 | 20.28 | . 94 | 47 | 1.11 | 20.55 | 1.59 | 20 | .97 |
| Age at first marriage (<25) | 17.89 | . 28 | 83 | . 89 | 18.05 | . 35 | 39 | . 91 | 16.57 | 1.14 | 14 | 1.06 |
| First marriage dissolved | 4.40 | 2.60 | 91 | 1.20 | 2.13 | 2.12 | 47 | . 99 | 10.00 | 6.36 | 20 | . 92 |
| Time spent in union | 99.29 | . 48 | 91 | 1.11 | 99.79 | . 21 | 47 | 1.00 | 97.02 | 2.73 | 20 | . 98 |
| Currently married | 97.80 | 1.56 | 91 | 1.01 | 97.87 | 2.12 | 47 | . 99 | 90.00 | 6.36 | 20 | . 92 |
| Births in first 5 years | 2.10 | . 12 | 91 | 1.25 | 2.17 | . 13 | 46 | . 91 | 1.80 | . 20 | 20 | . 78 |
| Births in past 5 years | . 89 | . 09 | 88 | 1.00 | . 49 | . 09 | 45 | . 78 | . 00 | . 00 | 18 | . 00 |
| Currently pregnant | 7.87 | 2.61 | 89 | . 91 | . 00 | . 00 | 46 | . 00 | . 00 | . 00 | 18 | . 00 |
| Children ever born | 5.63 | . 30 | 91 | 1.28 | 6.06 | . 47 | 47 | 1.13 | 5.50 | . 56 | 20 | . 75 |
| Living children | 5.19 | . 27 | 91 | 1.22 | 5.70 | . 42 | 47 | 1.15 | 4.95 | . 45 | 20 | . 71 |
| Breastfed in closed interval | 67.42 | 5.60 | 89 | 1.12 | 72.73 | 4.74 | 44 | . 70 | 77.78 | 9.07 | 18 | . 90 |
| Wants no more children | 80.72 | 3.10 | 83 | . 71 | 89.47 | 5.95 | 38 | 1.18 | 83.33 | 5.01 | 12 | . 45 |
| Additional number wanted | . 19 | . 05 | 83 | . 74 | . 26 | . 15 | 38 | 1.06 | . 08 | . 09 | 12 | 1.04 |
| Desired family size | 4.37 | . 23 | 89 | 1.02 | 4.64 | . 42 | 45 | 1.17 | 4.00 | . 46 | 18 | 1.00 |
| Knows effective contraceptives | 98.90 | 1.11 | 91 | 1.01 | 97.87 | 2.12 | 47 | . 99 | 95.00 | 4.89 | 20 | . 98 |
| Ever used contraceptives | 86.81 | 3.07 | 91 | . 86 | 80.85 | 6.29 | 47 | 1.08 | 80.00 | 7.87 | 20 | . 86 |
| Ever used effective methods | 78.02 | 5.00 | 91 | 1.15 | 72.34 | 7.60 | 47 | 1.15 | 80.00 | 7.87 | 20 | . 86 |
| Currently using (exposed) | 80.26 | 4.26 | 76 | . 93 | 78.95 | 7.11 | 38 | 1.06 | 83.33 | 5.01 | 12 | . 45 |
| Using effective (exposed) | 50.00 | 6.17 | 76 | 1.07 | 50.00 | 7.44 | 38 | . 91 | 75.00 | 4.66 | 12 | . 36 |
| Wants no more \& using eff. (exp.) | 48.39 | 5.96 | 62 | . 93 | 55.88 | 8.17 | 34 | . 95 | 90.00 | 7.28 | 10 | . 73 |
| Never used contraception | 12.36 | 2.99 | 89 | . 85 | 17.39 | 6.09 | 46 | 1.08 | 11.11 | 6.93 | 18 | . 91 |
| Used contraception in past | 19.10 | 4.07 | 89 | . 97 | 17.39 | 6.03 | 46 | 1.07 | 33.33 | 14.70 | 18 | 1.29 |
| Currently using oontraception | 68.54 | 5.12 | 89 | 1.03 | 65.22 | 6.90 | 46 | . 97 | 55.56 | 10.48 | 18 | . 87 |



Table III.12a - Sampling errors by years since first marriage for women with no education

| Variable name | $<5$ |  |  |  | 5-9 |  |  |  | 10-14 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DRFT | Mean or per cent | SE | $n$ | DEFPT |
| Age at first marriage | 18.76 | . 23 | 514 | 1.10 | 18.10 | . 22 | 556 | 1.16 | 18.33 | . 22 | 496 | 1.06 |
| Age at first marriage (<25) | 22.32 | . 15 | 71 | . 95 | 19.27 | . 14 | 270 | 1.05 | 17.34 | . 15 | 416 | 1.05 |
| First marriage dissolved | 2.12 | . 62 | 518 | . 98 | 3.96 | . 84 | 556 | 1.02 | 7.26 | 1.26 | 496 | 1.08 |
| Time spent in union | 98.57 | . 50 | 518 | . 99 | 98.86 | . 35 | 556 | 1.07 | 97.72 | . 56 | 496 | 1.12 |
| Currently married | 98.07 | . 60 | 518 | 1.00 | 97.48 | . 76 | 556 | 1.14 | 96.57 | . 90 | 496 | 1.10 |
| Births in first 5 years | . 00 | . 00 | 0 | . 00 | 2.14 | . 03 | 556 | . 83 | 2.00 | . 04 | 496 | . 92 |
| Births in past 5 years | . 00 | . 00 | 0 | . 00 | 2.35 | . 03 | 536 | . 79 | 2.09 | . 05 | 472 | . 98 |
| Currently pregnant | 34.25 | 2.18 | 508 | 1.03 | 29.52 | 2.16 | 542 | 1.10 | 23.59 | 2.03 | 479 | 1.05 |
| Children ever born | 1.17 | . 05 | 518 | 1.07 | 3.24 | . 06 | 556 | 1.03 | 5.09 | . 09 | 496 | . 94 |
| Living children | 1.08 | . 04 | 518 | 1.07 | 2.93 | . 05 | 556 | . 95 | 4.61 | . 08 | 496 | . 99 |
| Breastfed in closed interval | 92.58 | 1.55 | 256 | . 95 | 88.35 | 1.61 | 515 | 1.14 | 85.84 | 1.65 | 466 | 1.02 |
| Wants no more children | 5.18 | . 98 | 502 | . 99 | 16.54 | 1.81 | 532 | 1.12 | 28.89 | 2.29 | 443 | 1.06 |
| Additional number wanted | 4.68 | . 17 | 457 | 1.09 | 3.59 | . 14 | 494 | . 89 | 2.42 | . 16 | 424 | 1.09 |
| Desired family size | 6.19 | . 15 | 463 | 1.05 | 6.96 | . 17 | 485 | 1.04 | 7.08 | . 16 | 432 | 1.08 |
| Knows effective contraceptives | 55.79 | 3.22 | 518 | 1.47 | 65.29 | 2.42 | 556 | 1.20 | 67.54 | 2.53 | 496 | 1.20 |
| Ever used contraceptives | 7.14 | 1.43 | 518 | 1.27 | 12.05 | 1.49 | 556 | 1.08 | 19.35 | 1.91 | 496 | 1.08 |
| Ever used effective methods | 5.41 | 1.31 | 518 | 1.32 | 10.43 | 1.39 | 556 | 1.07 | 17.54 | 1.87 | 496 | 1.09 |
| Currently using (exposed) | 7.01 | 1.81 | 328 | 1.28 | 8.33 | 1.36 | 372 | . 95 | 16.06 | 2.01 | 330 | . 99 |
| Using effective (exposed) | 5.18 | 1.52 | 328 | 1.24 | 6.99 | 1.27 | 372 | . 96 | 11.52 | 1.78 | 330 | 1.01 |
| Wants no more \& using eff. (exp.) | 55.56 | 14.61 | 9 | . 83 | 23.21 | 5.26 | 56 | . 92 | 31.82 | 4.47 | 88 | . 90 |
| Never used contraception | 92.91 | 1.43 | 508 | 1.25 | 87.82 | 1.52 | 542 | 1.08 | 80.38 | 1.97 | 479 | 1.08 |
| Used contraception in past | 2.56 | . 71 | 508 | 1.01 | 6.46 | 1.01 | 542 | . 96 | 8.56 | 1.48 | 479 | 1.16 |
| Currently using contraception | 4.53 | 1.19 | 508 | 1.29 | 5.72 | . 94 | 542 | . 94 | 11.06 | 1.42 | 479 | . 99 |


| Variable name | 15-19 |  |  |  | 20-24 |  |  |  | $25+$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 18.09 | . 18 | 475 | . 95 | 18.21 | . 17 | 431 | . 97 | 15.94 | . 12 | 508 | . 96 |
| Age at first marriage (<25) | 17.23 | . 14 | 434 | . 93 | 17.73 | . 16 | 406 | 1.00 | 15.94 | . 12 | 508 | .96 |
| First marriage dissolved | 10.53 | 1.29 | 475 | . 91 | 8.12 | 1.22 | 431 | . 93 | 17.52 | 1.75 | 508 | 1.03 |
| Time spent in union | 97.66 | . 41 | 475 | . 98 | 98.13 | . 39 | 431 | . 96 | 96.44 | . 42 | 508 | . 89 |
| Currently married | 96.21 | . 97 | 475 | 1.10 | 95.13 | 1.01 | 431 | . 98 | 89.76 | 1.45 | 508 | 1.08 |
| Births in first 5 years | 1.92 | . 04 | 475 | . 94 | 1.94 | . 05 | 431 | 1.03 | 1.72 | . 05 | 508 | 1.07 |
| Births in past 5 years | 1.76 | . 06 | 452 | 1.20 | 1.36 | . 05 | 409 | 1.01 | . 55 | . 04 | 456 | 1.07 |
| Currently pregnant | 17.72 | 1.73 | 457 | . 97 | 11.71 | 1.52 | 410 | . 96 | 2.63 | . 87 | 456 | 1.16 |
| Children ever born | 6.87 | . 12 | 475 | 1.07 | 8.09 | . 16 | 431 | 1.20 | 8.67 | . 16 | 508 | 1.20 |
| Living children | 6.10 | . 11 | 475 | 1.11 | 7.05 | . 13 | 431 | 1.10 | 7.31 | . 14. | 508 | 1.17 |
| Breastfed in closed interval | 85.34 | 1.78 | 457 | 1.08 | 83.73 | 1.71 | 418 | . 95 | 81.65 | 1.89 | 496 | 1.09 |
| Wants no more children | 48.88 | 2.60 | 401 | 1.04 | 59.94 | 2.93 | 322 | 1.07 | 70.39 | 2.83 | 233 | . 94 |
| Additional number wanted | 1.53 | . 13 | 391 | 1.02 | 1.12 | . 15 | 312 | 1.15 | . 97 | . 17 | 228 | 1.02 |
| Desired family size | 7.46 | . 21 | 417 | 1.14 | 7.56 | . 23 | 374 | 1.20 | 7.63 | . 22 | 406 | 1.13 |
| knows effective contraceptives | 74.32 | 2.27 | 475 | 1.13 | 72.16 | 2.47 | 431 | 1.14 | 68.70 | 2.70 | 508 | 1.31 |
| Ever used contraceptives | 26.95 | 2.24 | 475 | 1.10 | 26.45 | 2.44 | 431 | 1.15 | 24.80 | 2.11 | 508 | 1.10 |
| Ever used effective methods | 21.68 | 2.21 | 475 | 1.17 | 23.90 | 2.18 | 431 | 1.06 | 21.06 | 1.94 | 508 | 1.07 |
| Currently using (exposed) | 19.69 | 2.67 | 320 | 1.20 | 25.55 | 2.62 | 274 | . 99 | 26.24 | 3.05 | 221 | 1.03 |
| Using effective (exposed) | 15.63 | 2.49 | 320 | 1.22 | 20.80 | 2.40 | 274 | . 98 | 20.81 | 2.75 | 221 | 1.00 |
| Wants no more \& using eff. (exp.) | 25.81 | 4.41 | 155 | 1.25 | 30.30 | 3.43 | 165 | . 96 | 28.39 | 3.65 | 155 | 1.00 |
| Never used contraception | 72.21 | 2.31 | 457 | 1.10 | 72.68 | 2.53 | 410 | 1.15 | 74.34 | 2.28 | 456 | 2.11 |
| Used contraception in past | 14.00 | 1.77 | 457 | 1.09 | 10.24 | 1.79 | 410 | 1.19 | 12.94 | 1.66 | 456 | 1.05 |
| Currently using contraception | 13.79 | 1.92 | 457 | 1.19 | 17.07 | 1.82 | 410 | . 98 | 12.72 | 1.70 | 456 | 1.09 |

Table III.12b - Sampling errors by years since first marriage for women with incomplete primary education

| Variable name | $<5$ |  |  |  | 5-9 |  |  |  | 10-14 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFFT | Mean or per cent | SE | ก | DEFT |
| Age at first marriage | 18.02 | . 32 | 157 | 1.00 | 17.54 | . 41 | 1.30 | 1.08 | 17.94 | . 48 | 106 | 1.25 |
| Age at first marriage (<25) | 22.50 | . 35 | 10 | . 95 | 19.58 | . 34 | 45 | 1.10 | 17.31 | . 29 | 91 | 1.04 |
| First marriage dissolved | 1.89 | 1.09 | 159 | 1.01 | 6.15 | 2.29 | 130 | 1.08 | 2.83 | 1.56 | 106 | . 96 |
| Time spent in union | 99.63 | . 21 | 159 | . 99 | 98.66 | . 57 | 130 | . 98 | 98.66 | . 75 | 106 | . 96 |
| Currently married | 98.74 | . 90 | 159 | 1.02 | 96.92 | 1.45 | 130 | . 96 | 98.11 | 1.28 | 106 | . 96 |
| Births in first 5 years | . 00 | . 00 | 0 | . 00 | 2.28 | . 08 | 130 | 1.06 | 2.32 | . 09 | 106 | 1.07 |
| Births in past 5 years | . 00 | . 00 | 0 | . 00 | 2.31 | . 09 | 124 | . 99 | 1.61 | . 09 | 104 | . 98 |
| Currently pregnant | 28.66 | 3.47 | 157 | . 96 | 26.98 | 4.13 | 126 | 1.04 | 18.27 | 3.60 | 104 | . 94 |
| Children ever born | 1.13 | . 08 | 159 | 1.07 | 3.27 | . 13 | 130 | 1.14 | 4.96 | . 16 | 106 | 1.00 |
| Living children | 1.06 | . 08 | 159 | 1.04 | 2.97 | . 11 | 130 | 1.06 | 4.69 | . 15 | 106 | 1.02 |
| Breastfed in closed interval. | 87.50 | 3.73 | 72 | . 95 | 87.20 | 2.68 | 125 | . 89 | 79.61 | 4.61 | 103 | 1.16 |
| Wants no more children | 8.33 | 2.46 | 156 | 1.11 | 42.02 | 5.11 | 119 | 1.12 | 59.60 | 4.58 | 99 | . 92 |
| Additional number wanted | 2.95 | . 21 | 149 | 1.07 | 1.20 | . 16 | 119 | 1.05 | . 62 | . 16 | 98 | 1.00 |
| Desired family size | 4.39 | . 19 | 149 | 1.01 | 4.39 | . 13 | 124 | 1.03 | 4.83 | . 22 | 101 | 1.00 |
| Knows effective contraceptives | 94.97 | 1.63 | 159 | . 94 | 95.38 | 2.12 | 130 | 1.15 | 97.17 | 1.62 | 106 | 1.00 |
| Ever used contraceptives | 28.93 | 3.58 | 159 | . 99 | 57.69 | 4.14 | 130 | . 95 | 70.75 | 4.94 | 106 | 1.11 |
| Ever used effective methods | 23.90 | 3.65 | 159 | 1.08 | 50.77 | 4.76 | 130 | 1.08 | 66.98 | 4.99 | 106 | 1.09 |
| Currently using (exposed) | 23.42 | 3.97 | 111 | . 98 | 42.35 | 5.36 | 85 | . 99 | 56.25 | 5.80 | 80 | 1.04 |
| Using effective (exposed) | 18.02 | 4.20 | 111 | 1.15 | 37.65 | 5.12 | 85 | . 97 | 41.25 | 5.50 | 80 | . 99 |
| Wants no more \& using eff. (exp.) | . 00 | . 00 | 6 | . 00 | 43.33 | 8.53 | 30 | . 93 | 43.18 | 7.24 | 44 | . 96 |
| Never used contraception | 70.70 | 3.65 | 157 | 1.00 | 42.06 | 4.15 | 126 | . 94 | 28.85 | 5.04 | 104 | 1.13 |
| Used contraception in past | 12.74 | 2.25 | 157 | . 84 | 29.37 | 4.42 | 126 | 1.08 | 27.88 | 3.70 | 104 | . 84 |
| Currently using contraception | 16.56 | 2.96 | 157 | . 99 | 28.57 | 4.20 | 126 | 1.04 | 43.27 | 4.56 | 104 | .93 |



Table III.12c - Sampling errors by years since first marriage for women with complete primary education

| Variable name | $<5$ |  |  |  | 5-9 |  |  |  | 10-14 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Age at first marriage | 18.19 | . 19 | 291 | . 94 | 18.46 | . 35 | 163 | 1.04 | 18.26 | . 42 | 109 | 1.09 |
| Age at first marriage (<25) | 22.72 | . 26 | 18 | . 91 | 19.42 | . 34 | 71 | 1.18 | 17.40 | . 26 | 99 | 1.04 |
| First marriage dissolved | 1.72 | . 75 | 291 | . 98 | 3.07 | 1.43 | 163 | 1.05 | 2.75 | 1.54 | 109 | . 98 |
| Time spent in union | 99.84 | . 09 | 291 | . 97 | 98.66 | . 65 | 163 | 1.05 | 99.15 | . 53 | 109 | . 97 |
| Currently married | 98.28 | . 75 | 291 | . 98 | 98.16 | 1.09 | 163 | 1.04 | 98.17 | 1.23 | 109 | . 95 |
| Births in first 5 years | . 00 | . 00 | 0 | . 00 | 2.13 | . 09 | 163 | 1.20 | 2.22 | . 09 | 109 | 1.02 |
| Births in past 5 years | . 00 | . 00 | 0 | . 00 | 2.22 | . 09 | 158 | 1.16 | 1.26 | . 10 | 106 | 1.08 |
| Currently pregnant | 31.12 | 2.88 | 286 | 1.05 | 20.63 | 3.09 | 160 | . 96 | 18.69 | 3.77 | 107 | 1.00 |
| Children ever born | . 98 | . 04 | 291 | . 85 | 3.07 | . 12 | 163 | 1. 25 | 4.33 | . 19 | 109 | 1.14 |
| Living children | . 93 | . 04 | 291 | . 82 | 2.90 | . 11 | 163 | 1.20 | 4.13 | . 17 | 109 | 1.11 |
| Breastfed in closed interval | 80.37 | 3.13 | 107 | . 81 | 84.97 | 2.91 | 153 | 1.01 | 75.00 | 5.81 | 104 | 1.36 |
| Wants no more children | 6.74 | 1.68 | 282 | 1.12 | 40.00 | 4.79 | 155 | 1.21 | 70.59 | 4.58 | 102 | 1.01 |
| Additional number wanted | 2.62 | . 15 | 274 | 1.24 | 1.25 | . 17 | 155 | 1.12 | . 53 | . 18 | 101 | . 96 |
| Desired family size | 3.89 | . 12 | 280 | 1.32 | 4.38 | . 17 | 158 | 1.09 | 4.43 | . 25 | 105 | 1.09 |
| Knows effective contraceptives | 92.78 | 1.49 | 291 | . 98 | 95.71 | 1.66 | 163 | 1.04 | 97.25 | 1.54 | 109 | . 98 |
| Ever used contraceptives | 32.99 | 2.98 | 291 | 1.08 | 59.51 | 4.88 | 163 | 1.26 | 81.65 | 3.94 | 109 | 1.06 |
| Ever used effective methods | 26.12 | 2.97 | 291 | 1.15 | 53.37 | 4.93 | 163 | 1.26 | 75.23 | 4.15 | 109 | 1.00 |
| Currently using (exposed) | 26.42 | 3.16 | 193 | . 99 | 45.08 | 4.84 | 122 | 1.07 | 73.17 | 4.95 | 82 | 1.01 |
| Using effective (exposed) | 20.21 | 2.83 | 193 | . 98 | 34.43 | 4.28 | 122 | -99 | 62.20 | 4.97 | 82 | . 92 |
| Wants no more \& using eff. (exp.) | 22.22 | 13.86 | 9 | . 94 | 43.18 | 6.98 | 44 | . 92 | 67.80 | 6.57 | 59 | 1.07 |
| Never used contraception | 67.13 | 2.98 | 286 | 1.07 | 40.00 | 4.88 | 160 | 1.26 | 18.69 | 4.00 | 107 | 1.06 |
| Used contraception in past | 15.03 | 2.16 | 286 | 1.02 | 25.63 | 3.59 | 160 | 1.04 | 25.23 | 4.54 | 107 | 1.08 |
| Currently using contraception | 17.83 | 2.32 | 286 | 1.02 | 34.38 | 3.81 | 160 | 1.01 | 56.07 | 4.85 | 107 | 1.01 |



Table III. 13 - Sampling errors for variables based on the household questionnaire for females (de facto residence) by current age and schooling

|  | 15-19 |  |  |  | 20-24 |  |  |  | 25-29 |  |  |  | 30-34 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable name | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Children ever born (ever-married) | . 81 | . 03 | 1229 | 1.03 | 2.09 | . 04 | 2323 | 1.26 | 3.66 | . 06 | 2306 | 1.35 | 5.43 | . 07 | 2143 | 1.29 |
| Children ever born (all women) | . 18 | . 01 | 5406 | 1.28 | 1.26 | . 04 | 3861 | 1.63 | 3.02 | . 07 | 2788 | 1.66 | 5.02 | . 08 | 2317 | 1.37 |
| \% children dead | 7.73 | . 95 | 1229 | 1.04 | 8.33 | . 44 | 2323 | 1.01 | 8.55 | . 38 | 2306 | 1.08 | 10.17 | . 38 | 2143 | 1.06 |
| Age-specific fertility rate | . 07 | . 00 | 5406 | 1.13 | . 25 | . 01 | 3861 | 1.27 | . 32 | . 01 | 2788 | 1.35 | . 30 | . 01 | 2317 | 1.18 |
| \% ever-married | 22.73 | . 88 | 5406 | 1.54 | 60.17 | 1.34 | 3861 | 1.70 | 82.71 | 1.19 | 2788 | 1.67 | 92.49 | . 66 | 2317 | 1.20 |
| \% currently married | 22.53 | . 88 | 5406 | 1.55 | 59.26 | 1.34 | 3861 | 1.70 | 81.13 | 1.21 | 2788 | 1.64 | 90.20 | . 71 | 2317 | 1.15 |
| 8 women with father alive | 90.36 | . 47 | 5406 | 1.18 | 84.63 | . 66 | 3857 | 1.13 | 76.78 | . 82 | 2786 | 1.03 | 64.23 | . 99 | 2315 | . 99 |
| of eldest with father alive | 93.53 | . 69 | 1005 | . 89 | 90.02 | 1.15 | 862 | 1.12 | 83.54 | 1.41 | 711 | 1.02 | 75.04 | 1.65 | 605 | . 94 |
| \% women with mother alive | 96.49 | . 27 | 5406 | 1.07 | 93.88 | . 46 | 3854 | 1.20 | 88.91 | . 54 | 2786 | . 91 | 82.38 | . 83 | 2316 | 1.05 |
| \% eldest with mother alive | 96.39 | . 53 | 1026 | . 91 | 92.96 | . 82 | 881 | . 96 | 89.26 | 1.08 | 726 | . 94 | 86.73 | 1.43 | 618 | 1.04 |
| \% women with first husband alive | 99.84 | . 12 | 1218 | 1.00 | 99.13 | . 22 | 2291 | 1.11 | 98.51 | . 27 | 2282 | 1.07 | 96.99 | . 44 | 2124 | 1.20 |


|  | 35-39 |  |  |  | 40-44 |  |  |  | 45-49 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable name | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFTT |
| Children ever born (ever-married) | 6.91 | . 09 | 1991 | 1.31 | 7.72 | . 11 | 1801 | 3.40 | 8.12 | . 12 | 1673 | 1.43 |
| Children ever born (all women) | 6.53 | . 10 | 2106 | 1.38 | 7.49 | . 13 | 1856 | 1.55 | 7.97 | . 13 | 1704 | 1.45 |
| \% children dead (ever-married) | 11.25 | . 33 | 1990 | . 97 | 13.88 | . 50 | 1801 | 2.26 | 16.80 | . 50 | 1673 | 1.10 |
| Age-specific fertility rate | . 24 | . 01 | 2106 | 1.22 | . 14 | . 01 | 1856 | . 89 | . 04 | . 01 | 1704 | 1.13 |
| \% ever-married | 94.54 | . 63 | 2106 | 1.27 | 96.98 | . 49 | 1856 | 1.23 | 98.18 | . 30 | 1704 | . 92 |
| \% currently married | 90.03 | . 78 | 2106 | 1.19 | 91.38 | . 73 | 1856 | 1.12 | 86.85 | . 75 | 1704 | . 92 |
| \% women with father alive | 48.81 | 1.21 | 2104 | 1.11 | 34.27 | 1.38 | 1856 | 1.25 | 23.71 | 1.09 | 1704 | 1.06 |
| \% eldest with father alive | 60.61 | 2.29 | 561 | 1.11 | 42.37 | 2.72 | 472 | 1.20 | 32.19 | 2.13 | 553 | 1.07 |
| \% women with mother alive | 73.12 | . 97 | 2102 | 1.00 | 58.41 | 1.11 | 1856 | . 97 | 45.44 | 1.33 | 1701 | 1.10 |
| \% eldest with mother alive | 77.86 | 1.90 | 569 | 1.09 | 62.74 | 2.29 | 475 | 1.03 | 50.81 | 2.58 | 557 | 1.22 |
| of women with first husband alive | 94.12 | . 62 | 1973 | 1.16 | 92.73 | . 72 | 1788 | 1.17 | 86.66 | . 86 | 1657 | 1.03 |


|  | Never been to school. and aged 15-49 |  |  |  | Been to school. and aged 15-49 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable name | Mean or per cent | SE | n | DEFT | Mean or per cent | SE | n | DEFT |
| Children ever born (ever-married) | 5.73 | . 06 | 9100 | 1.58 | 3.43 | . 05 | 4366 | 1.24 |
| Children ever born (all women) | 4.62 | . 05 | 11302 | 1.44 | 1.71 | . 03 | 8736 | 1.20 |
| \% children dead (ever-married) | 13.51 | . 27 | 9099 | 1.33 | 7.32 | . 32 | 4366 | 1.26 |
| Age-specific fertility rate | . 23 | . 01 | 11302 | 1.47 | . 14 | . 00 | 8736 | 1.32 |
| of ever-married | 80.51 | . 60 | 11302 | 1.60 | 49.98 | . 70 | 8736 | 1.32 |
| \% currently married | 77.09 | . 65 | 11302 | 1.63 | 48.27 | . 72 | 8736 | 1.34 |
| \% women with father alive | 61.96 | . 72 | 11296 | 1.57 | 78.37 | . 67 | 8732 | 1.51 |
| \% eldest with father alive | 66.37 | 1.14 | 2884 | 1.29 | 83.18 | 1.03 | 1885 | 1.19 |
| \% women with mother alive | 76.88 | . 49 | 11291 | 1.24 | 90.86 | . 42 | 8730 | 1.35 |
| of eldest with mother alive | 76.99 | . 99 | 2934 | 1.27 | 91.61 | . 58 | 1918 | . 92 |
| \% women with first husband alive | 94.81 | . 35 | 9033 | 1.50 | 97.26 | . 30 | 4300 | 1.22 |

# DIgV甘V GNV HSINVdS <br> 'HDNGys 'HSITDNG NI XYVSSOTD 

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APPENDIX IV GLOSSARY IN ENGLISH，FRENCH，SPANISH AND ARABIC

## Background Variables

Husband＇s occupation ：
Technical
Clerical
Sales
Farmers
Agricultural workers
Household type and other services
skilled
killed
Unskilled
Level of education ：
No schooling
Primary
Preparatory
Secondary
Institute
University
fattern of work ：
Worked before and after marriage
Worked only after marriage Worked only before marriage Never worked

## Region ：

Amman
Zarka and Irbid
Other Towns
Large villages
Small villages
Type of place of residence ：

## Urban Rural

Variables socio－économiques
Activité professionnelle du mari ：
Technicien
Enployé de bureau
Enployé du commerce
Exploitant agricole
Ouvrier agricole
Enployé de maison et autre jervice
Ouvrier qualifié
O．nvrier nor qualifié

## Niveau d＇instruction ：

Non scolarisé
P：imaire
Préparatoir
Secondair
Giversit
Pēriode de travail
A travaillé avant et après le mariage
A travaillé seulement après le mariage
A travaillé seulement avant le mariage
N＇a jamais travaillē

## Region ：

Amman
Zarka et Irbid
Autres villes
Grands villages
Pilages moyens

Nature de lieu de résidence

```
Urbain
```

Variable de Antecedentes
Ocupación del esposo ：

## Téchnica <br> De oficina

Ventas
Campesino
Trabajador agrícola
Servicio doméstico y ostros
servicios
Cualificado
No－cualificado
Nivel de Educación ：
Ninguna educaciōn
Primaria
Preparatoria
Instituto
Universid
Patrón de trabajo ．
Trabajo ontes y después del matrimonio
Trabajo solamente después del matrimonio
Trabajo solamente antes des matrimonio No ha trabajado nunca

Region ：
Amman
Zarka y Irbid
Otras ciudades
Aldeas grandes
Aldeas

Tipo de lugar de residencia ：
Urbano
Urbano
Rural

تنـيرات الخلفـية مهنة المُوج
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Age, nuptiality, and exposure
to child-bearing

## Age at first marriage

Age cohort
Calendar year of birth
Continuously in the married
state for the past five years
Continuously in the married state since first marriage

## Current age

Current marital status :

## Married

Widowed
Divorced
Separated
Currently married :
— and "fecund"

- fecund and wants no moro children
- and non-pregnant


## Ever-married

- with at least two live births (including current pregnancy)


## Exposure status

## "Exposed"

- with at least one live-birth
- and wants no more children
- and wants another child and states sex preference

Age, nuptialité et exposition au risque de grossesse

Age au premier mariage
Cohorte d'age
Millêsime de naissance
Toujours mariée durant les cinq dernières années
Toujours mariée depuis son premier mariage
Age actue]
Etat matrimonial actuel :

## Mariée

Veuve
Divorcée
Séparēe
Actuellement mariēe :

- et "fertile"
- fertile et ne veut plus d'autres enfants
- et non-enceinte

Non-cēlibataire

- avec au moins deux naissances vivantes (y compris grossesse actuelle)

Edad, nupcialidad y esposición al riesgo del embarazo

Edad al primer matrimonio Cohorte de edad
Año calendario de nacimiento
Ha estado continuamente casada durante los altimos cinco años
Ha estado continuamente casada desde su primer matrimonio
Edad actual
Estado civil actual:
Casada
Viuda
Divorciada
Separada
Actualmente casada :

- y fertil
- fértil y no desea tener más hijos
- y no-embarazada

Alguna vez casada :

- tiene al menos dos nacidos vivos (incluendo embarazo ectual)

Status d'exposition au risque de grossesse Exposición al riesgo de embarazo
"Exposée au risque de grossesse"

- avec au moins une naissance vivante
- et ne veut plus d'autres enfants
- et désire avoir un autre enfant avec préférence pour le sexe


## "Expuesta"

- tiene al menas un nacido vivo
- y no desea tener más hijos
- y desea tener otro hijo e indica preferencia por un sexo determinado
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( تشقل الحطل الحالي )
حالة الالتحرض:
+

First marriage dissolved

- and remarried

First married at least five years ago
First married before age 25

Interval from first marriage to first birth
Marriage cohort
Marriage dissolution and

## remarriage

Number of times married
Status of first marriage
Times since first marriage spent
in the married state

Years since first marriage

Knowledge and use of contraception
Contraceptive method being used

Contraceptive use (excluding sterilization) in the open interval
Contraceptive use in the last closed interval
Currently using contraception (any methods)
Currently using a modern method of contraception

Premier mariage dissous

- et remariée

Mariée pour la première fois il y a au moins 5 ans
Mariēe pour la première fois avant d'atteindre 25 ans
Intervaile entre le premier mariage
et la première naissance
Cohorte des mariages
Dissolution de mariage et remariage

Nombre de mariages
Statut du premier mariage
Durée écoulée depuis le premier mariage en ētat de femme mariée

Années écoulēes depuis le premier mariage

Connaissance et pratique de la contraception
Méthode contraceptive actuellement utilisée
Méthode contraceptive (stêrilisation exclue) utilisēe dans $\mathrm{I}^{1}$ intervalle ouvert
Méthode contraceptive utilisée dans le dernier intervalle fermé

Primer matrinonio disuelto

- y se ha vuelto a casar
 menos cinco años
Casada por primera vez antes de los ترَوجت لآل 25 años de edad
Intervalo entre el primer matrimonio الفترة بينـ المزوأَ $y$ el primer nacimiento
Cohorte de matrimonio
فوج زواجي
Disolución del matrimonio y matrimonio en segundas nupcias
Número de veces que ha estado casada
Situaciôn del primer matrimonio
Tiempo transcurrido en estado matrimonial, desde su primer matrimonio
Años transcurridos desde el primer matrimonio

Conocimiento y uso de anticoncepción
Mêtodo anticonceptivo que usa actualmente on
 abierto
 intervalo cerrado
تسحس

(quelle que soit la methode)
Utilise actuellement une méthode contraceptive moderne


Ever used contraception （any methods）

Ever used a modern method of contraception
Ever use of specified contraception methods
Heard of at least one modern method of contraception
Heard of specified contraception methods
Living children when contraception used for the first time

Pattern of contraceptive use Currently using Contraceptively sterilized Using some other method Past not current user

Used in open interval

Used in last closed interval

Used only in an earlier interval
Never used any method
Intends futur use
Does not intend future use

A déjà utilisée une méthode contraceptive（quelle que soit la méthode）
A déjà utilisée une méthode contraceptive moderne
A déjà utilisée des méthodes précises de contraception
A entendu parler d＇au moins une méthode contraceptive moderne
A entendu parler de méthodes précises de contraception Nombre d＇enfants vivants quand elle a utilisé pour la première fois une méthode contraceptive

Type de pratique contraceptive Pratique actuellement
A subi une stétilisation volontaire Utilise d＇autres méthodes
A pratiquē dans le passé mais ne pratique pas actuellement
A pratique durant l＇intervalle ouvert
A pratiqué dans le dernier intervalle fermé
A pratiqué seulement dans un intervalle antērieur
N＇a jamais pratiqué
Pense pratiquer dans le futur Ne pense pas pratiquer dans le futur

Ha usado anticoncepción alguna vez （cualcuier método）

Ha usado alguna vez un método anticonceptivo moderno

Uso de métodos antoconceptivos الا especificos
المنع الصمل

Ha oido hablar de por 10 menos un método anticonceptivo moderno

Métodos anticonceptivos especificos de سع⿰亻⿱丶⿻工二十⿴囗⿱一一 los que ha oido hablar
 usó anticoncepciōn por primera vez


## Usa actualmente

تصتعهمل
Esterilizada por razones anticontivas aco
Usa otro método
تستعـلم اهد ى الـطرق الأخرى
Ha usado en el pasado pero no actualmente
Usó en el intervalo abierto

Usó en el intervalo cerrado
الستقطت


Usó solamente en un intervalo cerrado anterior
Nunca ha usado anticoncepción
Piensa usar en el futuro
No tiene intenciones de usar en el futuro

Specific contraceptive method
Pill
IUD
Condom
Female sterilisation
Male sterilisation
Other female scientific

Rhythm
Withdrawal
Abstinence
Douche
Fertility and child mortality
Age at birth of child in
single years
Birth history
Birth order
Birth intervals

- Length of the open interval
- Length of the last closed interval
Breast-feeding
- Breast-feeding in the last closed interval
- Last closed interval begins with a live birth, is longer than 32 months, with the child surviving at least 24 months

Methode contraceptive
Pilule
DIU ou stērilet
Preservatif
Ligature des trompes
Vasectomie
Autres méthodes scientifiques pour la femme
Continence périodique
Retrait
Abstention
Douche

## Fecondité et mortalité infantile

Année d'âge de la mēre à la naissance de l'enfant

Historique des naissances
Rangs de naissances
Intervalles entre naissances

- Longueur de l'intervalle ouvert
- Longueur du dernier intervalle fermé


## Allaitement

- Allaitement dans le dernier intervalle fermé
- Dernier intervalle ferme commençant avec une naissance vivante, ayant une durée supérieure à 32 mois et dont l'enfant a survécu au moins 24 mois

Mertodos anticonceptivos especificos
Pildora
Disposotivo intra-uterino (DIU)
Condón
Esterilización femenina
Esterilización masculina
Otros métodos cientificos femeninos

## Ritmo

Retiro
Abstinencia
Ducha
Fecundidad y mortal idad infantil
Edad al tener el hījo, en años cumplidos

Historia de nacimientos
Orden de nacimiento
Intervalos genécicos

- Duración del intervalo abierto
- Duración del último intervalo cerrado
Lactancia
ى 诠
- Lactancia en el ūltimo intervalo الرْ الرضا cerrado
- El último intervalo cerrado ${ }^{3}$ حي comienza con un nacido vivo, dura más de \$i meses y el noño l, sobrevivió por 10 menos 24

饾 y meses

Calendar year of birth of child
Child mortality by age at death Child's age at death
Children born before or within
first 5 years of first marriage

Children born in past 5 years

Children ever born (number of)

Children ever born plus current pregnancy
Children who died before 2 years of age
Current pregnancy
Duration since first marriage at birth of child
Initial fertility
Interval between first marriage and first birth
Live births in past 7 years

## Living children

Living children plus current pregnancy
Living children 5 years ago
Living children when contraception was used for the first time

Living daugthers

Millésime de naissance de l'enfant Mortalité infantile par âge au décès Age au décès
Nombre d'enfants nés avant ou durant
les 5 premières années du premier mariage
Nombre d'enfants nés durant les 5 dernières années
Nombre d'enfants dējã nés
(descendance actuelle)
Nombre d'enfants déjà nés plus la grossesse actuelle
Nombre d'enfants décédés avant l'äge de 2 ans
Grossesse actuelle
Durēe écoulēe entre le premier mariage et la naissance de l'enfant
Fécondité initiale du mariage
Intervalle entre premier mariage et première naissance
Nombre de naissances vivantes au cours des 7 dernières années
Nombre d'enfants vivants
Nombre d'enfants vivants plus la grossesse actuelle
Nombre d'enfants vivants il y a 5 ans
Nombre d'enfants vivants au moment où la contraception a étê utilisée pour la première fois
Nombre des filles vivantes

Año calendario de nacimiento del nino Mordalidad infantil por edad al morir وغيا Edad del niño al morir

Hijos nacidos antes o durante los primeros 5 años de matrimonio
!لاطقفال اللمولود ين خلال المسـووات

Nümero de hijos tenidos
عد د الا
Nümero de hijos tenidos, más embarazo actual

عد


2 años de edad رll
Embarazo actual Ull lll
 del hijo

الـط
Fecundedad inicial
 $y$ el primer nacimiento
Nacidos vivos en los altimos 7 años
اللـا on as

Hijos actualmente vivos
Número de hijos actualmente vivos más
 embarazo actual
Número de hijos vivos hace 5 años
 cuando usô anticoncepciôn por primera vez
Número de hijas mujeres actualmente اللبـات ألجا فيات على قيد اللحيـا vivas
Living sons

## Nombre de garçons vivants

Male children born in past 5 years Nombre de garçons nés au cours des

## 5 dernières années

Month of current pregnancy
Recent fertility
Survivorship status
Years since birth occurred

## Preferences for number and sex of

 childrenAdditional children wanted (number of)

Desire for more children Desire to cease child-bearing Desired family size

- exceeds number of living children
Desires fewer than number living

Desires more than number living

Fertility preferences and the use of contraception
Last child not wanted
Prefers a boy
Prefers a girl

Mois de grossesse actuelle Féconditē récente du mariage Survivants
Années écoulées depuis la naissance

## Préférences relatives au nombre et

au sexe des enfants
Nombres d'enfants supplēmentaires désirés

Dēsire avoir d'autres enfants Désire ne plus avoir d'enfants Dimension dēsirée de la famille - dépasse le nombre d'enfants vivants
Aurait dēsiré avoir moins d'enfants que le nombre de ses enfants actuellement vivants
Désire avoir plus d'enfants que le nombre de ses enfants actuellement vivants

Descendance désirée et pratique de la contraception
Dernier enfant non désiré
Prēfére avoir un garçon
Préfére avoir une fille

Número de hijos varones actualmente

## vivos

Hijos varones nacidos en los últimos 5 años
Meses de embarazo del embarazo actual
Fecundidad reciente
Supervivencia
Cuantos años hace que ocurriō el nacimiento

Preferencia por numero y sexo de los hijos

Número de hijos adicionales deseados

## Deseo de más hijos

Deseo de no tener más hijos
Tamaño de familia deseado

- excede el número de hijos vivos

Desea menos hijos de que los que tiene

Desea el inismo número de hijos que tiene

Preferencias de fedundidad y uso de anticoncepción
Ultimo hijo no deseado
Prefiere un hijo varón
Prefiere una hija mujer

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الـرتّهة في وقف الا لدجها ب
مدبم الا سّرة الموشوب فيه
-
ترغبق في عد د أكهيو هن عد د الاطُقال
وقمأ ثل، متحح الالحمل
ثوضل ولد


Preference concerning the sex of children
Total number of children desired Wants another child - and states a sex preference Wants no more children

Préférence concernant le sexe des enfants
Nombre total d'enfants désirēs
Dēsire avoir un autre enfant

- et a une prēfērence pour le sexe Ne désire plus avoir d'enfants

Preferencias en cuanto el sexo de los hijos
 Desea otro hijo

- e indica preferencia por el sexo No desea más hijos
 ترغب في الجابط طفل، آخر



[^0]:    1 It should, however, be recognized that the registration figures are likely to be exaggerated due to duplications in registration and failure to strike deceased persons from the register.
    2 Vaidyànathan, K.E. (1976) "Estimation of Fertility in Syria From the 1970 Census Data on Past Live Births". Syrian Population Studies Series No. 1. Central Bureau of Statistics, Damascus, Syrian Arab Republic.
    ${ }^{3}$ Vaidyanathan, K.E. (1976). "Estimation of Infant and Child Mortality in Syria From the 1970 Census Data". Syrian Population Studies Series No. 2. Central Bureau of Statistics, Damascus, Syrian Arab Republic.

[^1]:    1 A detailed explanation of these definitions is given in chapter 9.

[^2]:    ${ }^{a}$ The indices are ratios (per 100) computed by dividing the population at a specified age by one-third of the total population in the three year ages, centred at that age.

[^3]:    1 It should be noted that the problem caused by the change in years of schooling was sorted out in the field and all those who passed their elementary examination prior to 1968 were recorded as completing six years of school and not the five years which they actually did.

[^4]:    2 The phrase does not necessarily imply that the respondent worked continuously throughout the period covered.

[^5]:    3 For a more detailed discussion of the method, see Pullum, T.E. (1978). Standardization. WFS Technical Bulletin no 3, The Hague: International Statistical Institute.

[^6]:    ${ }^{\mathbf{a}}$ The mean is computed as exact years (completed years +0.5 ). Note that the mean given in tables III. 1 and III. 2 a is given in completed years rather than exact years.
    ${ }^{\mathrm{b}}$ Standard error of the observed mean.
    Source: Tables III. 1 and III.2a.

[^7]:    1 The standard error of the difference in the means is 15 (table III. $2 b)$ so that the 95 per cent confidence interval for the difference is $.38 \pm 2(.15)=.08$ to .68 . Thus the observed difference is statistically significant at the 5 per cent level. Hence it is likely that the observed differential is a real one and not caused merely by sampling variation.

[^8]:    ${ }^{\text {a }}$ The mean is computed as exact years (completed years +0.5 ). Note that the mean given in tables III.6a, III.7a, III.8a, III.9a and III.10a is given in completed rather than exact years.
    ${ }^{\text {b }}$ Standard error of the observed mean.
    Source: Tables 1.1.3, III.6a, III.7a, III.8a, III.9a and III.10a.

[^9]:    Source: Tables 1.2,2 and 1.3.2.

[^10]:    Source: Table 1.4.1.

[^11]:    1 Standard error is .06 , the 95 per cent confidence interval for mean parity being $4.74 \pm 2$ (.06), i.e. 4.62 to 4.86 (Source: table III.1).

[^12]:    2 For details of the imputing procedures adopted to create the missing data, see chapter 2.

[^13]:    ${ }^{\text {a }}$ Standard error of the observed mean.

[^14]:    3 See section 2.9 on standard errors for a discussion on how to compare the percentage pregnant for adjacent age groups.
    4 For computational details see Goldman, Noreen and Charles Westoff, Can Fertility be Estimated From Current Pregnancy Data. Population Studies 34(3), 1980.
    5 Two minor differences in the mode of computation of ASFRs for the last 12 months from household and individuals surveys should be noted. In the former case, age refers to current age while in the latter, age refers to age at time of birth and person-years lived at that age. The second difference relates to imputation of missing months. For the individual survey, imputation procedures have already been described in chapter 2. For the household survey, all births occurring in 1978 and $5 / 12$ ths of births in 1977 with month unstated were considered as having occurred in the last 12 months. As only two per cent of all 1977 births had month unstated, this approximation cannot affect the fertility rate in an appreciable manner.

[^15]:    $\dagger$ Truncated exposure.

[^16]:    ${ }^{\dagger}$ Truncated exposure.

[^17]:    ${ }^{\text {a }}$ Standardized on age at first marriage.
    Source: Table 2.2.6.

[^18]:    6 Due to small cell frequencies, the three educational categories incomplete primary, complete primary and secondary or more - are combined into a global 'some schooling' category.

[^19]:    ${ }^{\text {a }}$ Means calculated by assuming the same proportions of women ever married as in the household survey.

[^20]:    1 Brass, W. et al (1968). The Demography of Tropical Africa. Princeton: Princeton University Press.
    2 Trussell, T.J. (1975). A re-examination of the Multiplying Factors of the Brass Technique for Determining Childhood Survivorship Rates. Population Studies 29 (1): 97-108.
    3 Feeney, G. (1980). Estimating Infant Mortality Trends from Child Survivorship Data. Population Studies 34(1): 109-128.

[^21]:    Note: $q(x)$ and years before the survey were estimated using the South variant of the Trussell regression procedure.

[^22]:    Note: $q(x)$ and years before survey estimated using the South variant of the Trussell regression procedure.

[^23]:    Note: $q(x)$ and years before survey estimated using the South variant of the Trussell regression procedure.

[^24]:    4 Brass, W. and K. Hill, (1973). Estimating Adult Mortality from Orphanhood. International Population Conference, Liege 3: 111-23.

[^25]:    5 Hill, K. (1977). Estimating Adult Mortality Levels from Information and Widowhood. Population Studies 31(1): 75-84.
    6 Brass, W and B.A. Bamgboye, (1981). The Time Location of Reports of Survivorship: Estimates for Maternal and Paternal Orphanhood and the Ever-Widowed. Working Paper No 81-1, Centre for Population Studies, London School of Hygiene and Tropical Medicine.

[^26]:    ${ }^{\mathrm{a}}$ Mean age of fathers at birth of their children $=32.60$.
    ${ }^{\mathrm{b}}$ Mean age of mothers at birth of their children $=28.27$.
    Note: Life-table survival ratios and years before survey calculated from survivorship of parents for age groups $N-5$ to $N$ and $N$ to $N+5$ using the Brass/Blacker/Hill weighting procedure.

[^27]:    Source: Table 3.1.3.

[^28]:    Source: Table 3.3.1B.

[^29]:    ${ }^{\text {a }}$ Including the women with five or more children.
    Source: Table 3.4.6A.

[^30]:    1 The definitions quoted below are taken from section 4 of the individual questionnaire.
    Pill 'to take a pill every day'
    IUD 'loop or coil of plastic or metal, the intra-uterine device, inserted in the womb'
    Female scientific methods 'such as a diaphragm, tampon, sponge, foam tablets, jelly or cream'
    Douche 'women wash themselves immediately after sex . . . to avoid getting pregnant'
    Condom 'men wear a condom during sex'
    Rhythm 'avoid having sex on particular days of the month when women are most able to become pregnant'
    Withdrawal 'Some men . . . are careful to pull out before climax'
    Abstinence 'go without sex for several months or longer to avoid getting pregnant'
    Injection 'an injection which will prevent women from getting pregnant*
    Female sterilization 'women have an operation... such as having their tubes tied'
    Male sterilization 'men have a sterilization, called vasectomy'
    Other methods 'any other methods which men or women use'

[^31]:    Source: Table 5.3.1.

[^32]:    ${ }^{\text {a }}$ Overall percentage 39.3.
    Source: Tables 5.2.2A, 5.2.3A and 5.2.4B.

[^33]:    Source: Table 6.3.1A.

[^34]:    Source: Table 6.7.2.

[^35]:    1 Any overlap between temporary separations and amenorrhoea or abstinence were discounted.

[^36]:    1 The above assertion can be made with 95 per cent confidence. Incidentally, it follows, with even greater confidence, that in the above example, the difference is not zero - in other words, that the two subclasses differ for the variable concerned. Sampling errors for differences are often used in this way to test whether two subclasses differ.

[^37]:    2 This mean has been computed from individual ages at first marriage in completed years. For mean in 'exact' years, add 0.5 to all values shown.

[^38]:    3 Of the 23 variables considered, the standard error over the total sample is under 1 per cent of the mean for 5 , between $1-3$ per cent for 7, between 3-4 per cent for 3, and above 4 per cent of the mean for 8 variables.

